The Grammar of Shupamem

by

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DEDICATION

To my mother and father, who have taught me to never give up with my research since day one, even during the most challenging times.

Also to my mentor, Anna Szabolcsi, without her help and continuing support, I would have never completed this thesis.

Finally to Angele Bell, whose love and support helped me make it through the sleepless nights. She assisted me through it all even when I felt exhausted and down.

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Thanks a million to Jeff Good at University at Buffalo, the typologist in my dissertation committee that I met at the Workshop on the Feasibility of a Web-based Database of the Syntactic Structures of the World's Languages organized at NYU in November 9-10, 2007. Since then, he became a very close mentor to me an offered to host me during Spring break 2011 on his campus in order to discuss my dissertation. Jeff carefully read earlier drafts of this dissertation, and gave me

wonderful feedback and insightful comments on how to improve my analysis. Without his feedback, I would not have been aware of some of the implications of my analysis in the broader picture of typological and syntactic analysis. I have enjoyed my stay at Buffalo with Jeff who spent most of the time guiding me through the most recent publications on issues relevant to this study.

I would also like to thank Richie Kayne who, despite of his busy schedule has cheerfully accepted to be part of this dissertation committee. His questions and feedback were very helpful in helping me understand the significance of Shupamem data with respect to its broader implication in UG within the Minimalist framework. Without Richie's detailed and brilliant suggestions, I would have never noticed that the second part of different standard negative particles attested in Shupamem is in fact a Low tone. I have also benefited from Richie's LCA-based approach. Theoretically speaking, the LCA worked surprisingly well for Shupamem, especially in my analysis of the internal syntax of DP of Grassfields Bantu languages.

I must also thank Ray Dougherty, who helped me break my inclination of being very subtle, cautious and sometimes circular in my explanations of facts and how they are important with respect to the UG as a whole. He carefully walked me through the process of a scientific methodology of tackling a linguistic phenomenon. Although Ray was never exposed to any Bantu language before, I

can proudly claim today, that his extraordinary curiosity has significantly contributed to my development as a full-grown linguist and a critical thinker.

My deepest gratitude also goes to Gregory Guy, who, although he came from a sociolinguistic background, gracefully accepted to be part of my dissertation committee. His invaluable guidance and assistance were remarkably helpful in boosting my creativity during my research experience. We have spent countless hours comparing some syntactic structures I barely had any account for, with Portuguese. In doing so, I finally found the unexpected similarities that emerged between those two typologically unrelated languages with respect to a number of agreement facts within the noun phrase. I can proudly claim today that, although Greg only knew me as someone who could predict the outcome of the South African World Cup in 2010, he has masterfully coached me to become a curious Bantuist in syntax!

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encouraged me to broaden my horizons in theoretical linguistics while focusing particularly on understudied Grassfields Bantu languages.

This research would not have been feasible without the assistance of many informants and members of Archive Project in Foumban. I owe much to all of those who were able to help me with their judgments, answering my questions about complex syntactic constructions that were unfamiliar to me.

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ABSTRACT

This study analyzes the grammar of Shupamem, a language that belongs to a geographically defined group of languages known as 'Grassfields Bantu languages'. Through a comprehensive description of empirical data on essential aspects of the morphosyntax syntax of Shupamem, this dissertation makes significant empirical and theoretical contributions to the increasingly important literature on Grassfields Bantu linguistics. I discuss prominent aspects of Shupamem morpho-syntax with illustrations and some reference to other close related Grassfields Bantu languages. The methodology and analytical approach adopted here are essentially in line with the Minimalist Program developed in studies like Chomsky (1995, 2001) and Kayne (1994) designed to account for the principles of Universal Grammar. Although the topics addressed here suggest a great diversity in terms of word order phenomena and morphological markers, the analysis

I propose here provides some evidence that a number of movement operations attested in Shupamem are highly constrained. This study explicitly centers on: (a) the internal syntax of the DP and word alternation between the head noun and its various modifiers (b) the syntax of negation that reveals that Shupamem is a bipartite negation (Bell 2004) with a great diversity of negation patterns whose surface forms depend on the status of Tense, Aspect and Mood; (c)

the syntax of focus that suggests two focus fields for Shupamem (e.g., a left peripheral field and the post-verbal field indicated morphologically (e.g., overt focus marker *pò*) or syntactically (e.g., cleft constructions); and (d) the syntax of body part expressions with a particular reference to the Binding Theory (Chomsky 1986). This dissertation thus offers a collection of distinct empirical puzzles that seem both theoretically and typologically significant. I explicitly analyze the distribution of lexical categories within the clause with a particular emphasis on a number of principles that govern their surface representations.

