AGHEM GRAMMATICAL STRUCTURE

WITH SPECIAL REFERENCE TO NOUN CLASSES, TENSE-ASPECT AND FOCUS MARKING

EDITED BY:

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TO

TIMOTHY INAH BUO

with our greatest esteem,

friendship and thanks.

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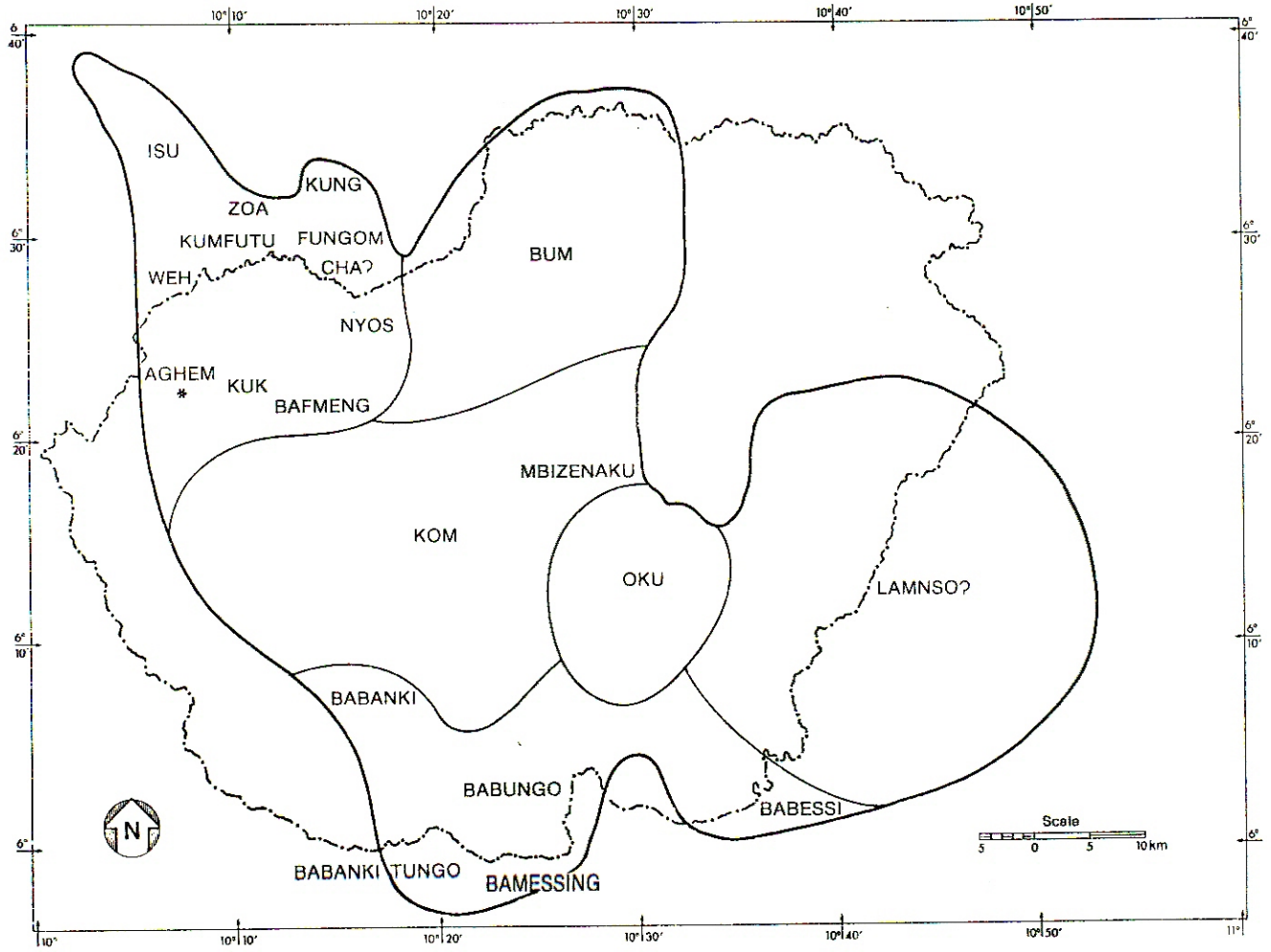
Languages of the Ring subgroup of Western Grassfields Bantu



PREFACE

The present volume, AGHEM GRAMMATICAL STRUCTURE, is the first of a projected series of grammatical and comparative reports on the languages of the Grassfields Bantu region of Cameroon. The investigations resulting in this work were carried out as part of a multinational effort by the Grassfields Bantu Working Group to document the linguistics of the North West and South West provinces of Cameroon. The American contribution to this effort was sponsored by a National Science Foundation Grant No. BNS76-81261, which has allowed intensive short-term field research in Cameroon and further study and analysis at the home institutions. We gratefully acknowledge this support, without which this first volume would not have been possible.

The Aghem language is spoken in and around the town of Wum, prefecture of the Menchum subdivision of the North West Province of Cameroon. Along with languages such as Kom, Oku and Lamnso', among others, Aghem belongs to the Ring subgroup of Western Grassfields Bantu. Most studies to date of Grassfields Bantu have dealt with languages of the Eastern branch of the family, bettern known as Mbam-Nkam (and including Bamileke, Ngemba, Bamoum, Bali and a few other languages). The current work is important, then, in that it provides one of the most detailed analyses currently available of a language of the Western branch.

The study is divided into three parts:

Part I, written by the editor, deals first with the sound system (chapter 1) and then the tone system (chapter 2). The remaining chapters describe the structure of nouns in their A-form ("in focus") and their noun class affiliations (chapter 3), noun modifiers (chapter 4) and pronouns (chapter 5). A special feature of the Aghem language concerns the treatment of the B-form of nouns ("out of focus") in chapter 6. As in the other two parts of the study, considerations of focus are central to an understanding of the grammatical structure of the language. An earlier version of chapter 6 was presented at the University of Leiden, Stanford University, the University of Southern California, and to the Los Angeles African Workshop. The author would like to thank the various persons who commented on this most unusual out-of-focus marking, to which Aghem nouns are frequently subjected.

Part II, written by Stephen C. Anderson, addresses the structure of verbs. An overview of the verbal system is provided in chapter 1 along with a feature analysis. Chapter 2 presents the different verb classes and the forms verbs take in different contexts. Chapters 3, 4 and 5 present, respectively, the tense, aspect and mood distinctions found in the language. Chapter 6 deals with consecutive constructions and chapter 7 with negation. Finally, in chapter 8, the different tone rules seen in the preceding chapters are summarized. A condensed version of the tense/aspect system of Aghem was presented at the Tenth Annual Conference on African Linguistics (University of Illinois, Urbana, April 7, 1979). The author would like to thank those attending this presentation for their helpful comments on the paper.

Part III, written by John Robert Watters, constitues an in-depth study of the syntax and semantics of focus in Aghem. Discussing the facts of Aghem against the background of universal typologies and linguistic theory, Watters distinguishes a number of focus types and provides an analysis within Simon Dik's framework of "functional grammar". Part 3 is a slightly abridged version of an M.A. Thesis submitted to the Department of Linguistics at the University of California, Los Angeles. The author would like to thank the members of his M.A. committee (Larry M. Hyman, Paul Schachter, Benji Wald and William E. Welmers)

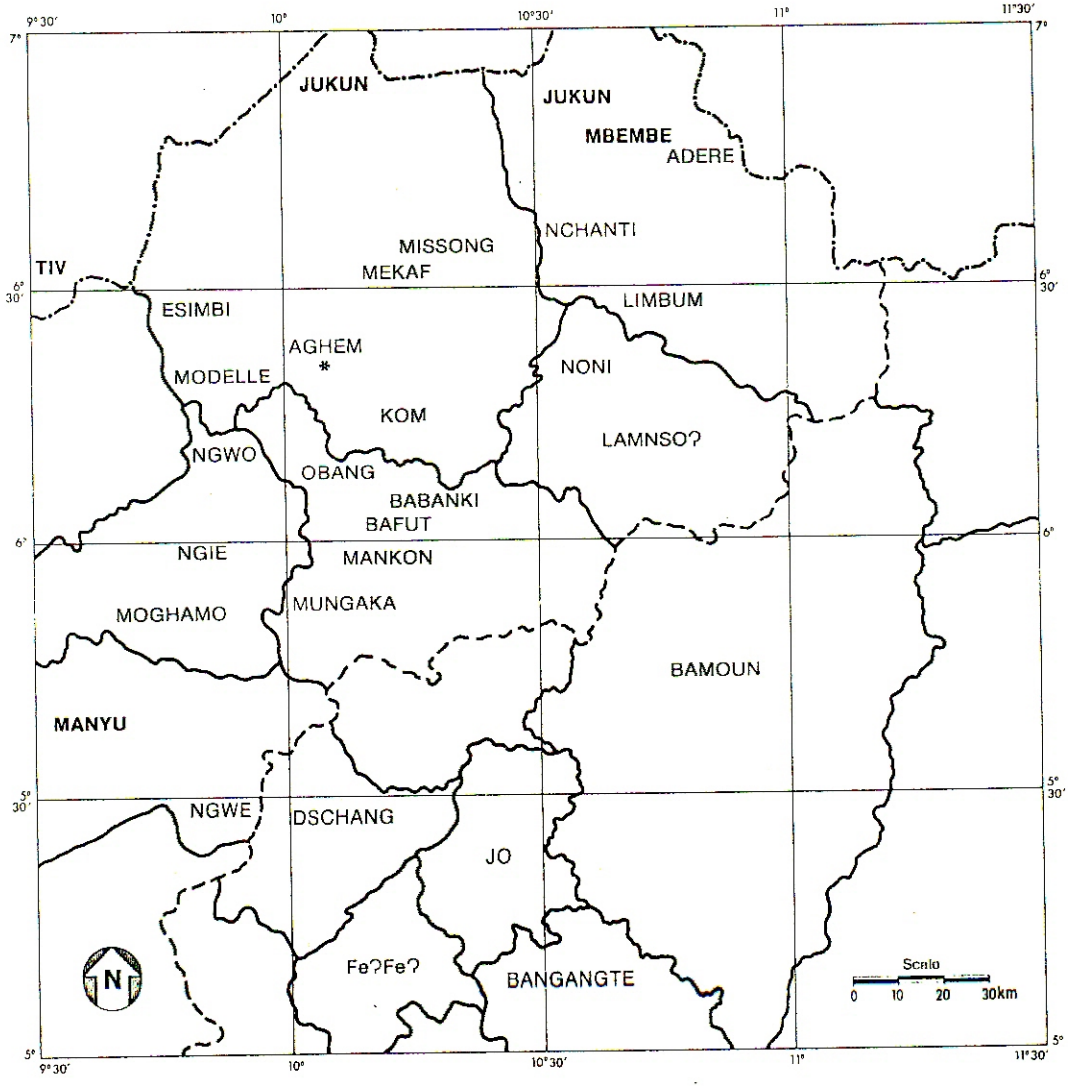
for their helpful comments on earlier drafts of the thesis.

Work on Aghem was conducted in Los Angeles during a two-month period in the summer of 1978 with an additional one week follow-up in January 1979. On both of these occasions we were fortunate to be able to work with Mr. Timothy Inah Buo, a student at the University of Houston, and a person with a deep knowledge of and commitment to the study of Aghem. During our brief weeks of contact, the three researchers met with Mr. Buo six and eight hours a day in order to accomplish as much as possible for the preparation of this volume. The result is far from definitive, given the obvious constraints, but we are happy to make our findings available to other scholars in this progress report. If we have been able to make this first contribution to the Aghem language, it is only because of Timothy Inah Buo's patience, skill and encouragement. In recognition of his enormous contribution to this work, we dedicate this book, AGHEM GRAMMATICAL STRUCTURE, to him.

LMH

ABBREVIATIONS

ADJ - adjective
ADP - adverbial phrase
AF - assertive focus
Ag - agent
AM - associative marker
Assoc - associative
AUX - auxiliary
Be - benefactive
C - consonant
CAF - counter-assertive focus
CAPL - counter-assertive polar focus
CFL - counterfactual mood
CNS - consecutive (tense)
CPL - completive aspect
CplF - completive focus
DEM - demonstrative
DP - defining pattern
DS - dummy subject
ELF - exhaustive listing focus
excl - 1st person exclusive
F_1 - today future tense
F_2 - after today future tense
far - 'that' (far from speaker/hearer)
FOC - focus (marker)
FG - functional grammar
Go - goal
H - high tone
HAB - habitual aspect
HRT - hortative mood
HYP - hypothetical mood
IAV - immediate after verb position
IBV - immediate before verb position
IMP - imperative
INC - incompletive aspect
incl - 1st person inclusive
L - low tone
LOC - locative
LOG - logophoric (pronoun)
mF - marked focus
N - homorganic nasal consonant
n.cl. - noun class
NAR - narrative (tense)
NEG - negative
n.h. - 'that' (near hearer)
n.s. - 'this' (near speaker)
NP - noun phrase
NUM - numeral
O/Obj - object
Ob - object:benefactive
OBL - obligational
OF - out of focus suffix
Og - object:goal
Ot - object:theme
P - presupposition
PF - polar focus
POSS - possessive (pronoun)
PP - prepositional phrase
P_0 - present completive tense
P_1 - today past tense
P_2 - before today past tense
pl. - plural
QM - question marker
REL - relative marker
sg. - singular
SM - subject marker
S/Subj - subject
TEMP - temporal adverb
Th - theme
V - vowel, verb
VP - verb phrase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Edited by Larry M. Hyman

PART I: PHONOLOGY AND NOUN STRUCTURE

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1

THE SOUND SYSTEM

1.1. SYLLABLE STRUCTURE

The Aghem sound system is characterized by 25 consonants, 10 vowels (long and short), and a number of diphthongs. These segments, which will be described in later sections of this chapter, combine to form a number of syllable types. In characterizing the syllable in Aghem it is necessary to distinguish between lexical stem syllables (of nouns, verbs, adjectives, etc.) and non-stem syllables (prefixes, suffixes, etc.). Almost all lexical stems are monosyllabic in Aghem. Using the symbol C for "consonant" and V for "vowel", the general syllabic structure of Aghem stems can be summarized as in the formula in (1):

(1) $- C_1 \ (w) \ V_1 \ (V_2, C_2) -$

Ignoring for the moment the w, this formula abbreviates the following three syllable structures, each illustrated by two verb stems following the é- infinitive prefix:

(2) a.	C_1V_1	:	é-bɔ́	'to be bad'	é-bɛ̂	'to hate'
b.	$C_1V_1V_2$	:	é-bɔ́ɔ	'to agree'	é-bûɔ	'to come'
c.	$C_1V_1C_2$	:	é-bɔ́m	'to mould'	é-bâŋ	'to be red'

In the above examples it is seen that a stem syllable can be short-open (-bɔ́, -bɛ̂), long-open (-bɔ́ɔ, -bûɔ), or closed (-bɔ́m, -bâŋ). A V_1V_2 sequence can consist of two like vowels (e.g. -bɔ́ɔ), in which case we speak of a long vowel, or of two unlike vowels (e.g. -bûɔ), in which case we speak of a diphthong. Both

are treated in further detail below. It should be noted that there are no syllables consisting of a V_1V_2 sequence followed by a consonant. Finally, as will be discussed in chapter 2, an Aghem stem syllable carries one of two contrasting basic or underlying tones (high or low). In the above examples, the stem syllable carries high (H) tone in the first column, and basic low (L) tone in the second column. The surface falling (HL) tone in 'to hate' etc. is the result of of rule which "spreads" the H tone of the infinitive prefix é- onto a following L tone verb stem.

The w in the above formula has been found only after the following stem-initial consonants:

(3)	t :	ó-twî	'medecine'		k :	ó-kwâ?	'mountain, hill'
	d :	é-dwîn	'to be old'		g :	ŋgwà?	'age group'
	n :	ń-nwîn	'bird'	*cf.*	[kp] :	é-kpîŋ	'to be sweet'
	zh :	é-zhwîi	'to breathe'		[gb] :	é-gbɔ́m	'to hunt'
	j :	ó-jwîn	'pus'		[ŋm] :	é-ŋmá?	'beehive'

The sequence Cw is thus only possible with one of the above consonants and only when it is followed by either a V_1V_2 or a V_1C_2 sequence. If followed only by a short vowel, the result is a diphthong beginning with u, e.g. é-gûo 'to grind', which is written as a V_1V_2 sequence. The labiovelars kp, gb, and ŋm are included above since they are the result of combining p+w, b+w, and m+w, respectively. This is especially clear in deriving the plural forms in gender 7/8 (see chapter 3). Normally this process requires a labialization (i.e. the addition of w) after the initial consonant when the stem vowel is ɨ, ɨ(gh)a, ɛ or a. Some examples are given in (4).

(4) a.	kɨ́-nâŋ	'cocoyam'		pl.	ó-nwâŋ
	kɨ̀-tɛ̌ɛ	'cricket'		pl.	ò-twɛ̌ɛ
b.	kɨ́-bá?	'rope'		pl.	ó-gbá?
	kɨ́-bɛ́	'fufu'		pl.	ó-gbɛ́

Although it is not always possible to find such alternations, the parallelism between (4a) and (4b) suggests that w once could occur after p,b,m but that the resulting sequences were modified to kp,gb,ŋm.

Turning to syllables which are not lexical stems, we classify these as either prefixes, suffixes, or nonaffixed grammatical markers. Such syllables show greater variety in their structure than stem syllables. Although some may conform to the formula in (1), they rarely if ever have a Cw sequence, and very few of these affixes and markers end in a consonant. They thus can be accounted for by the following formula in (5).

(5) $$- \left\{ \begin{matrix} (C)\ V \\ N \end{matrix} \right\} -$$

In this formula we see that non-stem syllables need not begin with a consonant (as was the case for stem syllables). Many prefixes, suffixes, and grammatical markers consist solely of a vowel, e.g. the noun prefix in ó-wîn 'fire', or the

infinitive prefix é-, which we saw earlier. Another possibility which was not found in lexical stem syllables is the syllabic nasal (N), which occurs both in noun and verb forms, e.g. ń̀-nwɬ̀n 'birds' (class 12), ò ḿ-bùɔ 'he/she has come'. This nasal is different from the other nasals in that it is syllabic and thus carries a tone (H in the two examples just given). A nonsyllabic nasal is found before certain noun stems (and one or two exceptional verb stems), especially in gender 9/10:

(6) mbà? 'cloud' mbvǔ 'chicken'
pl. tɬ̀-mbà? pl. tɬ̀-mbvǔ°

The above two singular forms are clearly monosyllabic and thus it is possible to add nonsyllabic N before the C_1 in the formula in (1). Because so many of these nonsyllabic nasals occur in 9/10, it is likely that they once were a (syllabic) prefix. It is clear from the morphology of the language that they are not considered to be prefixes by Aghem speakers today. Thus, the plural prefix of class 10 does not replace the nasal the way the plural prefix replaces the singular prefix in other classes. Also, this nasal does not undergo prefix deletion (see section 4.1). Note finally that a few exceptional nouns in genders other than 9/10 have a nonsyllabic nasal occurring between their prefix and C_1, e.g. fɬ̀-mbó? 'banana' (pl. m̀̀-mbó?), fɬ̀-ndàŋ 'stool' (pl. ǹ-ndàŋ).

1.2. CONSONANTS

The following consonants are found in Aghem:

(7) a. stops:	p b	t d		k g	kp gb	?	
b. fricatives:	f v	s z	sh zh	gh			
c. affricates:	pf bv	ts dz	c j				
d. liquid/glides:		l	y		w		
e. nasals:	m	n	ñ	ŋ	ŋm		

As can be seen, the above consonants have been grouped into rows according to how they are made (stops, fricatives, etc.). The vertical columns refer to place of articulation--from left to right: labial, alveolar, palatal, velar, labiovelar, and glottal. Not all of these consonant sounds occur as frequently as others, as will be pointed out below.

1.2.1. *Stops.* Aghem has both voiceless and voiced labial (p,b), alveolar (t,d), velar (k,g) and labiovelar (kp,gb) stops. In addition, it has a glottal stop (?) which, however, can only occur in C_2 position (i.e. it cannot be the initial consonant of a syllable). All of these are illustrated below:

(8)	p	é-pú	'to die'	b :	é-bó	'to hit'	
	t	é-tá	'to sew'	d :	é-dɬ̂	'to cry'	
	k	é-kɛ̂	'to swear'	g :	é-gûo	'to grind'	
	kp :	é-kpâ	'to burn'	gb :	é-gbo̱m	'to hunt'	
	? :	é-sá?	'to rule'				

Concerning the above stops, the following distributional constraints have been noted:

(i) The voiceless labial stop p occurs only before u (cf. ó-pú'ú 'njamajama' [a spinach-like vegetable]). Phonologically we view this pu syllable as a simplification of [kpu], which is heard in other dialects.

(ii) The voiced velar stop g is relatively rare in Aghem words and with only a few exceptions (such as 'to grind' above) occurs mostly when preceded by a non-syllabic nasal, e.g. ŋgŭo 'wine calabash', é-ŋgo̱o̱ɛ 'to bend'. At some earlier time it is likely that g only occurred after non-syllabic ŋ, while gh occurred elsewhere.

(iii) The labiovelar stops kp and gb are also relatively rare- This is explained by noting that these are the reflexes of p+w and b+w (cf. 4b). Just as there is no true p in present-day Aghem (except before u), the voiceless labiovelar kp is extremely rare, even more so than gb. Although written with two letters, the symbols kp and gb represent only one consonant each.

(iv) As noted above, the glottal stop ? never begins a stem syllable.

Except for kp, the voiceless stops tend to be aspirated.

1.2.2. *Fricatives.* Aghem has both voiceless and voiced labiodental (f,v), alveolar (s,z), and palatal (sh,zh) fricatives. It also has a frequently occurring voiced velar fricative gh. Although written with two letters in our orthography, the symbols sh, zh, and gh stand for one consonant only--phonetically, [š], [ž], and [ɣ], respectively. All of these fricatives are illustrated below:

(9)	f :	é-fúo	'to give'	v :	é-və̂ɔ	'feather'
	s :	é-sɨ́	'to exit'	z :	é-zê	'to vomit'
	sh :	é-shɨ́a	'to choose'	zh :	é-zhwɨ̂ɨ	'to breathe'
				gh :	é-ghâ	'to try'

The following distributional constraints have been noted concerning fricatives:

(i) The (alveo-) palatal fricatives sh and zh are rare. sh occurs only before ia (cf. kɨ́-shɨ́ashɨ́a 'sand'), a context where s does not occur. zh, on the other hand, only occurs before w (cf. é-zhwɨ́ŋ 'to swing'), a context where z does not occur. It seems likely then that sh and zh are recent developments in Aghem, and should be considered as positional variants of s and z, respectively.

(ii) The voiced labiodental fricative v has been found only before ʉ (cf. é-vʉ́ 'death') and is viewed as a positional variant of w, which does not occur in this environment. This analysis is borne out by forms such as wɛ́ w-ɨ́n 'this child' vs. wɛ́ v-ʉ̀ 'that child' [near hearer]. In the latter form the ordinary w concord of class 1 has become v before ʉ.

1.2.3. *Affricates.* Aghem has both voiceless and voiced labiodental (pf, bv), alveolar (ts,dz), and palatal (c,j) affricates. Again, the symbols pf, bv, ts, and dz refer each to a single consonant, the symbols c and j standing respectively for phonetic [tš] and [dž]. Examples are given below:

(10)	pf :	é-pfʉ́	'to eat'	bv :	é-bvʉ̂	'to fall'
	ts :	é-tsɨ́	'to spit'	dz :	é-dzɨ́	'to give birth'
	c :	ó-cô	'trouble'	j :	ó-jwɨ̂n	'pus'

The following distributional constraints should be noted:

(i) The voiceless labiodental affricate pf has only been found before ʉ (cf. the homophonous verb é-pfʉ́ 'to become burnt'). Its voiced counterpart bv occurs much more generally. In light of what was said about w and v in the previous section, pf can probably be analyzed as the realization of p+w before ʉ.

(ii) Both of the palatal affricates (c,j) are rare in Aghem words, with the alveolar affricates ʦ and dz being much more general. ʦ and dz, however, do not occur before the vowel ɨ, where c and ɟ *are* in fact found (cf. kɬ-cɨ́cɬ 'chest', ɟɨ̀ 'road'). It is thus likely that a historical connection exists between the two series of affricates. Because of such near minimal pairs as dzɨ̂m 'back' and ó-ɟɨ̂m 'ashes', the two must be considered separate in present-day Aghem.

1.2.4. *Liquid/glides.* The one alveolar lateral l and the palatal (y) and labiovelar (w) glides complete the set of oral consonants in Aghem. Of these only y is extremely restricted in distribution: it has been found to occur only before ɔ, e.g. é-yɔ̂sɔ̂ 'to help, yawn', yɔ̀ (incompletive negative marker). Note that w is fronted to [ɥ] before i, e.g. é-wí 'to kill' is pronounced [éɥí].

1.2.5. *Nasals.* Aghem has labial (m), alveolar (n), palatal (ñ), velar (ŋ), and labiovelar (ŋm) nasal stop consonants, as seen in the following examples:

(11)

m :	é-mîi	'to swallow'	ŋ :	é-tɔ́ŋ	'to blow'
n :	é-nîi	'to feed'	ŋm :	ó-ŋmê	'neck'
ñ :	é-ñɬ	'to enter'			

The following distributional constraints have been noted:

(i) The velar nasal ŋ occurs in stem-initial position apparently only in one stem: ŋé'é kɬ'wó 'fingernail' (X of hand), ŋéè kɬwù 'toenail' (X of foot). The stem -ŋé ('nail'?) was not identifiable by itself. In all other instances ŋ occurs in C_2 position (cf. mbàŋ 'walking stick') or is a realization of a pre-C_1 nasal (N), either syllabic or nonsyllabic: ŋ́-ghâm 'mats', ŋgwɬn 'bush'.

(ii) The labiovelar nasal was found only in the above stem for 'neck' and the word é-ŋmá? 'beehive'. As mentioned earlier, it probably derives from m+w.

1.3. VOWELS

Vowels in Aghem can be classified according to whether they are short, long, or diphthongs.

1.3.1. *Short vowels.* Monophthongs are vowels that consist of a single vowel quality throughout the syllable. Aghem distinguishes the following ten short vowels (monophthongs), grouped according to roundedness and vowel height:

(12)

unrounded		rounded	
i	ɨ	ʉ	u
e			o
ɛ			ɔ
a			ɔ̣

As can be seen, Aghem distinguishes five unrounded vowels (i, ɨ, e, ɛ, a), all of which are front vowels except a (which is a central vowel); and five (back)

rounded vowels (u, ʉ, o, ɔ, ɔ̣). The symbol ɨ stands for the I.P.A. front vowel [ɪ] in stems not closed by a C_2 consonant and the central vowel [ə] elsewhere, i.e. in C_1VC_2 stems and in affixes. The symbol ʉ stands for I.P.A. [ʊ]. The vowel ɔ̣ differs from ɔ in that it is lower in quality, approaching I.P.A. [ɒ]. These vowels are illustrated in the following examples:

(13)	i :	é-sí	'ceiling'	u	é-sû	'to wash'
	ɨ :	é-sɨ́	'eye'	ʉ	é-sʉ̂	'to play'
	e :	é-sê	'to pull out'	o	é-só	'raphia fibre'
	ɛ :	é-sɛ́	'to split'	ɔ	è-sɔ̀	'maize'
	a :	é-sá	'buttock'	ɔ̣	é-tɔ̣́	'to be intelligent'

The following should be noted about these vowels:

(i) As stated above, the vowel ɨ is pronounced [ɪ] when it occurs as a stem vowel without a following C_2, e.g. é-zɨ́ [é-zɪ́] 'to eat'. When it occurs in affixes, in stems with a following C_2, or as the first element of the diphthong ɨ(gh)a, it is pronounced with a centralized quality ranging from [ə] to [ɨ], e.g. kɨ́-kɨ́m [kə́-kə̂m] 'log', ŋ́-ghɨ̂a [ŋ́-ɣə̂a] 'excrement'. When occurring alone in a stem syllable (and hence pronounced [ɪ]), the preceding C_1 consonant may be only one of the following: s, z, ts, dz, ñ. Except for s, these are exactly those consonants which do not permit a following i. It is therefore likely that ɨ derives from an earlier i vowel, at least in this position.

(ii) The corresponding back rounded vowel ʉ is on the other hand always pronounced [ʊ]. It occurs either alone in a stem syllable or in the dipthong ʉɔ (section 1.3.3). In the former case it occurs only after the following C_1 consonants: v, s, pf, bv, ts, dz, l, m, ñ. Thus, stem-final ɨ and ʉ only occur after fricatives, affricates, and nasals (though not after the velar fricative gh). In the case of ʉ the fricative can be labial. ʉ also occurs after l, as in ń-lʉ̂ 'wine'. It probably derives from an earlier u, which vowel does not occur after v, pf, bv, ts, dz, l or ñ in stem-final position.

(iii) The vowels e and o are pronounced very close, somewhat between I.P.A. [i,u] and [e,o]. Similarly, the vowels ɛ and ɔ are also raised, sounding somewhere in between I.P.A. [e,o] and [ɛ,ɔ]. As mentioned above, ɔ and ɔ̣ differ in vowel height, with ɔ̣ sounding in between I.P.A. [ɔ] and [ɒ]. A minimal pair involving these vowels is é-tɔ́ 'to be short' vs. é-tɔ̣́ 'to be intelligent'. Thus, the Aghem vowels e, o, ɛ, and ɔ are all realized somewhat higher than is usually implied by the symbols used.

1.3.2. *Long vowels.* Except for ɨ and ʉ, Aghem stem vowels can occur long or short. In a few cases minimal (or near-minimal) pairs can be cited, indicating the potentially lexical function of the vowel length contrast in the language:

(14)	ii :	é-bíi	'to sleep'	i :	é-bí	'to be done' (of food)
	ee :	é-fêe	'to sell'	e :	é-sê	'to pull out'
	ɛɛ :	é-kɛ̂ɛ	'to clear'	ɛ :	é-kɛ̂	'to swear'
	aa :	fɨ̀-kàa	'squirrel'	a :	kɨ̀-tà	'spoon'
	uu :	é-nûu	'to leave'	u :	é-sû	'to wash'
	oo :	kɨ́-kó'ó	'juju'	o :	é-kô	'to cook'

ɔɔ :	é-bɔ́ɔ	'to agree'	ɔ :	é-bɔ́	'to be bad'
ọọ :	kɨ-kɔ̰ọ	'cutlass'	ọ :	kɨ-kɔ̰	'slave'

Long vowels are far less frequent than short vowels in Aghem and result either from the assimilation of one vowel to another, or the loss of an intervocalic consonant followed by the assimilation of the two vowels now in contact. Both of these possibilities are seen below in some representative B forms of class 1 verbs (cf. Anderson, section 2.2).

(15)	Infinitive form (é- + A form)	B form (A form + -a)	
a.	é-zɨ	zɨa	'to eat'
	é-tɨm	tɨma	'to shoot'
b.	é-sɛ́	saa	'to split'
	é-bɔ́	bɔɔ	'to be bad'
c.	é-nám	naa	'to cook (fufu)'
	é-tɔ́m	too	'to send'

In (15a) we see that for the verbs in question the B forms involves the addition of an -a suffix. In (15b) this suffix causes an assimilation (ɛ+a becomes aa in 'to split', with the stem vowel ɛ assimilating to the -a suffix; ɔ+a becomes ɔɔ with the a of the suffix assimilating to the ɔ of the stem in 'to be bad'). The result is a long vowel in both cases. In (15c), when the suffix -a is added, the m in C_2 position drops out because it is intervocalic (and not preceded by ɨ). The result again is a long vowel with assimilation of the -a suffix to the stem vowel. In many cases it is possible to say that a stem with a long vowel has an underlying C_2 consonant, usually m. Thus, since the B form of é-bɔ́ɔ 'to agree' (a class 2 verb) is bɔm (Anderson 2.2), it is possible to represent the infinitive form abstractly as /é-bɔ́m-á/. The B form of verbs of this structure is obtained by *deleting* the final vowel.

Long vowels frequently result thus from the juxtaposition of various words and grammatical markers in context, both in the noun and verb phrase (cf. section 1.5.2).

1.3.3. *Diphthongs.* In addition to the above ten vowels, of which at least eight regularly contrast short and long variants, the following diphthongs (sequences of unlike vowels) have been observed in the language:

(16)						
	ɪa :	é-tɪ́a	'stone'	ʉɔ :	é-dzʉ̂ɔ	'to close'
	ɨa :	é-kɨ́a	'to cut down'	ɔe :	é-kɔ́e	'rice'
	ua :	ó-lûa	'bridge'	ɔee:	é-kɔ́ɔé	'to pick up'
	uo :	é-búo	'to become tired'	ọe :	é-nọ́e	'to beg'
	uɔ :	é-bûɔ	'to come'	ọɔɛ:	é-kọ́ɔɛ́	'to cough'
	uọ :	ó-búọ	'leopards'			

Those words consisting of three vowel symbols (e.g. 'to pick up' and 'to cough') are analyzed as bisyllabic and therefore are not exceptional to the formula given in (1), which was said to characterize monosyllabic stems only. As can be seen,

the above diphthongs begin either with a high vowel (ɪ, ɨ, ʊ, ʉ) or with one of the mid/low back rounded vowels (ɔ,ɔ̣). Concerning diphthongs beginning with either ɔ or ɔ̣, only the sequence ɔe is commonly found in Aghem words.

In addition to the above, the diphthongs ɨa, uo, and uɔ have variants interrupted by velarization (indicated by gh):

(17) ɨgha : é-tsɨghà 'to pass'
ugho : é-dzúghò 'to divide'
ughɔ : ndùghɔ̀ 'who?'

The following observations have been made with respect to the distribution of these plain and velarized diphthongs:

(i) All instances of ua involve nouns whose prefix is o-. This prefix is seen to have a labialization effect on the initial consonant. Thus, the nouns ó-nûa 'belly', ó-lúa 'fat', and ó-kúa 'money', all of which are in class 3, are analyzed as having the underlying stems /-nà/, /-lá/, and /-ká/, respectively.

(ii) The plain diphthong ɨa occurs only after velars; cf. é-kɨ̂a 'headpad', ŋ́-ghɨ̂a 'excrement'. It occurs exceptionally after dz in the following two words, both of which appear to involve the same stem: é-dzɨ̂a 'termite', é-dzɨ̂adzɨ̀a 'fly'. After all consonants except velars, the corresponding velarized diphthong ɨgha occurs instead, e.g. bɨghà 'two', ń-tɨghà 'saliva', sɨghà-mbɨghà° 'seven'. The class 12 plurals of the three nouns in (i) show this complementary distribution: ń-lɨghà 'bridges', ŋ́-kɨ̂a 'monies', ń-nɨŋà 'bellies'. Automatic velarization is seen in 'bridges', since the initial consonant is alveolar, but is absent in 'monies', since the initial consonant is velar. In 'bellies' it is observed that the velarization one would expect undergoes nasalization after the stem-initial consonant n; we thus obtain nɨŋa instead of the expected nɨgha. Both ɨa and ɨgha derive from an earlier a which occurred in open syllable position (the following stem-final consonant having dropped out earlier).

(iii) The velarized diphthong ugho occurs only after alveolars. After all other consonants, the plain diphthong uo is found instead: é-túghó 'strength', é-súghò 'to stab', é-dzúghó 'mouth'; vs. é-fúo 'to give', é-kúo 'to hold'. The word é-núŋò 'to leave' shows once again that the velarization is nasalized after n, thereby changing the expected sequence nugho to nuŋo.

(iv) The diphthongs uɔ and ughɔ are relatively rare in Aghem. There is some reason to believe that they result from uo+a and ugho+a. As for velarization, some variation was noted, especially with initial labials; thus, one hears both búɔ and búghó 'if'.

(iv) It is not clear whether the diphthong uɔ̣ is distinct from ua. There is a clear tendency for ɨgha to labialize as uɔ̣, as in the class 7 noun kɨ́-fɨghà 'plantain' and its class 8 plural ó-fûɔ̣. This suggests an intermediate stage with uwa, with the w causing rounding of a and then dropping out. However, ua seems to be acceptable as an alternative pronunciation.

(v) The one singular/plural pair ó-cʉ̂ɔ/ń-cɨ̂a 'bed/beds' suggests that ʉɔ, which is an extremely rare diphthong occurring only after affricates, is from the dipthong ia which has undergone rounding. In other cases it may derive from ʉ+a, especially when a is a grammatical marker.

All dipthongs, whether velarized or plain, are considered to be monosyllabic (except when three vowels are involved). Although one may write é-tsɨghà 'to

pass', instead of é-tsɨ́gha, such a word consists of a stem with a single falling tone syllable, rather than two syllables, one with H tone and one with L tone.

1.4. *Constraints on final VC sequences.* Of the consonants presented in section 2, only the following can occur as C_2 in word-final position: m, n, ŋ, and ?. Thus, a syllable-final consonant will be one of the above nasals or the glottal stop. In addition, not all vowels occur in closed syllables. The possible word-final sequences are illustrated below:

(18)	ɨm :	é-tɨ́m	'to shoot'	ɨn :	é-zɨ́n	'name'
	am :	kɨ́-tám	'fruit'	an :	é-lán	'to be sour'
	om :	é-tóm	'to send'	ɔn :	é-zɔ́n	'to get clean'
	ɔm :	é-tɔ́m	'liver'			
	ọm :	é-tọ́m	'to write'			
	ɨŋ :	é-lɨ́ŋ	'to be black'	a? :	mbà?	'cloud'
	aŋ :	é-táŋ	'to count'	o? :	é-bó?	'bundle'
	oŋ :	kɨ́-dóŋ	'garbage pit'	ɔ? :	mbɔ̀?	'shoulder'
	ɔŋ :	é-tɔ́ŋ	'to blow'	ọ? :	é-bọ́?	'pumpkin'

Of the above sequences, an and ɔn only occur in verbs and are rare. oŋ is also extremely rare. In comparing sequences with ɔ vs. ọ, as in the case of these vowels in open syllable, ɔ derives from a central vowel (pronounced [ʌ] in related languages), while ọ derives historically from back rounded vowels (o,ɔ). om and oŋ can of course be recognized with underlying /u/; we write these sequences with o in order to maintain a consistency with how we write vowels in open syllables.

1.5. *Phonological rules.* There are a few general phonological rules which affect segments as they come in contact with one another. While these will come up in the discussion of noun and verb forms in subsequent chapters, we present a rough outline of these processes here.

1.5.1. *Consonant alternations.* The only true consonant alternation noted in Aghem concerns the consonants l and n. These consonants contrast in C_1 position, as seen in (19):

(19)	l :	ó-lûa	'bridge'	n :	ó-nûa	'belly'

However, when not in stem-initial position, l is found intervocalically and in -CV suffixes, while n is found syllable-finally and when syllabic itself, causing alternations such as the following:

(20) a. tsɨ̀l á 'wɛ́ 'the heels of the child' (cf. à-tsɨ̀n 'heels')

b. sá?'ń kɨ́ 'wɛ́ 'the basket of the child' (cf. kɨ́-sá?'lɔ́ 'basket')

c. á ń'wóo 'wɛ́ 'on the child's hands' (cf. á lá'wó 'on the hands')

In (20a) when a vowel follows a C_2 n, this n becomes l. In (20b) the suffix -lɔ́ becomes syllabic -Ń when followed by a consonant. Finally, in (20c), we see that the locative construction is marked by á+Ń if followed by a consonant, but

by á+l if followed by a vowel. In order to capture these alternations we propose that all consonants undergoing n/l alternation are underlyingly /n/, with the phonological rule in (21) deriving [l] in the appropriate environments:

(21) n → l / { V , ¢ } ___ V (where ¢ = suffix boundary)

This rule says that /n/ will become [l] either intervocalically or when /n/ begins a suffix and is followed by a vowel. One argument in favor of recognizing /n/ is that such words as 'name' in (18) and 'heels' in (20a) would end in C_2 /n/, and we would be able to maintain the generalization that C_2 consonants are either nasal or the glottal stop. This generalization could not be stated underlyingly if /l/ were recognized instead. Starting with /n/ also coincides with the historical reconstruction of both the suffix seen in (20b) and the locative marker seen in (20c). Concerning the -lɔ́ suffix, note that such verbs as é-félɔ́ 'to resemble', é-célɔ́ 'to exchange', and é-kpélɔ́ 'to meet (with)' have a reciprocal meaning that can be attributed to this suffix. In other languages the reciprocal suffix is pronounced -nə. It should be noted that the B forms of these verbs (which are derived by deleting the vowel of the suffix) are feen, ceen, and kpeen. With the loss of the final vowel, the suffix is realized as syllabic ɴ, with the preceding vowel undergoing vowel lengthening. This change is parallel to one characterizing the other main -CV suffix -sɔ/-sɨ, seen in (22):

(22) a. màʔsɨ́ kɨ́ 'wɛ́ 'the book of the child' (cf. kɨ̀-màʔsɔ̀ 'book')

b. lɔʔsɨ́ 'to deceive [B form]' (cf. é-lɔ́ʔsɔ̀ 'to deceive' [inf])

In (22a) we see that the noun suffix -sɔ closes its vowel to become -sɨ when followed by a consonant. In (22b) we see that the B form of 'to deceive' involves a closing of -sɔ to -sɨ just as we saw in the case of the reciprocal verbs just discussed. Thus, there seems to be a general process closing the ɔ of a -CV suffix to [ɨ] whenever followed by a consonant. (The B form of the verbs in question involve vowel closing because B forms cannot occur utterance-finally, where we can tell whether the vowel is phonetically ɔ or ɨ; see Anderson 2.2). Finally, when -nɔ closes to -nɨ, the vowel drops, leaving a syllabic nasal. Note that these two rules (nɔ → nɨ and nɨ → ɴ) must be ordered before rule (21). Historically, the vowel ɔ results from a low-level rounding of a vowel previously pronounced ʌ, as it is still pronounced today in closely related Weh. This explains why the B form of the verb é-tsɨ́ŋ 'to fear' is pronounced tsɔŋɔ (from underlying /tsɨŋ+a/). A derivation is provided in (23).

(23) ɨŋ+a > ʌŋa > ʌŋʌ > ɔŋɔ

First ɨ opened to ʌ (either as a result of assimilation to the suffixed -a, or as a result of ŋ being intervocalic). Then -a assimilated to this derived ʌ ; finally, both undergo the surface rounding of ʌ to ɔ which is characteristic of Aghem.

1.5.2. *Consonant deletions.* In Aghem the consonant m in C_2 position deletes when in intervocalic position (except after the stem vowel ɨ). Thus, compare the following A and B verb forms:

(24) é-nám / naa 'to cook (fufu)' BUT: é-tɨ́m / tɨma

é-tóm / too 'to send'

é-bó̱m / bo̱o̱ 'to mould'

Although it can be demonstrated from comparisons with neighboring languages that other consonants have fallen out in C_2 position, m is the only consonant exhibiting alternation with Ø in the present day language.

1.5.3. *Vowel alternations.* In a number of different environments two vowels can come together and various types of coalescence take place (assimilation, deletion, gliding etc.). The pattern is different depending on whether we are dealing with stem vowels or nonstem vowels. It thus is only rarely the case that a stem vowel will assimilate to a nonstem vowel, although the opposite is frequently the case. Since these processes will be naturally arise in discussions of the various grammatical contexts where vowels come together, only the following general outline will be presented here:

(i) In class 1 verbs, which take the suffix -a to form their B form, complete assimilation to a syllable-final stem vowel takes place *unless* that vowel is ɛ, ɨ, or ʉ, in which case we find aa, ɨa, and ʉɔ, respectively:

(25)	A form	B form			
a.	é-tɨ́	tɨ+a	→	tɨi	'to escape'
	é-dê	de+a	→	dee	'to show'
	é-bʉ́	bu+a	→	buu	'to bark'
	é-bɔ́	bɔ+a	→	bɔɔ	'to be bad'
b.	é-sɛ́	sɛ+a	→	saa	'to split'
	é-sɨ́	sɨ+a	→	sɨa	'to exit'
	é-sʉ́	sʉ+a	→	sʉɔ	'to play'

The same generalizations can be made when these vowel sequences occur in the noun phrase, e.g. /á-wɛ́′ + á + wù`/ is pronounced [wɛ́á wù] 'the children of the person'. When the second vowel is either e or o (the other two possible grammatical markers), assimilation usually takes place only when the stem vowel differs only in vowel height. Some variation has been noted which requires further investigation.

(ii) Whenever two vocalic markers occur in sequence, or when a vocalic prefix is followed by a vowel initial stem (as in possessive and demonstrative pronouns), the first vowel undergoes the following "gliding" process:

(26)					
e	→	z	/e-ɨn`/	→	[zɨ́n] 'this' (classes 4,5,9)
o	→	w	/o-ɨn`/	→	[wɨ́n] 'this' (classes 1,3,8)
a	→	gh	/a-ɨn`/	→	[ghɨ́n] 'this' (classes 2,6)

Historically, e became the glide y. Aghem, however, is in the geographic area where *y became z. The processes in (26) take place regularly in the noun + noun associative construction (section 4.6.1). As seen in the following examples, gliding must *precede* rule (21) and m-deletion or else the wrong output is obtained:

(27) a. /é-kɔ́m′ + é + á-wɛ́′/ → [kɔ́m zá'wɛ́] 'the crab of the children'
NOT *[kɔ́ zá'wɛ́]

b. /é-zɨ́n′ + é + á-wɛ́′/ → [zɨ́n zá'wɛ́] 'the name of the children'
NOT *[zɨ́ zá'wɛ́]

2

THE TONE SYSTEM

2.1. SURFACE TONES

The Aghem language has two basic level tones, H (high) and L (low) which are represented, respectively, by an acute (´) and a grave (`) accent. Since tone is assumed to be a property of the syllable in this language, only one tone mark is written per syllable (even if there is a long vowel, which is written double):

(1) é-bɔ́ 'to be bad' kɬ̀-tà 'spoon'
é-bɔ́ɔ 'to agree' fɬ̀-kàa 'squirrel'

These two basic tones occur in all combinations on the surface, as seen in (2).

(2) L-L : kɬ̀-tà 'spoon' H-L : é-bàm 'behind'
L-H : fɬ̀-mbɔ́? 'banana' H-H : tɬ́-bvé 'dogs'

In addition to basic H and L, other tones can further be differentiated. First, there is an opposition between a L tone which falls before a pause versus a L tone which does not fall (and which is written L°):

(3) L-L : tɬ̀-mbɔ̀ŋ [_ ‿] 'cows' (sg. mbɔ̀ŋ)
L-L°: tɬ̀-ndɔ̀ŋ° [_ _] 'horns' (sg. ndɔ́ŋ)

This opposition is found only before pause. In all other positions there is only one kind of L tone, the kind that does not fall appreciably in pitch. In Aghem the L° tone is related to H tone, as seen in a comparison of the singulars of the nouns in (3). The ° sign found at the end of an utterance thus indicates that the preceding L tone is not allowed to fall before pause.

Aghem has intonational downdrift. This means that in a H-L-H-L-H sequence, each subsequent H will be pronounced at a phonetic pitch level lower than the preceding H. L tones also downdrift slightly. Aghem also has downstepping of H tones. The result is that while only the two possibilities L and H are found after a L tone or after pause, a third possibility, downstepped H tone (symbolized as 'H) occurs contrastively after a nonlow tone (i.e. after a H or another downstepped H tone). An example is given in (4).

(4) a. fú kɬ́n [¯ ¯] 'this rat' (cf. kɬ́-fú 'rat')
b. wú kɬ́n [¯ ‾] 'this foot' (cf. kɬ́-wú 'foot')

As seen from the isolation forms of these nouns in (4), the presence of downstep (marked by a ' sign followed by the acute accent on the vowel) is not always predictable. Thus, although 'rat' and 'foot' are both pronounced H-H in isolation, 'foot' causes downstepping of the following demonstrative 'this', while 'rat' does not (see section 3.1 for an explanation of this difference).

The 'H notation is used here since (i) a downstepped H tone establishes a new ceiling (i.e. there can be no higher tone in the same phrase after a downstep);

and (ii) there are theoretically an infinite number of levels possible through downstepping. Thus, a downstepped H can be in turn followed by one or more downstepped H's in sequence, e.g. bé 'kɬ 'wɬn [¯ ¯ –] 'marketplace'. A downstep can also occur within the same syllable as a preceding H. Although the notation is cumbersome, the same system is used, e.g. mú'ú 'water'. As we shall see, a H'H contour tone is possible only on a syllable with a long vowel or diphthong.

Finally, diphthongs interrupted by velarization (indicated by gh) require two tone marks to avoid confusion, e.g. mbɬghà 'bag', kɬ-fɬghá 'thing'. Such sequences are however considered to constitute single syllables.

In addition to H, L, L°, and 'H, the contour tones LH (rising) and HL (falling) and H'H (falling to downstep) are possible. We have already illustrated the last of these. Examples of rising and falling tones are given in (5):

(5) L-LH : kɬ-tɛ̌ɛ [_ ⌣] 'cricket'

L-HL : kɬ-kɔ̂ [¯ ¬] 'slave' (cf. kɬ-kɔ̂ɔ̰ 'cutlass')

The LH rising tone is indicated by the symbol (ˇ). It is usually restricted to long vowels and occurs only rarely. (It *is* found on short vowels in the verb paradigm, although rarely, but not on nouns or verbs before pause.) The HL falling tone, on the other hand, is quite frequent and freely occurs on both short and long vowels (contrast 'slave' and 'cutlass' in (5)). In either case, it is marked by (ˆ). Since these contours are actually made up of two level tones pronounced on the same syllable, they could equivalently have been written kɬ-tɛ̀ɛ́ 'cricket' and kɬ-kɔ́ɔ̀ 'cutlass'. (The transcription kɬ-kɔ̂ for 'slave' is needlessly complex.) We do however use this transcription for interrupted diphthongs, e.g. é-tsɬghà 'to pass', which is considered to consist of one syllable (-tsɬgha) with falling tone.

2.2. FLOATING TONES

In addition to the above phonetic tones, all of which have been assigned to a particular syllable, there is a need to recognize underlying tones which do not in themselves belong to any syllable. These tones are termed "floating tones", and are indicated by the symbols H̩ (´) and L̩ (`). We have already seen how to H-H nouns behave differently in (4) above. Since 'foot' causes a following H tone to be downstepped, we can indicate its tonological structure by placing a floating L̩ after it, i.e. kɬ-wú`. It is this floating L̩ which causes the following H tone to be lowered. The same procedure is done throughout the grammar. Thus, in chapter 3 the various verb tenses are given abstract tonal representations which permit us to predict the tonal alternations which are observed. While only H̩ and L̩ are needed, it is possible for more than one floating tone to occur in sequence. See the individual treatments particularly of the associative construction and the verb tenses for further discussion.

2.3. TONE RULES

There are four kinds of tone rules required in Aghem: rules of tone grounding, tone spreading, tone lowering, and tone simplification.

2.3.1. *Tone grounding.* This term refers to the process by which a floating tone is assigned to a syllable. At some point it will be necessary that each floating tone be pronounced somewhere.

2.3.2. *Tone spreading.* Aghem has the following two rules of tone spreading:

(6) a. H - L → H - HL

b. L - H → L - LH

The first of these is seen in the following noun and infinitive verb forms, both of which are characterized by a H prefix:

(7) a. tɬ́-ñə̂m 'animals' á-ghɬ̂ 'people'

b. é-bâ 'to split' é-mə̂m 'to try'

Each of the forms in (7) consists of an underlying H prefix followed by an underlying L tone stem (cf. the related singulars of the nouns in (7a): ñə̀m 'animal' and wù 'person', where we observe a L tone stem on the surface).

The rule in (6b) is responsible for the rising tone seen earlier in kɬ̀-tɛ̌ɛ 'cricket' (cf. ŋgʊ̀ 'wine calabash', which derives from an earlier L prefix and a H stem). It also creates rising tones in verb conjugations. Finally, it is partially responsible for the L° tone found in pre-pause position, since such nouns as tɬ̀-ndə̀ŋ° 'horns' derive from underlying L-H via an intermediate L-LH form. This L-LH will simplify to L-L° *unless* it is on a long vowel (as in 'cricket').

2.3.3. *Tone simplification.* While tone spreading does create a lot of contour tones, there are further rules of contour tone simplification which reconvert these to level tones. One rule, termed "absorption", works as in (8).

(8) LH - H → L - H

A rising tone is simplified to a L tone when followed by a H tone. Or, in other words, the H part of the LH tone is "absorbed" into the H of the following syllable. (Curiously, there is no corresponding absorption of HL-L to H-L.) An example is tɛ̀ɛ kɬ́n 'this cricket', for which the derivation in (9) is provided:

(9) kɬ̀-tɛ́ɛ kɬ́n → kɬ̀-tɛ̌ɛ kɬ́n → kɬ̀-tɛ̀ɛ kɬ́n → tɛ̀ɛ kɬ́n

The underlying representation of 'cricket' is /kɬ̀-tɛ́ɛ/ (or even /kɬ̀-tɛ́ɛ̰/, with a final H which does not affect the derivation here). First tone spreading applies, creating L-LH; then absorption converts this to L-L. Finally, a process of prefix deletion occurs (section 4.1), and we obtain the final output. Many verb forms involve such an interaction of spreading and simplification rules.

2.3.4. *Tone lowering.* A special instance of tone spreading and absorption produces a fourth kind of rule which we term prefix-lowering. After verb forms which end in a L tone (either floating or segmental), a noun prefix is lowered from H to L, e.g.

(10) a. ò mɔ̀ kɔ̀? kɬ̀-bɛ́ 'she saw the fufu' [today] (cf. kɬ́-bɛ́ 'fufu')

b. ò nàá kɬ̀-bɛ́ 'she is cooking fufu'

We know that 'fufu' has an underlying H tone prefix in (10) because (i) it is pronounced H in the citation form of the noun; and (ii) if its underlying structure had been /kɬ̀-bɛ́/, it would be pronounced kɬ̀-bɛ̀° in (10b) by the rules of

tone spreading and tone simplification (of $\widehat{LH}$ to L° before pause). Now compare the pronunciation of fɨ́-ghâm 'mat' in (11):

(11) a. ò mɔ̀ kɔ̀? fɨ̀-ghàm 'she saw the mat' [today] (cf. fɨ́-ghâm 'mat')

b. ò bɔ̀ɔ́ fɨ̀-ghàm 'she is beating a mat'

Instead of deriving [fɨ̀ghâm], where only the prefix has been lowered, the $\widehat{HL}$ tone of the stem has also been lowered. Thus, we need the following simplification rule in (12):

(12) L - $\widehat{HL}$ → L - L condition: there is no word boundary between L and $\widehat{HL}$

This rule will follow the L spreading rule given in (6b). Thus, the complete derivation of (11b) is given in (13):

(13) /ò bɔ́-à fɨ́-ghàm`/ → ò bɔ̀ɔ́ fɨ̀ghâm → ò bɔ̀ɔ́ fɨ̀ghàm → ò bɔ̀ɔ́ fɨ̀ghàm

First there is tone spreading to the right (and loss of the final floating L tone). Then there is simplification of L-HL by rule (12). Finally, there is assimilation of the -a suffix to the preceding stem vowel (section 1.5.3). As can be seen, prefix lowering is a convenient term covering an interplay between tone spreading and (on occasion) tone absorption. More will be said about such derivations in later chapters.

3

NOUNS: A-FORMS (IN FOCUS)

3.1. NOUN STRUCTURE

Nouns occur in two forms depending upon the grammatical context: an A form (referred to as the "in focus" form) and a B form (which is "out of focus"). A-forms are treated in this chapter. B forms are treated in chapter 5. Of the two forms A forms are considered to be basic, while B forms are derived.

Nouns in the A form consist of a noun class prefix followed by a normally monosyllabic noun stem. Depending on the noun class, the prefix is Ø- (classes 1,9), V- (classes 2,3,4,5,6,8), CV- (classes 7,10,11), or N- (class 12):

(1) Ø- : wɛ́ 'child' (class 1)
V- : á-wɛ́ 'children' (class 2)
CV- : fɨ́-nwɨ́n 'bird' (class 11)
N- : ń̀-nwɨ́n 'birds' (class 12)

As seen in the above examples, this noun class prefix usually carries H tone on nouns in isolation (and in most contexts in sentences). There are, however, a few exceptions, e.g.

(2) kɨ̀-tà 'spoon' (cl. 7) fɨ̀-tsà?° 'trap' (cl. 11)
fɨ̀-mbó? 'banana' (cl. 11) kɨ̀-tɛ̌ɛ 'cricket' (cl. 7)

In addition, in some rare cases the noun stem is bisyllabic. Most of these stems can be demonstrated to be reduplications (3a), compounds (3b), monosyllabic stem + suffix (3c), or borrowings (3d):

(3) a. é-dzɨ̀adzɨ̀a 'fly' (cl. 5) fɨ̀-mɔ̀ŋɔ̀mɔ̀ŋɔ̀ 'tadpole' (cl. 11)
ḿ-gbáŋgbáŋ 'brain' (cl. 12) kɨ́-kpá?ákpá?á 'bean' (cl. 7)
b. wìnóò 'man' (cl. 1) ñɔ̀ɔdzɨ̀ 'elephant' (cl. 9)
wìzɨ́n 'woman' (cl. 1) kɨ̀-kɨ̀añɔ̀m 'horse' (cl. 7)
c. kɨ̀-mà?sɔ̀ 'letter' (cl. 7) kɨ́-tóŋ'lɔ́ 'ear' (cl. 7)
kɨ́-sá?'lɔ́ 'basket' (cl. 7) kɨ̀-tàŋlɔ̀ 'cap' (cl. 7)
d. trénjà 'stranger' (cl. 9) kɨ́-tɨ́ghábáŋ 'tobacco' (cl. 7)

The compound nouns in (3b) consist of a Ø or CV- prefix followed by two monosyllabic stems, e.g. 'horse' appears to be constructed from the nouns kɨ̀-kɨ̀a° 'a kind of monkey' and ñɔ̀m 'animal', the latter noun also being found in 'elephant' (where perhaps dzɨ̀ is related to dzɨ́ 'goat'). Finally, 'man' and 'woman' involve the noun 'person' plus forms for 'male' and 'female'.

The phonological structure of monosyllabic stems was given in chapter 1. For the tonal structure, consider first the following possibilities on nouns which lack a prefix:

(4) L_1 : ñòm 'animal' H_1 : bvá 'dog'
L_2 : dzɨ̀m 'back' H_2 : kɛ́ 'monkey'

All are class 9 nouns. In Aghem it is common for two nouns to have the same tone in isolation, but to have different tonal properties in a given grammatical context. Such differences have been noted in (4) by the subscripts 1 and 2. As can be seen, both L and H stems further subgroup into two different patterns. The difference between L_1 and L_2 can be seen in their plural forms in class 10: while the plural of 'animal' is tɨ́-ñôm, the plural of 'back' is tɨ́-dzɨ́m. The difference between H_1 and H_2 can be seen from the different tone observed on the associative marker tɨ́ in the plural forms (class 10) in (5):

(5) a. bvá 'tɨ́ 'wɛ́ [¯ — —] 'the dogs of the child'
b. kɛ́ tɨ́ 'wɛ́ [¯ — —] 'the monkeys of the child'

These differences can be accounted for if we recognize the underlying tonal representations in (6).

(6) L_1 : /ñòm`/ $H_1$ : /bvá`/
L_2 : /dzɨ̀m´/ H_2 : /kɛ́´/

Thus, the four sequences L-$\underset{\circ}{L}$, L-$\underset{\circ}{H}$, H-$\underset{\circ}{L}$, and H-$\underset{\circ}{H}$ are all found underlyingly on monosyllabic noun stems, with the floating tone being a remnant of what used to be a second stem syllable. We thus can explain the downstep of 'tɨ́ in (5a) as being the result of the floating $\underset{\circ}{L}$ tone of 'dog(s)'. Since the floating tone is $\underset{\circ}{H}$ in the case of 'monkey(s)', no downstepping takes place in (5b). The difference in plural formation between 'animals' and 'backs' is explained, since their underlying forms are /tɨ́-ñòm`/ and /tɨ́-dzɨ̀m´/. As we shall see in the next set of examples, nouns with the shape H-L-$\underset{\circ}{H}$ are pronounced H-H_1 in isolation.

The following tonal patterns account for more than 90% of the bisyllabic nouns in Aghem:

(7) H-$\widehat{HL}$: kɨ́-kə̂ 'slave' H-H_2 : kɨ́-wó 'hand'
H-H_1 : kɨ́-wú 'foot' H-H_3 : kɨ́-fú 'rat'

All are class 7 nouns. As indicated, bisyllabic nouns consist of a H tone prefix and either a HL or H stem. The HL stem comes from an underlying L which has undergone H-spreading from the preceding prefix tone (section 2.3.2). In the case of H-H nouns, three subclasses are needed to explain the different tonal behaviors found in context. As seen in (8),

(8) H-H_1 : wú 'kɨ́ 'wɛ́ 'the foot of the child'
H-H_2 : wó 'kɨ́ 'wɛ́ 'the hand of the child'
H-H_3 : fú kɨ́ 'wɛ́ 'the rat of the child'

both H-H_1 and H-H_2 cause the class 7 associative marker kɨ́ to be downstepped. This same marker remains H after H-H_3. In (9), on the other hand, it is seen that H-H_1 is realized as H-L, while both H-H_2 and H-H_3 are realized as H-'H after a H tone associative marker such as the class 5 é seen in these examples:

(9) $H\text{-}H_1$: fɨŋ é kɨwù 'the wound of the foot'
$H\text{-}H_2$: fɨŋ é kɨ'wó 'the wound of the hand'
$H\text{-}H_3$: fɨŋ é kɨ'fú 'the wound of the rat'

The examples in (8) show $H\text{-}H_1$ and $H\text{-}H_2$ pairing together, as opposed to $H\text{-}H_3$. The examples in (9) show $H\text{-}H_2$ and $H\text{-}H_3$ pairing together, as opposed to $H\text{-}H_1$. This second pairing is also seen in (10).

(10) $H\text{-}H_1$: ñùŋ ɔ̀ kɨwù 'the hair of the foot'
$H\text{-}H_2$: ñùŋ ɔ̀ kɨwò° 'the hair of the hand'
$H\text{-}H_3$: ñùŋ ɔ̀ kɨfù° 'the hair of the rat'

Here we see that $H\text{-}H_1$ becomes L-L after the L tone associative marker /à/ of class 9, while $H\text{-}H_2$ and $H\text{-}H_3$ become L-L°.

In order to account for the different tonal behavior exhibited in the above three H-H subgroups (as well as the H-HL pattern), the following underlying forms are recognized:

(11) $H\text{-}L\text{-}\underset{\circ}{L}$: /kɨ-kə̀`/ 'slave' = H-HL
$H\text{-}L\text{-}\underset{\circ}{H}$: /kɨ-wù'/ 'foot' = $H\text{-}H_1$
$H\text{-}H\text{-}\underset{\circ}{L}$: /kɨ-wó`/ 'hand' = $H\text{-}H_2$
$H\text{-}H\text{-}\underset{\circ}{H}$: /kɨ-fú'/ 'rat' = $H\text{-}H_3$

Bisyllabic nouns have a H prefix followed by either L or H on the stem followed by either $\underset{\circ}{L}$ or $\underset{\circ}{H}$ floating after the stem, thereby giving the four possibilities seen in (11). Note that the underlying form for 'foot' is identical to that seen earlier in /tɨ-dzɨm'/ 'backs', which is also a $H\text{-}H_1$ noun. Instead of a $H\text{-}H_1$ pattern, underlying H-L-$\underset{\circ}{H}$ will yield a H-H'H sequence if the stem vowel is long, e.g. é-fú'ú 'leaf', ó-jə́'ɔ́ 'dream'. (The one noun mú'ú 'water' [class 12] has H'H stem tone without an overt prefix.) It is important, finally, to note that the H_1 of prefixless nouns corresponds to $H\text{-}H_2$ in bisyllabic nouns, as can be seen from their underlying -H-$\underset{\circ}{L}$ structure.

In addition to the four tonal structures found when the prefix is H (in (11), the following tone patterns with a L prefix account for somewhat less than 10% of the bisyllabic nouns in Aghem:

(12) L-L : kɨ-tà 'spoon' L-H : fɨ-mbó? 'banana'
L-L° : fɨ-tsà?° 'trap' L-HL : kɨ-gbɨn 'dirty river'
L-LH : kɨ-tɨ̌t 'cricket'

Since it is the L tone of the prefix of these nouns that is exceptional, it is likely that the stems carry the same two-tone sequences seen in (11). However, because there are so few of these nouns (e.g. only one example each of L-H and L-HL), it is not possible to determine exactly what the underlying shape of each noun is. Surface L-L is clearly from underlying L-L-$\underset{\circ}{L}$ and L-L-$\underset{\circ}{H}$, since these two sequences merge in Aghem (cf. (10), where 'foot' has the underlying form /kɨ-wù'/ in this position and is pronounced L-L). L-L° is probably from both L-H-$\underset{\circ}{L}$ and L-H-$\underset{\circ}{H}$ (cf. 'hand' and 'rat' in (10)). Thus, as seen in (13),

(13) sá? fɬn 'this needle' (cf. fɬ-sà?° 'needle')

when the L tone prefix is dropped (by prefix dropping; section 4.1), the underlying H of the stem is allowed to surface without undergoing L spreading (to LH and then simplification to L° before pause). Turning to the remaining sequences, the only two examples of LH tone on a noun in isolation are 'cricket' in (12) and the noun ŋgŭo 'wine calabash', both of which have a long vowel or diphthong. L-LH thus corresponds to L-L°, the latter of which is found only when there is a short vowel. The treatment of L-H and L-HL is unclear. Neither of these nouns undergoes any alternation in its tones in any context; they also constitute the only two nouns known not to undergo prefix dropping. It is possible that some of the above nouns with L prefixes were borrowed from neighboring languages which have L tone prefixes (e.g. Bafut, in the Ngemba group).

3.2. NOUN CLASSES

Aghem distinguishes 12 noun classes, 6 of which are used with singular nouns, 6 of which are used with plural nouns. The same numbering of the classes is used as in Narrow Bantu, except for classes 11 and 12, which correspond to Bantu classes 19 and 6a, respectively. In the basic or A forms of nouns, each noun class has its own prefix shape, which in the case of classes 1 and 9 can be zero (Ø-). In addition, each class conditions agreement on modifiers and corresponding pronouns (chapter 4). The following table illustrates each class, indicating the prefix form of the noun as well as the consonant and tone (C+T) concord form found on certain agreeing elements:

(14) NOUN CLASSES IN A-FORMS OF NOUNS

class	*noun prefix*	*C+T concord*	*example + gloss*	
1	Ø	w`	wɛ́	'child'
2	á-	gh´	á-wɛ́	'children'
3	ó-	w´	ó-kɔ́?	'ladder'
4	é-	z´	é-kɔ́?	'ladders'
5	é-	z´	é-ghóm	'egg'
6	á-	gh´	á-ghóm	'eggs'
7	kɬ-	k´	kɬ-fú	'rat'
8	ó-	w´	ó-fú	'rats'
9	Ø	z`	bvə́	'dog'
10	tɬ-	t´	tɬ-bvə́	'dogs'
11	fɬ-	f´	fɬ-nwɬn	'bird'
12	ǹ-	m`	ǹ-nwɬn	'birds'

From the above table it is seen that the 12 noun classes in Aghem group together into 6 singular/plural pairs or *major genders* (section 3.3.1). Classes 1, 3, 5, 7, 9 and 11 are singular classes; classes 2, 4, 6, 8, 10, and 12 are plural classes. Thus, classes 3 and 8 and classes 4 and 5 are formally identical, except that 3 and 5 are singular classes, while 8 and 4 are plural classes. Classes 2 and 6 are formally identical and both are plural classes (although class 2 is used only for plural human beings; see section 3.3.1.1). We have

kept these distinct for comparative purposes, but recognize that an alternative analysis would be possible and internally consistent for Aghem which would set up only 9 noun classes, 2 of which could be used for either singular or plural purposes (3=8 and 4=5; only one class 2 would be set up for both our class 2 and class 6). This kind of analysis would also simplify the problem of identifying certain single class gender nouns for which an unambiguous class assignment is not possible in the above scheme (section 3.3).

It should be further noted in (14) that although classes 1 and 9 have identical Ø prefix forms, they have different consonant concords (w` for class 1 and z` for class 9). The consonant concords can otherwise be easily predicted from the noun prefixes, as follows:

(15)

prefix		*C+T*	*prefix*		*C+T*	*prefix*		*C+T*
e	→	z′				kɨ	→	k′
o	→	w′	N	→	m`	tɨ	→	t′
a	→	gh′				fɨ	→	f′

In the case of vowel prefixes, the w and z concords are clearly derived from the prefixes by desyllabification (gliding) (e- first became y, historically, and then z; o- becomes w; and a- in a less straightforward way becomes gh). If the prefix is a syllabic nasal (class 12), its concord is m; and finally, if the prefix is CV-, the concord is obtained by dropping the ɨ vowel. Note that all consonant concords are associated with H tone, except classes 1, 9 and 12. The w` and z` concords of 1 and 9 reflect earlier L tone prefixes ò- and è- on the nouns of these classes (cf. their vocalic concords in chapter 4).

3.3. *Noun genders.* The term "noun class" refers to one of the aforementioned 12 forms in which a singular or plural noun can appear. The term "noun gender" refers to the singular/plural pairings found in the language. We distinguish between major genders, minor genders, and single class genders.

3.3.1. *Major genders.* The major genders found in Aghem are in part derived from the table in (14). They include: 1/2, 3/4, 5/6, 7/8, 9/10, and 11/12. To these we add genders 3/12 and 5/10 (which are not found in Bantu languages further to the East, but are found in Western Grassfields Bantu). In citing a noun gender, the first number refers to the class of the singular form, and the second number refers to the class of the plural form (e.g. 1/2 means "class 1 in the singular and class 2 in the plural"). Each of these genders is now treated and illustrated in turn:

3.3.1.1. *Gender 1/2.* Gender 1/2 nouns all designate human beings:

(16)

wɛ́	'child'	pl.	á-wɛ́	'children'
fɨn	'friend'	pl.	á-fɨn	'friends'
nóm	'husband'	pl.	á-nóm	'husbands'

The one noun 'person' has an irregular alternation involving the stem itself:

(17) wù 'person, someone' á-ghɨ̂ 'persons, people'

This noun forms the basis for several compound nouns designating human beings:

(18)	wǐnôo	'man'	pl.	á-ghǐ-nôo	'men'
	wǐzɬn	'woman'	pl.	á-ghǐ-zɬn	'women'
	wù tsòŋɔ́	'thief'	pl.	ghǐ tsɔ́ŋɔ́ghɔ́	'thieves'

The w-/gh- alternation seen in 'person/s' is of course identical to the C+T concords indicated in (14). This noun appears as one of the two words in the language where one can still discern a historical vowel-initial stem (cf. wǐ 'wife', pl. ághǐ).

3.3.1.2. *Gender 3/4.* Nouns in this gender are characterized by a ó- prefix (~[u]) in the singular, and a é- prefix (~[i]) in the plural:

(19)	ó-wé	'body'	pl.	é-wé	'bodies'
	ó-tɔ́ŋ	'throat'	pl.	é-tɔ́ŋ	'throats'
	ó-sɬ	'face'	pl.	é-sɬ	'faces'

As seen in the above examples, this gender includes several body parts. It also contains a number of non-body parts. Where the singular has an initial Cw sequence, the w drops in the plural (cf. the reverse situation in gender 7/8):

(20)	ó-kwɬŋ	'mortar'	pl.	é-kɬŋ	'mortars'
	ó-kwâʔ	'mountain'	pl.	é-káʔà	'mountains'

3.3.1.3. *Gender 3/12.* Nouns in this gender are characterized by a ó- prefix (~[u]) in the singular, and a ń- prefix in the plural:

(21)	ó-kúa	'money'	pl.	ń̩-kɬa	'monies'
	ó-twǐi	'medecine'	pl.	ń-tǐi	'medecines'
	ó-sɔ́ŋ	'bleeding cup'	pl.	ń-sɔ́ŋɔ́	'bleeding cups'

Again, when the class 3 singular has a Cw sequence, the w falls (including what is written u in dipthongs beginning with this vowel). Since most of the nouns in this gender seem to be used primarily in the singular, this may be hint that the plural in class 12 is a recent innovation.

3.3.1.4. *Gender 5/6.* Nouns in this gender are characterized by a é- prefix (~[i]) in the singular, and a á- prefix in the plural:

(22)	é-kɔ́m	'crab'	pl.	á-kɔ́m	'crabs'
	é-bo̩ʔ	'pumpkin'	pl.	á-bo̩ʔ	'pumpkins'
	é-lɬm	'yam'	pl.	á-lɬm	'yams'

There are several body parts in this gender:

(23)	é-sɔ́ŋ	'tooth'	pl.	á-sɔ́ŋ	'teeth'
	é-tɔ́ŋ	'navel'	pl.	á-tɔ́ŋ	'navels'
	é-ghé	'breast'	pl.	é-ghé	'breasts'

3.3.1.5. *Gender 5/10.* Nouns in this gender are characterized by a é- prefix (~[i]) in the singular and a tɬ- prefix in the plural:

(24)	é-ghɔ̂	'wing'	pl.	tɬ-ghɔ̂	'wings'
	é-bɬa	'kolanut'	pl.	tɬ-bɬa	'kolanuts'
	é-vɑ̂ɔ	'feather'	pl.	tɬ-vɑ̂ɔ	'feathers'

Nouns in the plural class 10 frequently add a suffix -a which is not present in the singular:

(25)	é-ná?	'village'	pl.	tɬ-ná?à	'villages'
	é-vɛ́	'death'	pl.	tɬ-vɛ́ɔ̀	'deaths'

In the following examples, this -a suffix has caused a stem-final m to drop out and a stem-final n to become l according to the rules discussed in section 1.5:

(26)	é-zo̱m	'song'	pl.	tɬ-zɔ̂ɔ	'songs'
	é-bɬn	'dance'	pl.	tɬ-bɬlà	'dances'

Several class 5 nouns can take their plural in either class 6 or class 10:

(27)	é-ghɔ́ŋ	'spear'	pl.	á-ghɔ́ŋ ~ tɬ-ghɔ́ŋ	'spears'
	é-ghán	'root'	pl.	á-ghán ~ tɬ-ghán	'roots'
	é-bó?	'bundle'	pl.	á-bó? ~ tɬ-bó?	'bundles'

It should be noted that the vowel prefix of classes 4 and 5 varies between [e] and [i], with the former being somewhat more frequent. We have adopted e- for use in this study.

