Wh-movement, A-bar agreement and resumption in Bamileke Medumba

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Abstract: Medumba *wh*-questions are formed either: (i) in-situ, or (ii) ex-situ. They are always accompanied by two particles: (i) an invariant high-tone focus particle *á* that precedes the *wh*-phrase; (ii) a sentence final question particle (Q-particle) *á/à* that varies in tone depending on the tone of the preceding word. Root clause *wh*-extractions trigger A-bar agreement (by vowel length) on V and on T while non-root clause extractions trigger agreement on V and T within the embedded CP and agreement only on T within the matrix CP. In addition, *wh*-extraction in Medumba also extends this root clause/non-root clause contrast to the extraction site of the moved *wh*-XP in that some root clause extractions leave behind a gap (except extraction from a PP, from a coordinate structure and extraction of a possessor where the moved DP leaves behind a resumptive pronoun) while non-root clause extractions trigger the presence of a resumptive pronoun at the extraction site of the moved *wh*-XP. This paper investigates only ex-situ *wh*-questions and addresses the following questions: (a) what is the landing site of the moved *wh*-XP in Medumba? (b) how is movement achieved? (c) what is left behind after movement? I propose that *wh*-extractions in Medumba proceed by *phase* (Chomsky 2001) and creates an '*agreement chain*' within the phase spell out domains each time movement crosses a phase and the A-bar feature is checked. Valuation of the A-bar feature is reflected by vowel lengthening on V within the *v*P phase spell out domain, and vowel lengthening on T within the CP phase spell out domain. With regard to the agreement contrast in root clauses and non-root clauses, I am assuming adjunction of embedded CPs at TP in Medumba. By adjoining to TP, embedded CPs fall outside the matrix *v*P phase. In consequence, the matrix *v*P phase cannot participate in A-bar agreement operation. This proposal correctly predicts that embedded clauses should pattern with adjunct clauses in regard to extraction and agreement. As evidence, A-bar movement from embedded CPs and adjunct CPs in Medumba is only possible if there is resumption.

Keywords: *wh*-movement, A-bar agreement, resumption, islands

1 Introduction

Medumba[1] *wh*-questions are formed either: (i) in-situ, or (ii) ex-situ. They are always accompanied by two particles: (i) an invariant high-tone focus particle *á* that precedes the *wh*-phrase; (ii) a sentence final question particle (Q-particle) *á/à* that varies in tone depending on the tone of the preceding word. Root clause *wh*-extractions trigger A-bar agreement (by vowel length) on V and on T while non-root clause extractions trigger agreement on V and T within the embedded CP and agreement only on T within the matrix CP. In addition, *wh*-extraction in Medumba also extends this root clause/non-root clause contrast to the extraction site of the moved *wh*-XP in that some root clause extractions leave behind a gap (except extraction from a PP, from a coordinate structure and extraction of a possessor where the moved DP leaves behind a resumptive pronoun) while non-root clause extractions trigger the presence of a resumptive pronoun at the extraction site of the moved *wh*-XP.

[1] Abbreviations: AUX = auxiliary; 3SG = third person singular; C/COMP = complementizer; DO = direct object; FOC = focus; H = high tone; IMP = imperative; IO = indirect object; L = low tone; N = homorganic nasal prefix; P4 = recent past; PREP = preposition; Q = question marker; REL = relativizer; S = subject; WH = *wh*-word.

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This paper investigates only ex-situ-WH questions and addresses the following questions: (a) what is the landing site of the moved *wh*-XP in Medumba? (b) How is movement achieved? (c) What is left behind after movement? I propose that the different features of the *wh*-phrase are encoded by distinct C-heads in the CP-layer. The outer C-head encodes the Q-feature and hosts the Q-particle whereas the inner C-head encodes the *wh*-feature and hosts the *wh*-phrase in its specifier position. With regard to A-bar agreement, I argue that it proceeds by *phases* (Chomsky 2001) and creates an 'agreement chain' along its way at each phase domain. As for the root clause/non-root clause agreement asymmetry, I assume that "embedded" clauses are base-generated in adjunct position. In that respect, they behave like adjunct islands. As for the operator-trace relation, some root clause extractions leave a gap at the extraction site while non-root clause extractions leave a resumptive pronoun at the extraction site.

The discussion is organized as follows: Section 2 introduces *wh*-movement in Medumba; section 3 focuses on the move-based phasal A-bar agreement in Medumba; section 4 on the operator-trace relation in Medumba and section 5 on subject *wh*-extraction in Medumba.

2 *Wh*-movement in Medumba

2.1 What is *wh*-movement?

Traditionally, *wh*-movement in languages like English is known to exhibit the following properties: (i) it contains a *wh*-word; (ii) it contains a gap at the extraction site; (iii) it activates the CP layer via T-to-C movement (subject – auxiliary inversion) as illustrated below in (1):

(1) a. John gave a book to Mary. [Base sentence]

b. What did John give ___ to Mary? [Root clause *wh*-movement]

(2) Who did Peter say that John gave a book to ___? [Non-root clause *wh*-movement]

In some island contexts, the extraction site is occupied by a resumptive pronoun (Ross 1967):

(3) Which boy did Peter laugh after Mary kissed him? [Adjunct-island]

Medumba *wh*-movement exhibits the following cluster of properties:

a) It contains a *wh*-XP;
b) The *wh*-XP is preceded by the high-tone focus particle **á;**
c) There is a sentence-final variable-tone Q-particle **á**/**à** in C
d) In some root clauses, the *wh*-XP is associated with a gap (*t*);
in non-root clauses and islands, the *wh*-XP is associated with a resumptive pronoun;
e) All extraction sites correlate with a long/lengthened vowel in T;
f) All non-subjects extraction sites correlate with a lengthened vowel in V;

These properties are illustrated below in (5–9). I will argue that the properties in (e) and (f) correlate with what I refer to as A-bar agreement in Medumba. The template of *wh*-movement in Medumba is schematized below:

(4) $[_{CP}\ [_{FOC}$ á *wh*-$XP_1]$ C …[TP [T C**VV(C)]** … [VP $[_{VERB}$ C**VV**(C)] … [*t*/pronoun]$_1$ … $[_{C}$ **á**/**à**]]]

(5) *Base sentence*

Nùgà fə̀ fá bɔ̀ Nùmí
Nuga P4 give bag Numi
'Nuga gave the bag to Numi (yesterday)'

(6) *Root clause wh-movement*

á kʉ́ Nùgà fə̀-ə́[2] fá-à ___ Nùmí á?
FOC WH Nuga P4-H give-L Numi Q
'What did Nuga give to Numi?'

(7) *Non-root clause*

á wʉ́ Sɛ̀ɛ́mí fə̀-ə́ n-tʃúp mbʉ̀ Nùgà m-fá-à *(í) Nùmí á?[3]
FOC WH Sami P4-H N-say COMP Nuga N-give-L *(3SG.DO) Numi Q
'Who did Sami say that Nuga gave (him/her) to Numi?

(8) *wh-island*

á wʉ́ Nùgà fə̀-ə́ m-bɛ́tte mbʉ́ʉ̀ Nùmí m-fá-à *(í) Sɛ̀ɛ́mí á?
FOC WH Nùgà P4-H N-ask COMP Nùmí N-give-L *(3SG.DO) Sami Q
'Who did Nùgà ask if Nùmí gave *(him) to Sami?