Beside the wide range of phenomena covered in this analysis, I also indicate aspects of Shupamem that could be further explored. These aspects include the process of nasal place assimilation, vowel length and tones, the syntax of locative expressions and serial verbs.

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Abbreviations and Symbols

Abbreviations

1sg First person singular
2sg Second person singular
3sg Third person singular
ACC Accusative
Adv Adverb
AGR Agreement
ANIM Animate
ASP Aspect
ASPP Aspect Phrase
AUX Auxiliary
CF Contrastive Focus
COMP Complementizer
COND Conditional
COP Copula
D definite
DAT Dative
DEF definite marker
DEM Demonstrative
DIM Diminutive
DP Determiner Phrase
DU Dual
ES expletive subject
EVID evidential
FinP Finite Phrase
FM Focus marker
FOC focus
FocP Focus Phrase
FUT Future
GEN Genitive
INDEF indefinite
IMP Imperative
INF Infinitive
InterP Interrogative Phrase
IO Indirect Object
IPFV Imperfective
IRR Irrealis
IO Indirect Object

LOC locative
NEG Negation, negative
NSF non-subject term focus
NOM Nominative
O object
P_1 immediate past tense
P_2 recent past tense
P_3 intermediate past tense
P_4 remote past tense
PFV Perfective
PRF Perfect
PRS Present
PROG Progressive
PAST Past
PL plural
POSS possessive
PredP Predicate Phrase
PRES present
PROG Progressive
PRT Participle
QM question particle/marker
REL relative form
Relp relative pronoun
RFL reflexive
RP resumptive pronoun
S subject
sg singular
SPEC Specifier
SUBJ subject
TAM tense-aspect-modality
TP Tense Phrase
TOP Topic
UG Universal Grammar
V Verb
V_2 Verb second
VP Verb Phrase
XP maximal project

Symbols

ˈ downstep
~ similar to or allophone
# word boundary
ː Vowel length

Chapter One: General Introduction

1.General Aims of the Study

The ultimate goal of this dissertation is to provide a description and analysis of various aspects of Shupamem syntax with some reference to other close related Grassfields Bantu languages such as Bafut (Tamanji 1999, 2006, 2008), Nweh (Nkemnji, 1995), Limbum (Fransen, 1995), Mankon (Leroy, 2007), among others. While my analytical perspective essentially follows the Minimalist Program developed in studies like Chomsky (1995, 2001, 2008) and Kayne (1994) designed to account for the principles of universal grammar, it also shows how a rather unstudied language like Shupamem sheds some light on the understanding of Universal Grammar (UG). Although many Grassfields Bantu languages have been extensively studied (see Hyman 1972, Tamanji 1994, Nkemnji 1995, Nchare, 2005), less attention has been paid to the clausal structure of Grassfields Bantu languages in general and Shupamem in particular. The challenge of the current study is then to provide data pertaining to the morphosyntax of Shupamem DP; tense, aspect and mood (TAM); negation; interrogative clauses and the internal syntax of body part (BP) expressions that are used to express reflexive pronouns

and some non-reflexive pronouns. In the formal syntax literature, much has been written about similar syntactic constructions and word order alternations, but Shupamem exhibits some unusual features with respect to (a) the internal structure of the DP, (b) the TAM when combined with various types of negation particles, (c) bipartite negation, (d) left peripheral and post-verbal focus in interrogative sentences. These unusual morphosyntactic properties lead me to wonder about how to account for them using the minimalist framework. This dissertation thus intends to uncover a number of syntactic constructions that are understood only partially and generally imperfectly, even by most members of the linguistic community.