3.3.1.6. *Gender 7/8.* Nouns in this gender are characterized by a kɬ- prefix in the singular and a ó- prefix (~[u]) in the plural. Among the nouns found in 7/8 are the following body parts:

(28)	kɬ-jɔ̂?	'cheek'	pl.	ó-jɔ̂?	'cheeks'
	kɬ-nɔ́m	'tongue'	pl.	ó-nɔ́m	'tongues'
	kɬ-ghɔ́	'bone'	pl.	ó-ghɔ́	'bones'

In addition, 7/8 is the general "thing" gender:

(29)	kɬ-fɬghá	'thing'	pl.	ó-fú̱	'things'
	kɬ-kɔ̂ŋ	'stirring rod'	pl.	ó-kɔ̂ŋ	'stirring rods'
	kɬ-bɔ̂m	'hand piano'	pl.	ó-bɔ̂m	'hand pianos'

Whenever the stem vowel is ɛ, a, ɬa, or ɬgha, the initial consonant becomes labialized in the plural, as follows:

(30)	kɬ-tɛ̌ɛ	'cricket'	pl.	ò-twɛ̌ɛ	'crickets'
	kɬ-nâŋ	'cocoyam'	pl.	kɬ-nwâŋ	'cocoyams'
	kɬ-kɬa°	'monkey (sp.)'	pl.	ò-kùa°	'monkeys (sp.)'
	kɬ-fɬghà	'plantain'	pl.	ó-fû̱	'plantains'

When the initial consonant is b, instead of bw or bua, we find gb. However, -bɨgha labializes as buọ, as seen in the third example:

(31)	kɨ-bɛ́	'fufu'	pl.	ó-gbɛ́	'fufus'
	kɨ-bá?	'rope'	pl.	ó-gbá?	'ropes'
	kɨ-bɨghá	'leopard'	pl.	ó-búọ	'leopards'

Note, finally, that the prefix vowel of classes 3 and 8 varies between [o] and [u], with [o] being far more prevalent. We write o- in this study.

3.3.1.7. *Gender 9/10.* Nouns in this gender are characterized by a Ø prefix in the singular and a tɨ- prefix in the plural. Approximately half of the 9/10 nouns involve a stem-initial NC- sequence:

(32) a.	jì	'road'	pl.	tɨ-jǐ'ǐ	'roads'
	tóm	'message'	pl.	tɨ-tóm	'messages'
	fɨŋ	'heart'	pl.	tɨ-fɨŋ	'hearts'
b.	ndzàm	'axe'	pl.	tɨ-ndzàm	'axes'
	ndúghó	'house'	pl.	tɨ-ndùghò°	'houses'
	mbɨghà	'bag'	pl.	tɨ-mbɨghà	'bags'

Approximately 20% of the 9/10 nouns refer to animals:

(33) a.	ñòm	'animal'	pl.	tɨ-ñôm	'animals'
	dzɨ	'goat'	pl.	tɨ-dzɨ	'goats'
	zúghó	'snake'	pl.	tɨ-zúghó	'snakes'
b.	njì	'sheep'	pl.	tɨ-njì	'sheep'
	mbòŋ	'cow'	pl.	tɨ-mbòŋ	'cows'
	mbvə́	'chicken'	pl.	tɨ-mbvə̀°	'chickens'

As can be seen from the examples, the tone of the tɨ- prefix of class 10 depends on whether there is a NC- sequence (as in (32a) and (33a)) or not (as in (32b) and (33b)). The normal H tone prefix is found if there is no NC- sequence; otherwise, if there is such a sequence, the prefix carries L tone. In cases where the prefix is L and the stem is underlyingly H, a L-L° sequence is obtained, e.g. tɨ-mbvə̀° 'cows' (cf. mbvə́ 'cow'). A slight complication arises in the tone of plural forms lacking -N- but having stem L tone. Thus, compare the following:

(34) a.	dzɨ	'voice'	pl.	tɨ-dzɨ	'voices'
	fù	'hoe'	pl.	tɨ-fû	'hoes'
b.	dzɨŋ	'hunger'	pl.	tɨ-dzɨŋ	'hungers'
	dzɨm	'back'	pl.	tɨ-dzɨm	'backs'

The reason for the discrepancy between 'voices' and 'hoes' vs. 'hungers' and 'backs' is that the former stems are underlyingly -L-L̥, while the latter stems are -L-H̥. As seen in section 3.1, a H-L-L̥ sequence becomes H-HL, while a H-L-H̥ sequence becomes H-H_1. Note that the plural form tɨ-jǐ'ǐ 'roads' in (32a) has

the structure H-H'H rather than H-H_1 because there is a long vowel which permits the H'H sequence (underlyingly /tɬ-jì-á/). The following exceptional plural tones have been noted:

(35)	tọ̀e	'pot'	pl.	tɬ-tọ̀e	'pots'
	tsàm	'war'	pl.	tɬ-tsàm	'wars'

Although these two nouns do not have a NC- sequence, the tone of the plural prefix is L. This probably is attributable to the fact that these nouns once had a nasal (as they do in neighboring languages) which fell before voiceless consonants (there are no sequences of nonsyllabic N + voiceless consonant in Aghem). Thus, the tonal pattern continues to function as though the nasal were present.

As in the case of gender 5/10, many plural nouns in class 10 have an -a suffix:

(36)	ŋgwɬn	'bush'	pl.	tɬ-ŋgwɬà	'bushes'
	ndzóŋ	'moon'	pl.	tɬ-ndzóŋ́	'months', tɬ-ndzòŋ° 'moons'
	nòm	'dry season'	pl.	tɬ-nôo	'years'

Notice in the case of 'bushes' and 'months' that when this final -a is present the class 10 prefix is H even before a NC- sequence.

3.3.1.8. *Gender 11/12 (Bantu 19/6a).* Nouns in this gender are characterized by a fɬ- prefix in the singular and a ń- prefix in the plural:

(37)	fɬ-ghâm	'mat'	pl.	ń-ghâm	'mats'
	fɬ-sà?°	'needle'	pl.	ǹ-sà?°	'needles'
	fɬ-kâ?	'tree'	pl.	ń-kâ?	'trees'

Although it is not used productively for such purposes, some nouns can be transferred into gender 11/12 to derive a diminutive meaning, e.g. fɬ-kə̀ 'slave' (from kɬ-kə̀), fɬ-fú 'small rat' (from kɬ-fú), fɬ-vɛ́ɔ 'a little oil' (from ń-vɛ́).

3.3.2. *Minor genders.* In addition to the above eight major genders, the following nine minor genders each claim one or more nouns.

3.3.2.1. *Gender 1/10.* Only two examples:

(38)	fɛ̀	'chief'	pl.	tɬ-fɛ̀	'chiefs'
	bà? tòm°	'quarter head'	pl.	bà?á tɬ'tóm	'quarter heads'

Note the L tone of tɬ-fɛ̀ betraying the earlier nasal which dropped out before the voiceless consonant f.

3.3.2.2. *Gender 3/6.* Only one example:

(39)	ó-lə̂	'raphia'	pl.	á-lə̂	'raphia bush'

3.3.2.3. *Gender 3/10.* Only one example, occurring also in 3/4:

(40)	ó-lɬŋ	'bamboo'	pl.	tɬ-lɬŋ ~ é-lɬŋ	'bamboos'

3.3.2.4. *Gender 5/12.* One example:

(41) é-kûo 'native belt' pl. ŋ́-kûo 'native belts'

The plural form in class 12 may be influenced from the related noun fɨ-kûo/ŋ́-kûo 'imported belt', which shares the same plural.

3.3.2.5. *Gender 7/4.* Five nouns have been found to be acceptable in this gender:

(42)	kɨ-fé	'leg'	pl.	é-fé	'legs'
	kɨ-bî	'thigh'	pl.	é-bî	'thighs'
	kɨ̀-kwè	'branch'	pl.	è-kwè	'branches'
	kɨ-gɔ̂m	'figtree'	pl.	é-gɔ̂m	'figtrees'
	kɨ-tám	'fruit'	pl.	é-tám	'fruits'

As can be seen, all five nouns have either to do with trees or with the leg. Except for 'leg' and 'thigh', these nouns can appear alternatively in 7/8. The languages of this area frequently apply nouns such as 'branch', 'stick' etc. to oblong body parts such as legs and thighs (and arms).

3.3.2.6. *Gender 7/6.* This gender contains the following three paired body part nouns, which derive historically from Proto Benue-Congo kú-/á-:

(43)	kɨ-kwé	'arm'	pl.	á-kwé	'arms'
	kɨ-wó	'hand'	pl.	á-wó	'hands'
	kɨ-wú	'foot'	pl.	á-wú	'feet'

3.3.2.7. *Gender 7/12.* Two examples, both involving human beings:

(44)	kɨ-kə̧	'slaves'	pl.	ŋ́-kə̧	'slaves'
	kɨ-kó'ó	'juju'	pl.	ŋ́-kó'ó	'jujus'

Compare the alternative singular fɨ-kə̧ 'slave' (class 11), which naturally has its plural in class 12.

3.3.2.8. *Gender 7/10.* The following four nouns have been found:

(45)	kɨ-ɪó?'ó	'place'	pl.	tɨ-ɪó?'ó	'places'
	kɨ-sá?'ɪ́	'basket'	pl.	tɨ-sá?'ɪ́	'baskets'
	kɨ-tɔ̂e	'buttock'	pl.	tɨ-tɔ̂e	'buttocks'
	kɨ-bâ	'piece'	pl.	tɨ-bâ	'pieces'

All of these nouns except 'place' can alternatively occur in 7/8.

3.3.2.9. *Gender 11/10.* Only one example, which can also be in 11/12:

(46) fɨ-ndàŋ 'stool' pl. tɨ̀-ndàŋ 'stools'

3.3.3. *Single class genders.* A number of nouns exist only in one class in Aghem. As such they either lack a singular or a plural. Often the reason is semantic (e.g. 'coolness' has no plural). The following examples have been found (there are certainly many more, while some speakers may attempt to give new singular or plural forms under to fit unusual circumstances, e.g. 'suns').

3.3.3.1. *Class 3=8.* Since classes 3 and 8 are different only in that the former is singular and the latter plural, when there is no corresponding second class to form a gender, it is impossible to assign such nouns to either 3 or 8:

(47) ó-jǂm 'ashes' ó-tʂ́ 'intelligence'
ó-fɔ́ 'coolness' ó-tsɔ́ŋ 'stealing'
ó-jwǂn 'pus'

Two of these nouns, 'intelligence' and 'stealing', are derived from verbs: é-tʂ́ 'to be intelligent', é-tsɔ́ŋ 'to steal'.

3.3.3.2. *Class 4=5.* As in the previous case, it is not possible to assign such nouns unambiguously to either class 4 or 5:

(48) é-tsɑ́? 'clay' é-ñə̂ 'lake'
é-kǂa 'headpad' é-fʂ́lʂ́ 'pain'
é-wú 'rain' é-zú 'sun'

This class includes several nouns which are identical to infinitive verb forms: é-dâ 'length, to be long', é-lɛ́ 'poverty, to be lacking', é-túghó 'strength, to be strong'.

3.3.3.3. *Class 9.* Only one example: zǂŋ 'wind'.

3.3.3.4. *Class 10.* Nouns in this class represent a merger of Proto Grassfields Bantu classes 10 and 13, which are distinct in other languages (e.g. in Kom). Five such nouns were found:

(49) tǂ-kâŋ 'blood' tǂ-mʂ́?ʂ̀ 'dew'
tǂ-cía 'charcoal' tǂ-kǂŋmbǂŋ 'leprosy'
tǂ-zú 'honey' (sg. é-zú 'bee')

3.3.3.5. *Class 12.* A number of nouns designating masses or liquids are found in this single class gender (Proto Benue-Congo *ma-):

ŋ́-kǂa 'cornbeer' ń-tsɔ̂? 'salt'
ŋ́-kǂŋ 'fat' mú'ú 'water'
ń-və́ 'oil' mù ǹjwì 'urine'
ń-tǂghà 'saliva' ń-lə̂ 'wine'

The noun 'oil' has been seen to have a corresponding diminutive singular in class 11 (see 3.3.1.8), which probably represents an innovation.

4

NOUN MODIFIERS

4.1. WORD ORDER AND PREFIX DELETION

Noun modifiers follow the noun in Aghem, as seen in the following examples involving the noun fɨ-nwɨn 'bird' followed by a possessive pronoun, an adjective, a demonstrative, a numeral, and an associative noun:

(1) nwɨn 'fáŋá 'my bird' fɨ-nwɨn fɨ̀-mò? 'one bird'
nwɨn fɨ̀dú'úfɔ́ 'big bird' nwɨn 'fɨ 'wé 'bird of child'
nwɨn 'fɨn 'this bird'

As also seen, the prefix of the modified noun falls when followed by any modifier *except* a numeral. Thus, in four of the above five phrases, fɨ-nwɨn 'bird' has become nwɨn by prefix deletion.

The following generalizations should be noted regarding the tonal behavior of nouns undergoing prefix deletion:

(i) The H tone influence of the prefix remains in effect when nouns undergo prefix deletion. Recall that the HL falling tone of a noun such as fɨ-ghâm 'mat' is derived by H-tone spreading from an underlying representation /fɨ-ghàm/. When such nouns undergo prefix deletion, the HL tone remains on the stem, e.g. ghâm fáŋá 'my mat'. This fact demonstrates that the H prefix is present in underlying representations and only recently was permitted to drop in Aghem.

(ii) There are two exceptions to the above statement. The first concerns the noun kɨ-gôm 'figtree', which exceptionally becomes gòm káŋá 'my figtree' (i.e. with a L stem). This is the only noun in the language with an initial g which is not preceded by a nasal. Thus, there may have been an earlier nasal which is able to exert a lowering effect when the kɨ- prefix is deleted. The second exception concerns class 12 nouns, which always have such a nasal as their prefix. When a H-HL or H-H$_1$ class 12 noun loses its prefix, the stem becomes L, e.g. ghàm máŋá 'my mats' (ŋ́-ghâm 'mats'), nwɨn máŋá 'my birds' (ń-nwɨn 'birds'). This L tone effect is consistent with the L concord characterizing class 12 in Aghem.

(iii) Contrary to the behavior of H prefixes, when a L-L° noun undergoes prefix deletion, the underlying H of the stem comes to the surface, e.g. sá? fáŋ'á 'my needle' (fɨ̀-sà?° 'needle', from underlying /fɨ̀-sá?/). This suggests that prefix deletion *precedes* the L-spreading rule deriving L°.

(iv) It should be noted that two exceptional nouns were found which do not undergo prefix deletion: fɨ̀-mbó? 'banana', kɨ̀-gbɨ̂n 'dirty river'. Since these nouns have the regular plurals m̀-mbó? and ò-gbɨ̂n, it is clear that their first syllable is a L tone prefix. Note, finally, that class 9 nouns beginning with a NC sequence do not lose their initial nasal, e.g. ndzàm záŋá 'my axe'. This demonstrates conclusively that the initial N is not a prefix, but rather part of the stem.

When more than one modifier is present, the following order of the various elements is obligatory:

(2) *NOUN* + { *POSS*, *ADJ* } + *DEM* + *NUM*

In the above formula, *POSS* stands for either possessive pronouns or associative (genitive) nouns. Thus, we see that possessives and adjectives (*ADJ*) occur in either order and precede, respectively, both demonstrative pronouns (*DEM*) and numerals (*NUM*). While the two phrases in (3) are generally interchangeable,

(3) a. nwʃn 'fáŋá fɬdú'úfɔ́ 'my big bird' *(bird my big)*

b. nwʃn fɬdú'ú fáŋ'áfɔ́ 'my big bird' *(bird big my)*

(3a) can potentially contrast 'big' (i.e. my *big* bird, not my small one), while (3b) can potentially contrast 'my' (i.e. *my* big bird, not yours). The following phrases in (4) give the two possible word orders when all four modifier types are present:

(4) a. nwʃn 'fáŋá fɬdú'ú fʃn fɬmə̀? 'this my one big bird'
bird my big this one

b. nwʃn fɬdú'ú fáŋ'á fʃn fɬmə̀? 'this my one big bird'
bird big my this one

Other modifiers, e.g. quantifiers, interrogatives, etc. are assignable to one of the above four categories and generally take on the same word order characteristics as the other members of the set. As can be seen from all of the above examples, possessives, adjectives, demonstratives, and numerals all agree in noun class with the head noun. Thus, in the above examples, each of these four modifiers begins with f(ɬ)-, the concord marker conditioned by the class 11 noun fʃ-nwʃn 'bird'. In each of the following sections the members of each of these modifier categories are illustrated, and the noun class concords are outlined. A summary of locative concords is provided at the end of the chapter.

4.2. POSSESSIVE PRONOUNS

In Aghem only the first and second person possessives are true pronouns. The third person pronouns and the first person plural inclusive pronoun are built on the associative construction, i.e. 'bird of him', 'bird of them' (cf. section 6). We present first the true possessive pronouns in (5).

(5)

noun class	'my'	'your sg.'	'our [excl]'	'your pl.'
1,3,8	waŋa	wʉ̀a	wa?a	wɛɛ
2,6	ghaŋa	ghɬa	gha?a	ghɛɛ
4,5,9	zaŋa	zɬghà	za?a	zɛɛ
7	kaŋa	kɬa	ka?a	kɛɛ
10	taŋa	tɬghà	ta?a	tɛɛ
11	faŋa	fɬghà	fa?a	fɛɛ
12	maŋa	mɬghà	ma?a	mɛɛ

The stems thus appear to be -aŋa 'my', -ɬa 'your sg.', -a?a 'our [excl]', and -ɛɛ 'your pl.'. The form -ɬa 'your sg.' undergoes labialization after w and develops velarization (gh) except when the initial consonant is velar itself (cf. section 1.3.3 above). Note, also, that these pronouns seem to end in an -a suffix (which in the case of 'your pl.' assimilates to the preceding vowel).

Tonally, the forms 'my', 'our [excl]' and 'your pl.' are realized (i) H(-)H after L or HL; (ii) 'H(-)H after H-H$_1$ and H-H$_2$ nouns; and (iii) H(-)'H after H-H$_3$ nouns (including L-L°, which behaves like H-H$_3$ when a following modifier conditions prefix deletion). Examples are given in (6).

(6) a. L-L : tà káŋá 'my spoon' (kɬ-tà)
H-HL : kə̀ káŋá 'my servant' (kɬ-kə̀)
b. H-H$_1$: wú 'káŋá 'my foot' (kɬ-wú)
H-H$_2$: wó 'káŋá 'my hand' (kɬ-wó)
c. H-H$_3$: fú káŋ'á 'my rat' (kɬ-fú)
L-L° : sá? fáŋ'á 'my needle' (fɬ-sà?°)

The possessive pronoun -ɬa 'your sg.' becomes a HL falling tone after H-H$_3$ and L-L° nouns only: fú kɬ̂a 'your rat', sá? fɬ́ghà 'your needle'. This H-spreading rule is thus blocked in the case of H-H$_1$ and H-H$_2$ nouns, since these both involve a floating L$_\phi$ following the noun.

From the forms in (5) one can see that the tonal difference noted between classes 1, 9 and 12 versus the other classes in chapter 3 is not presented in possessive pronouns. Thus, classes 1, 3 and 8 are identical in this construction, as are classes 4, 5 and 9.

The remaining possessive pronouns are built on the associative construction and are given in (7).

(7) *noun class*	'his/her'	'our [incl]'	'their'
1,9	à wɬn°	à sɛ̀	à ghé
2,6	á 'wɬn	á sɛ̀	á 'ghé
3,8	ó 'wɬn	ó sɛ̀	ó 'ghé
4,5	é 'wɬn	é sɛ̀	é 'ghé
7	kɬ 'wɬn	kɬ sɛ̀	kɬ 'ghé
10	tɬ 'wɬn	tɬ sɛ̀	tɬ 'ghé
11	fɬ 'wɬn	fɬ sɛ̀	fɬ 'ghé
12	ǹ wɬn°	ǹ sɛ̀	ǹ ghé

As can be seen, classes 1 and 9 are identical, as are 2 and 6, 3 and 8, and 4 and 5, respectively. The tonal changes which are observed in this construction are basical two:

(i) A H tone class 1, 9 or 12 noun becomes L, e.g. wàà sɛ̀ 'our [incl] child' (wɛ́ 'child'), bvàò wɬn° 'his/her dog' (bvɛ́ 'dog') etc.

(ii) The initial H observed in the appropriate classes in (7) becomes 'H after a H-H$_1$ or H-H$_2$ noun, e.g. wú 'kɬ 'wɬn 'his/her foot' (kɬ-wú 'foot').

As will be seen in the section on demonstratives (4.4), the form 'his/her' is related to the demonstrative root -ɬn 'this/these'. Historically, a form such as nwɬn 'fɬ 'wɬn 'his/her bird' meant 'bird of this one'. The forms sɛ̀ and ghé mean 'we/us [incl]' and 'they/them', respectively. Thus, a form such as nwɬn 'fɬ 'ghé 'their bird' literally means 'bird of them'. (For compound and logophoric pronouns, see chapter 5.)

When possessive pronouns are used independently, i.e. without a preceding noun, the out of focus (OF) suffix is used (see chapter 6 for discussion of this suffix). These forms are given in (8) with the prefix and suffix boundaries indicated by a hyphen.

(8)

n.cl.	*mine*	*yours sg.*	*his/hers*	*ours [excl]*
1	ò-wáŋá	ò-wùa	ò-wɬn°	ò-wá?á
2,6	á-gháŋ'á-ghɔ́	á-ghɬa-ghɔ̀	á-'wɬn-ghɔ́	á-ghá?'á-ghɔ́
3,8	ó-wáŋ'á-wɔ́	ó-wûa-wɔ̀	ó-'wɬn-wɔ́	ó-wá?'á-wɔ́
4,5	é-záŋ'á-zɔ́	é-zɬghà-zɔ̀	é-'wɬn-zɔ́	é-zá?'á-zɔ́
7	kɬ-káŋ'á-kɔ́	kɬ-kɬa-kɔ̀	kɬ-'wɬn-kɔ́	kɬ-ká?'á-kɔ́
9	è-záŋá	è-zɬghà	è-wɬn°	è-zá?á
10	tɬ-táŋ'á-tɔ́	tɬ-tɬghà-tɔ̀	tɬ-'wɬn-tɔ́	tɬ-tá?'á-tɔ́
11	fɬ-fáŋ'á-fɔ́	fɬ-fɬghà-fɔ̀	fɬ-'wɬn-fɔ́	fɬ-fá?'á-fɔ́
12	m̀-máŋá-mɔ̀	m̀-mɬghà-mɔ̀	m̀-wɬn-mɔ̀	m̀-má?á-mɔ̀

n.cl.	*ours [incl]*	*yours pl.*	*theirs*
1	ò-sɛ̀	ò-wɛ́ɛ	ò-ghé
2,6	á-sɛ̀-ghɔ̀	á-ghɛ́'ɛ́-ghɔ́	á-'ghé-ghɔ́
3,8	ó-sɛ̀-wɔ̀	ó-wɛ́'ɛ́-wɔ́	ó-'ghé-wɔ́
4,5	é-sɛ̀-zɔ̀	é-zɛ́'ɛ́-zɔ́	é-'ghé-zɔ́
7	kɬ-sɛ̀-kɔ̀	kɬ-kɛ́'ɛ́-kɔ́	kɬ-'ghé-kɔ́
9	è-sɛ̀	è-zɛ́ɛ	è-ghé
10	tɬ-sɛ̀-tɔ̀	tɬ-tɛ́'ɛ́-tɔ́	tɬ-'ghé-tɔ́
11	fɬ-sɛ̀-fɔ̀	fɬ-fɛ́'ɛ́-fɔ́	fɬ-'ghé-fɔ́
12	ǹ-sɛ̀-mɔ̀	m̀-mɛ́ɛ-mɔ̀	ǹ-ghé-mɔ̀

The following observations can be made from the above forms:

(i) The tonal alternations seen in the 'my', 'yours sg.', 'ours [excl]' and 'yours pl.' forms were outlined above. As expected, the tone pattern is H(-)H after L (classes 1, 9 and 12) and H(-)'H after H (all other classes).

(ii) Classes 1 and 9 do not have an OF suffix. Class 12 has an OF suffix which exceptionally carries L tone. (The L tone on the OF suffixes in 'yours sg.' and 'ours [incl]' results from an assimilation of underlying /-ɔ́/ to the preceding L tone of the pronoun stem.) All three of these classes are characterized by a L tone prefix, as opposed to the H prefix observed elsewhere.

(iii) It should be noted that the initial prefix of 'mine', 'yours sg.', 'ours [excl]' and 'yours pl.' can optionally undergo prefix deletion in classes where there is an OF suffix, e.g. fɬ-fáŋ'á-fɔ́ = fáŋ'á-fɔ́ 'mine' [class 11]. In this respect the above forms behave as nouns, which lose their prefix when followed by a modifier agreeing in noun class. In the above case the modifier is the OF suffix (cf. chapter 6). Note that 'his/hers', 'ours [incl]' and 'theirs' do not undergo prefix deletion, presumably because they involve the associative construction (section 4.6).

4.3. DEMONSTRATIVE PRONOUNS

Aghem distinguishes three demonstrative pronouns: -ɬn 'this/these' [near speaker], -ì 'that, those' [near hearer], and AM + -ì 'that/those' [far from speaker and hearer]. The last demonstrative involves the associative marker which is added to the near hearer form with a tone change. These three demonstratives are abbreviated [n.s.], [n.h.] and [far], respectively, and are outlined in the table in (9).

(9)

n.cl.	*this* [*n.s.*]	*that* [*n.h.*]	*that* [*far*]
1,3,8	wɬn	vʉ̀	ò-vʉ̂ (1), ó-vʉ̂ (3,8)
2,6	ghɬn	ghì	á-ghî
4,5,9	zɬn	zɨ̀	è-zɬ̂ (9), é-zɬ̂ (4,5)
7	kɬn	kì	kɬ-kî
10	tɬn	tì	tɬ-tî
11	fɬn	fì	fɬ-fî
12	mɬn	mì	m̀-mî

The following points should be noted:

(i) Since there are no tonal distinctions between noun classes in the [n.s.] and [n.h.] forms, classes 1, 3 and 8 are identical, as are class 4, 5 and 9. There *is* a difference in the [far] forms, however, where classes 1 and 9 have L tone prefixes.

(ii) The -ì vowel of [n.h.] and [far] becomes ʉ after v in classes 1, 3 and 8, and ɨ after z in classes 4, 5 and 9. Although not indicated, there are class 7 variants of [n.h.] and [far] with palatalization, viz. cì and kɬ-cî.

(iii) The H tone of [n.s.] becomes 'H after H-H_1 and H-H_2 nouns, and L° after H-HL and L-L nouns, e.g.

(10)

H-H_1 :	wú 'kɬn	'this foot'	H-HL :	kǫ̀ kɨ̀n°	'this servant'
H-H_2 :	wó 'kɬn	'this hand'	L-L :	tà kɨ̀n°	'this spoon'
cf. H-H_3 :	fú kɬn	'this rat'			

(iv) The associative marker is L tone for classes 1, 9 and 12, and H tone for the remaining classes in the [far] forms. Note that there is a variant in class 1 and 9 associatives with à- instead of ò- and è-, respectively, when used with a preceding noun (i.e. the ò- and è- forms are obligatory when associatives are used independently).

(v) The above forms are also used independently to mean 'this one/these ones', 'that one/those ones [n.h.]' and 'that one/those ones [far]'. Unlike the independent possessive pronouns, the OF suffix cannot be used with demonstratives; nor is there a prefix in the [n.s.] and [n.h.] forms.

(vi) The locative forms fɛ́ 'here', fì 'there [n.h.]', and fî 'there [far]' are related to the above demonstrative forms and derived from an earlier locative class (class 16 in Bantu). It is interesting to note that the vowel [ɛ] in Aghem derives from an earlier *an. As a result, 'here' was once pronounced fá-n, undoubtedly based on the 'this' demonstrative construction.

4.4. ADJECTIVES

Most adjectives are derived from verbs in Aghem. Verbal expressions are used to express what would be predicate adjectives in English, as seen in (11).

(11) a. nwʃn 'fɬ-báŋ-à nò 'the bird is red' (é-bâŋ 'to be red')
nwʃn 'fɬ-dwʃl-à nò 'the bird is old' (é-dwʃn 'to be old')
b. nwʃn 'fɬ-lɔ́ŋ-ɔ́ nò 'the bird is black' (é-lʃŋ 'to be black')
nwʃn 'fɬ-túghó nò 'the bird is strong' (é-túghó 'to be strong')

The above forms in the present tense show these L (11a) and H (11b) tone verbs in their B (incompletive aspect) forms (see Anderson 2.2). This suffix and the focus marker nò are absent in [+focus] completive aspect forms, as seen in (12).

(12) a. nwʃn 'fɬ-ń bàŋ 'the bird has reddened'
b. nwʃn 'fɬ-ń 'llŋ 'the bird has blackened'

Attributive adjectives are formed by taking the incompletive form of the adjectival verb and adding an adjective prefix and the out of focus (OF) suffix -ɔ́, as seen in (13).

(13) a. nwʃn fɬ-báŋ'á-fɔ́ 'a/the red bird'
nwʃn fɬ-dwʃl'á-fɔ́ 'a/the old bird'
b. nwʃn fɬ-lɔ́ŋɔ́-fɔ́ 'a/the black bird'
nwʃn fɬ-túghó-fɔ́ 'a/the strong bird'

The markers for the different noun classes are as follows:

(14)

n.cl.	*adj. prefix*	*OF*	*n.cl.*	*adj. prefix*	*OF*
1	ò-	Ø	7	`kɬ-	k-ɔ́
2	`á-	gh-ɔ́	8	`ó-	w-ɔ́
3	`ó-	w-ɔ́	9	è-	Ø
4	`é-	z-ɔ́	10	`tɬ-	t-ɔ́
5	`é-	z-ɔ́	11	`fɬ-	f-ɔ́
6	`á-	gh-ɔ́	12	Ǹ-	m-ɔ̀

The following generalizations are seen from (14):

(i) The adjectival prefix is defined as identical to the noun prefix (except classes 1 and 9), but carrying L tone. All classes except 1, 9 and 12 have a floating L tone preceding the H tone prefix. This L is responsible for the H-'H tone observed on adjectives derived from L tone verbs, e.g.

(15) /`fɬ-bàŋ-á/ → fɬ-bâŋ-á → fɬ-báŋ'á 'red (one)' [class 11]

First the H is assigned to the right, creating a HL falling tone on the verb stem. The resulting HL-H sequence then simplified to H-'H. An alternative to the /fɬ'-/ representation in (14) would be either /fɬ'-/ or /fɬ-/. The representation /`fɬ-/ might be interpreted as a L tone adjective marker followed by the normal agreement

found on other modifiers (with L tone in classes 1, 9 and 12, H tone elsewhere).

(ii) Classes 1 and 9 do not have an OF. Class 12 exceptionally has a L tone OF suffix.

The adjectives derived in such a way can either modify a preceding noun or stand alone in the place of a noun, as seen in (16).

(16)	*n.cl.*	*a/the big X*		*big one(s)*	
	1	fɬ̀ ò-dǔu	→	ò-dǔu	'big one' (fɬ̀n 'friend')
	2	fɬ̀ à-dú'ú-ghɔ́	→	à-dú'ú-ghɔ́	'big ones' (áfɬ̀n 'friends')
	3	kọ̀? ò-dú'ú-wɔ́	→	ò-dú'ú-wɔ́	'big one' (ókọ̀? 'ladder')
	4	kọ̀? è-dú'ú-zɔ́	→	è-dú'ú-zɔ́	'big ones' (ékọ̀? 'ladders')
	5	ghóm è-dú'ú-zɔ́	→	è-dú'ú-zɔ́	'big one' (éghóm 'egg')
	6	ghóm à-dú'ú-ghɔ́	→	à-dú'ú-ghɔ́	'big ones' (ághóm 'eggs')
	7	fú kɬ̀-dú'ú-kɔ́	→	kɬ̀-dú'ú-kɔ́	'big one' (kɬ̀fú 'rat')
	8	fú ò-dú'ú-wɔ́	→	ò-dú'ú-wɔ́	'big ones' (ófú 'rats')
	9	ñɔ̀ è-dǔu	→	è-dǔu	'big one' (ñɔ̀m 'animal')
	10	ñɔ̂m tɬ̀-dú'ú-tɔ́	→	tɬ̀-dú'ú-tɔ́	'big ones' (tɬ̀ñɔ̂m 'animals')
	11	nwɬ̀n fɬ̀-dú'ú-fɔ́	→	fɬ̀-dú'ú-fɔ́	'big one' (fɬ̀nwɬ̀n 'bird')
	12	nwɬ̀n ǹ-dǔu-mɔ̀	→	ǹ-dǔu-mɔ̀	'big ones' (ńnwɬ̀n 'birds')

When used attributively with a noun, the adjective prefix can optionally be deleted. Its underlying L tone is transferred to the preceding syllable, e.g.

(17) nwɬ̀n fɬ̀-dú'ú-fɔ́ → nwɬ̀n dú'ú-fɔ́ 'a/the big bird'

This same optional prefix deletion process can apply when more than one adjective is present:

(18) a. fú kɬ̀-dú'ú kɬ̀-báŋ'á-kɔ́ → fû dú'û báŋ'á-kɔ́ 'red big rat'

b. fú kɬ̀-báŋ'á kɬ̀-dú'ú-kɔ́ → fû báŋ'â dú'ú-kɔ́ 'big red rat'

As can be seen from the translations, there is a tendency to put the new or contrasting attributive adjective after the given or presupposed adjective. Thus, both variants in (18a) mean 'a/the big rat which is red', while those in (18b) both mean 'a/the red rat which is big'. Note the falling tone on both the noun stem of 'rat' and the final part of the first adjective. Also note that only one OF suffix is used when there are two adjectives in sequence.

Adjective formation, as defined by (14), is used with a number of other modifiers, including the following:

(i) The interrogative /-ghɛ́`/ 'which (one)':

(19)	1	ò-ghɛ́-wɔ̀	4,5	è-ghɛ́-'zɔ́	10	tɬ̀-ghɛ́-'tɔ́
	2,6	à-ghɛ́-'ghɔ́	7	kɬ̀-ghɛ́-'kɔ́	11	fɬ̀-ghɛ́-'fɔ́
	3,8	ò-ghɛ́-'wɔ́	9	è-ghɛ́-zɔ̀	12	ǹ-ghɛ́-mɔ̀

These forms can be used either following a noun or in isolation, e.g. ñə̂m tɬ-ghɛ́-'tɔ́ 'which animals', tɬ-ghɛ́-'tɔ́ 'which ones' (animals). This interrogative form has the peculiarity of providing the only known construction where classes 1 and 9 have an OF suffix (-wɔ̀ and -zɔ̀, respectively).

(ii) The determiner /-lì/ 'other (one/s)':

(20)						
	1	ò-lì	4,5	è-lſ-'zɔ́	10	tɬ-lſ-'tɔ́
	2,6	à-lſ-'ghɔ́	7	kɬ-lſ-'kɔ́	11	fɬ-lſ-'fɔ́
	3,8	ò-lſ-'wɔ́	9	è-lì	12	ǹ-lſ-mɔ̀

As in all preceding adjectival forms, these forms can be used either following a noun or in isolation, e.g. ñə̂m tɬ-lſ-'tɔ́ '(the) other animals', tɬ-lſ-'tɔ́ '(the) other ones'. It is possible that the stem /lì/ is somehow related to the demonstrative 'that/those' seen above. The H tone on the stem in (20) is from the adjectival prefix, i.e. /ˋtɬ-lì-tɔ́/ is realized tɬ-lſ-'tɔ́)

(iii) Nominalizations are created by using the adjectival prefix and the OF suffix with the verb stem, as seen in the following examples:

(21) a. álɛ́'zɬ kɬbɛ́ → bɛ́ kɬ-zɬa-kɔ́ 'fufu eating'
to eat fufu

b. álɛ́'fúo kɬbɛ́ â fɬnghɔ́ → bɛ́ kɬ-fúo-kɔ́ â fɬnghɔ́ 'fufu giving to friends'
to give fufu to friends

Some adjectival meanings are expressed via the associative construction, as seen in section 4.6.

4.5. NUMERALS

The numbers 'one' through 'ten' are as follows:

(22)				
mə̀?	*1*	tɔ̌o	*6*
bɬghà	*2*	sɬghàmbɬghà°	*7*
tɬghá	*3*	é'fáa	*8*
cìakɔ̀	*4*	tèndzùghò°	*9*
tɛ̀	*5*	é-'ghɬm	*10*

Of these, only the numerals *1* through *5* show noun class agreement, which is effected via prefixation. The tone of the prefix is L *except* when the preceding noun ends in L tone (but not HL tone) or is H-H$_3$, e.g.

(23)	H-H$_1$:	kɬwú kɬ-mə̀?	'*1* foot'	H-HL :	kɬkə̂ kɬ-mə̀?	'*1* servant'
	H-H$_2$:	kɬfó kɬ-mə̀?	'*1* thing'	L-L :	kɬtà kɬ-mə̀?	'*1* spoon'
	H-H$_3$:	kɬfú kɬ-mə̀?	'*1* rat'			

The form of these prefixes is as follows:

(24)	*n.cl.*	1,3,8	o-	*n.cl.*	10	tɬ-
		2,6	a-		11	fɬ-
		4,5,9	e-		12	N-
		7	kɬ-			

As can be seen in (24), there are no tonal differences between classes 1, 9 and 12 versus the other classes. Also noteworthy is the fact that numerals do not condition prefix deletion, e.g. ń-nwɨ́n m̀-bɨ̀ghà 'two birds', tɨ́-bvə́ tɨ̀-tɛ̀ 'five dogs', etc. This sets them apart from all of the other modifiers in the language. Besides the numerals *1* to *5*, other quantifiers take the same numeral concord as in (24) and do not condition prefix deletion, e.g. -dzɨ̀m 'whole, all', -sɔ̀? 'how many': á-wɛ́ á-dzɨ̀m 'all the children', kɨ́-fú kɨ́-dzɨ̀m 'the whole rat', tɨ́-ñɔ̂m tɨ̀-sɔ̀? 'how many animals?'.

The form wó'ó wû 'twenty' is irregular, having the literal meaning 'body of a person' (= *10* fingers + *10* toes). The remaining multiples of ten are constructed by taking the form ń-'ghɨ́m + the numbers *3* through *9*, e.g. ń-'ghɨ́m ǹ-tɨ́ghá *'30'* (lit. 'tens of three'), ń-'ghɨ́m ǹ-cɨ̀akɔ̀ *'40'* (lit. 'tens of four'), etc. The number *'100'* is bɔ̀m (cf. tɨ́bɔ́ èghɨ́m *'1000'* = ten hundreds). To create numbers between the decades, the following are added:

(25)	àghè zɛ̌ mɔ̀?	*+1*		àghè tɔ̀ tǒo	*+6*
	àghè tɔ̀ tɨ́ bɨ̀ghà	*+2*		àghè tɔ̌ sɨ̀ghàmbɨ̀ghà°	*+7*
	àghè tɔ̀ tɨ́ tɨ́ghá	*+3*		àghè tè é'fáa	*+8*
	àghè tɔ̀ tɨ́ cɨ̀akɔ̀	*+4*		àghè tɔ̌ tèndzùghò°	*+9*
	àghè tɔ̀ tɨ́ tɛ̀	*+5*			

The form àghè may be related to à 'with' followed by ghé 'them'. As can be seen there is a 5/10 concord (z + é- for *+1*, tɔ + tɨ́ for *+2-9*), e.g. é'ghɨ́m àghè zɛ̌ mɔ̀? *'11'*, wó'ó wû àghè tɔ̀ tɨ́ bɨ̀ghà *'22'*, etc. The alternate form bɔ̀ɔ̀ ndâŋgàŋ is used for 'one hundred'.

4.6. ASSOCIATIVES

The associative construction is used primarily to express possession, but has all of the typical functions characteristic of genitive constructions. The possessed noun precedes the possessor noun in Aghem (N_1 of N_2), with one of the following associative markers occurring between the two:

(26)	*n.cl.*	1	à	*n.cl.*	7	kɨ́
		2	á		8	ó
		3	ó		9	à
		4	é		10	tɨ́
		5	é		11	fɨ́
		6	é		12	Ǹ

E.g. bvə́ 'tɨ́ 'wé 'the dogs of the child', nwɨ́n 'fɨ́ kɨ́kɔ̀ 'the bird of the servant'. Again, prefix deletion applies to the first noun.

The associative construction has the following peculiarities:

(i) Classes 1 and 9 are marked by an à- concord, rather than the expected ò- and è-, e.g. fɨ́ì à wɛ̀ 'the friend of the child' (class 1), dzɨ̀m à wɛ̀ 'the back of the child' (class 9). It will be noted, however, that when the head noun is not present, the expected concords surface, e.g. ò wɛ̀ 'that of the child' (class 1), è wɛ̀ 'that of the child' (class 9).

(ii) The possessed noun (N_2) has an *underlying* L tone prefix in all cases. This explains, for one thing, why in such forms as nwɬn 'fɬ kɬkə̀ 'the bird of the servant', 'servant' has a L tone on its stem, rather than the expected HL falling tone found in the citation form kɬkə̂. The underlying form of the above phrase is /fɬ-nwɬn′ + fɬ + kɬ-kə̀`/. The H tone found on the N_2 ('servant') prefix in the phonetic form is due to a spreading of the preceding H of the associative marker (cf. the absence of such a H tone in fɬ ɬ à kɬkə̀ 'the friend of the servant', where the associative tone is L). This L prefix on N_2 nouns in the associative (and in the locative construction--see below) is characteristic of all or most of Western Grassfields Bantu.

(iii) Modified N_2 nouns do not undergo prefix deletion, e.g. nwɬn 'fɬ kɬkə̀ káŋá 'the bird of my servant'.

4.6.1. *Segmental alternations in the associative construction.* Because the associative markers in (26) directly precede the N_2 noun, and because this noun frequently begins with a vowel, various segmental coalescences and modifications take place in the associative construction. The following chart summarizes the behavior of the associative marker + N_2 noun prefix as the noun classes are varied:

(27)

N_1 NOUN ↓ \ N_2 NOUN →	*1*	*2,6*	*3,8*	*4,5*	*7*	*9*	*10*	*11*	*12*
1	à	àà	à,àò	è	àkɬ	à	àtɬ	àfɬ	àN
2,6	á	aa,ghó	ghɔ́,áó	ghé	ákɬ	á	átɬ	áfɬ	ghɬN
3,8	ó	wá	óó	wé	ókɬ	ó	ótɬ	ófɬ	wɬN
4,5	é	zá	zé	zé	ékɬ	é	étɬ	éfɬ	zɬN
7	kɬ	ká	kó	ké	ká	kɬ	kɬtɬ	kɬfɬ	kɬN
9	à	àà	à,àò	è	àkɬ	à	àtɬ	àfɬ	àN
10	tɬ	tá	tɬ	té	tɬkɬ	tɬ	tɬtɬ	tɬfɬ	tɬN
11	fɬ	fá	fɬ	fé	fɬkɬ	fɬ	fɬtɬ	fɬfɬ	fɬN
12	Ǹ	mà	Ǹ	mè	ŋkɬ	Ǹ	ǹtɬ	ǹfɬ	mɬn

A number of general properties of the language, as well as idiosyncracies of the associative construction are revealed in this chart:

(i) As expected, the bare concords seen in (24) are found when the N_2 noun belongs either to class 1 or class 9, e.g. bɛ́ 'kɬ 'wɛ́ 'the fufu of the child', sɔ́ŋ 'é ñɔ̀m 'the tooth of the animal' etc. This is because in these classes the N_2 has no prefix and therefore no fusion takes place.

(ii) In general, when /e, o, a/ are followed by an N_2 vowel prefix, they become, respectively, [z, w, gh], e.g. kɔ́m zá'wɛ́ 'the crab of the children' (ékɔ́m 'crab', áwɛ́ 'children'); fú wá'wɛ́ 'the rats of the children' (ófú 'rats'); wɛ́ ghé'kɔ́m 'the children of the crab'.

(iii) There are several exceptions to (ii). First, the à of classes 1 and 9 never becomes gh. Second, a sequence of identical vowels may be exempt from

"desyllabification" of /e, o, a/ to [z, w, gh]: fɨ́ áá'wé 'the friends of the children' (áfɨ́n 'friends', áwé 'children'); fú óókɔ̀ 'the rats of the servants' (ófú 'rats', ókɔ̀ 'servants').

(iv) In most cases where a Cɨ associative marker is followed by a V prefix, the ɨ drops: bvú 'tá'wé 'the dogs of the children' (tɨ́bvú 'dogs', áwé 'children'); bé 'kó'fú 'the fufu of the rats' (kɨ́bé 'fufu', ófú 'rats'). Exceptions to this generalization arise when the associative marker is tɨ́ or fɨ́ and the prefix of the N_2 noun is o-. In this case it is the o- which drops, e.g. mbvú 'tɨ́'sóm 'the chickens of the farm' (tɨ̀mbvù° 'chickens', ósóm 'farm'). There appears to be some variation, however, when the N_2 noun belongs to class 8.

(v) As indicated in (27), there is variation in two cases: (a) when N_1 belongs to either class 1 or 9 and N_2 to either class 3 or 8, the o- prefix of the N_2 optionally drops; (b) when N_1 belongs to either class 2 or 6 and N_2 belongs to either class 3 or 8, desyllabification of /a/ to [gh] depends on the syllabic shape of the N_1 stem, e.g. sɔ́ŋ 'á ó'fú 'the teeth of the rats' (ásɔ́ŋ 'teeth', ófú 'rats') vs. lɨ́m ghɔ́'fú 'the yams of the rats' (álɨ́m 'yams'). Note in this latter form that if desyllabification did not occur when the N_1 noun ends in m, this m would undergo intervocalic deletion (section 1.5.2). By making desyllabification obligatory in such cases, the deletion of intervocalic m is avoided, e.g kɔ́m ghɔ́'sóm 'the crabs of the farm' (not *kɔ́m á ó'sóm). Similarly, in order perhaps to preserve final m, desyllabification *precedes* m-deletion. Thus, from underlying /é-kɔ́m' + é + ò-sóm'/ 'the crab of the farm' we obtain [kɔ́m zé'sóm] (and not either *kɔ́ é ó'sóm or *kɔ́ zé'sóm). Note in this last case that associative é- followed by N_1 ò- yields [zé] rather than the expected *zó or *zɔ́.

(vi) A curious realization is observed when both N_1 and N_2 belong to class 7. Instead of obtaining the expected kɨ́kɨ́, we obtain ká: bé 'kákɔ̀ 'the fufu of the servant' (not *bé 'kɨ́ kɨ́kɔ̀). This fact is interesting since in some related languages (e.g. Kom), the regular class 7 prefix is a- instead of kɨ-. Note that tɨ́tɨ́ and fɨ́fɨ́ are found when both N_1 and N_2 belong to the same class 10 or 11, e.g. dzɨ́m 'tɨ́ tɨ́'bvú 'the backs of the dogs' (tɨ́dzɨ́m 'backs', tɨ́bvú 'dogs').

(vii) Class 12 has an unusual realization in both N_1 and N_2 position. When the N_1 noun belongs to class 12, the associative marker will take one of two forms: if followed by a consonant, it will be realized as Ǹ-; if followed by a vowel it will be realized as m-: kà? ŋ̀ wè 'the trees of the child', kà? m-àwè 'the trees of the children' (ŋ́ká? 'trees', wé 'child', áwé 'children'). (Note also that after a L associative 'child/children' exceptionally acquire stem L tone.) The realization of class 12 associatives as Ǹ- before consonants takes place regardless of whether the consonant in question belongs to the stem of the N_2 noun or to its prefix (cf. kà? ǹ tɨ̀ñɔ̀m 'the trees of the animals').

In N_2 position we find à + N when the N_1 noun belongs to class 1 or 9, but C + ɨN when the N_1 noun belongs to any other class (including class 12 itself), e.g. kâ? zɨ́ ńnwɨ̀n 'the mountains of the birds' (ékâ? 'mountains' [cl. 4], ńnwɨ́n 'birds'). In order for the class 4 associative marker to become zɨ́ before ńnwɨ́n 'birds', it would be necessary for the class 12 noun to begin with an underlying vowel, in which case its prefix would be set up underlyingly as /ɨ́N-/. This would make the underlying forms for 'the mountains of the birds' /é-kà?` + é + ɨ̀N-nwɨ̀n'/. When preceded by the L tone associative marker à, the [ɨ] of the class 12 prefix would delete. In all other cases coalescence takes place, e.g. class 7 kɨ́ + ɨ̀N- becomes kɨ́N-, class 3 ó + ɨ̀N- becomes wɨ́N-, etc.

Having gone this far in the analysis, the following generalization can now be made: whether on an agreeing modifier or on the noun itself, a class 12 marker will take the form ɨN- before a consonant, but m- before a vowel. It therefore can be proposed that the underlying (and presumably historical) form for all class

12 markers is /mɨ-/. The tone of this marker is L except on the noun itself, in which case the tone is H. A rule of the form in (28) is required:

(28) mɨ] → ɨN- / _____ C (where] is not a final stem boundary)

The underlying form of 'birds' is now taken to be /mɨ-nwɨn'/, and the form for 'the trees of the child' seen above is now represented as /mɨ-kà?ˋ + mɨ + wɛ́'/. In order for this to be correctly converted to kà? ŋ̀ wɛ̀, two applications of the metathesis rule in (28) are required, followed by prefix deletion and accompanied by the appropriate tonal alternations (section 4.6.2). Perhaps as a logical intermediate step mɨ- can be seen metathesizing to ɨm-, then followed by homorganic nasal assimilation to the place of articulation of the following consonant. The process represented in (28) is of considerable interest, since other Cameroonian languages (e.g. Tuki) have VN- prefixes where we would expect the more typically Bantu mV-.

Before leaving the issue of class 12, it should be noted that there is some tendency for desyllabification not to occur when the N_2 noun belongs to this class. Thus one can hear either sɔ́ŋ 'zɨ́ ńnwɨn or sɔ́ŋ 'é ńnwɨn 'the tooth of the birds' (ésɔ́ŋ 'tooth'). While it has not been determined when /é, ɔ́, á/ + a class 12 noun can be exempted from desyllabification (with deletion of the initial /ɨ/ of the class 12 noun instead), forms such as sɔ́ŋ 'é ńnwɨn seem to indicate that Aghem speakers are losing track of the initial /ɨ/ and treating class 12 nouns as beginning with a syllabic /N/.

(viii) In addition to the coalescence and desyllabification processes referred to above, certain vowel assimilations optionally or obligatorily apply to the associative marker + N_2 prefix complex. Because of the variation noted it was not possible to determine explicit rules governing these assimilations. Among these, however, is the assimilation of class 1 and 9 à- to a preceding rounded vowel, e.g. mbɔ̀ŋ ɔ̀ wɛ̀ 'the cow of the child', or completely to a preceding vowel. In the example tɔ̀ɔ̀ wɛ̀ 'the message of the child' (tɔ́m 'message'), intervocalic m-deletion and vowel assimilation have applied to the underlying form /tɔ́mˋ + à + wɛ́/. Also, there is a tendency for the wá obtained from an N_1 class 3 or 8 and an N_2 class 2 or 6 to become wɔ́. This appears to be possible in all cases except where the N_1 noun has a stem vowel /a/, e.g. jɨ́m wɔ́'wɛ́ 'the ashes of the child' vs. twám wá'wɛ́ 'the baskets of the child' (ójɨ́m 'ashes', ótwám 'baskets'). In the case of zá, which is obtained from an N_1 class 4 or 5 followed by an N_2 class 2 or 6, this form never assimilates to zɔ́. More work is necessary involving more speakers of Aghem in order to determine the conditions under which the various assimilations take place.

4.6.2. *Tonal alternations in the associative construction.* It has already been stated that N_2 nouns exceptionally begin with a L prefix. This is seen particularly clearly when the N_2 noun is preceded by a L tone associative marker. In (29) each of the four major bisyllabic tone patterns (H-HL, H-H_1, H-H_2, H-H_3) follows a L tone associative:

(29) H-HL : mùu ŋ̀ kɨ́kɔ̀ 'the water of the servant'
H-H_1 : mùu ǹ fɨ́nwɨ́n 'the water of the bird'
H-H_2 : mùu ǹ tɨ́bvə̀° 'the water of the dogs'
H-H_3 : mùu ŋ̀ kɨ́fù° 'the water of the rat'

As can be seen, H-HL and H-H_1 nouns (underlyingly H-L-$\underset{\circ}{L}$ and H-L-$\underset{\circ}{H}$, respectively) are realized L-L after a L associative, while H-H_2 and H-H_3 nouns (underlyingly H-H-$\underset{\circ}{L}$ and H-H-$\underset{\circ}{H}$, respectively) are realized L-L°. Different realizations of these tone patterns on N_2 nouns are found after a H associative, as seen in (30):

(30) H-HL : kâ? fɬ kɬkə̀ 'the tree of the servant'
H-H_1 : kâ? fɬ fɬnwɬn 'the tree of the bird'
H-H_2 : kâ? fɬ tɬ'bvɛ́ 'the tree of the dogs'
H-H_3 : kâ? fɬ kɬ'fú 'the tree of the rat'

In this case the H-HL and H-H_1 nouns are realized again with a L stem, although their prefix has assimilated to the H of the preceding associative marker. In the case of H-H_2 and H-H_3, on the other hand, a H-'H sequence is obtained. This follows directly from the assumption that they have a L prefix in N_2 position. Thus, the underlying form for 'the tree of the rat' is /fɬ-kà?ˋ + fɬ + kɬ-fú'/. When the H tone of the associative marker spreads onto the L of the N_2 prefix, we obtain an intermediate form fɬ kɬfú. This HL-H sequence simplifies to H-'H (but *only* when the HL falling tone is on a prefix; cf. kə̀ kɬ 'wɛ́ 'the servant of the child', which does not become *kə̀ 'kɬ 'wɛ́).

When the N_1 noun conditions a H tone associative, it in turn does not undergo any tonal changes (except the loss of its H tone prefix through prefix deletion). On the other hand, H-H_1 and H-H_2 nouns cause a following H tone associative marker to become downstepped to 'H, e.g. nwɬn 'fɬ 'wɛ́ 'the bird of the child', bvɛ́ 'tɬ 'wɛ́ 'the dogs of the child'. This downstep is not observed when the N_1 noun is H-H_3: fú kɬ 'wɛ́ 'the rat of the child'.

When the N_1 noun conditions a L tone associative, it may undergo tonal changes of its own. First, as was pointed out in section 4.1, H-HL and H-H1 nouns in class 12 become L when they undergo prefix deletion, e.g. kà? ǹ wɛ̀ 'the trees of the child' (ǹkâ? 'trees'), nwɬn ǹ wɛ̀ 'the birds of the child' (ǹnwɬn 'birds'). In addition, all class 1 and 9 nouns which are H in isolation become L as N_1 in the associative construction: fɬ̀ì à kɬkə̀ 'the friend of the servant' (fɬ́n 'friend'), bvɛ̀ ɔ̀ kɬkə̀ 'the dog of the servant' (bvɛ́ 'dog').

Finally, class 1 and 9 nouns behave the same way as corresponding bisyllabic nouns in N_2 position, e.g. H nouns become L°: fɬ̀ì à bvɛ̀°. Exceptionally, 'child' can be realized either a L or L° in this position: fɬ̀ì à wɛ̀ = fɬ̀ì à wɛ̀° 'the friend of the child'.

The realizations of the four most common bisyllabic tone patterns are summarized in (31).

(31)	*underlying*	*isolation*	*after H assoc.*	*after L assoc.*	*gloss*
	/kɬ-kə̀ˋ/	kɬkə̂	kɬkə̀	kɬkə̀	'servant'
	/kɬ-wù'/	kɬwú$_2$	kɬwù	kɬwù	'foot'
	/kɬ-wóˋ/	kɬwó$_3$	kɬ'wó	kɬwò°	'hand'
	/kɬ-fú'/	kɬfú$_4$	kɬ'fú	kɬfù°	'rat'

Recall that the difference between H-H_2 (e.g. 'hand') and H-H_3 (e.g. 'rat') is that the former (like H-H_2) causes a following H to become 'H, while the latter does not, e.g. wó 'kɬ 'wɛ́ 'the hand of the child' vs. fú kɬ 'wɛ́ 'the rat of the child'.

4.6.3. *Headless associative constructions.* In addition to the N_1 + N_2 associative construction, it is possible for the head N_1 noun to be absent. Thus, corresponding to fʃì á 'wɛ́ 'the friends of the child' is á 'wɛ́-ghɔ́ 'those of the child's, the child's [friends]'. As can be seen, the OF suffix is present in headless associatives, just as it was present in independent possessive pronoun constructions. The markers for the different classes are as given in (32).

(32)

n.cl.				*n.cl.*			
1	ò	...	Ø	7	kʃ	...	kɔ́
2	á	...	ghɔ́	8	ó	...	wɔ́
3	ó	...	wɔ́	9	è	...	Ø
4	é	...	zɔ́	10	tʃ	...	tɔ́
5	é	...	zɔ́	11	fʃ	...	fɔ́
6	á	...	ghɔ́	12	Ǹ	...	mɔ̀

Further examples are: bɛ́ kɬghɛ́'kɔ́? 'which fufu?', ans. kʃ 'wɛ́-kɔ́ 'the child's'; bvɛ́ tɬghɛ́'tɔ́? 'which dogs?', ans. tʃ 'wɛ́-tɔ́ 'the child's'; ñɔ̀ èghɛ́zɔ̀? 'which animal?', ans. è wɛ̀ 'the child's' [cl. 9].

As seen in (32) and in the last example, classes 1 and 9 again do not have an OF suffix. Note also that their associative prefixes are ò- and è-, respectively, in the headless construction, while the associative marker in the N_1 + N_2 was seen to be à in (26). Finally, it should be noted that the same coalescences and desyllabification processes noted earlier in (27) and characterizing the N_1 + N_2 associative construction apply here too, e.g. nwʃn ŋghɛ́mɔ̀? 'which birds?', ans. ŋ wɛ̀-mɔ̀ 'the child's', m-àwɛ̀-mɔ̀ 'the children's'.

4.7. OTHER MODIFIERS

In this section a few additional modifiers will be exemplified. Most of these involve one of the concord types seen earlier (adjectival, associative, etc.), although some do not fit easily into any category.

The first set of examples involve a few modifiers which involve associative concord but with an obligatory OF suffix. These modifiers cannot be claimed to be adjectives, since the prefixal agreement markers carry H tone rather than the L tone seen in (14) for adjectives. Three examples have been found: -tɛ́- 'the one in question, the one you and I know about or have been talking about', -èsʃ- 'first', and -èbàm- 'last'. Examples are given on (33).

(33)

n.cl.	*the one in question*	*the first one*	*the last one*
1	ò-tɛ̀°	èsɬ°	èbàm
2,6	á-'tɛ́-ghɔ́	gh-ɛ́'sʃ-ghɔ́	gh-ébàm-ghɔ̀
3,8	ó-'tɛ́-wɔ́	w-ɛ́'sʃ-wɔ́	w-ébàm-wɔ̀
4,5	é-'tɛ́-zɔ́	z-ɛ́'sʃ-zɔ́	z-ébàm-zɔ̀
7	kʃ-'tɛ́-kɔ́	k-ɛ́'sʃ-kɔ́	k-ébàm-kɔ̀
9	è-tɛ̀°	èsɬ°	èbàm
10	tʃ-'tɛ́-tɔ́	t-ɛ́'sʃ-tɔ́	t-ébàm-tɔ̀
11	fʃ-'tɛ́-fɔ́	f-ɛ́'sʃ-fɔ́	f-ébàm-fɔ̀
12	ǹ-tɛ́-mɔ̀	m-èsʃ-mɔ̀	m-èbàm-mɔ̀

The underlying form of 'the one in question' appears to be /ˋté'/, with the floating L prefix causing the downstep after the H tone associative marker. Note that the class 1 and 9 associative marker à appears when the modified noun is present: fɬI à te° 'the friend in question', bvə̀ ɔ̀ tè° 'the dog in question'.

The forms for 'the first one' and 'the last one' are built on the nouns 'front' and 'behind' which have L tone prefixes in the examples because they are in N_2 position, hence: /è-sf'/ 'front', /è-bàmˋ/ 'behind' (cf. also é'sf 'front' with a locative prefix [section 4.8] and ésf 'eye'). In these forms the associative marker undergoes desyllabification in classes 2 through 6 and vowel coalescence in the remaining classes according to the generalizations outlined in (27) above. What makes these forms different from ordinary associative N_1 + N_2 is that an OF suffix is required to give the forms 'first' and 'last' an attributive sense (cf. the use of the OF suffix on adjectives [section 4.4]). Thus, compare nwɬn 'f-é'sɬ-fɔ́ 'the first bird' vs. nwɬn 'f-é'sɬ 'the bird of the eye'.

Another modifier based roughly on the associative construction involves the noun fɬñàŋlɔ̀ 'little' (pl. ǹñàŋlɔ̀), which clearly belongs to gender 11/12. The use of this "adjectival noun" is seen in (34).

(34)				
	1	ñàŋ fɬ 'wé	'little child'	(wé 'child')
	2	ñàŋ mɬ-ŋ wè	'little children'	(áwé 'children')
	3	ñàŋ fɬ 'kɔ́?	'little ladder'	(ókɔ́? 'ladder')
	4	ñàŋ mɬ-ŋ kɔ̀?	'little ladders'	(ékɔ́? 'ladders')
	5	ñàŋ f-éghòm	'little egg'	(éghóm 'egg')
	6	ñàŋ mɬ-ŋ ghòm	'little eggs'	(ághóm 'eggs')
	7	ñàŋ fɬ 'fú	'little rat'	(kɬfú 'rat')
	8	ñàŋ mɬ-n fù°	'little rats'	(ófú 'rats')
	9	ñàŋ fɬ ñɔ̂m	'little animal'	(ñɔ̀m 'animal')
	10	ñàŋ mɬ-n ñɔ̀m	'little animals'	(tɬñɔ̂m 'animals')
	11	ñàŋ fɬ nwɬn	'little bird'	(fɬnwɬn 'bird')
	12	ñàŋ mɬ-n nwɬn	'little birds'	(ńnwɬn 'birds')

As can be seen, the concord markers are fɬ in the singular and mɬ-N in the plural, the latter looking like a double class 12 agreement. In addition, the prefix of the noun drops in all cases *except* when it belongs to class 5, cf. ñàŋ f-ésɔ̀ŋ 'little tooth'. No explanation is offered for this fact. A possible explanation exists, however, for the occurrence of the double agreement marker in the plural. By the rules outlined in section 1.5.1 above, -ñàŋlɔ̀ should become -ñàŋǹ when followed by a consonant. (Indeed, this may be the case in the singular forms in (34), although it is not marked as such because of the difficulty in distinguishing long vs. short nasals in final position.) We have, in addition, seen that there is a relationship between syllabic nasals and m- in class 12, the latter form occurring whenever followed by a vowel (section 4.6.1). Given the discussion in that section, the underlying form for 'little children' should be: /mɬ-ñàŋnɔ̀ + mɬ + à-wé'/. First, the /ɔ̀/ of 'little' is deleted before a consonant, leaving behind a syllabic nasal. Then the /à-/ prefix of 'children' is deleted. The intermediate form at this stage is mɬ-ñàŋǹ mɬ wé'. It is seen in this form that the mɬ associative marker now stands before a consonant. It must in this case be converted to ɬN by rule (28) above. This now gives us the form ñàŋǹ ɬŋ wè (where we have also applied prefix deletion and tone rules). This form has

a syllabic nasal followed by a vowel, and since we are dealing with class 12, in which there is a relationship between Ǹ and m-, Aghem speakers mistakenly generalize this to this form and we obtain ñàŋ mɬŋ wɛ̀.

Another modifier not yet discussed is -ɛ̀(ɛ) 'where'. Unlike most languages, this form agrees with the noun being questioned when the question refers to the present tense. Thus, the following forms can be translated as 'where?' or 'where is/it, where are they?'.

(35)	*n.cl.*	1	ò-w-ɛ̀ɛ	*n.cl.*	9	ɛ̀-z-ɛ̀ɛ
		2,6	á-gh-ɛ̂ɛ		10	tʃ-t-ɛ̂ɛ
		3,8	ó-w-ɛ̂ɛ		11	fʃ-f-ɛ̂ɛ
		4,5	é-z-ɛ̂ɛ		12	m̀-m-ɛ̀ɛ
		7	kʃ-k-ɛ̂ɛ			

These forms are exceptional in that they involve first an associative-like prefix and second a demonstrative/possessive pronoun-like initial consonant. That is, there appear to be *two* agreement markers. Note, as expected, that the prefix is L for classes 1, 9 and 12 and H elsewhere (the HL falling tone on the stem is due to the spreading of the preceding H of the prefix in the appropriate classes).

The exceptional character of this modifier is seen particularly well in context. The vowel ɛɛ is long (perhaps incorporating a question marker) when these forms are used without a noun, but may be short if the noun is present; compare: fú kʃkɛ̂? 'where is the rat?' vs. kʃkɛ̂ɛ? 'where (is it)?'. There appears to be some variation in this area, however. The following examples show 'where' combined with other modifiers:

(36)	a.	ñôm tɬtɛ̂ɛ	'where are the animals?'
	b.	ñôm táŋá tʃtɛ̂ɛ	'where are my animals?'
	c.	ñôm tɬdú'ú tʃtɛ̂	'where are the big animals?'
	d.	ñôm tʃn tɛ̂ɛ	'where are these animals?'
	e.	tʃnôm tɬbɬghà tɛ̀ɛ	'where are the two animals?'

Note first in (36a) that the H prefix of tʃtɛ̂ɛ has been lowered by the preceding final L of (tʃ)nôm 'animals'. This is highly unusual and never occurs, for example, when a H tone concord marker signals the associative construction: ñôm tʃ kʃkɔ̀ 'the animals of the servant' (never *ñôm tɬ kʃkɔ̀). Note also in (36d and e) that the first part of 'where' does not co-occur with a demonstrative or a numeral, while it is the final OF marker on the adjective in (36c) which does not co-occur with 'where'. All of this suggests that the tʃ in this example is a form of the OF suffix itself--in particular, as will be discussed in chapter 6, it is the *preposed* form of the OF marker. The OF marker has been seen to become L after a L or HL stem, as in (36a), and it does not co-occur with demonstratives. In the above case there does seem to be some variation, since the form ñôm tʃn tʃtɛ̂ɛ 'where are these animals?' was also recorded. What is important, however, is that tʃ is obligatorily present in (36a,b and c). As for its non-occurrence with numerals, a form ñômtɔ̀ tʃbɬghà tɛ̀ɛ 'where are the two animals?' was hedgingly accepted. In this form we see the OF marker suffixed on the noun. It makes sense to propose that 'where' is characterized by an OF marker and the stem -ɛ̀ɛ, and numerals come between the two parts. Because numerals separate the form for 'where', the first part (the OF marker) can be deleted.

The final modifiers to be considered in this section are the following irregular possessive and associative forms for 'father' and 'mother'. First, the singular forms are given in (37).

(37) a.

bɬghà	'my father'	tsɬlé wá?'á	'our [excl] father'
tsúghɔ̀	'your father'	tsɬlè sɛ̀	'our [incl] father'
tsɬlé	'his/her$_1$'	tsɬlé wɛ́'ɛ́	'your [pl.] father'
tsɬlè wɬn°	'his/her$_2$'	tsɬlè ghé	'their father'
núŋɔ̀	'my mother'	zɬ wá?á	'our [excl] mother'
zúghɔ̀	'your mother'	zɬ à sɛ̀	'our [incl] mother'
zɬ	'his/her$_1$'	zɬ wɛ́ɛ	'your [pl.] mother'
zɬ à wɬn°	'his/her$_2$'	zɬ à ghé	'their mother'

A number of observations can be made concerning these forms:

(i) The 'my' forms are in both cases suppletive, involving different stems. Note with respect to 'my father' that bɬghà is used with a demonstrative in the sense of 'guy', e.g. bɬghà wɬn° 'this guy'.

(ii) There is a distinction between coreferential vs. noncoreferential possession in the case of the third person singular. This difference, present only in the singular, is seen from the following examples:

(38) a. ò mɔ̀ kɔ̀? tsɬlé 'he saw his [own] father'

b. ò mɔ̀ kɔ̀? tsɬlè wɬn° 'he saw his [someone else's] father'

The forms tsɬlé 'his/her$_1$ father' and zɬ 'his/her$_1$ mother' appear to contain a possessive logophoric pronoun (section 5.3), although the use of these forms does not depend on reported speech.

(iii) The forms for 'his/her$_2$', 'our [incl]' and 'their' involve the associative construction as we saw in section 4.2 (note the à found with 'mother').

Note that the 'his/her$_2$' forms are used when 'father' and 'mother' are possessed by a noun: tsɬlè kɬkɔ̀ 'the father of the servant', zɬ à wɛ̀ 'the mother of the child'.

The plural forms show different possibilities with meanings differing from the literal interpretation. The attested forms are given in (39) and (40).

(39) a.

ghê bɬghà	'my fathers'	(father's family, men and women)
ghê tsùghɔ̀	'your fathers'	" " " "
ghê tsɬlé	'his/her fathers'	" " "

b.

ghê tsɬlé gháη'á	'my fathers'	(father's male relatives)
ghê tsɬlé ghɬa	'your fathers'	" " "
ghê tsɬlè wɬn°	'his/her fathers'	" "

[N.B. Forms with ghê can also be pronounced with a long vowel, i.e. ghéè and are clearly related to the compound pronouns discussed in section 5.4.]

c. ghê tsɬlé ghá?'á 'our [excl] fathers' (or 'father's relatives')
ghê tsɬlè sɛ̀ 'our [incl] fathers' " " "
ghê tsɬlé ghé'é 'your [pl.] fathers' " " "
ghê tsɬlè ghé 'their fathers' " " "

(40) a. ghê nùŋɔ̀ = ghê zɬ̀ ghâŋá 'my mothers' (mother's family, men and women)
ghê zùghɔ̀ = ghê zɬ̀ ghɬ̀a 'your mothers' " " " "
ghê zɬ̀ ? = ghê zɬ̀ à wɬ̀n° 'his/her mothers' " " "

b. ghê zɬ̀ ghá?á 'our [excl] mothers' (or 'mother's relatives')
ghê zɬ̀ à sɛ̀ 'our [incl] mothers' " " "
ghê zɬ̀ ghéɛ 'your [pl.] mothers' " " "
ghê zɬ̀ à ghé 'their mothers' " " "

The following observations should be made:

(i) In the case of 'fathers' there are two forms with singular possessors. The first set of forms involves the suppletive (fused) possessives 'my father', 'your father' and 'his/her$_1$ father' preceded by the plural marker 'they' (class 2). In this case the meaning of 'my fathers' etc. is 'fathers family, including both men and women', i.e. 'father's relatives'. When the plural marker is followed by tsɬlé + (plural) possessive pronoun, the meaning of 'my fathers' etc. is 'father's male relatives'. This difference is observed in (39a and b). In (40a), on the other hand, we see that this difference does not exist between the two forms involving 'my mothers' etc. In both cases the meaning is 'mother's family, including both men and women', i.e. 'mother's relatives'.

(ii) In (39a,b) and (40a) there is some confusion over the two forms for 'his/her'. While in the singular they refer to coreferential vs. non-coreferential possessors, this seems to break down in (39), where the difference is between 'father's relatives' and 'father's male relatives'. In (40a), on the other hand', some sense of the original reference difference is still felt, probably because of the synonymy of the two forms with 'mothers'.

(iii) The plural possessor forms in (39c) and (40b) are ambiguous between the literal meanings ('our fathers', 'your [pl.] mothers' etc.) and the reading 'father's/mother's relatives' (male and female).

When possessed by a noun, the expected associative forms are found, except that agreement is with the singular (class 1): ghê tsɬlè tɬ̀bvɑ̀° 'the fathers of the dogs', ghé zɬ̀ ɔ̀kɔ̰̀ 'the mothers of the servants'.

4.8. LOCATIVES

Although strictly speaking not actual noun modifiers, locatives are treated here since they share certain properties, especially tonal, with associative constructions. As seen in the following examples, the locative marker consists of á + an underlying /n/ and precedes the noun:

(41) a. áŋ 'wó ghâŋ'á 'in my hands'
b. álókwà? 'on the mountain' (cf. ókwá? 'mountain')

In (41a) we observe from underlying /án + àwó` + ghâŋá/ that prefix deletion applies

to the à- of hands, and then the nasal of the locative marker assimilates to the place of articulation of the stem consonant w. In (41b), on the other hand, since the noun 'mountain' begins with a vowel, the underlying locative /n/ becomes [ɪ] intervocalically (section 1.5.1).

Two tonal peculiarities characterize the locative construction: (i) as in the case of the N_2 in an associative construction, the prefix of locativized noun has a L tone prefix; (ii) modifiers of the locativized noun take the tonal shape expected after H-H_3 nouns, rather than being affected by the final floating L of H-H_2 nouns. Thus, compare (41a) with wó 'gháŋá 'my hands'.

The following examples show, further, that (i) án- is used also with instruments and adverbially with the sense of 'with'; and (ii) the n drops before a CV prefix. It also drops before a stem-initial NC sequence.

(42) a. án fû 'with a hoe' áló'tǫ́ 'with intelligence'
á fɬ'ñɬ 'with a knife' á kɬkɔ̀ŋ 'with a stirring stick'

b. á kɬ'tú 'on the head' á 'ndúghó 'in the house'
á fɬghàm 'on the mat' á ndzɬm 'on the back'

The examples in (42a) have a 'with' sense, while those in (42b) have an 'on' or 'in' locative sense. This construction is considered to be primarily a locative one, since it has exclusively this function in related languages, and since there are two, perhaps related, prepositions that have non-locative functions: à 'with' (comitative), â 'to, for' (indirect object). These three prepositions are contrasted in (43):

(43) a. á kɬ'fú 'on the rat', with [=instrument] the rat'
b. à fúkɔ́ 'with the rat' [accompaniment]
c. â fúkɔ́ 'to the rat' [recipient]

In (43a) the rat is either a location or an instrument (e.g. I scared him *with* a rat); in (43b) the rat is used comitatively (e.g. the squirrel went somewhere *with* the rat); and in (43c), the rat is the recipient (I gave something *to* the rat) or beneficiary (I did something *for* the rat). Note that the locative preposition has lost its n before the CV prefix of /kɬ-fú'/ (here with L tone), and that the prepositions à and â require that the following noun be in the B form with an OF suffix (chapter 6).

In the above analysis, if prefix deletion occurs on a modified locativized noun, the locative marker will be [áɴ]. If prefix deletion does not occur, then the locative marker will be [áɪ] before a vowel-initial prefix, but [á] before a consonant-initial prefix. Thus, compare the following:

(44) a. /án + à-wɔ́ + á + kɬ-kɔ̀/ → áŋ'wɔ́'ɔ́ kɬkɔ̀ 'in the hands of the servant'
/án à-wɔ́/ → áɪá'wɔ́ 'in the hands'

b. /án + kɬ-wɔ́ + kɬ-mɔ̀?/ → á kɬ'wɔ́ kɬmɔ̀? 'in one hand'

In (44a) we see first the realization of the locative preposition as áŋ, since prefix deletion has been conditioned by the presence of an associative construction. In the second example, the /n/ stays, although it becomes [ɪ] intervocalically. In (44b) /n/ drops before a CV prefix (which does not undergo prefix deletion before a numeral).

In a few cases prefix deletion is optional, even though there is no modifier present to condition it. Thus, besides the form in (41b), one can also say áŋ kwà? 'on the mountain'.