(9) *Adjunct island*

á wʉ́ Nùmí fə̀-ə́ nɛ̀ɛ́n tɔ́n káà Nùgà fáà *(í) Sɛ̀ɛ́mí á
FOC WH Nùmí P4-H go market before Nùgà give *(3SG.DO) Sami Q
'Who did Nùmí go to the market before Nùgà gave *(him) to Sami?'

The above examples show that *wh*-movement in Medumba exhibits a root clause/non-root clause contrast. Table 1 illustrates this contrast with regard to C and the operator – trace relation. Root clause Cs contain a C-typing Q-particle *a* whereas non-root clause complement CPs are introduced by the COMP *mbʉ̀/mbʉ́ʉ̀*. With regard to the operator – trace relation, root CPs contain a gap (except extraction from a PP, from a coordinate structure and extraction of a possessor where the moved DP leaves behind a resumptive pronoun) whereas non-root CPs contain a resumptive pronoun at the extraction site.

Table 1: Medumba root clause/non-root clause contrast

C	**Root**	**Matrix CP**	C-typing *(Q-particle)* ***a***
	Non-root	"Complement" CP	COMP (*mbʉ̀/mbʉ́ʉ̀*)
		Adjunct CP	/
Op-trace	**Root**	**Matrix CP**	Gap
	Non-root	"Complement" CP	Resumption
		Adjunct CP	Resumption

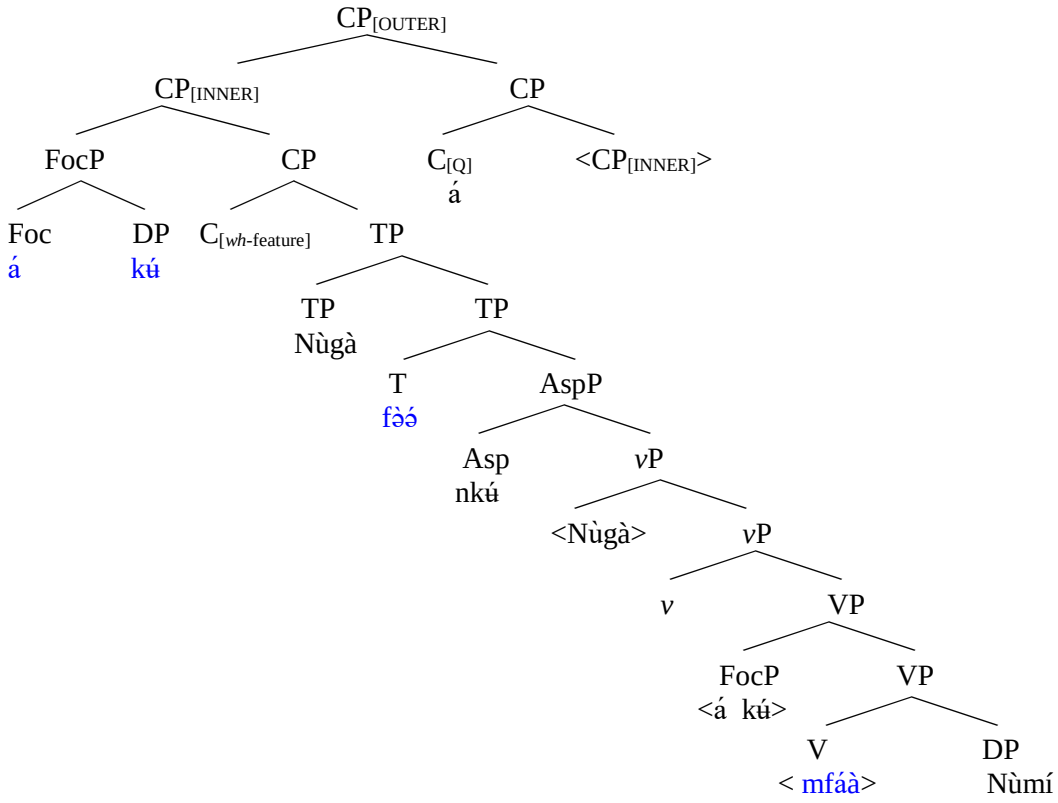
[2] It seems what happens on tones in these environments is conditioned by phonology. If the base tone on the vowel is H, the copy will be L and if the base is L, the copy will be H.
[3] During wedding ceremonies in the Bamileke tribe of Cameroon, a child is symbolically given to the married couple as a symbol of fertility. Example (7) is uttered in such context.

2.2 Deriving *wh*-movement in Medumba: The landing site of the moved *wh*-XP

Recall that *wh*-phrases are always accompanied by two particles in Medumba: an invariant high-tone focus particle *á* that precedes the *wh*-phrase and a sentence final Q-particle *á/à* that varies in tone depending on the tone of the preceding word. I propose that the different features involved in *wh*-movement in Medumba are encoded by distinct C-heads in the CP-layer. An outer C-head that encodes the Q-feature and hosts the Q-particle and an inner C-head that encodes the *wh*-feature and hosts the moved *wh*-phrase in its specifier position (the focus particle is base-generated and forms a constituent with the *wh*-phrase). After movement of FocP containing the *wh*-phrase to Spec-$C_{[INNER]}$, $CP_{[INNER]}$ moves[4] to Spec-$C_{[OUTER]}$ and strands the Q-particle hosted by $C_{[OUTER]}$ in final position as represented in (11):

(10) á kʉ́ Nùgà fə-ɔ́ n-kʉ́ m-fá-à ___ Nùmí á?
FOC WH Nuga P4-H N-IMP N-give-L Numi Q
'What was Nuga giving to Numi?'

(11)



[4] I assume that this movement is triggered by the presence of an EPP feature at Spec-$C_{[OUTER]}$

3 Move-based phasal A-bar agreement in Medumba

3.1 The distribution of A-bar agreement in Medumba

This section focuses on *wh*-extraction and vowel lengthening, one of the major properties of *wh*-extraction in Medumba. The examples below illustrate root clause *wh*-extraction of the subject (12), of the direct object (13), of a PP complement (14) and of a PP adjunct (15):

(12) *Subject*

á	wú	fə̀-ə́	n-kú	m-fá	bɔ̀	Nùmí	á?
FOC	WH	P4-H	N-IMP	N-give	bag	Numi	Q

'Who was giving the bag to Numi?'

(13) *Direct Object*

á	kú	Nùgà	fə̀-ə́	n-kú	m-fá-à	___	Nùmí á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L		Numi Q

'What was Nuga giving to Numi?'

(14) *PP Complement*

a. Stranded P

á	wú	Nùgà	fə̀-ə́	n-kú	m-fá-à	bɔ̀	múùm	*(jí)	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L	bag	to	*(3SG.IO)	Q

'Who was Nuga giving the bag to (him)?'

b. PP fronting

á	múùm	wú	Nùgà	fə̀-ə́	n-kú	m-fá-à	bɔ̀	___	à?
FOC	to	WH	Nuga	P4-H	N-IMP	N-give-L	bag		Q

'Who was Nuga giving the bag to (him)?'