My account of the surface order of various functional projections within the DP, IP and CP domain will build on prior models such as Kayne's (1994) Antisymmetry Approach and other related models such as Cinque (1999, 2005), Abney (1987), Bell (2004), Pollock (1989), Rizzi (1997) and subsequent works that use a derivational approach, to describe the cartography of the clause. Using methods similar to those in earlier studies, I undertake a discussion of problems that Shupamem data present for previous generalizations about the order of functional projections in UG and look at how the syntax of Shupamem forces us to modify a number of assumptions that do not hold. We will see for instance that none of the negative particles attested in Shupamem can be used on their own in isolation (i.e. as in their citation forms), and none of the analyses offered before in the literature really accounts for unusual data in Shupamem. In addition, the

discussion of the internal structure of the DP challenges Cinque's (2005) assumptions regarding the options available in UG for deriving possible word orders cross-linguistically within the DP. Specifically, it is shown that Shupamem displays 19 orders when the head noun is combined with the demonstrative, the numeral and the adjective, contra Cinque's LCA-based hypothesis that only 14 orders are attested and derivable in UG. I offer a description and analysis of noun classes and tonal classes attested in Shupamem in order to show how they play a crucial role in the internal structure of the DP. The morphosyntax of Shupamem CP field also suggests a rather interesting connection between both left peripheral focus particles and post verbal focus heads with respect to wh-expressions, both from a descriptive or typological standpoint and from a theoretical one.

This study is motivated by my desire to create a bridge between formal theoretical linguistics and the linguistic description of Shupamem data in order for the two to inform each other. It is intended to be useful to broad audience interested in the syntactic features of Bantu languages. My ultimate objective is to provide reliable data with clear descriptive generalizations that can be useful to theoretical as well as descriptive linguists.

Thus, it is my desire that each chapter will be significantly informed by formal theories that account for the fact under investigation, but not theory-oriented entirely. On the theoretical front, the main objective of this dissertation is to discover what an under-studied language such as Shupamem can contribute to the

understanding of previous linguistic theories. It also provides reliable data that can be helpful in testing many assumptions regarding the hierarchy of functional projections. On the other side, I hope that previous formal theoretical frameworks that have been proposed to describe better studied languages may provide an efficient methodology and adequate syntactic theory whose architecture is sound for my description and analysis of the complex data of Shupamem. In this regard, this dissertation is my contribution to the enrichment of the scant but growing knowledge on the linguistic theorizing enterprise and investigation of under-studied Grassfields Bantu (GB) languages spoken in Cameroon, by providing the literature with new data that might profoundly inform UG.

In addition to the theoretical implications of this study, there is also a language specific driven ambition that I needed to fulfill. Because Shupamem is so central to the Bamum people, it is very surprising that nowadays, no grammar or any reliable dictionary is available to the public. Although one cannot think of Shupamem as an endangered language, there is a pressing need in the local community to standardize the language in order to make it available for primary and college education where only French and English (the official languages of Cameroon) are used. This dissertation constitutes a first step in the language development and documentation project launched in Foumban (the capital of the Bamum Kingdom) in 2006. I intend to contribute to the development of a writing system for Shupamem that has only oral forms, in order to support and facilitate the

introduction of Shupamem into the school system of the local community. It is my expectation that this dissertation will be a foundation work for further research on Shupamem writing system and basic language materials that can be used in education and in other official domains of language use such as the media and the administration as well as in everyday life in the local community.

Because I want this dissertation to be read and used by as wide a range of researchers as possible outside the linguistics field, I will include as many examples as I can in the descriptive sections of each chapter devoted to a specific topic. Many of my examples draw on several sources. Some of them are from my previous works where I attempted to discuss some basic grammatical constructions in Shupamem. Other examples are from what individual native speakers say (unreflective responses as well as well-considered and theoretical arguments) whether a given string of words is grammatical or not in Shupamem grammar. Such positions usually tend to vary depending on the speakers ages, gender and societal status or rank.

In discussing these examples, I will also offer a theoretical analysis and discussion of unusual constructions that challenge previous linguistic generalizations. Thus, the dissertation will go back and forth between the linguistic description of a number of syntactic features and their theoretical implications for UG. A crucial balancing factor in this dissertation is that my description of each aspect of Shupamem grammar, in addition to being informed by what other native

speakers think about it, also reflects on various theoretical approaches or methodological preferences, and draws on broader analyses provided by other scholars who have investigated similar phenomena elsewhere. Therefore, I will be moving back and forth between theory and empirical analysis of the data to be able to define some generalizations that may emerge from the data under investigation.