Finally, the same locative construction is used for the long form of infinitives. Examples are given in (45):

(45) a. álé'bə̀m 'to mould' b. álésù 'to wash'
álé'zf 'to eat' álébùɔ 'to come'

In (45a) underlying H tone stems are illustrated (cf. the short forms ébə̀m and ézf). In (45b) underlying H tone stems are seen (cf. ésû and ébûɔ). As seen in these comparisons, tonal differences occur between the long and short infinitive forms. The downstep observed with H tone stems in (45a) is not present in the short infinitive; the falling tone observed in short infinitives having a L tone stem, is not present in (45b). This is explained by the underlying forms seen now in (46).

(46) a. /é-bə̀m/ vs. /án + è-bə̀m/ 'to mould'
/é-zf/ vs. /án + è-zf/ 'to eat'
b. /é-sù/ vs. /án + è-sù/ 'to wash'
/é-bùɔ/ vs. /án + è-bùɔ/ 'to come'

Here we observe that the long form contains the short form--but with a L tone prefix, rather than a H. This is consistent with what was said about the tone of noun prefixes following the locative marker /án/. Indeed, the short infinitive *is* a noun, belonging historically to class 5. The L of the infinitive prefix following /án/ thus accounts for the downstep in (45a); it also accounts for the non-spreading of the *surface* H of -é- in (45b). This prefix obtains its H tone from the preceding locative marker, with its own underlying L tone assuring that the new H coming in from the left will not spread onto the L tone verb stem.

5

PERSONAL PRONOUNS

5.1. SUBJECT PRONOUNS

Aghem distinguishes two sets of personal pronouns: those which are used in subject position and those which are used in other positions (direct object, object of preposition, etc.). Possessive pronouns have been treated in the preceding chapter (section 4.2).

The forms encountered as first, second, and third person human subject pronouns are seen in (1).

(1)

	singular	*plural*	*inclusive*
1st person	ǹ	ghà?́	sè́
2nd person	wò	ghè́	
3rd person	ò	ghé	

As seen in the above forms, a distinction exists in Aghem between exclusive and inclusive first person plural pronouns (ghà?́ and sè́, respectively), something which was also seen in the possessive pronouns discussed earlier. There also is a variant á which is synonymous with sè́. All of these subject pronouns are illustrated in (2) in the P_1 (today past) tense.

(2)

ǹ mɔ̀ bvə̀ nò	'I fell'	
wò mɔ̀ bvə̀ nò	'you [sg.] fell'	
ò mɔ̀ bvə̀ nò	'he/she fell'	
ghà? mɔ̂ bvə̀ nò	'we [excl] fell'	
sè mɔ̂ bvə̀ nò	'we [incl] fell'	(= á mɔ̂ bvə̀ nò)
ghè́ mɔ̂ bvə̀ nò	'you [pl.] fell'	
ghé mɔ̂ bvə̀ nò	'they fell'	

In these forms we observe the P_1 tense marker /mɔ̀/ developing a HL falling tone after 'I', 'we [excl]', 'we [incl]', 'you [pl.]' and 'they'. In the case of the á variant of 'we [incl]' and ghé 'they', we can explain the HL of mɔ̂ by postulating a rightward H tone spreading rule which copies the H of these pronouns onto the following tense marker (see Anderson 3.2). In the case of ǹ, ghà?́, sè́, and ghè́, we posit a floating H tone following the basic L of the pronoun which is shifted onto the tense marker. Additional support for these underlying tones will be observed with respect to object pronouns in the next section. Examination of these latter pronouns also suggest that the first person singular subject pronoun be represented underlyingly as /ǹ́/, since the object form 'me' is mɔ̀ɔ́.

The forms ò and ghé serve as subject pronouns for classes 1 and 2 (the human classes). The remaining subject pronouns are given in (3):

(3)

3,8	ó	6	á	9	è	11	fʃ
4,5	é	7	kʃ	10	tʃ	12	ǹ

These pronouns condition the same H spreading onto mɔ̀ as has been shown in (2), e.g. é mɔ̂ bvə̀ nɔ̀ 'it [cl. 3] / they [class 8] fell', tɬ́ mɔ̂ bvə̀ nɔ̀ 'they [cl. 10] fell', etc. The one exception is class 12, which has a L tone subject pronoun: m̀ mɔ̀ bvə̀ nɔ̀ 'they fell'. These subject pronouns have desyllabified or fused forms in the P_0 completive focus tense, e.g. class 3,8: wɬ́n bvə̀ 'it/they *did* fall' (just now), class 4,5: zɬ́n bvə̀; class 12: mɬ̀́n bvə̀. This tense form is characterized by an underlying /ɬ́Ǹ/ marker, which is seen more clearly in the sentence wù ḿ bvə̀ 'a person *did* fall' (just now). The underlying /ɬ́/ will be deleted, with its H tone being reassigned to the resulting syllabic nasal, *unless* a desyllabified subject marker precedes, e.g. wɬ́N, zɬ́N, ghɬ́N. (In forms such as class 7 kɬ́N, which derives from underlying /kɬ́ + ɬ́Ǹ/, it is not clear which of the ɬ́'s has fallen: that of the subject marker or that of the tense marker.)

The forms in (3) are also used as subject-verb agreement markers (henceforth: subject markers, abbreviated SM). The one exception is class 9, which has a floating L tone subject marker, as does class 1. Class 2 is marked by á instead of the full pronoun ʼghé. These subject markers are illustrated in (4).

(4)	*n.cl.*			
	1	fɬ́n mɔ̀ bvə̀ nɔ̀	'the friend fell'	(fɬ́n)
	2	fɬ́ɪ á mɔ̂ bvə̀ nɔ̀	'the friends fell'	(áfɬ́n)
	3	kʊ̀́? 'ó mɔ̂ bvə̀ nɔ̀	'the ladder fell'	(ókʊ̀́?)
	4	kʊ̀́? 'é mɔ̂ bvə̀ nɔ̀	'the ladders fell'	(ékʊ̀́?)
	5	ɪɬ́m é mɔ̂ bvə̀ nɔ̀	'the yam fell'	(éɪɬ́m)
	6	ɪɬ́m á mɔ̂ bvə̀ nɔ̀	'the yams fell'	(áɪɬ́m)
	7	nâŋ kɬ̀́ mɔ̂ bvə̀ nɔ̀	'the cocoyam fell'	(kɬ́nâŋ)
	8	nwâŋ ò mɔ̂ bvə̀ nɔ̀	'the cocoyams fell'	(ónwâŋ)
	9	ñɔ̀m mɔ̀ bvə̀ nɔ̀	'the animal fell'	(ñɔ̀m)
	10	ñɔ̂m tɬ̀́ mɔ̂ bvə̀ nɔ̀	'the animals fell'	(tɬ́nɔ̂m)
	11	nwɬ́n 'fɬ́ mɔ̂ bvə̀ nɔ̀	'the bird fell'	(fɬ́nwɬ́n)
	12	nwɬ̀́n m̀ mɔ̀ bvə̀ nɔ̀	'the birds fell'	(ńnwɬ́n)

A number of processes are at work in the forms in (4). First note in the class 1 form that the H of 'friend' (underlyingly /fɬ́n'/) does not spread onto the tense marker. This is because there is an underlying L tone subject marker which is not realized segmentally, but which is ultimately derived from /ɔ̀/, or perhaps /à/. In the forms for classes 3, 4 and 11 we see that the SM is downstepped after $H\text{-}H_1$ and $H\text{-}H_2$ nouns, as expected. In the class 7, 8 and 10 forms the SM becomes a L tone after a HL stem. However, the original H of the SM *is* realized on the tense marker, as represented in (5):

(5) /tɬ́-ñɔ̀m̀ + tɬ́ + mɔ̀ + bvə̀ + nɔ̀/

H L H L

[ñɔ̂m tɬ̀́ mɔ̂ bvə̀ nɔ̀] 'the animals fell'

In (5) we see a general process of rightward tone spreading. Since the language does not generally permit rising tones (except in some verb forms), LH contour simplifications take place where necessary (see also Anderson 3.2).

5.2. OBJECT PRONOUNS

Although the second set of pronouns occur in all environments except subject position, they will be referred to as object pronouns. The human object pronouns are indicated in (6).

(6)

	singular	*plural*	*inclusive*
1st person	mùɔ́	ghà?́	`sè́
2nd person	wɔ̀`	ghè́	
3rd person	`wɨ̀n	́ghé	

The following differences are noted between the subject and object pronouns:

(i) The first person singular object pronoun is mùɔ́, while the corresponding subject pronoun is Ǹ́. It is clear that the latter is derived from the former, and that an underlying representation of the subject pronoun as /m̀́/ may therefore be justified.

(ii) The third person singular object pronoun is based on the class 1 demonstrative form wɨ̀n 'this one' (section 4.3).

(iii) There is no á object pronoun for the first person plural inclusive.

These pronouns are illustrated in (7a) after a L context and in (7b) after a H context (in this case a floating H tone characteristic of this negative tense).

(7) a.

ò mɔ̀ kɔ̀? mùɔ	'he saw me'	[today past]
ò mɔ̀ kɔ̀? wɔ̀	'he saw you [sg.]'	
ò mɔ̀ kɔ̀? wɨ̀n°	'he saw him/her'	
ò mɔ̀ kɔ̀? ghà?	'he saw us [excl]'	
ò mɔ̀ kɔ̀? sè	'he saw us [incl]'	
ò mɔ̀ kɔ̀? ghè	'he saw you [pl.]'	
ò mɔ̀ kɔ̀? ghé	'he saw them'	

b.

ò kà kɔ̀? múɔ	'he didn't see me'	[today past]
ò kà kɔ̀? wô	'he didn't see you [sg.]'	
ò kà kɔ̀? wɨ̂n	'he didn't see him/her'	
ò kà kɔ̀? ghá?	'he didn't see us [excl]'	
ò kà kɔ̀? sè	'he didn't see us [incl]'	
ò kà kɔ̀? ghé	'he didn't see you [pl.]'	
ò kà kɔ̀? ghé	'he didn't see them'	

In (7a) we see that `wɨ̀n 'him/her' becomes wɨ̀n° after a L tone. On the other hand, ́ghé 'them' does not undergo this change, since it is preceded by a floating H tone which blocks the assimilation. In (7b), those pronouns whose underlying tonal representation is L-L become HL after a floating H which occurs between the verb and the object pronoun. Those pronouns whose underlying representation is L-H become H (exactly as H-H_1 nouns such as /fɨ́-nwɨ̀ń/ 'bird' have a L-H stem becoming H after the H prefix). `sè́, on the other hand, does not become sé because of the preceding floating L tone which blocks assimilation.

As mentioned, these object pronouns are not used exclusively in direct object position. In (8) and (9) we see them first as object of a preposition and second as the form an emphatic subject takes as it is postposed after the verb (cf. section 6.2; Watters 2.1).

(8)	ò mɔ̀ nàm kʃbɛ́ â mùɔ	'he/she cooked fufu for me'
	ò mɔ̀ nàm kʃbɛ́ â wɔ̀	'he/she cooked fufu for you [sg.]'
	ò mɔ̀ nàm kʃbɛ́ â wɨn°	'he/she cooked fufu for him/her'
	ò mɔ̀ nàm kʃbɛ́ â ghà?	'he/she cooked fufu for us [excl]'
	ò mɔ̀ nàm kʃbɛ́ â sɛ̀	'he/she cooked fufu for us [incl]'
	ò mɔ̀ nàm kʃbɛ́ â ghɛ̀	'he/she cooked fufu for you [pl.]'
	ò mɔ̀ nàm kʃbɛ́ â ghé	'he/she cooked fufu for them'
(9)	à zɨ́á mùɔ bɛ́'kɔ́	'*I* am eating fufu' (not someone else)
	à zɨ́á wɔ̀ bɛ́'kɔ́	'*You* [sg.] are eating fufu'
	à zɨ́á 'wɨn bɛ́'kɔ́	'*He/She* is eating fufu'
	à zɨ́á ghà? bɛ́'kɔ́	'*We* [excl] are eating fufu'
	à zɨ́á sɛ̀ bɛ́'kɔ́	'*We* [incl] are eating fufu'
	à zɨ́á ghɛ̀ bɛ́'kɔ́	'*You* [pl.] are eating fufu'
	à zɨ́á 'ghé bɛ́'kɔ́	'*They* are eating fufu'

The dummy subject marker à is observed in the forms in (9), while the preposition â in (8) indicates either a recipient (dative) or benefactive object.

There are no inanimate object pronouns. Instead, if it is possible at all, the forms `wɨn and 'ghé are used. This is true also of possessive pronouns, for which only the associative human forms are available, but which can on occasion be used for animals or inanimates, e.g. fú kʃl'á ò mɔ̀ kɔ̂? lɔ́?'ɔ́ kʃ-'wɨn-kɔ́ 'the rat whose place he saw' (lit. the rat that he saw its [=his/her] place = the rat that he saw the place of it [=him/her]). However, usually inanimate objects are expressed through zero anaphora, e.g. m̀ mɔ̂ kɔ̀? nɔ̀ 'I saw (it)' (where nɔ̀ is a focus marker required to complete an objectless verb in non-focused tenses; see Watters 3.2).

5.3. LOGOPHORIC PRONOUNS

In addition to the above pronouns, Aghem distinguishes a third person singular logophoric pronoun from the regular third person singular pronoun. The logophoric or "self-reporting" pronoun is used only in reported speech and has the form é as subject and ghé as object (and in possessives), merging with the third person plural pronoun. The logophoric pronoun is used when a third person singular referent in reported speech is coreferential with the third person doing the reporting. In (10a) we see a regular third person subject in the embedded clause, since the two subjects are not coferential. In (10b) we see the logophoric subject pronoun é in the embedded clause, since the two subjects *are* coreferential:

(10) a.	wɨ̀zɨ́n mɔ̀ dzɛ̀ ñʃ'á ò mɔ̀ bvɨ̀ nɔ̀	'the woman said that he fell'
b.	wɨ̀zɨ́n mɔ̀ dzɛ̀ ñʃ'á é mɔ̂ bvɨ̀ nɔ̀	'the woman said that she [herself] fell'

Historically, this é is the old third person object pronoun which came to be used as a logophoric subject pronoun, as in other African languages (e.g. Igbo). Later, when the demonstrative form wɬn replaced third person singular object pronouns, it did not replace the logophoric, since this object form was being used with a subject function. Notice in (11) that there is no logophoric plural pronoun.

(11) ghé mɔ̂ dzɛ̀ ñf'á ghé mɔ̂ bvə̀ nɔ̀ 'they said that they fell'

This sentence is ambiguous between the two readings 'they said that they (themselves) fell' and 'they said that they (other people) fell'.

In non-subject position, the third person singular logophoric pronoun is ghé, homophonous with the third person plural pronoun. In (12b) we see this pronoun in direct object position. In (13b) it occurs as a possessive pronoun.

(12) a. wìzɬn mɔ̀ dzɛ̀ ñf'á m̀ mɔ̂ kɔ̀? wɬn° 'the woman said that I saw him'

b. wìzɬn mɔ̀ dzɛ̀ ñf'á m̀ mɔ̂ kɔ̀? ghé 'the woman said that I saw her (herself)'

(13) a. wìzɬn mɔ̀ dzɛ̀ ñf'á m̀ mɔ̂ zɬ bɛ́ 'kɬ 'wɬn 'the woman said that I ate his fufu'

b. wìzɬn mɔ̀ dzɛ̀ ñf'á m̀ mɔ̂ zɬ bɛ́ 'kɬ ghé 'the woman said that I ate her fufu'

The (a) sentences have non-coreferential third person singular pronouns. Note that the (b) sentences are ambiguous in that they can refer also to third person plural referents. Thus, (12b) can also mean 'the woman said that I saw them' and (13b) can mean 'the woman said that I ate their fufu'.

Theoretically one should get first and second person pronouns in direct discourse (e.g. 'he said, "I ate your fufu"') and logophoric and other pronouns in indirect discourse (e.g. 'he said that he [log] ate your fufu'). However, the texts that we have analyzed suggest that in spontaneous speech the two become merged (as Elaine Thomas has recently demonstrated also for Engenni and has termed "semi-direct" discourse).* An example is given in (14):

(14) a. wìzɬn 'vɛ́ ndzɛ̀ à wɬn ñf'á é ŋgé 'lɬghá wɔ̀
woman that said to him that she/LOG much like you
? 'the woman said to him that she liked him a lot'
? 'the woman said to him "I like you a lot"'

b. sɔ̌ogɔ̀? vɛ́ mé ñf'á wɔ̀ lɬghá mùɔ, mɔ̀ wɔ̀ mbàŋ lɔ́ wì bà?tòm° ...
soldier that (said) that you like me and you yet are wife (of) chief
'the soldier said, "you like me, and yet you are the wife of the chief"'

In (14a) a woman is addressing a soldier. The reporter, however, starts out with a logophoric é, which seems to indicate that we are witnessing indirect discourse. However, the object pronoun wɔ̀ clearly refers to the soldier, and not to the listener of the story, as we can see from what follows in (14b). This would seem to indicate that a switch is made from indirect to direct discourse in midstream, whence the difficulty in translating (14a). In (14b), on the other, direct discourse is used--and is nevertheless marked by the complementizer ñf'á 'that', probably coming from an earlier incompletive verb form 'saying'. More work is needed in this area to sort out the exact use of logophorics in spontaneous discourse.

*Elaine Thomas, *A Grammatical Description of the Engenni Language (1978). Summer Institute of Linguistics Publications in Linguistics* No. 60. Arlington: University of Texas.

5.4. PRONOUN CONJUNCTION

As in apparently all languages, pronouns can be conjoined in Aghem. The conjunction used for this purpose is à, which also is used to mean 'with' in a comitative sense. The use of this conjunction/preposition is illustrated in (15).

(15) a. tʃbvə́ à dzʃ'tɔ́ 'dogs and goats'

b. wɔ̀ à (sùghɔ̀) mùɔ 'you and (also) me'

As seen in (15a), nouns following à are put in the B form with the OF suffix (section 6.5). In (15b) two singular pronouns 'you' and 'me' are conjoined with the optional marker sùghɔ̀ 'also' (which also can be used with nouns, e.g. tʃbvə́ à sùghɔ̀ dzʃ'tɔ́). The order of the elements can be reversed in both of the above cases, i.e. tʃdzʃ à (sùghɔ̀) bvə́'tɔ́ 'goats and (also) dogs', mùɔ à (sùghɔ̀) wɔ̀ 'me and (also) you'. The last combination, with a first person pronoun preceding a second person pronoun, however, sounds egocentric, and is not preferred. The following pronoun combinations are acceptable and unambiguous:

(16) a. mùɔ à wɔ̀ 'me and you' mùɔ à ghɛ̀ 'me and you [pl.]'
mùɔ à wɨn° 'me and him/her' mùɔ à ghə́ 'me and them'

b. wɔ̀ à mùɔ 'you and me' wɔ̀ à ghà? 'you and us [excl]'
wɔ̀ à wɨn° 'you and him/her' wɔ̀ à ghə́ 'you and them'

c. wɨn à mùɔ 'him/her and me' wɨn à ghà? 'him/her and us [excl]'
wɨn à wɔ̀ 'him/her and you' wɨn à sɛ̀ 'him/her and us [incl]'
wɨn à ghɛ̀ 'him/her and you [pl.]'

d. ghɛ̀ à mùɔ 'you [pl.] and me'

e. ghə́ à mùɔ 'them and me' ghə́ à wɔ̀ 'them and you'

In (16a) we see that mùɔ 'me' can combine with second and third person singular and plural pronouns. In (16b) we see that wɔ̀ 'you [sg.]' can combine with first and third person singular and plural pronouns (although not with sɛ̀ 'us [incl]', which would be redundant). In (16c) we see that wɨn 'him/her' can combine with any singular or plural first or second person pronoun. In (16d) ghɛ̀ 'you [pl.]' combines with 'me', while in (16e) ghə́ 'them' combines with either 'me' or 'you'. The following conclusions can be drawn from these forms:

(i) As expected, first persons do not combine with first persons and second persons do not combine with second persons. Unexpectedly, third persons do not readily combine in this way (thus, one cannot say *wɨn à wɨn° 'him/her and him/her'). Complex pronouns are used instead (see below).

(ii) In general, one cannot combine a plural pronoun with another pronoun when the plural pronoun is in first position. There are three exceptions. In (16d) we see that one can combine ghɛ̀ 'you [pl.]' with a first person pronoun. And in (16e) we see that one can combine ghə́ 'them' with either a first or a second person pronoun. If we recognize a hierarchy whereby first person is higher than second person which in turn is higher than third person, then the generalization is that a plural pronoun can be in first position only if the second position pronoun is higher on the pronominal hierarchy. (The only examples collected

involved singular pronouns in second position.) The reason for this constraint is that complex pronouns (see below), which also use à, require that the first element of the pronoun be chosen from the highest position in the pronominal hierarchy, e.g. a complex pronoun consisting of a first and a second person will begin with ghà? 'we/us'. In the forms in (16d) and (16e), this does not happen, and we know that we are not dealing with so-called complex pronouns. Rather, these are pronouns that are combined in a *cumulative* bond ('them and me'), not in an *incorporative* bond ('them including me'). The two possibilities referred to as cumulative and incorporative bonding are thus contrasted in (17):

(17) a. ghé à mɔ̀ɔ 'them and me'

b. ghà?à ghé 'us including them; them including us; us including him/her; them including me'

The first form literally means 'them and/with me', while the second consists of ghà? 'us' + à 'with/and' + ghé 'them'. What is unusual about (17b) is that a number of readings are possible, as indicated. All this pronoun says is that there are at least three people and at least one of them has to be first person and another one has to be third person. It says nothing about the internal composition of the group, i.e. how many people are first vs. third person. There are nine such complex pronouns in Aghem. These are given in (18) with all of the possible glosses:

(18) a. ghà?à wò 'me and you [sg.]'

ghà?à wɨn° 'me and him/her'

ghà?à ghè 'me and you [pl.]'

ghà?à ghé 'me and them, us [excl] and him, us [excl] and them, me and him [log], us and him [log]'

b. sàà ghé 'us [incl] and him, us [incl] and them, us [incl] and him [log]'

c. ghàà wɨn° 'you [sg.] and him'

ghàà ghé 'you [sg.] and them, you [pl.] and him, you [pl.] and them, you [sg.] and him [log], you [pl.] and him [log]'

d. ghèè wɨn° 'him and him, him and him [log]'

ghèè ghé 'them and him, them and them, them and him [log]'

As already mentioned, the first element of a complex pronoun is always a plural pronoun. If a first person is involved, the first element will be ghà? 'us [excl]', as seen in (18a), unless there is a first person, a second person, and a third person, in which case the first element is sè 'us [incl]', as seen in (18b). In (18c) we observe ghè 'you [pl.]' as the first element, since there is a second person and a third person involved, and in (18d), where only third persons are involved, the first element is ghé 'them'. As when not in subject position, the logophoric pronoun merges with 'them'. Note the following assimilations: sè + à → sàà, ghè + à → ghàà, and ghé + à → ghèè.

Concerning the second element of the complex pronoun, it can be either singular or plural. If it is singular, only two persons are involved, e.g. ghà?à wò 'me and you'. If it is plural, at least three persons are involved, e.g. ghà?à ghè 'me and you [pl.]'. As mentioned, if three or more persons are involved, the

complex pronoun says nothing about how these persons subgroup, e.g. ghà?à ghé can mean, among other things, 'me and 'them' (i.e. one first person and more than one third person) or 'us [excl] and him' (i.e. more than one first person and only one third person).

The different uses of the forms in (18) are presented in table form in (19).

(19)

	you (sg.)	*him/her*	*logophoric*	*you (pl.)*	*they*
I	ghà?à wò	ghà?à wɨn°	ghà?à ghé	ghà?à ghɛ̀	ghà?à ghé
you (sg.)		ghàà wɨn°	ghàà ghé		ghàà ghé
him/her		ghèè wɨn°	ghèè wɨn°		ghèè ghé
we (excl)		ghà?à ghé	ghà?à ghé		ghà?à ghé
we (incl)		sàà ghé	sàà ghé		sàà ghé
you (pl.)		ghàà ghé	ghàà ghé		ghàà ghé
they			ghèè ghé		ghèè ghé

There are a number of blanks in the above table. These are explained in the following ways:

(i) In some cases the same persons would be combined, which is not possible, e.g. 'you + you'.

(ii) In some cases the form could have been given but because of the nature of the table this would result in representing the same combination twice, e.g. the last form of the second column 'they + him/her' is not given since it is found in the third form of the last column.

(iii) A few combinations are not found because they are covered by the pronoun sɛ̀ 'we [incl]'. Thus, there is no complex pronoun for 'we + you', whether the 'you' is singular or plural. There *are* forms for 'you [sg.] and I' and 'you [pl.] and I', as seen in the first row of (19). The way one would express the combination of three or more first + second persons is seen in (20).

(20) a. sɛ̀ mɔ̂ bʉ̀ɔ nɔ̀ 'we [incl] came'

b. ghɛ̀ mɔ̂ bʉ̀ɔ sɛ̀ 'you [pl.] came with us'

In (20a), the 'we [incl]' pronoun is used as a subject and automatically signals that first and second persons are involved. In (20b) we observe a second person plural subject and, following the verb, the 'we [incl]' pronoun. Similar examples illustrating the uses of sɛ̀ are seen in (21), which were judged to be synonymous.

(21) a. sɛ̀ mɔ̂ bʉ̀ɔ àdzɨ̀m 'we all [incl] came' (lit. we [incl] came all)

b. m̀ mɔ̂ bʉ̀ɔ sɛ̀ 'we all [incl] came' (lit. I came we [incl])

The sentence in (21b) suggests that sɛ̀ not only indicates the inclusion of the addressee, but also that there is the sense of 'all' or 'everyone' in it.

As recalled from (15a), nouns can be combined simply with à. They can, in addition, function as the second element in a complex pronoun, as seen in (22).

(22) a. ghà?à wɛ̀° 'the child and me'
ghàà wɛ̀° 'the child and you [sg.]'
ghèè wɛ̀° 'the child and him/her'

b. ghà?à ghéè wɛ̀° 'the child and us [excl]'
sàà ghéè wɛ̀° 'the child and us [incl]'
ghàà ghéè wɛ̀° 'the child and you [pl.]'
ghèè (ghéè) wɛ̀° 'the child and them'

c. ghà?à ghéè wɛ́-ghɔ́ 'the children and me/us [excl]'
sàà ghéè wɛ́-ghɔ́ 'the children and us [incl]'
ghàà ghéè wɛ́-ghɔ́ 'the children and you [sg/pl.]'
ghèè (ghéè) wɛ́-ghɔ́ 'the children and him/her/them'

In (22a) we see that when a noun is conjoined with a single pronominal person, the noun simply follows the expected plural pronouns. In (22b), on the other hand, if more than two persons are involved, ghéè must be added in all cases except after ghèè, where its presence is optional. In these forms the noun is singular; in the forms in (22c), the noun is plural. Note that because it would necessarily involve at least three persons, sàà cannot be directly followed by a noun, whether singular or plural. The additional pronominal form ghéè is analyzed as ghé followed by à. Thus, a form such as sàà ghéè wɛ́-ghɔ́ 'the children and us [incl]' is analyzed as coming from sè + à + ghé + à + children, meaning literally 'we [incl] with them with children'. Since the meaning of 'with' is incorporative in these complex pronoun forms, we can interpret this combination as 'we [incl] which includes them which includes the children'. Nouns which are conjoined in this way automatically occur in their B form (chapter 6), since they follow the preposition à.

The above use of ghéè after ghà?à, sàà, and ghàà becomes only optional when the noun is not human--or when it is the noun kɬkᵩ̀ 'servant, slave', which since it belongs to an inanimate gender, is treated grammatically as being non-human:

(23) ghà?à (ghéè) kᵩ̀-wɔ̀ 'the servants and me/us [excl]'
sàà (ghéè) kᵩ̀-wɔ̀ 'the servants and us [incl]'
ghàà (ghéè) kᵩ̀-wɔ̀ 'the servants and you [sg/pl.]'

The following illustrates the use of these pronouns with non-humans:

(24) a. ghà? mɔ̂ tsɬghà bvɨ̀ ghà?à(ghéè)lɬm-ghɔ́ 'we [incl] fell (together with, holding) yams'
we (excl) fell with yams

b. ghà? mɔ̂ bùɔ ghà?à(ghéè)nwɬn-mɔ̀ 'we came (flying together) with the birds'
we (excl) came with birds

The use of ghà?à and optional ghéè in (24) indicates that the falling and coming was done jointly among the indicated persons and the yams and birds, respectively. If the simple preposition à 'with' had been used alone in (24b), a different meaning would have obtained:

(25) ghà? mɔ̂ bùɔ à nwɬn-mɔ̀ 'we [excl] brought the birds'

6

NOUNS: B-FORMS (OUT OF FOCUS)

6.1. STRUCTURE OF B-FORM OF NOUNS

In chapter 3 the A-form of nouns was discussed and illustrated. These nouns were shown to be characterized by a noun class prefix--or in the case of classes 1 and 9, by Ø. An example of an A-form noun is seen in the object position in the affirmative sentence in (1).

(1) m̀ mɔ̂ zɨ́ kʃ́-bɛ́ nɛ́ 'I ate fufu today'
I P_1 *ate* *fufu* *today*

The A-form noun in this case is kʃ́-bɛ́ 'fufu', which consists of the class 7 prefix kʃ́- followed by the stem /-bɛ́ˋ/.

In the sentence in (2), on the other hand,

(2) ǹ kâ zɨ́ bɛ́-'kɔ́ nɛ́ 'I didn't eat fufu today'
I *NEG* *ate* *fufu* *today*

where the sentence in (1) is negated by the P_1 negation marker /kà/, the object now occurs in a different form: in (2), the noun 'fufu' consists of the stem /-bɛ́ˋ/ followed by a suffix /-kɔ́/. This latter suffix, in turn, consists of the class 7 consonant concord k followed by what seems to be a stem vowel -ɔ́.

This observed difference between a prefixed (A) form and a suffixed (B) form of nouns is quite unusual in Cameroonian Bantu and in Bantu in general. The purpose of the present chapter is first to study the distribution of the A and B forms, and second to provide an explanatory account of this phenomenon. In the parenthetical subtitle of chapter 3, A-forms were referred to as "in focus". In the parenthetical subtitle of the present chapter, B-forms are referred to as "out of focus". As will be shown in the following discussion, B-forms are indeed claimed to constitute the shape nouns take when they are *unexpectedly* out of focus, while A-forms are found to characterize nouns when they are either in focus or are *expectedly* out of focus. The terms "unexpectedly" and "expectedly" will be treated more in depth below. For the time being, let us take note of the position argued here that A-forms are basic or unmarked, while B-forms are derived and marked. Thus, what will be at issue here is determining the conditions under which B-forms are *derived* from A-forms.

The various A and B forms of nouns are illustrated for all of the noun classes in the table in (3). In this table it is noted that classes 1 and 9 (i.e. the singular human and animal classes) do not show a distinction between A and B forms, since they do not have a prefix in the A form and do not have a suffix in the B form. It is noted also that only class 12 has a L tone suffix. The marker of the B form, henceforth an OF (out of focus) marker, has H tone in all other cases, although it is downstepped to 'H after a $H\text{-}H_1$ or $H\text{-}H_2$ noun, and becomes L after a stem with HL or L tone, e.g. fʃ́-ghâm 'mat' (A-form) becomes ghâm-fɔ̀ (B-form). Two separate columns are indicated for B forms. In the left hand column the shape of the OF marker is seen to involve the vowel -ɔ when it is *postposed* (or encliticized) to a preceding element (here, the noun). In the right hand column, the shape of the OF marker is seen to be identical to the noun prefix when it is *pre-*

posed to the following element. As we shall see in section 6.7, the preposed OF marker is identical to the SM (subject marker) which occurs either as a subject pronoun or as an agreement with the subject noun (see section 5.1 above). All

(3) AGHEM NOUN FORMS

n.cl.	*A-form*	*B-form* *postposed form*	*preposed form*	*gloss*
1	wɛ́	wɛ́	wɛ́	'child'
2	á-wɛ́	wɛ́-ghɔ́	wɛ́ á	'children'
3	ó-kʊ́?	kʊ́?-'wɔ́	kʊ́? 'ó	'ladder'
4	é-kʊ́?	kʊ́?-'zɔ́	kʊ́? 'é	'ladders'
5	é-lʃm	lʃm-zɔ́	lʃm é	'yam'
6	á-lʃm	lʃm-ghɔ́	lʃm á	'yams'
7	kʃ-fú	fú-kɔ́	fú kʃ	'rat'
8	ó-fú	fú-wɔ́	fú ó	'rats'
9	bvá	bvá	bvá	'dog'
10	tʃ-bvá	bvá-'tɔ́	bvá 'tʃ	'dogs'
11	fʃ-nwɬn	nwɬn-'fɔ́	nwɬn 'fʃ	'bird'
12	ń-nwɬn	nwɬn-mɔ̀	nwɬn ǹ	'birds'

examples of B forms discussed below will be of the postposed variety (involving -ɔ), until the preposed forms receive explicit treatment in section 6.7.

Although it has been said that the B forms are derived from the A forms, it should not be concluded that a noun prefix "becomes" a noun suffix. Recall from section 4.1 that a process of prefix deletion takes place when a noun is qualified by a modifier agreeing with it in noun class. As seen in the examples in (4),

(4) a.	before POSS:	bvá 'táŋá	'my dogs'
b.	before DEM:	bvá 'tʃn	'these dogs'
c.	before ADJ:	bvá tɬdú'útɔ́	'big dogs'
d.	before ASSOC:	bvá 'tʃ 'wɛ́	'the dogs of the child'
e.	before SM:	bvá 'tʃ mɔ̂ bvà nò	'the dogs fell' [P_1 = today]
f.	*BUT* before NUM:	tʃbvá tɬbɬghà	'two dogs'

this process also occurs before the subject marker, as seen in (4e), but does not occur before numerals and other quantifiers, as seen in (4f). Because of the occurrence of this process of prefix deletion, it is possible to view the B form as obtained by *adding* an OF marker which in turn causes prefix deletion, as in (5).

(5) tʃ-bvá *(A-form)* → tʃ-bvá-'tɔ́ *(B-form)* → bvá-'tɔ́ 'dogs'

Intermediate forms with both a noun class prefix and an OF suffix are found in related languages. This derivation makes all the more sense since we shall argue in section 6.6 that the OF suffix is derived from a demonstrative. As seen in (4b) above, demonstratives condition prefix deletion.

It will be noted from the above discussion that nouns occur without prefixes in both A and B forms (e.g. when there is a modifier agreeing in noun class with the head noun, whether the latter is logically in A or B form; cf. section 6.6). The question, then, is how we can tell from any given example whether a noun is in A or B form. The following procedure can be followed, when in doubt:

(i) If a noun is prefixed, it is unambiguously in A form.

(ii) If a noun is suffixed (with the OF marker /-ɔ/), it is unambiguously in B form.

(iii) If a noun is neither prefixed as in (i) nor suffixed as in (ii), there is indeterminacy, since the distinction is neutralized in the absence of one of the overt affixes. To determine the *underlying* morphological form, one of two substitution tests can be applied: (a) noun + numeral; (b) noun + à + noun.

To illustrate the substitution tests in (iii), let us refer to the indeterminate case in (4e) above. In this sentence the head noun 'dogs' occurs without a prefix and without the suffix -tɔ́. The question is whether subjects occur in A form (and undergo prefix deletion as conditioned by the subject marker) or whether subjects occur in B form, but take the form of the second column in (3). (Alternatively, at this point, we could consider a third possibility that the subject occurs in B form but loses its OF suffix because of the SM.) We know from (1) above that the object of an affirmative verb occurs in A form. When modified by a numeral, we obtain the sentence in (6):

(6) m̀ mɔ̂ bɔ̀ tʃbvǘ tɬbɬghà 'I beat two dogs'
I P_1 beat dogs two

The prefix tʃ- of 'dogs' is intact since it does not undergo prefix deletion, as already seen in (4f). From (2) above we know that the object of a negative verb occurs in B form. When modified by a numeral, we obtain the sentence in (7).

(7) ŋ̀ kà bɔ̀ bvǘ-'tɔ́ tʃbɬghà 'I didn't beat two dogs'
I NEG beat dogs two

Finally, turning now to the indeterminate subject position, we see in (8) that the A form is conditioned by that position.

(8) tʃbvǘ tɬbɬghà mɔ̂ bvù nɔ̀ 'the two dogs fell'
dogs two P_1 fell FOC

The same results are seen in (9), (10) and (11), where *noun* à *noun* is substituted for a simple noun after an affirmative verb, a negative verb, and, finally, in subject position. As seen in (9),

(9) m̀ mɔ̂ bɔ̀ tʃbvǘ à dzʃ-'tɔ́ 'I beat the dogs and goats'
I P_1 beat dogs and goats

(10) ŋ̀ kà bɔ̀ bvǘ-'tɔ́ à dzʃ-'tɔ́ 'I didn't beat the dogs and goats'
I NEG beat dogs and goats

(11) tʃbvǘ à dzʃ-'tɔ́ mɔ̂ bvù nɔ̀ 'the dogs and goats fell'
dogs and goats P_1 fell FOC

while only the second noun of a *noun* à *noun* construction is expected to be in B form, both are in B form in (10). In (11) we see that the subject position requires the A form (seen also in (9) after the affirmative verb).

6.2. OBJECT → B-FORM (EXTRINSIC DEFOCUSING)

In this and the following three sections, the different contexts where nouns are found in their B form will be discussed and illustrated. In order to demonstrate the "out of focus" nature of the B form, we begin with cases where some element other than the direct object is focused--in this case, contrastively focused. (See Watters [in this volume] for discussion of the syntax and semantics of focusing in Aghem.) In the sentence given earlier in (1), the direct object occurs directly after the verb and is part of the focus of that sentence. Thus, sentence (1) answers either the question *what did you eat?*, in which case 'fufu' is the exclusive focus of (1), or the question *what did you do?*, in which case the entire verb phrase 'ate fufu' is the focus of sentence (1). In the latter case 'fufu' is still in focus, although it constitutes only part of the total focus.

In (12) the verb 'eat' is contrastively focused:

(12) m̀ mɔ̂ zɨ̀ nô bɛ́-'kɔ́ nɛ́ 'I *ate* fufu today' (i.e. I didn't *cook* fufu today)
I P_1 *ate FOC fufu today*

The focus marker /nò/ is used for this purpose and is placed after the element it contrasts, in this case the verb. Notice that as a result of focusing the verb, the object 'fufu' must be placed in the B form. The same is observed in (13), where the temporal adverb 'today' is contrastively focused.

(13) m̀ mɔ̂ zɨ̀ nɛ́ bɛ́-'kɔ́ 'I ate fufu *today*' (i.e. not yesterday)
I P_1 *ate today fufu*

In this example we see also that the focus position occurs directly after the verb--that is, in the direct object's original position. This in itself argues forcefully that the direct object is in the expected case in focus. When it is not in focus, it in most cases does not occur in its immediate post-verbal slot. Nor does it occur in the A form, which it would if it were part of the focus. These same facts are seen again in (14), where the subject is contrastively focused.

(14) à mɔ̀ zɨ̀ mʉɔ bɛ́-'kɔ́ nɛ́ '*I* ate fufu today' (i.e. not someone else)
DS P_1 *ate I fufu today*

When the subject is focused, it must be postposed to immediate post-verbal position (i.e. the normal object position). In addition, a dummy subject (DS) à serves as a place holder for the subject's unmarked position. Note in (14) that the direct object 'fufu' is again in the B form, since it is not in focus.

In (15) a different kind of focus is observed:

(15) m̀ mâa zɨ́ bɛ́-'kɔ́ nɛ́ 'I *did* eat fufu today' (i.e. contrary to my desire or expectation not to)
I P_1*-FOC ate fufu today*

In this sentence it is the completedness of the action that is focused, or, as interpreted by Watters (section 3.1), the truth value of an assertion about past action that is in focus. Thus, as in the English gloss, I might first say "I didn't eat fufu today", and then sentence (15), "oh, I'm wrong, I *did* eat fufu today". In (15) we see that there is a special auxillary form mâa which occurs intead of mɔ̀ in the P_1 tense in this type of focus. Notice that because the tense marker has a special form, the direct object can directly follow the verb, even though it is not in focus. (See Anderson, section 4.2, for other focused tense

forms.) The object must, however, still be in the B form. The same is true of the sentence in (16), which differs from (15) only in that the direct object has been preposed to the verb (and thus occurs between the auxillary the verb stem):

(16) m̀ mâa bɛ́ 'kɨ́ zɨ́ nɛ́ 'I *did too* eat fufu today' (i.e. contrary to
I P_1-FOC fufu ate today someone's assertion that I didn't)

In this case the meaning is altered to have a contradictory sense. Someone has said "you didn't eat fufu today", and one replies "I *did too* eat fufu today". The form of 'fufu' is slightly different (bɛ́ 'kɨ́ instead of bɛ́-'kɔ́) because the noun precedes the verb (see section 6.7).

To sum up the discussion thus far, whenever *anything* is contrastively focused other than the direct object, the latter must occur in B form. This fact provides the most transparent evidence for the argument that B forms are assumed by nouns which are *unexpectedly* out of focus. The subject of a sentence, when in its normal initial position, can be argued also to be out of focus, since it is normally presupposed and topical. However, it occurs in the A form because it is in its expected state (i.e. not focused). Note that whatever post-verbal information is not in focus is actually presupposed in the above examples and could be deleted. Thus, in (13), for instance, where the adverb nɛ́ 'today' is contrast focused and 'fufu' follows it in B form, 'fufu' could have been omitted altogether. Thus, instead of literally uttering 'I ate *today* fufu', one could have said m̀ mɔ̂ zɨ́ nɛ́ 'I ate (it) *today*'. This latter utterance involves zero anaphora of the object pronoun 'it' (fufu).

6.3. OBJECT → B-FORM (INTRINSIC DEFOCUSING)

In all of the above examples an explicit choice was made to focus one or another element of the sentence. As a result, if that choice was not the direct object, it (the direct object) had to occur in B form. In this sense the defocusing indicated by placing a noun in B form can be viewed as *extrinsic* in nature. Placing the object in B form can be avoided by the speaker by simply letting the object be part of the focus. This is not possible in other cases where certain auxillary characteristics carry an inherent (sometimes secondary) focus of their own and require the object to be in B form. Since this does not represent an independent choice on the part of the speaker to defocus the object (by focusing some other element), we shall refer to these B form objects as being *intrinsically* defocused. Alternatively, if we were addressing the inherent focus of the modalities to be discussed, we could refer to them as being *intrinsically focused.*

The first example is negation. As we saw in (2) above, an object occurs in B form if it follows a negative verb. The example in (2) involved the negative marker kɛ̀, which is used with slight variants for past tense completive aspect negation (and in relatively few other environments--see Anderson, chapter 7). In (17) we see that the same defocusing of the object automatically occurs after the incompletive aspect negative marker yɔ́:

(17) m̀ mɔ̂ zɨ́-á 'yɔ́ bɛ́-'kɔ́ nɛ́ 'I wasn't eating fufu today'
I P_1 ate/INC NEG fufu today

The one exception to the above statement is that an object will be in A form if the negative marker is or includes kɛ̀(e), as seen in (18).

(18) m̀ mɔ̂ bùɔ, kɛ̀ zɨ́ kɨ́bɛ́ nɛ́ 'I came and didn't eat fufu today'
I P_1 came &NEG ate fufu today

No explanation for the exceptional behavior of kè is offered. It is suspected that the ultimate account will have to do with the verbal nature of this marker. The question of interest is why objects should be considered out of focus when following a negative verb. The explanation for this can be found in Givón's recent work* on the pragmatics of negation, where he demonstrates that in a negative utterance it is generally the negation that is asserted (i.e. focused), with the rest of the sentence being presupposed (out of focus). Thus, in this sense negation seems to have an intrinsic focus of its own. It should be noted that it is only the object which occurs in B form, as seen in (19).

(19) tʃbvú tɨbɨghà kà zɨ bɛ́-'kɔ́ 'the two dogs did not eat the fufu'
dogs two NEG ate fufu

In (19) the subject is in A form because, although not part of the focus of this sentence, subjects are *expected* not to be in focus.

Aghem extends the out of focus marking of objects to their occurrence after imperatives, as seen in (20).

(20) a. zʃ bɛ́-'kɔ́ 'eat fufu!'
eat fufu

b. fú-kɔ́, zʃ bɛ́-'kɔ́ 'Rat, eat fufu!'
Rat eat fufu

The sentence in (20a) could have been uttered either after the question *what should I eat?*, in which case the 'fufu' is new information, or after the question *should I eat fufu?*, in which case 'fufu' is given information. In the first case 'fufu' has to be considered semantically in focus (i.e. asserted), but it still occurs in B form. It thus is clear that imperatives have an overriding intrinsic focus, and the object must therefore be in B form, whatever the dynamics of the utterance happen to be within a given discourse. This is seen even more clearly in (21), where the focus marker /nò/ indicates that 'fufu' is being contrasted:

(21) zʃ bɛ́-'kɔ́ nô 'eat *fufu*!' (i.e. not yams)
eat fufu FOC

Although 'fufu' is semantically asserted in (21) and occurs with the focus marker /nò/, it still must be in B form, because it follows an imperative. Returning to sentence (20b), we see that vocatives also occur in B form, as they are not asserted, but rather are backgrounded (i.e. out of focus) with respect to the imperative or other utterance which accompanies them. Thus, fú-kɔ́, the B form, by itself means 'Rat!' (vocative), while the A form kʃ-fú is the citation form and therefore glossed definitionally as 'rat'. It is not accidental that the not-out-of-focus form, i.e. the A form, is also used in citation.

The final modality which will be illustrated here as requiring the object to be in B form is the incompletive hortative form in (22a), compared with the F_1 (today future) tense in (22b):

(22) a. ò sɛ́e zʃa bɛ́-'kɔ́ 'he should be eating fufu' [later today]
he H/INC eat fufu

b. ò sɨ zɨá kɨbɛ́ 'he will eat fufu' [later today]
he F_1 eat fufu

*Talmy Givón, "Negation in language: pragmatics, function, ontology" (1978). In P. Cole (ed.), *Syntax and Semantics 9: Pragmatics*, 69-112. Academic Press.

In both the incompletive hortative and the imperative constructions, it is as if the object is automatically backgrounded to the incertainty and the imperative force of these modalities. In the next section we shall, in addition, see that the hortative requires the object to be in B form if its subject is second person.

6.4. NOUN → B-FORM IN BACKGROUNDED CLAUSES

In all of the preceding cases, it is only the direct object which is affected by whatever conditions the B form. In the constructions discussed in this section, *all* nouns in a clause are affected if they occur in a so-called backgrounded subordinate clause. We begin with examples of the hortative construction in (23).

(23) a. ò lɨghà ñfˊáˊ ǹ zf kfbéˊ 'he wants me to eat fufu'
he wants that I eat fufu

b. ò lɨghà ñfˊáˊ wò zf béˊ-ˊkóˊ 'he wants you to eat fufu'
he wants that you eat fufu

In (23a) the subject of the hortative clause is a first person and the direct object occurs in its A form. In (23b), on the other hand, the subject of the hortative clause is a second person and the direct object occurs in its B form, exactly as seen in the case of imperatives. While there is some tonal evidence of a relationship between second person hortatives and imperatives, what is interesting is that the backgrounding of the direct object cannot be explained in terms of imperative force. Cf. the examples in (24).

(24) a. ò lɨghà ñfˊáˊ wò à mùɔ zf kfbéˊ 'he wants you and me to eat fufu'
he wants that you & I eat fufu

b. ò lɨghà ñfˊáˊ wò à wín zf béˊ-ˊkóˊ 'he wants you and him to eat fufu'
he wants that you & he eat fufu

In (24a) the subject of the hortative clause is a second person combined with a first person. The result is semantically a first person 'we' and the object therefore is in A form. In (24b), on the other hand, the subject of the hortative clause is a second person combined with a third person. The result is semantically a second person 'you [pl.]' and the object therefore is in B form. Note, however, that in both cases a second person is involved and there is thus imperative force. A combination of factors seem to be at work determining when the object will be defocused, the most crucial of which is that the subject must be a second person (whether exclusively second person or second + third person).

A second subordinate construction where nouns are required to be in the B form is the relative clause. As seen in (25), both the subject and the object are in B form when included in a relative clause.

(25) a. bvéˊ ˊtfl áˊ tf mɔ̀ zf béˊ-ˊkóˊ 'the dogs that ate fufu'
dogs DEM REL SM P_1 ate fufu

b. béˊ ˊkfl áˊ bvéˊ-ˊtóˊ tfbɨghà mɔ̀ zf 'the fufu that the two dogs ate'
fufu DEM REL dogs two P_1 ate

In (25a) the direct object 'fufu' occurs in B form in the relative clause, although it would have been in A form in the corresponding (affirmative) main clause. In (25b) the numeral 'two' unambiguously demonstrates that the subject of a relative clause is in B form, in this case bvéˊ-ˊtóˊ 'dogs'. In (26), on the other hand,

(26) a. bvá 'tʃɪ á tʃ mɔ̀ tákè zʃ kʃbé 'the dogs that didn't
dogs DEM REL SM P1 NEG ate fufu eat fufu'

b. bé 'kʃɪ á bvá-'tɔ́ tʃbɨghà mɔ̀ tákè zʃ 'the fufu that the two
fufu DEM REL dogs two P1 NEG ate dogs didn't eat'

only the nouns which *precede* the negative marker tákè are affected, i.e. the subject 'dogs' in (26b), but not the object 'fufu' in (26a). As mentioned above, objects following a negative marker involving kè(e) do not occur in B form. In (26a) we see that this exception to object defocusing after a negative verb also overrides the defocusing conditioned by relative clauses. Addressing ourselves to why relative clauses should put nouns in their B form, we note that relative clauses contain backgrounded information, which information is put in the B form in contrast to the foregrounded information in the main clause. Because of kè and certain other incompletely understood phenomena, the identification of B form with backgrounding is imperfect. However, as has been shown for a number of other languages, relative clauses have out of focus properties, including in Aghem, their inability to take completive aspect focus markers such as the mâa seen in (15) and (16) above. However, as discussed in more detail by Watters [this volume], certain focus operations *can* take place in relative clauses, subject postposing being one of them. However, as seen in (27),

(27) bé 'kʃɪ á à mɔ̀ zʃ bvá-'tɔ́ 'the fufu that the *dogs* ate'
fufu DEM REL DS P1 ate dogs

the postposed contrast-focused subject must still be in B form, and it is the relative construction which therefore dictates the form of this (focused) noun.

Another type of subordinate construction which requires both the subject and the object to be in B form is condition clauses, as seen in (28).

(28) búɔ bvá-'tɔ́ tʃbɨghà mɔ̀ zʃ bé-'kɔ́ 'if the two dogs ate fufu...'
if dogs two P1 ate fufu

Again, if a negative with kè(e) occurs, only what precedes it will be in B form:

(29) búɔ bvá-'tɔ́ tʃbɨghà mɔ̀ tákè zʃ kʃbé 'if the two dogs didn't eat fufu'
if dogs two P1 NEG ate fufu

Condition clauses are also backgrounded and topic-like, as argued by Marchese* and Haiman**. They are set up for the assertion which follows in the consequent clause. In this respect, it can be argued than an 'if-then' construction consists of an out-of-focus clause and an in-focus clause. The former, the *if*-clause, requires the subject and object to be marked in the B form in Aghem as a reflection of the nature of such constructions.

In addition, certain temporal clauses also require the nouns within them to be in the B form. Only two examples will be given: a *before*-clause in (30) and an *as*-clause in (31).

(30) ò mɔ̀ zè kɨbé sé ò sɨ zʃ'á bé-'kɔ́ 'he swept the compound
he P1 sweeped compound before he P1 ate fufu before he ate fufu'

(31) ghʃ'á ò mɔ̀ zʃ bé-'kɔ́ 'as he ate fufu...'
as he P1 ate fufu

*Marchese, Lynell, "Subordinate clauses as topics in Godie" (1977). *Studies in African Linguistics, Supplement* 7.157-164.
**Haiman, John, "Conditions as topics" (1978). *Language* 54.

The final clause-type to be considered in this section is the consecutive. As seen in (32), when the subject of the consecutive verb is the same as the subject of the initial (main) verb, the object of the consecutive verb occurs in A form:

(32) ò mɔ̀ zɔ̰̀m ézɔ̰́m, zɨ́ kɨ́bɛ́ 'he sang a song and ate fufu' [today]
he P_1 *sang song eat fufu*

However, except for the "imprecise time" aspects (habitual and narrative), the object of the consecutive verb occurs in the B form if there is a change of subject:

(33) ò mɔ̀ zɔ̰̀m ézɔ̰́m, yìa ǹ zɨ́ bɛ́-'kɔ́ 'he sang a song and I ate fufu'
he P_1 *sang song & I ate fufu* [today]

In (34), where the narrative past marker Ń is seen to characterize the consecutive of the before today past tense (P_2), the object of the consecutive verb in in A form (CNS = narrative consecutive tense):

(34) ò mɔ̀ zɔ̰̀m ézɔ̰́m, mùɔ ń 'zɨ́ kɨ́bɛ́ 'he sang a song and I ate fufu'
he P_2 *sang song I CNS ate fufu* [before today--*note tone*]

As seen in (35), the object of a negative consecutive verb will condition a B form object, unless, as in (36), the negative consecutive construction involves the marker kɛ̀(e).

(35) ò mɔ̀ zɔ̰̀ɔ̰ ézɔ̰́m, mùɔ ń zɨ́a 'yɔ́ bɛ́-'kɔ́ 'he was singing a song
he P_2 *sang/INC song I CNS ate/INC NEG fufu* and I was eating fufu'

(36) ò mɔ̀ zɔ̰̀m ézɔ̰́m mùɔ ŋ̀ kɛ̀ zɨ́ kɨ́bɛ́ 'he sang a song and I ate fufu'
he P_2 *sang song I CNS NEG ate fufu*

Returning to consecutives having the same subject as the main verb, if the negation marked on the first verb has scope over the second, the object of the second will be in B form. This is automatically the case when the first verb is a motion verb, as seen in (37).

(37) wɛ́ ká'á bûɔ, zɨ́ bɛ́-'kɔ́ 'the child didn't come and eat fufu'
child P_2*/NEG came eat fufu* [before today]

The normal interpretation of this sentence is that the child neither came nor ate fufu. As a consequence, the object of the second verb is put into B form by the negation on the first verb, which thereby affects the whole sentence. In (38), on the other hand,

(38) wɛ́ ká'á zɔ̰́m zɔ̰́m-'zɔ́, zɨ́ kɨ́bɛ́ 'the childn't didn't sing a song and
child P_2*/NEG sang song eat fufu* (then) eat fufu' [before today]

the normal interpretation is that the child ate fufu but he did not sing a song. That is, the negation has scope over the first verb only. This has been found to be the case in all sentences where the first verb is transitive. However, not all intransitive first verbs act as 'come' in (37). In addition, clearly more is involved than negation, since parallel differences are found, for instance, in relative clauses. Thus, compare (39) and (40).

(39) wìzɬn wɬì à ò mɔ̀ dzɔ̂mɔ́, zɬ́ kɬbɛ́ 'the woman who screamed and (then) ate fufu'
woman DEM REL she P1 screamed eat fufu

(40) wìzɬn wɬì à ò mɔ̀ ñɬŋ bûɔ zɬ́ bɛ́-'kɔ́ 'the woman who ran and came and ate fufu'
woman DEM REL she P1 ran come eat fufu

Although (39) has an intransitive first verb, the object of the second verb within this relative clause is not subject to B-marking. In fact, if one substituted the B form bɛ́-'kɔ́ 'fufu' the result would be ungrammatical. In (40), however, where there are three verbs in a row, the object of the last verb is still subject to the B marking conditioned by the relative construction. If one attempted to substitute the A form kɬbɛ́, the result would be ungrammatical. Thus, it appears either that one must develop a notion of scope of backgrounding within a relative clause--or that the cause of B-marking has more to do with binary oppositions between successive elements than anything else. In this second interpretation, in (40), the partial utterance 'who ran and came' would be backgrounded with respect to the head noun 'woman', while 'and ate fufu' would be foregrounded with respect to 'and ran and came'. While this is highly speculative, there is at least one indication that B-marking has to do with being out of focus with respect to another (present) element. Compare the utterances in (41).

(41) a. ókɔ̂ òdzɬm yɔ́ 'dzɬ́ fɬn-ghɔ́ 'all of the servants aren't friends'
servants all NEG-be NEG friends

b. à yɔ̀ dzɬ́ tɬbvɛ́ 'it's not dogs'
DS NEG-be NEG dogs

In (41a), where the negative copula yɔ̀ has both a subject and an object noun complement, the latter occurs, as expected, in the B form. (Note the similarity between the phonetic shape of the negative copula and the negative marker used with the incompletive aspect--see Anderson 7.1). In (41b), however, where there is a dummy subject and only one noun (which appears to be the subject in focus position), this noun must occur in A form. That the A form of 'dogs' in (41b) cannot be explained by virtue of its being in focus position is seen from the sentence in (42).

(42) à kà zɬ́ bvɛ́-'tɔ́ bɛ́-'kɔ́ 'the *dogs* didn't eat fufu' (someone else did)
DS NEG ate dogs fufu

The subject 'dogs' has been postposed to immediate post-verbal position. However, although it is clearly contrast-focused, it must occur in B form because it is preceded by a negative verb (cf. the relative clause in (27) above). The same B form would be found if the verb was intransitive and the subject were so transposed after a negative. Thus, it appears that the postposed subject in (41b) is realized in A form because there is nothing out of focus for it to contrast with in that sentence. Recall that negatives have their own intrinsic focus. The negative copula is simply a negative marker, and the dummy subject is nothing more than a place holder. Whether out-of-focus marking in Aghem is accomplished in the relative fashion outlined above must await further investigation, especially incorporating more textual analyses and spontaneous discourse.

6.5. NOUN → B-FORM IN PREPOSITIONAL PHRASES; ADJECTIVES *etc.*

In addition to the B forms conditioned by focus, auxillary, and subordinate clause considerations, there are two prepositions which require a noun to be in B form: â 'to, for' and à 'with, and'. These are illustrated below:

(43) ò mɔ̀ fùo kɬbɛ́ â bvʉ́-'tɔ́ 'he gave fufu to the dogs'
he P1 gave fufu to dogs

(44) ò mɔ̀ kɔ̀? kɬfú à nwɬn-'fɔ́ 'he saw a rat with/and a bird'
he P1 saw rat and bird

The object of these prepositions must be in B form no matter whether they are definite or indefinite and no matter what they are modified by. Recall from the discussion in section 4.8 above that the locative/instrumental preposition án, the third preposition in Aghem, requires that the following noun be in the A form, e.g. álɔ́kwà? 'on the mountain' (án + ɔ̀kwà?). We have also seen (section 5.4) that nouns combined in complex pronouns occur in B form, since the preposition à is involved, e.g. ghà?à nwɬn-'fɔ́ 'the bird and me'. Finally, some of the other uses of the OF suffix outlined in earlier chapters include adjectives, as in (45), and independent possessive pronouns, as in (46).

(45) nwɬn fɬ-dú'ú-fɔ́ 'a/the big bird'

(46) (fɬ-)fáŋ'á-fɔ́ 'mine' [class 11]

Perhaps adjectives require the OF suffix because they are, like relative clauses, backgrounded with respect to the modified nouns. The use of the OF suffix in independent possessive pronouns points to a possible earlier function of this marker as a referential demonstrative (see section 6.6).

6.6. ANALYSIS OF THE OUT-OF-FOCUS SUFFIX

In the preceding sections we have seen that various considerations lead to the marking of nouns in a B form with the OF suffix. What is particularly striking is that the form of the noun is dictated by the construction, rather than independently determined by its semantic or pragmatic function within an utterance. At times the marking of a noun is in direct conflict with its function, as seen earlier in (27) and (42). In no instance was it possible for a speaker to choose one or the other form according to a particular desired nuance. The language is set in its ways, and the intuitions on which this study has been based were firm and consistent.

The question arising at this point concerns the analysis of the OF suffix. Is it indeed a suffix? And if so, what kind of suffix? How does it combine with other modifiers in the noun phrase? Where did it come from? In order to answer these questions, let us recall the order of modifiers in the noun phrase (section 4.1) recapitulated in (47):

(47) a. nwɬn 'fáŋá fɬdú'ú fɬn fɬmɔ̀?
bird my big this one 'this my one big bird'

b. nwɬn fɬdú'ú fáŋ'á fɬn fɬmɔ̀?
bird big my this one 'this my one big bird'

c. *NOUN* + { *POSS, ADJ* } + *DEM* + *NUM*

As seen in the phrases in (47a) and (47b), the two possible orders of modifiers are *NOUN + POSS + ADJ + DEM + NUM* and *NOUN + ADJ + POSS + DEM + NUM*, as indicated in (47c). The combination of a noun in A form followed individually by each of the modifiers in (47) is seen in (48) (cf. the citation forms in (4) above).

(48) a. ò mɔ̀ bò bvǘ 'táŋá 'he beat my dogs'
he P_1 beat dogs my

b. ò mɔ̀ bò bvǘ tɬdú'ú-tɔ́ 'he beat the big dogs'
he P_1 beat dogs big

c. ò mɔ̀ bò bvǘ 'tʃn 'he beat these dogs'
he P_1 beat dogs these

d. ò mɔ̀ bò tʃbvǘ tɬbɬghà 'he beat the two dogs'
he P_1 beat dogs two

Only the object noun phrase in (48b) involves the OF suffix -tɔ́, which is obligatorily present on the adjective 'big' (cf. section 4.4 above). In (49), on the other hand, a different set of facts obtain when correlates of the above combinations of *NOUN + modifier* occur in a B context (e.g. after a negative verb).

(49) a. ò kà bò bvǘ 'táŋá-tɔ́ 'he didn't beat my dogs'
he NEG beat dogs my

b. ò kà bò bvǘ tɬdú'ú-tɔ́ 'he didn't beat the big dogs'
he NEG beat dogs big

c. ò kà bò bvǘ 'tʃn (*tɔ́) 'he didn't beat these dogs'
he NEG beat dogs these

d. ò kà bò bvǘ-'tɔ́ tʃbɬghà 'he didn't beat the two dogs'
he NEG beat dogs two

In (49a) we observe that the OF suffix comes after the possessive pronoun. In (49b) it is suffixed to the adjective, as has generally been the case with adjectives thus far. In (49c) we see that the OF suffix cannot co-occur with a demonstrative, and finally, from (49d) we conclude that the OF suffix occurs between the noun and a following numeral. To sum up, the OF suffix follows possessive pronouns and adjectives, is mutually exclusive with demonstratives, and precedes numerals. The place of the OF suffix is seen even more clearly in (50), where the two possible word orders *NOUN + POSS + ADJ + DEM + NUMERAL* and *NOUN + ADJ + POSS + DEM + NUM* are seen in a B context:

(50) a. ò kà bò bvǘ 'táŋá tɬdú'ú tʃn tɬbɬghà 'he beat these my two big dogs'
he NEG beat dogs my big these two

b. ò kà bò bvǘ tɬdú'ú táŋ'á tʃn tɬbɬghà 'he beat these my two big dogs'
he NEG beat dogs big my these two

Because a demonstrative is present in both sentences, there is no OF marker--not even on the adjective which normally requires one! Now, compare the two possible word orders in (51), where the demonstrative is left out:

(51) a. ò kà bò bvǘ 'táŋá tɬdú'ú-tɔ́ tʃbɬghà 'he beat my two big dogs'
he NEG beat dogs my big/OF two

b. ò kà bò bvǘ tɬdú'ú táŋ'á-tɔ́ tʃbɬghà 'he beat my two big dogs'
he NEG beat dogs big my/OF two

In (51) the OF marker -tɔ́ occurs in exactly the same place as the demonstrative tʃn 'these' in (50). And, just to show that its presence in a B context has nothing to do with the presence of an adjective, compare the A and B forms in (52).

(52) a. ò mɔ̀ bɔ̀ bvə́ 'táŋá tʃbɨghà 'he beat my two dogs'
he P1 beat dogs my two

b. ò kà bɔ̀ bvə́ 'táŋá-tɔ́ tʃbɨghà 'he didn't beat my two dogs'
he NEG beat dogs my/OF two

The OF marker occurs in the same place as demonstratives. It also cannot co-occur with a demonstrative. The reason for this constraint, I would like to propose, is that it *is* a demonstrative. It 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 of this chapter. That this marker derives historically from a demonstrative is clear. Its shape suggests a root /-ɔ/ (H tone for all classes except 12; recall that classes 1 and 9 do not take an OF suffix except in the interrogative form 'which one' (see section 4.4. above), in which case they too are characterized by a L tone suffix). Because this vowel can derive from a number of other vowels undergoing reduction in final position, its original quality cannot be determined from the Aghem form alone. However, if we compare with neighboring languages the vowel *e becomes the most likely reconstruction. Compare, at this point, the three demonstrative pronouns in Aghem with those in Bafmeng, as they appear in isolation in class 11:

(53)	*this one (n.s.)*	*that one (n.h.)*	*that one (far)*
Aghem	fʃn	fɬ	fʃfɬ
Bafmeng	ə̄fɬŋ	ə̄fə̄	ə̄fɬ

The Bafmeng forms involve an irrelevant prefix ə̄- which is present when the demonstrative occurs without the modified noun. What is interesting is that although the same historical root *-n 'this' is observed in both languages, the other two demonstratives show important differences. The historical distinction is represented by Bafmeng: *e 'that [near hearer]' vs. *i 'that [far from speaker and hearer]' (cf. the respective forms ə̀fé and ə̀fɬ of Ngamambo). The Aghem forms thus appear to be innovative.

It is suggested here that the OF suffix -ɔ derives from the historical 'near hearer' demonstrative *e. In most if not all Grassfields Bantu languages having this three-way demonstrative distinction, it is the 'near hearer' demonstrative which simultaneously is used as a referential demonstrative 'the one being talked about, having been referred to, that you know'. That is, the 'near hearer' demonstrative has a definitizing function, something which tends to line up with topical and presupposed referents in language. Thus, it does not seem too unreasonable to hypothesize that the 'near hearer' demonstrative in its referential sense developed into an out of focus marker in Aghem, and has developed into what Greenberg* terms a "stage II article" (although with the reverse properties of the kind of articles he discusses). What then apparently happened in Aghem's demonstrative system was that the 'far from speaker and hearer' demonstrative /-ɬ/ first generalized to mean either 'n.h.' or 'far' (i.e. like English 'that'), but later was reinforced with the additional prefix seen in (53). The two 'that' demonstratives in (53) are thus analyzed in Aghem as /fɬ-ɬ/ and /fʃ-fɬ-ɬ/. It is likely that the reanalysis of the 'n.h.' demonstrative to an article of sorts first characterized objects of a preposition, adjectives, and independent possessive pronouns, since it is only in these environments that the article is found in some of the closely related languages (e.g. Kom). Later, Aghem extended what

*Joseph H. Greenberg, "How do languages acquire gender markers". In Joseph H. Greenberg (ed.), *Universals of Human Language, Vol. 3, pp. 47-82.* (1978). Stanford University Press.

may have been a redundant oblique marking on objects of a preposition to out-of-focus direct objects, and ultimately to all of the environments outlined above.

6.7. SUBJECT AGREEMENT OR PREPOSED NOUN AGREEMENT?

In this section we return to the shape of B forms observed when a B form object noun is preposed to the verb. Two representative examples are contrasted in (54) and (55):

(54) a. ò mâa zɨ́ bɛ́-'kɔ́ 'he *did* eat fufu'
he P_1/FOC eat fufu

b. ò mâa bɛ́ 'kɨ́ zɨ́ 'he *did too* eat fufu'
he P_1/FOC fufu eat

(55) a. ò mâa zɨ́ ɪ́m-ghɔ́ 'he *did* eat yams'
he P_1/FOC eat yams

b. ò mâa ɪ́m á zɨ́ 'he *did too* eat yams'
he P_1/FOC yams eat

In (54a), the direct object 'fufu' is in B form because it follows the P_1 completive aspect focus marker mâa. In (54b), it is in B form because it occurs before the verb in a process of defocusing. The difference is between assertive and counterassertive focus on the completedness of the action, i.e. focus on the fact that something did happen. The phonological difference which characterizes (54a) and (54b) is minimal, but the one characterizing the corresponding sentences in (55) is more striking. When preceding the verb, the B form noun takes the form in the third column of (3) above. In discussing (3) earlier, it was said that these preposed forms involve a marker which is identical to the noun prefix. Thus, in (55b), the á which occurs between the object 'yams' and the verb is identical to that noun's prefix, i.e. á-ɪ́m, as it occurs in A form.

The various combinations of B form noun + modifier were given in (49), as they appear when following the verb. In (56) the corresponding forms are given with the object noun phrase preceding the verb.

(56) a. ò mâa bvǘ 'táŋá tɨ́ bó 'he *did too* beat my dogs'
he P_1/FOC dogs my OF beat

b. ò mâa bvǘ tɨ̀dú'ú tɨ́ bó 'he *did too* beat the big dogs'
he P_1/FOC dogs big OF beat

c. ò mâa bvǘ 'tɨ́n bó 'he *did too* beat these dogs'
he P_1/FOC dogs these beat

d. ò mâa bvǘ-'tɔ́ tɨ́bɨ̀ghà bó 'he *did too* beat the two dogs'
he P_1/FOC dogs/OF two beat

The same constraints are observed as in (49); namely, the mutual exclusivity of demonstratives and the OF marker in (56c), and the occurrence of the preposed form of the OF marker in the demonstrative slot in (56a) and (56b). As seen in (56d), when there is a numeral intervening between the OF marker and the verb, the postposed (suffixed) form -tɔ́ is found.

A comparison of the forms in (49) and those in (56) suggest that the choice of what shape a B form will take on the surface is a relatively superficial or low-level process. If the noun precedes the verb, it takes the forms in column three in (3); otherwise it takes the forms in column two. Now note the sentence

in (57).

(57) bvá 'tɨ̀ mâa bɛ́ 'kɨ̀ zɨ̀ 'the dogs *did too* eat the fufu'
dogs SM P_1/FOC fufu OF eat

In this sentence we have a noun subject /tɨ̀-bvá`/ 'dogs', which requires the subject marker tɨ̀. At the same time, the defocused object /kɨ̀-bɛ́`/ 'fufu' requires the OF marker kɨ̀, whose shape is dictated by the position of the B form object before the verb. It turns out that these OF markers have exactly the *same* shape as the subject markers (which in turn are identical to the shape of noun prefixes except for tone, in the case of class 12). Thus, it is possible to raise the question of whether the SM's and these particular OF markers are really one and the same thing.

In order to answer this question it is necessary to investigate the properties of SM's. Their combinability with the various noun modifiers is seen in (58).

(58) a. bvá 'táŋá tɨ̀ mɔ̂ bvù nò 'my dogs fell'
dogs my SM P_1 fell FOC

b. bvá tɬdú'ú tɨ̀ mɔ̂ bvù nò 'the big dogs fell'
dogs big SM P_1 fell FOC

c. bvá 'tɨ̀n mɔ̂ bvù nò 'these dogs fell'
dogs these P_1 fell FOC

d. tɨ̀bvá tɬbɬghà mɔ̂ bvù nò 'two dogs fell'
dogs two P_1 fell FOC

In these sentences we see that the SM tɨ̀ co-occurs only with the possessive pronoun in (58a) and the adjective in (59a). (In this latter case, the OF marker of the adjective is not present.) In (58c) we see that the SM cannot co-occur in the same clause as a subject modified by a demonstrative, nor can it co-occur with a noun modified by a numeral in (58d). It should be noted that the sentences in (58) represent cases where the subject is in normal position--and not where it has been left dislocated. Examples of left-dislocation follow in (59), where the co-occurence constraints have been violated:

(59) a. bvá táŋá, tɨ̀ mɔ̂ bvù nò 'my dogs, they fell'
dogs my they P_1 fell FOC

b. bvá tɬdú'útɔ́, tɨ̀ mɔ̂ bvù nò 'the big dogs. they fell'
dogs big/OF they P_1 fell FOC

c. bvá 'tɨ̀n, tɨ̀ mɔ̂ bvù nò 'these dogs, they fell'
dogs these they P_1 fell FOC

d. tɨ̀bvá tɬbɬghà, tɨ̀ mɔ̂ bvù nò 'the two dogs, they fell'
dogs two they P_1 fell FOC

It thus appears from (58) that the SM has the same properties as the OF marker--and, when the OF marker precedes the verb, as in (56), both have the same phonological shape. The SM and the OF marker do not co-occur with demonstratives, and both come in the demonstrative position. The difference observed with numerals in (56d) and (58d) can be explained by the fact that the noun phrase in (56d) is in a B context (i.e. an object preceding its verb), while the noun phrase in (58d) is in an A context (i.e. subject of a verb). While the OF marker occurs between the noun and the numeral in the former case, in the latter it is not present at all. Presumably, if it had been present, it would have had to occur

between the noun and the numeral. This however is not permitted. Thus, the *only* difference between the OF marker in (56) and the SM marker in (58) is seen with numerals.

Given this fact, it seems plausible that a low-level conversion rule applies in certain contexts: OF → SM. That is, instead of the expected OF marker /-ɔ/, the SM is obtained by a morphological substitution rule. The primary environment where this conversion takes place is in immediate pre-verbal position, as we have seen. Although there is some variation, there is a tendency for this conversion not to take place if an element intervenes between the preposed object and the verb, as we saw with a numeral in (56d). Compare also the sentences in (60).

(60) a. bvǘ 'tʃ mâa zʃ bɛ́- kɔ́ à lʃm-ghɔ́ 'the dogs *did* eat fufu and yams'
dogs SM P1/FOC eat fufu and yams

b. bvǘ 'tʃ mâa bɛ́-'kɔ́ à lʃm á zʃ 'the dogs *did too* eat fufu and yams'
dogs SM P1/FOC fufu and yams SM eat

In (60a), both 'fufu' and 'yams' occur in the normal B form with the respective OF markers -kɔ́ and -ghɔ́. In (60b), however, only 'fufu' occurs in this form; 'yams' occurs with the SM having replaced the OF marker since it directly precedes the verb. Because of this, (60b) is glossed with *two* SM's. We might wonder, then, whether it isn't more accurate to speak of noun-verb agreement, rather than subject-verb. When an object is out of focus and preposed to the verb, it has two of the important properties of subjects. Hence, it is marked by the SM, rather than by the OF marker.

There are indications in at least two other environments of the need for a conversion rule of the form OF → SM. The first concerns the interrogative 'where'. As discussed in section 4.7 above, this modifier agrees in noun class with the head noun in the present tense, e.g. bɛ́ 'kʃ-kɛ̂ɛ 'where is the fufu?', nwʃn 'fʃ-fɛ̂ɛ 'where is the bird?' etc. Now consider its combinability with other modifiers in (61).

(61) a. bvǘ 'tʃ-tɛ̂ɛ 'where are the dogs?'
dogs where

b. bvǘ 'táŋá tʃ-tɛ̂ɛ 'where are my dogs?'
dogs my where

c. bvǘ tɬdú'ú tʃ-tɛ̂ɛ 'where are the big dogs?'
dogs big where

d. bvǘ 'tʃn tɛ̂ɛ 'where are these dogs?'
dogs these where

e. bvǘ tɬbɬghà tɛ̀ɛ 'where are the two dogs?'
dogs two where

The unmodified interrogative 'where' is exemplified in (61a). In (61b) it occurs following a possessive pronoun. It follows an adjective in (61c), but this time the adjective does not have its OF suffix. In (61d) and (61e), on the other hand, it is the modifier 'where' which does not have its tʃ- *prefix* when there is either a demonstrative or a numeral. Why should this be?