(15) *PP Adjunct*

a. Stranded P

á	wú	Nùgà	fə̀-ə́	n-kú	m-fá-à	bɔ̀	Nùmí	bʰə̀ə́	*(í)	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L	bag	Numi	PREP	*(3SG.IO)	Q

'Who was Nuga giving the bag to Numi in front of (him)?'

b. PP Fronting

á	bʰə̀ə́	wú	Nùgà	fə̀-ə́	n-kú	m-fá-à	bɔ̀	Nùmí	___	à?
FOC	PREP	WH	Nuga	P4	N-IMP	N-give-L	bag	Numi		Q

'In front of who was Nuga giving the bag to Numi?'

The above data show that root clause *wh*-extractions trigger vowel lengthening on T for the subject and on V and T for non-subjects. The *wh*-XP is associated with a gap except extraction from a PP[5] in which a resumptive pronoun appears at the extraction site of the moved *wh*-XP (14a,b). But when the whole PP is extracted, it leaves behind a gap (14b,15b).

[5] This is also extended to extractions from possessors and from conjuncts. These cases are analyzed later in this paper as islands.

Unlike root clause extractions, non-root clause extractions are associated with a resumptive pronoun for all extraction sites. With embedded subject extractions, lengthening is only on T in both matrix and embedded clauses. With non-subjects, there is lengthening with embedded post-V extraction on V and T in embedded clause, but lengthening only on T in matrix clause. These contrasts are illustrated below in (16) for the subject and (17) for a non-subject case:

(16) *Subject extraction (non-root clause)*

a. á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúp
FOC WH Sami P4-H N-IMP N-say
mbù *****(á) fə̀-ə́ n-kú m-fá bɔ̀ Nùmí á?
COMP *(3SG.S) P4-H N-IMP N-give bag Numi Q
'Who was Sami saying that (he) was giving the bag to Numi'

b. *á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúùp
FOC WH Sami P4-H N-IMP N-say
mbù *****(á) fə̀-ə́ n-kú m-fáà bɔ̀ Nùmí á?
COMP *(3SG.S) P4-H N-IMP N-give bag Numi Q

(17) *Non-subject extraction (non-root clause)*

a. á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúp
FOC WH Sami P4-H N-IMP N-say
mbù Nùgà fə̀-ə́ n-kú m-fá-à *(**í**) Nùmí á?
COMP Nuga P4-H N-IMP N-give-L *(3SG.DO) Numi Q
'Who was Sami saying that Nuga was giving (him/her) to Numi?

b. *á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-tʃúùp
FOC WH Sami P4-H N-IMP N-say
mbù Nùgà fə̀-ə́ n-kú m-fá-à *(**í**) Nùmí á?
COMP Nuga P4-H N-IMP N-give-L *(3SG.DO) Numi Q

I propose that lengthening on V and T is the reflex of A-bar[6] agreement in Medumba. I assume a move-based phasal agreement to account for this lengthening effect and base-generation of complement CPs in adjunct position (TP adjunction). Table 2 below summarizes the locus of A-bar agreement in Medumba[7]:

[6] See appendix C for other A-bar constructions displaying agreement in Medumba.
[7] Absence of vowel lengthening on the imperfective auxiliary will be explained in the next section on the mechanism of A-bar agreement.

Table 2: Move-based phasal A-bar agreement in Medumba

		Locus of AGREEMENT			
		T		Verb	
Extraction Site		**Root**	**Non-Root**	**Root**	**Non-Root**
Subject	Root Clause	✓		✗	
	Embedded clause	✓	✓	✗	✗
Non-Subject	Root Clause	✓		✓	
	Embedded clause	✓	✓	✗	✓

A-bar agreement relates to discourse features such as *wh*-, focus or topic (see also Lochbihler and Mathieu 2010) and can also display ϕ-feature agreement (person, number, gender) in some languages. It is worth mentioning that this type of extraction morphology with A-bar movement is not restricted to Medumba and is usually referred to as '*wh*-agreement[8]' (Carstens 2005, 2011; Kinyalolo 1991; Chung 1994, Lochbihler and Mathieu 2010).

In Medumba (18a,b) and Shona (19), *wh*-in-situ does not trigger A-bar agreement but *wh*-movement does, as seen by the Shona example in (20).

(18) a. Nùgà fə̀ m-fá **á** **kú** Nùmí á? [Medumba]
Nuga P4 give-L FOC WH Numi Q
Lit. Nuga gave what to Numi?'

b. *Nùgà fə̀-ə́ m-fá-á **á** **kú** Nùmí á?
Nuga P4-H give-L FOC WH Numi Q
Lit. Nuga gave what to Numi?'

(19) W-ai-fung-a [kuti t-aka-teng-er-a [Shona]
2SG.SM-IPFV-think-FV that 1PL.SM-REM.PST-buy-APPL-FV
Ø-ani Ø-rokwe]?
1a-who 5-dress
'Who(m) did you think we bought a dress (for)?' (Zentz, in press)

(20) Ndi-Ø-ani *(**wa**)-w-ai-fung-a [Shona]
FOC-1a-who *(**WH.a**)-2SG.IPFV-think-FV
[kuti t-aka-teng-er-a Ø-rokwe]?
that 1PL.SM-REM.PST-buy-APPL-FV 5-dress
'Whom) did you think we bought a dress (for)?' (Zentz, in press)

In Lubukusu, local A-bar extraction of a subject (for relative clauses, clefts, and *wh*-questions) requires the addition of a verbal pre-prefix that agrees in noun class with the extracted subject. For each noun class, the verbal pre-prefix is identical to the nominal pre-prefix:

[8] Further research is needed to establish a better cross-linguistic typology and understanding of these phenomena. For consistency, I will be referring to this phenomenon in this paper as 'A-bar agreement'.

(21) a. *No extraction*

ba-ba-ana ba-a-tim-a [Lubukusu]
2.PPF-2-child 2.SM-PST-run-FV
'Children ran.'

b. *Class 2 subject extraction*

naanu ***(ba)**-ba-a-tim-a
2.who ***(WH.a)**-2.SM-PST-run-FV
'Who ran?' (Wasike 2007: 236)

In Akɔɔse, non-subject extraction (focus movement, relativization, *wh*-ex-situ, temporal adverbials) is marked by a floating high tone prefix on the verb (Hedinger 2008; Zentz *in press*).

(22) a. *No extraction*

Mw-ăn ĕ-pim-ɛɛ́ Ø-mbaaŋgé. [Akɔɔse]
1-child 1.NEG-throw.out-PRF.IRR 10-cocoyam
'The child didn't throw out the cocoyams.' (Hedinger 2008: 105, #295)

b. *wh-object extraction*

Chĕ mw-ăn **é**-pim-ɛɛ́
what 1-child **H**-1.NEG-throw.out-PRF.IRR?
'What didn't the child throw out?' (Hedinger 2008: 106, #297)

It appears from the above examples that languages that exhibit pronominal concordial A-bar agreement (Lubukusu, Shona) display A-bar agreement as ϕ-feature agreement whereas languages such as Akɔɔse and Medumba do not. This is also true for Ojibwe (see Lochbihler and Mathieu 2010). The table below summarizes the A-bar agreement typology in some Bantu languages namely Shona, Lubukusu, Akɔɔse and Medumba.