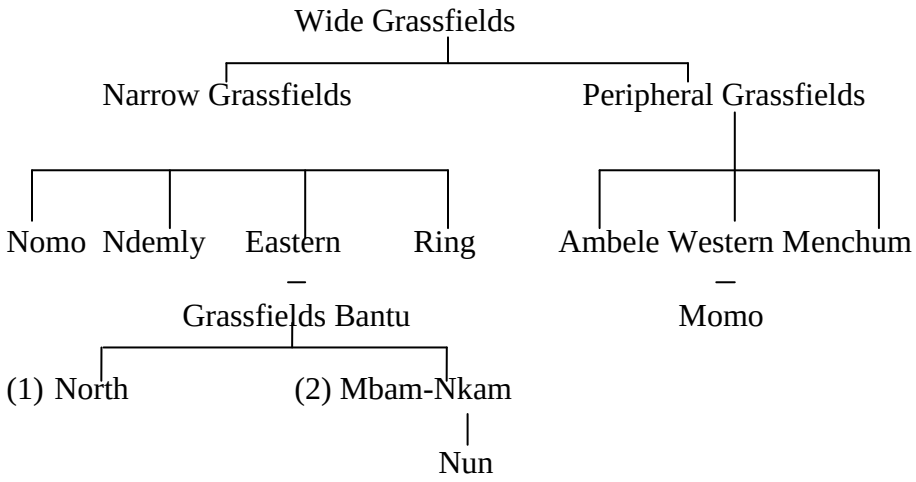
2.Language Classification and Location

The Bamum language, also referred to as "Bamum" or Shupamem (pronounced as ʃўpàməm) in the literature is one of the complex group of languages spoken in Western province of Cameroon (Central Africa). It belongs to the geographically defined group of languages known as Grassfields Bantu (GB) languages of the Niger-Congo family. There are differences in points of views among scholars on the classification of GB languages in general and Shupamem in particular. An early work such as Ward (1938:436) assumes that Shupamem can be viewed as related to the Bantu languages group and to Western Sudanic languages in these terms 'there is little doubt that Bamum shows elements that are Bantu and at the same time similarities in vocabulary and structure with the Western Sudanic group'.

Later on, the Grassfields Bantu Working Group (GBWG) went further in their investigations to realize that Shupamem is a closely related language to Bamileke languages around the Nun River (Hyman, 1980:181) based on the similarities in vocabulary items that show a relationship between Shupamem noun class system and that of many other Bantu languages. Dieu and Renaud (1983) groups Shupamem in what is known as Zone 9 including the languages Greenberg (1966) claims to belong to the Niger-Congo-Kordofanian Phylum. The GB languages to which Shupamem belongs has two sub-groups according to Dieu and Renaud's classification, namely (a) the Western GB languages and (b) the Eastern GB languages. Therefore, within the Benue-Congo family, Shupamem belongs the Nun group that falls under the Mbam-Nkam Grassfields Bantu languages according to Piron (1995). Although the Bamum people uncompromisingly view their language as different from the Bamileke languages, Shupamem is significantly similar to those languages as shown in Voorhoeve (1971a) who has demonstrated that it is in fact a dialect of those languages from a linguistic standpoint.

According to Ethnologue (Lewis, 2009), Shupamem is classified as Niger-Congo, Atlantic-Congo, Volta-Congo, Benue-Congo, Bantoid, Southern, Wide Grassfields, Narrow Grassfields, Mbam-Nkam, Nun. It is claimed on the basis of a SIL (1982) report that 250 000 people speak Shupamem in the Bamum kingdom, one of the rare kingdoms in the Western part of the republic of Cameroon to have converted to Islam.

Morphologically, due to Shupamem's reduced noun class system (see section 2 in Chapter 2), Jacquot and Richardson's (1956:06) or Lewis (2009) strongly believe that that Shupamem is a Bantoid language. Whatever classification turns out to be correct, it is clear to me that Shupamem is the extension of the group Mbam-Nkam that includes a hundred languages listed in figure 3. The neighboring closely related languages to Shupamem are listed for convenience in figure 1 as adapted from Piron (1995), Also see Watters (2003:227-233) for a detailed discussion of the classification of Grassfields Bantu languages and how they are related to each other.