If we compare these data with those seen earlier in (58), we see that the tʃ- of tʃ-tɛ̂ɛ occurs in exactly the same environments where the subject marker tʃ occurs. In other words, the interrogative 'where' seems to require an OF marker that undergoes the OF → SM change and which, like the "real" SM's, is not present

with either demonstratives or numerals. That this is so is seen in the form in (62), which is a variant of (61e):

(62) bvə́-'tɔ́ tʃ́bɨ̀ghà tɛ̀ɛ 'where are the two dogs?'
dogs SM two where

In (62), the OF marker -tɔ́ is present as part of the 'where' construction, which we now analyze as in (63):

(63) *NOUN + POSS/ADJECTIVE + OF/DEM + NUM +* -ɛ̀ɛ

The two parts of the 'where' construction are underlined: the OF marker (which occurs if there is no demonstrative) and the stem -ɛ̀ɛ. As can be seen, 'where' is discontinuous: if there is a numeral, it will come between the two parts of 'where'. If not, the OF marker (if occurring in the absence of a demonstrative) will directly precede the stem -ɛ̀ɛ, in which case it acquires the SM form, e.g. tʃ́-tɛ̂ɛ instead of tɔ́ tɛ̂ɛ. This, then, is another environment for the OF → SM rule.

A final environment, which is presented only tentatively under this analysis, is the 'that [far]' demonstrative seen above in section 4.3. It is very likely that in forms such as bvə́ 'tʃ́-tî 'those dogs [far]', the prefix tʃ́- is none other than an OF marker which has undergone the change to SM. In this case, the two demonstratives 'that [near hearer]' and 'that [far from speaker and hearer]' would be analyzed, respectively, as -ì and OM+ -ì (cf. bvə́ tì 'those dogs [n.h.]', which lacks the tʃ́- of the above [far] form). Unfortunately, it is difficult to determine if this is indeed the case, since this prefix always accompanies the [far] demonstrative and cannot be separated from it. The tonal properties of this prefix suggest that it *is* an OF marker, since, unlike the associative marker, it assimilates to a preceding L tone, e.g. ñɔ̂m tɨ̀-tî 'those animals [far]'. This assimilation should be compared with that in ñɔ̂m tɨ̀ mɔ̂ bvə̀ nɔ̀ 'those animals [far] fell'. In both cases the tʃ́ carries underlying H tone, but has assimilated to the preceding L of 'animals'.

6.8. ONE EXCEPTIONAL NOUN

Two nouns have been found in Aghem which do not undergo prefix deletion: fɨ̀mbɔ́? 'banana' and kɨ̀gbɨ̂n 'dirty river'. Examples are seen in (64):

(64) a. fɨ̀mbɔ́? fáŋ'á 'my banana' b. kɨ̀gbɨ̂n káŋá 'my dirty river'

Both have regular plurals in the expected class and must therefore be considered to consist of a prefix + stem, i.e. m̀-mbɔ́? 'bananas', ɔ̀-gbɨ̂n 'dirty rivers'. It will be noted that these nouns are also exceptional in that they involve a L tone prefix (cf. section 3.1 above). In fact, these are the only nouns that have been found with a L prefix and a H or HL stem. Nouns which are L-L undergo prefix deletion, as expected (e.g. kɨ̀tà 'spoon' → tà káŋá 'my spoon').

Of these two nouns, 'banana' (and its plural) also has the option of occurring in a B context, but without an OF marker. One such context, after an imperative verb, is seen in (65):

(65) a. zʃ́ fɨ̀mbɔ́? 'eat a/the banana' (the only thing there)
b. zʃ́ fɨ̀mbɔ́?-fɔ́ 'eat the banana' (out of many things)

As indicated, (65a) indicates that only a/the banana was there, while (65b) requires that the banana be chosen from a larger set. Whether this exceptional behavior of this one noun bears on the ultimate analysis of the OF marker is unclear.

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PART II: VERB STRUCTURE

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1

FEATURE ANALYSIS AND RESTRICTIONS

The Aghem verb phrase will be discussed in this section as consisting of nine binary features characterizing the various tense, aspect and mood distinctions found in the language. Since a single chart detailing all the possible cooccurrences of the plus and minus values for all nine features would be much too large to include here, we shall examine the features in groups of two or three at a time. For each group of features, we shall extract the appropriate feature restrictions which constrain the entire system. In this way, the verbal system may be examined in manageable amounts.

Basic to any verbal system is the manner in which the language divides up the time spectrum. Using Comrie's definition (1976) of "tense" as a "grammaticalized location in time", we find that Aghem contains five basic tenses: Past (P_2), Today Past (P_1), Present (0), Today Future (F_1) and Future (F_2). Since five basic tenses exist, we need at least three separate binary features to handle the variety involved. Since P_1, 0 and F_1 all refer to actions occurring today, the following feature system seems to best capture the underlying reality of the Aghem tense system:

	TENSES				
FEATURES:	P_2	P_1	0	F_1	F_2
[Past]	+	+	-	-	-
[Future]	-	-	-	+	+
[Today]	-	+	+	+	-

Since three binary features have the power to distinguish eight different tenses, the fact that Aghem has only five tenses requires the following cooccurrence constraints:

(1) if [+Past], then [-Future]

(2) if [+Future], then [-Past]

These two constraints can be collapsed into a single negative condition as in (3):

(3) $\sim \begin{bmatrix} +\text{Past} \\ +\text{Future} \end{bmatrix}$

The above condition prohibits the cooccurrence of [+Past] and [+Future], but not [-Past] and [-Future] which we need for the present "0" tense.

Now that the underlying tense system has been briefly introduced, we can examine its interaction with other features such as "Hortative" mood and completive "Focus", as detailed in the following table:

	P_2	P_1	0		F_1	F_2
[Past]	+	+	-		-	-
[Future]	-	-	-		+	+
[Today]	-	+	+		+	-
[Focus]	+/-	+/-	+	-	-	-
[Hortative]	-	-	-	+/-	+/-	+/-

The feature specification [+Focus] refers to sentences which are grammatically marked to emphasize the completed action of the predicate (see section 4.2). As can be seen from the above table, [+Focus] and [+Future] may never cooccur, as captured by the following negative condition:

(4) $\sim \begin{bmatrix} +\text{Focus} \\ +\text{Future} \end{bmatrix}$

The feature specification [+Hortative] refers to the hortative mood, leaving the unmarked specification [-Hortative] for the more common indicative mood. Once again, the above chart shows that [+Past] and [+Hortative] never cooccur and we thus have another negative redundancy condition:

(5) $\sim \begin{bmatrix} +\text{Past} \\ +\text{Hortative} \end{bmatrix}$

The final redundancy condition discernable from the preceding table concerns

the relation between [Focus] and [Hortative]. These two features never cooccur with positive marking, as captured by (6).

(6) $\sim \begin{bmatrix} +\text{Focus} \\ +\text{Hortative} \end{bmatrix}$

This constraint correctly predicts that the possibility of completive focus only exists in the indicative mood.

We are now in a position to examine the interaction between tense and aspect in the Aghem language. The basic features of the aspectual system are [Completive] and [Habitual]. The following table is arranged to show the interaction of tense and aspect for both indicative and hortative moods.

	P_2		P_1		0				F_1		F_2		
[PST]	+		+		-				-		-		
[FUT]	-		-		-				+		+		
[TOD]	-		+		+				+		-		
[HRT]	-		-		-		+		-	+	-	+	
[CPL]	+	-	+	-	+	-	+	-	-	+/-	-	+	-
[FOC]	+/-	-	+/-	-	+/-	-	-	-	-	-	-	-	-
[HAB]	-	+/-	-	-	-	+/-	-	+/-	-	-	+/-	-	+/-

Careful study of the above table will lead to the discovery of a few more cooccurrence constraints. First of all, completive focus may only appear when the verb phrase is already marked completive, as in the following condition:

(7) if [+Focus], then [+Completive]

Similarly, habitual aspect may only appear when the verb phrase is marked incompletive, as seen in (8).

(8) if [+Habitual], then [-Completive]

Since the above two rules depend upon opposite values for the feature [Completive], we can see that they imply the following negative cooccurrence constraint:

(9) $\sim \begin{bmatrix} +\text{Focus} \\ +\text{Habitual} \end{bmatrix}$

The feature specification [+Habitual] also presents an interesting semantic difference based on the above features. The underlying intuition seems to be that one day is too short a time period in which to form a habit. This makes the co-

occurrence of habitual aspect with P_1 and F_1 impossible. When [+Habitual] cooccurs with [+Past] in the P_2 tense, the meaning is that the habit only holds for the past [+Past], but not in the present or future (i.e. [-Past]). Similarly, when [+Habitual] cooccurs with [+Future] in F_2, the meaning is that the habit will or should hold only in the future [+Future], but not in the present or past (i.e. [-Future]). The semantic interpretation of [+Habitual] thus seems to be tied to the *positive* value of [Past] or [Future] with which it cooccurs. This impression is supported, then, by the cooccurrence of habitual aspect with the present tense. Present tense is both [-Past] and [-Future]. The semantic interpretation of [+Habitual] is therefore not attached to any positive value of past or future. This is reflected in Aghem usage where a present habitual tense-aspect carries the meaning of a habit which holds for past, present and future. Whereas the timeless nature of a present tense/habitual aspect is usually just stated as an isolated fact in the grammar of a language, the feature system just presented for Aghem actually predicts and therefore explains this semantic fact.

There is one other syntactic-semantic distinction which is basic to the sections which follow. It will be noticed that the above table shows that either completive or incompletive aspect may cooccur with present tense. The English parallels of these two forms are quite different and we shall therefore label them separately in order to avoid undue confusion. Thus,

(10) $\begin{bmatrix} -\text{Past} \\ -\text{Future} \\ -\text{Completive} \end{bmatrix}$ = "present tense"

in Aghem, which closely parallels present tense in English. On the other hand,

(11) $\begin{bmatrix} -\text{Past} \\ -\text{Future} \\ +\text{Completive} \end{bmatrix}$ = "P_o tense"

Though this P_o tense is in feature terms a completed aspect/present tense, it corresponds semantically to the meaning of the perfect in English. In fact, it corresponds most closely to the "Hot News Perfect" proposed by McCawley (1971). The implication is that an action has just been completed in the immediate past and therefore has results which are relevant to the present moment. The meaning is similar to "x just did y" and we will therefore gloss P_o constructions with the English perfect. Though the P_o construction is morphologically a present (0) tense in Aghem (see section 3.1), we have used the somewhat ambiguous symbol "P_o" since it may be confused semantically with past tenses in English.

The final main feature of the Aghem verbal system has to do with negation. Any of the feature combinations permitted above may be additionally modified by the feature [Negative]. In addition, as with affirmatives, the feature [Focus] combines optionally with nonfuture completed aspect forms. A focused negative form is contrastive in roughly the same sense as focused affirmative completive forms. Thus, it is used when a speaker refutes a positive utterance he has just heard.

This concludes the section on the basic cooccurrence constraints. It should be remembered that these constraints interact to produce more complicated "derived" constraints which depend upon the cooccurrence of more than one feature in the "if" part of the constraint. We have confined ourselves to the basic constraints in this chapter.

2

VERBS

2.0. INTRODUCTION

This chapter is devoted to a discussion of the underlying form of the verb in Aghem. This includes its underlying tone, prefixes, suffixes and other variations in form. A final brief word about tonal spreading from the subject marker completes our preparation for the following chapters, where the other elements of the verb phrase are examined in their turn.

2.1. HIGH/LOW TONE CLASSES

As is common for Bantu languages, verb roots can be assigned to one of two tone classes: either "High" (H) or "Low" (L). In Aghem, some of the minimal pairs which establish this distinction are cited below:

(1)

High Tone			*Low Tone*		
/é-bvǎ/	[ébvǎ]	'ask'	/é-bvə̀/	[ébvə̂]	'fall'
/é-kwɬn/	[ékwɬn]	'return from bush'	/é-kwɬn/	[ékwɬn]	'pour out'
/é-zú/	[ézú]	'hear'	/é-zù/	[ézû]	'skin'
/é-kọ́?/	[ékọ́?]	'ascend'	/é-kɔ̀?/	[ékɔ̂?]	'see'

The above verbs are cited in their infinitive form which has a high tone prefix /é-/. It should be noted for the examples in the right hand column that the H of the infinitive prefix "spreads" onto the following L of the stem. The L root is then realized as a high-to-low contour (falling) tone. Thus, as indicated, the basic or underlying tones of the verb in the infinitive construction are H-H and H-L for the two tone classes. Though the number of minimal pairs is not great, the H vs. L distinction of the verb root is crucial. As a result, all of the following examples will be given in tonal doublets to clearly show the difference in the total verb phrase when the stem is either H or L. The underlying tone of any particular root in our corpus of 204 verbs may be found in the Appendix at the end of the chapter.

2.2. VERB CLASSES

Aghem has three basic verb classes (referred to as classes 1, 2 and 3). In addition, verb class 3 has been further subdivided according to suffix into subclasses 3a, 3b and 3c. Each individual verb can occur in one or two forms. The 204 verbs in our corpus (see Appendix) are summarized in the following table according to their distribution in the various verb classes and the different forms in which they may occur.

	Verb Forms			
Verb classes	*A/B*	*C/D*	*E*	Total
1. -Ø/-a	100			100
2. -a/-Ø	12			12
3a. -ɨɔ/-n		46		} 92
3b. -sɔ/-sɨ		12		
3c. -Ø			34	
Total:	112	58	34	204

The various verb forms mentioned above represent the following grammatical and phonological contexts:

(2) a. A-form: completive aspect
B-form: incompletive aspect

b. C-form: clause-final
D-form: not clause-final

c. E-form: invariant

We thus see that only 112 out of our 204 verbs (or slightly more than half) actually have separate forms according to the completive/incompletive dichotomy which is so basic to the Aghem verb phrase. The other 92 verbs only change according to phonological criteria (specifically, juncture). Thus all the verbs of verb class 3 neutralize the distinction between completive and incompletive aspect. We will now examine each of the verb classes and the actual changes involved.

Verbs from verb class 1 may occur in either the (completive) A form or the (incompletive) B-form. Careful examination of the following chart (summarizing part of the appendix) will show the B-form to be derived by adding an underlying /-a/ suffix to the A-form:

(3)

	A-form	*B-form*		*A-form*	*B-form*
a.	ɛ	aa	q.	a?	a?a
b.	ɨ	ɨa	r.	ɔ̣?	ɔ̣?ɔ̣
c.	ʉ	ʉɔ	s.	ɔ?	ɔ?ɔ
d.	ɨm	ɨma	t.	o?	o?o
e.	ɨn	ɨla	u.	am	aa
f.	an	ɨla	v.	ɔ̣m	ɔ̣ɔ̣
g.	ɨŋ	ɔŋɔ	w.	ɔm	ɔɔ
h.	i	ii	x.	om	oo
i.	e	ee	y.	an	ala
j.	a	aa	z.	ɔn	ɔlɔ
k.	ɔ̣	ɔ̣ɔ̣	aa.	aŋ	aŋa
l.	ɔ	ɔɔ	bb.	ɔŋ	ɔŋɔ
m.	o	oo	cc.	ʉe	oo
n.	u	uu	dd.	ɔe	ɔɔ
o.	ɨa	ɨaa			
p.	ɔɛ	ɔɛɛ			

From the preceding chart the following generalizations emerge:

(i) Whereas with most vowels in open syllables the /-a/ suffix assimilates to the quality of the root vowel (examples h-n above), the vowel /ɛ/ assimilates to the /-a/ suffix, as in (a).

(ii) The underlying quality of the vowel in the /-a/ suffix is most clearly revealed after the vowel /ɨ/ in (b,d,e).

(iii) The /-a/ suffix is rounded to [ɔ] after the rounded vowel /ʉ/ in (c) and after a final velar nasal in (g).

(iv) Examples (q-bb) show that the suffix /-a/ assimilates completely to the quality of the root vowel even when a root-final consonant intervenes.

(v) The disappearance of the /m/ between vowels in examples (u-x) and the alternation of final /n/ with medial [ɪ] are typical of Aghem morphophonology, occurring also in nouns (Hyman, sections 1.5.1 and 1.5.2).

(vi) Examples (f,p,cc,dd) are irregular in one way or another and must be marked as exceptions to the general alternations. Examples (cc,dd) seem to substitute an /-a/ suffix for an A-form suffix /-e/.

It seem clears from the preceding discussion that in verb class 1 an underlying /-a/ suffix changes an A-form to a B-form. This suffix can be associated with the grammatical feature [-Completive] (cf. Welmers [1973:384,397,413] who mentions that Niger-Congo languages commonly have an /a/ verbal suffix which indicates incomplete action).

Verbs from verb class 2 are summarized in the following chart:

(4)

	A-form	*B-form*		*A-form*	*B-form*
a.	ɔɔ	ɔm	e.	ɨŋe	ɨŋ
b.	ɨla	ɨn	f.	aŋa	aŋ
c.	ɨla	an	g.	ɔŋɔ	ɔŋ
d.	ɨŋɔ	ɨŋ	h.	ɔlɔ	ɔn

Verbs from verb class 2 follow almost exactly the principles laid out for variation for verb class 1. The big difference is that the A-form and B-form have changed places. For verb class 2, the B-form appears to be basic and the A-form to be derived by the addition of an underlying /-a/ suffix. Careful examination of the 12 verbs in this class does not reveal any common syntactic or semantic feature which could account for this switching. The only thing these verbs seem to have in common is a final nasal consonant in their "basic" B-form. For lack of a better predictor of when the A-form or B-form will occur without the /-a/ suffix, we must set up separate verb classes. Since there are many more verbs in class 1 than in class 2, we shall take class 1 to be the paradigm case and refer to the /-a/ suffix as representing incompletive aspect throughout the rest of this paper. The historical reason why the 12 verbs of noun class 2 changed from the paradigm case remains a mystery which may only be resolvable using comparative evidence from related languages.

The verbs in verb class 3 do not change according to aspectual differences, but rather according to their position in a sentence. The patterns of this class are summarized in the following chart, assuming underlying /-nɔ́/ and /-sɔ́/:

(5)

	Position	
Class	*Final*	*Non-Final*
3a.	-lɔ	-n
3b.	-sɔ	-sɨ
3c.	Ø	Ø

The variation in suffix form in classes (3a) and (3b) can be handled by the following rules (cf. Hyman, section 1.5.1):

(6) a. $-C\text{ɔ} \rightarrow -C\text{ɨ} \;/\; \_\_\_\; X$ (where X ≠ a clause boundary)

b. $\text{ɨ} \rightarrow \text{Ø} \;/\; \text{¢n} \_\_\_$

c. $\text{n} \rightarrow \text{l} \;/\; \{V, \text{¢}\} \_\_\_\; V$ (where ¢ = suffix boundary)

The informal rules given in (6) state the following: (a) the /ɔ/ vowel of a /-Cɔ/ suffix closes to [ɨ] when not followed by a clause boundary; (b) this same vowel [ɨ] deletes when preceded by /n/; finally, in (c), /n/ becomes [ɪ] intervocalically or in suffixes where the vowel /ɔ/ has not closed and dropped by the rules in (a) and (b).

The rules in (6) clearly show that the changes in the suffixes are phonological in nature and all three subclasses of verb class 3 are thus united in that they never change in order to signal a change of aspect. Verb class 3 thus differs drastically from classes 1 and 2 detailed above. Examples of verb class 3 and the phonological nature of their variation are given below:

(7) a. sɛ̀ má'á céɪ́ɔ́ 'we [incl] *did* exchange (things)'
we P2/FOC exchange

sɛ̀ má'á céén kɔ̰-wɔ̀ 'we [incl] *did* exchange servants'
we P2/FOC exchange servants

b. sɛ̀ má'á tsɔ́ʔsɔ́ 'we [incl] *did* annoint ourselves (with oil)'
we P2/FOC annoint

sɛ̀ má'á tsɔ́ʔsɨ́ kɔ̰-wɔ̀ 'we [incl] *did* annoint the servants (with oil)'
we P2/FOC annoint servants

c. sɛ̀ má'á wɪ́ 'we [incl] *did* kill (them)'
we P2/FOC kill

sɛ̀ má'á wɪ́ kɔ̰-wɔ̀ 'we [incl] *did* kill the servants'
we P2/FOC kill servants

2.3. VERB PREFIXES

The infinitive form of any Aghem verb is formed by adding the prefix /é-/ to its A-, C- or E-form. In the case of a L tone stem, the H tone of the /é-/ prefix spreads onto the root, as below:

(8) a. /é-bɔ́/ [ébɔ́] 'to hit' b. /é-sù/ [ésû] 'to wash'

This tonal spreading applies to infinitives in their citation forms, but not necessarily to their realization in all other environments.

A second more complex verb prefix is [álé-]. This prefix is actually a fusion of the locative preposition /án/ and the infinitive prefix /è-/, this time with a L tone instead of H. Once again we see that /n/ alternates with intervocalic [ɪ] with the surface result being [álé-], as below:

(9) a. [álé'bɔ́] 'to hit' b. [álésù] 'to wash'

2.4. VERB SUFFIXES

In section 2.2 above we examined the distribution of the following verb suffixes:

(9) a. /-a/ (verb class 1)
b. /-nɔ/ (verb class 3a)
c. /-sɔ/ (verb class 3b)

We have already seen that the suffix /-a/ usually means "incompletive" and that it is fairly productive, being used with over half of the verb roots in the corpus.

The verb suffix /-sɔ/ seems to be an archaic causative suffix. It still might be regarded as slightly productive as it changes certain intransitive verbs into their transitive parallels, as seen in (10).

(10)

Intransitive		*Transitive*	
énôm	'be hot'	énômsɔ̀	'heat (something)'
ésɛ̂ɛ	'be cold'	ésɛ̂ɛsɔ̀	'cool (something)'
émɨ̀ɛ	'be finished'	émɨ̀ɛsɔ̀	'finish (something)'
étsɔ́ʔ	'laugh'	étsɔ́ʔsɔ́	'oil/rub (someone)'
élá?	'wonder'	élá?sɔ́	'be foolish (about something)'

The rest of the verbs in class 3 do not have parallel suffixless forms. These verbs appear to be frozen forms probably reflecting the causative variant of an earlier usage. While this suffix is clearly limited to use with a certain small class of verbs, the following sentences indicate a residual effect inasmuch as *[éfɔ̂sɔ̀] is not an acceptable infinitive in Aghem:

(11) a. kə̀ kɨ̀ fɔ́ nɔ̂ 'the servant is blind'
servant SM blind FOC

b. ɔ̀ ḿ fɔ̀ sɨ̀ kə̀-kɔ̀ 'he blinded the servant'/'he caused the servant to become blind'
he P_0/FOC blind CAUS? servant

The [sɨ] in (11b) seems to be a reflex of an earlier more productive causative suffix.

2.5. AGREEMENT

The verb phrase in Aghem often follows a subject noun phrase which ends with an agreement marker. The form of these subject markers (SM) is described in Hyman (section 5.1). What is important for the verb phrase is that the underlying H of the SM is sometimes realized on the marker itself, as in (12a), but other times is transferred onto the verb phrase, as in (12b).

(12) a. kə̀ kɨ́ mɔ̀ bɔ́ fɨghâm 'the servant hit the mat' [today]
servant SM P_2 hit mat

b. kə̀ kɨ̀ mɔ̂ bɔ̀ fɨghâm 'the servant hit the mat' [before today]
servant SM P_1 hit mat

Close comparison of the above two examples shows the importance of tone spreading from the SM to the verb phrase. We will return to like examples of this spreading process whenever it can affect the initial element of a verb phrase.

APPENDIX: AGHEM VERBS

Class 1.	*A-form*	*B-form*		*A-form*	*B-form*	
	bɛ̀	baa	'hate'	dzɛ̀	dzaa	'tell'
	tɛ̀	taa	'reach'	lɛ́	laà	'be lacking, poor'
	sɛ́	saa	'split'	ghɛ́	ghaa	'do'

A-form	*B-form*	
sɨ́	sɨa	'exit'
zɨ́	zɨa	'eat'
tsɨ́	tsɨa	'pay, spit'
dzɨ́	dzɨa	'give birth'
ñɨ́	ñɨa	'enter'
pfʉ́	pfʉɔ	'eat, become burnt'
bvʉ́	bvʉɔ	'ask'
mʉ́	mʉɔ	'drink'
sʉ̀	sʉɔ	'play'
tsʉ́	tsʉɔ	'open (sth.)'
fɨ̀m	fɨma	'whiten, bake in ashes'
tɨ́m	tɨma	'shoot'
ñɨ́m	ñɨma	'extinguish'
bɨ́n	bɨla	'dance'
fɨ̀n	fɨla	'turn into (sth.)'
dwɨ̀n	dwɨla	'be old'
dɨ̀n	dɨla	'be heavy'
žwɨ́n	žwɨla	'whistle'
tsɨ́n	tsɨla	'cover, bury'
kwɨ́n	kwɨla	'return from bush'
kwɨ̀n	kwɨla	'pour out'
kán	kɨla	'be drunk'
tsɨ́ŋ	tsɔŋɔ	'fear, tremble'
lɨ́ŋ	lɔŋɔ	'blacken'
ñɨ́ŋ	ñɔŋɔ	'run'
kɨ́ŋ	kɔŋɔ	'look for'
tɨ́	tii	'escape'
nɨ́	nii	'slide, feed'
dè	dee	'show'
sè	see	'pull (out)'
tá	taa	'sew'
ghà	ghaa	'struggle'

A-form	*B-form*	
bɔ́	bɔɔ	'be bad, spoiled'
fɔ̀	fɔɔ	'be blind'
bó	boo	'hit, beat'
kwó	kwoo	'catch, hold'
pú	puu	'die'
bú	buu	'bark at s.o.'
dù	duu	'grow big'
ndù	nduu	'go (to)'
sù	suu	'wash'
zú	zuu	'hear'
zù	zuu	'skin (sth.), itch'
kɨ̀a	kɨaa	'cut down, speak'
kɔ́ɛ	kɔɛɛ	'cough'
fwà?	fwa?a	'work'
sá?	sa?a	'rule'
zà?	za?a	'chew'
tsà?	tsa?a	'sift'
là?	la?a	'wander, get lost'
ká?	ka?a	'begin'
ñɔ̰?	ñɔ?ɔ̰	'burn, roast'
kɔ́?	kɔ?ɔ̰	'ascend'
fɔ̀?	fɔ?ɔ	'measure'
tɔ̀?	tɔ?ɔ	'be well done'
sɔ́?	sɔ?ɔ	'go to bush'
zɔ̀?	zɔ?ɔ	'press, entertain'
tsɔ́?	tsɔ?ɔ	'laugh'
kɔ̀?	kɔ?ɔ	'see'
bvó?	bvo?o	'break (by snapping)'
tsó?	tso?o	'pound'
bám	baa	'return, come back'
tám	taa	'sow (seeds)'
nám	naa	'cook (fufu)'
kám	kaa	'squeeze'

A-form	*B-form*	
bə̰́m	bə̰ə̰	'mould'
fə̰́m	fə̰ə̰	'blow nose'
mə̀m	mə̰ə̰	'touch'
tə̰́m	tə̰ə̰	'write'
kə̰́m	kə̰ə̰	'carve, plane wood'
zə̰́m/zə́m	zə̰ə̰	'sing'
gbə̰́m/gbə́m	gbə̰ə̰	'hunt'
tsə́m	tsəɔ	'drip'
nə́m	nɔɔ	'become injured'
	[see p.85]	
nàn	nala	'hide (sth.)'
fɔ̀n	fɔlɔ	'leak'
zɔ́n	zɔlɔ	'be clean'

A-form	*B-form*	
tɔe	too	'refuse'
zɔe	zoo	'buy'
lɔe	loo	'be full'
nə̰e	nɔɔ	'beg'
bàŋ	baŋa	'be red'
táŋ	taŋa	'count'
dàŋ	daŋa	'cross'
dzàŋ	dzaŋa	'be sick'
bɔ́ŋ	bəŋɔ	'pick up sth. lost'
tɔ́ŋ	təŋɔ	'blow'
tsɔ́ŋ	tsəŋɔ	'steal'

Class 2.

nɔ́ɔ	nɔm	'grow (flower, tree)'
zɔ̀ɔ	zɔm	'rise up, wake s.o.'
bɔ́ɔ	bɔm	'agree, accept'
dzɨlà	dzɨn	'wear (clothes)'
kɨlà	kan	'hang s.o. to die'
ghɨŋɔ́	ghɨŋ	'make'

ñɨŋè	ñɨŋ	'lie down'
fáŋá	faŋ	'tie'
náŋá	naŋ	'put, leave sth.'
tɔ́ŋɔ́	təŋ	'call, read'
kɔ́ŋɔ́	kɔŋ	'go on same level'
kɔ́lɔ́	kɔn	'wrap, tie up, fold'

Class 3a.

C-form	*D-form*	
zɨlɔ̀	zɨɨn	'rest'
félɔ́	feen	'resemble'
célɔ́	ceen	'exchange'
kpélɔ́	kpeen	'meet (with)'
lɛ́lɔ́	lɛɛn	'look (at)'
kɛ̀lɔ̀	kɛɛn	'curse'
ghɔ́lɔ́	ghɔɔn	'be devious'
mɑ́lɔ́	mɑɑn	'be jealous'
sùlɔ̀	suun	'abuse'

C-form	*D-form*	
súghɔ́lɔ́	sughon	'weed'
mə̰́ʔlɔ́	mə̰ʔn	'think'
tsɔ́ʔlɔ́	tsɔʔn	'be pleased'
nɨm(ɨ)ɔ̀	nɨmn	'growl'
tsɔ̀m(ɨ)ɔ̀	tsɔmn	'curse'
kɔ̀m(ɨ)ɔ̀	kɔmn	'turn'
dzɔ̀m(ɨ)ɔ̀	dzɔmn	'groan with pain'
dzə̀m(ɨ)ɔ̀	dzə̰mn	'follow'
kɔ́m(ɨ)ɔ́	kɔmn	'pick (grains)'

C-form	*D-form*	
ghɨŋ(ǀ)ɔ́	ghɨŋn	'make'
ghàŋ(ǀ)ɔ̀	ghaŋn	'crawl'
mìi(ǀɔ̀)	miin	'swallow'
šwì(ǀɔ̀)	šwin	'shoot (and hit)'
fèe(ǀɔ̀)	feen	'sell'
záa/zɛ́ǀɔ́	zɛɛn	'spread to dry'
kpàa/ kpɛ̀ǀɔ̀	kpɛɛn	'burn (sth.)'
tsóo(ǀɔ́)	tsoon	'bend over'
kòo/kòeǀɔ̀	koen	'cook'
kɔ́e(ǀɔ́)	kɔen	'pick up'
mùu(ǀɔ̀)	muun	'swell'
gùo(ǀɔ̀)	guon	'grind'
fùghò(ǀɔ̀)	fughon	'sink, dip'
súghó(ǀɔ́)	sughon	'uproot, pluck'

C-form	*D-form*	
sùghò(ǀɔ̀)	sughon	'stab'
dzùghò(ǀɔ̀)	dzughon	'divide'
nùŋò(ǀɔ̀)	nuŋon	'go, leave'
mà?à/ mà?ǀɔ̀	ma?n	'throw away'
ñá?á/ ñá?ǀɔ́	ña?n	'kneel'
mɔ̀?(ǀ)ɔ̀	mɔ?n	'initiate'
šìa	šian	'choose'
mòo	moon	'live, stay'
nà?à	na?n	'announce, call'
bɔ̀?ɔ̀	bɔ?n	'carry (on head)'
mìa(sɔ̀)	mian	'finish (intr.)'
fìa(sɔ̀)	fian	'rot'
zɨghà(sɔ̀)	zɨghan	'leave behind'
dɔ̀?ɔ̀/dɔ̀?sɔ̀	dɔ?n	'sit down'

Class 3b.

mìɛsɔ̀	miɛsɨ	'finish (tr.)'
sɛ́sɔ́	sɛsɨ	'cool (sth.)'
yɔ̀sɔ̀	yɔsɨ	'help, yawn'
lɯ́esɔ́	lɯesɨ	'fill (sth.)'
là?sɔ̀	la?sɨ	'be foolish'
dɔ̀?sɔ̀	dɔ?sɨ	'sit s.o. down'

lɔ̀?sɔ̀	lɔ?sɨ	'deceive'
tsɔ́?sɔ́	tsɔ?sɨ	'oil/rub (self)'
kɔ́?sɔ́	kɔ?sɨ	'praise, put up'
zɔ́?sɔ́	zɔ?sɨ	'perspire'
mɔ̀msɔ̀	mɔmsɨ	'try'
nɔ̀msɔ̀	nomsɨ	'heat'

Class 3c. *(E-forms)*

bɨ́i	'sleep, spend the night'
bɨ̀i	'travel'
dɨ̀i	'cry for someone'
wɨ́(i)	'kill'
žwɨ̀i	'breathe'
nɨ̀i	'take, receive'
tɛ́ɛ	'stand'
zɛ́ɛ	'spend the day with s.o.'
zɛ̀ɛ	'rub off, sweep, loosen'

tɛ́ɛ	'sharpen'
tɛ̀ɛ	'drag'
kɛ́ɛ	'scrape'
kɛ̀ɛ	'clear away'
bàa	'tear'
tɔ́(ɔ́)	'be bitter, intelligent'
bùɔ	'come'
kɔ́ɔ	'know'
kùo	'snore, harvest'

bɬghá	'weave'	lèmè	'smell'
tɬghá	'sting'	kwèlè	'pour into sth.'
lɬghá	'like'	kèlè	'hang'
tsɨghà	'pass'	nɬŋá	'suck, lick'
zɬghá	'fly, be mad'	káŋé	'fry'
búghó	'be tired'	là'	'be'
fú(gh)ó	'give'		
túghó	'be strong, shine'		
tsúghó	'descend'		
zúghó	'thatch'		

[addendum to p.83]:

tóm	too	'send'
zóm	zoo	'dry'
dzòm	dzoo	'drive/send away'
nóm	noo	'bite'
kòm	koo	'happen'

3

TENSE

3.0. INTRODUCTION

The tense-aspect system of Aghem will be described in the next two chapters. By using zero morphemes (Ø) to designate the unmarked forms, we can separate tense markers from aspect markers and describe the tense and aspect systems as separate though overlapping systems. The unmarked (Ø) tense is the present tense and the unmarked (Ø) aspect is the non-focused completive aspect. The present chapter will discuss the various tenses of Aghem while holding to the unmarked completive aspect where possible (but not in the future tenses, where the incompletive aspect is obligatory) and to the unmarked indicative mood. Chapter 4 will then describe the variations possible within these tenses according to aspect. Chapter 5 will describe the variation of both tense and aspect according to the different moods.

3.1. PRESENT /Ø/ (P_o)

As discussed in section 1.1 above, the morphologically unmarked present tense translates into English in two very different ways according to completive vs. incompletive aspect. When the aspect is [-CPL], its meaning is like that of the present progressive in English, and it is glossed that way in section 4.1.2, where it is described in detail. When the aspect is [+CPL], however, the morphological present tense has a meaning like that of the present perfect in English. To avoid semantic confusion, we will lable the "completive present" as "P_o" and gloss it with the English perfect, as below:

(1) a. ò bò fɬghâm 'he has hit the mat'
he hit mat

b. ghé bó fɬghâm 'they have hit the mat'
they hit mat

c. ò sù fɬghàm 'he has washed the mat'
he wash mat

d. ghé sû fɬghàm 'they have washed the mat'
they wash mat

Sentences (1a) and (1b) use the H tone verb /bó/ 'hit', while sentences (1c) and (1d) use the L tone verb /sù/ 'wash'. Careful observation of these examples shows that tones spread onto the following word when that word begins with an opposite tone. Thus the L tone of the pronoun /ò/ spreads onto the H tone verb in (1a) and the H tone of the pronoun /ghé/ spreads onto the L tone verb in (1d). In addition, we have a simplification of a rising tone on a short syllable in (1a) because Aghem only allows a rising tone on a short vowel in certain extremely restricted environments (see chapter 8). The tone changes between pronoun and verb can therefore be summarized as in (2).

(2)

	underlying		*spreading*		*simplification*
[1a]	/ ò bó/	→	ò bǒ	→	ò bò ...
[1d]	/ghé sù/	→	ghé sû		

The above derivation of the surface tones receives support from section 4.1.2 below, where simplification does not take place because the vowel is long.

The object of the above sentences is /fɬ-ghàm`/ 'mat', which has the surface tone pattern [fɬghâm] when it occurs in isolation. As can be seen, the L tone of the verb root spreads onto the H tone prefix in (1c) and (1d). The rising tone on a short vowel simplifies to L before a H tone as we saw in (2). In addition, the falling tone on the verb root is simplified to L because Aghem does not permit a phonetic L-HL sequence within the same word. The complete derivation is seen in (3):

(3) *underlying* *spreading* *simplification*$_1$ *simplification*$_2$

[1c] /ò sù fɬghàm`/ → ò sù fɬghâm → ò sù fɬghâm → ò sù fɬghàm

See chapter 8 for a more complete discussion of tone processes. For our purposes here, we will merely note that all spreading rules precede all simplification rules in Aghem.

The spreading of tones to the verb is not limited to cases where the subject is a pronoun. When the subject is a noun, tone spreading takes place from the subject marker (SM) to the verb, just as tone spreading took place above from the pronoun. Examples are seen in (4).

(4) a. kǫ̀ kɬ bó́ fɬghâm 'the servant has hit the mat'
servant SM hit mat

b. kǫ̀ kɬ sû fɬghàm 'the servant has washed the mat'
servant SM wash mat

Careful examination of the verb and object tones of (4a) and (1b) and of (4b) and (1d) will show that an underlying H tone is being spread from the SM just as it is spread from a H tone pronoun. The rising tone on the short vowel then simplifies as we have already seen. In summary:

(5) /kɬkǫ̀`/ → kǫ̀ kɬ sû → kǫ̀ kɬ sû ...

For further discussion of the deletion of the noun prefix (e.g. in subject position) and noun phrase tone rules, see Hyman (1979).

3.2. TODAY PAST /mɔ̀/ (P_1)

The today past tense (labeled P_1) is used to describe events which took place earlier in the same day. Its form is derived by adding a L tone /mɔ̀/ to the present tense resulting in the following surface realizations:

(6) a. ò mɔ̀ bò fɬghâm 'he hit the mat' [today]
he P_1 hit mat

b. ghé mô bò fɬghâm 'they hit the mat'
they P_1 hit mat

c. ò mɔ̀ sù fɬghàm 'he washed the mat'
he P_1 wash mat

d. ghé mô sù fɬghàm 'they washed the mat'
they P_1 wash mat

e. kǫ̀ kɬ mô bò fɬghâm 'the servant hit the mat'
servant SM P_1 hit mat

f. kộ kɨ́ mɔ̂ sù fɨghàm 'the servant washed the mat' [today]
servant SM P_1 wash mat

All of the above sentences follow the same tone patterns seen for P_0 in the preceding section with the exception of tones spreading to and from the P_1 marker /mɔ̀/. Both H tone pronouns and the H of the SM spread onto the P_1 marker instead of onto the verb. The L tone of the /mɔ̀/ also spreads onto H tone verbs which undergo the same simplification of a rising tone on a short vowel seen above. The spreading to and from the /mɔ̀/ is best seen in the following derivation of (6b):

(7) /ghé mɔ̀ bó/ → ghé mɔ̂ bǒ → ghé mɔ̂ bò ...

The tonal processes involved in P_1 are therefore quite straightforward, and contrast with the more complex derivations required in P2 described below.

3.3. PAST /ˋmɔ́/ (P_2)

The past tense (labeled P_2) in Aghem differs from the today past tense P_1 only with respect to tone. In every case, the segmentals remain identical between parallel sentences in the two tenses. The P_2 tense refers to events which took place *before* today. The following sentences are characteristic of P_2 and should be compared with the parallel P_1 sentences in (6a-d) above.

(8) a. ò mɔ̀ bɔ́ fɨghâm 'he hit the mat' [before today]
he P_2 hit mat

b. ghé mɔ̀ bɔ́ fɨghâm 'they hit the mat' [before today]
they P_2 hit mat

c. ò mɔ̀ sɔ́ 'fɨghâm 'he washed the mat' [before today]
he P_2 wash mat

d. ghé mɔ̀ sɔ́ 'fɨghâm 'they washed the mat' [before today]
they P_2 wash mat

The more complicated tonal behavior of P_2 (as opposed to P_1) is seen in the following tonal characteristics:

(i) The tone of the pronoun is blocked from spreading onto the [mɔ] resulting in an invariant L tone [mɔ̀] with P_2.

(ii) The P_2 marker spreads a H tone onto the verb (cf. the L tone in P_1).

(iii) A L tone from a verb is blocked from spreading onto the object prefix, resulting in a downstep between the verb and its object (8c,d).

The blocking of the normal tone spreading processes seems to be best handled by positing floating tones in the appropriate places. One must therefore posit an underlying P_2 marker of the form /ˋmɔ́/ and an addition floating H tone (H) after the verb which occurs only with P_2. The tone spreading between subject and verb is then typified by the following derivation:

(9) *underlying* *spreading* *simplification*
/ghé ˋmɔ́ sù/ → ghé ˆ mɔ̌ sû → ghé mɔ̀ sû ...

The H of the pronoun /ghé/ 'they' spreads onto the floating L of the P_2 marker /ˋmɔ́/. This creates a floating falling tone which will be deleted by rule. The floating L which precedes the P_2 marker spreads onto the following H tone, creating a rising tone [mɔ̌], which later simplifies to [mɔ̀].

More complicated are the tone changes which take place between the verb and its object when the verb has an underlying L tone. The floating H following the verb prevents normal tone spreading onto the object prefix. Instead, we find that a falling tone on a short vowel simplifies to a H tone followed by a downstep when it occurs before another H tone. The downstep rule can be formulated as in (10):

(10) HL → H' / ___ H

The derivation thus proceeds as follows:

(11) /(`mɔ́) sù' fɬghàm`/ → sû fɬghâm → sú 'fɬghâm ...

This simplifying of HLH to H'H is typical of African downstep systems, and makes phonetic sense in that it seems easier to pronoun H-'H than HL-H. The underlying L tone is thus preserved on the surface without undue effort. The tonal difference between two P_2 sentences with H and L tone verbs is the presence vs. absence of downstep between the verb and the object.

The P_2 marker also prevents spreading from the subject marker (which is otherwise typical of most tenses). This can be seen as a predictable result of the $\underset{o}{L}$ which precedes the P_2 marker. Examples are seen in (12).

(12) a. kǫ̂ kɬ mɔ̀ bɔ́ fɬghâm 'the servant hit the mat' [before today]
servant SM P_2 hit mat

b. kǫ̂ kɬ mɔ̀ sú 'fɬghâm 'the servant washed the mat' [before today]
servant SM P_2 wash mat

These two sentences are very important for a precise formulation of the rule simplifying rising tones on short vowels. We have already seen several examples of rising tones becoming L before H. In (12a,b) the rising tone on [kɬ] (midway through the derivation) becomes H before L. We can therefore state that rising tones on short syllables simplify to the opposite of the following syllable, as in the following dissimilation rule:

(13) LH → [-αH] / ___ [αH]

This rule is interesting in that tone rules of anticipatory dissimilation are rare in African tone languages (Hyman and Schuh 1974). We can now summarize the derivation of (12a) as follows:

(14) /kɬkǫ̀` kɬ `mɔ́ bɔ́/ → kǫ̂ kɬ̌ mɔ̌ bɔ́ → kǫ̂ kɬ mɔ̀ bɔ́ ...

In (14) the dissimilation rule applies in two places, producing both H and L tones according to the beginning level of the tone which immediately follows. It is crucial that the downstep rule precede the dissimilation rule or the output of (14) would be further modified to the incorrect surface form *[kǫ̂ 'kɬ].

3.4. NARRATIVE /`fɬ/ (NAR)

The narrative tense (labeled NAR) is used in the first sentence of stories which refer to something which happened at some distant time. It is usually used only once at the beginning of a story since it functions to set the time frame for the whole narrative. The tonal pattern of this tense marker is exactly the same as that of the P_2 marker /`mɔ́/. The following sentences show that the underlying

NAR marker is /ˋfɬ/ due to the arguments already presented in section 3.3.

(15) a. ò fɬ bɔ́ fɬghâm 'he once hit the mat'
he NAR hit mat

b. ghé fɬ bɔ́ fɬghâm 'they once hit the mat'
they NAR hit mat

c. ò fɬ sú 'fɬghâm 'he once washed the mat'
he NAR wash mat

d. ghé fɬ sú 'fɬghâm 'they once washed the mat'
they NAR wash mat

The NAR /ˋfɬ/ of this section is not to be confused with the counterfactual markers [fi] and [fɛ] discussed in section 5.3 below.

The NAR tense in Aghem seems to be paralleled by a pair of adverbial time phrases in English. In English narrative style, one might begin a story about imaginary happenings "Once upon a time...", or a story about real, though distant happenings "One time...". The NAR tense in Aghem can be used for both real and imaginary happenings and thus fills a double function. If this extended range of meaning is kept in mind, we can glossthe NAR as we have done above. It should be remembered that the NAR tense is serving a discourse function in addition to specifying the time period. Once the time frame has been established, the consecutive tense (CNS) (section 3.7) is used to maintain the flow of events throughout the rest of the narrative.

3.5. TODAY FUTURE /sɬ/ (F_1)

As mentioned in section 1.1 above, the completive-incompletive distinction is not present in the two future tenses in the indicative mood. Since these future tenses always take the B-, D- or E-form of the verb, they are obligatorily incompletive (cf. section 4.1.2 below). Since future actions are by definition not yet completed, this restriction is entirely logical.

The near future in Aghem (labeled F_1) is tonally identical to the today past P_1. The F_1 tense is used to refer to future actions expected in the same day just as the P_1 is used to refer to past actions in the same day. It seems significant that the semantic similarity between F_1 and P_1 (both referring to events in the same immediate and limited time period) is paralleled by identical tonal behavior.

In the following examples we see tone spreading from pronoun to F_1 marker, from F_1 marker to verb, and from an underlying L tone verb suffix onto the object. For further discussion of these tone changes, see the discussion of incompletive P_1 in section 4.1.2 below.

(16) a. ò sɬ bɔ̀ɔ́ fɬghàm 'he will hit the mat' [today]
he F_1 hit mat

b. ghé sɬ bɔ̀ɔ́ fɬghàm 'they will hit the mat' [today]
they F_1 hit mat

c. ò sɬ sùu fɬghàm 'he will wash the mat' [today]
he F_1 wash mat

d. ghé sɬ sùu fɬghàm 'they will wash the mat' [today]
they F_1 wash mat

3.6. FUTURE /lɔ̀/ (F_2)

Like F_1, the future tense (labeled F_2) is obligatorily incompletive in the indicative mood. The F_2 tense is used to refer to an action which will take place tomorrow or some time later. Typical examples are seen in (17):

(17) a. ò lɔ́ 'bóo fɬghàm 'he will hit the mat' [after today]
he F_2 hit mat

b. ghé lɔ́ 'bóo fɬghàm 'they will hit the mat' [after today]
they F_2 hit mat

c. ò lɔ́ sùu fɬghàm 'he will wash the mat' [after today]
he F_2 wash mat

d. ghé lɔ́ sùu fɬghàm 'they will wash the mat' [after today]
they F_2 wash mat

The above tone changes are treated by positing the underlying F_2 marker to be /lɔ̀/. Normal spreading and simplification rules already discussed account for everything but the simplification of a LH contour on a long vowel after a H changing to a downstepped H tone ('H) as in (17a,b). We therefore need a rule as in (18):

(18) LH → 'H / H ___

We are now in a position to summarize the derivation of F_2 forms, as follows:

(19) *underlying* *simplification* *downstep*
/ò lɔ̀ bó-à/ → ò lɔ̌ bòó → ò lɔ́ bòó → ò lɔ́ 'bóo ...
/ò lɔ̀ sù-à/ → ò lɔ̌ sùu → ò lɔ́ sùu ...

For a discussion of the vowel assimilation of the incompletive /-à/ suffix and the transfer of its tone to the object, see section 4.1.2. Once again we witness an environment where an underlying HLH sequence is simplified on the surface to H'H. Once again, we also see a rising tone on a short vowel (on [lɔ̌]) simplify to a H by anticipatory dissimilation to the following L. Another process we have seen before can be observed in the following examples:

(20) a. kộ kɬ lɔ́ 'bóo fɬghàm 'the servant will hit the mat' [after today]
servant SM F_2 hit mat

b. kộ kɬ lɔ́ sùu fɬghàm 'the servant will wash the mat' [after today]
servant SM F_2 wash mat

Using the dissimilation rule in (13), the following derivation is as expected:

(21) /kɬkọ̀ kɬ lɔ̀/ → kộ kɬ lɔ́ → kộ kɬ lɔ́ ...

The rising tone simplifies to a L tone before a H tone as predicted. This lends additional support to our unusual anticipatory dissimilation rule.

It should be mentioned here that the F_2 marker /lɔ̀/ and the copula /lɔ̀/ 'be' are segmentally identical but tonally quite different. Since tense markers often develop historically from verbs, however, it is not difficult to imagine that our modern Aghem F_2 marker developed from an earlier copula. While the historical source may be the same, the two words are quite different in present speech patterns (see section 4.3.1 for further discussion).

3.7. CONSECUTIVE /ˈmè/ (CNS)

The consecutive tense in Aghem (labeled CNS) is used to show consecutive action in the past where the action in one clause follows closely the action in the preceding clause. It is probably best translated into English by adding the time adverb "then" to a past tense gloss. There is variation in the CNS marker according to whether or not the sentence has an object. The underlying form of the CNS marker is posited to be /ˈmè/ with a floating H tone preceding the marker. The surface reflexes of these tones can be seen in the following examples:

(22) a. ò mê bó 'he then hit (it)'
he CNS hit

b. ghé mê bó 'they then hit (it)'
they CNS hit

c. ò mê sú 'he then washed (it)'
he CNS wash

d. ghé mê sú 'they then washed (it)'
they CNS wash

e. kǫ̀ kɨ̀ mê bó 'the servant then hit (it)'
servant SM CNS hit

f. kǫ̀ kɨ̀ mê sú 'the servant then washed (it)'
servant SM CNS wash

These examples present a problem. Both H and L tone verbs are neutralized to H tone. This neutralization does not exist in the corresponding examples in (24) below, where the object is present on the surface. Though various possibilities exist (e.g. posit a floating H tone both to the left and to the right of the verb root), it seems most satisfactory to posit a replacive H tone on the verb root just in case the CNS marker occurs in a sentence with no overt object. One needs to examine such objectless sentences in other verb tenses to see if we are dealing with a more general principle whereby a replactive H tone occurs as the *result* of object deletion. A possible derivation would then be:

(23)

underlying		*spreading*		*replacement*
/ò ˈmè bó/	→	ò mê bǒ	→	ò mê bó
/ò ˈmè sù/	→	ò mê sù	→	ò mê sú

An important part of such a derivation would be rule ordering, as the tone replacement rule must follow the downstep rule in (10). If this were not the case, our final surface forms would meet the structural description for the downstep rule and convert it into the incorrect *ò mé 'bó and *ò mé 'sú.

Further support for the above solution occurs where an object is present with the CNS marker. In this case, the underlying CNS marker /ˈmè/ is converted to /ǹ̀/ halfway through the derivation, as seen in the following examples:

(24) a. ò ǹ̀ 'bó fɨghâm 'he then hit the mat'
he CNS hit mat

b. ghé ǹ̀ 'bó fɨghâm 'they then hit the mat'
they CNS hit mat

c. ò ǹ̀ sù fɨghàm 'he then washed the mat'
he CNS wash mat

d. ghé ń sù fɬghàm 'they then washed the mat'
they CNS wash mat

e. kộ kɬ ḿ 'bó fɬghâm 'the servant then hit the mat'
servant SM CNS hit mat

f. kộ kɬ ń sù fɬghàm 'the servant then washed the mat'
servant SM CNS wash mat

Careful inspection of the two sets of examples will show that the [mê] without object corresponds to the [Ń'] (with downstep) with object. One can thus posit a sort of elision rule, as in (25):

(25) mê → Ń / in CNS clauses with an object

The falling tone on the homorganic syllabic nasal then simplifies to H, with the L part of the contour then causing the downstepping of a following H tone verb root. The ordering of this rule is crucial, since it must preceed the downstep rule in (10), as follows:

(26) *underlying* *spreading* *elision* *downstep*
/ò 'mè bó/ → ò mê bǒ → ò ḿ bǒ → ò ḿ 'bó

It is important at this point to draw attention to the fact that the objects in examples (24a-f) are in their A-forms, as all objects have been in this chapter. The form of the object is particularly relevant to note at this point as there exists in Aghem an underlying completive focus marker /'Ń/ which occurs in the same position as the CNS marker, but which requires the object to be in its B-form. An example from section 4.2.1.1 will show the potential confusion:

(27) kộ kɬ ḿ 'bó ghâm-fò 'the servant *has* hit the mat'
servant SM P_O/FOC hit mat/OF

One can see that identical tone rules have been at work in both (27) and (24e) and one cannot know which meaning is intended before coming to the form of the object. (See chapter 6 for consecutive verb constructions.)

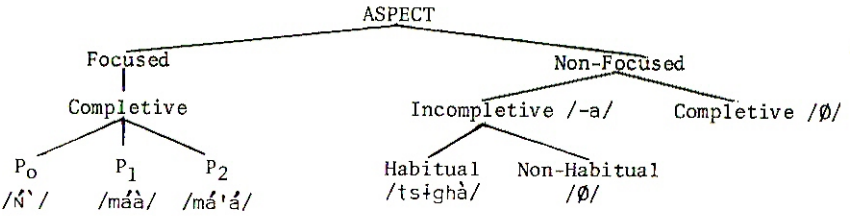
4

ASPECT

4.0. INTRODUCTION

The preceding chapter described the various tenses of Aghem in their most unmarked (expected) forms, i.e. completive aspect for non-future tenses and incompletive aspect for future tenses. The present chapter builds upon that base by showing the variety of aspectual distinctions which may occur with each tense.

In Aghem the aspect marker itself may be either focused or unfocused. Whenever the aspect marker is focused, the object is then "defocused" and must occur in its B-form (see Hyman, chapter 6). With this basic division in mind, the aspect system of Aghem is summarized as follows:



4.1. NON-FOCUSED

In Aghem, the non-focused aspect markers follow the verb. They serve to distinguish completed vs. incompleted actions as well as habitual actions which are always additionally marked as incompletive. The non-focused aspect markers of this section always cooccur with an object in its focused A-form.

4.1.1. *Completive /Ø/.* The unmarked non-focused aspect has been extensively used in the preceding chapter with all tenses except the future (both F_1 and F_2). It is signaled on the surface by the verb being in its A-, C- or E-form (see section 2.2 above and the appendix at the end of chapter 2). The reader is therefore referred back to the preceding chapter for a thorough discussion of sentences with non-focused completive aspect.

4.1.2. *Incompletive /-a/.* The incompletive B-form of the verb for the most part can be derived by the addition of an underlying /-a/ suffix to the completive A-form as discussed in section 2.2 above. This /-a/ always has an underlying L tone except for the past tense P_2 and narrative tense NAR, where it has a H tone. The L tone of this suffix is often spread onto the following prefix of the object, as in the following examples with the present tense:

(1) a. ò bòó fɨghàm 'he is hitting the mat'
he hit/INC mat

b. ghé bóo fɨghàm 'they are hitting the mat'
they hit/INC mat

c. ò sùu fɨghàm 'he is washing the mat'
he wash/INC mat

d. ghé súù fɬghàm 'they are washing the mat'
they wash/INC mat

e. kọ̀ kɬ bóo fɬghàm 'the servant is hitting the mat'
servant SM hit/INC mat

f. kọ̀ kɬ súù fɬghàm 'the servant is washing the mat'
servant SM wash/INC mat

The incompletive examples above (with the B-form of the verb) are even more regular tonally than their respect completive sentences (with the A-form of the verb as in section 3.1 above). In each case, the first vowel of the verb has received the tone of the preceding word by tone spreading. Also, the tone of the verb root has been transferred to the second vowel of the verb (instead of being spread to the prefix of the object as in 3.1 above). The new factor is the additional L tone from the incompletive suffix /-à/ (realized above as an assimilated long vowel). Finally, this underlying L tone has been transferred to the prefix of the object. Thus, in incompletive constructions, almost every tone has been transferred one vowel to the right, as shown below for (le):

(2) /kɬkọ̀ kɬ bó à fɬghàm/ (underlying tones)
[kọ̀ kɬ bó ó fɬghàm] (surface tones)

A similar process is also to be found in the today past P_1, which has the same B-form of the verb preceded by the tense marker /mɔ̀/:

(3) a. ò mɔ̀ bòó fɬghàm 'he was hitting the mat' [today]
he P_1 hit/INC mat

b. ghé mɔ̂ bòó fɬghàm 'they were hitting the mat' [today]
they P_1 hit/INC mat

c. ò mɔ̀ sùu fɬghàm 'he was washing the mat' [today]
he P_1 wash/INC mat

d. ghé mɔ̂ sùu fɬghàm 'they were washing the mat' [today]
they P_1 wash/INC mat

e. kọ̀ kɬ mɔ̂ bòó fɬghàm 'the servant was hitting the mat' [today]
servant SM P_1 hit/INC mat

f. kọ̀ kɬ mɔ̂ sùu fɬghàm 'the servant was washing the mat' [today]
servant SM P_1 wash/INC mat

The tones in the above examples are completely as expected, given the discussion of section 3.2 above and the discussion so far in this section. In addition, the tones on the verbs and objects for F_1 (see section 3.5 above) and F_2 (section 3.6) are as expected.

The past tense P_2 has a marker /ˋmɔ́/ which results in slightly different tone patterns on the surface, as follows:

(4) a. ò mɔ̀ bóo fɬghâm 'he was hitting the mat' [before today]
he P_2 hit/INC mat

b. ghé mɔ̀ bóo fɬghâm 'they were hitting the mat'
they P_2 hit/INC mat

c. ò mɔ̀ sú'ú fɬghâm 'he was washing the mat'
he P_2 wash/INC mat

d. ghé mɔ̀ sú'ú fɬghâm 'they were washing the mat'
they P_2 wash/INC . mat

e. kǫ̀ kɬ mɔ̀ bóo fɬghâm 'the servant was hitting the mat'
servant SM P_2 hit/INC mat

f. kǫ̀ kɬ mɔ̀ sú'ú fɬghâm 'the servant was washing the mat'
servant SM P_2 wash/INC mat

In contrast to other incompletive forms, the object in the preceding examples retains its H tone prefix and is not permuted to L tone as in (1) and (3) above. This is due to the underlying H tone on the /-a/ suffix with P_2 and NAR tenses (NAR examples would parallel the examples in (4) with the sole difference being that the tense marker is /ˋfɬ/ instead of /ˋmɔ́/). This H tone spreads onto the following word whenever it begins with a L tone, as with the HAB marker described in section 4.1.3 below.

Examples (4c,d,f) above share a L tone verb root /sù/. These examples are significant in that they show a simplification of an underlying HLH tone sequence to H'H, which we saw in the preceding chapter. The difference here is that the H'H patter occurs on a single long syllable. The derivation of (4d) is given in (5):

(5) *underlying* → *spreading* → *downstep*
/(ˋmɔ́) sù-á fɬghàmˋ/ → sûú fɬghâm → ... sú'ú fɬghâm

4.1.3. *Habitual* /tsɬghà/ *(HAB)*. As shown in the tree diagram in 4.0, habitual aspect (labeled HAB) is a subcategory of incompletive aspect. This means that whenever the HAB marker is present, the verb must also be in its incompletive form, though the reverse is not necessarily the case. The HAB marker /tsɬghà/ has only a single underlying L tone. Since the orthography adopted for this description uses two vowels in the HAB marker, we will always mark both vowels with the same L tone in our surface examples (cf. Hyman, section 1.3.3 above). Thus, the reader must keep in mind that this marker reacts to all of the tone rules as a single (short) syllable.

As discussed in 1.1 above, HAB is never permitted with either F_1 or P_1 because a portion of a single day is not considered ample time in which to establish the habitual nature of an action. The following characteristic examples of non-past HAB sentences show the tone changes we expect:

(6) a. ò bòó tsɬghà fɬghàm 'he is habitually hitting the mat'/ 'he habitually hits the mat'
he hit/INC HAB mat

b. kǫ̀ kɬ lɔ́ sùu tsɬghà fɬghàm 'the servant will habitually wash the mat'
servant SM F_2 wash/INC HAB mat

The preceding examples reveal that the L tone of the HAB marker spreads onto the object prefix as in the following derivation:

(7) *underlying* → *spreading* → *simplification*
/tsɬghà fɬghàm/ → tsɬghà fɬghâm → ... tsɬghà fɬghàm

The spreading of the L tone of the HAB marker to the object is blocked in P_2 and NAR tenses, as seen in the following examples:

(8) a. ghé mɔ́ sú'ú tsɨghá 'fɨghâm 'they were habitually washing the
they P_2 wash/INC HAB mat mat'

b. kǫ́ kɨ́ fɨ́ bóo tsɨghá 'fɨghâm 'the servance was once habitually
servant SM NAR hit/INC HAB mat hitting the mat'

What is important in these examples is that the underlying L tone of the HAB marker is blocked from spreading onto the object prefix. This is parallel to the examples of P_2 with completive aspect examined in section 3.3 above. We therefore need to posit an additional floating H tone after the HAB marker when it cooccurs with either the P_2 or NAR tense. Remember that the incompletive suffix also has an underlying H tone with these tenses. Thus, consider the following derivation:

(9) *underlying* *spreading* *downstep*

/(sù-á) tsɨghà' fɨghàm`/ → tsɨghâ fɨghâm → ... tsɨghá 'fɨghâm

The fact that the HAB marker takes an additional H with P_2 and NAR tenses, just like a completive A-form verb, points to a probable verbal source of this marker (cf. the verb /tsɨghà/ 'to pass').

4.2. FOCUSED

While all of the non-focused aspect markers described above have *followed* the verb, focused aspect markers *precede* the verb. In fact, in the P_1 and P_2 tenses, they appear to fuse with the tense markers creating portmanteau forms. While non-focused aspect markers signaled both completive and incompletive aspects, focused markers exist only for completive aspect. Whenever a clause is focused for completive aspect, the object of the verb is defocused into its B-form. This defocusing process (described in detail in Hyman, chapter 6 and in Watters 1979) always accompanies aspect-focus and never cooccurs with an incompletive verb form. Thus, "aspect-focused" and "completive-focused" describe the same phenomenon.

Completive focus is used to insist that something has indeed taken place in the context of someone having either denied or questioned its completion. As discussed in section 1.1, completive focus always takes a verb root in its completive A-form and never cooccurs with incompletive or habitual aspects. In the indicative mood, it thus occurs with non-future P_0, P_1 and P_2 tenses only.

4.2.1. *Present completive /Ń`/ (P_o/FOC).* The surface realization of P_o with completive focus (P_o/FOC) is identical with that of the consecutive tense CNS (section 3.7), except that the object is defocused to its B-form:

(10) a. ò ḿ 'bó ghâm-fɔ́ 'he *has* hit the mat'
he P_o/FOC hit mat

b. ghé ḿ 'bó ghâm-fɔ́ 'they *have* hit the mat'
they P_o/FOC hit mat

c. ò ń sù ghâm-fɔ́ 'he *has* washed the mat'
he P_o/FOC wash mat

d. ghé ń sù ghâm-fɔ́ 'they *have* washed the mat'
they P_o/FOC wash mat

e. kǫ́ kɨ́ ḿ 'bó ghâm-fɔ́ 'the servant *has* hit the mat'
servant SM P_o/FOC hit mat

f. kǫ́ kɨ́ ń sù ghâm-fɔ́ 'the servant *has* washed the mat'
servant SM P_o/FOC wash mat

The underlying P_0/FOC marker is taken to be /Ǹ/ with a floating L tone after the H tone on the syllabic nasal. This marker interacts with the existing tone rules as a short syllable as in the following typical derivations:

(11)

underlying		*spreading*		*simplification*		*downstep*
/ ò Ǹ bó /	→	ò Ň bǒ	→	ò ń bǒ	→	ò m̀'bó
/(kɬkọ̀) kɬ Ǹ sù/	→	kɬ̌ ń sù	→	kɬ ń sù	→	... kɬ ńsù

The examples in (11) show that the syllabic nasal consonant retains its syllabicity throughout the derivation. It interacts with the tone rules just like any short vowel, undergoing the dissimilation rule whenever it has a rising tone as the result of spreading.

The spreading of tones from the verb to the object and the subsequent dropping of the object prefix when the noun is in its B-form is described in chapter 8. A typical derivation involving a B-form object is seen in (12).

(12)

underlying		*spreading*		*prefix-deletion*		*simplification*
/sù fɬghàm̀-fɔ́/	→	sù fɬ̌ghâm-fɔ̌	→	sù ghâm-fɔ̌	→	... sù ghâm-fɔ̀

The only difference from the tone rules previously mentioned is the simplification of the rising tone by the dissimilation rule. The added feature is that a rising tone on a suffix at the end of an utterance simplifies to L tone. This complicates the formal statement of the anticipatory dissimilation rule and the reader is referred to chapter 8 for a fuller statement of this phenomenon.

4.2.2. *Past completives /máà/ (P_1/FOC) and /má'á/ (P_2/FOC).* Both the past tense P_2 and the today past tense P_1 may be marked for completive focus. Just as the P_1 and P_2 markers (mɔ) are identical except for tone, so are their respective tense-aspect markers (maa). Completive focus of P_1 is seen in the following examples:

(13) a. ò máà bó ghâm-fɔ̀ — 'he *did* hit the mat' [today]
he P_1/FOC hit mat

b. ghé máà bó ghâm-fɔ̀ — 'they *did* hit the mat'
they P_1/FOC hit mat

c. ò máà sù ghâm-fɔ̀ — 'he *did* wash the mat'
he P_1/FOC wash mat

d. ghé máà sù ghâm-fɔ̀ — 'they *did* wash the mat'
they P_1/FOC wash mat

e. kọ̀ kɬ máà bó ghâm-fɔ̀ — 'the servant *did* hit the mat'
servant SM P_1/FOC hit mat

f. kọ̀ kɬ máà sù ghâm-fɔ̀ — 'the servant *did* wash the mat'
servant SM P_1/FOC wash mat

These sentences should be compared with their P_2 counterparts in (14).

(14) a. ò má'á bó ghâm-fɔ̀ — 'he *did* hit the mat' [before today]
he P_2/FOC hit mat

b. ghé má'á bó ghâm-fɔ̀ — 'they *did* hit the mat'
they P_2/FOC hit mat

c. ò má'á sù ghâm-fɔ̀ 'he *did* wash the mat'
he P_2/FOC wash mat

d. ghé má'á sù ghâm-fɔ̀ 'they *did* wash the mat'
they P_2/FOC wash mat

e. kɔ̰̀ kɨ́ má'á bó ghâm-fɔ̀ 'the servant *did* hit the mat'
servant SM P_2/FOC hit mat

f. kɔ̰̀ kɨ́ má'á sù ghâm-fɔ̀ 'the servant *did* wash the mat'
servant SM P_2/FOC wash mat

The two preceding paradigms are characterized by an unusual trait. The surface forms of P_1/FOC and P_2/FOC as well as words immediately before and immediately after are tonally invariant. It thus appears that normal tone spreading processes are blocked both before and after these markers. Normally we have handled a blockage of tone spreading by positing a floating tone before the word where the blocking takes place. This has the distinct advantage of handling tonal problems with tonal solutions. We could continue along these lines even for the present problem and posit a floating H tone before both P_1/FOC and P_2/FOC which would effectively block spreading from a preceding word. Blocking spreading *after* these markers is much more difficult. All of the verbs in the above paradigms appear on the surface with the same tone as the underlying tone of the stem. We would therefore have to posit a floating tone after the two markers the same as whatever tone is on the verb stem. This solution seems ad hoc as floating tones normally are attached to a specific morpheme and have an effect on the surface somewhere in the paradigm.

A more simple solution, perhaps, is to handle this tonal problem by positing a grammatical-semantic cause. We will say that whenever two separate meanings are realized by one indissoluble morpheme, the resulting form blocks tone spreading both before and after. Thus the special nature of the portmanteau morphemes (combining tense and focus properties) is tonally marked by the suspension of normal tone spreading processes.

The following table summarizes the forms for the P_0, P_1 and P_2 tenses in both [-focus] and [+focus] contexts:

COMPLETIVE ASPECT

	[-Focus]	[+Focus]
P_0 :	ò bò fɨ́ghâm	ò ḿ 'bó ghâm-fɔ̀
	ghé sû fɨ̀ghàm	ghé ń sù ghâm-fɔ̀
P_1 :	ò mɔ̀ bò fɨ́ghâm	ò máà bó ghâm-fɔ̀
	ghé mɔ̂ sù fɨ̀ghàm	ghé máà sù ghâm-fɔ̀
P_2 :	ò mɔ̀ bó fɨ́ghâm	ò má'á bó ghâm-fɔ̀
	ghé mɔ̀ sú 'fɨ́ghâm	ghé má'á sù ghâm-fɔ̀

4.3. 'BE' AND 'HAVE'

As in most languages, the verbs meaning 'be' and 'have' are irregular in form and usage. The fact that both are stative in meaning is not a sufficient cause to explain the irregular nature of their syntactic paradigms. Each of these common verbs is discussed in turn below.

4.3.1. /lɔ̀'/ *'be'*. The copula /lɔ̀'/ 'be' is tonally irregular, as we shall see below. It is listed in its invariant E-form in the appendix to chapter 2. It does not vary with the usual completive/incompletive changes we have seen above. In fact, we could list this verb as "inherently incompletive" for it never takes completive focus. This seems to follow naturally from the stative nature of its meaning. Once we posit an underlying L tone on the root and a floating H tone following the root, most of the tone changes for /lɔ̀'/ follow from the regular tone rules, as seen below:

(15) a. ò lɔ̀ kɬkɔ̧̀ 'he is a servant'
he be servant

b. ghé lɔ́ 'ókɔ̧̀ 'they are servants'
they be servants

c. ò lɔ̀ tsɬghá 'kɬkɔ̧̀ 'he is always a servant'
he be HAB servant

d. ghé lɔ́ 'tsɬghá 'ókɔ̧̀ 'they are always servants'
they be HAB servants

The following derivations explain the variety found in the preceding examples:

(16)

	underlying		*spreading*		*downstep*
a.	/ò lɔ̀' kɬkɔ̧̀`/	→	ò lɔ̀ kɬkɔ̧̀		
b.	/ghé lɔ̀' ókɔ̧̀`/	→	ghé lɔ̂ ókɔ̧̀	→	ghé lɔ́ 'ókɔ̧̀
c.	/(ò) lɔ̀' tsɬghà' kɬkɔ̧̀`/	→	lɔ̀ tsɬghâ kɬkɔ̧̀	→	...lɔ̀ tsɬghá 'kɬkɔ̧̀
d.	/(ghé) lɔ̀' tsɬghà' ókɔ̧̀`/	→	lɔ̂ tsɬghâ ókɔ̧̀	→	...lɔ́ 'tsɬghá 'ókɔ̧̀

The above examples are thus in keeping with the existing tone rules. (16d) is especially interesting in that we get two adjacent downsteps for the first time and it happens just where our rules predict. Examples from the P_1 and P_2 tenses are given in (17).

(17) a. ò mɔ̀ lɔ̀ kɬkɔ̧̀ 'he was a servant' [today]
he P_1 be servant

b. ghé mɔ̂ lɔ̀ ókɔ̧̀ 'they were servants' [today]
they P_1 be servants

c. ò mɔ̀ lɔ́ 'kɬkɔ̧̀ 'he was a servant' [before today]
he P_2 be servant

d. ghé mɔ̀ lɔ́ 'ókɔ̧̀ 'they were servants' [before today]
they P_2 be servants

e. ò mɔ̀ lɔ́ 'tsɬghá 'kɬkɔ̧̀ 'he was always a servant'
he P_2 be HAB servant

f. ghé mɔ̀ lɔ́ 'tsɬghá 'ókɔ̧̀ 'they were always servants'
they P_2 be HAB servants

Once again, a derivation with two adjacent downsteps is required:

(18)

underlying		*spreading*		*downstep*
/(`mɔ́) lɔ̀' tsɬghà' kɬkɔ̧̀`/	→	lɔ̂ tsɬghâ kɬkɔ̧̀	→	...lɔ́ 'tsɬghá 'kɬkɔ̧̀

It should be noted that examples with the today future (F_1) /sɨ́/ are tonally identical to examples (17a,b) and examples with the narrative NAR /ˋfɨ́/ are tonally identical to examples (17c-f). Examples from the F_2 future tense are given in (19):

(19) a. ò lɔ́ lɔ̀ kɨ́kɔ̨̂ 'he will be a servant' [after today]
he F_2 be servant

b. ghé lɔ́ lɔ̀ ɔ́kɔ̨̂ 'they will be servants'
they F_2 be servants

c. ò lɔ́ lɔ̀ tsɨ́ghá 'kɨ́kɔ̨̂ 'he will always be a servant'
he F_2 be HAB servant

d. ghé lɔ́ lɔ̀ tsɨ́ghá 'ɔ́kɔ̨̂ 'they will always be servants'
they F_2 be HAB servants

The preceding examples are an excellent place to compare the F_2 marker /lɔ́ˋ/ and the copula /lɔ̀ˊ/ 'be', as they occur adjacent to each other. A derivation characteristic of the above examples is seen in (20).

(20) *underlying* *spreading* *downstep & simplification*
/(ò) lɔ́ˋ lɔ̀ˊ tsɨ́ghàˊ kɨ́kɔ̨̀/ → lɔ́ lɔ̀ tsɨ́ghâ kɨ́kɔ̨̂ → ...lɔ́ lɔ̀ tsɨ́ghá 'kɨ́kɔ̨̂

All of the examples so far in this section argue for an underlying tone pattern /lɔ̀ˊ/ for this copula. The truely exceptional nature of this verb is found in the consecutive tense CNS, as seen in (21).

(21) a. ò ń̀ lɔ́ 'kɨ́kɔ̨̂ 'he was then a servant'
he CNS be servant

b. ghé ń̀ lɔ́ 'ɔ́kɔ̨̂ 'they were then servants'
they CNS be servants

The reader should carefully compare the above examples with the examples of the CNS in section 3.7 in order to realize the tonal irregularity involved. According to the tone rules of the language, we expect the incorrect form *ò ń̀lɔ̀ kɨ́kɔ̨̂. What seems to be happening is that in the CNS, the copula /lɔ̀ˊ/ (in contrast with other verbs) joins with the preceding [ń̀] to form a single unit. This unit, which acts like a short syllable, would then have a falling contour before H tone which would trigger the downstep rule, resulting in the correct surface realization in (21a). The reason why this [ń̀] should lose its separate nature only with the copula /lɔ̀ˊ/ is unclear and one is left with the usual explanation that copulas in all languages are usually irregular in one way or another.