Table 3: A-bar agreement typology

	Agreement typology
Lubukusu	Pronominal concordial agreement prefix
Shona	
Akɔɔse	H-tone at the left edge of V
Medumba	Extra Vowel at the right edge of T and V

3.2 The mechanism of A-bar agreement in Medumba

Languages that exhibit "*wh*-agreement" usually show agreement either on V or T. But Medumba shows an interesting pattern in which agreement appears on V and T. In other to account for this, I propose that A-bar agreement in Medumba is movement-based and proceeds by phase. A phase (Chomsky 2001) is an economy principle, which helps to solve derivational complexities. It is a domain within which all derivational processes operate at the same time and where all features are checked. It is constituted of a phase head and a phase domain (spell out domain). When the derivation reaches a phase and all the features are checked, the phase spell out domain (complement) is sent to transfer and is invisible to further computations. Any movement must obey the Phase Impenetrability Condition (PIC):

(23) *"The domain of H is not accessible to operations outside HP. Only H and its edge are accessible to such operations"* (Chomsky 2001:13).

The edge is known as elements outside H. They are either specifiers or elements adjoined to HP (Chomsky 2001). I consider CP and *v*Ps as phase boundaries in Medumba. The choice of a phase boundary is motivated by their "propositional[9]" nature. That is verbal phrases with full argument structure and CP with force indicators (Chomsky 2001). I argue that *wh*-extraction in Medumba proceeds by phases and creates an *'agreement chain*' within the phase spell out domains (the complements of phase heads) each time the *wh*-phrase crosses a phase. This agreement is marked on V within the *v*P phase spell out domain, and on T within the CP phase spell out domain[10]. Evidence that *wh*-movement proceeds by phase and triggers agreement within the phase spell out domain comes from the fact that any functional projection (which is not complement of a phase head) intervening between the phases (*v*P and CP) fails to show agreement. This is the case of the aspectual auxiliary as illustrated below:

(24) á kʉ́ Nùgà fə̀-ə́ n-kʉ́ m-fá-à Nùmí á?
FOC WH Nuga P4-H N-IMP N-give-L Numi Q
'What was Nuga giving to Numi?'

Notice that the absence of agreement on the aspectual auxiliary has nothing to do with the form or shape of the aspectual auxiliary *per se*. In the absence of an overt tense auxiliary for instance, the aspectual auxiliary raises[11] to T and is therefore marked for phasal agreement as shown in (25):

(25) á kʉ́ Nùgà kʉ́-ʉ̀ m-fá-à Nùmí á?
FOC WH Nuga IMP-L N-give-L Numi Q
'What was Nuga giving to Numi?'

This move-based phasal A-bar agreement phenomenon is illustrated below:

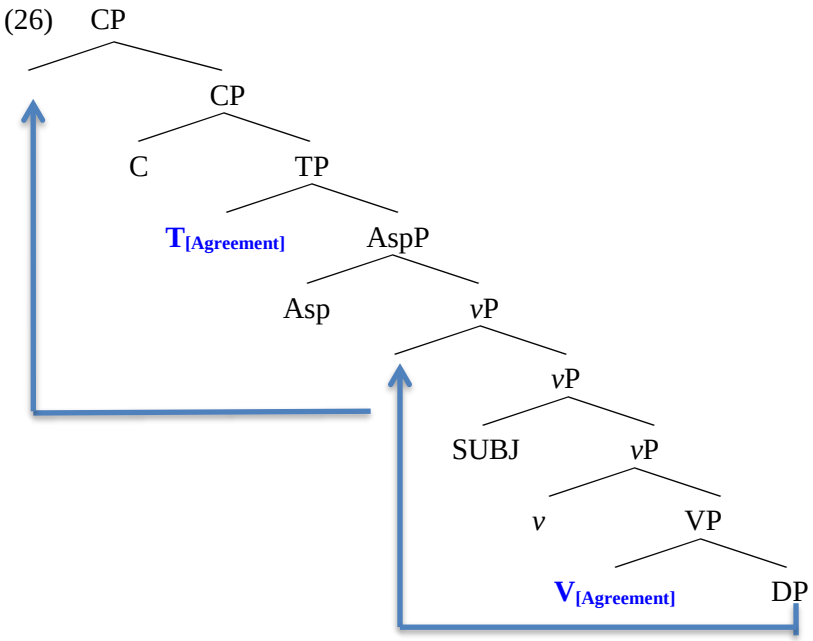
[9] Passive and unaccusative verbs are also propositional VPs. Although there is no passive in Medumba, there is A-bar agreement on V and T with unaccusative verbs (i). There is a debate in the literature about whether passive and unaccusative VPs should be considered as phases. So if A-bar agreement is phasal in Medumba, then agreement with unaccusative verbs suggests that these VPs are also phases.

(i) á wʉ́ fə̀-ə́ n-tə́ə̀m sí á
FOC WH P4-H N-fall down Q
'Who fell down?'

[10] That agreement is marked within the phase domain and not on the phase heads (*v* and C) has interesting consequences on the syntax-phonology interface in Medumba and might signal transfer to PF when a phrase escapes from the phase domain.

[11] This is true only for non-subject extractions. Subject extraction cases are discussed in section 5. The presence or absence of the nasal prefix on Asp Aux depends on whether AspP Aux is in-situ (24) or has moved (25). See appendix B for further discussion.

(26)



Now that the root clause A-bar agreement pattern is examined, I will turn to the non-root clause agreement contrast. Recall that with non-root clauses, there is A-bar agreement with embedded post-V extraction on V and T in embedded the clause and agreement only on T with the matrix clause. The example in (17) is repeated below to ease explanation:

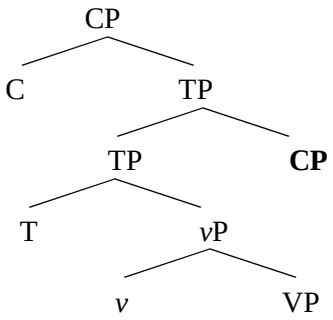
(27) a. á wʉ́ Sɛ̀ɛ́mí fə̀-ə́ n-kʉ́ n-tʃúp
FOC WH Sami P4-H N-IMP N-say
mbʉ̀ Nùgà fə̀-ə́ n-kʉ́ m-fá-à *(í) Nùmí á?
COMP Nuga P4-H N-IMP N-give-L *(3SG.DO) Numi Q
'Who was Sami saying that Nuga was giving (him/her) to Numi?

b. *á wʉ́ Sɛ̀ɛ́mí fə̀-ə́ n-kʉ́ n-tʃúùp
FOC WH Sami P4-H N-IMP N-say
mbʉ̀ Nùgà fə̀-ə́ n-kʉ́ m-fá-à *(í) Nùmí á?
COMP Nuga P4-H N-IMP N-give-L *(3SG.DO) Numi Q

The analysis I propose so far for A-bar agreement accounts for root clause extractions and predicts in principle that in non-root clause extractions, the matrix verb will also undergo lengthening via move-based phasal A-bar agreement. But this does not seem to be the case as in those contexts, the matrix CPs show agreement only on T. To account for this asymmetry, I propose

that embedded CPs are TP adjuncts[12] in Medumba. By adjoining[13] to TP, embedded CPs fall outside the matrix *v*P phase:

(28)



Since embedded clauses are generated in an adjoined position, matrix Vs cannot participate in the phasal A-bar agreement operation since the extracted *wh*-XP does not cross that V. This proposal correctly predicts that embedded clauses should pattern with adjunct clauses in regard to extraction and agreement. Evidence comes from the fact that movement from embedded CPs (29) and adjunct CPs (30) in Medumba is only possible if there is a resumptive pronoun at the extraction site of the moved *wh*-XP:

(29) *Embedded CP*

á	wú	Sɛ̀ɛ́mí	fə̀-ə́	n-kú	n-ʧúp			
FOC	WH	Sami	P4-H	N-IMP	N-say			
	mbù	Nùgà	fə̀-ə́	n-kú	m-fá-à	*(í)	Nùmí	á?
	COMP	Nuga	P4-H	N-IMP	N-give-L	*(3SG.DO)	Numi	Q

'Who was Sami saying that Nuga was giving (him/her) to Numi?