(i) Mungaka 50 000 (1982)

(ii) Bamoun cluster

[a] Shupamem 215,000 (1982)

[b] Bafanji 8,500 (1982)

[c] Bamali 5,300 (1982)

[d] Babalang 14,500 (1994)

[e] Banbolan 6000-15, 000 (1994)

(iii) Mamenyam 4,000 (1994)

Fig. 1.1. Shupamem Classification Among the Grassfields Bantu Languages

Thus, the group Nun distinguishes three language families: (i) the *Mungaka* family; (ii) the *Bamoun cluster* that includes Shupamem and four related languages, namely: Bafanji, Bamali, Bambalang and Bangolan; and (iii) the *Mamenyam* family. See Watters (2003:231-233) for the details of the classification of all Grassfields Bantu language. It is very important to note as pointed out in Watters (2003:229) 'that the population numbers from 1982 may today be 50-80 percent higher than those given, depending on the population growth over the last two decades'. There are however lingering questions as to whether Shupamem has dialects or not. In other words, what would further research on geographical inter-comprehension and lexicostatistics suggest? This question is beyond the scope of the dissertation. Nevertheless, it is clear to me, at least to the best of my knowledge of Shupamem, that there has not been any report or claim of a significant dialectal variation (i.e. geographical linguistic variation) in Shupamem as spoken in the Bamum Kingdom. I will leave this issue for further investigation.

The data discussed and analyzed in this thesis come from native speakers of Shupamem living in and around Foumban, Cameroon (Nun Department, Western Province of Cameroon). Figure 1.1 and Figure 1.2 are maps of the languages of Cameroon and the clusters of Grassfields Bantu languages as in Ethnologue[1]

[1] The maps in Figure 2 and 3 are taken from Lewis, M. Paul (ed.), Ethnologue: Language of the World, Sixteenth edition. Dallas, Tex.: SIL International. Online version: http://www.ethnologue.com/.

[2] Under Hyman's (1972) classification, Mankon is treated as a Bamileke language. This

(2009). Shupamem is referred to as Bamun in Figure 1.3. The language code is 195.