4.3.2. /kɨ́/ *'have'*. The verb /kɨ́/ 'have' is also irregular. In contrast to the copula /lɔ̀ˊ/ 'be' of the preceding section, /kɨ́/ is tonally regular, behaving always as a H tone verb root should. The verb /kɨ́/, however, has two different forms with a unique distribution. The "short" variant is simply [kɨ́] and occurs with non-future and noncompletive-focus forms, as in (22).

(22) a. ò kì fɨ́ghâm 'he has a mat' (P_0)
he have mat

b. ò mɔ̀ kɨ́ fɨ́ghâm 'he had a mat' [before today]
he P_2 have mat

The "long" variant of /kí/ is [kélé] which occurs with future tenses and past tenses with completive focus:

(23) a. ò má'á kélé ghâm-fò 'he *did* have a mat' [before today]
he P_2/FOC have mat

b. ò sɨ̀ kèlé fɨghàm 'he will have a mat' [today]
he F_1 have mat

c. ò ló 'kélé fɨghàm 'he will have a mat' [after today]
he F_2 have mat

The reason why only one of the "short" or "long" forms is allowed with each marker is presumably the result of the stative nature of /kí/. You cannot get the normal completive/incompletive contrast in non-future tenses for this reason. The reason for the bizarre distribution of "long" vs. "short" forms is unknown as there is nothing readily similar between future tenses and past tenses with completive focus which would indicate some kind of natural class. Once again, the ultimate reason for the strange behavior of this verb is simply the statement that 'have' is normally abnormal.

The verb /kí/ also has one final use in that it may be a recent semantic calque from English in forming a distant anterior past tense. It is thus used like an auxiliary verb in the following examples to indicate remote past time (perhaps indicating an incipient P_3 tense in development?).

(24) a. ò mò kí bó fɨghâm. 'he hit the mat' [long ago]
he P_2 have hit mat

b. ghé mò kí sú 'fɨghâm 'they washed the mat' [long ago]
they P_2 have wash mat

c. ò má'á kí 'bó ghâm-fò 'he *did* hit the mat' [long ago]
he P_2/FOC have hit mat

d. ghé má'á kí sù ghâm-fò 'they *did* wash the mat' [long ago]
they P_2/FOC have wash mat

Note that in (24d) the auxiliary use of /kí/ remains in its short form, as opposed to the expected long form after the P_2/FOC marker (cf. (23a)).

If the above constructions are recent semantic calques from English, it is noteworthy that there has also been a semantic shift. While the 'have' auxiliary with a past tense marker indicates *perfect* use of the past in English, the Aghem use their translation of the same construction to indicate *distant* past tense. Since this semantic shift is also a feature of the Pidgin English spoken in the Aghem area, it is more correct to speak of the above construction as a semantic calque into Aghem from Pidgin English and not from standard English.

5

MOOD

5.0. INTRODUCTION

The indicative mood has been described at length in chapters 3 and 4 and is the unmarked mood. The other moods (hortative, imperative, counterfactual, hypothetical and obligational) will each be described in turn by what they add to the basic indicative structure.

5.1. HORTATIVE /é/ (HRT)

The hortative mood (labeled HRT) in Aghem is signaled by an underlying marker /é/ which reacts differently in clauses with completive A-form vs. incompletive B-form verbs. The hortative mood, in sharp contrast with the indicative mood, has both completive and incompletive variants in the future tenses. In addition, it does not cooccur with past tenses (cf. chapter 1). In Aghem at least, the indicative mood seems to be "past-oriented" with neutralization of completive/incompletive contrast in future tenses, while the hortative mood is "future-oriented" because it does not cooccur with past tenses. This accounts for the fact that the hortative mood has the completive/incompletive distinction in future tenses which the indicative lacks. Since, in the hortative mood, the completive and incompletive variants contain several differences, we shall examine each in separate subsections.

5.1.1. *Completive /ˊ/.* The completive variants of the hortative mood are different from their indicative counterparts only in the presence of an underlying H tone /ˊ/. In every case with completive aspect, the underlying /e/ vowel of the hortative mood has been deleted. The H tone marker remains in its position after the tense marker and before the verb as in the following examples from the two future tenses:

(1) a. ò sɨ́ bó fɨ́ghâm 'he should hit the mat' [later today]
he F_1/HRT hit mat

b. ghé sɨ́ bó fɨ́ghâm 'they should hit the mat'
they F_1/HRT hit mat

c. ò sɨ́ sû fɨ́ghàm 'he should wash the mat'
he F_1/HRT wash mat

d. ghé sɨ́ sû fɨ́ghàm 'they should wash the mat'
they F_1/HRT wash mat

(2) a. ò lɔ́ bó fɨ́ghâm 'he should hit the mat' [after today]
he F_2/HRT hit mat

b. ghé lɔ́ bó fɨ́ghâm 'they should hit the mat'
they F_2/HRT hit mat

c. ò lɔ́ sû fɨ́ghàm 'he should wash the mat'
he F_2/HRT wash mat

d. ghé lɔ́ sû fɨ́ghàm 'they should wash the mat'
they F_2/HRT wash mat

All of the above examples should be compared closely with their indicative

counterparts described earlier in sections 3.5 and 3.6 in order to appreciate the tone changes which mark the hortative mood. With completive aspect, there is no segmental difference between indicative and hortative moods. The following characteristic derivations show how the additional underlying H tone interacts with the tone rules in the expected manner:

(3)	*underlying*		*spreading*		*simplification*		[e]-*deletion*
a.	/(ò) sɨ́ é bó/	→	sɨ́ ě bó	→	sɨ́ è bó	→	...sɨ́ bó
b.	/(ghé) sɨ́ é sù/	→	sɨ́ ě sû	→	sɨ́ è sû	→	...sɨ́ sû
c.	/(ghé) lɔ̀ é bó/	→	lɔ̀ ě bó	→	lɔ̀ è bó	→	...lɔ̀ bó
d.	/(ò) lɔ̀ é sù/	→	lɔ̀ ě sû	→	lɔ̀ è sû	→	...lɔ̀ sû

Rule ordering is crucial for the preceding derivations. Specifically, the deletion of the hortative [e] *along with its tone* must *follow* both spreading and simplification rules or incorrect forms will be generated ([lɔ̀] in (3d), for instance). In this way, the full tonal effect of a marker is still realized (via spreading, etc.) even though the marker is not present on the surface.

The main irregularity in the hortative paradigm occurs with completive A-form verbs in the P_O tense:

(4) a. ò bó fɨ́ghâm 'he should hit the mat' [now]
he P_O/HRT hit mat

b. ghé bó fɨ́ghâm 'they should hit the mat'
they P_O/HRT hit mat

c. ò sù fɨ̀ghàm 'he should wash the mat'
he P_O/HRT wash mat

d. ghé sû fɨ̀ghàm 'they should wash the mat'
they P_O/HRT wash mat

Once again, the preceding examples should be compared closely with their indicative counterparts in section 3.1. Close comparison will show that (4b-d) are ambiguous with respect to mood. Of these examples, our tone rules would predict that (4b,d) would be ambiguous because it does not matter whether a H tone spreads onto a verb from a preceding pronoun or from a preceding hortative marker /é/. (4c) is neutralized with its indicative parallel according to the indicative tone pattern. It is thus example (4c) which violates our expectations. We would expect the incorrect form *ò sû fɨ̀ghàm, where the falling tone on [sû] would reflect the underlying /é/. One might therefore question whether the hortative mood does in fact cooccur with the P_O tense. (4a), however, shows P_O and hortative in the same sentence coming from the following regular derivation:

(5)	*underlying*		*spreading*		[e]-*deletion*
	/ò é bó fɨ́ghàm`/	→	ò ě bó fɨ́ghâm	→	ò bó fɨ́ghâm

The preceding surface form differs from its indicative parallel in that the indicative would have allowed spreading of the pronoun tone onto the verb resulting in a L tone [bò], as described in 3.1 above. The hortative mood with the P_O tense thus appears to be in a state of limbo, with neutralization of mood a common occurrence. When a sentence which is ambiguous as to mood is needed in a conversational context which would not disambiguate it, the Aghem speaker will use alternate longer strategies to convey the same hortative meaning.

An interesting variant of the hortative mood with P_0 occurs when the subject is a second person pronoun. Because of its close semantic parallel to the imperative mood (section 5.2), the hortative also follows the imperative pattern syntactically by defocusing its object into the B-form as in the following examples:

(6) a. wò bó ghâm-fɔ̀ 'you [sg.] should hit the mat' [now]
you/sg. HRT hit mat

b. ghè bó ghâm-fɔ̀ 'you [pl.] should hit the mat'
you/pl. HRT hit mat

c. wò sú 'ghâm-fɔ̀ 'you [sg.] should wash the mat'
you/sg. HRT wash mat

d. ghè sú 'ghâm-fɔ̀ 'you [pl.] should wash the mat'
you/pl. HRT wash mat

The above examples are interesting in that the downstep rule is crucially ordered *after* prefix-dropping, as seen in (7):

(7) *underlying* *spreading* *prefix-deletion* *downstep*
/(é) sù f↓ghàm`-fɔ́/ → sû f↓ghâmfɔ̌ → sû ghâmfɔ̌ → sú 'ghâmfɔ̌ →
→ *(by simplification)* sú 'ghâmfɔ̀

The above derivation shows that it is prefix-deletion which brings two falling tones together and thereby triggers the downstepping rule. The reader is referred to section 5.2 below for a description of imperative sentences which closely resemble the meaning of the preceding hortatives with second person subjects.

5.1.2. *Incompletive* /é ... á/. The hortative mood with incompletive B-form verbs is characterized by the following features:

(i) The vowel of the /é/ marker never drops out as it does with completive A-form verbs.

(ii) The incompletive suffix /-á/ takes a H tone instead of the typical L tone with the indicative.

(iii) The object is always defocused into B-form.

As with the completive parallels, the incompletive forms occur only with non-past (present and future) tenses. In the present tense, the hortative marker /é/ often fuses with the subject pronouns as in the following chart:

SURFACE FORMS					
separate	*fused*		*separate*	*fused*	
muɔ e	mue	'I'	sɛ e	see	'we [incl]'
wo e	we	'you sg.'	gha?e		'we [excl]'
o e	we	'he, she, it'	ghɛ e		'you pl.'
			ghe e		'they'

It should be noted that in normal speech, when fused forms are normally used, the contrast between second and third person singular is neutralized. If the context does not disambiguate the meaning intended, the speaker can revert to the unfused

forms of careful speech to make the meaning clear. A typical example of both separate and fused variants is the following:

(8) a. ò è bóo ghâm-fɔ̀ 'he should be hitting the mat' [now]
he HRT hit mat

= b. wè bóo ghâm-fɔ̀
he/HRT hit mat

The subject pronouns in the rest of the examples in this section will be cited in their fuller "separate" forms, all the while keeping in mind that the fused variants are always also possible.

The hortative mood cooccurs with the present tense as below:

(9) a. ò è bóo ghâm-fɔ̀ 'he should be hitting the mat' [now]
he HRT hit mat

b. ghé é bóo ghâm-fɔ̀ 'they should be hitting the mat'
they HRT hit mat

c. ò è sú'ú ghâm-fɔ̀ 'he should be washing the mat'
he HRT wash mat

d. ghé é sú'ú ghâm-fɔ̀ 'they should be washing the mat'
they HRT wash mat

Derivations typical of these examples are seen in (10).

(10)

	underlying		*spreading*		*downstep*		*simplification*
/ (ɔ̀)	é bó-á/	→	ě bóo	→	ě bóo	→	...è bóo
/(ghé)	é sù-á/	→	é sûú	→	é sú'ú	→	...é sú'ú

Once again the downstep rule simplifies a HLH pattern on a long vowel to H'H. In the future tenses, the hortative /é/ fuses with the preceding tense marker:

(11)

	underlying		*vowel-assimilation*		*downstep*
F_1/HRT/INC:	/sɨ̀ + é/	→	sèé	→	sèé
F_2/HRT/INC:	/lɔ̀ + é/	→	lêé	→	lé'é

The fused /sèé/ (labeled F_1/HRT) and /lé'é/ (labeled F_2/HRT) are thus seen to be straightforward results of their separate underlying morphemes. The resulting paradigms are as follows:

(12) a. ò sée bóo ghâm-fɔ̀ 'he should be hitting the mat' [later today]
he F_1/HRT hit mat

b. ghé sé'é bóo ghâm-fɔ̀ 'they should be hitting the mat'
they F_1/HRT hit mat

c. ò sée sú'ú ghâm-fɔ̀ 'he should be washing the mat'
he F_1/HRT wash mat

d. ghé sé'é sú'ú ghâm-fɔ̀ 'they should be washing the mat'
they F_1/HRT wash mat

(13) a. ò lé'é bóo ghâm-fɔ̀ 'he should be hitting the mat' [after today]
he F_2/HRT hit mat

b. ghé lé'é bóo ghâm-fɔ̀ 'they should be hitting the mat'
they F_2/HRT hit mat

c. ò lé'é sú'ú ghâm-fɔ̀ 'he should be washing the mat'
he F_2/HRT wash mat

d. ghé lé'é sú'ú ghâm-fɔ̀ 'they should be washing the mat'
they F_2/HRT wash mat

The above fused markers allow spreading except that a L tone cannot spread onto the already complex H'H in examples (k) and (m). Some typical derivations are:

(14)

	underlying		*spreading*		*downstep*		*simplification*
a.	/(ò) sèé bó-á/	→	sèé bóo	→	sèé bóo	→	...sée bóo
b.	/(ghé) sèé sù-á/	→	sêé sûú	→	sé'é sú'ú	→	...sé'é sú'ú
c.	/(ò) lé'é sù á/	→	lé'é sûú	→	lé'é sú'ú	→	...lé'é sú'ú

What is different about the above examples is that a LH contour on a long syllable has been simplified to H preceding another H tone as in the following rule:

(15) LH: → H: / ___ H

All of the previous examples of a LH on a long syllable have preceded a L tone, and have therefore not been simplified by the above rule.

Habitual aspect is also possible with the hortative mood with either present tense or F_2. Once again, habitual aspect with F_1 is not permitted as it represents too short a period of time in which to demonstrate a habit. Thus, we find the following examples:

(16) a. ò è bóo tsɨghá 'ghâm-fɔ̀ 'he should habitually be hitting the mat'
he HRT hit HAB mat

b. ò lé'é sú'ú tsɨghá 'ghâm-fɔ̀ 'he should habitually be washing the mat'
he F_2/HRT wash HAB mat

The following derivation of (16b) is representative of HAB with the hortative mood:

(17) / ò lɔ̀ é sù-á tsɨghà' fɨghàm`-fɔ́ / (underlying morphemes)
ò lée̋ sûú tsɨghâ fɨghâmfɔ̌ (spreading)
ghâmfɔ̌ (prefix-deletion)
ò lé'é sú'ú tsɨghá 'ghâmfɔ̌ (downstep)
[ò lé'é sú'ú tsɨghá 'ghâmfɔ̀] (simplification)

We see from the above examples that just as the HAB marker takes a floating H with P_2 in the indicative mood (where /-a/ is also H tone), so the hortative mood takes an additional floating H after the HAB marker to parallel the H on its /-a/. This seems to argue strongly for a link between H tones on /-a/ suffixes and following HAB markers and points to a probable verbal item as the historical source of the HAB marker (cf. /tsɨghà/ 'to pass').

A special usage of the /see/ marker may occur in the following examples:

(18) a. ò mɔ̀ sée 'bóo fɬghàm 'he should have been hitting the mat' [earlier today]
he P_1 F_1/HRT hit mat

b. ò sɬ sée 'bóo fɬghàm 'he will have to hit the mat' [later today]
he F_1 F_1/HRT hit mat

c. ò lɔ́ sée 'bóo fɬghàm 'he will have to hit the mat' [after today]
he F_2 F_1/HRT hit mat

Although one may be tempted to call the [sée] in the above sentences the F_1 hortative marker (as indicated), there are the following problems:

(i) The underlying tones on /see/ do not seem to be the LH of the F_1/HRT.

(ii) This marker cooccurs with other tense markers (e.g. the P_1 in (18a)).

(iii) The object is in its A-form, which is typical of the indicative mood.

(iv) The tones of the verb and object are typical of the indicative mood.

(v) The parallel form /lé'é/ 'F_2/HRT' does not appear to be able to replace the /see/ here as it can elsewhere.

The above examples seem to have two tense markers and two moods. The exact limits of such cooccurrences and their respective semantic components must await further investigation.

5.2. IMPERATIVE /'/ (IMP)

In Aghem, one can find true imperative constructions which mean almost the same thing as a parallel abbreviated hortative construction. Indeed, hortative constructions can even delete a second person subject pronoun like the imperative. The only true criteria, therefore, for distinguishing between parallel hortative and imperative constructions is the presence of the hortative marker /é/ and tone patterns which belong exclusively to the imperative. In this section, we will compare true imperatives with their similar abbreviated hortative parallels in order to get a feeling for the true syntactic imperative. Perhaps the closest parallel is in the following examples:

(19) a. é bóo 'be hitting!' c. bóò 'hit!'

b. é sú'ú 'be washing!' d. sùû 'wash!'

Although the meaning of the above sets is so close as to be almost synonymous, (19a, b) are abbreviated hortatives and (19c,d) true imperatives. The abbreviated hortative examples follow the derivations explained in 5.1.2 above. The tonal pattern of imperatives without an object is always as in (19c,d). It would appear that imperatives are formed by adding a HL pattern to the root tone of the verb. Due to the complex nature of the resulting LHL sequence on L tone verbs, only verb forms with more than a short vowel can occur in the imperative when an object is absent. Thus, with a verb like /bó/ 'to hit', one can form the imperative only on the longer B-form, with a verb like /kpàa/ 'to burn' one has two possibilities:

(20) kpàâ = kpɛ̀lɔ̂ 'burn (something)!'

Thus verb class 1 builds its imperative on the B form, verb class 2 on the A-form, and verb class 3 on the C- or E-form, as seen in the following table:

verb class	*form*	*imperative*	*gloss*
1	B	fwà?â	'work!'
1	B	bfìà	'dance!'
2	A	kɬìâ	'hang!'
2	A	fáŋâ	'tie (it)!'
3a	C	zɬìô	'rest!'
3a	C	lɛ́lô	'look!'
3b	C	yɔ̀sô	'help!'
3b	C	tsɔ́?sô	'rub yourself!'
3c	E	bfì	'sleep!'
3c	E	bìf	'travel!'

Since a L tone is usually added to the underlying /-a/ suffix in the indicative mood, it seems that the imperative examples above are derived by adding a H tone (IMP) between the root and the suffix, as below:

(21) a. /bɔ́' + à/ → bɔ́ɔ̀ 'hit!'
b. /sù' + à/ → sùû 'wash!'

The following sentences illustrate the difference between hortative and imperative parallels when an object is present:

(22) a. é bɔ́o ghâm-fɔ̀ 'hit the mat'
b. é sú'ú ghâm-fɔ̀ 'wash the mat'
c. bɔ́ ghâm-fɔ̀ 'hit the mat'
d. sù ghâm-fɔ̀ 'wash the mat'

Once again, abbreviated horatives (22a,b) follow exactly the tonal derivations described in 5.1.2 above. While the hortative mood can only delete a second person pronoun if the verb is in its incompletive B-form, the imperative mood only occurs with an object when the verb is in its completed A-form. Thus the two are in complementary distribution. The tone patterns of (22c,d) are harder to decipher due to the dropping of the object prefix. Is there a floating imperative H tone following the verb as we saw above (or preceeding the verb as with parallel negative examples--see section 7.1.1 below)? Substitution of noun objects from classes 1 and 9, where there is no noun prefix and hence no prefix deletion, indicate that the same tones are present with or without the object noun:

(23) a. bɔ́ 'bvɤ́ 'hit the dog!' b. sǔ 'bvɤ́ 'wash the dog'

In (23) the final L tone observed earlier in (21) conditions the downstep on the class 9 noun /bvɤ́'/ 'dog'.

Some doubt as to the underlying tonal consistency of the imperative mood is created by examples with HAB aspect as below:

(24) a. bɔ́o tsɬghà 'make a habit of hitting (it)!'
b. súù tsɬghà 'make a habit of washing (it)!'

In these examples we seem to have a floating H tone for the imperative, but it

precedes the verb. This does not come from the hortative mood, since the /é/ is absent and the underlying /-a/ is L tone (instead of H tone as with the hortative). We thus have a derivation as in (25):

(25) a. /'bó-à ts↓ghà/ → bóo ts↓ghà (by spreading)
b. /'sù-à ts↓ghà/ → súù ts↓ghà

It thus seems that we have a floating H tone associated with the imperative mood. This H always follows immediately after the verb root except with HAB aspect, where it immediately precedes.

5.3. COUNTERFACTUAL /fɛ̀'/ and /fì'/ (CFL_1 and CFL_2)

The counterfactual mood communicates that the statement which the sentence affirms is in reality not true. There are two different counterfactual markers in Aghem depending upon time depth. If the action referred to is relatively recent, the marker used is /fɛ̀'/ (labeled CFL_1), while a more distant action takes /fì'/ (labeled CFL_2). In a sentence beginning

(26) énáʔ mɔ̀ mɔ̀ʔ'ŋ́ké ñf'á ... 'Inah thought that...'
Inah P_2 thought that

one can terminate it in the following three ways:

(27) a. é lɔ́ bàʔtɔ́m ɔ̀dz↓ŋ '...he was a good chief' (and he was right because he was)
he$_i$ be chief good
b. é fɛ́ 'lɔ́ bàʔtɔ́m ɔ̀dz↓ŋ '...he was a good chief' (and he was wrong because he wasn't)
he$_i$ CFL_1 be chief good
c. é fí 'lɔ́ bàʔtɔ́m ɔ̀dz↓ŋ '...he was [long ago] a good chief' (and he was wrong because he wasn't)
he$_i$ CFL_2 be chief good

Typical derivations involving the counterfactual markers are given in (28):

(28) *underlying* *spreading* *downstep* *simplification*
a. /é fɛ̀' lɔ̀'/ → é fɛ̂ lɔ̂ → é fɛ́ 'lɔ̂ → é fɛ́ 'lɔ́ ...
b. /é fì' lɔ̀'/ → é fî lɔ̂ → é fí 'lɔ̂ → é fí 'lɔ́ ...

In (28) the floating H is responsible for triggering the downstep rule.

It is interesting that the counterfactual markers resemble so closely two of the demonstrative pronouns: /fɛ́/ 'here' and /fí/ 'there'. It seems likely that the counterfactual markers developed historically from demonstrative pronouns and that there is a close relationship between the spatial distance of the pronouns and the temporal distance of the corresponding counterfactual markers.

5.4. HYPOTHETICAL /tɔ́`/ (HYP)

The moods in section 5.1 through 5.3 were formed by adding something to the unmarked indicative base at the beginning of the verb phrase. The hypothetical mood (labeled HYP), on the other hand, is formed by adding /tɔ́`/ to the very beginning of the entire sentence, as seen in (29).

(29) a. tɔ́ ò bòó fɬghàm 'he could be hitting the mat'
HYP he hit mat

b. tɔ́ ò lɔ́ 'bóo fɬghàm 'he would be hitting the mat'
HYP he F_2 hit mat

c. tɔ́ ò mɔ̀ bóo tsfghá 'ffghâm 'he could have been habitually hitting the mat'
HYP he P_2 hit HAB mat

d. tɔ́ ò máà bó ghâm-fɔ̀ 'he *could* have hit the mat' [today]
HYP he P_1/FOC hit mat

e. *tɔ́ ò ḿ 'bó ghàm-fɔ̀ 'he *could* have just hit the mat'
HYP he P_0/FOC hit mat

The HYP marker /tɔ́ˋ/ can be added to any indicative verb form (except P_0, as the ungrammaticality of (29e) demonstrates) to transform it into the corresponding hypothetical verb form. The reason why this mood cannot cooccur with P_0 remains unclear as it can occur with both the present tense (as in (29a)) and with completive focus (as in (29d)). There thus seems to be some sort of semantic clash between the strong assertion of completed action with P_0 and the tentative flavor of hypothetical sentences.

5.5. OBLIGATIONAL /kí/ (OBL)

The obligational mood uses a slight variant of consecutive verb constructions to indicate that one is under an obligation to perform an action, as seen in (30).

(30) a. ò kì álé'bó ffghâm 'he has to hit the mat'
he have hit mat

b. ò mɔ̀ kí álésù ffghâm 'he had to wash the mat' [before today]
he P_2 have wash mat

It is interesting that the use of 'have' and the verb prefix /án + è-/ meaning 'to' so closely parallels English usage. This leads one to suspect that this construction might be a recent calque from English and not a reflection of traditional Aghem usage. See section 4.3.2 above for another case in which the verb /kí/ has been chosen as the basis of a semantic calque from Pidgin English.

6

CONSECUTIVES

6.0. INTRODUCTION

In this chapter we will examine consecutive verb phrases with special attention to their cooccurrence restrictions and segmental and tonal phenomena. Because the resulting construction is so greatly influenced by the presence or absence of a change in subject, these two types of constructions will be described separately.

6.1. WITH SAME SUBJECT

When the subject of both the main and consecutivized verb is identical, the subject of the second verb is deleted and the two verb phrases (VP's) become adjacent to each other, as in the formula in (1).

(1) $NP_0 - VP_0 - VP_1 - VP_2 - (\text{etc.})$

This kind of construction can only occur if each verb phrase refers back to the same identical subject. Constructions where the subject is not the same are described in 6.2 below.

An important constraint on consecutive verbs with the same subject is that they cannot diagree in completive/incompletive aspect. Both verbs must be either completive or incompletive, with mixing of forms being disallowed. For the convience of the reader, the verbs used in this section are repeated below in both their completive and incompletive forms in (2):

(2)	*completive*	*incompletive*		*completive*	*incompletive*	
	bó	boo	'hit'	nám	naa	'cook' (fufu)
	sù	suu	'wash'	zo̱m	zo̱o̱	'sing'
	kòo	koelɔ	'cook'	bɨn	bɨla	'dance'

6.1.1. *Without intervening objects.* When the initial VP does not contain an object, two verbs come in contact with each other. In the limited environment where both verbs are completive and both without an accompanying object, they are separated by a L tone /è-/ which resembles the infinitive prefix in everything but tone, as seen in (3):

(3) a. ò mɔ̀ zo̱m èbɨn 'she sang and danced' [before today]
she P_2 sing &dance

b. ò mɔ̀ zo̱m èkóo 'she sang and cooked'
she P_2 sing &cook

It will be noticed that the L tone verb root /kòo/ 'cook' is perturbed to H only above where an object is not present. This causes tonal neutralization with H tone verb roots and is not derivable by our current tone rules. The rest of the examples in this chapter do not contain the /è-/, nor are L tone verbs changed to H, and they are derivable by the regular tone rules. That the problem disappears when an object is present is seen below in (4).

(4) a. ò mɔ̀ zo̱m nám kɬbɛ́ 'she sang and cooked fufu' [before today]
she P_2 sing cook fufu

b. ò mɔ̀ zo̱m kòo kɬbɬghá 'she sang and cooked leopard'
she P_2 sing cook leopard

It should be noticed that there is no tone spreading between adjacent VP's. This lack of such a pervasive characteristic of Aghem tonology may reflect the presence and subsequent deletion of subjects and tense markers in the deep structure of the second VP. On the other hand, if such underlying elements are indeed present, they do *not* spread their tones onto the second verb root either. The result is that the verb root realizes its underlying tone on the surface. This tone is additionally spread onto the following object prefix, as in the following derivation:

(5) *underlying* *spreading* *simplification*

a. /(zo̱m) nám kɬbɛ́/ → nám kɬbɛ́ → ...nám kɬbɛ́

b. /(zo̱m) kòo kɬbɬghá/ → kòo kɬbɬghá → ...kòo kɬbɬghá

We saw in the preceding examples that the /è-/ disappeared when an object was present. The /è-/ also disappears when the verbs are incompletive aspect:

(6) a. ò mɔ̀ zo̱o̱ bɬlá 'she was singing and dancing' [before today]
she P_2 sing/INC dance/INC

b. ò mɔ̀ zo̱o̱ kòelɔ̀ 'she was singing and cooking'
she P_2 sing/INC cook/INC

Once again the /è-/ is gone and the verbs are found with their underlying verb root tones. The reader is referred to sections 7.1.2 and 7.2.1 below for the negatives /yɔ́/ and /kè'/ with consecutive verbs.

6.1.2. *With intervening objects.* The first verb of a consecutive VP construction may also have an object which may differ from the object of the second verb:

(7) a. ò mɔ̀ nám kɬbɛ́ bɔ́ fɬghâm 'she cooked fufu and hit the mat' [before today]
she P_2 cook fufu hit mat

b. ò mɔ̀ nám kɬbɛ́ sù fɬghàm 'she cooked fufu and washed the mat'
she P_2 cook fufu wash mat

Once again we see that there is no tone spreading between VP's, but the tone on the second verb spreads to the following object prefix in the normal fashion. It should be noted that the second VP has a unique structure. This is seen from the fact that it does not change with either tense or focus. Indeed, the consecutive object remains in its A-form even when the first object has been defocused into its B-form, as seen in (8):

(8) a. ò ń 'nám bɛ́-'kɔ́ bɔ́ fɬghâm 'she *has* cooked fufu and hit the mat'
she P_0/FOC cook fufu/OF hit mat

b. ò mâà nám bɛ́-'kɔ́ sù fɬghàm 'she *has* cooked fufu and washed the mat'
she P_1/FOC cook fufu/OF wash mat

One thing which can modify the second VP is a change in completive/incompletive aspect, since it must agree with the first VP, as seen in (9).

(9) a. ò nàá kɨbɛ́ bóo fɨghàm 'she is cooking fufu and hitting the
she cook/INC fufu hit/INC mat mat'

b. ò nàá kɨbɛ́ sùu fɨghàm 'she is cooking fufu and washing the
she cook/INC fufu wash/INC mat mat'

The above sentences show that the regular L tone of the /-a/ suffix is transferred onto the prefix of 'mat' by the normal tone rules. Once again, these incompletive consecutive VP's do not vary with a change of tense in the first VP.

6.2. WITH DIFFERENT SUBJECT

Special consecutive verb forms are used when the subject of the second VP is not identical to the subject of the first VP. As in the case of identical subjects, the second VP agrees in completive/incompletive aspect with the first VP. Differing from identical subject consecutives, however, the form of different subject consecutives depends, in addition, on the *tense* of the first verb.

6.2.1. *Completive aspect.* In this section the consecutive forms will be given for the P_0, P_1 and P_2 completive aspect past tenses. No difference in form is obtained in the consecutive VP when the first VP occurs in completive aspect focus.

The form this consecutive construction takes after a P_0 VP is seen in (10), where the subject of the second VP is a pronoun:

(10) ò nàm kɨbɛ́... 'she cooked fufu...' [just now]
she cooked fufu

yìa ǹ zɨ́	'... and I ate'	ghá? 'yía zɨ́	'... and we [excl] ate'
& I eat		*we & eat*	
wò vù zɨ́	'... and you ate'	sɛ́ 'yía zɨ́	'... and we [incl] ate'
you & eat		*we & eat*	
vù zɨ́	'... and he ate'	ghɛ́ 'yía zɨ́	'... and you [pl.] ate'
(he) & eat		*you & eat*	
yɛ́ zɨ́	'... and he [log] ate'	ghé 'yía zɨ́	'... and they ate'
he/LOG eat		*they & eat*	

The singular forms in the left hand column are irregular, as can be seen. (As also can be seen, there is a special logophoric pronoun form yɛ́ which is used as the subject of a consecutive clause. This pronoun refers back to the person reporting an event, e.g. 'he$_i$ said that she cooked fufu and he$_i$ ate'.) The plural pronouns in the right hand column are more regular and line up with the form noun subjects take, as seen from the representative noun classes in (11):

(11) a. ... wɛ́ vù zɨ́ '...and the child ate'
child & eat

b. ...nwɨ́n 'fía fɨ́ zɨ́ '...and the bird ate'
bird & SM eat

As seen most clearly in (11b), the noun is followed first by a consecutive marker '&' and then by the subject marker (SM). The form that this consecutive marker takes is shown in (12) for all of the noun classes:

(12)	*cl. 1*	vù	*4,5*	zɨ́	*10*	tɨ́a
	2,6	yɨ́a	*7*	kɨ́a	*11*	fɨ́a
	3,8	vú	*9*	zɨ̀	*12*	mìa

A comparison with Hyman (section 4.3) will reveal that these markers are probably related to the demonstrative 'that', the final -a of classes 2,6,7,10,11 and 12 being perhaps related to the relative marker /á/. Note that class 7 kɨ́a can optionally be pronounced [cɨ́a].

These same forms are used for consecutive VP's following the P_1 completive aspect. In this case, however, there is an optional repetition of the P_1 /mɔ̀/ between the consecutive marker and the verb, as seen in (13):

(13) ò mɔ̀ nàm kɨ́bɛ́, wɔ̀ vù (mɔ̀) zɨ́ 'she cooked fufu and you ate' [today]
she P_1 cook fufu you & P_1 eat

As seen in (14), if there is an object in the consecutive VP, it is realized in its B-form:

(14) a. ò nàm kɨ́bɛ́, yìa ǹ zɨ́ nâŋ-kɔ̀ 'she has cooked fufu and I have eaten a cocoyam'
she cook fufu and I eat cocoyam

b. ò mɔ̀ nàm kɨ́bɛ́, yìa ǹ mɔ̂ zɨ́ nâŋ-kɔ̀ 'she cooked fufu and I ate a cocoyam' [today]
she P_1 cook fufu and I P_1 eat cocoyam

The P_2 completive aspect consecutive forms corresponding to those used after P_0 and P_1 completive aspect are seen in (15).

(15) ò mɔ́ nám kɨ́bɛ́... 'she cooked fufu' [before today]
she P_2 cook fufu

mùɔ mɛ̂ zɨ́	'...and I ate'	ghà? mɛ̂ zɨ́	'...and we [excl] ate'
I & eat		*we & eat*	
wɔ̀ mɛ̂ zɨ́	'...and you ate'	sɛ̀ mɛ̂ zɨ́	'...and we [incl] ate'
you & eat		*we & eat*	
ò mɛ̂ zɨ́	'...and he ate'	ghɛ̀ mɛ̂ zɨ́	'...and you [pl.] ate'
he & eat		*you & eat*	
yɛ́ mɛ̂ zɨ́	'...and he [log]	ghɛ́ mɛ̂ zɨ́	'...and they ate'
he/LOG & eat	ate'	*they & eat*	

As can be seen, after the P_2, it is the CNS tense described earlier in section 3.7 that occurs in this case. Just as in the examples given in that section, the CNS marker /ˊmɛ̀/ becomes a homorganic nasal if the clause has an object:

(16) ò mɔ́ nám kɨ́bɛ́, mùɔ ń ˊzɨ́ kɨ́náŋ 'she cooked fufu and I ate a cocoyam' [before today]
she P_2 cook fufu I & eat cocoyam

As also seen in (16), the object of the CNS tense occurs in its A form, rather than in the B form observed after P_0 and P_1 in (14) above. Thus, the CNS tense, frequently used as a narrative tense describing sequential events in a story, is actually the form the consecutive takes after the remote past completive aspect. Its form with a subject noun is as illustrated in (17):

(17) ò mɔ́ nám kɨ́bɛ́, nwɨ́n ˊfɨ́ mɛ̂ zɨ́ 'she cooked fufu and the bird ate' [before today]
she P_2 cook fufu bird SM CNS eat

6.2.2. *Incompletive aspect.* The incompletive counterparts of the P_0, P_1 and P_2 above are identical except that class 1 and 2 verbs take their B form, as seen below:

(18) a. ò nàá kɬbɛ́, yìa ǹ zɬ'á 'she is cooking fufu and I am eating'
she cook/INC fufu & I eat/INC

b. ò mɔ̀ nàá kɬbɛ́, yìa ǹ (mɔ̂) zɬ'á 'she was cooking fufu and I was eating' [today]
she P_1 cook/INC fufu & I P_1 eat/INC

c. ò mɔ̀ náa kɬbɛ́, mùɔ ń zɬa 'she was cooking fufu and I was eating' [before today]
she P_2 cook/INC fufu I CNS eat/INC

The only unexpected thing that arises in these forms is the absence of a downstep between the CNS marker and a H tone verb, when the latter is marked for incompletive aspect. A comparison of CNS tenses is seen in (19):

(19) a. wò ḿ 'bó fɬghâm '& you hit the mat' [before today]
... *you CNS hit mat*

b. wò ń sù fɬghâm '& you washed the mat'
... *you CNS wash mat*

c. wò ḿ bóo fɬghâm '& you were hitting the mat'
... *you CNS hit/INC mat*

d. wò ń súù fɬghâm '& you were washing the mat'
... *you CNS wash/INC mat*

In (19a) the H tone verb /bó/ 'hit' is realized on a downstep, while in (19b) the L tone verb /sù/ 'wash' is realized as a L, i.e. without spreading of the H of the CNS marker onto it. This was accounted for in section 3.7 by saying that the CNS marker has a HL contour, in this case /Ń̀/, since there is an object. In the corresponding incompletive aspect forms in (19c,d), however, there is no evidence for such a floating L tone. In (19c) the B-form /bó+á/ isn't realized on a downstep; and in (19d), the B-form /sù+á/ allows the H of the CNS marker to spread onto it. Thus, the CNS marker is simply /Ń/ when the verb is in incompletive aspect.

The corresponding present and past habitual forms of (18) are given in (20).

(20) a. ò nàá tsɬghà kɬbɛ́, mùɔ ń zɬ'á 'she cooks fufu and I eat'
she cook/INC HAB fufu I CNS eat/INC

b. ò mɔ̀ náa tsɬghá 'kɬbɛ́, mùɔ ń zɬa 'she used to cook fufu and I used to eat'
she P_2 cook/INC HAB fufu I CNS eat/INC

It is not surprising that the past habitual takes the same CNS tense marking as the P_2 incompletive aspect marking seen in (18c). Both involve continuous action in the remote past. However, it is somewhat surprising that the present habitual takes the same CNS tense, as seen in (20a), since it is based on the present tense, which uses the other set of consecutive markers (as in (18a)). What this seems to imply is that the CNS /'mè/ ~ /Ń̀/ indicates either habitual or remote past sequential action.

The future tenses are redundantly incompletive in aspect and follow the first set of consecutive markers as illustrated for the present and P_1 incompletive aspect in (18a,b) above. The only difference is the presence of the future marker just before the verb:

(21) a. ò sɨ̀ nàá kɨ̀bɛ́, yìa ǹ sɨ̀ zɨ́'á 'she will cook fufu and I will eat' [today]
she F_1 cook/INC fufu I & F_1 eat/INC

b. ò lɔ́ 'náa kɨ̀bɛ́, yìa ǹ lɔ́ zɨ́'á 'she will cook fufu and I will eat' [after today]
she F_2 cook/INC fufu I & F_2 eat/INC

6.2.3. *Other consecutive markers.* There is at least one other consecutive marker /àŋ/ which sometimes occurs with a consecutive VP with a change of subject from the main VP. This conjunction may be a borrowing from English *and*, and has not been adequately studied. In the following final examples, it seems also to condition a suffix (underlying /-a/?) on the P_1 consecutive marker /və̀/, when this latter is used after a P_2 VP. More work is needed in this area of the grammar.

(22) a. ò mɔ̀ nàm kɨ́bɛ́, àŋ wò və̀ zɨ́ 'she cooked fufu and you ate' [today]
she P_1 cook fufu and you & eat

b. ò mɔ̀ nám kɨ́bɛ́, àŋ wò və̀ɔ zɨ́ 'she cooked fufu and you ate' [before today]
she P_2 cook fufu and you & eat

7

NEGATION

7.0. INTRODUCTION

There are several different negative morphemes used in Aghem. Each of them differs in segmental phonemes, tonal phenomena, grammatical class, position in the sentence and the precise semantic elements being negated. In addition, negative morphemes differ with respect to whether or not they trigger defocusing of the object. These words will therefore be described below as either focused negation (which triggers defocusing of the object to its B-form) or non-focused negation, (where the object is left in its A-form).

7.1. FOCUSED NEGATION

The following completive and incompletive negatives have in common that they always trigger defocusing of the object. One can therefore make the generalization that each of these negative markers is "focused".

7.1.1. *Completive* /kà/ *(NEG).* The underlying completive negative marker is /kà/. This marker occurs in indicative main clauses, the hortative, imperative, and hypothetical moods as described in the following sections.

7.1.1.1. *With indicative mood* /kà/. Since the completive negative marker /kà/ only cooccurs with (main clause) completive verb forms, it does not occur with future tenses in the indicative mood. The following table shows how the completive negative correlates with the various focused and non-focused tense-aspect markers in corresponding affirmative forms:

COMPLETIVE TENSE-ASPECT MARKERS

	AFFIRMATIVE		*NEGATIVE*	
	non-focused aspect	*focused aspect*	*non-focused aspect*	*focused aspect*
P_0	Ø	ǹ̀	kà	kàǹ
P_1	mɔ̀	máà		kàa
P_2	̀mɔ́	má'á	kàá	

The above negative forms show that Aghem has neutralized tense-focus contrasts in two different directions. First, in negative P_2 sentences, there is no focused/non-focused aspect distinction. This distinction is retained, however, in the P_0 and P_1 tenses where the non-focused forms are neutralized, as seen in (1).

(1) a. ò kà bó ghâm-fɔ̀ — 'he has not hit the mat' = 'he did not hit the mat' [earlier today]
he NEG hit mat

b. ghé kâ bó ghâm-fɔ̀ — 'they have not hit the mat' = 'they did not hit the mat'
they NEG hit mat

c. ò kà sù ghâm-fɔ̀ — 'he has not washed the mat' = 'they did not wash the mat'
he NEG wash mat

d. ghé kâ sù ghâm-fɔ̀ 'they have not washed the mat' = 'the did not wash the mat'
they NEG wash mat

The tones realized on the verb roots in the preceding examples create some problems for our tone rules. One could posit a floating L tone before the L tone verb and a floating H tone before the H tone verb just for these constructions. This seems to be a rather ad hoc solution since the tone is not even the same tone. A second solution, which we shall adopt here, is that just in this environment, the normal tone spreading processes are blocked between the NEG /kà/ and the verb, yielding a derivation like the following:

(2)

	underlying		*spreading*		*prefix-deletion*
a.	/ (ò) kà bó fǂghàm`-fɔ́/	→	(kà) bó fǂghâmfɔ̌	→	bó ghâmfɔ̌
b.	/(ghé) kà sù fǂghàm`-fɔ́/	→	(kâ) sù fǂghâmfɔ̌	→	sù ghâmfɔ̌

→ *(by simplification)* ...bó ghâmfɔ̀
→ ...sù ghâmfɔ̀

Since the L tone of the /kà/ is prevented from spreading onto the H tone verb, the problem of later simplifying [bǒ] to [bó] is side-stepped.

A paradigm that does not have the above difficulty but follows all of the normal tone rules including spreading is the following:

(3) a. ò káń bó ghâm-fɔ̀ 'he *hasn't yet* hit the mat'
he P_o/NEG/FOC hit mat

b. ghé ká'ń bó ghâm-fɔ̀ 'they *haven't yet* hit the mat'
they P_o/NEG/FOC hit mat

c. ò káń sû ghâm-fɔ̀ 'he *hasn't yet* washed the mat'
he P_o/NEG/FOC wash mat

d. ghé ká'ń sû ghâm-fɔ̀ 'they *haven't yet* washed the mat'
they P_o/NEG/FOC wash mat

As the English gloss indicates, these focused sentences differ from their non-focused counterparts in (1) in that they signal that the action has not yet been completed. They seem to imply that the speaker expects that the action will soon be accomplished but that the time is not yet. The underlying marker /kàń/ (P_o/NEG/FOC) seems to be a fusion of the basic morphemes /kà/ and /Ń`/ except that the floating L after the $P_o$ marker /Ń`/ is not present. Perhaps, then, this floating L is a mark of the *affirmative* P_o/FOC. Recognizing underlying /kà + ń/, typical derivations are as seen in (4).

(4)

	underlying		*spreading*		*downstep*		*simplification*
a.	/(ghé) kàń bó/	→	kâń bó	→	ká'ń bó	→	...ká'ń bó...
b.	/ (ò) kàń sù/	→	kàń sû	→	kàń sû	→	...káń sû...

The above examples are significant in that the fused /kàń/ acts like a single long syllable with respect to the tone rules. First, it simplifies to H'H, which could not occur on a short syllable. Second, it simplifies to a long H: before H. We have seen that a rising LH tone on a long vowel simplifies in this manner (section 5.1.2), while the same LH sequence on a short vowel simplifies to L before H

(section 3.1). The object tones were left out of the above derivation in that they are derived as in (2) above.

As seen in the table at the beginning of this section, the marker for P_1/NEG/FOC is /kàa/, as seen in the following examples:

(5) a. ò kàa bó ghâm-fɔ̀ 'he *did not* hit the mat' [today]
he P_1/NEG/FOC hit mat

b. ghé kâa bó ghâm-fɔ̀ 'they *did not* hit the mat'
they P_1/NEG/FOC hit mat

c. ò kàa sù ghâm-fɔ̀ 'he *did not* wash the mat'
he P_1/NEG/FOC wash mat

d. ghé káà sù ghâm-fɔ̀ 'they *did not* wash the mat'
they P_1/NEG/FOC wash mat

It should be noted that the examples in (5) differ from those in (1) only in the length of the vowel on the negative marker. Even the tonal patterns are identical. The derivations for P_1/NEG/FOC sentences are thus the same as for P_1/NEG except for the underlying length observed on the vowel of the NEG marker.

As mentioned at the beginning of this section, the distinction between focused and non-focused aspect is neutralized with the P_2 tense, as the following examples in (6) illustrate.

(6) a. ò káa bó ghâm-fɔ̀ 'he did not hit the mat'
he P_2/NEG hit mat

b. ghé ká'á bó ghâm-fɔ̀ 'they did not hit the mat'
they P_2/NEG hit mat

c. ò káa sû ghâm-fɔ̀ 'he did not wash the mat'
he P_2/NEG wash mat

d. ghé ká'á sû ghâm-fɔ̀ 'they did not wash the mat'
they P_2/NEG wash mat

The above neutralized P_2 examples differ from the focused P_1 examples only with regards to tone. The tones on the two different long /kaa/'s are derived as follows:

(7)

	underlying		*spreading*		*downstep*		*simplification*
a.	/(ghé) kàa bó/	→	káà bǒ	→	káà bǒ	→	...káà bó...
b.	/ (ò) kàa sù/	→	kàa sù	→	kàa sù	→	...kàa sù...
c.	/(ghé) kàá bó/	→	kâá bó	→	ká'á bó	→	...ká'á bó...
d.	/ (ò) kàá sù/	→	kàá sû	→	kàá sû	→	...káa sû...

The consecutive tense (CNS) and consecutive verbs, both in the indicative mood, take a completive negative marker /kè'/ described in 7.2.1 below.

7.1.1.2. *With hortative mood* /'ká/. The horative mood is the only mood which tonally modifies the completive negative marker /kà/. In the hortative mood, this marker is /'ká/ with both a preceding floating H tone as well as a H tone on the syllable itself. This marker is used with both completive (section 5.1.1) and incompletive (section 5.1.2) variants. Negation in the hortative mood thus differs

significantly from the indicative mood, where /kà/ is limited to completive forms. The following examples show /'ká/ with a variety of completive hortatives:

(8) a. ò ká bó ghâm-fɔ̀ 'he shouldn't hit the mat' [now]
he NEG/HRT hit mat

b. ghé ká bó ghâm-fɔ̀ 'they shouldn't hit the mat'
they NEG/HRT hit mat

c. ò ká sû ghâm-fɔ̀ 'he shouldn't wash the mat'
he NEG/HRT wash mat

d. ghé ká sû ghâm-fɔ̀ 'they shouldn't wash the mat'
they NEG/HRT wash mat

(9) a. ò ká sɨ́ bó ghâm-fɔ̀ 'he shouldn't hit the mat' [later today]
he NEG/HRT F_1 hit mat

b. ghé ká sɨ́ sû ghâm-fɔ̀ 'they shouldn't wash the mat'
they NEG/HRT F_1 wash mat

(10) a. ò ká lɔ́ bó ghâm-fɔ̀ 'he shouldn't hit the mat' [after today]
he NEG/HRT F_2 hit mat

b. ghé ká lɔ́ sû ghâm-fɔ̀ 'they shouldn't wash the mat'
they NEG/HRT F_2 wash mat

The above sentences demonstrate that the regular H tone coming from the underlying /é/ hortative marker is always present in addition to the H tone modification of the NEG marker. Typical derivations from the above groups are seen in (11).

(11)

	underlying		*spreading*		*downstep*		*/e/-deletion*
a.	/(ò) 'ká é sù/	→	ká é sû	→	é sû	→	...sû...
b.	/(ò) 'ká sɨ́ é bó/	→	ká sɨ́ ě bó	→	sɨ́ ě bó	→	...sɨ́ bó...
c.	/(ò) 'ká lɔ́ é sù/	→	ká lɔ́ ě sû	→	lɔ́'é sû	→	...lɔ́ sû...

Once again, the downstep feature on the /e/ drops with the vowel.

The negative /'ká/ also cooccurs with incompletive hortatives. When the incompletive hortative is in the present tense, the hortative marker /é/ may or may not fuse with the adjacent negative /'ká/ as in the example in (12).

(12) a. ò ká é bóo ghâm-fɔ̀ 'he shouldn't be hitting the mat' [now]
he NEG HRT hit/INC mat

= ò kée bóo ghâm-fɔ̀
he NEG/HRT hit/INC mat

We complete this present tense paradigm below with all the examples in their full forms, pointing out that it is always possible for ka+e to fuse to kee:

(12) b. ghé ká é bóo ghâm-fɔ̀ 'they shouldn't be hitting the mat'
they NEG HRT hit/INC mat

c. ò ká é sú'ú ghâm-fɔ̀ 'he shouldn't be washing the mat'
he NEG HRT wash/INC mat

d. ghé ká é sú'ú ghâm-fɔ̀ 'they shouldn't be washing the mat'
they NEG HRT wash/INC mat

In future hortatives, the HRT marker /é/ obligatorily fuses with the preceding F_1 or F_2 marker. The fused future HRT marker directly follows /ˊká/:

(13) a. ò ká sé'é bóo ghâm-fɔ̀ 'he shouldn't be hitting the mat' [later today]
he NEG F_1/HRT hit/INC mat

b. ghé ká sé'é sú'ú ghâm-fɔ̀ 'they shouldn't be washing the mat'
they NEG F_1/HRT wash/INC mat

(14) a. ò ká lé'é bóo ghâm-fɔ̀ 'he shouldn't be hitting the mat' [after today]
he NEG F_2/HRT hit/INC mat

b. ghé ká lé'é sú'ú ghâm-fɔ̀ 'they shouldn't be washing the mat'
they NEG F_2/HRT wash/INC mat

Typical derivations are provided below in (15).

(15) *underlying* *spreading* *downstep*

a. /(ò) ˊká é sù-á/ → ká é sûú → ...ká é sú'ú...

b. /(ò) ˊká sɨ́ é bó-á/ → ká sêé bóo → ...ká sé'é bóo...

c. /(ò) ˊká lɔ̀ é sù-á/ → ká léě sûú → ...ká lé'é sú'ú...

The above derivations show the importance of H tone with the hortative mood as they all contain a H tone /ˊká/, a H tone /e/ and a H tone /-á/. This plurality of H tone morphemes probably points back to an earlier period when a more general H tone hortative marker attached itself to serial verbs which then developed into the modern Aghem hortative markers mentioned above.

7.1.1.3. *With imperative mood* /kà/. The imperative negative is /kà/ in contrast to the H tone /ˊká/ of the hortative mood described in the preceding section. We saw some evidence in 5.2 for a floating H tone imperative marker preceding the verb. These two facts account for the following examples in a straightforward way:

(16) a. kà bó 'don't hit (it)!'
NEG hit

b. kà sû 'don't wash (it)!'
NEG wash

c. kà bó ghâm-fɔ̀ 'don't hit the mat!'
NEG hit mat

d. kà sû ghâm-fɔ̀ 'don't wash the mat!'
NEG wash mat

While one might be tempted to see the above floating H tone marker as the hortative /é/, where the vowel always drops with completive verb forms, this is not the case because we saw in the preceding section that the /é/ with completive verbs goes with the H tone negative /ˊká/. We thus have our L tone /kà/ with the imperative mood, with the following derivation:

(17) /kà ˊ sù/ → kà sû

This shows that the imperative mood in Aghem is not just the hortative mood with a deleted second person subject, but a separate mood in its own right.

7.1.1.4. *With hypothetical mood* /kà/. Since the hypothetical mood (HYP) is formed by adding /tɔ̀ / to the beginning of the corresponding indicative sentence (see section 5.4), it follows the indicative pattern of negation, as seen in (18).

(18) tɔ́ ò káa sû ghâm-fɔ̀ 'he shouldn't have washed the mat'
HYP he P_2/NEG wash mat

7.1.2. *Incompletive /yɔ́/ (NEG).* In the indicative mood, the completive negative marker /kà/ is paralleled by the incompletive negative marker /yɔ́/. Not only are these two negative markers very different in their segments and tone, they are also very different with respect to their position within the verb phrase. The completive negative /kà/ occurs before the verb, while its incompletive counterpart /yɔ́/ occurs after the verb. Since the /yɔ́/ is a focused negative marker, it always requires that the object be in its B-form. This defocusing of the object with the absence of the object prefix is paralleled by a loss on the surface of the underlying H tone of /yɔ́/ when it is preceded by a L tone, as seen in (19c,d).

(19) a. ò bòó 'yɔ́ ghâm-fɔ̀ 'he is not hitting the mat'
he hit/INC NEG mat

b. ghé bóo 'yɔ́ ghâm-fɔ̀ 'they are not hitting the mat'
they hit/INC NEG mat

c. ò sùu yɔ̀ ghâm-fɔ̀ 'he is not washing the mat'
he wash/INC NEG mat

d. ghé súù yɔ̀ ghâm-fɔ̀ 'they are not washing the mat'
they wash/INC NEG mat

The tonal derivations of (19a) and (19c) are given in (20).

(20)	/ò bó-à yɔ́ fɬ-ghàm`-fɔ́/	/ò sù-à yɔ́ fɬ-ghàm`-fɔ́/	*(underlying forms)*
	ò bòó yɔ̌ fɬghâmfɔ̌	ò sùu yɔ̌ fɬghâmfɔ̌	*(spreading)*
	ò bòó yɔ̌ ghâmfɔ̌	ò sùu yɔ̌ ghâmfɔ̌	*(prefix-deletion)*
	ò bòó 'yɔ́ ghâmfɔ̌	ò sùu yɔ̌ ghâmfɔ̌	*(downstep)*
	[ò bòó 'yɔ́ ghâmfɔ̀]	[ò sùu yɔ̀ ghâmfɔ̀]	*(simplification)*

These derivations show a clear example of the crucial ordering of the downstep rule before the simplification process. If the order of these rules had been reversed, the [yɔ̌] in the left hand column would have simplified to [yɔ̀] and the downstep rule would not have applied, giving an incorrect output. The same kind of derivations are typical of other sentences in the indicative mood, as the following characteristic sentences indicate:

(21) a. ghé bóo tsɬghà yɔ̀ ghâm-fɔ̀ 'they do not habitually hit the mat'
they hit/INC HAB NEG mat

b. ghé bóo tsɬghà dzɬ yɔ̀ ghâm-fɔ̀ 'they *do not either* habitually hit the mat'
they hit/INC HAB NEG NEG mat

c. ghé sɬ sùu yɔ̀ ghâm-fɔ̀ 'they will not wash the mat' [later today]
they F_1 wash/INC NEG mat

d. ò lɔ́ 'bóo 'yɔ́ ghâm-fɔ̀ 'they will not hit the mat' [after today]
he F_2 hit/INC NEG mat

e. ò lɔ́ 'bóo dzɬ yɔ̀ ghâm-fɔ̀ — 'he will *not either* hit the mat' [after today]
he P_2 hit/INC NEG NEG mat

f. ghé mɔ̂ bòó 'yɔ́ ghâm-fɔ̀ — 'they were not hitting the mat' [earlier today]
they P_1 hit/INC NEG mat

g. ò mɔ̀ sú'ú tsɬghá 'yɔ́ ghâm-fɔ̀ — 'he did not habitually wash the mat'
he P_2 wash/INC HAB NEG mat

h. ghé mɔ̀ bóo yɔ́ ghâm-fɔ̀ — 'they were not hitting the mat' [before today]
they P_2 hit/INC NEG mat

It must be remembered that in the P_2 tense, the incompletive verb suffix /-a/ takes a H tone instead of the more usual L tone. This H tone is responsible for the lack of downstep on the [yɔ́] in (21h). (See sections 4.1.3 and 7.2.4 for detailed explanations of /tsɬghà/ and /dzɬ/, respectively.)

In the hortative mood, the negative /yɔ́/ may only cooccur with incompletive sentences, while the negative /'ká/ cooccurs with both incompletive and completive aspects. This results in two ways to negate an incompletive hortative sentence, as summarized in the following table:

(22)

		/ka/	/yɔ/
INDICATIVE:	*completive*	+	-
	incompletive	-	+
HORTATIVE:	*completive*	+	-
	incompletive	+	+

Examples of the /yɔ́/ negative with the incompletive hortative are given in (23).

(23) a. ò è sú'ú yɔ́ 'ghâm-fɔ̀ — 'he is probably not washing the mat' [now]
he HRT wash/INC NEG mat

b. ghé é sú'ú tsɬghá 'yɔ́ ghâm-fɔ̀ — 'they probably do not habitually wash the mat'
they HRT wash/INC HAB NEG mat

c. ò sée bóo yɔ́ ghâm-fɔ̀ — 'he probably will not hit the mat' [later today]
he F_1/HRT hit/INC NEG mat

d. ghé lé'é bóo tsɬghá 'yɔ́ ghâm-fɔ̀ — 'they will probably not habitually hit the mat'
they F_2/HRT hit/INC HAB NEG mat

Since the hypothetical mood (HYP) is built upon the indicative, it can occur with /yɔ́/ whenever the verb form is incompletive. The resulting sentences are as regular as their indicative counterparts, as the following examples show:

(24) a. tɔ́ ò mɔ̀ bòó 'yɔ́ ghâm-fɔ̀ — 'he couldn't have been hitting the mat' [earlier today]
HYP he P_1 hit/INC NEG mat

b. tɔ́ ò mɔ̀ sùu yɔ̀ ghâm-fɔ̀ — 'he couldn't have been washing the mat' [earlier today]
HYP he P_1 wash/INC NEG mat

c. tɔ́ ò mɔ̀ sú'ú tsɬghá 'yɔ́ ghâm-fɔ̀ — 'he couldn't have been habitually washing the mat'
HYP he P_2 wash/INC HAB NEG mat

The negative /yɔ́/ also occurs with consecutive VP's when they are incompletive, as seen in (25).

(25) a. ò nàá kɬbɛ́ bóo 'yɔ́ ghâm-fɔ̀ 'she is cooking fufu and not hitting the mat'
she cook/INC fufu hit/INC NEG mat

b. ò nàá kɬbɛ́ sùu yɔ̀ ghâm-fɔ̀ 'she is cooking fufu and not washing the mat'
she cook/INC fufu wash/INC NEG mat

c. ò mɔ̀ nàá kɬbɛ́ bóo 'yɔ́ ghâm-fɔ̀ 'she was cooking fufu and not hitting the mat' [today]
she P_1 cook/INC fufu hit/INC NEG mat

d. ò mɔ̀ náa kɬbɛ́ sùu yɔ̀ ghâm-fɔ̀ 'she was cooking fufu and not washing the mat' [before today]
she P_2 cook/INC fufu wash/INC NEG mat

As can be seen, the tonal properties in the second (consecutive) VP do not change along with the various tenses. Typical derivations of the negative incompletive consecutive VP are given in (26).

(26)

/bó-à yɔ́ fɬ-ghàm`-fɔ́/	/sù-à yɔ́ fɬ-ghàm`-fɔ́/	*(underlying forms)*
bóo yɔ̌ fɬghâmfɔ̌	sùu yɔ̌ fɬghâmfɔ̌	*(spreading)*
bóo yɔ̌ ghâmfɔ̌	sùu yɔ̌ ghâmfɔ̌	*(prefix-deletion)*
bóo 'yɔ́ ghâmfɔ̌	sùu yɔ̌ ghâmfɔ̌	*(downstep)*
[bóo 'yɔ́ ghâmfɔ̀]	[sùu yɔ̀ ghâmfɔ̀]	*(simplification)*

The above rules demonstrate once again that the downstep rule must precede the simplification rule. They also show that the second consecutive VP is separate from the first VP and tones do not spread across the boundary between them. The following examples show that the same tonal processes operate in the second VP even when the first has no object present:

(27) a. ò sɬ zɔ̰́ bɬlɛ́ 'yɔ́ 'she will sing and not dance' [later today]
she F_1 sing/INC dance/INC NEG

b. ò mɔ̀ zɔ̰́ náa 'yɔ́ bɛ́-'kɔ́ 'she was singing and not cooking fufu' [earlier today]
she P_1 sing/INC cook/INC NEG fufu

It should be noticed from (27b) that when the consecutive verb is incompletive, the negative /yɔ́/ is used and the object is defocused in the normal way. This contrasts with consecutive verbs that are completive, which take the negative /kɛ̀'/ and leave the object in its A-form (see 7.2.1 below).

7.1.3. *Negative copula /yɔ̀'/ (NEG/be).* The negative copula /yɔ̀'/ 'not be' differs from the incompletive negative /yɔ́/ in several respects, the most noticeable of which is that the underlying tones are L with a floating H. While these two morphemes are distinct in modern Aghem, their segmental and semantic similarities suggest that the incompletive negative /yɔ́/ developed from the negative copula /yɔ̀'/ in the not-too-distant past.

Sentences with the negative copula /yɔ̀'/ are almost identical to their positive counterparts with the postive copula /lɔ̀'/. The only observable difference is that the object has been defocused into its B-form (since the negative copula is a focused negative) and the change of initial consonant from /l/ to /y/, as seen below:

(28) a. ò lɔ̀ kɬkɔ̰̀ 'he is a servant'
he be servant

b. ò yɔ̀ kɔ̰̀-kɔ̀ 'he is not a servant'
he NEG/be servant

c. ghé lɔ́ 'ókɔ̰̀ 'they are servants'
they be servants

d. ghé yɔ́ 'kɔ̰̀-wɔ̀ 'they are not servants'
they NEG/be servants

It is not too difficult to see the form of the negative copula /yɔ̀'/ as the fusion of the positive copula /lɔ̀'/ with the regular incompletive negative /yɔ́/, as derived in (29).

(29) *underlying* *lɔ-deletion* *simplification*
/lɔ̀'/ + /yɔ́/ → ` 'yɔ́ → yɔ̀'

Though the above derivation may reflect the historical processes involved, it seems best to talk of a synchronic negative copula with the form /yɔ̀'/. Typical derivations are given in (30).

(30)

/ò yɔ̀' kɬ-kɔ̰̀-kɔ́/	/ghé yɔ̀' ó-kɔ̰̀-wɔ́/	*(underlying forms)*
ò yɔ̀ kɬkɔ̰̀kɔ̌	ghé yɔ̂ ókɔ̰̂wɔ̌	*(spreading)*
ò yɔ̀ kɔ̰̀kɔ̌	ghé yɔ̂ kɔ̰̂wɔ̌	*(prefix-deletion)*
ò yɔ̀ kɔ̰̀kɔ̌	ghé yɔ́ 'kɔ̰̂wɔ̌	*(downstep)*
[ò yɔ̀ kɔ̰̀kɔ̀]	[ghé yɔ́ 'kɔ̰̂wɔ̀]	*(simplification)*

These derivations are representative of the many kinds of sentences with the negative copula, further examples of which follow in (31).

(31) a. ò yɔ̀ tsɬghá kɔ̰̀-kɔ̀ 'he is not always a servant'
he NEG/be HAB servant

b. ghé yɔ́ 'tsɬghá kɔ̰̀-wɔ̀ 'they are not always servants'
they NEG/be HAB servants

c. ò yɔ̀ dzɬ̀ kɔ̰̀-kɔ̀ 'he *is not either* a servant'
he NEG/be NEG servant

d. ghé yɔ́ 'dzɬ̀ kɔ̰̀-wɔ̀ 'they *are not either* servants'
they NEG/be NEG servants

e. ghé mɔ̀ yɔ́ 'tsɬghá dzɬ̀ kɔ̰̀-wɔ̀ 'they *were not either* always servants'
they P2 NEG/be HAB NEG servants

It should be noted that whereas the NEG marker /dzɬ̀/ (marking contrastive emphasis--see section 7.2.4) always *precedes* the NEG marker /yɔ́/, it *follows* the negative copula /yɔ̀'/, as seen in (31c-e) above. This change of position also argues for the separate nature of the modern Aghem negative copula.

7.2. NON-FOCUSED NEGATION

Whereas the preceding sections have described the main negative markers, each of which triggers defocusing of the object, the present section describes a

few negative markers which do not trigger this process. These markers differ in their grammatical class, position in the sentence, and the semantic element negated.

7.2.1. *Completive negatives* /kè'/ *and* /tákè'/. In addition to the forms seen in section 7.1.1, where the completive negative marker was /kà/, two related completive negative markers /kè'/ and /tákè'/ are found in non-main clauses. As will be seen in the examples illustrating the use of these markers, the object of clauses negated by /kè'/ and /tákè'/ remains in A-form.

7.2.1.1. *Completive consecutive* /kè'/ *(NEG).* The same-subject consecutive construction was discussed and illustrated in section 6.1. Its marker in the affirmative was seen to be Ø. As seen in the following examples, the consecutive VP is marked by /kè'/ in the corresponding negative:

(32) a. ò nàm kɬbé kè bó fɬghâm
he cook fufu NEG hit mat
'he has cooked fufu, not hit the mat'

b. ò nàm kɬbé kè sû fɬghàm
he cook fufu NEG wash mat
'he has cooked fufu, not washed the mat'

c. ò ń 'nám bé-'kó kè bó fɬghâm
he P_0/FOC cook fufu NEG hit mat
'he *has* cooked fufu, not hit the mat'

d. ò ń 'nám bé-'kó kè sû fɬghàm
he P_0/FOC cook fufu NEG wash mat
'he *has* cooked fufu, not washed the mat'

In (32) we see that the tonal properties of the consecutive VP are not changed according to the tense or focus of the initial VP. It is crucial here that the object of the consecutive VP occurs in its focused A-form. This lack of object-defocusing is characteristic of the negative /kè'/ and not of the consecutive VP construction, where /yó/ *does* defocus the object in the corresponding incompletive negative consecutives, as seen in (33).

(33) a. ò nàá kɬbé bóo 'yó ghâm-fò
he cook/INC fufu hit/INC NEG mat
'he is cooking fufu, not hitting the mat'

b. ò nàá kɬbé sùu yò ghâm-fò
he cook/INC fufu wash/INC NEG mat
'he is cooking fufu, not washing the mat'

Tonal derivations of the completive consecutive negatives in (32) are given in (34).

(34)

	underlying		*spreading*		*simplification*$_1$		*simplification*$_2$
a.	/(kè') bó fɬghàm̀/	→	bó fɬghâm	→	bó fɬghâm	→	...bó fɬghâm...
b.	/(kè') sù fɬghàm̀/	→	sû fɬghâm	→	sû fɬghâm	→	...sû fɬghàm...

The above consecutive VP's remain the same even when the first VP or both VP's lack an object, as seen in (35).

(35) a. ò mɔ̀ zɔ́m kè bɬn
she P_2 sing NEG dance
'she sang and didn't dance' [before today]

b. ò sɬ zɔ́m kè nám kɬbé
she F_1/HRT sing NEG cook fufu
'she should sing and not cook fufu' [today]

Though the consecutive negative /kè'/ occurs before the verb like the normal completive negative /kà/, it differs from /kà/ in that it never triggers defocusing

of the object. It is interesting that this /kè'/, which is used with completive consecutive VP's having the same subject as the main VP, is also used with the consecutive tense (CNS). As was seen in section 3.7, the CNS marker is /'mè/ if the verb has no object, but is simplified to /ǹ/ if there is an object. As seen in (36), the form of the negative CNS is /ǹkè'/, whether an object is present or not.

(36) a. ò ǹ kè bɔ́ fɨghâm 'he then didn't hit the mat'
he CNS NEG hit mat

b. ò ǹ kè sû fɨghàm 'he then didn't wash the mat'
he CNS NEG wash mat

c. ò ǹ kè bɔ́ 'he then didn't hit (it)'
he CNS NEG hit

d. ò ǹ kè sû 'he then didn't wash (it)'
he CNS NEG wash

As should be recalled from section 6.2 above, the CNS tense is also used as the different-subject consecutive for the present and past HAB tenses as well as the P_2 tense, as seen in the one representative sentence in (37).

(37) ò mɔ̀ nám kɨbɛ́, ò ǹ kè zɨ 'she cooked fufu, and he didn't eat (it)'
she P_2 cook fufu he CNS NEG eat [before today]

Thus, in contrast with the morphologically complex /tá-kè'/ marker discussed in the next section, the simplex /kè'/ is used only as a negative consecutive marker, either when there is no change of subject in the consecutive VP, or when the change of subject takes place after a HAB or P_2 initial VP.

7.2.1.2. *Completive subordinate* /tákè'/. It was stated at the beginning of 7.1.1 that the markers /kè'/ and /tákè'/ are not used in "main" clauses. The marker /kɔ̀'/ is found only in consecutives, as summarized in the preceding paragraph. The marker /tákè'/ clearly consists of the same /kè'/ morpheme, but preceded by an additional marker /tá/ of uncertain origin (unless related ultimately to the common Bantu negative root of the same shape). The longer form /tákè'/ is used as the completive negative marker in *most* subordinate clauses. We will discuss its occurrence in relative-, conditional- and consecutive-subordinate clauses in the following subsections.

7.2.1.2.1. *Relative clauses.* Tense-aspect marking in relative clauses has not received attention thus far in this study. Very briefly, tense-aspect marking in relative (and conditional) clauses is identical to main clauses except (i) the FOC aspect is not possible in a relative clause; and (ii) the P_1 and P_2 tenses neutralize as seen in the affirmative example in (38).

(38) wù wɨ̌ɨ̀ à ò mɔ̀ nám bɛ́-'kɔ́ 'the person who cooked fufu'
person this REL he P_1/P_2 cook fufu [earlier today or before today]

The relative clause in (38) is formed by means of the demonstrative 'this' followed by the REL marker /á/. Since /nám/ 'cook' does not undergo L-spreading from the preceding marker /mɔ̀/, tonally this clause looks like a P_2. However, as seen in the gloss, the time reference is either to earlier today (P_1) or to before today (P_2). Compare (39), where the corresponding P_0 relative clause is given.

(39) wù wɨ̀ à ò nàm bɛ́-'kɔ́ 'the person who has cooked fufu'
person this REL he cook fufu

The negative correlates to (38) and (39) are seen to involve /tákè'/ in (40):

(40) a. wù wɨ̀ à ò tákè nám kɨ́bɛ́ 'the person who hasn't cooked fufu'
person this REL he NEG cook fufu

b. wù wɨ̀ à ò mɔ̀ tákè nám kɨ́bɛ́ 'the person who didn't cook fufu' [earlier today or before today]
person this REL he P_1/P_2 NEG cook fufu

As seen in (40), the object 'fufu' remains in A-form after the negative tákè, as seen also with the simplex /kè'/ in (36a,b). Why this should be so, when both negation and relative clause structure normally cause the object to be in B-form, is not clear.

7.2.1.2.2. *Condition clauses.* Tense-aspect marking in 'if' clauses is similar to that found in relative clauses. Thus, compare the following affirmative and negative counterparts in (41).

(41) a. búghɔ́ ò mɔ̀ nám bɛ́-'kɔ́ 'if he cooked fufu' [earlier today or before today]
if he P_1/P_2 cook fufu

b. búghɔ ò mɔ̀ tákè nám kɨ́bɛ́ 'if he didn't cook fufu' [earlier today or before today]
if he P_1/P_2 NEG cook fufu

In (41a) it is observed that the object is in B-form, as is normally required of all nouns within an 'if' clause. In (41b), however, the object is in A-form, since the negative marker tákè requires an A-form object above and beyond the considerations based on the type of clause in which the object occurs.

7.2.1.2.3. *Consecutive clauses.* In section 7.2.1.1 it was seen that the negative marker of the CNS tense is /kè'/. It was also said that the CNS tense is used when there is a change of subject in a consecutive VP which, in turn, follows a VP in the HAB aspect or the P_2 tense. In all other cases, when there is a different subject consecutive in the completive aspect, the negative marker is tákè. Representative examples are seen in (42).

(42) a. ò nàm kɨ́bɛ́, yìa ǹ tákè zɨ́ 'he has cooked fufu and I have not eaten (it)'
he cooked fufu & I NEG eat

b. ò mɔ̀ nàm kɨ́bɛ́, yìa ǹ mɔ̂ tákè zɨ́ 'he cooked fufu and I didn't eat it' [today]
he P_1 cook fufu & I P_1/P_2 NEG eat

It should be recalled that it is *only* the CNS tense which requires in the affirmative that the object be in A-form. All other different-subject consecutives require the object to be in B-form (section 6.2). The relative clause and the *if*-clause also require B-forms. This correlation between clauses which cause nouns within them to be in B-form and which require tákè as their negative marker in the completive aspect suggests that we are dealing with a unified class of "subordinate clauses", defined by these two criteria. Thus, we can summarize the above discussion by saying that /tákè'/ is the subordinate completive aspect negative marker, while /kè'/ is the coordinate completive aspect negative marker (used in its simple form only in the CNS tense).

7.2.2. /hàɨ̀/ *'no!'*. An additional non-focused negative marker is the word /hàɨ̀/ which simply means 'no'. It is usually used in response to a polar question

and, as such, contrasts with the word /ɔ̀ɔ̃/, meaning 'yes'. It can constitute an entire utterance in itself, or it can be further elaborated upon. In response to the following polar question,

(43) ò mɔ̀ wí kɬkɔ̰̀ ɔ̀ 'did he kill the servant' [before today]
he P_2 kill servant Q

the following four answers (among others) are possible:

(44) a. ɔ̀ɔ̃
yes
'yes'

b. ɔ̀ɔ̃, ò má'á wí
yes he P_2/FOC kill
'yes, he killed (him)'

c. hàí
no
'no'

d. hàí, ò mɔ̀ bó nô
no he P_2 hit FOC
'no, he hit (him)'

The word hàí is invariant and does not participate in any tone spreading processes.

7.2.3. */kèe/ 'in vain'*. A very different kind of negative word is the adverb /kèe/, which means 'to do something in vain'. Though this word resembles a verb in some respects, it never occurs in isolation. It always follows a regular verb which is modifies. Regardless of the completive/incompletive status of the main verb, it always occurs with a long vowel. Since this is not true of consecutive verbs, it appears that /kèe/ is on its way from being a normal verb root to being grammaticalized as some sort of adverb. Some characteristic examples in the indicative mood are given in (45).