[12] It is not clear how sentential complementation works in Medumba. The language lacks indirect *wh*-questions. The verb 'asks' which normally selects for indirect *wh*-questions in English-type languages does not give rise to indirect *wh*-questions in the same context in Medumba (ii).

(ii)

Sɛ̀ɛ́mí	fə̀	m-bɛ́ttə́	mbù	á	kú	Nùgà	fə̀-ə́	m-fá-à	Nùmí	á?
Sami	P4	N-ask	COMP	FOC	WH	Nuga	P4-H	N-give	Numi	Q

Lit. 'Sami asked that: "what did Nuga give to Numi?"'
'Sami asked: "what did Nuga give to Numi?"'

The above example is a direct quote in Medumba and not an indirect question.

[13] Unlike TP adjuncts, VP adjuncts show A-bar agreement in Medumba (iii). The fact that these adjunction structures behave differently with regard to agreement in Medumba suggests that the matter here is not only about being adjoined, but also about the adjunction site.

(iii) *PP Adjunct*

á	wú	Nùgà	fə̀-ə́	n-kú	m-fá-à	bɔ̀	Nùmí	bʰə̀ə́	*(í)	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L	bag	Numi	PREP	*(3SG.IO)	Q

'Who was Nuga giving the bag to Numi in front of (him)?'

(30) *Adjunct Island*

á	wʉ́	Nùmí	fə-ə́	nɛ̀ɛ́n	tɔ́n	káà	Nùgà	fáà	*(í)	Sɛ̀ɛ́mí	á
FOC	WH	Nùmí	P4-H	go	market	before	Nùgà	give	*(3SG.DO)	Sami	Q

'Who did Nùmí go to the market before Nùgà gave *(him) to Sami?'

4 The operator – trace relation in Medumba

4.1 The root clause/non root clause contrast

A resumptive pronoun is the overt pronominal element found in some languages in the variable position of unbounded A'-dependency constructions–the latter include relative clauses, constituent questions, comparative clauses, dislocation and focus constructions (Rouveret 2011). With regard to the operator – trace relation, Medumba *wh*-extractions exhibit a root clause/non-root clause contrast in that (some) root clause *wh*-extractions leave a gap (except extraction from PPs, from coordinate structures and extraction of possessors in which a resumptive pronoun appears at the extraction site of the moved XP) whereas non-root clause *wh*-extractions trigger resumption. I will refer to these domains in which resumption is required in order for extraction to be possible as island circumvention domains.

Table 4: Operator – trace relation in Medumba

	Root		Non-root	
	Gap	Resumption	Gap	Resumption
Subject	✓	✗	✗	✓
Object	✓	✗	✗	✓
PP fronting	✓	✗	✗	✓
Islands	✗	✓	✗	✓

With regard to extractions from PPs in root clauses in Medumba, there is no preposition stranding *sensu stricto*. For movement to be licit either there is resumption at the DP extraction site or the whole PP is fronted. I thus propose that PPs also constitute island domains in Medumba (see also Boeckx and Lasnik 2006). That is why any extraction from a PP requires a resumptive pronoun at the extraction site (32).

(31) *Direct Object*

á	kʉ́	Nùgà	fə-ə́	n-kʉ́	m-fá-à	___	Nùmí	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L		Numi	Q

'What was Nuga giving to Numi?'

(32) *PP Island*

á	wʉ́	Nùgà	fə-ə́	n-kʉ́	m-fá-à	bɔ̀	múùm	*(jí)	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L	bag	to	*(3SG.IO)	Q

'Who was Nuga giving the bag to (him)?'

(33) *PP Fronting*

á	kʉ́	Nùgà	fə-ə́	n-kʉ́	m-fá-à	___	Nùmí	á?
FOC	WH	Nuga	P4-H	N-IMP	N-give-L		Numi	Q

'What was Nuga giving to Numi?'

Non-root clause *wh*-extractions require a resumptive pronoun at the extraction site for all the positions.

(34) á wú Sɛ̀ɛ́mí fə̀-ə́ n-kú n-ʧúp
FOC WH Sami P4-H N-IMP N-say
mbù Nùgà fə̀-ə́ n-kú m-fá-à *(**í**) Nùmí á?
COMP Nuga P4-H N-IMP N-give-L *(3SG.DO) Numi Q
'Who was Sami saying that Nuga was giving (him/her) to Numi?

With regard to fronted prepositional complements and adjuncts within embedded clauses, a copy of the preposition plus a resumptive pronoun appears at the extraction site (36). For economy reasons, I will not reproduce the PP adjunct cases as they follow the same pattern.

(35) á múùm wú Sɛ̀ɛ́mí fə̀-ə́ n-ʧúp
FOC to WH Sami P4-H N-say
mbù Nùgà fə̀-ə́ m-fá-à bɔ̀ *(múùm jí) á?
COMP Nuga P4-H N-give-L bag *(to 3SG.IO) Q
'To whom was Sami saying that Nuga was giving the book (to him)'

Resumptive pronouns have been claimed to be used as a device serving to redeem some constructions that would otherwise violate some principles of grammar, namely those where the variable site ends up separated from the operator by one or more barriers or island boundaries. The notion of island originates from Ross (1967). He proposed in his analysis different island tests, which are now considered to be standard diagnostics for movement. Chomsky (1986) further refers to these tests under the general principle of subjacency in terms of barriers. Given that cross-clausal *wh*-constructions pattern like islands and require resumption in Medumba, this analysis predicts that even in traditional cases of islands, the resumptive pronoun would serve as a rescue strategy in Medumba. These cases of island circumvention are illustrated below:

***Wh*-island**: Example (36) illustrates extraction of a direct object and (37) shows extraction of a PP complement.

(36) á wú Nùgà fə̀-ə́ n-kú m-bɛ́tte
FOC WH Nùgà P4-H N-IMP N-ask
mbúù Nùmí fə̀-ə́ n-kú m-fá-à *(**í**) Sɛ̀ɛ́mí á?
COMP Nùmí P4-H N-IMP N-give-L *(3SG.DO) Sami Q
'Who was Nùgà asking if Nùmí was giving *(him) to Sami?'

(37) á múùm wú Nùgà fə̀-ə́ n-kú m-bɛ́tte
FOC to WH Nùgà P4-H N-IMP N-ask
mbúù Nùmí fə̀-ə́ n-kú m-fá-à bɔ̀ *(**múùm jí**) á?
COMP Nùmí P4-H N-IMP N-give-L bag to *(3SG.IO) Q
* 'To whom was Nùgà asking if Nùmí was giving the bag to him.'