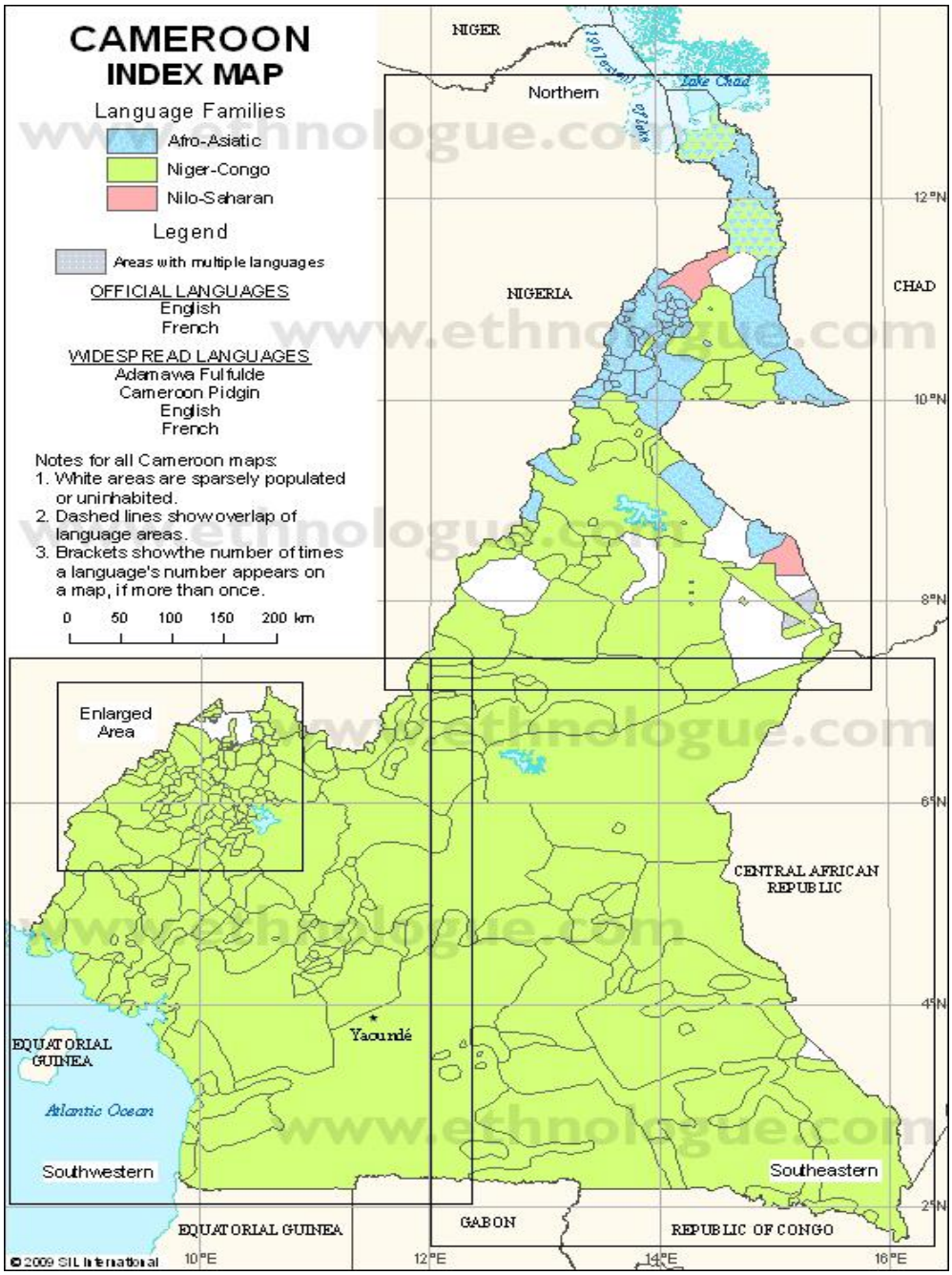


Fig.1. 2. Cameroon's Language Clusters

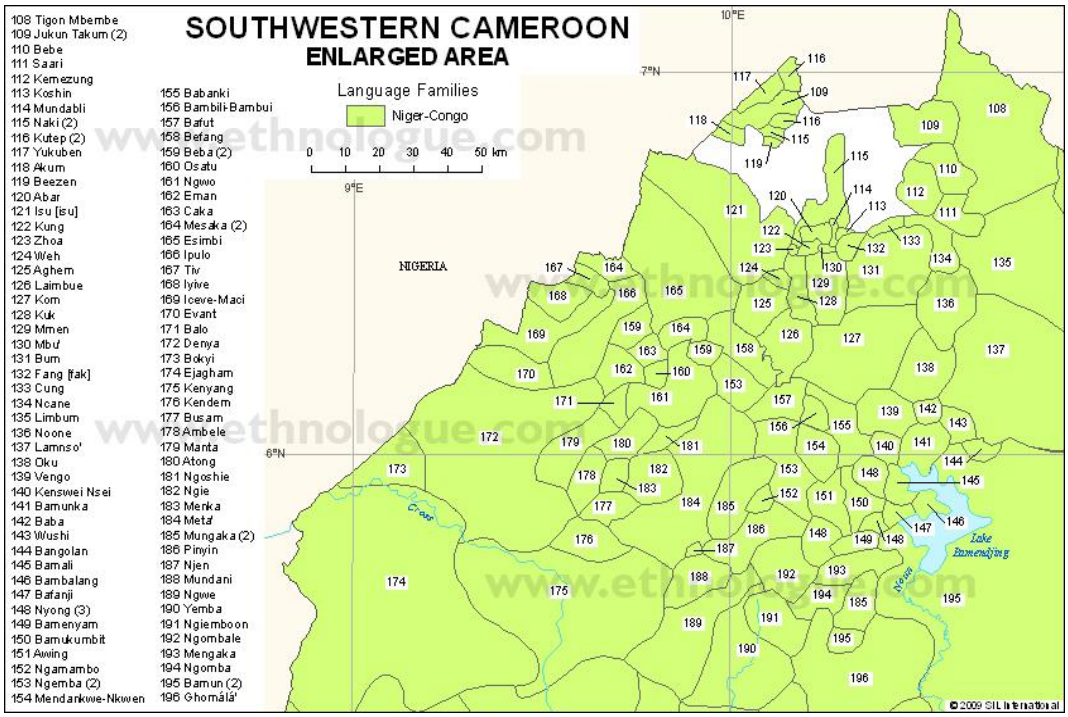


Fig.1. 3. Shupamem and its neighboring Grassfields Bantu Languages

Typologically speaking, using Hyman's (1972:8) original data in what are referred to as 'Bamileke' languages, it obviously clear that Shupamem is a Mbam-Nkam language although it belongs to the Nun language group. For this analysis, I have reorganized Hyman's (1972) data following Watters' (2003) classification. On the basis of a striking coinciding sound change in the treatment of the Proto-Bantu *z, Hyman was able to make some inferences about which languages belong to Western or Eastern GB language families.