(45) a. ò bòó kèe fɬghàm 'he is hitting the mat in vain'
he hit/INC in-vain mat

b. ò sù kèe fɬghàm 'he has washed the mat in vain'
he wash in-vain mat

c. ò má'á bó kèe ghâm-fɔ̀ 'he *did* hit the mat in vain' [before today]
he P_2/FOC hit in-vain mat

d. ò mɔ̀ bó ké'é fɬghâm 'he hit the mat in vain' [before today]
he P_2 hit in-vain mat

e. ò mɔ̀ sú 'ké'é fɬghâm 'he washed the mat in vain' [before today]
he P_2 wash in-vain mat

f. ò mɔ̀ sú'ú ké'é fɬghâm 'he was washing the mat in vain' [before today]
he P_2 wash/INC in-vain mat

g. ò mɔ̀ bóo ké'é tsɬghá 'fɬghâm 'he used to hit the mat in vain'
he P_2 hit/INC in-vain HAB mat

h. ò lɔ́ sùu kèe tsɬghà fɬghàm 'he will habitually wash the mat in vain'
he F_2 wash/INC in-vain HAB mat

The tonal properties of /kèe/ are those of an incompletive verb. The final vowel (from /-a/) has an underlying L tone with all tenses except the P_2, where it is H tone. This results in the preceding surface tones by the following type of derivation:

(46) *underlying* *spreading* *downstep* *simplification*

a. /(ò bó-à) kèe fɬghàm`/ → kèe fɬghâm → kèe fɬghâm → ...kèe fɬghàm

b. /(ò`mɔ́ bó) kèé fɬghàm`/ → kêé fɬghâm → ké'é fɬghâm → ...ké'é fɬghâm

The word /kèe/ is also grammatical with the hortative mood, as seen in (47).

(47) a. ò sɬ sû kéè fɬghàm 'he should wash the mat in vain' [today]
he F_1/HRT wash in-vain mat

b. ghé lɔ́ sû kéè fɬghàm 'they should wash the mat in vain'
they F_2/HRT wash in-vain mat [after today]

Though the above sentences are grammatically acceptable in Aghem (as in English), they are semantically strange (in both languages), since one does not usually obligate someone to perform an action which beforehand has been determined to be without effect.

In the examples in (47), both the main verb and the /kèe/ are preceded by a H tone hortative marker, as seen also in the following derivation:

(48) *underlying* *spreading* *simplification*

/(ò sɬ) 'sù 'kèe fɬghàm`/ → (sû kéè) fɬghâm → ...fɬghàm

Though the word /kèe/ still has many of the traits of a full-fledged verb because its distribution violates the constraints on mixing completive and incompletive forms in a consecutive VP, it is best considered to be an adverb.

It is noteworthy that /kèe/ also takes the prefix /è-/ when the object is absent, as with consecutive verbs (section 6.1.1):

(49) ò sɬ sû èkée 'he should wash (it) in vain'
he F_1/HRT wash in-vain

7.2.4. *Contrastive emphasis /dzɬ/ (NEG).* The final negative word we shall examine is the word /dzɬ/ (same as the noun /dzɬ/ meaning 'road, path', both having the variant /jì/). This marker occurs in the verb phrase after the verb and the HAB marker /tsɨghà/, but before the negative marker /yɔ́/. It cannot occur in a sentence without either of the two major negative markers: completive /kà/ or incompletive /yɔ́/. Its purpose is to provide contrastive emphasis to a previous affirmative statement. In a conversation where someone has just made a positive statement, one might emphasize that the previous statement is false by including /dzɬ/ (the negative counterpart to the FOC marker /nò/). The following examples show the use of this marker:

(50) a. ò kà bò dzɬ ghâm-fɔ̀ 'he *has not either* hit the mat'
he NEG hit NEG mat

b. ò kà sù dzɬ ghâm-fɔ̀ 'he *has not either* washed the mat'
he NEG wash NEG mat

These examples show that both L and H tone verbs are realized on L tone before /dzɬ/, whereas they retain their underlying tones when the /dzɬ/ is absent (see section 7.1.1 above). This neutralization to L before /dzɬ/ is the result of the simplification of the short rising tone on [bǒ] to a L tone before a H, as seen in the derivation below:

(51) *underlying* *spreading* *simplification*$_1$ *simplification*$_2$

/(ò kà) bó dzɨ/ → bǒ dzɨ → bò dzɨ → ...bò dzɨ...

In this derivation, simplification$_2$ treats the dzɨ as if it were a suffix on the verb, and thus they form one word together.

Similar examples from P_1 and P_2 are given in (52) and (53).

(52) a. ò kàa bò dzɨ ghâm-fɔ̀ 'he *did not either* hit the mat' [today]
he P_1/NEG hit NEG mat

b. ò kàa sù dzɨ ghâm-fɔ̀ 'he *did not either* wash the mat'
he P_1/NEG wash NEG mat

(53) a. ò káa bó dzɨ ghâm-fɔ̀ 'he *did not either* hit the mat' [before today]
he P_2/NEG hit NEG mat

b. ò káa sû dzɨ ghâm-fɔ̀ 'he *did not either* wash the mat'
he P_2/NEG wash NEG mat

When /dzɨ/ cooccurs with both the negative /kà/ and the completive focus P_o marker [ǹ], it has the specific meaning of 'yet', as seen in (54).

(54) a. ghé ká'ǹ bó dzɨ ghâm-fɔ̀ 'they have *not yet* hit the mat'
they NEG/FOC hit NEG mat

b. ghé ká'ǹ sû dzɨ ghâm-fɔ̀ 'they have *not yet* washed the mat'
they NEG/FOC wash NEG mat

Finally, /dzɨ/ cooccurs with the incompletive negative marker /yɔ́/, as in the following examples:

(55) a. ò bòó dzɨ yɔ̀ ghâm-fɔ̀ 'he *is not either* hitting the mat'
he hit/INC NEG NEG mat

b. ghé súù tsɨghà dzɨ yɔ̀ ghâm-fɔ̀ 'they *are not either* habitually washing the mat'
they wash/INC HAB NEG NEG mat

c. ò mɔ̀ sú'ú tsɨghá 'dzɨ 'yɔ́ ghâm-fɔ̀ 'he *was not either* habitually washing the mat'
he P_2 wash/INC HAB NEG NEG mat

d. ò sɨ̀ bòó dzɨ yɔ̀ ghâm-fɔ̀ 'he *will not either* hit the mat' [today]
he F_1 hit/INC NEG NEG mat

(55c) above gives us another look at the influence of the floating H before the negative marker /dzɨ/, as seen in the following derivation:

(56) /ò ˋmɔ́ sù-á tsɨghàˊ dzɨ 'yɔ́ fɨ-ghàmˋ-fɔ́/ *(underlying forms)*
ò mɔ̌ sûú tsɨghâ dzɨ yɔ́ fɨghâmfɔ̌ *(spreading)*
ò mɔ̌ sûú tsɨghâ dzɨ yɔ́ ghâmfɔ̌ *(prefix-deletion)*
ò mɔ̌ sú'ú tsɨghá 'dzɨ 'yɔ́ ghâmfɔ̀ *(downstep)*
[ò mɔ̀ sú'ú tsɨghá 'dzɨ 'yɔ́ ghâmfɔ̀] *(simplification)*

What is interesting is that the floating H posited after the HAB with P_2 (section 4.1.3) has its copy *between* the /dzɨ/ and /yɔ́/, thus showing H_o again to be characteristic of the P_2 tense.

8

TONE RULES

8.0. INTRODUCTION

This chapter provides a short summary of the tone rules and ordering requirements which have been discussed peacemeal at various points throughout the preceding chapters. This chapter is intended as a supplement to Hyman's chapter 2, by adding tone rules which are found in the verb phrase. However, the scope of this chapter is not comprehensive, as we have limited ourselves to a single underlying tonal pattern in our nouns used as objects. Further refinement of our rules could be obtained by taking each of the tonal patterns on nouns outlined by Hyman in his chapter 2, and substituting each of them as objects throughout the many verbal paradigms that we have examined in the preceding six chapters. Such a task is presently beyond our scope and our rules must therefore be taken to be somewhat tentative in nature. The rules in this chapter will be cited in a straightforward manner with a discussion of pertinent restrictions. This will allow linguists of different theoretical persuasions the option of formalizing the rules according to their own personal preferences.

8.1. TONE SPREADING

The preceding chapters have shown ample evidence for the pervasive nature of the following tone spreading rules (also discussed by Hyman, section 2.3.2):

(1) a. H-L → H-HL b. L-H → L-LH

These two rules operate once each at every applicable point at the beginning of our tonal derivations. They function to spread *to the right* (perseverative assimilation) the effect of a tone whenever it is followed by a dissimilar tone. The resulting falling and rising tones are the input to our downstep and simplification rules and the tone spreading rules must therefore be ordered first. Further discussion with relevant examples can be found in section 3.1 above.

8.2. PREFIX-DELETION

The deletion of noun prefixes before any modifier except numerals has been described by Hyman (section 4.1). This deletion rule figures in as a tone rule as well in that the tones are deleted along with the segments. This rule is crucially ordered after the tone spreading rules in that the tone from the prefix is spread to the root before the whole prefix drops out. Our typical object in its B-form comes from an underlying /fǐ-ghàm`-fɔ́/ 'mat'. If prefix-deletion preceded spreading, instead of vice-versa, we would derive the incorrect form *[ghàmfɔ̀] instead of [ghâmfɔ̀].

We also saw in 5.1.1 that prefix-deletion must precede the downstep rules. If the order of the rules were reversed, we would get an incorrect form *[sû ghâmfɔ̀], instead of the correct downstepped form [sú 'ghâmfɔ̀] in example (6c) of 5.1.1. Prefix-deletion thus appears to be a rather early rule in our inventory of rules.

8.3. DOWNSTEP

Downstepped H tones ('H) are derived whenever a HLH tone sequence is found on two adjacent short syllables or on one long syllable. This is produced in three separate ways:

(2) a. HL-H → H'-H
b. H-LH → H-'H
c. $\widehat{\text{HLH}}$: → $\widehat{\text{H'H}}$:

(where the colon indicates that the preceding tone sequence is realized on a single long syllable). We have already seen in this chapter that the downstep rules must follow both the spreading and prefix-deletion rules. We also saw in section 3.3 above that the downstep rules must precede the tone simplification rules described in the next section, or incorrect outputs would be derived.

8.4. SIMPLIFICATION

The great majority of instances of tone simplification that we have seen deal with rising tones. In Aghem, as in most languages, falling tones are tolerated much more than rising tones. Very few rising tones actually occur on the surface in Aghem and most of them are on long syllables. We will now examine the various simplification rules as they must be ordered in a derivation.

8.4.1. *Simplification of short rising tones.* Rising tones on short syllables are almost always simplified. What is unusual in Aghem is that the simplification rule is anticipatory in nature. Whereas most tone rules are conditioned by preceding tones, the tones in question here are conditioned by following tones. A rising tone is simplified according to the following H or L tone or sentence-final position, as in the following rules:

(3) a. LH-H → L-H
b. LH-L → H-L
c. LH // → L // *(where // = pause boundary)*

As discussed in 3.3 above, rules (3a) and (3b) can be collapsed into a single anticipatory dissimilation rule, as in (4),

(4) $\text{LH} \rightarrow [-\alpha \text{H}] \; / \; \_\_\_ \; [\alpha \text{H}]$

where a rising tone on a short syllable dissimilates to the following tone.

We have already mentioned that the above dissimilation rule needs to apply after the downstep rules mentioned in 8.3 above. Of particular interest is that part of the downstepping process captured in (2b). Rules (3a,b) would completely bleed (2b). It is therefore crucial that downstep rules precede the dissimilation rule or the downstep rules would never actually operate.

Rule (3a) is usually called absorption, since the H tone of a rising glide is absorbed by the following H tone. It seems relevant that, at least for Aghem, the absorption rule is only one side of the dissimilation rule stated in (4). The simplification of a rising glide to L tone in (3c) is quite natural, since the voice tends to relax and drop at the end of utterances.

8.4.2. *Simplification of long rising tones.* Rising tones on long syllables may or may not simplify, depending on their tonal environment. When a rising tone on a long syllable follows a H tone, we have downstep, as in (5).

(5) H-LH: → H-'H:

It is significant that this downstep rule must follow the dissimilation rule, whereas the other downstep rules have to precede it. In 3.6 above we saw that (5) needed to follow rule (4) or the dissimilation rule would have to be further complicated by mentioning 'H tones in its environment.

Another rule which simplifies long rising tones is:

(6) LH: - H → H: - H

This rule is quite different from its counterpart with a short vowel (rule (3a)). Obviously, the length of the syllable is of crucial importance in deciding whether to simplify a rising tone to a L (if short) or a H (if long). The segmental information is thus a conditioning factor at this point. This rule is discussed further in 5.1.2 above.

8.4.3. *Simplification of short falling tones.* One additional rule that we have often seen only works within word boundaries. This rule was formalized by Hyman (section 2.3.4) as follows:

(7) L-HL → L-L *(condition: no word boundary between the L and the HL)*

This rule must follow prefix-deletion or we would derive the incorrect form *[ghàmfɔ̀] instead of the correct [ghâmfɔ̀] in the B-form.

8.5. TONE REPLACEMENT

One of the last rules is called tone replacement. This process only takes place with the consecutive tnese (CNS) described in 3.7. With this tense, if there is no object present, tone replacement replaces whatever tone is on the verb with a H tone. Since the resulting sequence of HLH tones meets the conditions of the downstep rule, yet downstep does *not* take place, we know that tone replacement must follow the downstep rules or ungrammatical sentences would be derived. See section 3.7 above for further discussion.

8.6. /e/-DELETION

Whenever the hortative marker (HRT) cooccurs with a completive verb form, the /e/ of the hortative is deleted. However, the H tone is not deleted. In fact, the tone of the HRT marker is so important that /e/-deletion cannot occur until after spreading and simplification (see 5.1.1 above) or downstep (see 7.1.1.2 above). Obviously the deletion of the HRT vowel occurs quite late in the derivation and for that reason we have discussed it last.

8.7. RULE ORDERING

Though all of the rules in this chapter do not need to be rigidly ordered in the order we have presented them, rules (1)-(3b) have strong constraints and need to be in the order presented. The rules from (3c) to the end of this chapter are not crucially ordered with respect to each other though they must follow rules (1)-(3b). We can therefore conclude that rules (1)-(3b) are rigidly ordered, rules (3c) onward are freely ordered, and the rigidly ordered rules all apply before the freely ordered ones.

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PART III: FOCUS IN AGHEM*

A STUDY OF ITS FORMAL CORRELATES AND TYPOLOGY

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[ABSTRACT]

Languages differ as to how they formally mark the pragmatic function *focus* in the surface form of sentences. They may use stress and intonation, special morphology, special particles, word order, cleft sentences, and so on. Aghem, a Grassfields Bantu language of Cameroon, uses four different means to mark focus: word order, verbal morphology, a special particle nɔ̀, and cleft sentences. In some cases these formal means interact, but in other cases they are mutually exclusive.

The Aghem focus system lends itself best to a formal account which directly generates the various types of focus. With a few modifications, the Functional Grammar approach of Simon Dik adequately captures the generalizations about this focus system by first generating the types of focus and then associating these types directly with their surface manifestations via expression rules.

The variety of formal correlates of focus in Aghem requires a richer typology of focus than previously proposed. The types of focus include assertive focus, counter-assertive focus, polar focus, counter-assertive polar focus, and exhaustive listing focus. However, this typology does not require a disjunctive definition of focus. It may be non-disjunctively defined as: that information in the sentence which the speaker believes, assumes or knows the hearer does not share with him or her. The types of focus are accounted for instead by the intersection of "types of assertion" (i.e. assertion and counter-assertion) and "types of presuppositional sets" (e.g. a null member set, a single member set, a multiple member set and a truth value set).

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1

INTRODUCTION

1.0. THE PROBLEM

The problem which this study addresses is that of the pragmatic function *focus* (cf. Dik 1978) and its formal correlates in Aghem,[1] a Grassfields Bantu language of Cameroon. Languages differ as to how they formally (i.e. in surface form) mark the focus in a given sentence. They may use stress and intonation, special morphology, special particles, word order, cleft sentences, and so on. Of course, any one language may use more than one of these formal means.[2]

In Aghem one finds four different means used to mark the focus: word order, verbal morphology, the particle nɔ̀, and cleft sentences.[3] In some cases these formal means interact, but in other cases they are mutually exclusive. This study will answer three crucial questions about these formal means of marking focus.

First, do these formal means produce sentences which are formally distinct but functionally synonymous, marking a unitary category focus; or do they produce sentences whose formal distinctions correlate with functional distinctions, resulting in a variety of focus types? An answer to this question is given in chapters 2 and 3: in chapter 2 the word order correlates are presented, and in chapter 3 the verbal morphology, the particle nɔ̀, and cleft sentences are presented.

Secondly, once the relation of form and function is determined, what would an adequate formal account of the focus system look like? This question is addressed in chapter 4, where Dik's (1978) non-transformational model, Functional Grammar, is used. The model directly generates pragmatic functions such as focus in the initial structure and therefore does not need to make use of the interpretive rules necessary in a conventional transformational model. In addition to the formal account of the system in chapter 4, a mechanical procedure will be discussed by which an arbitrary sentence can be given a logical reading in terms of the type of focus used in the sentence.

Thirdly, if more than one type of focus is found, then is focus a non-unitary pragmatic function; or can the functional distinctions be explained in terms of "types of presuppositional sets" and "types of assertion" rather than "types of focus", leaving focus as a unitary function? An answer to this question is given in chapter 5. Also, in the same chapter, some comments are made on the relation between the typology of focus developed in this study and other recently proposed typologies.

1.1. FOCUS: A PRAGMATIC FUNCTION

In the discussion above, focus has been referred to as a "pragmatic function". This terminology is borrowed from Dik's (1978) functional[4] perspective on linguistic behavior. He distinguishes between syntactic, semantic and pragmatic functions. Syntactic functions include such notions as subject, object, oblique and predicate.[5] Semantic functions, to borrow from Jackendoff (1972) rather than from Dik (1978), may include theme,[6] topic, focus and tail.

Turning more specifically to the notion "pragmatic function", Dik (1978:127-129) distinguishes between three types of pragmatic information:

ADDENDUM: line 6 of section 1.1 should read----Dik (1978), include the theme, agent, goal, source, benefactive and locative. Pragmatic functions, returning to Dik, include theme[6], topic, focus and tail.

(1) a. *General information:* this concerns information about the world and other possible worlds.

b. *Situational information:* this concerns information from the perceived and experienced situation of the speaker and hearer at the time of the exchange.

c. *Contextual* (or *linguistic*) *information:* this concerns information derived from utterances which have been exchanged before any given moment.

Some might prefer to use the term "pragmatic information" only for the general and situational types, and the term "discourse information" for the contextual type. In this study, however, such a distinction between pragmatic and discourse information will not be used, since it is not crucial to the analysis of focus in Aghem. Yet at times reference will be made to "discourse rules" or "rules of context" when the discussion turns to sentences whose focus is formally unmarked. Reference to such rules is another way of saying that the determination of the focus in such sentences goes beyond the scope of a sentential grammar. No attempt will be made in this study to formulate such discourse or contextual rules and their relation to a sentential grammar. But such rules clearly have to do with Dik's "contextual information".

Thus, a pragmatic function is a role assigned to a constituent (or set of constituents) in relation to the information assumed to be shared (or not shared) by the speaker and addressee. This role is distinct from the constituent's form and syntactic categorial value. Furthermore, the role of the constituent within the informational context of a given utterance contrasts with (or is distinct from) its possible roles within the syntactic and semantic contexts inherent in the utterance. The focus of a sentence is such a pragmatic function.

Focus itself has been characterized in various ways:

(2) a. The constituent with the most important or salient pragmatic information (Dik 1978:19,130; Givón 1975:185).

b. The constituent highest on the scale of communicative dynamism and (with a few exceptions) the rightmost constituent in a sentence (Sgall 1973: 164).[7]

c. The constituent (from morpheme to phrase) given the intonation contour (Chomsky 1969:29).

d. The constituent(s) containing the information which the speaker assumes the hearer does not share with him (Jackendoff 1972:230).

For the purpose of this study, Jackendoff's characterization will be used.

In addition to the focus, there is what one might call "the specific presupposition". This is the presupposition specified in the utterance itself and it is distinct from the more general presupposition discussed in section 5.1. Thus, a sentence may be parsed in the following ways:

(3) a. F....

b. P...F....

c. *P....

An entire sentence may fall under the scope of F(ocus) as indicated in (3a), or a

sentence may be divided between the P(resupposition) and the F(ocus), as indicated in (3b). No sentence in normal discourse can be characterized as falling entirely under the scope of the P(resupposition), which is indicated by the unacceptable (3c). Such sentences could only be repetitions, or utterances in highly stylized discourses such as chants, liturgies, poems and songs.

However, an imporatnt distinction must be made between the marked focus (mF) and the focus (F). Consider the English sentence (4a), for example.

(4) a. *John hit Mary on the árm.*

b. *What happened?*

c. *What did John do?*

d. *Where did John hit Mary?*

In this sentence only 'arm' receives the primary stress, and is therefore the mF, while the scope of focus, the actual F, may vary according to the wider context in which the sentence (4a) is uttered. Thus, (4a) may be a response to question (4b), (4c), or (4d). Sentence (4a) could be graphically parsed according to context in the following ways:

(5) a. *John hit Mary on the árm.*
F..... (mF). (4a) after (4b)

b. *John hit Mary on the árm.*
P... F..... (mF). (4a) after (4c)

c. *John hit Mary on the árm.*
P..... F = (mF). (4a) after (4d)

In (5a) and (5b) the scope of the focus is greater than the mF, whereas in (5c), the scope of the focus is identical to the mF. Thus, one can expand (3) and parse a sentence in the following ways:

(6) a. F...(mF)....

b. P...F...(mF)....

c. P.....F = (mF)....

d. *P....

Although it has not been overtly stated up to now, the definition of the presupposition should be evident: namely, the element(s) containing the information which the speaker assumes that the hearer shares with him or her.

1.2. TONE AND NOMINAL FORMS

Aghem is a tone language. Hyman (chapter 2) discusses Aghem tone at length, so for the purposes of this study the tones and their representation may simply be listed:

(7) a. ´ (high)

b. ` (low)

c. ^ (falling)

d. ˇ (rising)

e. !´ (downstepped high)

f. `° (final non-falling low)

Aghem is also a noun class language, with nine classes synchronically, but twelve classes diachronically--these classes being reconstructable in terms of Proto-Bantu forms. Every noun root is a member of one or two noun classes, which means that each noun root which is a member of two classes has two elicitation forms: for example, -ghòm' 'egg' may be é-ghóm 'egg' or á-ghóm 'eggs'. This singular-plural pairing of noun classes is typical of Bantu languages.

What is not typical of Bantu languages is that Aghem noun roots may lose their prefixes under certain circumstances and gain suffixes under others. Hyman discusses this aspect of Aghem in detail in his chapters 3, 4 and 6. In these chapters the various forms which a noun may take in each noun class are exemplified. All we need to note at this point is that a noun may have various potential forms depending on the phrase or sentential position in which it occurs. The presence or absence of a prefix or suffix does not change the meaning of the noun root.

Examples of the various forms of -fɬn' 'friend' and -bvǔ' 'dog' in their singular and plural forms are given in (8) to make the reader aware of the wide variety of possible forms a noun may take.

(8) a. -fɬn' 'friend'

sg.	fɬn	fɬn	fɬn	fɬn
pl.	á-fɬn	fɬl(-)á	fɬn-ghɔ́	fɬn

b. -bvǔ' 'dog'

sg.	bvǔ	bvǔ	bvǔ	bvǔ
pl.	tɬ-bvǔ	bvǔ(-)'tɬ	bvǔ-'tɔ́	bvǔ

These two nouns happen to belong, in their singular forms, to the two noun classes which have zero prefix and zero suffix. Most nouns belong to classes which have prefixes and suffixes in both their singular and plural forms.

1.3. ADDITIONAL COMMENTS

This study is essentially limited to simple sentences: sentences with one verb and its arguments. Therefore, there will not be any discussion of complex sentences and the marking of focus, or the lack of it, in subordinate or dependent clauses. In the appendix, however, a table of the types of focus marking and their occurrence in relative, temporal, and conditional clauses is given.

Furthermore, the discussion essentially concerns non-negative, declarative sentences, although some interrogative and negative sentences are discussed at relevant points. Since neither complex sentences nor negative sentences are discussed in detail, the problem which Schauber (1978) points out for some theories of focus and presupposition will be sidestepped. The problem, as she sees it, is present in any theory which proposes that a sentence may be parsed into two constituents: namely, the focus and the presupposition; and which assumes that the focus and the presupposition cannot overlap. She claims that for certain negative complex sentences (in both Navajo and English) the focus must be considered to be part of the presupposition.[8]

Finally, it should be pointed out that this study is based on the intuitions of one speaker of Aghem. The sentences were either elicited or constructed by the author and tested with the Aghem speaker for acceptability and interpretation(s). Only three texts were available on which to test the analysis arrived at through elicitation. It should be further noted, however, that in every case the author

and speaker attempted to construct a relevant context in which the sentences could be meaningfully uttered, either through the question test[9] or through paraphrase and reconstruction of preceding utterances. These limitations, especially in the area of natural conversational texts, are specified simply to note that further study remains to be done on focus in Aghem and that the proposals made in this study are not presented as the final word on the subject.

2

FORMAL CORRELATES OF FOCUS: WORD ORDER

2.0. BASIC WORD ORDER

Word order[1] can vary significantly in Aghem. The purpose of such flexibility in syntagmatic structures is to exploit certain sentential positions which have been assigned specific functional values in the language. Therefore, in addition to the broader goals of determining the principles of focus and the types of focus, one goal of this chapter is to establish the crucial sentential positions and to characterize them in terms of their associated functions.

Even though word order may vary, one may still speak of a "basic" word order in terms of text frequency, some typological criteria, and the pragmatic function of focus. First, any frequency count of text material[2] will indicate that the word order in (1) is the dominant one.

(1) *S AUX V (O) (â O) (LOC) (TEMP)*[3]

The figures in (2) summarize clause counts made on three Aghem texts. The term "clause" refers to a verb and its arguments.

(2) *clause types*	*basic order*	*total clauses*	*% of basic order*
a. main	203	206	98.5
b. complement	42	43	97.6
c. subordinate			
i. temporal	15	15	100.0
ii. conditional	8	8	100.0
iii. relative	16	16	100.0
	284	288	98.6

One salient feature of the figures in (2) is that the word order of (1) is overwhelmingly favored in comparison to other word orders, at least in non-conversational texts. Of the 288 clauses in the count, only four displayed a deviant word order.[4] A second salient feature is that subordinate clauses occur *only* with the basic order, a fact which is not surprising in that subordinate clauses often demonstrate less varied word order than main clauses across languages (Paul Schachter, personal communication). Of course, no sentence in the text has the complete form of the schema in (1), although a few approximate it. The 284 basic word order clauses do employ, however, the following orders between paired constituents and therefore indirectly substantiate the order in (1).

(3) a. S { Verb / Copula }

b. V { Object / Complementizer / Adverb: place or time or manner / Infinitive }

c. O { â Object / Complementizer / Adverb: place or time }

It may be concluded that in terms of frequency, the order in (1) is the "basic" order.

A second reason for treating the order in (1) as "basic" is that the typological criteria (Greenberg 1966) correspond to an SVO language. Note that in (4) Aghem is completely consistent with the head-dependent relations typical of VO languages.

(4) a. *Verb - Adverb*
b. *Auxiliary - Verb*
c. *Noun - Adjective*
d. *Noun - Genitive*
e. *Noun - Relative clause*
f. *Preposition - Noun Phrase*

A third reason to speak of (1) as "basic" is that the most general *WH* question in Aghem, namely (5), requires the word order of (1) in its answer.

(5) à mɔ̀[5] kóm kwɔ̀ 'what happened?'
it P_2 happen what

This fact suggests that the order in (1) is the least marked (or the unmarked) word order.[6] Thus, in terms of frequency, typological criteria and pragmatic factors, Aghem is basically an SVO language.

2.1. THE IMMEDIATE AFTER VERB (IAV) POSITION---FOCUS

The first syntactic position to establish is the IAV position. In order to make the exposition clear, it would be best to begin with intransitive verbs before moving on to transitive ones, simply because the number of arguments per verb is kept to a minimum.

2.1.1. *Intransitive verbs.* With an intransitive verb, the only constituents which are minimally required are the verb, the subject, and the auxiliary (e.g. the P_0, P_1 and P_2 markers).[5] Ignoring the auxiliary, the possible word orders would be SV and VS, both of which are attested. Compare the sentences in (6).

(6) a. énáʔ mɔ̀ ñfŋ nô 'Inah ran'
Inah P_2 run FOC
b. à mɔ̀ ñfŋ énáʔ 'Inah ran'
DS P_2 run Inah
c. *ndúghɔ́ mɔ̀ ñfŋ (nô) 'who ran?'
who P_2 run FOC
d. à mɔ̀ ñfŋ ndúghɔ́ 'who ran?'
DS P_2 run who
e. énáʔ mɔ̀ ñfŋ á kf'bé (nô) 'Inah ran in the compound'
Inah P_2 run in compound FOC

Note the following features of the sentences in (6). First, the focus marker (FOC) /nɔ̀/ is obligatory if the sentence has the basic word order and the verb is neither complex nor followed by a complement. Thus, nɔ̀ is obligatory in (6a) but not in (6e), where a locative complement is present. The focus marker is discussed in detail in section 3.2.

Secondly, sentence (6a) has the basic word order with the subject before the verb, while sentence (6b) has a deviant word order with the subject after the verb.

In sentence (6a) the focus is unmarked. In terms of a sentential grammar, this is all that needs to be said. However, in terms of a grammar of context, the focus could be either the entire sentence or just the verb. The actual determination of focus depends on the preceding context. For example, the sentence could serve as the answer to either *what happened?* or *what did Inah do?*. Only the preceding context, therefore, can define what the focus is in a sentence with unmarked focus. By contrast, sentence (6b) is a marked word order, and it has only one possible constituent as the focus: the subject. It answers the question *who ran?* and only that question.

Thirdly, the only way to ask *who ran?* is to postpose the subject interrogative word to the IAV position as in (6d).[7] It is impossible for the interrogative word to remain in the sentence initial position as indicated by the unacceptable (6c). This fact corresponds to the postposing of the focused subject NP to the IAV position in (6b). Thus, the IAV position is clearly the focus, both interrogatively and assertively. The following rule is proposed:

(7) POSTPOSE the focused subject to the IAV position.[8]

This rule assumes a universal principle of focus: the interrogative word is the marked focus in any sentence in which it occurs.

The sentences in (6) suggest two principles of focus. The first principle identifies the occurrence of unmarked focus.

(8) *Principle 1:* If the sentence has the "basic" word order, then the focus is unmarked; in terms of the larger discourse context, the sentence may be used either when the focus is the entire sentence or when it is only the verb.

The second principle identifies the focus position.

(9) *Principle 2:* If the sentence does not have the "basic" word order, then the constituent in the IAV position is the marked focus.

In light of these principles, study the following pairs of sentences:

(10) a. énáʔ mɔ̀ ñfŋ ghɛ́ 'where did Inah run?'
Inah P2 run where

b. (énáʔ mɔ̀ ñfŋ) á kf'bɛ́ '(Inah ran) in the compound'
Inah P2 run in compound

(11) a. énáʔ mɔ̀ ñfŋ zfn 'when did Inah run?'
Inah P2 run when

b. (énáʔ mɔ̀ ñfŋ) á'zɔ́ɔ '(Inah ran) yesterday'
Inah P2 run yesterday

(12) a. énáʔ mɔ̀ ñfŋ ênzfn 'how did Inah run?'
Inah P2 run how

b. (énáʔ mɔ̀ ñfŋ) tsʉ́ɨtsʉ́ɨ '(Inah ran) quickly'
Inah P2 run quickly

Sentences (10a), (11a) and (12a) all come under the universal principle which identifies the marked focus with the interrogative word. In sentences (10b), (11b)

and (12b) the facts are more complex. In the context in which these sentences are used to answer their appropriate questions, the focus can be determined: either the focus alone may be used as an answer, or the focus is the constituent in the IAV position, the same position used by the interrogative word in the question. Note, however, that if the entire sentence is used, the focus is known only because of the context in which it occurs and not because the sentence falls under Principle 2. In fact, as sentences in isolation they are unmarked for focus and they may be answers to the following questions: *what happened?*, *what did Inah do?* and *what did Inah do yesterday/in the compound/quickly?*. Thus, as isolated sentences they fall under Principle 1. However, in order to accomodate the above facts, Principle 1 has to be modified:

(13) *Principle 1:* If the sentence has the "basic" word order, then the focus is unmarked; in terms of the larger discourse context, the sentence may be used either when the focus is the entire sentence or when it is that part of the sentence from the verb to the end or when it is any sub-set(s) of that part of the sentence from the verb to the end.[9]

As it is now stated, Principle 1 would cover any sentence with a basic word order.

Before turning to transitive examples, a point should be made about nominal morphology and the IAV position. Compare the sentences in (14).

(14) a. bvə́ 'tɨ́ mɔ̀ ñɨ́ŋ nô 'the dogs ran'
dogs SM P_2 run FOC

b. à mɔ̀ ñɨ́ŋ tɨ́-bvə́ 'the *dogs* ran'
DS P_2 run dogs (*DS* = dummy subject 'it')

In (14a) the subject is sentence initial, and in its simple unmodified[10] form it consists of the noun root and the subject marker (SM) of its noun class: bvə́ 'tɨ́ 'dogs'. In (14b) the subject is in the IAV position and in its simple unmodified form consists of its noun class prefix and its noun root: tɨ́-bvə́ 'dogs'. This nominal form may be called the "A form". In every sentence which does not morphologically mark the focus by means of the aspect focus marker or the negative,[11] the noun in the IAV position takes the A form.

2.1.2. *Transitive verbs.* The goal at this point is not to account for the acceptability or unacceptability of all the possible word orders in sentences with two argument verbs. These will be specified in section 4.1. The goal here is to confirm that the IAV position is indeed the focus position and to confirm or modify, as the case may be, the postposing rule in (7) and the focus principles 1 and 2.

First, consider sentences in which only the verb, the subject, and the object occur (i.e. no locative or temporal phrases).

(15) a. fɨ́ɨ á mɔ̀ zɨ́ kwɔ̀ 'what did the friends eat?'
friends SM P_2 eat what

b. (fɨ́ɨ á mɔ̀ zɨ́) kɨ́-bɛ́ '(the friends ate) fufu'
friends SM P_2 eat fufu

(16) a. à mɔ̀ zɨ́ ndúghɔ́ bɛ́-'kɔ́ 'who ate the fufu?'
DS P_2 eat who fufu

b. (à mɔ̀ zɨ́) á-fɨ́n (bɛ́-'kɔ́) 'the friends (ate the fufu)'
DS P_2 eat friends fufu

The sentences in (15) are subject to the same analysis which was given for the sentences in (10) to (12). In (15a) the interrogative word unambiguously marks the focus of the sentence. In (15b) the identification of the focus is more complex. If the elliptical answer kɨ-bɛ́ 'fufu' is given, then the focus is unambiguous. Even if the entire sentence is used, the focus will be identifiable as long as the context is clear: namely, the question in (15a) which requires that in the appropriate answer the object will be the focus. If the sentence (15b) is heard or studied in isolation, however, there is no surface indication as to what the focus is. In effect, the sentence in its surface form is an example of unmarked focus and of Principle 1.

The sentences in (16) require a different analysis. Sentence (16a) has the focus clearly marked by means of the interrogative word. Sentence (16b), according to Principle 2, also has a marked focus: the subject in the IAV position. As an answer to (16a) this is clearly the case. However, sentence (16b) may also be the answer to a question with multiple foci, as long as one of the foci is the subject. Thus, it could be the answer to (17).

(17) à mɔ̀ zɨ́ ndúghɔ́ kwɔ̀ 'who ate what?'
DS P_2 eat who what

Principle 2, therefore, needs to be modified:

(18) *Principle 2:* If the sentence does not have the "basic" word order, and (a) the subject is in the IAV position, then the focus is not fully marked; the focus could be the subject, or it could include the subject and any or all the constituents after the subject; or if (b) the subject is in the sentence initial position, then the constituent in the IAV position is the marked focus.

Principle 2b has not yet been exemplified, but it is given in anticipation of the discussion of (19), (20) and (21) immediately below.

Turning now to transitive sentences with a locative or manner prepositional phrase (PP) or a temporal adverbial phrase (ADP), the basic order is SVO-PP or SVO-ADP. Compare the sentences below.

(19) a. fɨ́ɨ á mɔ̀ zɨ́ kɨ-bɛ́ án 'sóm 'the friends ate fufu in the farm'
friends SM P_2 eat fufu in farm

b. fɨ́ɨ á mɔ̀ zɨ́ ghɛ́ bɛ́-'kɔ́ 'where did the friends eat fufu?'
friends SM P_2 eat where fufu

c. (fɨ́ɨ á mɔ̀ zɨ́) án 'sóm (bɛ́-'kɔ́) '(the friends ate fufu) in the *farm*'
friends SM P_2 eat in farm fufu

(20) a. fɨ́ɨ á mɔ̀ zɨ́ kɨ-bɛ́ á'zɔ́ɔ 'the friends ate fufu yesterday'
friends SM P_2 eat fufu yesterday

b. fɨ́ɨ á mɔ̀ zɨ́ zɨ́n bɛ́-'kɔ́ 'when did the friends eat fufu?'
friends SM P_2 eat when fufu

c. (fɨ́ɨ á mɔ̀ zɨ́) á'zɔ́ɔ (bɛ́-'kɔ́) '(the friends ate fufu) *yesterday*'
friends SM P_2 eat yesterday fufu

(21) a. fɨ́ɨ á mɔ̀ zɨ́ kɨ-bɛ́ áŋ 'wó 'the friends ate fufu with (their) hands'
friends SM P_2 eat fufu with hand

b. fɬl á mɔ̀ zɬ ênzɬn bɛ́-'kɔ́ 'how did the friends eat fufu?'
friends SM P_2 eat how fufu

c. (fɬl á mɔ̀ zɬ) áŋ 'wɔ́ (bɛ́-'kɔ́) '(the friends ate fufu) with their
friends SM P_2 eat with hand fufu *hands*'

Sentences (19a), (20a) and (21a) all have the basic word order. They all have unmarked focus and are examples of Principle 1 as stated in (13).

Sentences (19b), (20b) and (21b) all have an interrogative word which marks the unique focus. In addition, they are examples of Principle 2b which would interpret the interrogative word as the focus because the sentence does not have the basic word order and it is the interrogative which is in the IAV position. Thus, the focus in these sentences is identifiable both in terms of the interrogative word and in terms of the sentence word order.

The answers to these questions are given in (19c), (20c) and (21c). The focus is also marked in these sentences. Principle 2b would identify the focus as the constituent in the IAV position. In other words, the focused constituent in these sentences has been placed in the IAV position because it is the unique focus. These facts suggest that the postposing rule in (7) should be modified to read as a rule of adposing:

(22) ADPOSE the unique focus to the verb by placing it in the IAV position.

This adposing rule would not cover the facts of multiple foci pointed out for (17) or for (16b) as an answer to (17). Therefore, the adposing rule in (22) can be further modified to read:

(23) ADPOSE the unique focus to the verb by placing it in the IAV position; however, with multiple foci, if the subject is one of the foci, ADPOSE it to the verb.

In summary, in this section on the IAV position, three things have been accomplished: first, in terms of the relation between form and function, the IAV position has been established as the focus syntactic position; secondly, in terms of syntactic rules, a general rule of constituent focus has been introduced: namely, the adposing rule in (23); thirdly, in terms of interpretive principles, two focus principles have been formulated: namely, Principle 1 in (13) and Principle 2 in (18).

2.2. THE IMMEDIATE BEFORE VERB (IBV) POSITION

The second syntactic position to establish is the IBV position. This position is located between the auxiliary (e.g. P_2) and the verb. It may hold up to two non-verbal constituents. In the discussion of the IAV position, it was possible to speak of focus as a unitary function. In this section, however, different types of focus will have to be distinguished. The exposition in this section will begin with transitive verbs.

2.2.1. *Transitive verbs.* Compare the sentences in (24) and (25) with sentences (19a), (20a) and (21a).

(24) fɬl á mɔ̀ bɛ́-'kɬ́ zɬ́ { án 'sɔ́m / á'zɔ́ɔ / áŋ 'wɔ́ } { ... in the *farm*' (not the house) / ... *yesterday*' (not two days ago) / ... with *hands*' (not spoons) }
friends SM P_2 fufu eat

'the friends ate fufu...

(25) fʃɪ á mɔ̀ { án 'sóm / á'zɔ́ɔ / áŋ 'wó } zʃ́ kʃ́-bɛ́ { ...in the farm' / ...yesterday' / ...with hands' }
friends SM P_2 *eat fufu*

'the friends ate *fufu* [not yams]...

In (24) the object kʃ́-bɛ́ 'fufu' of sentences (19a), (20a) and (21a) has been preposed to the IBV position. In (25) the PP or ADP, as the case may be, has been preposed to the IBV position. Note that in (24) the word for 'fufu' bɛ́-'kʃ́ is no longer in its A form but is instead in its B form (cf. Hyman, chapter 6).

The function of the IBV position in these sentences is to indicate that the given constituent is part of the presupposition. The constituent in the IBV position is the marked presupposition, while the subject and the verb are part of the unmarked presupposition. The preposing rule can be formulated as in (26).

(26) PREPOSE the marked presupposition to the IBV position.

The glosses for sentences (24) and (25) indicate that the constituent in the IAV position is the focus of each sentence. The type of focus involved, however, differs from that seen in section 2.1 above. Sentences (19c), (20c) and (21c) have a focus which is simply being asserted. In sentence (24), by contrast, the focus is being counter-asserted. In order to clarify the counter-assertiveness of this focus, consider the following exchanges:

(27) a. A: fʃɪ á mɔ̀ zʃ́ kʃ́bɛ́ á kʃ́'bé 'the friends ate fufu in the compound'

b. B: hàʃ́, ghé mɔ̀ zʃ́ (kʃ́-bɛ́) án'sóm 'no, they ate (fufu) in the farm'

c. B: hàʃ́, ghé mɔ̀ bɛ́-'kʃ́ zʃ́ án'sóm 'no, they ate the fufu in the *farm*'

The context in (27) is that of a speaker A asserting and a speaker B counter-asserting. Speaker B in the above exchange specifically denies that it was 'in the compound' that the friends ate fufu. He claims that this event occured 'in the farm'. Note, however, that speaker B has two options in counter-asserting. First, he may use sentence (27b) which has the basic word order. He may omit the object kʃ́-bɛ́ 'fufu', but in either case it is only the overall context which permits one to identify the focus in (27b) and to know that it is counter-assertive. In isolation, the scope and type of focus would be unmarked in this sentence.

Secondly, speaker B may also use sentence (27c) which has a constituent in the IBV position. In this case, both the scope and the type of focus is marked. The constituent in the IAV position is the focus, and it is being counter-asserted.

The difference between what will be called asserted focus (AF) and counter-assertive focus (CAF) can be characterized in the following terms:

(28) a. *Assertive focus (AF):* that information which the speaker believes, assumes or knows the hearer does not share with him or her.

b. *Counter-assertive focus (CAF):*[13] that information which the speaker substitutes for information which the hearer asserted in a previous utterance.

In light of the above facts about the IBV position in relation to the IAV position, Principles 1 and 2 have to be modified to include a statement about interpreting the types of focus involved:

(29) *Principle 1:* If the sentence has the "basic" word order, then the scope and type of focus is unmarked; in terms of the larger discourse context, the sentence may be used either when the focus is the entire sentence or when it is that part of the sentence from the verb to the end or when it is any sub-set(s) of that part of the sentence from the verb to the end; and the type of focus may be either AF or CAF.

(30) *Principle 2:* If the sentence does not have the "basic" word order and (a) the subject is in the IAV position, then the scope and type of focus is not fully marked; the scope of the focus could simply be the subject (the most likely case), or it could include the subject and any or all of the constituents after the subject, and the type of focus could be either AF or CAF; or if (b) the subject is in the sentence initial position, and there is no constituent in the IBV position, then the constituent in the IAV position is the marked focus and is the AF.

In addition, Principle 3 is needed to interpret sentences with a constituent in the IBV position:

(31) *Principle 3:* If the subject is sentence initial and there is a constituent in the IBV and IAV positions, then the IBV constituent is the marked presupposition and the IAV constituent is the focus and is the CAF.

There appears to be a common feature in each of these principles in terms of marking or the lack of it: namely, if the scope of focus is marked, then the type of focus is also marked, and vice versa. But if the scope of focus is unmarked, then the type of focus is also unmarked, and vice versa.

The preposing rule (26) could apply to a sentence with only an object NP after the verb, or it could apply to two post-verbal constituents. In either case, the result is that there is no constituent in the IAV position and the verb is clause final:

(32) fɬl á máà bɛ́-'kɔ́ ({ án 'sɔ́m / á'zɔ́ɔ / áŋ 'wɔ́ }) zɬ { ...in the farm' / ...yesterday' / ...with (their) hands' }
friends SM P_1/FOC fufu *eat*

'the friends *did too* eat fufu...

Sentence (32) serves for both an SVO and an SVO-PP or SVO-ADP sentence. In each case, the post-verbal constituents have been preposed, leaving the verb in clause final position. The constituent(s) in the IBV position are the marked presupposition. The function of such a word order is counter-assertive, but in this case the focus is not an element in the clause. Instead, the focus is the truth value of the sentence, and in this case the counter-assertion is that the sentence is true. This type of focus is indicated by the completive focus (P_1/FOC) marker máà. In any sentence in a past completed tense, if there is a constituent in the IBV position and the verb is clause final, then a completive focus tense marker must be used in place of the neutral aspect marker (in this case, máà instead of mɔ̀ for P_1).[15] A possible context in which a sentence like (32) could be used is given in (33).

(33) a. A: fɬl á kà zɬ bɛ́-'kɔ́ 'the friends didn't eat fufu' [P_1]
friends SM NEG eat fufu

b. B: fɬl á máà bɛ́-'kɬ zɬ 'the friends *did too* eat fufu'
friends SM P_1/FOC fufu eat

Speaker A asserts that the truth value of 'the friends ate fufu' is false, but speaker B counter-asserts that the truth value is actually true. This type of focus will be called counter-assertive polar focus (CAPF). The term "polar" is used because of the binary opposition between the values "true" and "false" which this type of focus involves. This type of focus may be characterized as follows:

(34) *Counter-assertive polar focus (CAPF):* the truth value "true" which the speaker asserts concerning a sentence, contradicting the hearer's previous utterance that the truth value is "false" for the sentence.

Principle 4 captures the interpretation of a sentence like (32).

(35) *Principle 4:* If the subject is sentence initial and there is at least one constituent in the IBV position but no constituent in the IAV position, then the focus of the sentence is its truth value and is to be identified as CAPF, while the constituent in the IBV position is the marked presupposition.

Finally, note that it is only post-verbal constituents of the basic word order which may be placed in the IBV position. The subject may never occur there, as is indicated by the unacceptability of the sentences in (36).

(36) a. *à máà bvú-'tɬ ñɬŋ 'the dogs *did too* run'
DS P_1/FOC dogs run

b. *à máà fɬɪ-á zɬ kɬ-bé 'the friends ate *fufu* [not yams]'
DS P_1/FOC friends eat fufu

The unacceptability of (36a) and (36b) confirms the fact that the IBV position is for the marked presupposition (at least when the subject is sentence initial). The subject does not need to occur in the IBV position since in the sentence initial position it is already potentially part of the presupposition. It can be part of the focus if the entire sentence is the scope of the focus, but otherwise it is always part of the presupposition. For the other constituents, however, like the object or locative and so on, the IBV position is the only position in which they may occur and be clearly marked as part of the presupposition.

2.2.2. *Intransitive verbs.* Sentences with intransitives verbs and either a locative PP or a temporal ADP, or both, behave identically to the sentences with transitive verbs discussed in section 2.2.1 above. Consider the following sentence:

(37) bvú 'tɬ máà { á kɬ-'bé / á'zɔ́ɔ / tsú+tsú+ } ñɬŋ { ...in the compound' / ...yesterday' / ...quickly' }
dogs SM P_1/FOC

'the dogs *did too* run...

Compare (37) with sentences (10b), (11b), and (12b). The differences are clear: in (37) the verbal complement is in the IBV position, the P_1/FOC marker is present, and the type of focus is CAPF; whereas in the other sentences the verbal complement is in the IAV position, the P_1/FOC marker is absent, and both the type and scope of focus are formally unmarked. Thus, (37) is just a further example of the preposing rule in (26) and of the interpretive Principle 4 in (35).

If a sentence with an intransitive verb had both a locative PP and a temporal ADP, the same principles would apply and the same possible word orderings would be available as in sentences with a transitive verb and either a PP or an ADP. Thus,

one constituent may occur in the IBV position and one in the IAV position, or both may be in the IBV position with the verb sentence final. Principles 3 and 4 would apply to the appropriate cases. These possibilities are exemplified in (38).

(38) a. bvǔ 'tɬ mɔ̀ á kɬ-'bé ñɬŋ á'zɔ́ɔ 'the dogs ran in the compound *yesterday* [not two days ago]'
dogs SM P_2 in compound run yesterday

b. bvǔ tɬ má'á á kɬ-'bé á'zɔ́ɔ ñɬŋ 'the dogs *did too* run in the compound yesterday'
dogs SM P_2/FOC in compound yesterday run

In summary: first, in terms of the relation between form and function, the IBV position has been established as the marked presupposition; secondly, in terms of syntactic rules, a rule of preposing, rule (26), has been introduced; thirdly, in terms of interpretive principles, Principles 1 and 2 have been modified to include the identification of both the scope and type of focus, and Principles 3 and 4 have been added; and fourthly, three types of focus have been distinguished: assertive focus (AF), counter-assertive focus (CAF), and counter-assertive polar focus (CAPF).

2.3. CLAUSE POSITIONS AND DITRANSITIVE VERBS

Study the sentences in (39), both of which involve the use of a verb and three arguments.

(39) a. fɬl á mɔ̀ zo̱m nzàŋ â bà?tɔ̀m° 'the friends sang Nzaŋ for the chief'
friends SM P_2 sing Nzaŋ for chief

b. fɬl á mɔ̀ fúo kɬ-bɛ́ â bvǔ-'tɔ́ 'the friends gave fufu to the dogs'
friends SM P_2 give fufu to dogs

In sentence (39a), the word nzàŋ is the name of a specific song and dance. In both (39a) and (39b) the direct object immediately follows the verb and the indirect object follows the morpheme â. The morpheme â may be translated as either 'to' or 'for', the distinction between these two meanings not being formally made in Aghem. In (39a) the â marks what may be called the benefactive, as opposed to the â in (39b) which, in Jackendoff's (1972) semantic terms, marks the goal.[17] The direct object in these sentences will be referred to as the "theme", another semantic term from Jackendoff, but it could also be called the "patient".

The distinction between a ditransitive verb with a benefactive argument and one with a goal argument is significant. The verb with a benefactive argument may use only the IAV and IBV positions, while the verb with a goal may use not only the IAV and IBV positions, but also the position after the morpheme â. In terms of this analysis, the verb which takes the benefactive does not permit the theme and the benefactive to be *transposed*, while the verb which takes the goal does permit the theme and goal to be transposed. Some examples of the two types of ditransitive verbs are given in (40) below.

(40)

Prohibit Transposing (Benefactive)	*Permit Transposing (Goal)*
to clear grass for Y	to give X to Y
to sing X for Y	to tell X to Y
to dance X for Y	to send X to Y
to sew X for Y	to buy X for Y
to wash X for Y	to sell X to Y
to count X for Y	to cook fufu for Y

Those verbs taking a benefactive would generally not be expected to be subcategorized for two objects in any language, whereas those verbs taking a goal in (40) generally fall into the class of verbs which one would expect all or most languages to subcategorize for two objects (Larry Hyman, personal communication).

In the following discussion, only the acceptable word orders and certain relevant unacceptable word orders will be presented. Most of the unacceptable orders are irrelevant. They are detailed in section 4.1. Of the class of verbs which take the benefactive, there are only ten acceptable word orders out of a possible twenty-four. Of the class of verbs which take the goal, there are only thirteen acceptable word orders out of the relevant forty-eight possible orderings.[18]

2.3.1. *Ditransitive verbs with benefactive.* Consider the sentences in (41) along with (39a).

(41) a. à mɔ̀ zo̱m á-fɨ́n nzàŋ â bà?tɔ̀m°
DS P_2 sing friends Nzaŋ for chief
'the *friends* sang Nzaŋ for the chief'

b. fɨ́ á mɔ̀ zo̱m â bà?tɔ́m nzàŋ[19]
friends SM P_2 sing for chief Nzaŋ
'the friends sang Nzaŋ for the *chief*'

c. fɨ́ á mɔ̀ â bà?tɔ́m zo̱m nzàŋ
friends SM P_2 for chief sing Nzaŋ
'the friends sang *Nzaŋ* [not something else] for the chief'

d. fɨ́ á mɔ̀ nzàŋ zo̱m â bà?tɔ̀m
friends SM P_2 Nzaŋ sing for chief
'the friends sang Nzaŋ for the *chief* [not for the society]!'

e. fɨ́ á má'á nzàŋ â bà?tɔ́m zo̱m
friends SM P_2/FOC Nzaŋ for chief sing
'the friends *did too* sing Nzaŋ for the chief'

f. fɨ́ á má'á â bà?tɔ́m nzàŋ zo̱m
friends SM P_2/FOC for chief Nzaŋ sing
'the friends *did too* sing Nzaŋ for the chief'

Sentence (39a) has the basic word order and Principle 1 would apply to it. Sentence (41a) results from the application of the adposing rule in (22) which places the subject in the IAV position, and Principle 2a in (30) would apply to it. Sentence (41b) also results from the application of the adposing rule (22), but in this case the benefactive is placed in the IAV position. Principle 2b in (30) would apply to this sentence. Sentences (41c-f) all result from the application of the preposing rule in (26), which places one or two constituents in the IBV position. Principle 3 would apply to sentences (41c) and (41d), and Principle 4 would apply to sentences (41e) and (41f). Thus, these sentences do not present any new positions or principles of focus.

Five of the sentences in (41) along with (39a) represent all of the possible word orderings when the subject is sentence initial. These orderings are schematized in (42) and the corresponding sentence in (39) or (41) is indicated along with the scope and type of focus involved.

(42) i. The theme (Ot) and the benefactive (Ob) after the verb:

a. S V Ot â Ob (39a) Unmarked focus

b. S V â Ob Ot (41b) AF = â Ob

ii. Either the Ot or the Ob preceding the verb:

c. S â Ob V Ot (41c) CAF = Ot

d. S Ot V â Ob (41d) CAF = â Ob

iii. Both the Ot and the Ob preceding the verb:

e. S Ot â Ob V (41e) CAPF = true

f. S â Ob Ot V (41f) CAPF = true

Note that (42e) and (42f) are synonymous in terms of the scope and type of focus. This synonymity should not be surprising since the order of the Ot and the Ob in these sentences probably depends on their order in the preceding utterance which is being counter-asserted: that is, they have the same order as they do in the preceding utterance. Thus, (42e) is most likely preceded by (42a), and (42f) is preceded by (42b).

The seventh acceptable sentence above is (41a), which involves the postposing of the subject. Since the subject is placed in the IAV position by the same adposing rule in (22) that places the Ob in the IAV, one cannot get any other constituent in the IAV if the subject has already usurped that position. The possibility still remains, however, that a constituent or two could be preposed by rule (26) when the subject is in the IAV. In fact, it is this process which accounts for the other three acceptable sentences with this first class of ditransitive verbs. Consider the sentences in (43).

(43) a. à mɔ̀ nzàŋ zo̱m á-fɬn â bà?tòm 'the *friends* sang *Nzaŋ* for the chief'
DS P_2 *Nzaŋ sing friends for chief* (i.e. it was the *friends* who sang *Nzaŋ* for the chief)

b. à mɔ̀ â bà?tóm zo̱m á-fɬn nzàŋ 'the *friends* sang Nzaŋ for the *chief*'
DS P_2 *for chief sing friends Nzaŋ* (i.e. it was the *friends* who sang Nzaŋ for the *chief*)

c. à mɔ̀ nzàŋ â bà?tóm zo̱m á-fɬn 'the *friends* sang *Nzaŋ* for the *chief*'
DS P_2 *Nzaŋ for chief sing friends* (i.e. it was the *friends* who sang *Nzaŋ* for the *chief*)

d. *à mɔ̀ â bà?tóm nzàŋ zo̱m á-fɬn 'the *friends* sang *Nzaŋ* for the *chief*'
DS P_2 *for chief Nzaŋ sing friends*

Thus, the possible orderings for a sentence with the subject in the IAV position are:

(44) i. Either none or one constituent in the IBV:

a. --V S Ot â Ob (41a)

b. --Ot V S â Ob (43a)

c. --â Ob V S Ot (43b)

ii. Two constituents in the IBV:

d. --Ot â Ob V S (43c)

e. *--â Ob Ot V S (43d)

The two dashes in (44) are shorthand for à*(DS) + AUX* which are irrelevant to the ordering possibilities. The à is the dummy subject which occurs in the sentence initial position when the subject has been postposed.

Note that according to (44d) and (44e) the only possible ordering of two constituents in the IBV position is Ot â Ob. This restriction is due to the fact that sentences with two constituents in the IBV position keep those two constituents in

the same order that they had in the preceding utterance. It is impossible to have a preceding sentence with the order *--V S â Ob Ot. Therefore, a sentence like (44e) and (43d) is unacceptable. However, since it is possible to have (44a) and (41a), it is also possible to have (44d) and (43c).

Turning to the function of preposing and the IBV position, one would expect the constituents in the IBV position in (43) to be the marked presupposition, at least on the basis of sentences (41c-f). As the translations of the sentences in (43) indicate, however, this expectation is not met. The constituents in the IBV positions in (43a-c) are part of the focus. In these cases, the subject along with the constituent(s) in the IBV are the CAF. For example, take the following exchange:

(45) a. A: wɛ́ á mɔ̀ zo̱m nzàŋ â dzɨŋɛ́-kɔ́ 'the children sang Nzaŋ for the society'
children SM P_2 sing Nzaŋ for society

b. B: hàí, à mɔ̀ â bàʔtóm zo̱m á-fɨn nzàŋ 'no, it was the *friends* who sang Nzaŋ for the *chief*'
no DS P_2 for chief sing friends Nzaŋ

Speaker A asserts that the children sang Nzaŋ for the society. Speaker B counter-asserts that Speaker A is wrong on two accounts. First, it was the friends and not the children who sang. Secondly, it was the chief and not the society for which they sang. Thus, the IAV and IBV positions may be used to mark multiple foci. Furthermore, it is the position of the subject which determines what function is to be assigned to the IBV position. These facts mean that the preposing rule in (26) needs to be modified and an additional interpretive principle needs to be formulated:

(46) PREPOSE the marked presupposition to the IBV position if the subject is sentence initial; or the non-subject CAF if the subject is in the IAV position.

(47) *Principle 5:* If the subject is in the IAV position and at least one constituent is in the IBV position, then the subject and the constituent(s) in the IBV position are the foci and are the CAF.

2.3.2. *Ditransitive verbs with goal.* Everything that holds true for the ditransitive verbs in section 2.3.1 above also holds true for this class of ditransitive verbs. Therefore, there is no need to specify the ten acceptable orderings which have been discussed above. Instead, the crucial difference between the two classes of ditransitive verbs is that the class with an object:goal permits the theme (Ot) and the goal (Og) to exchange positions. One does not get all of the possible word orderings, however. Only three are acceptable. The acceptable word orderings (and some of the unacceptable ones) for this class of ditransitive verbs are given in (48).

(48)	*Ot and Og not transposed*	*Ot and Og transposed*
i.	Ot and Og after the verb:	
	a. S V Ot â Og	a'. S V Og â Ot
	b. S V â Og Ot	b'. *S V â Ot Og
ii.	Either Ot or Og before the verb:	
	c. S Ot V â Og	c'. S Og V â Ot
	d. S â Og V Ot	d'. *S â Ot V Og

iii. Both Ot and Og before the verb:

e. S Ot â Og V	e'. S Og â Ot V
f. S â Og Ot V	f'. *S â Ot Og V

iv. Subject in the IAV and either none or one in the IBV:

g. --V S Ot â Og	g'. *--V S Og â Ot
h. *--V S â Og Ot	h'. *--V S â Ot Og
i. --Ot V S â Og	i'. *--Og V S â Ot
j. --â Og V S Ot	j'. *--â Ot V S Og

v. Subject in IAV and two constituents in the IBV:

k. --Ot â Og V S	k'. *--Og â Ot V S
l. *--â Og Ot V S	l'. *--â Ot Og V S

First note that whenever a sentence with a non-transposed Ot and Og is unacceptable its counterpart with a transposed Ot and Og is also unacceptable. Secondly, note that the Ot and Og may never be transposed in a sentence with a subject in the IAV position. This fact suggests that the function of the transposition is to mark the Ot as the unique focus. In the basic word order or via the adposing rule there is no way to mark the Ot as the unique focus. However, with this type of ditransitive verb, where the Ot is generally non-human and the goal is human, it is possible to switch the Ot and Og and therefore to mark the Ot as the unique focus. Of course, if both the theme and the goal are equally human or equally animate, then it is not possible to switch the theme and goal without essentially making the old theme the new goal and the old goal the new theme. Consider the sentences in (49) and (50).

(49) a. ò mɔ̀ fúo kɨ́-fú â bɨ́ghá-'kɔ́ 'he gave the rat to the leopard'
he P_2 give rat to leopard

b. ò mɔ̀ fúo kɨ́-bɨ́ghá â fú-kɔ́ 'he gave the *rat* to the leopard'
he P_2 give leopard to rat

(50) a. ò mɔ̀ fúo tɨ́-bvə́ â bɨ́ghá-'kɔ́ 'he gave the dogs to the leopard'
he P_2 give dogs to leopard

b. ò mɔ̀ fúo kɨ́-bɨ́ghá â bvə́-'tɔ́ 'he gave the leopard to the dogs'
he P_2 give leopard to dogs

In (49a) the Ot kɨ́-fú 'rat' is not equally animate with the Og bɨ́ghá-'kɔ́ 'leopard' [B form] in terms of the situation of giving one of them to the other. In other words, a leopard is capable of consuming a rat, but a rat cannot consume a leopard. Therefore, the Ot and Og may be transposed in (49b) and it is still interpreted as the leopard consuming the rat, but with the unique focus being the rat. In (50a), however, the Ot tɨ́-bvə́ 'dogs' is equally animate with the Og bɨ́ghá-'kɔ́ 'leopard'. Thus, if they are transposed, the Ot 'dogs' becomes the Og and the Og 'leopard' becomes the Ot. This interpretation is preferred because dogs are capable of consuming leopard meat. Of course, if the pragmatic situation is spelled out in detail it is possible to get the reading that the leopard consumed the dogs even in (50b), but this would be possible only in a well specified context, such as in answer to the question *what did he give to the leopard?*. Thus, the pragmatics having to do with general information about the world determines whether or not the transposing rule can apply in order to make an Ot the unique focus in a given sentence. Note

that if it is possible to uniquely focus the Ot, then the Og will be part of the presupposition rather than the focus, even though it is in the IAV position and is in the A form.

The fact that the Ot is the unique focus in sentences where the transposing rule has applied helps explain why the transposed cases of (48b',d',f') are unacceptable. If in the transposed case of (48a') the Ot is already the unique focus, it would be redundant to put the â Ot in the IAV position. Thus, sentence (48b') is unnecessary. It would also be contradictory to then prepose it to the IBV position as in (48d'). The Og can be marked as the CAF simply by not transposing the Ot and Og and using word order (48c). Finally, the transposed order in (48e') would be possible since it would probably follow a sentence like (48a'), where the order of the theme and goal is also Ot â Og. However, (48f') is impossible since the sentence which would probably precede it, namely (48b'), is also impossible.

In order to account for the transposition, one syntactic rule and one interpretive principle are needed:

(51) TRANSPOSE the theme and the goal if the theme is the unique focus.

(52) *Principle 6:* If the theme and goal occur in the order "goal â theme", then the theme is the focus and is the AF; or is the CAF if the Og is in the IBV position.

The three acceptable word orders with the Ot and Og transposed are exemplified in (53).

(53) a. fɨ́ɨ á mɔ̀ fúo tɨ́-bvɛ́ â bɛ́-'kɔ́ 'the friends gave the dogs *fufu*'
friends SM P_2 give dogs to fufu [cf. (48a')]

b. fɨ́ɨ á mɔ̀ bvɛ́-'tɨ́ fúo â bɛ́-'kɔ́ 'the friends gave the dogs *fufu*'
friends SM P_2 dogs give to fufu [not yams; cf. (48c')]

c. fɨ́ɨ á má'á bvɛ́-'tɔ́ â bɛ́-'kɔ́ fúo 'the friends *did too* give the
friends SM P_2/FOC dogs to fufu give dogs fufu' [cf. (48e')]

Note that there is a certain asymmetry in the pairing of these transposed sentences with their non-transposed counterparts in terms of the expected interpretations. In fact, one non-transposed sentence does not come under Principle 3 in (31) as one expects. In order to spell these facts out, note that in (53a) the Ot is the AF and one expects, in its non-transposed counterpart (cf. 48a), that the focus is unmarked since the sentence would have the basic word order and would fall under Principle 1 in (29). This expectation is met. In (53c) the truth value is the CAF and one expects that its non-transposed counterpart would be synonymous since any sentence with a completive focus marker, a constituent in the IBV position, and the verb sentence final, would have this interpretation. This expectation is also met. In the case of sentence (53b), however, where the transposed Ot is the CAF, one would expect that its non-transposed counterpart would also have the same reading, with the Ot not transposed but still the CAF according to Principle 3 in (31). But in this case the expectation is not met. Instead, the difference in form is also coincident with a difference in meaning. It seems that the Ot in the IAV position in a sentence like (54) is interpreted as the unique AF, and semantically the sentence seems to specify the cause or source of a certain state of affairs:

(54) fɨ́ɨ á mɔ̀ â bvɛ́-'tɨ́ fúo kɨ́-bɛ́ 'the friends gave the dogs *fufu*' (and
friends SM P_2 to dogs give fufu that is why they are sick)

Thus, even though the ditransitive sentence (54) is formally identical to (41c), their semantic and pragmatic readings are distinct. The source of this difference seems to be the distinction between the presence of a benefactive versus the presence of a goal in the IBV position. Thus, Principle 3 has to be modified to read:

(55) *Principle 3:* If the subject is sentence initial and there is a constituent in the IBV and IAV positions, then the IBV constituent is the marked presupposition and the IAV constituent is the focus and is the CAF; unless the IBV constituent is the goal and the IAV constituent is the theme, in which case the IAV constituent is the focus and is the AF and semantically it specifies the source or cause for a certain state of affairs.

2.3.3. *Summary.* In the discussion in sections 2.1, 2.2. and 2.3, three rules were introduced which exploited three sentential positions. In (56) each of the rules is associated with the position which it exploits.

(56)	*Rules*	*Positions*
	Adposing (22)	V ___ (=IAV)
	Preposing (46)	___ V (=IBV)
	Transposing (51)	â ___

In addition to the rules and the positions, six interpretive principles were formulated. These principles correlated the positions with the types of focus. The table in (57) [next page] summarizes the relations between the different positions and the types of focus. The completive focus marker is included (in its P_1 form) in the table since it is obligatory under certain circumstances. The sentential positions are specified across the top of the table along with the completive focus marker (CplF). The types of focus and the P(resupposition) are specified along the side of the table. The boxes with dashed lines indicate that the correlation of the given sentential position or of the completive focus marker with the given pragmatic function does not occur.

The row marked AF (assertive focus) indicates that the AF is specified either by the IAV position (V___) or the position immediately following the morpheme â. In the first position, the constituent may have any semantic function even though in the example (57a) it is the goal. In the latter case, the constituent following the morpheme â must be the theme.

The row marked CAF (counter-assertive focus) indicates that the CAF is specified by the IAV position if the subject is sentence initial and there is a constituent in the IBV position as in (57c); or if the subject is in the IAV position and there is at least one constituent in the IBV position as indicated by (57d) and (57e). The CAF is also specified by the IBV position if the subject is in the IAV position as also indicated by (57d) and (57e).

The row marked CAPF (counter-assertive polar focus) indicates that if there is one or more constituents in the IBV position and the verb is sentence final and the completive focus marker is present (e.g. máà), as in (57f), then the completive focus marker marks the CAPF.

The row marked P (presupposition) indicates that if the subject is sentence initial, any constituent in the IBV position will be the marked presupposition as indicated by (57c) and (57f).

Thus, along with the various rules, syntactic positions and interpretive principles that have been established so far, three types of focus have been distinguished: the AF, the CAF, and the CAPF.

TABLE 1

Unmarked focus: S V Ot â Og (basic order)

Sentential position or CplF / Marked function	V__ (IAV)	__V (IBV)	â__	CplF
AF	S V <u>â Og</u> Ot (a).	----	S V Og â <u>Ot</u>.(b)	----
CAF	S [Ot / âOg] V [âOg / Ot] (c) à [Ot / âOg] V <u>S</u> [âOg / Ot] (d) à Ot âOg V <u>S</u> (e)	à [Ot / âOg] V S [âOg / Ot] (d) à <u>Ot âOg</u> V S (e)	----	----
CAPF	----	----	----	S <u>máà</u> {Ot âOg / âOg Ot} V (f)
P	----	S [Ot / âOg] V [âOg / Ot] (c) S máà {Ot âOg / âOg Ot} V (f)	----	----

2.4. MULTIPLE FOCI

The occurrence of multiple foci has already been noted for sentences in which the scope of focus is formally unmarked. See Principles 1 and 2a in (29) and (30). They account for nearly all possible sentences with multiple foci, since the presence of multiple foci generally requires that the sentence have either the basic word order, or the basic word order with the exception of the subject in the IAV position. This last possibility occurs when the subject is one of the foci and the verb is part of the presupposition.

The only sentence type with multiple foci which Principles 1 and 2a would not cover is exemplified by (45b) and (57d and e). This type of sentence motivated Principle 5, which now accounts for it. A sentence like (45b) seems to be the only sentence type which formally marks multiple foci. In this case they are all the CAF. In the sentences covered by Principles 1 and 2a, however, the type of focus could be either AF or CAF. Thus, the occurrence of multiple foci does not motivate any modifications of or additions to the set of principles already established.

3

FORMAL CORRELATES OF FOCUS: VERBAL MORPHOLOGY, THE FOCUS MARKER nò AND CLEFT SENTENCES

3.0. INTRODUCTION

In addition to the syntactic positions which may be used to mark various types of focus, an Aghem speaker may also use other means. First, there is verbal morphology in the form of the completive focus marker (CplF) which is here represented by maa.[1] Secondly, there is the focus marker nò. These two means may co-occur with the various word orders presented in chapter 2. Thirdly, there is the cleft sentence, which is a form which does not co-occur with any of the other means.

3.1. THE COMPLETIVE FOCUS MARKER (CplF)

Compare the sentences in (1).

(1) a. énáʔ mò fúo kɬ-bɛ́ â fɬn-ghɔ́ — 'Inah gave fufu to (his) friends'
Inah P_2 give fufu to friends

b. énáʔ má'á fúo bɛ́-'kɔ́ â fɬn-ghɔ́ — 'Inah *did* give fufu to (his) friends' (i.e. it is the case that Inah gave fufu to (his) friends)
Inah P_2/FOC give fufu to friends

There are two formal differences between these two sentences. First, the marking of the P_2 tense is distinct. Sentence (1a) has the normal completive aspect marker for P_2, while sentence (1b) has the completive focus marker for P_2 (here indicated as P_2/FOC). Secondly, sentence (1a) has the object 'fufu' in the A form (kɬ-bɛ́), while sentence (1b) has the object 'fufu' in the B form (bɛ́-'kɔ́). The glosses attempt to capture the differences in meaning signaled by these formal differences. Sentence (1a) has the basic word order and no morphologically marked focus, so it simply falls under interpretive Principle 1 in chapter 2, the scope and type of focus being unmarked. Sentence (1b) is marked, however. The focus is on the truth value of the sentence: specifically that it is "true". This focus is the potentially assertive counterpart to the counter-assertive polar focus (CAPF) discussed in section 2.2.1 above. This focus will be called "polar focus" (PF). The two glosses given for (1b) are simply two different ways of trying to capture this type of focus in English. Polar focus can be defined as follows:

(2) *Polar focus (PF):* the truth value "true" which the speaker asserts concerning a sentence.

Note that a sentence like (1b), which is marked for PF and has the basic word order, is unmarked as to whether it is being simply asserted or counter-asserted. Interpretive Principle 7 captures this fact:

(3) *Principle 7:* If a sentence has the basic word order and is marked with the completive focus marker, then the truth value "true" is the focus of the sentence and the focus may be either asserted or counter-asserted.

Finally, in terms of verbal morphology the completive focus can only be indicated in the past tenses (see Anderson, section 4.2). There is no morphological counter-

part in the past incompletive, present or future tenses, although word ordering and the focus marker nɔ̀ interact to mark PF in these tenses (cf. section 3.2). This restriction on the verbal morphology seems to correspond to the fact that it is the truth value of the sentence which is the focus, and the truth value of a past action is easier to assess than that of a present or future action because the past action is completable whereas the present or future action is not specified in terms of completedness. It is at least reasonable, therefore, that the CplF would be restricted to the past tenses only. Of course, it would be interesting to know what underlies the distinction diachronically, to see if there is any support or counter-evidence for this speculation.

3.1.1. *The completive focus marker and possible word orders.* The completive focus marker may be used with any of the word orders discussed in chapter 2. It was noted that for sentences like (41e and f) and (53c), where the verb was sentence final and there was a constituent in the IBV position, the CplF was obligatory if the tense was past. In other words, the normal completive past tense marker (mɔ̀ in P_1 and P_2) could not occur in a sentence with such a word order. In a sentence with the basic word order, however, like those in (1a) and (1b), the CplF may be used as well as the normal completive past tense markers, the choice depending on what is being communicated. However, there are numerous possible word orders between these two extremes. Further study needs to be done on these, but in general it may be said that each sentence in (4) involves CAPF. The question remains as to whether or not these may be sub-types of CAPF, and if they are, how should they be characterized.[2]

(4) a. énáʔ má'á fúo â fʃn-ghɔ́ bɛ́-'kɔ́ 'Inah *did* give fufu [at least] to his *friends*'
Inah P_2/FOC give to friends fufu

b. énáʔ má'á fúo fʃn-ghɔ́ â bɛ́-'kɔ́ 'Inah *did* give his friends [at least] *fufu*'
Inah P_2/FOC give friends to fufu

c. énáʔ má'á bɛ́-'kʃ́ fúo â fʃn-ghɔ́ 'Inah *did* give fufu to his *friends* [not to the dog]'
Inah P_2/FOC fufu give to friends

d. énáʔ má'á fʃ́l-á fúo â bɛ́-'kɔ́ 'Inah *did* give his friends *fufu* [not meat]'
Inah P_2/FOC friends give to fufu

In (4a) the goal has been adposed to the IAV position; in (4b) the theme and goal have been transposed; in (4c) the theme has been preposed to the IBV position, leaving the goal in the IAV position; and in (4d) the theme and goal have been transposed, and the goal has then been preposed to the IBV position, leaving the theme in the IAV position. Sentences (4a) and (4b) claim that of all the possible events involving Inah's giving, at least one specific occurrence of it is true; while sentences (4c) and (4d) claim that contrary to a previous assertion, something else is true.