Adjunct Island: Example (38) shows extraction of the direct object from an adjunct clause while (39) illustrates extraction of a PP complement.

(38) á wʉ́ Nùmí fə̀-ə́ nɛ̀ɛ́n tɔ́n káà Nùgà fáà *(**í**) Sɛ̀ɛ́mí á
FOC WH Nùmí P4-H go market before Nùgà give *(3SG.DO) Sami Q
* 'Who did Nùmí go to the market before Nùgà gave (him) to Sami?'

(39) á wʉ́ Nùmí fə̀-ə́ nɛ̀ɛ́n tɔ́n káà Nùgà fá-à bɔ̀ *(**jí**) á
FOC WH Nùmí P4-H go market before Nùgà give-L bag *(3SG.IO) Q
* Who did Nùmí go to the market before Nùgà gave the bag to him?

Complex noun phrase: Example (40) illustrates extraction of the direct object and (41) shows extraction of a PP complement from an object complex noun phrase.

(40) á wʉ́ Nùmí fə̀-ə́ n-dʒʉ́n mɛ́n
FOC WH Nùmí P4-H N-see child
zə̀ à fə̀-ə́ n-kʉ́ m-fá-à *(**í**) Nùgà à?
REL 3SG.S P4-H N-IMP N-give-L *(3SG.DO) Nuga Q
'Who did Nùmí see the child that was giving *(him) to Nuga?

(41) á wʉ́ Nùmí fə̀-ə́ n-dʒʉ́n mɛ́n zə̀ Nùgà fə̀-ə́ n-kʉ́
FOC WH Nùmí P4-H N-see child REL Nuga P4-H N-IMP
m-fá-à bɔ̀ *(jí) à?
N-give-L bag *(3SG.IO) Q
'Who did Nùmí see the child that was giving the bag to (him)?

The left-branch constraint: The example below shows that extraction is possible from possessor constructions in Medumba, in which case there is a resumptive pronoun at the extraction site (42). But if the whole possessor construction is extracted, it leaves behind a gap with root clauses (43):

(42) á wʉ́ Nùmí fə̀-ə́ n-dʒʉ́ʉ̀n ʃʏ́n *(í) á?
FOC WH Numi P4-H N-see friend *(3SG) Q
* Who did Numi see his friend?

(43) á ʃʏ́n wʉ́ Nùmí fə̀-ə́ n-dʒʉ́ʉ̀n ___ á?
FOC friend WH Numi P4-H N-see Q
'Whose friend did Numi see?'

The coordinate structure constraint: The following example shows that a member of a coordinated structure can be extracted in Medumba:

(44) á wʉ́ Nùmí fə̀-ə́ n-dʒʉ́ʉ̀n Nùgà búù *(jí) á?
FOC WH Numi P4-H N-see Nuga and *(3SG) Q
* Who did Numi saw Nuga and ___?

It appears from the above examples that all island domains can be circumvented in Medumba by the means of resumption. The resumptive pronoun seems to be used as a device to circumvent constructions in which movement is illicit in Medumba. Notice that resumptive pronouns cannot substitute for a gap in root clause extraction[14] (45).

(45) *á wú Nùgà fə̀-ə́ n-kú̱ m-fá-à í Nùmí á?
FOC WH Nuga P4-H N-IMP N-give-L 3SG.DO Numi Q
'Who was Nuga giving (him) to Numi?

4.2 Does resumption involve movement in Medumba?

The resumptive strategy has often been analyzed as the result of a binding relation between an antecedent in A'-position and a pronoun in an A-position. On this view, while the gapping strategy involves movement, the resumptive strategy does not (Sells 1984; McCloskey 1990).

The resumptive strategy in Medumba shows the same agreement properties as the gapping strategy. This seems to suggest that even the resumptive strategy involves movement in Medumba. In addition, they also exhibit the reconstruction effect. In the example below[15], the binding relation between the reflexive *tʰú-wú̱l í* (himself) and the antecedent Nuga is only possible if the reflexive is interpreted at the extraction site:

(46) **á zít zjə́k[16] tʰú-wú̱l í** Nùmí fə̀-ə́
FOC which totem head-body his Nùmí P4-H
nɛ̀ɛ́n tɔ́n káà Nùgà jú̱ù̱n í á
go market before Nùgà see 3SG.DO Q
*'Which totem of himself did Nùmí went to the market before Nùgà saw (it)?'

To sum, island circumvention data in Medumba pose a real challenge to the understanding and analysis of islands in the field. Islands are usually referred to as domain from which movements are prohibited and have been used as standard tests for constructions involving movement. The empirical data in Medumba show that these constructions do not seem to block movement in Medumba although they require resumption. As evidence, they exhibit the move-based phasal agreement.

5 Subject *wh*-extraction in Medumba

5.1 The *wh*-subject extraction requirement

Root clause subject *wh*-extraction requires the presence of an overt tense auxiliary on which it triggers agreement via vowel lengthening (47).

[14] I think this is due to an economy principle on the conditions of spell out copies in Medumba. That is the copy is spelt out (overt) only when needed, especially in cases of island circumvention.
[15] This example is also ambiguous in that the referent can be the deepest subject Nuga or the intervening subject Numi.
[16] In the Bamileke culture, *zjə́k* (a kind of totem) is usually the "animal shape" of some individuals, especially those who are members of a secret society.

(47) á wʉ́ fə̀-ə́ n-kʉ́ m-fá bɔ̀ Nùmí á?
FOC WH P4-H N-IMP N-give bag Numi Q
'Who was giving the bag to Numi?'

In the absence of an overt tense auxiliary, it is illicit to extract the subject whether the imperfective auxiliary moves to T, hence the bare form (48a) or stays in-situ, hence the N-marked form (48b)[17]:

(48) a. *á wʉ́ kú-(ù) m-fá bɔ̀ Nùmí á?
FOC WH IMP-L N-give bag Numi Q
[Who was giving the bag to Numi?]

b. *á wʉ́ n-kʉ́ m-fá bɔ̀ Nùmí á?
FOC WH N-IMP N-give bag Numi Q
[Who was giving the bag to Numi?]

Likewise, the bare form of the verb signals movement to T whereas the N-marked form signals absence of movement. In the absence of an overt tense auxiliary, verbs whether bare (49a) or N-marked (49b) cannot improve constructions in which subjects *wh*-Ps are extracted.

(49) a. *á wʉ́ fá-(à) bɔ̀ Nùmí á?
FOC WH give-L bag Numi Q
[Who gave the bag to Numi?]

b. *á wʉ́ m-fá bɔ̀ Nùmí á?
FOC WH N-give bag Numi Q
[Who was giving the bag to Numi?]

The rescue operation to satisfy subject *wh*-extraction in the absence of an overt tense auxiliary is the insertion of *bɛ́ɛ̀n*[18].

(50) a. á wʉ́ bɛ́ɛ̀n n-kʉ́ m-fá bɔ̀ Nùmí á?
FOC WH AUX N-IMP N-give bag Numi Q
'Who is giving the bag to Numi?'

b. á wʉ́ bɛ́ɛ̀n m-fá bɔ̀ Nùmí á?
FOC WH AUX N-give bag Numi Q
'Who gave the bag to Numi?'