In proto-Bantu roots such as *z*am* ‘ax’, *z*ab* ‘vegetable’, *z*um* ‘back’ (cf. Igbo *àzú*) and *z*ob* ‘to sing’, all Western GB dialects exhibit an initial /z/ (sometimes realized as [dz] because of the preceding nasal prefix) while all East GB dialects exhibit /ʒ/ realized as [ʒ] after a homorganic nasal. Hyman’s illustration of phonetic evolution of the Proto-Bantu *z*am* ‘ax’ is given here in (1) for convenience.

(1) Cross-comparison of the Phonetic Evolution of the PB *z*am* ‘ax’.

Mbam-Nkam Group		
(a) Nun	(b) Ngemba	(c) Bamileke
Shupamem: nʒàm	ŋgyɛmbɔɔŋ : nza	fɛʔfɛʔ : nʒɤɤ
	Mankon[2] : ndzəm	Medumba: nʒóm
	Mbambili : ndzɔɔ	Nweh: nʒàm
		Ghomala: nʒɔm
		Yɛmba: nza
		Batcha: nʒop
		Fondati: nʒa

Note that the term ‘Bamileke’ as used here corresponds to a subset of the Mbam-Nkam languages. I end this section by arguing that based on the evidence presented earlier, it follows that Shupamem is an Eastern Grassfields Bantu language of the Mbam-Nkam group.

[2] Under Hyman’s (1972) classification, Mankon is treated as a Bamileke language. This classification has been revisited. These days, Mankon is rather characterized as Mbam-Nkam language (Watters, 2003).

3. Previous Studies on the Language

Shupamem is one of the least studied of the Grassfields Bantu languages at least in terms of studies explicitly dealing with syntactic phenomena. The following summary is a complete list of all previous works I am aware of on Shupamem and its speakers. Most of the studies on Shupamem date from the 19th and early 20th century, consisting of *The Gospels, The Epistles to the Romans, 1st Corinthians, Philemon, 1st and 2nd Thessalonians* which have been translated into Shupamem and published by the British and Foreign Bible Society (Ward, 1938). To the best of my knowledge, the only written documents on Shupamem include:

(a) A list of 280 words described by Koelle (1854) in his *Polyglotta Africana*.

(b) Charley Frey's (missionary) short manuscript entitled *Premier Elément de Grammaire Bamoum*.

(c) Labouret's (1936) manuscripts on the vocabulary of Shupamem.

(d) A phonetic description of Shupamem by Ward (1938).

(e) My own recent works on some aspects of the morphosyntax of Shupamem (Nchare, 2005, 2008, 2010).

(f) Molu's (2009) very recent study of Shupamem morphology.

None of these studies, however, indicates tones adequately. It is my ambition in this dissertation to remedy this deficit. The first published document on Shupamem listed in European sources is Koelle's (1854) designed for comparative studies of African languages. Koelle's publication is impressive and crucial to Africanists in that it offers massive amounts of data in 156 languages African languages for comparative and diachronic analyses. Shupamem data was recorded from a Bamum informant freshly liberated from a slave ship seized in the Atlantic Ocean by the British in Freetown (Sierra Leon) between 1850 and 1852. Koelle's list is an invaluable source for comparison of Shupamem with many other African languages. It contains many interesting facts on what appears to be a relatively recent innovation in Modern Shupamem.

At issue here is the pronunciation of the vowels such as [a] > [ə] (2a), [a] > [ɛ] (2b), [ɔ] > [u] (2c, d and e) and the consonants [gb] > [kp] (3a, b and c), [g] > [k] (3d); [b]> [p] (2e) and [b] > [v] (2e).

Shupamem in Koelle (1854)	Modern Shupamem (2012)	Meaning
(2) a. fáma	a'. fámə́	'eight'
b.tán	b'. tɛ̄n	'five'
c. e-lɔ	c'. lú	'radio'
d. a-kɔn	d'. kún	'bed'
e. a-tɔ	e'. tú	'head'
f. a-kɔt	f'. kùt	'leg'
(3) a. e-gba	a'. ĵì-kpà	'four (definite)'
b. gba	b'. kpà	'four (indefinite)'
c. ngben	c'. ŋkpɛ̀n	'slave'
d. nega	d'. nìkà	'gun'
e. e-bon	e'. pù	'beauty'
f. e-bam	f'. və̀m	'belly

A quick comparison of Koelle's (1854) data on Shupamem and modern Shupamem as spoken today shows some interesting differences exemplified in the data in (2) and (3). In addition, Shupamem seems to have lost all vowels word initially as in (2c, d, and e) and (3a, e and f). It has so far proved impossible to draw a strong conclusion about whether Shupamem has undergone a sound change. This is due in part to the lack of more data to back up such a conclusion.