Although the CplF marker may co-occur with the word orders in (4), it cannot co-occur with a postposed subject as indicated by the unacceptable sentence in (5):

(5) *à má'á fúo énáʔ bɛ́-'kɔ́ â fʃn-ghɔ́ '???'
DS P_2/FOC give Inah fufu to friends

3.1.2. *The completive focus marker and questions.* The CplF marker cannot occur in a sentence with an interrogative word, nor can it be used in an answer to a question which is formed with an interrogative word.

(6) a. A: énáʔ mɔ̀ kɔ̀ʔ ghɛ́ bɛ́-'kɔ́ 'where did Inah see the fufu?'
Inah P_1 see where fufu

b. A: *énáʔ máà kɔ̀ʔ ghɛ́ bɛ́-'kɔ́
Inah P_1/FOC see where fufu

c. B: énáʔ mɔ̀ kɔ̀ʔ á kʃ́-'bé (bɛ́-'kɔ́) 'Inah saw (the fufu) in the compound'
Inah P_1 see in compound fufu

c. B: *énáʔ máà kɔ̀ʔ á kʃ́-'bé (bɛ́-'kɔ́)
Inah P_1/FOC see in compound fufu

In (6a) and (6c) the focus is clear. In (6a) it is the interrogative word, and in (6c) the focus is determined by the context: namely, it answers the question (6a) and therefore the focus is á kʃ́'bé 'in the compound'. In neither of these sentences is the truth value of the sentence in question. Therefore, the CplF marker is inappropriate, as indicated by the unacceptability of (6b) as a question and (6d) as an answer to a question formed with an interrogative word.

The CplF marker can be used in polar questions, however. First, note the form of a polar question without the CplF marker in (7) and the range of possible answers in (8). (QM means 'question marker'.)

(7) fʃ́ì á mɔ̂ wì fʃ́-nwʃ́ì 'á 'did the friends kill a bird?'
friends SM P_1 kill bird QM

(8) a. ɔ̀ɔ̃, fʃ́ì á mɔ̂ wì fʃ́-nwʃ́n[3] 'yes, the friends killed a bird'
yes friends SM P_1 kill bird

b. ɔ̀ɔ̃, fʃ́ì á mɔ̂ wì nɔ̂ 'yes, the friends killed (one)'
yes friends SM P_1 kill FOC

c. ɔ̀ɔ̃, fʃ́ì á máà wì (nwʃ́n-'fɔ́) 'yes, the friends *did* kill (the bird)'
yes friends SM P_1/FOC kill bird

d. hàʃ́, fʃ́ì á kâ wì dzʃ́ (nwʃ́n-'fɔ́) 'no, the friends did not kill (a bird)'
no friends SM NEG kill NEG bird

e. hàʃ́, à mɔ̀ wì énáʔ (nwʃ́n-'fɔ́) 'no, *Inah* killed a bird'
no DS P_1 kill Inah bird

f. hàʃ́, fʃ́ì á mɔ̂ fèe nɔ̀ 'no, the friends sold (it)'
no friends SM P_1 sell FOC

g. hàʃ́, fʃ́ì á mɔ̂ wì kʃ́-fú 'no, the friends killed a rat'
no friends SM P_1 kill rat

With the CplF, however, the polar question has a specific focus, and consequently the range of possible answers is significantly restricted. Thus, a question like (9) requires a preceding context such that someone has just said something like *the friends shot a bird*; or simply the speaker expects that the friends killed a a bird and so uses the CplF, expecting a positive answer:

(9) fʃ́ì á máà wì nwʃ́n-'fɔ́ ɔ́[4] 'is it the case that the friends killed the bird?'
friends SM P_1/FOC kill bird QM

The answers to (9) are essentially limited to (8c) as the positive response, or (8d) as the negative one. Apparently (8f) would also be acceptable, but only as an elliptical form of the full utterance which would consist of (8d) and (8f). Thus, since the truth value of the sentence is the focus in the question, the argu-

ments cannot be contradicted in the answer as in (8e) and (8g), nor can the normal completive past tense marker mɔ̀ of (8a) and (8b) be used in the answer.

The CplF marker is also used in one of the possible responses to a negative polar question like that in (10a). Only the answers in (10b and c) are appropriate.

(10) a. ffɪ á kâ wì nwfn-'fɔ́ ɔ́ 'didn't the friends kill a bird?'
friends SM NEG kill bird QM

b. ɔ̃ɔ̃, ffɪ á kâ wì dzǂ (nwfn-'fɔ́) 'yes, the friends didn't kill (a bird)'
yes friends SM NEG kill NEG bird

c. hàǐ, ffɪ á máà wì nwfn-'fɔ́ 'no, the friends *did* kill (a bird)'
no friends SM P_1/FOC kill bird

Thus, for polar questions in general, if the question uses either the CplF or a negative form, the response which denies the validity of the event requires the negative kà (or yɔ́ in the non-completive aspect), while the response which asserts the validity of the event requires the CplF marker (here, máà).

3.1.3. *The completive focus marker and the negative.* Aghem formally distinguishes between CplF and non-CplF in the negative, but only in the immediate past (P_0) and the today past (P_1). In the distant past (P_2), the formal distinction is neutralized. The following table specifies the positive and negative forms (cf. Anderson, section 7.1).

(11) TABLE 2

	affirmative		*negative*	
	[-CplF]	[+CplF]	[-CplF]	[+CplF]
P_0	Ø	ǹ̀	kà	kàǹ
P_1	mɔ̀	máà	kà	kàa
P_2	ˋmɔ̀ˊ	má'á	kàá	kàá

As was mentioned in chapter 1, the central concern of this study does not include focus in negative sentences. Research remains to be done on the distinction between the two sets of negative forms in (11). However, a tentative analysis can be given as to some of the distinctions between these two sets of forms.

The difference between these two different sets of negative forms apparently is one of scope, although in certain cases there does not seem to be any clear pragmatic or semantic distinction. This lack of a clear distinction may very well underlie the incomplete formal distinction between these two sets. It should be pointed out that even though two different forms are distinguished for P_1 in (11), the language consultant apparently did not always distinguish these two negative forms (Stephen C. Anderson, personal communication). Therefore, the distinction between the two sets of forms can be said to exist with certainty only in the P_0.

With the non-CplF negatives, the scope of the focus depends on the type of sentence in which it occurs and the context in which it is uttered. If the subject is sentence initial and the rest of the sentence has the basic word order, then the scope could be the same as that spelled out in Principle 1 in (29) in chapter 2. However, in this case a distinction should be made between the embedded proposition and the sentence. The scope of focus can be, depending on the larger context in which it is used, the entire embedded proposition, or it could be that part of the sentence from the verb to the end, or any sub-set(s) of that part of the sentence from the verb to the end. For example, take sentence (12).

(12) énáʔ kà fùo bɛ́-'kɔ́ â fʃ́n-ghɔ́ 'Inah did not give fufu to (his) friends'
Inah NEG give fufu to friends

The embedded proposition in (12) is "Inah gave fufu to his friends". The negative can have this proposition within its scope, in which case the reading might be characterized as "Inah's giving fufu to his friends is not what happened, (instead it was something else)". Of course, as noted above, the scope of the negative may be much more limited than the entire proposition but not all of the possibilties for (12) will be given here. However, one further example would be where 'fufu' is the only element within the scope of the negative. In this case, the reading would be something like "Inah did not give *fufu* to his friends (but he did give them meat)", or "Inah gave something to his friends, but it wasn't fufu". The negative focus in sentences with the basic word order as in (12) could be either assertive or counter-assertive, again depending on the larger context.

If the subject is sentence initial and there are one or two constituents in the IBV position plus a constituent in the IAV position, the scope of the negative focus is the IAV constituent. The type of focus is counter-assertive.

If the subject is postposed to the IAV position, then the scope of the negative focus would simply be the subject, or the subject and any post-subject constituent(s). The negative focus in this case would also be counter-assertive.

If the subject is sentence initial and there are one or two constituents in the IBV position but no constituent in the IAV position, then one must use the CplF marker. In this case, as is the case with any sentence containing the CplF negative forms, the focus is the truth value of the embedded proposition, namely "false". With the basic word order, the use of the negative CplF could be either asserted or counter-asserted and will be subsumed under the label "polar focus" (PF). With any of the other word orders, the use of the negative CplF would be counter-assertive and will be subsumed under the label "counter-assertive polar focus" (CAPF).

On the basis of this discussion about the negative CplF, polar focus as defined in (2) has to be modified as:

(13) *Polar focus (PF):* the truth value "true" or "false" which the speaker asserts or counter-asserts concerning a proposition.

The one area where the two types of negative foci become difficult to distinguish is when the non-CplF negative has the entire proposition as its scope. Compare (12) above with its minimal pair in (14) below.

(14) énáʔ kán fúo bɛ́-'kɔ́ â fʃ́n-ghɔ́ 'Inah *did* not give fufu to (his) friends'
Inah NEG/P_0/FOC give fufu to friends

The difference between (12) and (14) might be captured by the logical forms in (15), where NEG(ative) and FAL(se) are predicates.

(15) a. NEG (Inah gave fufu to his friends) (for (12))

b. FAL (Inah gave fufu to his friends) (for (14))

The difficulty here is to capture the semantic difference between the two predicates, if indeed there is any. The possibility suggested here is that captured by the paraphrases in (16).

(16) a. "*Something* happened, but that something was not Inah's giving fufu to his friends." (for (12))

b. "It is *not* the case that Inah gave fufu to his friends." (for (14))

The difference between the two seems to come down to the fact that the normal negative invites the interpretation that something indeed did happen, only the right something has not been identified; whereas with the CplF negative the simple claim is made that the embedded proposition is false, without any question as to whether something else might have happened. The fact that the distinction between these two is subtle may underlie the lack of a thorough morphological differentiation between the two sets of negatives.

3.2. THE FOCUS MARKER nò (FOC)

The FOC marker nò always occurs to the right of the constituent which it marks as the focus. It is used to indicate various types of focus. In some instances it may be used to produce sentences which are formally distinct from but functionally synonymous with sentences which have their focus marked by word order or with cleft sentences.

The FOC marker is obligatory in a simple sentence which has neither a CplF marker nor a verbal complement. Sentences (17a), (18a) and (19a) are all examples of such sentences. The other sentences in (17) through (19) exemplify the presence of either the CplF marker or a verbal complement.

(17) a. kɨ mɔ̂ dzɔ̀ɔ̀ nò 'it was good'
it P_1 good FOC

b. kɨ máà dzɔ̀ 'it *was* good/it came out good'
it P_1/FOC good

c. kɨ mɔ̂ dzɔ̀ɔ̀ né 'it was good today'
it P_1 good today

(18) a. fú kɨ mɔ̂ ñɬŋ nô 'the rat ran'
rat SM P_1 run FOC

b. fú kɨ máà ñɬŋ° 'the rat *did* run'
rat SM P_1/FOC run

c. fú kɨ mɔ̂ ñɬŋ á kɨ-'bé 'the rat ran in the compound'
rat SM P_1 run in compound

(19) a. bɨghá 'kɨ mɔ̂ wì nô 'the leopard killed (it)'
leopard SM P_1 kill FOC

b. bɨghá 'kɨ máà wì° 'the leopard *did* kill (it)'
leopard SM P_1/FOC kill

c. bɨghá 'kɨ mɔ̂ wì fɨ-nwɨn 'the leopard killed a bird'
leopard SM P_1 kill bird

The scope and type of focus are unmarked in the sentences above with the FOC marker. They may be used in the larger context when the focus is either the entire sentence or the verb alone, and when the type of focus is either AF or CAF. Note that a postposed subject is equivalent to a verbal complement: in such a sentence the FOC marker is not obligatory:

(20) a. à mɔ̀ dzɔ̰̀ɔ̰ kɬ-bɛ́ 'the *fufu* is good'
DS P_1 good fufu

b. à mɔ̀ ñ̀ŋ kɬ-fú 'the *rat* ran'
DS P_1 run rat

c. à mɔ̀ wì kɬ-bɬghá 'the *leopard* killed (it)'
DS P_1 kill leopard

Only in sentences like (17a), (18a) and (19a) is the FOC marker obligatory. In sentences like (17b), (18b) and (19b) the FOC marker is obligatorily absent. It cannot co-occur with the CplF marker.

In sentences (17c), (18c) and (19c) the FOC marker is optional. It may be absent, or it may occur after the verb or after any verbal complement as indicated in (21a) and (21b) below. It may not occur, however, before the verb as in (21c) or on more than one constituent per sentence, as in (21d).

(21) a. fú kɬ mɔ̂ ñ̀ŋ nô á kɬ-'bé 'the rat *ran* [i.e. did not walk] inside the compound'
rat SM P_1 run FOC in compound

b. fú kɬ mɔ̂ ñ̀ŋ á kɬ-'bé nò 'the rat ran inside the *compound* [not inside the house]'
rat SM P_1 run in compound FOC

c. *fú kɬ nô mɔ̀ ñ̀ŋ á kɬ-'bé 'the *rat* [not the dog] ran inside the compound'
rat SM FOC P_1 run in compound

d. *fú kɬ mɔ̂ ñ̀ŋ nô á kɬ-'bé nò 'the rat *ran* [i.e. did not walk] inside the *compound* [not inside the house]'
rat SM P_1 run FOC in compound FOC

In sentences where the FOC marker is optional, the scope of the FOC marker is the constituent to its left and nothing more. The type of focus is CAF. Thus, the FOC marker may be used in sentences with unmarked focus and it may be used in other sentences to mark the CAF.

In addition, in the appropriate circumstances the FOC marker may be used to mark the CAPF. It was noted above that the CplF marker is only available in the past tenses. In the non-past tenses there is no verbal morphology available to indicate that the truth value of a given sentence is being asserted or counter-asserted. However, even without the verbal morphology it is possible to mark formally a sentence to indicate that the truth value is being counter-asserted. This marking is done by preposing the one or two verbal complements to the IBV position and leaving the verb in the sentence final position. In these cases the FOC marker is required to occur after the verb, and its function is clearly to mark the sentence for CAPF:

(22) fú kɬ sɬ$^{\delta}$ á kɬ-'bé ñ̀ŋ nò 'the rat *will too* run in the compound'
rat SM F_1 in compound run FOC

In (22) the FOC marker is obligatory just as the CplF marker is obligatory in such a sentence if the tense is past completive. If the locative constituent á kɬ-'bé were absent in (22) the focus would be unmarked. In terms of the larger discourse in which such a sentence would be used, however, it could have one of three possible readings: AF "the rat will run" with the scope being either the entire sentence or the verb; CAF "the rat will *run* [and not walk]"; and CAPF "the rat *will too* run".

The fact that the FOC marker may be used to mark the CAF means that Aghem may have sentences which are formally distinct but functionally identical. This synonymity is shown in (23a and b). Sentence (23a) uses word order, and (23b) uses the FOC marker.

(23) a. énáʔ mɔ̀ án 'sóm zɨ̀ kɨ́-bɛ́ 'Inah ate *fufu* [not yams] in the farm'
Inah P_1 in farm eat fufu

b. énáʔ mɔ̀ zɨ̀ kɨ́-bɛ́ nɔ̀ án 'sóm 'Inah ate *fufu* [not yams] in the farm'
Inah P_1 eat fufu FOC in farm

Finally, the FOC marker may mark a type of focus which has not yet been introduced; namely, exhaustive listing focus (ELF). Kuno (1972, 1975) first distinguished this type of focus. ELF may be thought of as that type of focus which marks a constituent as the *only* member of a given set (i.e. Jackendoff's presupposition set (1972)) for which the remainder of the sentence is true. It is at this point that the FOC marker interacts with the word order variants of chapter 2. If the FOC marker marks a postposed subject or the constituent in the IAV position which would normally be the CAF, then it is marking that constituent as the ELF. In (24a) the subject is the ELF, and in (24b) the goal is the ELF.

(24) a. à mɔ̀ fùo á-wɛ́ nô bɛ́-'kɔ́ â fɨ́n-ghɔ́ '(only) the *children* gave the friends fufu'
DS P_1 give children FOC fufu to friends

b. wɛ́ á mɔ̂ bɛ́- kɨ́ fúo â fɨ́n-ghɔ́ nô 'the children gave fufu (only) to [their] *friends*'
children SM P_1 fufu give to friends FOC

3.3. CLEFT SENTENCES

The last of the formal correlates to the pragmatic function of focus is the cleft sentence. It is similar to the English cleft sentence in that the construction has constituents in the following order: a dummy subject (DS) à, the verb 'to be', the focused constituent, and finally the presupposition expressed by a relative clause. See (25) and (26). Note that in (25a) and (26a) the FOC marker is not obligatory in the relative clause in order to complete it; in fact, it is obligatorily absent: the FOC marker never occurs in a relative clause.

(25) a. à mɔ̀ lɔ̀ bà?tɔ́m wɨ́ 'á ò mɔ̀ búɔ (*nɔ̀) 'it was the chief who came'
DS P_1 be chief this REL he P_2 come FOC

b. *à mɔ̀ lɔ̀ bà?tɔ́m nô wɨ́ á ò mɔ̀ búɔ '???'
DS P_1 be chief FOC this REL he P_2 come

c. *à máà lɔ̀ bà?tɔ́m wɨ́ 'á ò mɔ̀ búɔ '???'
DS P_1/FOC be chief this REL he P_2 come

(26) a. à mɔ̀ lɔ̀ bɨghá 'kɨ́ á énáʔ mɔ̀ kɔ́? (*nɔ̀) 'it was a leopard that Inah saw'
DS P_1 be leopard this REL Inah P_2 see FOC

b. *à mɔ̀ lɔ̀ bɨghá nɔ̀ kɨ́ á énáʔ mɔ̀ kɔ́? '???'
DS P_1 be leopard FOC this REL Inah P_2 see

c. *à máà lɔ̀ bɨghá 'kɨ́ á énáʔ mɔ̀ kɔ́? '???'
DS P_1/FOC be leopard this REL Inah P_2 see

In the cleft sentence, the focused constituent is marked as the ELF as in English (cf. Kuno 1972). In (25a) /bà?tɔ́m/ 'chief' is the only member of the set in question for which "X came" is true, and in (26a) /kɨ́-bɨghá/ 'leopard' is the only member of the set in question for which "he saw X" is true (where X represents the set in question).

The FOC marker nɔ̀ may not mark the focused constituent of the cleft sentence as is indicated by the unacceptable sentences (25b) and (26b). This fact seems to

indicate that the ELF is probably the outer limit of the Aghem focus typology.[6] In 3.2 it was seen that a constituent which may be the AF, according to word order Principle 1 in (29) of chapter 2, could be marked by the FOC marker nɔ̀ and become the CAF. Furthermore, a constituent which would be the CAF under Principle 3 in (31) of chapter 2 could also be marked by the FOC marker nɔ̀ and become the ELF. Thus, the FOC marker may serve to change a constituent from the AF to the CAF, and from the CAF to the ELF, but not from the ELF to some unspecified focus type.

The CplF marker also cannot occur in a cleft sentence as is indicated by the unacceptable sentences (25c) and (26c). This restriction is expected since as was seen in 3.1.1 in (5), the CplF marker cannot co-occur with a postposed subject: in the cleft sentence, the focus is the postposed subject of the verb 'to be'. This restriction also should be expected since the focus type which the CplF marker indicates is the truth value "true" for the given sentence, while in a cleft sentence, there is no question as to the truth value of the presupposition. The question is simply: of what item is the presupposition true?

Finally, since the cleft sentence marks the focused constituent as the ELF, the sentence (25a) is synonymous with (27).[7]

(27) à mɔ̀ búɔ bà?tóm nô '(only) the *chief* came'
DS P_2 *come chief FOC*

3.4. SUMMARY

The following table summarizes the types of focus which may be marked by the different formal correlates presented in sections 3.1, 3.2 and 3.3.

(28) TABLE 3

	AF	*CAF*	*ELF*	*PF*	*CAPF*
CplF marker				X	X
FOC marker		X	X		X
Cleft sentence			X		

Tables 4 and 5 graphically display the co-occurrences of the various types of focus with the CplF marker and the FOC marker, and the various types of word orders in which the markers occur. The boxes in the tables which are marked only with dashes are those for which there is no co-occurrence of focus type, formal marker, and word order. In both of the tables the particular formal marker, whether máà representing CplF or the FOC marker nɔ̀, is underlined as well as the syntactic position in question, whether the IAV, IBV, â ___, or a combination of these.

Table 4 shows that with the basic word order the CplF marker indicates PF, while with any of the other special word orders it marks CAPF. Table 5 shows that the FOC marker nɔ̀ occurs with the basic word order either when the focus is unmarked or when the FOC marker marks the CAF. It also marks the CAF when it marks a constituent which has been moved either to the IAV (V ___) position or the position after the morpheme â (â ___). The FOC marker marks a sentence for CAPF when all the verbal complements occur in the IBV position and the verb is sentence final (except for the nɔ̀ which follows it) and is in a non-past tense. Finally, the FOC marker marks a constituent as the ELF when by the word ordering principles that constituent would be the CAF.

(29)

TABLE 4

Completive Focus Marker (CplF)

	CplF (basic order)	CplF+ V__	CplF+ â__	CplF+ __V+	CplF+ __V+ V__	CplF+ __V+ â__
AF	-----	-----	-----	-----	-----	-----
CAF	-----	-----	-----	-----	-----	-----
PF	S máà V Ot â Og	-----	-----	-----	-----	-----
CAPF	-----	S máà V â Og Ot	S máà V Og â Ot	S máà {Ot â Og / â Og Ot} V	S máà [Ot / âOg] V [âOg / Ot]	S máà Og V â Ot
ELF	-----	-----	-----	-----	-----	-----

NB: V__ = IAV; __V = IBV; â__---relevant only with object:theme (Ot)

TABLE 5

Focus Marker nò *(FOC)*

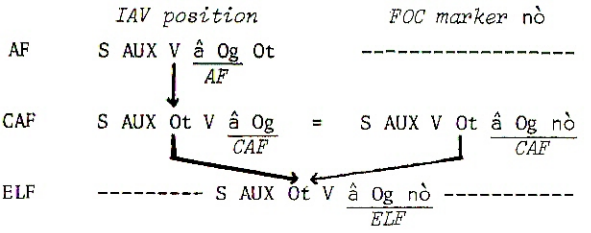
	FOC+ (basic order)	*FOC+* V__	*FOC+* â__	*FOC+* __V	*FOC+* V__+ __V	*FOC+* __V+ â__
AF	-----	-----	-----	-----	-----	-----
CAF	S V X nò { O / LOC / TEMP }	S V â Og nò Ot	S V Og â Ot nò	-----	-----	-----
PF	-----	-----	-----	-----	-----	-----
CAPF	-----	-----	-----	S { Ot â Og / Og â Ot } V* nò	-----	-----
ELF	-----	-----	-----	-----	S [Ot / âOg] V [âOg / Ot] nò	S Og V â Ot nò
not marked	S V nò	-----	-----	-----	-----	-----

*Only if non-past tense.

3.5. A NOTE ON THE FORMAL RELATIONSHIP BETWEEN TYPES OF FOCUS

An interesting relationship has been noted at various points thus far between some types of focus found in Aghem and the formal correlates of word order and the FOC marker nɔ̀. The types of focus involved include AF, CAF and ELF. The relationship can be specified by the following pattern: ELF seems to be built on CAF, and CAF seems to be built on AF. For example, AF is assigned to the constituent which is in the IAV position and which is followed by at least one other constituent. Secondly, CAF is assigned to the constituent which is in the IAV position but which is sentence final, with at least one other constituent in the IBV position; or to the post-verbal constituent which is followed by the FOC marker nɔ̀. Thirdly, the ELF is assigned to the constituent which meets all the criteria for CAF marked by word order, except that it must be additionally followed by the FOC marker nɔ̀. This example of the progression from AF to CAF to ELF is schematized in the table in (31). In the schema, the object:goal is the focus.

(31) A TABLE OF THE PROGRESSION OF SOME FOCUS TYPES



This formal progression from one type of focus to another suggests that there is also a possible progression in meaning along the following lines: AF ('I assert, presupposing no other focus'), CAF ('I assert, presupposing an AF'), and ELF ('I assert, presupposing a potential CAF').

It was not possible to determine any difference in meaning between the two CAF constructions in the table. A difference may be found, however, when numerous conversational texts have been collected. If there is a clear pragmatic or semantic difference between the two, it probably does not involve focus and presupposition. In terms of focus, the two CAF constructions probably are equivalent as indicated by the equal sign.

4

A FORMAL ACCOUNT OF FOCUS IN AGHEM

4.0. INTRODUCTION

One of the current trends in the theory of syntax and semantics is to question the validity of and necessity for a transformational component. In the earlier Chomskyan framework (Chomsky 1957, 1965, 1969) transformations were considered to be crucial in order to account for the relation between active and passive sentences, between differing word orders for semantically identical sentences,[1] and between different interpretations which could be assigned to ambiguous sentences. In the profusion of approaches to syntax and semantics in the mid and late 1970's, however, the transformational component has been frequently omitted. In its place some type of "base" component directly generates the surface forms of the sentences.

Some of the approaches which omit the transformational component include Brame's (Syntactic) Functional Grammar (1978), Hudson's Daughter Dependency Grammar (1976; cf. also Schachter 1978, 1979) and Dik's Functional Grammar (1978)--a framework which is in some ways reminiscent of Tagmemics (Pike 1967, Longacre 1976, Pike and Pike 1977). Even within the current Chomskyan framework of Trace Theory (1977a, b), it has been pointed out by Lightfoot (1977, 1979) that transformations have been reduced in number and power to the point that the next step may very well be to exclude them altogether and require instead that the base directly generate the surface structure of sentences. Of course, the surface structure is significantly enriched with traces and PRO's.

In light of this trend, it would be interesting to compare transformational and non-transformational accounts of Aghem focus. However, the extended discussion required for such a comparison would take us far afield from what is essential to give a formal account of the focus system. It will simply be assumed here that a model which directly generates a pragmatic function like focus in the initial structure of a sentence can more adequately capture the generalizations about Aghem focus than a model which interprets the focus from a surface structure composed only of categorial information and traces.

Therefore, the major goal of this section is simply to provide a formal account of Aghem focus. This account will be given in terms of Dik's (1978) Functional Grammar approach. His approach will be slightly modified to generate actual types of focus rather than simply an undifferentiated function FOCUS. This account is given in section 4.2.

However, before the formal account is detailed, all of the acceptable and the relevant unacceptable word orders which any formal account must control are specified in section 4.1. These word orders are summarized in terms of five word ordering principles. Other facts concerning Aghem focus are also summarized in 4.1.

Finally, in order to contrast the types of focus introduced in chapters 2 and 3 by means of explicit interpretive readings, a mechanical procedure is outlined by which an arbitrary sentence may be given an interpretive reading in terms of focus and presupposition. This procedure is detailed in section 4.3.

4.1. WORD ORDER AND OTHER FACTS RELATED TO FOCUS IN AGHEM

Although many of the facts about word order have already been given in chapters 2 and 3, it is still necessary to specify more completely the class of acceptable and unacceptable word orders. These are given in (1) through (4) below. The unacceptable sentences are marked with an asterisk (*). The following abbreviations are used: S (subject), V (verb), Ot (object:theme), Og (object:goal), Ob (object: benefactive)--"theme" and "goal" being borrowed from Jackendoff's (1972) thematic categories. The "theme" in the sentences under consideration could also be referred to as the "patient". In the schematizations below, the dash (i.e. '--') represents the dummy subject (DS) à plus the auxiliary. These are not specified because they do not enter into the word ordering possibilities except as sentence initial elements when the subject is non-initial. Of course, the auxiliary is also present when the subject is initial, occurring in the position immediately following the subject, but it will simply not be specified in these word orders where the subject is sentence initial because again the auxiliary does not figure in the word ordering possibilities.

(1) Clauses with two elements: S and V.

a. S V

b. --V S

(2) Clauses with three elements: S, V and X (where X may be either Ot, a locative PP or a temporal ADP).

I. The subject before the verb and complement.

a. S V X

b. S X V

II. The verb before the subject and complement.

c. --V S X

d. *--V X S

III. The complement before the verb and subject.

e. --X V S

f. *--X S V

(3) Clauses with four elements: S, V, Ot and â Og or X (where X in column A represents â Og, â Ob, a locative PP, or a temporal ADP).

	Column A (Ot unmarked)	*Column B (Ot marked by â)*
I.	Subject before all other elements.	
i.	Ot and Og or X after the verb	
a.	S V Ot X	a'. S V Og â Ot
b.	S V X Ot	b'. *S V â Ot Og
ii.	Either Ot or Og or X before the verb.	
c.	S Ot V X	c'. S Og V â Ot
d.	S X V Ot	d'. *S â Ot V Og

iii. Both Ot and Og or X before the verb.

e. S Ot X V	e'. S Og â Ot V
f. S X Ot V	f'. *S â Ot Og V

II. Verb before all other elements.

i. Subject immediately after the verb.

g. --V S Ot X	g'. *--V S Og â Ot
h. *--V S X Ot	h'. *--V S â Ot Og

ii. Subject in second position after the verb.

i. *--V Ot S X	i'. *--V Og S â Ot
j. *--V X S Ot	j'. *--V â Ot S Og

iii. Subject in third position after the verb.

k. *--V Ot X S	k'. *--V Og â Ot S
l. *--V X Ot S	l'. *--V â Ot S Og

III. Unmarked O before all other elements.

i. O only before the verb.

m. --Ot V S X	m'. *--Og V S â Ot
n. *--Ot V X S	n'. *--Og V â Ot S

ii. O and either â O, X or S before the verb.

o. --Ot X V S	o'. *--Og â Ot V S
p. *--Ot S V X	p'. *--Og S V â Ot

iii. O, â O or X, and S before the verb.

q. *--Ot X S V	q'. *--Og â Ot S V
r. *--Ot S X V	r'. *--Og S â Ot V

IV. Marked O (i.e. â O) or X before all other elements.

i. Only â O or X before the verb.

s. --X V S Ot	s'. *--â Ot V S Og
t. *--X V Ot S	t'. *--â Ot V Og S

ii. â O or X and either O or S before the verb.

u. *--X Ot V S	u'. *--â Ot Og V S
v. *--X S V Ot	v'. *--â Ot S V Og

iii. â O or X, O and S before the verb.

w. *--X Ot S V	w'. *--â Ot Og S V
x. *--X S Ot V	x'. *--â Ot S Og V

(4) Clauses with five elements: S, V, O, â O, X (where X equals either a locative PP or a temporal ADP); only the eleven acceptable orders are specified here of the 120 logically possible combinations).

I. Subject sentence initial.

i. O, â O and X after the verb.

a. S V Ot â Og X

b. S V â Og Ot X

c. S V X Ot â Og

ii. Either O or â O before the verb.

d. S Ot V â Og X

e. S â Og V Ot X

iii. Both Ot and â O before the verb.

f. S Ot â Og V X

g. S â Og Ot V X

II. Subject immediately after the verb.

i. O, â O and X after the verb.

h. V S Ot â Og X

ii. O or â O before the verb.

i. Ot V S â Og X

j. â Og V S Ot X

iii. O and â O before the verb.

k. Ot â Og V S X

The acceptable and unacceptable word orders in (1) through (4) can be accounted for on the basis of five principles.

(5) *Word order principles:*

a. The subject may only occur in the sentence initial position or in the immediate after verb (IAV) position. (This principle accounts for the unacceptability of (2d,f), (3i,j,k,l,n,p,q,r,t,v,w,x and their prime (e.g. i') counterparts), and the majority of unacceptable orders not listed in (4).

b. If the subject is in the IAV position, then the other constituents must maintain the order: Ot â Og X, where Og may be Ob and X may be a locative PP or a temporal ADP. This principle holds whether these constituents precede or follow the verb. (It accounts for the unacceptability of (3g',h,h',m',o',s',u,u') and numerous unacceptable orders not listed in (4).

c. Og must precede â Ot in the sentence. (This principle accounts for the unacceptability of (3b',d',f').)

d. If Ot, â O, and X are present in the sentence, then X may never precede the verb--where X may be either a locative PP or a temporal ADP.

e. If Ot, â O and X are present, any one of them may occur in the IAV position, but the other two must maintain their order in the schema Ot â O X--where X may be a locative PP or a temporal ADP. (Principles (5c,d,e) account for numerous unacceptable word orders not listed in (4).)

Any theoretical account of focus in Aghem must capture the word ordering principles in (5). In addition, it must account for the other properties presented in chapters 2 and 3: namely, the other formal correlates of focus such as the completive focus (CplF) marker, the focus marker (FOC) nɔ̀, and the cleft sentence--all presented in chapter 3; and the various types of focus presented in both chapters 2 and 3. The definitions of these types of focus are given again for easy reference in (6) below, and each definition is accompanied by an English sentence or two which approximately characterizes their Aghem counterparts.

(6) *Types of focus:*

a. *Unmarked focus:* occurs when the focus or foci are not formally marked on the surface, the sentence having the basic word order (cf. Principle 1 in (29) of chapter 2). Example: *Inah gave fufu to his friends.*

b. *Assertive focus:* that information which the speaker believes, assumes or knows the hearer does not share with him or her (cf. (28a) in chapter 2). Example: *Inah gave* fufu *to his friends.*

c. *Counter-assertive focus (CAF):* that information which the speaker substitutes for information which the hearer asserted in a previous utterance (cf. (28b) in chapter 2). Example: *Inah gave* fufu [not yams] *to his friends.*

d. *Exhaustive listing focus (ELF):* that information which the speaker asserts is unique in the sense that the rest of the sentence is true only with respect to it and false with respect to all other units of information which could be appropriately substituted for it in the sentence (see section 3.2). Example: *Inah gave* fufu only [and nothing else] *to his friends.*

e. *Polar focus (PF):* the truth value "true" or "false" which the speaker asserts or counter-asserts concerning a proposition (cf. (13) of chapter 3). Example: *it is* true/the case *that Inah gave fufu to his friends = Inah* did *give fufu to his friends.*

f. *Counter-assertive polar focus (CAPF):* the truth value "true" or "false" which the speaker asserts, contradicting the hearer's previous utterance concerning the truth value of the sentence. (This definition is a modification of that given in (34) in chapter 2 in light of the discussion in section 3.1.3.) Example: *it is* too the case/true [contrary to your denial] *that Inah gave fufu to his friends = Inah* did too *give fufu to his friends.*

4.2. FUNCTIONAL GRAMMAR (FG)

Dik's Functional Grammar (FG) (1978, 1979) is presented and used in this section only in its broad outline.[2] There is no attempt to conform to the details of the model, and in some cases it is not at all clear what the details of the model would be. These limitations do not detract, however, from the possibility of seeing how FG would account for focus in Aghem.

4.2.1. *The assignment of functions and terms.* The salient feature of FG is that three levels of functions are present in the initial, unordered structure of a given sentence: namely, semantic functions, syntactic functions and pragmatic functions. In the actual generation of a sentence, the first step is to select a basic predicate-frame from the lexicon, like that in (7).

(7) $\text{give}_V\ (X_1\text{:human}\ (X_1))_{Ag}\quad (X_2)_{Th}\quad (X_3\text{:animate}\ (X_3))_{Go}$

The V indicates that 'give' is a verbal predicate, and the variables X_i indicate the argument positions. The labels Ag(ent), Th(eme) and Go(al)--to use Jackendoff's (1972) terms rather than Dik's--mark the semantic functions of the arguments, and the categories "human" and "animate" specify the selectional restrictions on the agent and goal. Thus, in selecting a lexical entry from the category "verbal predicate", the number of arguments and their semantic functions are already specified.

The frame may then be extended to include "satellite" arguments which have semantic functions such as location and time. In addition, basic terms or derived terms are inserted into the argument positions. At this point, syntactic and pragmatic functions (in that order) need to be assigned in order to produce a fully specified predication. The syntactic functions are limited to subject and object by Dik and are assigned to a structure like that in (7) to form a structure like that in (8). The structure in (8) has had the terms inserted and the predicate-frame extended to include the satellite argument "Loc(ation)".

(8) $\text{give}_V\ (X_1\text{:Inah}\ (X_1))_{AgSubj}\quad (X_2\text{:fufu}\ (X_2))_{ThObj}$

$(X_3\text{:friends}\ (X_3))_{Go}\quad (X_4\text{:compound}\ (X_4))_{Loc}$

After the syntactic functions are assigned, the pragmatic functions such as focus, topic, theme and tail[3] are assigned. Focus assignment in Aghem would have to take the form of the rules in (9). The rules are optional.

(9) *Focus assignment rules (optional)*

a. FOCUS:
- i. Assign ELF to: $\text{Io}_V\ (dX_i\text{:}\Phi(X_i))_\emptyset\ (X_j)_\emptyset$ ___
- ii. Assign { CAF / PF / CAPF } to: Φ_V ___
- iii. Assign { AF / ELF / CAF } to: $(X_i)_{YZ}$ ___

b. FOCUS: Assign CAF to: $(X_1)_{SubjCAF}\ (X_2)_{YZ}$ ___ $((X_3)_{YZ}$ ___ $)$

The most general focus assignment rule is (9a). This rule assigns AF, ELF or CAF to an argument; or CAF, PF or CAPF to a verbal predicate (Φ is an arbitrary predicate). The Y and Z signify the semantic and syntactic functions, respectively. The $\emptyset$ signifies that the argument carries no semantic or syntactic function. Rule (9a) consists of three rules which are disjunctively ordered. If any one of them applies, then the other two do not apply. They would apply in the order i, ii, iii. Rule (9a.i) assigns ELF to the predicate nominative of a cleft sentence. The morpheme Io is the copula 'to be' in Aghem. The argument $(dX_i\text{:}\Phi(X_i))_\emptyset$ is Dik's formalization of the relative clause and its head in the cleft sentence. Rule (9a.ii) assigns CAF, PF or CAPF to an arbitrary argument. Rule (9a.iii) assigns AF, ELF or CAF to an arbitrary argument. Finally, rule (9b) assigns CAF to one or two arguments if the subject has already been identified as the CAF by rule (9a.iii).

Aghem also has a *marked* presupposition: namely, those arguments in the IBV position when the subject is sentence initial.

(10) *Presupposition assignment rule*

PRESUPP:
Assign P to:

a. $(X_j)\left\{\begin{matrix}\text{Obj}\\ \emptyset\end{matrix}\right\}$ CAF $(X_k)\left\{\begin{matrix}\text{Obj}\\ \emptyset\end{matrix}\right\}$ __ $((X_m)\left\{\begin{matrix}\text{Obj}\\ \emptyset\end{matrix}\right\}$ __ $)$

b. Φ_V CAPF $(X_j)\left\{\begin{matrix}\text{Obj}\\ \emptyset\end{matrix}\right\}$ __ $((X_k)\left\{\begin{matrix}\text{Obj}\\ \emptyset\end{matrix}\right\}\left\{\begin{matrix}\_\_\\ \emptyset\end{matrix}\right\})$

Requirements:

1) $*(X_i)_{\text{SubjFocus}}$

2) if $\Phi_{(V\ \text{CAPF})}\cdots(X_i)_{\text{Th}}\cdots$

$(X_j)\left\{\begin{matrix}\text{Go}\\ \text{Be}\end{matrix}\right\}\cdots$, then $*(X_k)\left\{\begin{matrix}\text{Loc}\\ \text{Temp}\end{matrix}\right\}$ P.

Rule (10) assigns P to non-subject arguments when the subject is in the sentence initial position (i.e. not focused--see requirement 1). This rule does not imply that all constituents in a sentence which are part of the presupposition carry a P. Only those arguments which are in a sentential position which clearly indicates that they are part of the presupposition are marked with P. Note that rule (10) is optional like rule (9).

In the first environment, P is assigned to one or two non-subject arguments when one non-subject argument is the CAF. Requirement 2 indicates, however, that the locative or temporal arguments cannot be marked for P if both theme and goal or theme and benefactive arguments are also present in the sentence.

In the second environment, P is assigned to one or two non-subject arguments when a verbal predicate (Φ_V) is marked for CAPF. Requirement 2 also applies to this environment. In addition, note that in this case, if a second argument is present it is not obligatorily assigned P: it may simply remain unmarked as indicated by the $\emptyset$.

Once the predication is fully specified for terms and for functions, it is ready for the expression rules. These rules specify 1) the form of constituents; 2) the order of constituents; and 3) the accent and intonational features of the predication. Of interest in this presentation are those rules which assign form and order to the constituents. The rules are ordered so that the form of the constituents is first determined, and then their order.

4.2.2. *Expression rules: form of constituents.* The following expression rules specify the form of constituents in Aghem in relation to focus.

(11) *AUX assignment*

a. Φ_V (CA)PF $\rightarrow$ $AUX_{\text{CplF:Tns}}$ Φ_V (CA)PF

b. Φ_V $\rightarrow$ AUX_{Tns} Φ_V

Rules (11a) and (11b) are disjunctively ordered. They essentially assign the appropriate AUX to the predicate of the sentence in question. If the predicate is specified for (CA)PF as in (11a), then the CplF marker is assigned. If the

predicate is unmarked for focus, then it takes a normal AUX form, specified only for tense as in (11b).

(12) *Focus marker* nò *assignment*

a. $\Phi_{V\ CA(P)F} \rightarrow \Phi_{V\ CA(P)F}$ nò

Requirement: if CAPF, then Tns = [-past]

b. $(X_i)_{XY\ ELF} \rightarrow (X_i)_{XY\ ELF}$ nò

c. $(X_i)_X \left\{ \begin{matrix} Obj \\ \emptyset \end{matrix} \right\} CAF \rightarrow (X_i)_X \left\{ \begin{matrix} Obj \\ \emptyset \end{matrix} \right\} CAF$ nò

Requirement: applies only if $\Phi \ldots ((X_j)_{XY\ \emptyset})$

Rule (12a) assigns the FOC marker nò to a verbal predicate marked as the CAF, or to one marked as the CAPF if the tense is non-past. Rule (12b) assigns the FOC marker to an argument which is marked as the ELF. Note that this rule would not (as it should not) apply to the ELF of a cleft sentence since this argument would have the form: $(X_i)_{\emptyset\ ELF}$. In this case, the $\emptyset$ indicates that neither semantic nor syntactic functions have been assigned, whereas in (12b) the argument will be specified for its semantic function (i.e. X) and possibly a syntactic function (i.e. Y).

Rule (12c) assigns the FOC marker to an argument which is not the subject and which is the CAF. This argument may occur in a predication with other non-subject arguments but they cannot be marked for a pragmatic function such as focus or presupposition. In addition, the subject argument may not be marked for the pragmatic function focus.

Note that all three rules in (12) and both rules in (11) must apply if their conditions are met. For (11b) one condition is that (11a) has not applied.

(13) *Preposition* â

Assign â to

a. ___ $(X_i)_{ThObj(C)AF}$

Requirement: $\Phi_{V_{tr}} \ldots (X_j)_{Subj\emptyset}$

b. ___ $(X_i)_{ThObj} \left\{ \begin{matrix} P \\ \emptyset \end{matrix} \right\}$

Requirements: 1) $\Phi_{V_{tr}(CA)PF}$

2) $\Phi_i \ldots (X_j)_{ThObjP}$ ..., iff $\Phi_i \ldots (X_k)_{GoP} \ldots$

c. ___ $(X_i) \left\{ \begin{matrix} Go \\ Be \end{matrix} \right\}$

The three rules in (13) are disjunctively ordered, and they apply in the order: a,b,c. Rule (13a) is obligatory if its conditions are met. It assigns

the preposition â 'to, for' to an argument marked for theme, object and either the AF or the CAF. This rule can only apply, however, if the verbal predicate in the predication is of the class "tr"[4] and the subject does not share in the CAF.

Rule (13b) is optional. It assigns the preposition â to an argument marked for theme, object and either P or no pragmatic function. This rule can only apply, however, if the verbal predicate in the predication is of the class "tr" and is marked for either PF or CAPF. The requirement specifies that if the theme is part of the marked presupposition then it can be preceded by â only if the goal is also part of the marked presupposition.

Rule (13c) is the elsewhere statement. If neither (13a) nor (13b) have applied and the predication has either a goal or a benefactive argument, then that argument will take the preposition â.

(14) *Preposition /án/*[5]

$$(X_i)_{Loc} \rightarrow \text{án } (X_i)_{Loc}$$

Rule (14) assigns the locative preposition án 'at, on, in, to' to a locative argument.

4.2.3. *Expression rules: order of constituents.* Once the form of the constituents has been specified, the order of the constituents can be determined. The first step is to specify the Defining Pattern of the language to which all other orders relate as variations.

(15) *The Defining Pattern (DP)*[6] *for predications*

$$\text{S AUX } P2_a \; P2_b \; \text{V P1 O } X^1_{\{\text{Go}\}} \; X^2_{\text{Loc}} \; X^3_{\text{Temp}}$$

Unless otherwise specified, the DP in (15) orders the verbal predicate and the arguments of the predicate-frame as S-AUX-V-O. This is the unmarked order. The X's mark those positions which are unmarked for syntactic function. Their unmarked order is specified in semantic terms: namely, Go/Be-Loc-Temp. These arguments follow the V-O in the unmarked order. The P1 position (the IAV position) is the general focus position. The two P2 positions (the IBV position) are used either for the marked presupposition or for the non-subject CAF when the subject is also part of the CAF.

Variations on the unmarked S-AUX-V-O order are specified in the following rules. The rules are ordered in two sets, and the order established by one rule cannot be changed by a succeeding one.

(16) *Ordering of presupposition*

a. $\hat{a}\ (X_i)_{\text{ThObjP}} \rightarrow P2_b$

b. $(X_i)_P \rightarrow P2_{\{a,b\}}$

The rules in (16) order the arguments which are marked for presupposition. They apply in the order: a,b. Rule (16a) guarantees that a theme preceded by the preposition â will always follow the goal (as stated in ordering principle 5c) when both are the marked presupposition. The goal in this case would be subject to rule (16b) which places an argument marked for P in either of the P2 positions.

Since the â-theme would already occupy $P2_b$ by rule (16a), the goal would have to occupy $P2_a$. In those cases where there is no â-theme, however, rule (16b) permits two arguments marked for the P to occur in any order. Ultimately, the ordering of the arguments in the P2 position probably depends on certain discourse rules which at this point are unknown.[7] For a sentential grammar their ordering is inconsequential.

(17) *Ordering of focus*

a. $(X_i)_{CAF} \rightarrow P2 \;/\; \ldots(X_j)_{SubjCAF}\cdots$

Requirement: P2 ordered by DP (15)

b. $\begin{bmatrix} \hat{a} & (X_i)_{Th} \begin{Bmatrix} AF \\ \emptyset \end{Bmatrix} \\ & (X_j)_{Go\ \emptyset} \end{bmatrix} \rightarrow \begin{bmatrix} X^1 \\ 0 \end{bmatrix}$

c. $(X_i) \begin{Bmatrix} AF \\ CAF \\ ELF \end{Bmatrix} \rightarrow P1$

The rules in (17) order arguments which are marked for various types of focus. These rules are ordered: a,b,c.

Rule (17a) places non-subject arguments which are part of the CAF in the P2 position, as long as the subject is also part of the CAF. In this case, the arguments in the P2 position must follow the order of the DP (15): Th-Go/Be-Loc-Temp. Since no more than two arguments may occur in the P2 positions at any one time, this ordering requirement is to be read as: Th precedes Go/Be, Loc or Temp; Go/Be precedes Loc or Temp; and Loc precedes Temp.

Rule (17b) places the theme into position X^1 of the DP if the theme is either AF or has zero pragmatic function, and if the theme is also preceded by â. As a consequence, the goal which co-occurs with the theme in such predicate-frames is assigned to the 0 position in the DP.

Rule (17c) places all focused arguments which have not been ordered by rules (17a) and (17b) into the P1 position. This rule accounts for most cases where the focus is indicated by the surface word order.

4.2.4. *Discussion of the Functional Grammar account.* There are certain properties of the Aghem focus system which are simply ad hoc and any formal account will have to handle these properties in an ad hoc way. However, there are certain generalizations, in terms of relating form and function, which provide a test for a model's adequacy. FG appears to succeed in capturing these generalizations. First, rule (11a) captures the fact that both types of polar focus are indicated by the completive focus marker (in past tenses). Secondly, and more importantly, rule (17c) captures the fact that the focus and the P1 position are synonymous in most sentences where the focus is marked by the word order.

4.3. THE SEMANTIC INTERPRETATION OF FOCUS

In turning to the semantic interpretation of a sentence in terms of focus and presupposition in FG, it should be noted that the type and scope of focus (or the foci) are already marked in a sentence with *marked* focus. However, for a sentence which is unmarked for focus and uses the DP in (15) in an unaltered form, the type

and scope of focus has to be determined by Principle 1 in (29) in chapter 2.

Once the type and scope of focus have been determined by Principle 1 or are marked by the function assignment rules (4.2.1), the sentence can then be assigned a presupposition. Rules (18a-c) assign the presupposition to a sentence for which the focus has been identified. The form of these rules follows the lines developed by Chomsky (1969) and Jackendoff (1972) for the assignment of the presupposition in English where the intonation contour indicates the center of focus.

(18) *Presupposition assignment rules*

a. Replace the constituent marked by AF, CAF, ELF, PF or CAPF with an appropriate semantic variable[8] and assign P to the derived structure.

b. Make the appropriate semantic variable for PF and CAPF a function of P: X(P).

c. If no surface element(s) is available for P-assignment, then there is no presupposition specific to that sentence.

Once the type of focus and the presupposition have been determined for a given sentence, an interpretive reading can be assigned to the sentence. The reading is to be given so as to reflect the type of focus involved. Therefore, the following general readings are provided for the various types of focus:

(19) *Readings for focus and presupposition assignments*

a. AF: The *X* such that P --- is the AF.

b. CAF: The *X* such that P --- is the CAF; contrary to the assertion that the *X* such that P --- $\left\{\begin{array}{l}\text{is other than the CAF}\\ \text{is not the CAF}\end{array}\right\}$.

c. ELF: The *X* such that it is *X* and only *X* such that P --- is the ELF.

d. PF: The *X* such that *X*(P) --- is true or false.

e. CAPF: The *X* such that *X*(P) --- is true or false; contrary to the assertion that the *X* such that *X*(P) --- is nottrue or not false.

Note that the readings above suggest some modifications of Jackendoff's notion "presupposition set" (1972). First, the reading for the ELF assumes that a set may be a single member set.[9] Secondly, PF and CAPF assume that truth values may also form a proper presupposition set. This fact means that a presupposition set involves more than lexical items. It also includes functions such as truth values.

The above reading assignments account for all sentences in the set under discussion, except for sentences with multiple foci. One such type of sentence is that with two foci as the CAF. An appropriate reading for such a sentence could be (20):

(20) *Reading of multiple foci*

CAF: The *X* and *Y* such that P --- are the CAF_X and CAF_Y (respectively); contrary to the assertion that the *X* and *Y* such that P --- are other than the CAF_X and the CAF_Y (respectively).

In order to clarify further the assignment of focus and presupposition, and the assignment of a proper reading, consider the following examples. One example

is given for each type of marked focus. No example will be given of a sentence with unmarked focus since it would essentially amount to a list of all possible readings and would be very complex. The following examples will be sufficient to acquaint the reader with the types of readings being suggested.

(21) AF: énáʔ mɔ̀ fúo tɬ-bvǘ â bɛ́-'kɔ́ 'Inah gave the dogs *fufu*'
Inah P_2 *give dogs to fufu*

---------P--------- AF

reading: The *X* such that Inah gave the dogs *X* --- is fufu.

(22) CAF: énáʔ mɔ̀ bvǘ-'tɬ fúo â bɛ́-'kɔ́ 'Inah gave the dogs *fufu* [not meat]'
Inah P_2 *dogs give to fufu*

---------P--------- CAF

reading: the *X* such that Inah gave the dogs *X* --- is fufu; contrary to the assertion that the *X* such that Inah gave the dogs *X* --- { is other than fufu / is not fufu }.

(23) ELF: énáʔ mɔ̀ bvǘ-'tɬ fúo â bɛ́-'kɔ́ nô 'Inah gave the dogs *fufu only*'
Inah P_2 *dogs give to fufu FOC*

---------P--------- ELF

reading: the *X* such that it is *X* and only *X* such that Inah gave the dogs *X* --- is fufu.

(24) PF (the assertive reading)

énáʔ má'á fúo bɛ́-'kɔ́ â bvǘ-'tɔ́ 'it is the case that Inah gave fufu to the dogs'
Inah P_2*/FOC give fufu to dogs*

--P-- PF ----------P----------

reading: the *X* such that *X* [Inah gave the fufu to the dogs] --- is true.

(25) CAPF: énáʔ má'á bɛ́-'kɔ́ â bvǘ-'tɬ fúo 'it *is too* the case that Inah gave the dogs fufu [contrary to your denial]'
Inah P_2*/FOC fufu to dogs give*

--P-- CAPF ----------P----------

reading: the *X* such that *X* [Inah gave fufu to the dogs] --- is true; contrary to the assertion that the *X* such that *X* [Inah gave fufu to the dogs] --- is not true.

(26) *Multiple* CAF *foci*

à mɔ̀ bɛ́-'kɬ́ fúo énáʔ â bvǘ-'tɔ́ '*Inah* gave the dogs *fufu* [contrary to what you say]'
DS P_2 *fufu give Inah to dogs*

--P-- CAF --P-- CAF ----P----

reading: the *X* and *Y* such that *X* gave *Y* to the dogs --- are Inah and fufu (respectively); contrary to the assertion that the *X* and *Y* such that *X* gave *Y* to the dogs --- are { other than Inah and fufu / not Inah and fufu }.

5

FOCUS AND TYPES OF FOCUS

5.0. INTRODUCTION

In the preceding chapters various types of focus have been introduced. They have been discussed in relation to simple sentences only. In the appendix there is a table indicating which of these types of focus may be used in relative, conditional, and adverbial clauses. The function of the various formal correlates in these clauses is not discussed, however, since that would require further extensive studies.

The various types of focus have also been discussed as though they are in some way uniform without this uniformity being made explicit. In the remainder of this section this problem of a unitary notion of focus will be discussed along with the focus typology so far proposed in this study in relation to the typological schemas proposed by Kuno (1972, 1975) and Chafe (1976).

5.1. FOCUS AS A UNITARY PRAGMATIC FUNCTION

Focus has been variously defined. Dik (1978) suggests that the focus is the "most salient" information in the sentence. Jackendoff (1972:16) suggests that the focus is "the information in the sentence that is assumed by the speaker not to be shared by him and the hearer". A similar characterization was given above in (28a) in chapter 2 for "assertive focus". It is repeated here as the definition of focus:

(1) *Focus:* that information in the sentence which the speaker believes, assumes or knows the hearer does not share with him or her.

As discussed at length, this information is clearly identified by various means in some sentences, but in others there is no formal marking of this information on the surface.

If (1) is accepted as the unitary definition of focus as a pragmatic function, then how are the various "types of focus" to be understood? Rather than turn to the readings given in chapter 4, it would probably be more productive to use some of Jackendoff's notions such as "presuppositional set", "presupposition" and "assertion".

The presuppositional set[1] is formally characterized in the following way. First, assign an appropriate semantic variable *X* to represent the focus of the sentence. Next, from the specific presupposition formed by the remainder of the sentence, form a predicate $\text{Presupp}_S(X)$. Thus, as Jackendoff (1972:245) notes, the sentence in (2a) would be formally characterized as (2b) or (2c) and the sentence in (3a) as (3b) or (3c). The capitals indicate the unique focus.

(2) a. *John LIKES Bill*

b. $\text{Presupp}_S\ (X)$

c. the $\left\{\begin{array}{l}\text{relation between John and Bill}\\ \text{attitude of John toward Bill}\end{array}\right\}$ is *X*

(3) a. *John likes BILL*

b. $\text{Presupp}_S\ (X)$

c. $\left\{ \begin{array}{l} \text{John likes} \\ \text{the Theme of John's liking is} \end{array} \right\} X$

The predicate can then be changed into the presuppositional set by using the lambda notation and deriving the construction: $\lambda X\ \text{Presupp}_S\ (X)$. Jackendoff says that the lambda notation is necessary in order to include the empty set for sentences such as *NOBODY likes Bill*. The presuppositional set is defined as "the set of values which, when substituted for in $\text{Presupp}_S\ (X)$, yield a true proposition" (1972:245).

Once the propositional set is constructed, one can then form the general presupposition and the assertion. Jackendoff characterizes the presupposition in his (6.76) (1972:246), given here as (4).

(4) $\lambda X\ \text{Presupp}_S\ (X)$ $\left\{ \begin{array}{l} \text{is a coherent set} \\ \text{is well-defined} \\ \text{is amenable to discussion} \\ \text{is under discussion} \end{array} \right\}$ in the present discourse

The assertion, on the other hand, claims that the focus of a declarative sentence is a member of the presuppositional set. Jackendoff (1972:246) characterizes it as in (5).

(5) $\text{Focus} \in \lambda X\ \text{Presupp}_S\ (X)$

The assertion of (2a) would be (6a) in formal terms, but (6b) informally; and the assertion of (3a) would be (7a) in formal terms, but (7b) informally. The representations in (6a) and (6b) are those of Jackendoff's (6.81) and (6.83), respectively (1972:247).

(6) a. *like* X $\left[\text{the} \left\{ \begin{array}{l} \text{relation between John and Bill} \\ \text{attitude of John toward Bill} \end{array} \right\} \text{is } X \right]$

b. *like* is one of $\left\{ \begin{array}{l} \text{the relations between John and Bill.} \\ \text{John's attitudes toward Bill.} \end{array} \right.$

(7) a. *Bill* $\in \lambda X$ $\left[\left\{ \begin{array}{l} \text{John likes} \\ \text{the Theme of John's liking is} \end{array} \right\} X \right]$

b. *Bill* is one of $\left\{ \begin{array}{l} \text{the people John likes.} \\ \text{the Themes of John's liking.} \end{array} \right.$

Turning to the types of focus, we can begin by first distinguishing between different types of presuppositional sets. Jackendoff distinguished at least between an empty set (for sentences like *NOBODY likes Bill*) and a set with multiple members. In the study in chapters 2 and 3, single member sets (the ELF) were introduced as well as a set whose members were truth values. Thus, there are at least four types of presuppositional sets.

Secondly, note that Jackendoff talks about the assertion of a declarative sentence. In chapters 2 and 3 we also introduced the notion of the counter-assertion. This notion could be formally characterized as in (8).

(8) $\text{Focus}_{n-1} \notin X\ \text{Presupp}_S\ (X)\ \text{V}\ \text{Focus}_n \in X\ \text{Presupp}_S\ (X)$

In other words, the counter-assertion claims that the focus of the preceding utterance is not a member of the presuppositional set, while the focus of the sentence in question is.

Given the four types of presuppositional sets and the two types of assertion, we can account for AF, CAF, ELF, PF and CAPF not in terms of focus (which we can keep as a unitary function) but in terms of the intersection of the presuppositional sets and the types of assertion, as displayed in (9).

(9)

TABLE 9

	assertion	*counter-assertion*
Empty set	1	2
Single member set	3	4
Multiple member set	5	6
Truth values	7	8

According to (9)[2] there are actually eight types of intersections. Aghem only formally distinguishes five of these: ELF:3, AF:5, CAF:6, PF:7 and CAPF:8. This does not mean that there is no way to assert or counter-assert 1, 2 or 4. It only means that Aghem does not formally mark these in the surface structure of a sentence. Instead, these will either be specified by the use of selected lexical items or inferred from specific discourse contexts.

Thus, we are able to distinguish between a unitary notion of focus (1), the predicate function (e.g. (2b)), the presuppositional set, the presupposition (4), and the assertion (5) and counter-assertion (8). Furthermore, from the intersection of the types of presuppositional sets and the types of assertion we can construct a *typology of focus*.

5.2. PREVIOUS TYPOLOGICAL SCHEMAS OF FOCUS

There is no attempt here to provide a critique of previous typologies of focus. There is no doubt that a lengthy critique and comparison of Chafe's "contrastiveness" with the various categories and notions discussed so far in this study could be given,[3] but the goal here is simply to show that the schema proposed here goes beyond any previous one.

If one were to combine the typologies used by Kuno (1972, 1975) and Chafe (1976), one would arrive at a typology something like the following: assertive (information) focus, exhaustive listing focus, and contrastive focus. The term "contrastive focus" is Chafe's, and it actually included exhaustive listing focus (ELF) in the way that Chafe characterized it. Thus, we can factor out ELF from Chafe's contrastive focus. In addition, we can factor out counter-assertive focus from his contrastive focus since he includes examples like *RONALD [not Sally] made the hamburgers* in his discussion of contrastiveness. Having factored out both ELF and CAF from Chafe's contrastive focus, we are left only with sentences such as those in (10) and (11).

(10) *SALLY wants HOT dogs, but RONALD wants HAMburgers*

(11) *They elected HENRY TREASURER, and they elected ALICE PRESIDENT* (Chafe's 3, p.36)

Note that such sentences do not involve new versus old or given information. For

example, (10) could answer any of the following questions: *why are Sally and Ronald arguing?, who wants hot dogs and hamburgers?, what do Sally and Ronald want?*. In each case, the answer could be (10) with its multiple foci of stress. Note furthermore that such sentences could be either asserted or counter-asserted. For example, (10) could be the counter-assertion to the sentence *I think SALLY wants HAMburgers but RONALD wants HOT dogs*. The response would then be something like *No, (you've got it all wrong) SALLY wants HOT dogs, and RONALD wants HAMburgers*. Finally, note that in such sentences there is a semantic parallelism between members of the same (at least potentially) semantic classes: namely, Sally parallels Ronald, both belonging to the set of human agents; and hot dogs parallels hamburgers, both belonging to the set of eatable or, as used above, desirable entities.

It is not clear what all of these facts mean, but it is possible that these sentences may be the "pure" form of the contrastive focus type, where there is a parallelism between two members of one or more sets. The sentences (10) and (11) demonstrate parallelism between members of two sets, but sentence (12) is an example of parallelism between members of one set. Sentence (12) is Chomsky's (73) (1969).

(12) *John is more concerned with AFfirmation than with CONfirmation*

Since these types of sentences may involve either assertion or counter-assertion, they may also provide evidence for another type of presuppositional set as in Table 8 in (9): namely, parallel member sets. If this is correct, then contrastive focus in its "pure" form also falls into the typology specified in section 5.1 above.

5.3. CONCLUSION

In conclusion, the present study has directly borrowed only the assertive and exhaustive listing focus types from the earlier typologies. The counter-assertive focus, polar focus and counter-assertive polar focus types have all been introduced to capture the focusing capacities of Aghem.

APPENDIX

FOCUS MARKING AND CLAUSE TYPES

	main	*adverbial*	*conditional*	*relative*
cleft	X			
completive focus	X			
FOC nò	X			
PREPOSE	X	/	/	
ADPOSE	X	X	X	X
TRANSPOSE	X	X	X	X

The three salient features of the above table are: 1) all formal means of marking the focus may be used in main clauses; 2) only word order marking may be found in the subordinate clauses; and 3) the adverbial and conditional clauses may have a preposed constituent as long as the verb is not clause final, while the relative clauses may never prepose a constituent. This last point means that perhaps relative clauses may mark a constituent only for AF while it is possible in adverbial and conditional clauses to mark a constituent as either AF or CAF. In actual fact, the function of using various word orders in the subordinate clauses is not at all clear and requires further study. It may be possible that in the case of adverbial and conditional clauses the use of various word orders corresponds to the use of such clauses to specify the topic of the sentence (cf. Haiman 1978 on conditionals).

Notes for Chapter 1.

[1]Aghem is spoken in the North West Province of Cameroon, primarily in the town of Wum. The number of speakers is unknown to the author.

[2]For example, in English we find stress and cleft sentences used to mark the focus (Chomsky 1969, Jackendoff 1972, Schachter 1973). In Efik, a Kwa language, an NP which is the focus may be moved to the front of the sentence. In this case, the verb must take a special morphology. If the NP is not fronted and follows the verb, then the verb may take the special form or take the normal form. Thus, Efik uses both word order and verbal morphology to indicate the focus (cf. Welmers 1968, Cook 1976). In Bemba and Rwanda, both Bantu languages, the focus is marked morphologically, but the use of the particular morphemes is conditioned by the syntactic function of the constituent in focus and not by the word order: one form marks predicate focus and another marks complement focus. Thus, morphology is used but only in conjunction with syntactic functions (cf. Givón 1975).

[3]Note that Aghem does not exploit the phonological structures of the language to mark a focused constituent, as is done in English, for example. Thus, Aghem is one of numerous tone languages in the world which mark the focus by non-phonological means. Schauber (1978) suggests that some complexity factor may be involved to account for the lack of phonologically marked focus in most tone languages: namely, to mark the focus in a tone language, intonation as a possible mechnamism for marking the focus is not preferred to syntactic and morphological means because it significantly increases the phonological complexity of an utterance for the speaker and addressee by comparison to the other means available.

[4]Note that the term "function" is used here not in the logical or mathematical sense. Instead, it refers to the linguistic role played by a constituent in various linguistic contexts: namely, syntactic, semantic and pragmatic.

[5]In Dik's model, one would like to have a universal characterization of such syntactic functions, but that is not an easy task. Various people have attempted to characterize such functions in different ways: in Relational Grammar they are taken as primitives (Johnson 1974, 1977; Perlmutter and Postal 1977; Gary and Keenan 1977); Keenan (1976) has proposed the use of a check list to identify the subject in any one language; Fillmore (1977) suggests deriving subject and direct object in terms of the perspective permitted or required by the particular verb in question; and of course, Chomsky (1965) has suggested deriving subject and object in terms of the underlying phrase structure. From a seminar taught by Stephen R. Anderson on grammatical relations and from the descriptions of the data in papers by Anderson (1976) and Anderson and Chung (1977), another characterization is possible: namely, across languages the subject will be distinguishable from other functions in terms of a class of syntactic rules.

[6]As a consequence of using Jackendoff's terminology for semantic functions and Dik's terminology for pragmatic functions, the term "theme" may refer to two different functions: one semantic and one pragmatic. The semantic theme is that constituent which, for example, with verbs of motion is understood as undergoing the motion, or with verbs of location has its location asserted (Jackendoff 1972: 29-30). The pragmatic theme, according to Dik (1978:19) "specifies the universe of discourse with respect to which the subsequent predication is presented as relevant." In this study there should be no confusion, however, since the pragmatic theme is never discussed. Therefore, any reference to the "theme" is to be taken as referring strictly to the semantic function.

[7]This characterization of the focus is based on Firbas (1966, 1971) and others of the Functional Sentence Perspective (FSP) school of Prague. In this school of

thought a sentence is divided into the theme (i.e. the given information, the lowest in "communicative dynamism") and the rheme (i.e. the new information and the highest in "communicative dynamism"). The rheme could be often taken as equivalent to the "scope of focus" and the constituent highest in communicative dynamism as the "marked focus". Cook (1976) uses FSP in his analysis of focus in Efik, a Niger-Congo language.

[8]Schauber (1978) argues this point both from English and from Navajo. A representative sentence would be the following: *it's not the boy who wrecked the CAR who blamed me.* This sentence is the gloss given for her (27) (p.160). She claims that the focus of this sentence is 'car' and that it is part of the presupposition 'the boy wrecked the car'. Therefore, the focus can at times be part of the presupposition. See Schauber for further discussion.

[9]The question test consists of finding the appropriate interrogative word(s) (i.e. WH question words like "who", "what" and so on) to form a question to which a given declarative sentence would be the answer. Thus, the sentence *JOHN gave the book to Mary* would be the answer to the question *who gave the book to Mary?*, but it would not be the answer to *what happened?* or *what did John give to Mary?*, and so on. If a declarative sentence is related to a single, specific WH-question, then the declarative sentence may be straightforwardly parsed in terms of focus and presupposition: the focus being the element which answers the interrogative (i.e. WH-) word, and the presupposition being the remainder of the sentence.

Notes for Chapter 2.

[1]In this presentation I concentrate on simple sentences, that is, a sentence consisting of only one verb and its arguments--what we might call a "clause". In complex clauses where more than one verb is used the use of word order to mark focus is greatly restricted. Further study remains to be done to determine the constraints in complex sentences.

[2]Only three texts were collected in Aghem [included in this volume]. Two were traditional folk stories, i.e. narrative discourse, and one was about the Aghem farm-planting day, i.e. procedural discourse. Of far more interest would be natural conversational discourse, including arguments and quarrels. I would assume that conversations would exploit the word ordering possibilities much more than these more planned forms of discourse.

[3]The symbols represent the following: S:subject; AUX:auxiliary (tense-aspect); V:verb; O:object; LOC:locative; TEMP:temporal adverb; FOC:focus marker. The first object can be considered the direct object, and the second one the indirect object. The first is often the theme (in Jackendoff's terms [1972]), the second is either the benefactive or goal. In this schematization, the subject marker (SM) has been included within the subject since it seems to parallel a nominal suffix (see Hyman, chapter 6). Even though Aghem word order is flexible, two positions are generally present. First, the subject is marked with an NP, or if the NP is moved, by a dummy subject (DS) à. Secondly, the tense marker is always in second position and it never is moved, though it may have a zero realization or be realized as a tonal morpheme.

[4]The four deviant orders are: (a) two clauses with sentence initial objects (O S V LOC); and (b) two clauses with an object occurring pre-verbally (S O V Q-why, (S) â O V). The two clauses represented by (a) are outside the scope of this study. They involve the use of the topic position in the sentence: that position which establishes what the predication is about. The two clauses in (b) fall

more within this tudy, but a look at their contexts suggests that what is spoken of here as "counter-assertive focus" also includes "counter-expected focus": that is, a focus which is semantically related to counter-assertive focus and identical in form (in Aghem), but which differs from counter-assertive focus in that it is not motivated by a previous assertion with incorrect information, but by a situation with an unexpected state of affairs, defined either culturally or in terms of general human experience.

[5]In the past time, Aghem distinguishes between P_0 (immediate past), P_1 (today past) and P_2 (distant past); see Anderson, chapter 3.

[6]This argument is actually based on an analog to Keenan's (1976:307) semantic definition of a basic sentence. The analog is as follows:

> *A sentence X is pragmatically more basic than a sentence Y, if and only if its assertion and consequent interpretation is less dependent on a preceding sentence or situational context than sentence Y.*

Crucial to this definition of a pragmatically basic sentence is the notion "less dependent". This notion should be taken to mean that sentence *X* presupposes less than sentence *Y*.

[7]This process contrasts with a common procedure in various Benue-Congo languages, which is to leave the interrogative word in the position appropriate to its syntactic function. Thus, one would expect the interrogative word to remain in the subject position--sentence initial.

[8]This rule is stated in these terms only for expository purposes. It will be progressively altered. The use of the terms "subject", "postpose" and "focused" is not meant to prejudice the presentation at this point in favor of one model or another.

[9]Note that the subsets do not need to be adjacent, therefore the focused material may consist of discontinuous subsets.

[10]Modified nominals would be those with demonstratives, adjectives, relative clauses and so on, in which case neither the subject marker nor the noun prefix would be present in most cases (see Hyman, chapters 4 and 6).

[11]This generalization pertains only to main clauses. The completive focus marker and the negative will be discussed in chapter 3.

[12]The root for 'friend' is -fɨ́n. The final /n/ becomes [ɪ] before a vowel, as in (15a,b).

[13]As noted in note 4 above for chapter 2, this type of focus can include cases of counter-expectation in terms of normal cultural and experiential expectation.

[14]The focus marker /nɔ̀/ is obligatorily absent here, contrary to the discussion of (6) above, because of the presence of the completive focus marker máà. See sections 3.1 and 3.2 for further details.

[15]There are three forms for these two markers: Ǹ/Ø (P_0), máà/mɔ̀ (P_1), má'á/ 'mɔ̀' (P_2). The first form is the form the tense marker takes under completive focus, while the second form is the normal completive marker. See Anderson, chapter 4 for further details.

[16]The completive focus marker (CplF) may also occur with an intransitive verb when no verbal complements are present. The focus of the sentence is its truth value, but whether the sentence is being asserted or counter-asserted is not formally marked by the CplF. This is discussed in section 3.1 in greater detail.

[17]Paul Schachter (personal communication) suggested that the relevant distinction between these two classes of ditransitive verbs was that between benefactive and recipient (i.e. goal).

[18]The reference to "possible word orders" should be explained. The twenty-four possible orderings with the benefactive comes from the fact that there are four ordering variables: S(ubject), V(erb), O(bject):theme and O(bject):benefactive. In the case of goal, however, there is a fifth word ordering variable: namely, the morpheme â. Therefore, there are actually 120 possible word orderings, but since the occurrences of the â before S and V and in clause final position are irrelevant, there are only forty-eight relevant possible orderings: twenty-four with the â preceding the O:goal and twenty-four with it preceding the O:theme.

[19]The word nzàŋ 'a type of dance and song' is invariable since it has neither a prefix nor a suffix. In fact, nouns of classes 1 and 9 do not have prefixes or suffixes (cf. Hyman, section 6.1).

Notes for Chapter 3.

[1]Cf. note 12 of chapter 2.

[2]What we may actually have here is the embedding of an assertive focus (AF) in a counter-assertive polar focus (CAPF) in (4a) and (4b), and the embedding of CAF in a CAPF in (4c) and (4d). Thus, (4a) might read in logical form:

TRUE (The X such that Inah gave fufu to X--is his friends)

In this case, *TRUE* is the predicate and the focus of the CAPF, while the reading in parentheses is the straightforward AF.

[3]As with the root -fʃn 'friend', the final /n/ of -nwʃn 'bird' becomes [ˈ] before a vowel as in (8a).

[4]The QM is á, but it assimilates to the vowel quality of an immediately preceding vowel as in (9).

[5]This future (F_1) is the *near* (today) future marker. Aghem distinguishes between a today future and an after-today future (F_2).

[6]As Larry Hyman (personal communication) has noted, perhaps it is the FOC marker nɔ̀ which is the outer limit of the focus typology. It is difficult to see which comes first: the morpheme nɔ̀ or the function ELF.

[7]The fact that (27) and (25a) are formally distinct but pragmatically synonymous in terms of focus and presupposition, as are (23a) and (23b), suggests that the formal distinction between these two sentences may very well serve some additional pragmatic functional distinction other than focus, or perhaps even some type of discourse function such as foregrounding and backgrounding. The uses of these various forms in a large sample of texts remains to be done.

Notes for Chapter 4.

[1]I am thinking here of sentences involving Dative Shift, Subject and Object raising, Polar and WH Questions and their answers, and so on.

[2]In this discussion of FG I am ignoring term insertion, term operators, and the difference between basic and derived structures.

[3]Dik gives the following definitions for these pragmatic functions (1978:19):

a. Theme: "specifies the universe of discourse with respect to which the subsequent predication is presented as relevant."

b. Tail: "presents, as an "afterthought" to the predication, information meant to clarify or modify it."

c. Topic: "presents the entity 'about' which the predication predicates something in the given setting."

d. Focus: "presents what is relatively the most important or salient information in the given setting."