What is interesting about the above examples is that when *bɛ́ɛ̀n* and the imperfective auxiliary co-occur, they triggers the present tense reading[19] (50a), but the absence of the imperfective auxiliary leads to the default past tense reading (50b).

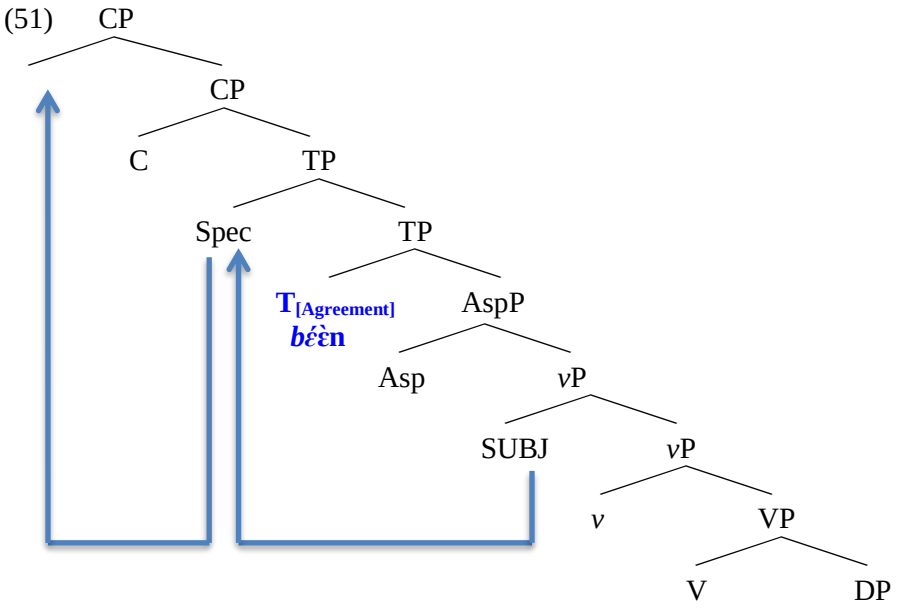
5.2 What is *bɛ́ɛ̀n* and why bɛ́ɛ̀n?

I propose that subject *wh*-phrases move to Spec-T first, then to Spec-C. In the absence of an overt tense auxiliary *bɛ́ɛ̀n-support* is needed to make extraction of *wh*-subjects possible. I consider *bɛ́ɛ̀n*

[17] See appendix B for discussion about V and AspP raising.
[18] When *bɛ́ɛ̀n* is inserted, the Asp Aux and the Verb are both N-marked.
[19] The imperfective Aux by itself does not trigger the present tense reading. See Appendix D for more examples.

as a kind of auxiliary with some abstract tense feature, inserted at T and used in last resort when there is no overt tense aux in the structure.

(51)



This analysis correctly predicts that in the presence of an overt T, it is illicit to have *bɛ́ɛ̀n* (52).

(52) *á wú̱ fə̀-ə́ *bɛ́ɛ̀n* n-kú̱ m-fá bɔ̀ Nùmí á?
FOC WH P4-H N-AUX N-IMP N-give bag Numi Q
[Who was giving the bag to Numi?]

The fact that subject *wh*-phrases first move to Spec-T can be explained by the licensing of the resumptive pronoun in Spec-T in non-root clause extraction since Spec-T is an argument position (53).

(53) **á** **wú̱** Sɛ̀ɛ́mí fə̀-ə́ n-ʧúp mbù̱ **á** bɛ́ɛ̀n m-fá bɔ̀ Nùmí á?
FOC WH Sami P4-H N-say COMP 3SG.S AUX N-give bag Numi Q
'Who was Sami saying was giving the bag to Numi'

Recall that that in root clauses subject *wh*-movement triggers agreement only on T but not on V whereas non-subject *wh*-movement triggers agreement on T and V. A question that arises at this level is what blocks agreement between the subject and V since the subject originates in Spec-*v*. This contrast can be explained by the fact that the A-bar agreement mechanism in Medumba is movement-based and subject does not cross the *v*P phase.

6 Conclusion

This paper focused on *wh*-movement, A-bar agreement and resumption in Bamileke Medumba. It is proposed that the different features of the *wh*-phrase are encoded by distinct C-heads in the CP-layers. The outer C-head encodes the Q-feature and hosts the Q-particle whereas the inner C-head encodes the *wh*-feature and hosts the moves *wh*-phrase in its specifier position. With regard to A-

bar agreement, it is argued that it is movement-based and proceeds by phase (Chomsky 2001). The agreement asymmetry is triggered by the fact that embedded clauses are adjoined to TP and pattern with adjunct clauses in Medumba in regard to movement. With regard to the operator-trace relation, it appears that root clause extractions leave behind a gap (except extraction from a islands where a resumptive pronoun appears at the DP extraction site) while non-root clauses use a resumptive strategy. I propose that resumption is a device used in Medumba to circumvent constructions in which movement is illicit.

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Appendix

A: The internal structure of *wh*-words and animacy in Medumba

The *wh*-system is marked for animacy in Medumba. This animacy feature exhibits a contrast between *human* and *everything else* and is distributed depending on whether the *wh*-word is marked as *human* (the *w-form*) or is *unmarked* (the *k-form*). The other forms include the temporal *wh*-word (*s-ʉ́*) and the locative (*já*). Consider the following examples:

(1) Q: á w-ʉ́ lá à? A: á Nùmí / #á mb^{h}ʉ́
FOC HMN-WH DEM.2PROX Q FOC Numi / FOC dog
'Who's that?' 'It is Numi' / #'It's a dog'

(2) Q: á k-ʉ́ lá à? A: á mb^{h}ʉ́ / búʔŋwànì
FOC UNMKD-WH DEM.2PROX Q FOC dog / book
'What's that?' 'It is a dog/book'

The above contrast shows that the *w-form* of *wh*-words selects only for human in Medumba whereas the *k-form* selects for other animate and inanimate.

Table 1: The internal structure of *wh*-words in Medumba

Base	**Animacy Feature**	**Form**	**Gloss**
DP [w- + wh]	Human	w-ʉ́ HMN-WH	who
DP [k- + wh]	Unmarked	k-ʉ́ UNMKD-WH	what
PP [ndzʉ́- DP]		[$_{P}$ ndzʉ́-[$_{DP}$ k-ʉ́]] way UNMKD-WH	how
[nùúm- DP]		[$_{P}$ nùúm-[$_{DP}$ k-ʉ́]] for UNMKD-WH	why
XP	Other	s-ʉ́ TEMP-wh	when
		já LOC.wh	where

In parallel to the *wh*-system, the pronominal system exhibits a different animacy feature contrast. It is organized around the contrast between *animate* and *inanimate*. For instance direct object pronouns are *í* for animate and are *null* for inanimate. Consider the contrast below with simple sentences:

(3) (*This is just for illustration and is by no means an apology for slave trade)*
Q: kárjà jà A: Mʉ́ swɛ̀n *(í) Nùmi
slave where 1SG sell *(3SG.DO) Numi
'Where is the slave?' 'I sold him to Numi'

(4) Q: mb^{h}ú̶ jà?
dog where
'Where is the dog?'

A: Mú̶ swɛ̀n *(í) Nùmi
1SG sell *(3SG.DO) Numi
'I sold it to Numi'

(5) Q: búʔŋwànì jà?
book where
'Where is the book?'