Note that Dik's "theme" is a *pragmatic* function, while Jackendoff's "theme" is a *semantic* one.

[4]These are the verbs which take a theme and a goal as two of three arguments in the predicate frame.

[5]The locative preposition has the following form:

á*n* → á / ___ [CV -CV...]
á*N* / ___ [V -CV...] *(if V → Ø / N[__-CV...])*
á*l* / *elsewhere*

[6]The pattern here is only predication internal: the pragmatic theme and tail are excluded. Note that if the X's and P2 positions are excluded, the order is S-V-P1-O. This order is significantly different from that proposed by Dik (1978: 175) as the general language independent order:

$$P1 \left\{ \begin{matrix} V\ S\ O \\ S\ V\ O \\ S\ O\ V \end{matrix} \right\}$$

In Aghem the special P1 position is post-verbal rather than predication initial.

[7]In terms of discourse, it is probable that the order of the constituents in the P2 positions is dependent on the order of the same constituents in the preceding utterance: that is, they keep the same order in the P2 position as they had in the preceding utterance. I say "probably" because I have insufficient textual data to confirm this claim.

[8]Cf. Jackendoff (1972:242ff) for a more complete discussion of the notion "appropriate semantic variables". Such a variable essentially represents the semantic content (specified by a feature or features) which a set of semantic units share in common. The set of semantic units consists of those units which are in possible contrast with the focus in the given semantic context. The units in the set do not necessarily share any semantic feature(s) beyond that specified by the appropriate variable. Thus, if the variable represents "something eatable and animate", then in the sentence *John ate FISH*, the semantic unit *FISH* would belong to the set including beef, mutton, pork, and so on.

[9]This necessary modification was first brought to my attention by Paul Schachter.

Notes for Chapter 5.

[1]The presuppositional set is similar to, if not identical to, Hawkins' "shared sets" (cf. Hawkins 1978:131).

[2]It would be interesting to see if one could construct an implicational hierarchy in terms of these types. For example, one might assume that every language has some way to mark formally types 5 and 6 (but not necessarily a way to distinguish them), and that many languages also have a way to mark type 3. Then perhaps only a few languages formally mark 7 and 8, and perhaps even fewer (if any) formally mark types 4, 1 and 2.

In addition, based on the fact that some languages distinguish between singular, dual, and plural, one might expect two more types to be added to the table in (9): in these cases the presuppositional set would only have two members, and this set could be either asserted or counter-asserted.

Furthermore, in establishing the implicational hierarchy (or hierarchies) it might be necessary to consider assertive focus types apart from counter-assertive types; and in addition, to separate the different types of counter-assertive focus into pure counter-assertive, counter-expected and negative. Finally, the various formal means could also be separated: word order, verbal morphology, intonation etc.

[3]E.g. Chafe wants to argue that contrastive focus involves an "awareness" that the speaker assumes the addressee shares with him/her. This awareness or "background knowledge" does not have to be "given". As an example, Chafe offers an incident where Sherlock Holmes suddenly exclaims after a whole evening in thought: *The BUTLER did it!* Watson, who happens to be lost in a book, is entirely surprised and befuddled. Yet, as Chafe notes, Holmes treated the knowledge *as if* it were given and shared by Watson. Therefore, Chafe concludes, the background knowledge must either be given or "quasi-given"--this last type "being a pretense on the speaker's part that giveness applies" (Chafe 1976:34).

It would seem, however, that the appropriate or at least more insightful analytic terms would be "focus" and "presupposition" rather than "given" and "new". Thus, when Sherlock Holmes exclaims, he assumes that Watson shares the information of the presupposition with him: namely, *X did it*. The fact that Watson is surprised shows that Holmes was wrong in assuming that Watson shared his universe of discourse and therefore his specific presupposition. Since the presupposition is not shared, the dialogue is a marked one. In a normal, unmarked discourse the presupposition would be shared between speaker and addressee. The markedness of this discourse correlates with Watson's behavior: surprise! Therefore, a new term like "quasi-given" is not necessary if the discourse is analyzed in terms of focus and presupposition. In addition, in terms of shared presuppositions one can determine whether a given discourse is normal or marked, and if it is marked, one can expect some type of correlated behavior. Therefore, the terms "given" and "new" are neither necessary nor the most insightful.

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TEXT #1

[The following text, based on the speech of Mr. Timothy Inah Buo, was recorded and transcribed by Stephen C. Anderson, Larry M. Hyman and John Robert Watters, with the assistance of Mr. Buo.]

1 wù lí fɬ lɔ́ 'tsɬghá kɔ́ nô ghèe fɬl à wɬn°. ghé ńsɔ́ʔɔ́ tsɬghà
man certain once be HAB only FOC with friend of his they go-bush HAB
THERE ONCE WAS A MAN$_1$ WITH HIS FRIEND$_2$. THEY WERE ALWAYS GOING

2 kɔ́ è-gbo̱m. fɬl à wɬn òlì ŋ́kwɔ́ álé'gbo̱m tsɬghà fɬn à wɬn òlì.
only to-hunt friend of his other knows to-hunt pass friend of his other
HUNTING IN THE BUSH. THE MAN KNEW HOW TO HUNT BETTER THAN HIS

3 ghɬ'á ghé sɔ́ʔ ndû gbo̱m'zɔ́ tsôʔ lí'fɔ́, fɬl à wɬn 'wɬl á ò tɔ̀ʔ
as they go-bush go hunting day certain friend of his this REL he well
FRIEND. AS THEY WENT HUNTING ONE DAY, THE FRIEND WHO DID NOT

4 kwɔ̌ 'yɔ́ gbo̱m'zɔ́, ò ŋ́kɔ́ŋɔ́ tsɬghà jì zɬl à ò lɔ́ wɬ'ɬ fɬl òlì wɬn.
know NEG hunting he look HAB road this REL he F_2 kill friend other this
KNOW HOW TO HUNT WELL WAS LOOKING FOR A WAY TO KILL HIS FRIEND.

5 ghé sɔ́ʔ ndû kɔ́ áŋ kù fɬl à wɬn mé ñɬ'á é ndû ká?á wɔ́ɔ̀
they go-bush go only in forest friend of his (said) that he$_i$ go start hither
AS THEY WENT TO THE FOREST, HIS FRIEND$_2$ SAID HE WOULD GO START

6 álé'gbo̱m gbo̱o̱ ko̱ʔo̱ wɔ́. òlì mé ñɬ'á é gbo̱o̱ tsúghó wɔ́.
to-hunt hunting go-up hither other (said) that he$_i$ is-hunting downward hither
HUNTING FROM BELOW. HIS FRIEND$_1$ SAID HE WOULD HUNT DOWNWARDS.

7 fɬl à wɬn wɬl 'á ò mɔ̀ kɬ 'twɬi-wɔ́, ò mɔ̀ lɬ'ghá álé'wɬ fɬlà lì
friend of his this REL he P_2 have medecine he P_2 like to-kill friend other
THE FRIEND$_2$ WHO HAD MEDECINE WANTED TO KILL THE OTHER FRIEND$_1$.

8 wɬn. ò ńnì ko̱ʔ dzɬm à kɬbɬghà°. ghɬ'á ò sɬ ñɬ 'tsúghó ndú'ú áŋ kù
this he took out back of leopard as he F_1 enter down going in forest
HE$_2$ TOOK OUT A LEOPARD SKIN. AS HE ENTERED DOWN INTO THE FOREST,

9 ò ńfɬn kɔ̀ʔ á kɬ'bɬghá, gbo̱o̱ ko̱ʔo̱ wɔ̀. fɬlà wɬn òlì wɬn, ò ŋ́gbo̱o̱
he turned up to leopard hunting up hither friend his other this he hunted
HE TURNED INTO A LEOPARD HUNTING UPWARDS. THE OTHER FRIEND$_1$ WAS

10 tsúghó wɔ̀, kwɔ́ yɔ́ ñɬ'á wù lì vû ko̱ʔo̱ wô fî à lɔ́
down hither know NEG that person other that ascending hither there he is
HUNTING DOWNWARDS NOT KNOWING THAT THE OTHER PERSON COMING UP WAS

11 'fɬn. ghɬ'á ghé bûɔ kpé'én wɔ́, fɬlà wɬn òlì wɬn dánsɬ kɔ̀ʔɔ̀
friend. as they come meet hither friend his other this then saw
HIS FRIEND$_2$. AS THEY CAME AND MET, THE ONE FRIEND$_1$ THEN SAW A

12 ndù kɬbɬghá shwì ndù kɬbɬghá. ghɬ'á bɬghá 'kɬ tsɬghà bvû ndû á wée 'tsɬ,
going leopard shot go leopard as leopard SM fell go to ground
A LEOPARD GOING AND SHOT IT. AS THE LEOPARD FELL TO THE GROUND,

13 bɨghá 'kɨn fɨn kə̀? wù. ò ńñɨŋ tsùghò èndú álédù kɔ̂? ká! à
leopard this turned into person he ran downward &went to-go see kind of
THE LEOPARD TURNED INTO A PERSON. HE RAN DOWN TO SEE WHAT KIND

14 bɨghá 'kɨ! á ò tɨm. ghɨ'á ò ñɨŋ 'tsúghó ndú'ú ndù kɔ̀? ndù mɔ̀ à lɔ́
leopard this REL he shot as he ran downward going go see go when it be
OF LEOPARD HE HAD SHOT. AS HE RAN DOWNWARD HE SAW THAT IT WAS HIS

15 'fɨn, ò ŋkòo kə̀? áwó álɔ́'tú, kà? ndù lɔ̀?ô dɪ'ɪ-wɔ́.
friend he put up hands on-head start go places crying
FRIEND, AND HE PUT HIS HANDS ON HIS HEAD AND STARTED TO CRY.

16 ò ńtsùghò èkɔ́?. ò ḿ'bvɨ́ tsúghó é ñɨ'á êzɪŋ sé'é ghée kwɔ̌? ghé sɨ̂
he descended to-see he asked down he$_i$ that now would do what they F_1
HE WENT DOWN TO SEE. HE ASKED HIMSELF WHAT TO DO NOW? THEY WILL

17 dzè ñɨ'á é wɪ́ wù. ò ŋkwɨn èndú ndù dzè fùo ndù à
say that he$_i$ killed person he returned-from-bush to-go go say give go to
SAY THAT I KILLED THE PERSON. HE RETURNED FROM THE BUSH AND RE-

18 bà?tòm, à bà?tóm ñɨ'á ghèe fɨn mɔ̂ sɔ̀? égbə̀m, fɨn vù ndù
chief to chief that he-with friend P_1 go-bush to-hunt friend that went
PORTED TO THE CHIEF THAT HE AND HIS FRIEND WENT HUNTING IN THE

19 fɨn kə̀? á kɨ'bɨghá, yé tɨm 'wɪ́ ndú 'wɨn.
turn up to leopard &he$_i$ shot kill go him
BUSH, HIS FRIEND TURNED INTO A LEOPARD, AND HE SHOT AND KILLED HIM.

20 bà?tóm ŋ'ká?á álé'bvɨ́ á wɨn ghɨ'á ò mɔ̀ wɪ́ wù tè. ò mé
chief started to-ask to him as he P_2 kill person in-question he (said)
THE CHIEF STARTED TO ASK HIM HOW HE KILLED THE PERSON. HE$_1$ SAID

21 ñɨ'á ghèe fɨn mɔ̂ sɔ̀? égbə̀m; ghɨ'á ghé sɔ́? ndû á ŋ'gwɨn,
that he-with friend P_1 go-bush to-hunt as they go-bush go to bush
THAT HE AND A FRIEND WENT TO HUNT, AND AS THEY WENT TO THE BUSH,

22 fɨn vù dzè ñɨ'á é ndû ká?'á wɔ̂ álé'gbɔ́ɔ kə̀?ə́ wɔ́ áŋ kù.
friend that said that he$_i$ go start hither at-hunting ascend hither in forest
THE FRIEND SAID THAT HE WOULD START HUNTING UPWARDS IN THE FOREST.

23 ghé sɨ̂ bûɔ kpé'én wɔ́ á fɨtsɨtè. ghɨ'á é sɨ̂ gbə̀'ə́ tsú'ghó wɔ́, yé
they F_1 come meet hither at middle as he$_i$ F_1 hunt descend hither &he
THEY WOULD MEET IN THE MIDDLE. AS HE WAS HUNTING DOWNWARD, HE

24 bûɔ kɔ̂? tsúghó'bɨghá-'kɔ́ yé shwɪ̂ ndû bɨghá-'kɔ́ mə̀?ŋ̀ké ñɨ'á é fɛ́ 'tɨm
came see down leopard &he$_i$ shot go leopard thinking that he$_i$ here shot
CAME AND SAW BELOW A LEOPARD, AND HE SHOT THE LEOPARD, THINKING

25 kɨbɨghá, kwɔ́ yɔ́ ñɨ'á é fɛ́ 'tɨm mà?à ndù fɨn á wée'tsɨ́.
leopard know NEG that he$_i$ here shot away go friend to body-of-ground
THAT HE HAD SHOT A LEOPARD, NOT KNOWING THAT HE HAD SHOT HIS

26 é nsɨ̌ ñɨŋ tsùghò ndú ndù kɔ̀? ndù mɔ̀ à
he$_i$ NARR/F_1 run descend go go see go when it
FRIEND TO THE GROUND. HE WAS RUNNING DOWN AND SAW THAT IT WAS

27 lɔ́ 'fɬn, é 'fí dánsɬ kɔ̀? nò ñɬ'á é mɔ̂ fɛ́ wí 'fɬn. é káà
be friend he$_i$ there then see FOC that he$_i$ P$_1$ here kill friend he$_i$ NEG
HIS FRIEND, THAT HE HAD KILLED HIS FRIEND. HE DIDN'T KILL

28 wì dzɬ bɬghá- kɔ́ wí fɬ kwɔ́ tsɬghá nò ñɬ á ò fɬlà tsɬghà á
kill NEG leopard wife had known HAB FOC that he turns HAB to
A LEOPARD. HIS$_2$ WIFE HAD ALWAYS KNOWN THAT HE$_2$ TURNED HIMSELF

29 kɬ'bɬghé. bà?tɔ́m mé ñɬ'á ghé ndû bɔ́?ɔ̀ wɔ̂ wɬn á ŋ́'gwɬn. ká là
leopard chief (said) that they go carry hither him to bush kind
(OFTEN) INTO A LEOPARD. THE CHIEF SAID THAT THEY SHOULD GO

30 wù và tè ghé tsɬn tsɬghà yɔ̀ á kɬ'bé. ghé ndû tsɬn tsɬghà
person that in-question they bury HAB NEG in compound they go bury HAB
CARRY HIM TO THE BUSH. THAT KIND OF PERSON THEY DO NOT BURY IN

á ŋ́'gwɬn.
31 *to bush*
THE COMPOUND, BUT RATHER IN THE BUSH.

TEXT #2

[The following text, based on the speech of Mr. Timothy Inah Buo, was recorded and transcribed by Larry M. Hyman, with the assistance of Mr. Buo.]

1 wù lí fɨ kí tsɨghá 'kɔ́ wí à wé-ghɔ́ ábɨghà, ò ńlɔ́
person certain once had HAB only wife and children/OF two he was
A CERTAIN PERSON ONCE HAD A WIFE AND TWO CHILDREN. HE WAS

2 sɔ̌ogɔ̀? è bà?tòm°. ghé ń'sɔ́?[1] kɔ́ tsàm. sɔ̌ogɔ̀? tɨ́ bà?tóm
soldier of chief they went-bush only war soldiers of chief
A SOLDIER OF THE CHIEF. THEY WENT TO WAR. THE SOLDIERS OF

3 tɨ́ ndùu zɨ́[2] wɔ̀ tsàm. bà?tóm sɨ́ nà?à kɔ̀[3] èzɨ́ â sɔ̌ogɔ̀?
SM went eat hither war chief F_1 announce only feast for soldiers
THE CHIEF WON THE WAR. THE CHIEF ANNOUNCED A FEAST FOR

4 tɨ́'wɨ́ntɔ́ à né? zédzɨ́m ñɨ́'á ghé bûɔ zɨ́ lɔ́?'ɔ́ wɨ́ı 'á tsàm zɨ́
his/OF and village whole that they come eat places these REL war that
HIS SOLDIERS AND THE WHOLE VILLAGE, THAT THEY COME EAT WHERE

5 lɔ́'ɔ́ té. sɔ̌ogɔ̀? zɨ́ı à è mɔ̀ ndùu zɨ́ 'wɔ́ tsàm ò ńdùu
was there soldier this REL SM P_2 went eat hither war he went
THE WAR HAD BEEN. THIS SOLDIER WHO HAD WON THE WAR CAME.

6 èbúɔ. bà?tóm kí tsɨghá ághí átɛ̀. wì òìì ò ńlɔ́ fùo èzɨ́a
&came chief had HAB wives five wife certain she was there among
THE CHIEF HAD FIVE WIVES. A CERTAIN WIFE WAS THERE AMONG

7 tè mɔ́ tsɨ́lé fɨ́ kí pú nô ghèe ghêzɨ́[4]
them when father once had died FOC with mothers
THEM WHOSE FATHER HAD DIED LONG AGO WITH HER "MOTHERS". THE

8 bà?tóm ńdùu nì[5] wɔ̀ wɨ́n álé'túghó. wìzɨ́n 'vá ńlɔ́ êzɨ́
chief went take hither her with strength woman that was like that
CHIEF WENT AND MARRIED HER WITH POWER. THAT WOMAN WAS SUCH

9 mòtɔ̀?ɔ̀ ìɨghá tsɨghà yɔ́ bà?tòm°. tsó fé'zɨ́ fì ndùu
really like HAB NEG chief day of-feast that went
THAT SHE NEVER REALLY LIKED THE CHIEF. THE DAY OF THE FEAST

10 èbúɔ, sɔ̌ogɔ̀? zɨ́ ńtɔ̀? dzɨ́là kô fwɔ́'ɔ́ wéghɔ̀ŋ ó 'wɨ́n, bùɔ té
&came soldier that well dressed only things of-spear of his came stood
CAME, AND THAT SOLDIER DRESSED WELL IN HIS UNIFORM AND CAME

11 èkɔ́?. bà?tóm mé[6] ñɨ́'á zɨ́ zɨ́ı 'á é[7] ná?'á é ná?'á
up chief said that feast this REL he_i called he_i called
AND STOOD UP. THE CHIEF SAID THAT HE HAD CALLED THIS FEAST

12 bɔ̀? sɔ̌ogɔ̀? wɨ́n ò mɔ̀ ndûu tɨ́m zɨ́ 'wɔ́ tsàm zɨ́n, sɛ̌ɛ 'yía ké'ıí
because soldier his he P_2 went shot ate hither war this we and kept
BECAUSE OF HIS SOLDIER WHO HAD WON THIS WAR, AND WE HAD KEPT

13 tsúghó nâ? zɬn°. wí vǔ ò ńtɔ́?ɔ̀ lɛ̀ń kɔ́ sǒogɔ̀? vǔ à
down village this woman that she well looked at only soldier that in
THIS VILLAGE. THAT WOMAN LOOKED WELL AT THE SOLDIER IN HIS

14 ń'dzá téghɔ̀ŋ tɬ'wɬn. wí vá ń'tóm tsúghó tsɬn ndɬghà è bà?tóm èlì
clothing of-war of his woman that sent down servant of chief certain
UNIFORM. THE WOMAN SENT DOWN A CERTAIN SERVANT OF THE CHIEF

15 ñɬ á ò ndùu tɔ́ŋ'ɔ́ wɔ̂ sǒogɔ̀? vǔ. sǒogɔ̀? vǔ ḿbvá ñɬ'á núŋɔ̀ wɬn
that he go call hither soldier that soldier that asked that woman this
IN ORDER FOR HIM TO SUMMON THE SOLDIER. THE SOLDIER ASKED WHY

16 sɬ mùɔ tɔ́ŋɔ́ â ŋkwɔ̌? à kòm kwɔ̌? sǒogɔ̀? vá nùŋò sɬ ndùu kɔ́
F_1 me call for what DS happened what soldier that went out go only
THIS WOMAN HAD CALLED HIM. WHAT HAD HAPPENED? THE SOLDIER

17 nò ndùu kɔ̀? ndùu wìzɬn vǔ ábé'é. wìzɬn 'vá ndzɛ̀ à wɬn ñɬ'á é
FOC go see go woman that outside woman that said to him that she;
WENT OUT THITHER TO SEE THE WOMAN OUTSIDE. THE WOMAN SAID TO

18 ŋgé 'lɬghá wò. sǒogɔ̀? vá mé ñɬ'á wò lɬghá mùɔ, mɔ̀ wò mbàŋ lɔ́
much like you soldier that said that you like me and you indeed are
HIM THAT SHE LIKED HIM A LOT. THE SOLDIER SAID, "YOU LIKE ME,

19 wì bà?tòm, wò vǔ lɬ'ghá mú'ɔ́?
wife (of) chief you that like me
AND YOU ARE THE WIFE OF THE CHIEF. YOU REALLY LIKE ME?" THE

20 sǒogɔ̀? vá ntsɔ́ŋɔ́ ñɬ'á búɔ bà?tóm sɬ zú tsúghó ñɬ'á é bîi
soldier that feared that if chief F_1 hear down that he; travels
SOLDIER FEARED THAT IF THE CHIEF SHOULD HEAR THAT HE IS KEEPING

21 òfɬn ghèe wì, ò sɬ kàn kɔ́ nǒ 'ghé. sǒogɔ̀? vá mé
friendship with wife he will hang only FOC him; soldier that said
COMPANY WITH HIS WIFE, HE WILL JUST HANG HIM. THE SOLDIER SAID

22 ñɬ'á é 'ḿbɔ́ɔ. sǒogɔ̀? vǔ ò ŋ́kè dzê â nùŋɔ̀
that he; agreed/accepted soldier that he never told to woman
THAT HE AGREED [to the friendship]. THE SOLDIER NEVER TOLD THE

23 vǔ ñɬ'á é fɛ́ lɔ̌ mɔ́ é kí nó 'wí à wɛ́-ghɔ́ ábɬghà.
that that he; here was that he; had FOC wife and children/OF two
WOMAN THAT HERE HE WAS WITH A WIFE AND TWO CHILDREN. THE

24 sǒogɔ̀? vá mê lɛ́lɔ́ nùŋò ñɬ ndùu á ń'dúghó. ghé nà?à kɔ̣?
soldier that NARR looked went enter go to house they called up
SOLDIER LOOKED AND WENT INTO THE HOUSE. THEY ANNOUNCED

25 fûɔ bɬlá wɔ́. ò ḿ'bɬn kɔ́ ghèe nùŋò vǔ, ghé ndùu dɔ̀?ɔ̀
things (of) dancing hither he danced only with woman that they went sat
THE DANCES. HE DANCED ONLY WITH THE WOMAN, AND THEY SAT

26 ètsúghó. sǒogɔ̀? vá mê lɛ́lɔ́ nùŋò kwɬn èndú á ń'dúghó
down soldier that NARR looked go return-from-bush go to house
DOWN. THE SOLDIER LOOKED AND WENT TO THE HOUSE WITH

27 ghèe wɨ°, lɛ̌n sùghɔ̀ ghɨ́a zɨ̀ â wɨ̀ kè dzɛ̂. núŋɔ̀ vɨ́ 'lɛ́n
with wife looked also matter that to wife never tell woman that looked-at
HIS WIFE, BUT NEVER TOLD HER ANYTHING. THE WOMAN ESCAPED FROM

28 bà?tòm tì sɨ̀ èkɔ̰́?. ghɨ́'á ò tɨ́ 'sɨ́ 'kɔ̰́? bà?tòm, ò ń'tɔ̰́m tsúghó
chief escaped out up as she escaped out up chief she wrote down
THE CHIEF. AS SHE ESCAPED FROM THE CHIEF SHE WROTE A LETTER

29 kɨ́mà?sɔ̀ â sɔ̌ogɔ̀? vɨ̀, â wɨ́n ñɨ́'á ò bùghɔ̀ kɔ̂? ghé. sɔ̌ogɔ̀? vɨ́ ndùu
letter to soldier that to him that he come see her; soldier that went
TO THE SOLDIER THAT HE SHOULD COME SEE HER. THE SOLDIER WENT

30 nùŋɔ̀ èkɔ̰́? zɨghà mà?à tsùghɔ̀ áwɛ́, nùŋɔ̀ èndú ndùu kɔ̀? ndùu nùŋɔ̀ vɨ̀.
go up left threw down children went go go see go woman that
AND ABANDONED HIS CHILDREN AND WENT TO SEE THE WOMAN. HE AND

31 ghèe nùŋɔ̀ vɨ̀ ŋ'ká? tsúghó álébìì káŋ lɔ́ ám'bɨ́. ghé ń'lɛ́lɔ́ nùŋɔ̀
he& woman that started down to-travel all over world they looked-at went
THE WOMAN STARTED TO TRAVEL ALL OVER THE WORLD. THEY WENT DOWN

32 tsùghɔ̀ ndùu àsɨ́n, nùŋɔ̀ kɔ́ŋɔ́[8] ndùu â wɛ́, nùŋɔ̀ kɔ́ŋɔ́ ndùu â bú wɛ́
down go Esimbi went go-level go to Weh go go-level go to Bu child
TO ESIMBI, WENT TO WEH AND TO BU. HIS CHILD

33 ŋ'ká? tsúghó édzâŋ, sɔ̌ogɔ̀? wɛ̀ lɛ́'ɛ́, àŋgáŋ. wù ńtsɨ́n
started down be-sick soldier where (exclamation) nowhere person cover
STARTED TO GET SICK, WHERE IS THE SOLDIER? NOWHERE! NO ONE

34 'kúɔ yɔ́ lɔ́?'ɔ́ kɨ́l 'á ò lɔ̀ álédzɛ̀ à ndùu â wɨ́n ñɨ́'á ò fɛ́ lɔ́ wɨ́
know NEG place this REL he be to-tell to go to him that he here is wife
KNEW WHERE HE WAS IN ORDER TO TELL HIM THAT HIS WIFE IS SICK,

35 dzáŋà nò, wáa dzáŋà nò, mɔ̀ vɨ̀ bìì ká'ŋ ndú wɨ́l à lɔ́?'ɔ́tɔ́
sick FOC children sick FOC when (he) travels all-over go him to places/OF
THAT HIS CHILDREN ARE SICK, AS HE TRAVELS ALL OVER THE PLACE

36 ghèe wìzɨ́n. áwɛ́ ádzɨ́m ghé ŋ'ká? tsúghó lɔ̀?ô dzáŋ'áwɔ́. ghé ń'tɔ́ŋɔ́
he& woman children all they started down places sick/OF they called
WITH THE WOMAN. ALL THE CHILDREN BEGAN TO GET SICK. THEY

37 ghìí tɨ́ŋgàŋ ádzɨ́m, ghé mbùɔ ghà kè kɔ́ nò. ghé mé ñɨ́'á
people (of) medecine all they came tried in-vain only FOC they (said) that
CALLED ALL THE DOCTORS WHO CAME AND TRIED IN VAIN. THEY SAID

38 wáa fɛ́ dzàŋà lɔ́?'ɔ́ wɨ́l 'á tsɨ́lé lɔ́ àtè°. ghé kɔ́ŋɔ́ kè
children here sick places these REL father is at they looked-for in-vain
THE CHILDREN ARE SICK BECAUSE OF WHERE THE FATHER IS. THEY

39 tsɨ́lé. bà?tóm ń'tóm tsúghó tɨ́sɔ̌ogɔ̀? ñɨ́'á
father chief sent down soldiers that
LOOKED IN VAIN FOR THE FATHER. THE CHIEF SENT DOWN SOLDIERS TO

40 ghé ndû kɨ́ŋ tsɨ́lé ghèe wɨ̀. ghé ŋ̀kɨ́ŋ kè tsúghó. bà?tóm
they go look-for father and wife they looked in-vain down chief
GO LOOK FOR THE FATHER AND HIS WIFE. THEY LOOKED IN VAIN. THE

41 ńlɬghá álénì wì sǒogò? và. ò ń'tóŋó wì sǒogò? và, ñɬa
wanted to-take wife (of) soldier that he called wife (of) soldier that that
WANTED TO MARRY THE WIFE OF THE SOLDIER. HE CALLED HER, ASKING

42 ghɬ'á nòm wùa sɬ lɔ́ mɔ̀ ò ńnì nùŋò wì ghé, wò sɬ kǒn mǫ̀?ǹ kwǒ?
as husband yours F_1 be that he took go wife his$_i$ you F_1 SIM think what
HER THAT SINCE HER HUSBAND HAD TAKEN AWAY HIS WIFE, WHAT WAS

43 núŋò vá mé ñɬ'á é mǫ̀?ǹ jì yɔ̀ ghɬa èlɬ'zɔ́,
woman that (said) that she$_i$ thinks NEG NEG matter certain
SHE THINKING? THE WOMAN SAID SHE WASN'T THINKING ANYTHING IN

44 é lɔ́ dɔ̀?ǹ kéñɬ tɔ́ nóm lɔ́ bûɔ èbàm.
she$_i$ F_2 stay like-this until husband F_2 come back
PARTICULAR, SHE WOULD STAY LIKE THIS UNTIL HER HUSBAND WOULD

45 bà?tóm mé ñɬ'á wò lɔ́ dɔ̀?ǹ kêezɬ tɔ̀ nòm
chief (said) that you F_2 stay like-that until husband
COME BACK. THE CHIEF SAID, "YOU WILL STAY LIKE THAT UNTIL

46 wùa lɔ́ bûɔ èbàm wò fɛ́ lɬghá ñɬ'á é lɔ́ dɔ́?ɔ̀ súghɔ̀ èzɬ tɔ̀ wì
your F_2 come back you here want that I(LOG) F_2 stay also same until wife
YOUR HUSBAND COMES BACK? DO YOU WANT ME ALSO TO STAY LIKE THIS

47 ghé lɔ́ bûɔ èbàm? núŋò và mɔ̂ wɬn ñɬ'á é kɬ jɬ 'yɔ́
my(LOG) F_2 come back woman that P1/to him (said) that she$_i$ had NEG NEG
UNTIL MY WIFE COMES BACK? THE WOMAN TOLD HIM THAT SHE HAD

48 ghɬa èlɬ'zɔ́ álédzè â wò, é fɛ́ sé ndû kɔ̂? wáa 'ghé.
matter certain to-say to you she$_i$ here should go see children her$_i$
NOTHING TO SAY ABOUT THAT TO HIM, BUT THAT SHE WOULD LIKE TO

49 bɬghà và ń'lɛ́lɔ́ tǫ̀m wò kɬmà?sɔ̀ â wì ñɬ'á
guy that looked wrote hither letter to wife that
SEE HER CHILDREN. THAT GUY WROTE A LETTER TO HIS WIFE THAT

50 é zɬghà tɬn wô. núŋò và ń'lɛ́n mà?sɬ kì tóŋó èkǫ́? kà?
he$_i$ left forever you woman that looked-at letter that read up started
HE HAD LEFT HER FOREVER. THE WOMAN READ THE LETTER AND STARTED

51 ndù álédì. tsɬlé ndù èbúɔ, ghêzɬń ndù èbúɔ. ghé ḿbùɔ mòo wò
go to-cry father went &came mothers went &came they came stayed hither
TO CRY. HER FATHER CAME, HER "MOTHERS" CAME. THEY CAME AND

52 fùo èzɬ. tsô? lɬ 'fɬn bùɔ kɔ́ nò, sǒogò? và ńdzè tsùghò
there like-that day certain this came only FOC soldier that said down
STAYED THERE. A CERTAIN DAY CAME THAT THE SOLDIER TOLD THE

53 â nùŋò vá ñɬ'á é mɔ̀ kɬ tsɬghá wɬ à wɛ́ghɔ́ ábɬghà. núŋò vá
to woman that that he$_i$ P_2 had still wife and children/OF two woman that
WOMAN THAT HE HAD A WIFE AND TWO CHILDREN. THE WOMAN SAID:

54 mé ñɬ'á,"wɬ à wɛ́ghɔ́ ábɬghà?" sǒogò? vá mê bɔ́ɔ.
(said) that wife and children/OF two soldier that NARR answered
"A WIFE AND TWO CHILDREN?" THE SOLDIER ASSENTED.

55 núŋɔ̀ té fɨ́ dánsɨ́ zɨ̀ghà tɨ̀n nó 'wɨ́n, zɨ̀ghà mà?à ètsúghó.
woman in-question there then left forever FOC him left threw down
THE WOMAN THEN LEFT HIM FOREVER, ABANDONING HIM.

56 wù vɛ̀ ŋ́'ká? tsúghó álé'kɨ́ŋ jì álébùɔ èbàm án'dúghó. tú 'kɨ́n
person that started down to-look-for way to-come back to-house head P_O/FOC
THAT PERSON STARTED TO LOOK FOR A WAY TO COME BACK HOME. HE

57 dɨ́là ñɨ́'á é sɨ́ bùɔ tsɨ̀ghà ñɨ̀á ènzɨ́lá mɔ̀ à mɔ̀ mbáŋ núŋ'ó, ghé
heavy that he$_i$ F_1 come pass enter how when DS P_2 indeed go he$_i$
WAS ASHAMED HOW HE COULD ENTER WHEN HE HAD WRITTEN A LETTER

58 tǫ́m kɨ́mà?sɔ̀ â wì ñɨ́'á é lɔ́ kɔ̀n bùɔ yɔ̀ èbàm, ñɨ́'á wí nɨ̀zɨ́
wrote letter to wife that he$_i$ F_2 again come NEG back that wife forget
TO HIS WIFE THAT HE WOULD NEVER COME BACK, THAT HIS WIFE SHOULD

59 ghé'é? é sɨ́ èzɨ́ŋ tsɔ́ kɔ́n ndù tsɨ̀ghà ñɨ̀á ndù ènzɨ́lá? ò ŋ́'ká? tsúghó
him$_i$ he$_i$ F_1 now ? again go pass enter go how he started down
FORGET HIM. HE WOULD NOW ENTER HOW? HE STARTED

60 lɔ̀?ô lá?'á káŋ wɔ́, là? kàŋ́ 'kɔ́, là? kàŋ́ 'kɔ́, kúa
places wandering around hither wander around only wander around only money
WANDERING AND WANDERING ALL AROUND UNTIL HALF OF HIS MONEY

61 sɨ̀ lɛ́ ètsúghó. ò ńtsɨ́n 'kɨ́ yɔ́ fɨghà lɨ́'kɔ́ á mbɨ̀ghà. fɨghá 'kɨ́l á
half-way down he covered have NEG thing any/OF in bag thing this REL
WAS GONE. HE DIDN'T HAVE A THING IN HIS BAG. THE ONLY THING

62 kɨ́ mɔ̀ dɔ́?ɔ̀sɨ́ â wɨ̀n, à mɔ̀ lɔ́ ñɨ́'á ò bùɔ èbàm án'dúghó. ò ńdù nùŋɔ̀
SM P_2 sat to him DS P_2 be that he come back to-house he went left
LEFT TO HIM WAS TO GO BACK HOME. HE LEFT WHERE

63 wɔ́ lɔ̀?ô bú'ɔ́ wɔ́ ébàm, ò ḿbùɔ tè tsúghó kɔ̀? tsùghò kǫ́ kɨ́ 'wɨ́n
hither place came hither back he came stood down see down slave of his
HE WAS, CAME BACK, AND SAW A CERTAIN SLAVE OF HIS WHO USED TO

64 lɨ́'kɔ́ kɨ́l 'á kɨ́ mɔ̀ sû tsɨ́'ghá wɨ́n. kǫ́ kɨ́'té kɨ́n tɔ̀?
certain/OF this REL SM P_2 wash HAB him slave in-question this well
WASH HIM. THE SLAVE LOOKED WELL

65 lɛ̀ń 'wɨ́n, bvá tsúghó é ñɨ́'á wɨ́n mbàŋ yɔ́ 'tsɨ́lè ghé'é? ò ńnɨ̀ŋ
looked-at him asked down self that he indeed NOT father his$_i$ he ran
AT HIM AND ASKED HIMSELF IF THIS INDEED WAS NOT HIS MASTER. HE

66 èndú ndùu dzɛ̀ à wɨ́n ñɨ́'á wò ḿbùɔ ébàa? sǒogɔ̀? vɛ̀ ń'lɛ́n kɔ́, tú
go go say to him that you came back soldier that looked only head
RAN AND ASKED HIM, "YOU HAVE COME BACK?" THE SOLDIER LOOKED

67 'kɨ́n sɨ̀ ghǫ̃́n dɨ̀là ghá?á. ò mé ñɨ́'á é mbùɔ èbàm. wɛ́ ń'té
P_O/FOC devious heavy than he (said) that he$_i$ came back child stood-up
JUST ASHAMED AND SAID THAT HE HAD COME BACK. A CHILD STOOD UP

68 án'dúghó, zú kɛ́lɛ̂ zó? 'kɨ́ tsɨ́lé, kà?à lɔ̀?ô dɨ́iwɔ́.
in-house heard familiar smell of father started places crying
IN THE HOUSE, SMELLED THE FAMILIAR SCENT OF HIS FATHER, AND STARTED CRYING.

69 tsɬlé 'fí dánsɬ tsɬghà ñɬa wò nò án'dúghó, bùɔ bò?ò kʂ̌? 'wé.
father there then passed enter hither FOC into-house came carry up child
THE FATHER THEN ENTERED INTO THE HOUSE AND CAME OUT CARRYING

70 wí ndù sɬ èwɔ́, ò fí dánsɬ bùɔ mò nò ébàm
wife went exit hither he there then came stayed FOC back
THE CHILD. HIS WIFE CAME OUT AND HE THEN STAYED BACK IN THE

71 é'ná?. énáʔ èdzɬm â ná?'zɔ́ álé'ká? á lò?ô sú'ń wɬn,
at-village village whole for village/OF to-start at places abuse him
VILLAGE. THE WHOLE VILLAGE STARTED TO ABUSE HIM OR TO

72 ŋ'káa álétsɔ̀m wɬn°. ghé ŋ'ghɬŋ tsúghó ézɬ. bà?tóm kòn lɛ̌n sɔ̀ wɬn°,
or to-curse him they made down feast chief again looked-at him
CURSE HIM. THEY MADE A FEAST. THE CHIEF LOOKED AT HIM AGAIN

73 tɔ̀ŋɔ̀ èwɔ́ ñɬ'á 'wɬn mò lɔ́ sǒogɔ̀? èzáŋá ètùghò tùghò, ò mò tí
called hither that he P2 be soldier my strong strong he P2 escaped
AND CALLED OUT THAT HE WAS STILL HIS STRONG SOLDIER WHO HAD

74 núŋ'ó ò ŋ́kɔ̀n bùɔ ébàm. bà?tóm kòn lɛ̌n 'wɬn náŋá èndú ñɬ'á ò
away he again came back chief again looked-at him left go that he
ESCAPED AND COME BACK AGAIN. THE CHIEF AGAIN LOOKED AT HIM,

75 dɔ̀?ɔ̀ wù wɬ l à ò sá?'á ghɔ́ŋ'zɔ́.
stay person this REL he rules spear/OF
AND LET STAND THAT THIS PERSON RULE OVER THE ARMY.

NOTES

[1]When the narrative tense ń- occurs in the text, it is not glossed separately. Instead, the verb is glossed as past tense.

[2]In Aghem, "to eat a war" is to win the war.

[3]The postverbal element kɔ́ is translated uniformly as 'only' in the text. Its meaning varies, however, between 'only', 'just' and 'but'.

[4]This form 'mothers' actually refers to 'mother's relatives' (see Hyman, section 4.7).

[5]In Aghem, "to take a woman" means 'to marry'.

[6]The form mé in this sentence is actually the form the narrative tense takes where there is no direct object. In reported speech, however, the verb édzɛ̂ 'to say' can be deleted, in which case it is the mé + ñɬ'á which implies the verb.

[7]Logophoric pronouns (referring back to the person reporting the event--see Hyman, section 5.3) are indexed with $_i$, e.g. *he*$_i$, *she*$_i$, *his*$_i$ etc.

[8]There are many verbs of going that appear in this text. Three of these refer to the vertical direction: ékʂ̌? 'to go up [to a higher place]', étsúghó 'to go down [to a lower place]', ékɔ́ŋɔ́ 'to go [on the same level]'. Different places thus require different motion verbs, depending on their relative altitude vis-à-vis to Wum.

TEXT #3

[The following text, based on the speech of Mr. Timothy Inah Buo, was recorded and transcribed by John Robert Watters, with the assistance of Mr. Buo.]

1 wìzɨn 'kɑ́ʔɑ́ tsɬghà ɑ́lénàʔà èkɑ́ŋ éwɨn é'sɨ. ò kàʔɑ́ 'tsʉ́ghɔ́
woman starts HAB to-announce planting week before/first she starts down
A WOMAN ALWAYS STARTS BY ANNOUNCING THE PLANTING DAY A WEEK BE-

2 ɑ́lénàʔà èkɑ́ŋ â nɔ́'ɔ́ wɛ́-ghɔ́, â wɑ́a 'wɨn-ghɔ́,
to-announce planting to husband-of children/OF to children-of hers/OF
FORE. SHE STARTS BY ANNOUNCING THE PLANTING TO HER SONS-IN-LAW,

3 â wɑ́a zɨ-ghɔ̀. tsɔ́ʔ fɛ́-kàŋ
to children-of her-mother/OF day of-planting
HER OWN CHILDREN, AND TO HER MATERNAL SIBLINGS. ON THE PLANTING

4 ghɛ́ dzɬm ghɛ́ ndù èbʉ́ɔ ɛ́n ndʉghò wɬn°, mɔ̀ ò ŋ̀kòo fʉ̀ɔ zɨa-wɔ́,
they all they go &come to house hers when she has-cooked things-of eat/OF
DAY, THEY ALL GO TO HER HOUSE WHEN SHE HAS COOKED SOME FOOD, THE

5 ɑ́ghɨ̂ nɔ́ò à kɔ̀ọ-wɔ̀, ɑ́ghɨ̂ zɨn à fù-tɔ̀, wɑ́a zɨ
people male with cutlasses/OF people female with hoes/OF, children-of mother
MEN WITH CUTLASSES, THE WOMEN WITH HOES, THE MATERNAL SIBLINGS

6 à fʉ̀ɔ zɨa-wɔ́, à wɑ́a bɑ́ŋ-'ghɔ́, à sɔ̀, à nwàŋ-wɔ̀.
with things-of eat/OF with small cocoyams/OF, with maize, with cocoyams
WITH FOOD, WITH SMALL COCOYAMS, WITH MAIZE, AND WITH COCOYAMS.

7 ɛ́n nɔ̀ŋɔ̀ tɨ-'zʉ́u tɔ̀ɔ́, ɑ́ghɨ̂ ɑ́dzɬm ghɛ́ nʉ̀ŋɔ̀ ndù ɑ́lɛ́'sɔ́? ɛ́ŋ 'gwɨn. ghɨ'ɛ́
at times of-sun six people all they leave go to-go-bush in bush as
AT SUNRISE ALL OF THE PEOPLE LEAVE TO GO TO THE BUSH. AS THEY

8 ghɛ́ sɔ́? ñɨ'ɛ́ ndû ɛ́ŋ 'gwɨn, ghɛ́ ŋ̀kà? ndù á lɔ̀?ô kɛ́'ɛ́-wɔ́, ɑ́ghɨ̂
they go-bush enter go in bush they start go to process-of clear/OF people
ENTER THE BUSH AND THEY START THE CLEARING PROCESS, THE WOMEN

9 zɨn ghɛ́ ŋ̀'kɛ́è ɑ́ tɨfù, ɑ́ghɨ̂ nɔ́ò ghɛ́ ŋ̀'kɛ́è ɑ́l-ɔ́kɔ̀ọ. bʉ́ghɔ́ ghɛ́
female they clear to hoes people male they clear to-cutlasses when they
CLEAR WITH HOES AND THE MEN CLEAR WITH CUTLASSES. WHEN THEY

10 kɛ́è mɛ́è tsʉ́ghɔ́ sɔ́m-wɔ́, ghɛ́ dzɬm ghɛ́ bʉ̀ɔ dɔ̀?ɔ̀ tsʉghò ɑ́lɛ́'zɨ. ɑ́ghɨ̂
clear finish down farm/OF they all they come sit down to-eat people
FINISH CLEARING THE FARM, THEY ALL COME AND SIT DOWN TO EAT, THE

11 nɔ́ò ghɨn dɔ̀?ɔ̀ ndù ɑ́m bà kɨ 'ghɛ́, ghɨ̂ zɨn ghɨn dɔ̀?ɔ̀ ndù ɑ́m bà
male these sit go to side of theirs people female these sit go to side
MEN SIT ON THEIR SIDE AND THE WOMEN SIT ON THEIR SIDE. AS THEY

12 kɨ 'ghɛ́. ghɨ'ɑ́ ghɛ́ zɨ'ɑ́, mʉ́ɔ òsʊ̌m ŋ̀kàʔ ndù ɑ́lébà wɑ́a - bɑ́ŋ,
of theirs as they eat owner-of farm starts go to-split small cocoyams
EAT, AND THE FARM OWNER STARTS TO SPLIT SMALL COCOYAMS,

13 ò ǹ bà tsúghó ǹdèmà wáa - báŋ, kwó 'wáa - báŋ á lɔ̀ɔ̀ mfàn
she CNS split down many small cocoyams NEG small cocoyams SM F_2? finish
SHE SPLITS MANY SMALL COCOYAMS, SO THAT THE SMALL COCOYAMS DO NOT

14 sf'lé búghó 'ghé ká? 'tsúghó fíì-zɔ̀. búghó 'ghé zf méè kǫ̀?,
goal-unachieved when they start down hoeing/OF when they eat finish up
RUN OUT WHEN THEY START PLANTING. WHEN THEY FINISH EATING, THE

15 ghî nóò ghfn, ghé nì kǫ̀? tffû, ghî zfn ghfn nì kǫ̀? ósá?'lɔ́ à
people male these they take up hoes people female these take up baskets with
MEN TAKE UP HOES AND THE WOMEN TAKE UP BASKETS WITH SMALL COCO-

16 wáa - báŋ-'ghó á 'té. ghé ǹ kà? ndù lò?ô ff'f-wɔ́. wìnóò ń
small cocoyams in PRO they CNS start go process-of planting/OF man CNS
YAMS IN THEM, AND THEY START THE PLANTING PROCESS. THE MAN GOES

17 fíì ndù, wìzfn táa wò wáa - báŋ. ghî nɔ́ɔ̀ dwf'lá ghfn, tɔ́
hoes go woman seeds hither small cocoyam people old old these like
AHEAD HOEING WHILE THE WOMAN PLANTS THE SMALL COCOYAM. THE OLD

18 ghéè-zɬá 'wé, tɔ́ ghéè-dzâm tɬ tsɬlè, ghé ǹ táa wò àsɔ̀
mothers-of children like sisters of father-her they CNS seed hither maize
PEOPLE SUCH AS MOTHERS WITH CHILDREN AND HER PATERNAL AUNTS PLANT

19 à bǫ́?-'ghó ébàm. wìzfn wɬl à ò tɔ̀? kwɔ́
with squash/OF behind woman this REL she well know
MAIZE AND SQUASH BEHIND (THE OTHERS). THE WOMAN WHO DOES NOT

20 yɔ́ álé'tómsɔ́ wìnóò,wìnóò ò nì kǫ́? zúù báŋ'átɔ́ tsɔ̀?sf tsúghó á kf'tú
NEG to-assist man man he takes up soil red rub down on head
KNOW HOW TO ASSIST THE MAN WELL, THE MAN RUBS RED SOIL ON HER

21 búghó ò sɬ kwf'lá ndú wáa zɬ ghf'ń tsɔ́?'ɔ́ kwflá
when she F_1/HRT return-home go children-of mother these laugh return-home
HEAD SO THAT WHEN SHE IS RETURNING HOME HER FRIENDS WILL LAUGH

22 ndù ñf'á wfn mɔ̀ kwɔ̀ yɔ́'ɔ́ álé'tómsɔ́ wù. búghó 'ghé fíì méè tsúghó
go that she P_1 know NEG to-assist person when they hoe finish down
AT HER SAYING THAT SHE DOESN'T KNOW HOW TO ASSIST. WHEN THEY

23 káŋ-'zɔ́, ghé ǹ kà? ndù bǫ́?ǫ̀ táa-ghɔ́,
cultivated (not-yet-growing) farm they CNS start go squash seeding/OF
FINISH HOEING THE NEW FARM, THEY START WITH SQUASH AND MELON

24 à káà táa-ghɔ́, ghé ń 'tám ábǫ́? tàm mèɛ tsúghó. búghó'ghé
with melon seeding/OF they CNS seed squash seed finish down when they
SEEDING AND SEED SQUASH UNTIL THEY ARE FINISHED. WHEN THEY

25 tám 'méè tsúghó, ghé ń nì kǫ́? ózwí'í mà?à wò án 'tú wé - kàŋ
seed finish down they CNS take up grass throw hither on head of mound
FINISH SEEDING THEY TAKE GRASS AND THROW IT ON THE TOP OF THE

26 wfl á ghé tám 'méè tsúghó. múɔ òsóm ò ǹ dɔ̀?ɔ̀
this REL they seed finish down owner-of farm she CNS sit
MOUND WHICH THEY HAVE FINISHED SEEDING. THE FARM OWNER STAYS

27 dɔ̀ʔɔ̀ ndù èbàm kàʔ wɔ̀ sɔ̀ táa-wɔ́, tám kɔ́ ásɔ̀ nɔ́ŋ'ɔ́ té zúu tɔ̀ɔ́
sit go behind start hither maize seeding seed only maize times of-sun six
BACK AND STARTS MAIZE SEEDING, SEEDING MAIZE UNTIL SUNSET, THEN

28 ò nùŋò kwɬlè wɔ́. ghî nɔ́ɔ̀-ghɔ̀, ghé nùŋò tsùghò án 'sɔ́m
she leave return-home from-there people male/OF they leave down from farm
LEAVES AND RETURNS HOME. AS FOR THE MEN, THEY LEAVE THE FARM AND

29 kàʔ ndù lɔ̀ʔô yɔ́'sɬ káŋ wáa zɬ-ghɔ̀. búghɔ́ 'ghé yɔ́sɬ
start go process-of help all-over children-of mother/OF when they help
GO ALL OVER HELPING MATERNAL SIBLINGS. WHEN THEY FINISH HELPING

30 méè tsúghó wáa zɬ-ghɔ̀, ghé nùŋò tsùghò ndù áŋ kù álèndù kɬŋ
finish down children-of mother/OF they leave down go to forest to-go look-
THEIR MATERNAL SIBLINGS, THEY LEAVE, GOING TO THE FOREST TO LOOK

31 lɔ̀ʔɔ̀ wɬl à kàʔ ǹ ghê ǹ lɔ́'ɔ́ té, àlî 'ghɬn nùŋò tsùghò
for place this REL firewood-of theirs it is-in it others these leave down
FOR A PLACE WHICH HAS FIREWOOD, WHILE OTHERS LEAVE TO GO HUNTING.

32 ndù lɔ̀ʔô gbo̱o̱-wɔ́. búghɔ́ 'ghé gbo̱m méè tsúghó, ghé ǹ ndù nùŋò kwɬn
go process hunting when they hunt finish down they CNS go leave return-
WHEN THEY FINISH HUNTING, THEY RETURN HOME.

33 èwɔ́. tsóʔ fé kàŋ fɬ lɔ́ 'tsɬghá tsóʔ fɬl 'á wáatsɬ á zɬ'á
home from-there day of-planting SM is HAB day this REL orphans SM eat
THE DAY OF PLANTING IS ALWAYS A DAY WHEN ORPHANS EAT

34 kóo tsɬghá á 'té, ághî àdzɬm. ghî ghɬl á ghé bôʔ kɬ
to-satisfaction HAB on it, people all people these REL they even have
TO SATISFACTION, ALONG WITH ALL THE PEOPLE. EVEN PEOPLE WHO DO

35 tsɬghà yɔ́ fúɔ̀ zɬa-wɔ́, ghé zɬ'á kóo tsɬghà à tè. à lɔ̀
HAB NEG things-of eating/OF they eat to-satisfaction HAB on it it is
NOT ALWAYS HAVE FOOD EAT TO THEIR SATISFACTION ON IT. IT IS THE

36 tsóʔ fɬl 'á ághî àdzɬm ál é'náʔ dóʔlɔ́ ñɬ'á fɬ búɔ̀.
day this REL people all in-village be-happy that it comes
DAY WHICH ALL THE PEOPLE IN THE VILLAGE ARE GLAD TO HAVE COME.

ENGLISH-AGHEM WORD LIST

The following English-Aghem word list, prepared by the editor, divides the Aghem vocabulary into three parts: (1) nouns; (2) verbs; (3) other (adverbs, conjunctions, pronouns, etc.). The following conventions have been followed:

(i) For nouns, the singular form is given with its noun class prefix, followed by an indication of its singular/plural noun gender. If its plural form is unpredictable (usually tonally), it is then given in parentheses.

(ii) In the case of H-H nouns, the singular form cited carries a subscript, either *1*, *2* or *3*. As discussed in Hyman (section 3.1), H-H nouns divide into three tone classes having the underlying tonal structures indicated below:

/H-L-H̩/ → H-H$_1$
/H-H-L̩/ → H-H$_2$
/H-H-H̩/ → H-H$_3$

Rather than giving the underlying tones (shown above in the left hand column), the subscript is provided so that the tonal properties of any noun in question can be determined from this word list.

(iii) Verbs are cited as they appear with the /é-/ infinitive prefix. What this means is that a verb form having HL tone following this prefix is underlyingly a L tone verb stem, while a verb form having a H tone following this prefix is underlyingly H. For bisyllabic verb forms (stem + suffix), a L tone verb stem will have H or HL tone followed by L on the suffix, while a H tone verb stem will have H tone on both the stem and the suffix.

I. Nouns

age group ŋgwà? 9/10
animal ñɔ̀m 9/10 (tʃnɔ̂m)
arm kʃkwé$_2$ 7/6
ashes ójʃ̀m 3
axe ndzàm 9/10
back dzɮ̀m 9/10 (tʃdzʃm)
bamboo ólɮ̂ŋ 3/4~10
banana fɮ̀mbó? 11/12
basket kʃsá?'lɔ́ 7/8
(native) kʃtám 7/8
(kind of) éfô 5
bean kʃkpá?ákpá?à 7/8
bed ócâɔ 3/12 (ńcʃ̀a)
bee ézú 5/10
beehive éŋmá?$_1$ 5/10
belly ónû̀a 3/12 (ńnʃŋà)
belt ékûo 5/12
(imported) fʃkûo 11/12
bicycle fɮ̀tsà?° 11/12
bird fʃnwʃn$_1$ 11/12
bleeding cup ósɔ́ŋ$_2$ 3/12 (ńsɔ́ŋɔ́)
blood tʃkâŋ 10
body ówé$_1$ 3/4
bone kʃghɔ́(ɔ)$_3$ 7/8
book kɮ̀mà?sɔ̀ 7/8
brain ḿgbáŋgbáŋ 12
branch kɮ̀kwè 7/4~8
breast éghé$_2$ 5/6
bridge ólû̀a 3/12 (ńlʃghà)
bundle dzɮ̀ghà 9/10, ébó?$_1$ 5/6~10

burial cloth ndzǘ 9/10
bush ŋgwɬn 9/10 (tɬŋgwɬlà)
buttock kɬtɔ̂e 7/8~10
cadaver wù pǔu 1/2
calabash kɬtɔ́m$_2$ 7/8
(for wine) ŋgǔo 9/10
canerat ñɔ̀ ndzɬlɔ̀ 9/10
cap kɬtàŋlɔ̀ 7/8
ceiling ésɬ$_2$ 5/6
charcoal tɬcɬa$_2$ 10
cheek kɬjɔ̂? 7/8
chest kɬcɬcɬ 7/8
chicken mbvǘ 9/10
chief (fon) fɛ̀ 1/10
(quarterhead) bà?tɔ̀mᵒ 1/10
child wɛ́ 1/2 (áwɛ́$_3$)
chisel fɬmbɔ̀? 11/12
clay étsá?$_3$ 5
cloth (burial) ndzǘ 9/10
cloud mbà? 9/10
cock nɔ̀ mbvɛ̀ᵒ 9/10
cockroach kɬfɔ́m$_3$ 7/8
cocoyam kɬnâŋ 7/8 (ɔ́nwâŋ)
(small) ábáŋ 6
compound kɬbɛ́$_2$ 7/8
(fenced) mbɛ̀ 9/10
cooking place étsɬ$_2$ 5/6
coolness ófɔ́$_2$ 3
cornbeer ŋkɬa 9/10
country énǎ?$_2$ 5/10 (tɬnǎ?à)
cow mbɔ̀ŋ 9/10
cowry ékɔ́m$_3$ 7/8
crab ékɔ́m$_3$ 7/8
cricket kɬtɛ̌ɛ 7/8 (ɔ̀twɛ̌ɛ)
cutlass kɬkɔ̰̀ 7/8
dance ébɬn$_2$ 5/10 (tɬbɬlà)
(kind of) ndzàŋ 9/10
day ótsó?$_3$ 3, fɬtsó?$_3$ 11 (ńtsó?ó 12)
death évǘ$_2$ 5/10 (tɬvɛ̂ɔ)
dew tɬmɔ̰̀?ɔ̰̀ 10
dog bvǘ 9/10
door kɬbâ? 7/8
dream ójɔ́'ɔ́ 3/12
drum (big) fɬkâ? 11/12
dry season nɔ̀m 9/10 (tɬnɔ́ɔ̀)
dust kɬgbɬn 7/8
ear kɬtóŋ'lɔ́ 7/8
egg éghɔ́m$_1$ 5/6
egusi ékɛ́ 5
elephant ñɔ̀ɔ dzɬ 9/10
elephant grass ózhwɬ'ɬ 3
excrement ńghɬa 12
eye ésɬ$_2$ 5/6
face ósɬ$_2$ 3/4
farm ósóm$_3$ 3/4
(newly cultivated) ékáŋ 5
fat ólúa$_3$ 3, ńkɬŋ 12
father tsɬlé 1/2
feast ézɬ 5/10
feather évɛ̂ɔ 5/10
fenced compound mbɛ̀ 9/10
figtree kɬgɔ̂m 7/4~8
fingernail ŋé'é kɬ'wó
fire ówɬn$_1$ 3/12
fish étsɬghá$_3$ 5/10
fly édzɬadzɬa 5/10
food ófó ɔ̀zɬa 8
foot kɬwú$_1$ 7/6
forest kɬkû 7/8
friend ffn 1/2
fruit kɬtám$_2$ 7/4~8
fufu kɬbɛ́$_2$ 7/8
garbage pit kɬdúŋ$_3$ 7/8
gathering kɬdzɬŋlɔ́ 7/8

goat dzf 9/10

grass (kind of) kfghê 7/8

(elephant) ózhwí'f 3

(thatching) ówé$_2$ 3

grasshopper ékáʔàkàʔà 5/10

grave éshía 5/6

grinding stone ŋgǫ̀ʔ 9/10

groundnuts ńtsóŋdzf 12

gun ówfn$_1$ 3/12

guy bfghà 1

hair ñùŋ 9/10 (tfñûŋ)

half kfkím 7/8

hand kfwó$_2$ 7/6

hand piano kfbôm 7/8

hat kɬtàŋlò 7/8

head kftú$_2$ 7/8

headpad ékfa$_2$ 5

heart fɬŋ 9/10 (tɬfɬŋ, tffɬŋ)

heel ètsɬn 5/6

hill ókwâʔ 3/4 (ékáʔà)

hip ésá$_2$ 5/6

hoe fù 9/10 (tffû)

honey tfzú$_3$ 10 (cf. *bee*)

hole kfbôʔ 7/8

horn ndóŋ 9/10

horse kɬkɬa ñòm 7/8

house ndúghó 9/10

(juju's) tǫ́ʔ 9/10 (tɬtǫ̀ʔ°)

hunger dzɬŋ 9/10 (tfdzfŋ)

hunter wù gbǫ̀ǫ́ 1/2

husband nóm 1/2

illness édzân 5/10 (tfdzáŋà)

intelligence ótǫ́$_3$ 3

intestines énfŋà 4 (cf. *belly*)

iron kfbvóʔ$_2$ 7/8

journey ébíìlòŋ 5/10

juju kfkó'ó 7/12

juju house tǫ́ʔ 9/10 (tɬtǫ̀ʔ°)

kind kân 9/10

knee éñf$_2$ 5/6

knife ffñf 11/12

kola ébía$_1$ 5/10

ladder ókǫ́ʔ$_2$ 3/4

lake éñê 5

leaf éfú'ú 5/10

leg kffé$_3$ 7/4

length édâ 5

leopard kfbfghá$_2$ 7/8 (óbúǫ̀)

leprosy tɬkɬŋmbɬŋ 10

letter kɬmàʔsò 7/8

little fɬñàŋlò 11/12

liver étǫ́m 5/6

locust ébé$_3$ 5/10

log kfkím 7/8

madness ézfghá$_2$ 5/10

maize èsò 5/6

man wìnóò 1/2 (ághî nóò)

marketplace bé 'kf 'wfn 7

marrow ffkóŋókóŋó 11/12

mat ffghâm 11/12

matter éghfa$_1$ 5/6

medecine ótwíi$_3$ 3/12 (ńtfi)

melon éké 5

message tóm 9/10

metal fɬtsàʔ° 11/12

money ókúa$_2$ 3/12 (ŋ́kfa)

monkey ké 9/10 (tfké$_3$)

(kind of) kɬkɬa° 7/8 (òkùa°)

month, moon ndzóŋ 9/10 (tɬndzòŋ° *moons* tfndzóŋó *months*)

mortar ókwfŋ$_2$ 3/4 (ékfŋ)

mother zf 1

mound ékáŋ 5

mountain ókwâʔ 3/4 (éká?à)

mountain ókwâʔ 3/4 (ékáʔà)
mouth édzúghó$_2$ 5/6
mushroom kɬzə́ʔ$_2$ 7/8
name ézɬn$_3$ 5/6
navel étɔ́ŋ$_1$ 5/6
neck ónmê 3/4
needle fɬsàʔ° 11/12
nest ndùghò fɬnwɬn 9/10
njamanjama ópú'ú 3
nose éwí$_2$ 5/6
oil ńvú$_3$ 12
orphans wáa tsɬ 2
pain éfə́lə́ 5
palmnut (raphia) kɬkú 7/8
palmtree kâʔ fɬ kɬbàŋ 11/12
people ághî 2
pepper kɬtsɬtɬghá 7/8 (ótsɬtúa)
person wù 1/2 (ághî)
piece kɬbâ 7/8~10 (ógbâ)
pit (garbage) kɬdúŋ$_3$ 7/8
place kɬlóʔ'ó 7/10
plantain kɬɬghà 7/8 (ótúə̀)
pot tə̀e 9/10 (tɬtə̀e)
potato ndɔ́ŋ 9/10
poverty élɛ́$_2$ 5
pumpkin ébɔ́ʔ$_1$ 5/6
pus ójwɬn 3
quarrel ézúghò 5
quarterhead bàʔtòm° 1/10
rain éwú$_3$ 5
raphia fiber éwú 5/10
rat kɬfú$_3$ 7/8
request kɬbvébvú 7/8
rice ékɔ́e 5/6
ridge ékáŋ 5
river (dirty) kɬgbɬn 7/8
road jì(~dzɬ) 9/10 (tɬjí'í)
root éghán$_1$ 5/6~10
rope kɬbáʔ$_2$ 7/8 (ógbáʔ)
saliva ńtɬghà 12
salt ńtsɔ̂ʔ 12
sand kɬshɬashía 7/8
servant kɬkə̂ 7/8, fɬkə̂ 11/12
sheep njì 9/10
shoulder mbɔ̀ʔ 9/10
sister dzàm 1
slave kɬkə̂ 7/8, fɬkə̂ 11/12
smoke kɬñə́ʔ 7/8
snail kɬtâʔ 7/8 (ótwâʔ)
snake zúghó 9/10 (tɬzúghó$_3$)
society kɬdzɬŋé 7
song ézə́m$_2$ 5/10 (tɬzə́ə̀)
soup kɬnómó 7/8~12
spear éghóŋ$_1$ 5/6~10
spoon kɬtà 7/8
squirrel fɬkàa 11/12
star fɬsàbɬlà 11/12
stealing ótsɔ́ŋ 3
stick (walking) mbàŋ 9/10
stirring rod kɬkɔ̂ŋ 7/8
stone étɬa$_3$ 5/6
stone (grinding) ŋgə̀ʔ 9/10
stool kɬkɔ́e$_3$ 7/8, fɬndàŋ 11/10~12
storeroom (men's) étsúghó 5/10
stranger trénjà 9/10
strength étúghó$_2$ 5
student wà kɬmàʔsɔ̀ 1/2
sun ézú$_3$ 5
tadpole fɬmɔ̀ŋɔ̀mɔ̀ŋɔ̀ 11/12
tail ókɔ́e 3/4
tear ffsɬ$_2$ 11/12
termite édzɬa 5/10

thatching grass	ówé$_2$ 3	*village*	éná?$_2$ 5/10 (tʃná?à)
thief	wù tsɔ̀ŋɔ́ 1/2	*voice*	dzɨ 9/10 (tʃdzʃ)
thigh	kʃbî 7/4	*walking stick*	mbàŋ 9/10
thing	kʃtʃghá$_2$ 7/8 (ófúọ)	*war*	tsàm 9/10 (tɨtsàm)
(matter)	éghʃa$_1$ 5/6	*(=spears)*	éghɔ́ŋ$_1$ 5/6~10
throat	ótɔ́ŋ$_1$ 3/4	*water*	mú'ú 12
time	éñɔ́ŋ'ɔ́ 5/10	*week*	éwʃn 5
tobacco	kʃtʃgháběáŋ 7	*wife*	wʃ 1/2 (ágʃ)
toilet	éʃʃm 5	*wind*	zʃŋ 9/10
tongue	kʃnɔ́m$_2$ 7/8	*wine*	ńlɑ̂ 12
tooth	ésɔ́ŋ$_1$ 5/6	*wine calabash*	ŋgŭo 9/10
trap	fɨtsà?° 11/12	*wing*	éghɔ̂ 5/10
tree	fʃkâ? 11/12	*woman*	wìzʃn 1/2 (ágʃ zʃn)
trouble	ócô 3/12	*work*	kɨfwà? 7/8
urine	mù ǹ jwì 12	*world*	mbʃ 9
valley	ébʃghá$_3$ 5/10	*wound*	éʃʃŋ 5/6
vegetable	ópú'ú 3	*xylophone*	tɨtsɨ 10
vein	éghán$_1$ 5/6~10 (tʃghánà)	*yam*	élʃm$_3$ 5/6

II. Verbs

accept	ébɔ́ɔ	*be bitter*	étʂ́
agree	ébɔ́ɔ	*be black*	élʃŋ
announce	éná?à	*be blind*	éfɔ̂
ascend	ékʂ́?	*blow*	étɔ́ŋ
ask	ébvʉ́	*(nose)*	éfʂ́m
be bad	ébɔ́	*break*	ébvó?
bake in ashes	éfʃm	*breathe*	ézhwʃi
bark	ébú	*burn (tr.)*	éñʂ́?, ékpâ
be	lɔ́	*become burnt*	épfʉ́
beat	ébó	*bury*	étsʃlá
beg	énʂ́e	*buy*	ézɔ́e
begin	ékʌ́?	*call*	étɔ́ŋɔ́
bend	éŋgʂ́ọ́ɛ	*carry (on head)*	ébɔ́?ɔ̀
(over)	étsɔ́	*carve*	ékʂ́m
be big	édû	*catch*	ékúo
bite	énɔ́m	*cause*	éghʃŋ(ɔ́)

change écélɔ́
choose éshʃà
get clean ézɔ́n
clear away ékɛ́ɛ̀
close édzʉ́ɔ̀
come ébúɔ̀
cook ékóò
(fufu) énám
copulate étsɔ́?
cough ékɔ̰ɔ̰ɛ
count étáŋ
cover étsʃn
crawl éghâŋlɔ̀
cross édâŋ
cry édʃ
cultivate égwálà
curse étsômlɔ̀
cut down ékʃà
dance ébʃn
deceive élɔ́?ɔ̀sɔ̀
descend étsúghɔ̀
be devious éghɔ́lɔ́
die épú
dip éfúò
divide édzúghɔ̀
do éghɛ́
be done (food) ébʃ
drag étɛ́ɛ̀
drink émʉ́
drip étsɔ́m
drive away édzôm
be dry ézóm
eat (sth. soft) ézʃ
(sth. hard) épfʉ́
enter éñʃ
entertain ézô?
escape étʃ
exchange écélɔ́
exit ésʃ
extinguish éñ↕m
fall ébvʉ̂
fart ébvʉ́
fear étsʃŋ
feed énʃi
fill (tr.) élɔ́esɔ́
(intr.) élɔ́e
finish (tr.) émʃàsɔ̀
(intr.) émʃà
fly ézʃghʉ́
fold ékɔ̰lɔ̰́
follow édzômɔ̀
be foolish élʉ́?àsɔ̀
forget énêz↕
fry ékáŋé
give éfúo
give birth édzʃ
go éndû
(on same level) ékɔ́ŋɔ́
(to bush) ésɔ́?
be good édzɔ̰́
grind égúò
groan édzɔ́mɔ̀
grow énɔ́o
growl énʃmɔ̀
hang ékɛ́lɛ̀
happen ékôm
be happy édó?lɔ́
harvest ékúò
hate ébê
hear ézú
heat énômsɔ̀
be heavy éd↕n
help éyôsɔ̀, étómsɔ́
hide énân

hit ébó
hoe éfíì
hold ékúo
hunt égbo̱m
imitate émo̱?lɔ̀
become injured énɔ́m
be intelligent étɔ̱
itch ézô
be jealous émɛ́lɔ́
jump étê
kill éwí(i)
kneel éná?á
know ékúɔ
be lacking élɛ́
laugh étsɔ́?
leak éfɔ̂n
leave énúŋò
lick énfŋá
lie down éñfŋè
be light (wt.) ézâŋsɔ̀
like élfghá
live émúò
be long édâ
look for ékfŋ
loosen ézê
get lost élâ?
make éghfŋ(ɔ́)
measure éfô?
mould ébo̱m
be nauseous énɔ́mɔ̀
become old édwfn
open étsɛ́
pass étsfghà
pay étsf
perspire ézó?sɔ́
pick (grain) ékɔ́mɔ́
pick up ékɔ́ɔe
pick up sth. lost ébɔ́ŋ
plant ékáŋ
play ésɛ̂
be pleased étsɔ́?lɔ́, édó?lɔ́
pluck ésúghó
pound étsó?
pour ékwfn
praise ékɔ̱?sɔ́
press ézɔ̂?
pull (out) ésê
put énáŋá
(hands on head) ékóò
read étɔ́ŋɔ́
be red ébâŋ
refuse étɔe
resemble éfélɔ́
rest ézflɔ́, ézɛ́lɔ̀
return from bush ékwfn
be ripe ébâŋ
rise up ézɔ́ɔ̀
roast éñɔ̱?
rot éflà
rub étsɔ́?sɔ́
rub off ézê
rule ésá?
run éñfŋ
scrape ékéɛ
see ékɔ̂?
seed étám
seize ébáŋɔ́
sell éféè
send étóm
sew étá
sharpen étɛ́ɛ
shine étúghó
shoot étfm
be short étɔ́, ékfm àtɔ́

show	édê
be sick	édzâŋ
sift	étsálá, étsâʔ
sing	ézo̱m
sink	éfúò
sit	édɔ́ʔɔ̀
skin	ézû
sleep	ébfi
slide	éné
be small	étɔ́, éñâŋtɔ́
smell	élémì
snore	ékúò
be sour	élân
speak	ékfà
spend day	ézfi
spend night	ébfi
spend time	énɔ́ŋ'ɔ́
spit	étsf
split	ébâ, ésɛ́
spoil	ébɔ́
spoon out	étâ
spread to dry	ézáa
squeeze	ékám
stab	ésúghò
stand (intr.)	étée
(tr.)	étéesɔ́
stay	émúò
steal	étsɔ́ŋ
sting	étfghá
stir	ébâŋ
be strong	étúghó
suck	énfŋá
surpass	égháʔ
swallow	émfì
swear	ékɛ̂
sweep	ézê
be sweet	ékpf̂ŋ
swell	émû
swim	étfghá
swing	ézhwfŋ
take	énfì
take out	étâ
tear	ébâ(a)
tell	édzɛ̂
thatch	ézúghó
think	émo̱ʔlɔ̀
throw away	émáʔà
tie	éfáŋá
become tired	ébúo
touch	émo̱m
travel	ébfi
tremble	étsfŋ
try	émo̱msɔ̀, éghâm
turn	ékɔ̂mɔ̀
uproot	ésúghó
urinate	ébvâ
vomit	ézɛ̂
wander	élâʔ
weed	ésúghólɔ́
be well (done)	étɔ̂ʔ
whistle	ézhwfn
be white	éf↕m
work	éfwâʔ
write	étǫ́m
yawn	éyɔ̂sɔ̀

III. OTHER (ADVERBS, CONJUNCTIONS, PRONOUNS, NUMERALS ETC.)

after mɔ̀
again kɔn
all -dzɨm
all over káŋ
also sùghɔ̀
and (NP) à
and (Sent.) àŋ
as ghɨ'á
because bɔ̀?
before sé
behind ébàm (cf. kɨbám, n.)
certain -lɪ́
completely mèɛ
daytime á tsʉ̀
eight é'fáa
fast fɨ̂ŋ
first é'sɨ
five tɛ̀
for (Ind.Obj.) â
forever tɨn
four cɪ̀akɔ̀
good -dzʉ̀ŋ
habitually tsɨghà
have kɪ́
here fɛ́
him/her wɨn
hither (from there) wɔ̀
how ênzɨn
hundred bɔ̀m
I mʉ̀ɔ
if búghɔ́
inside tètè°
in vain kèe
like (such as) tɔ́
many ndèmà
me mʉ̀ɔ
new -fʉ́o
no hàɪ́
at night â tsɔ́?wɔ́
nine tèndzùghɔ̀°
now ênzɪ́ŋ
old -wɪ́
one mɔ̀?
only kɔ́
or ŋ́'káa
outside ábé'é
quickly tsʉ́etsʉ́e
quiet mɔ́ŋ
(to) satisfaction kʉ́u
seven sɨghàmbɨghà
six tɔ̌o
such as tɔ́
ten é'ghɨm
that (in Q.), the -té
there (near hearer) fɪ̀
there (far from speaker/hearer) fɪ̀ɪ̀
they/them ghé
thither (from there) ndù
three tɨghá
to (ind.obj.) â
to (loc.) án
today nɛ́
tomorrow tsʉ́tsʉ́
two bɨghà
until tè
us/we (excl) ghà?
us/we (incl) sè
what kwɔ̀
when (Q-word) zɨn
when (conj.) mɔ̀

where	ghɛ́	*yes*	ɔ̀ɔ̃
while (simult.)	-kɔ́n-	*yesterday*	á'zɔ́ɔ
who	ndʉ̀ghɔ̀	*you sg.*	wɔ̀
with (comitative)	à	*you pl.*	ghɛ̀
with (instr., manner)	án		