A: Mú̶ swɛ̀n (*í) Nùmi
1SG sell (*3SG.DO) Numi
Lit. 'I sold to Numi'
'I sold it to Numi'

The above distribution shows that unlike the *wh*-system, pronouns (direct object) exhibit a contrast between animate (*the í pronoun* selects for all animates without distinction) and inanimate (*the null form*).

With regard to the extraction of the direct object from an embedded clause, there is a "clash" between the way in which the animacy feature of the *wh*-system is organized and the way in which the anymacy feature is organized within the pronominal system. This clash results in some oddities when the two systems interact in a single sentence (7).

The pronoun *í* works perfectly in context with the *w-form of* the *wh*-word (6).

(6) á wú̶ Sɛ̀ɛ́mí fə̀-ə́ n-kú̶ n-tʃúp mbù̶ Nùgà fə̀-ə́ n-kú̶
FOC WH Sami P4-H N-IMP N-say COMP Nuga P4-H N-IMP

m-fá-à *(**í**) Nùmí á?
N-give-L *(3SG.DO) Numi Q
'Who was Sami saying that Nuga was giving (him/her) to Numi?

Although the *k-form* of the *wh*-word works with other animates except human, it is somehow bad to have the k-*form* with the pronoun *í* (even though *í* selects for all animates without distinction) as illustrated by the contrast in (7a,b).

(7) a. *á kú̶ Sɛ̀ɛ́mí fə̀-ə́ n-kú̶ n-tʃúp
FOC WH Sami P4-H N-IMP N-say

mbù̶ Nùgà fə̀-ə́ n-kú̶ m-fá-à í Nùmí á?
COMP Nuga P4-H N-IMP N-give-L 3SG.DO Numi Q
'What was Sami saying that Nuga was giving to Numi?'

b. á kú̶ Sɛ̀ɛ́mí fə̀-ə́ n-kú̶ n-tʃúp mbù̶ Nùgà fə̀-ə́ n-kú̶
FOC WH Sami P4-H N-IMP N-say COMP Nuga P4-H N-IMP

m-fá-à Ø Nùmí á?
N-give-L 3SG.DO Numi Q
'What was Sami saying that Nuga was giving to Numi?'

The gap that surfaces in (7b) follows a paradigm and is considered as a null direct object pronoun (inanimate).

B: Basic sentence structure and N-marking in Medumba: raising to T?

Recall that Medumba is an SVO language. Sentences can appear with a bare verb (verb without the infinitive morpheme *nɨ̀*) as shown in (8a); with a tense auxiliary + V (8b) or with an aspectual auxiliary + V (8c).

(8) a. Nùgà fá bɔ̀ Nùmí
Nuga give bag Numi
'Nuga gave the bag to Numi'

b. Nùgà fə̀ m-fá bɔ̀ Nùmí
Nuga P4 N-give bag Numi
'Nuga gave the bag to Numi (yesterday)'

c. Nùgà kɨ́ m-fá bɔ̀ Nùmí
Nuga IMP N-give bag Numi
'Nuga was giving the bag to Numi'

In the above examples, when there is no overt tense Aux, the verb and the aspectual Aux are bare (8a,c). But when the verb is preceded by either an overt tense Aux (8b) or a perfective Aux, an homorganic nasal prefix appears to its left edge (8c).

When there is an overt Tense Aux + Asp Aux + V in the sentence, both the aspectual auxiliary and the verb get the nasal prefix (9).

(9) Nùgà fə̀ n-kɨ́ m-fá bɔ̀ Nùmí
Nuga P4 N-IMP N-give bag Numi
'Nuga was giving the bag to Numi (yesterday)'

The question that arises at this level is what triggers the presence or absence of the nasal prefix on the aspectual auxiliary and on the verb. I hypothesize that in the absence of an overt tense Aux, either Asp Aux or V raise to T to get the tense inflection but in the presence of an overt tense Aux, Asp Aux and V stay in-situ and are not inflected (hence the N-marking).

Table 2: Sentence structure and N-marking in Medumba

Condition	**Structure**	**Example**
No overt tense Aux – V	[TP [T ..... [**V**……]]]	(7a)
Tense Aux. – N-V	[TP [T **Aux** [**N-V** ….]]]	(8b)
Asp Aux. – N-V	[TP [T ..... [Asp … [**N-V**…]]]]	(8c)
Tense Aux. – N-Asp Aux. – N-V	[TP [T **Aux** [**N-Asp** … [**N-V**…]]]]	(9)

As for the origin of N-marking, it might be a way to mark non-inflected forms of Aux and Vs in the system or just the reduced form of the infinitive marker *nɨ̀*.

C. Agreement with other A-bar constructions

The A-bar agreement phenomenon is extended to other A-bar constructions in Medumba such as focus movement (10), relative clauses (11) and topicalization (12):

(10) á bɔ̀ Nùgà fə̀-ə́ n-kʉ́ m-fá-à Nùmí lá
FOC bag Nuga P4-H N-IMP N-give-L Numi ?
'Nuga was giving the bag$_{FOC}$ to Numi'

(11) Nùmí fə̀ n-dʒʉ́n bɔ̀ zə̀ mɛ́n fə̀-ə́ n-kʉ́ m-fá-à Nùgà lá
Nùmí P4 n-see bag REL child P4-H INF-IMP INF-give-L Nùgà REL
'Nùmí saw the bag that the child was giving to Nuga.'

(12) bɔ̀ kí mɛ́n fə̀-ə́ n-kʉ́ m-fá-à Nùgà
bag TOP child P4-H INF-IMP INF-give-L Nùgà
'The bag, the child was giving to Nùgà.'

D. Examples on Tense –Aspect interaction and subject *wh*-extraction

The imperfective auxiliary by itself does not trigger the present tense reading in Medumba (13a). The language recruits the auxiliary *tʃwɛ̀ɛ́t* for that purpose (13b).

(13) a. Nùgà kʉ́ m-fá bɔ̀ Nùmí
Nuga IMP N-give bag Numi
'Nuga was giving the bag to Numi'

b. Nùgà tʃwɛ̀ɛ́t n-kʉ́ m-fá bɔ̀ Nùmí á?
Nuga PRS N-IMP N-give bag Numi Q
'Nuga is giving the bag to Numi?'

Somehow, it is illicit to use the present tense auxiliary *tʃwɛ̀ɛ́t* with subject *wh*-extraction (14a). It cannot also co-occur with *bɛ́ɛ̀n* (14b):

(14) a. *á wʉ́ tʃwɛ̀ɛ́t n-kʉ́ m-fá bɔ̀ Nùmí á?
FOC WH PRS N-IMP N-give bag Numi Q
[Who is giving the bag to Numi?]

b. *á wʉ́ bɛ́ɛ̀n tʃwɛ̀ɛ́t n-kʉ́ m-fá bɔ̀ Nùmí á?
FOC WH AUX PRS N-IMP N-give bag Numi Q
[Who is giving the bag to Numi?]

It seems the only strategy to get the present tense reading with subject *wh*-extraction in Medumba is to combine *bɛ́ɛ̀n* with the imperfective auxiliary. In the absence of the imperfective auxiliary, the default past tense reading prevails. Further research is needed for a better understanding of the Tense-Aspect interaction in Medumba.