Nevertheless, it is important to notice that there are some inconsistencies in Koelle's analysis. Phonologically, the indication of tones is not reliable as shown in (4). For example, the lack of the tone on a morpheme such as *ńdab* > *ndàb* 'cotton' makes it hard to distinguish *ndàp* 'cotton' from similar lexemes such as *ndáp* 'house' or sentences like *ǹ-dàp* 'I hit' or *ǹ-dáp* '*I envy*', where *ǹ-* indicates the first person singular. The tone is distinctive in Shupamem in a way that makes it significantly central to every aspect of the grammar.

While the glosses of verb forms are often very imprecise with respect to the expression of tense/aspect and person, it is rather impossible to provide a good interpretation of Koelle'(1854) sentences without the appropriate tonal melody. If we take Koelles's sentences such as (4) and (5) for instance, it can be observed that the first person singular that was commonly used in Koelle's data are abandoned in today's Shupamem. This of course does not mean that the language has significantly changed, but rather that without the correct indication of tones; it is very confusing at least for the adequate interpretation of some lexical items in relevant contexts.

(4) a. *ma tuá*
1sg come.PFV
'I came' (Koelle 1854)

b. *mə̌ two̍*
1sg come.PFV
'I came' (Modern Shupamem)

(5) a *ma jí* *na tat*
1sg cover.PFV FOC pot
'I covered THE POT' (Koelle 1854)

b. *jǹ-ʒǐ* *nà tɛ̀t*
1sg-cover.PFV FOC pot
'I covered THE POT' (Modern Shupamem)

The indication of tones on both sentences in (4a) and (5a) is misleading. At issue here is the interpretation of the sentences above with respect to the way the tones are encoded. For instance, the example in (4a) better reads as 'I came' if we follow Koelle's indication of tones while (5a) can be interpreted as 'It is the pot that I covered' with the past tense instead of the present tense as originally described in Koelle (1854). In any events, Koelle's contribution is a valuable source of data for theoretical linguists as well as typologists interested in specific topics dealing with whether there is an on-going sound change in Shupamem or not.

Another interesting piece of research is Ward (1938) in which the author provides a detailed description of the phonetic structure of Shupamem based on an impressive amount of data. The study is done very efficiently in a way that gives the reader an accurate transcription of Shupamem. While the author had dealt with the problem of tonal indication adequately, the data in Ward (1938) offer extra evidence to the sound change in progress I have inferred from Koelle's (1854) data earlier on.

For instance, the high back rounded vowel [u] is described in Ward (1938:427) as a vowel 'about half-way between cardinal o and u'. This is exemplified in (6).

Shupamem vowels in Ward (1938)	Modern Shupamem vowels	Meaning
(6) a. tox	a'. tú	'head'
b. nʃot	b'. nʃùt	'mouth'
c. sox	c'. sù	'tooth'
d. jon	d'. jún	'buy!'
e. fo	e'. fù	'call!'
f. mo	f'. mú	'fire
g. ŋgox	g'. ŋgù	'town'
h. ŋgop	h'. ŋgùp	'skin'
i. tokoʔʃə	i'. túk!úʔʃə́	'knees'

As we can see from the comparison of the examples above, there is a contrast between Ward (1938) vowels and Modern Shupamem vowels in terms of the degree of height and rounding. What appears today as front high round vowel [y] as found in French *confus* 'confused', *su* 'known' etc, was initially transcribed in Ward (1938) as [ø]. The author describes it as 'a front rounded vowel between close and half close' as in *ʃøʔ* 'night', *pø* 'we', *nyø* 'hair', *titayø* 'my father', *nayø* 'my mother', *nyø* 'bee' generally found in French words such as *jeu* 'game', *feu* 'fire' etc.

If we take Ward's (1938) description of Shupamem as a document that was meant to (a) analyze the phonetic system of Shupamem and (b) introduce the reader to the difficulties associated with the tonal system gradually, one is led to admit that she meets those requirements admirably although she also recognizes that 'the research work necessary to determine these rules means a long and patient examination of a large number of carefully recorded sentences and texts and is outside the scope of this brief inquiry' (Ward 1938:436). If we assume that the data transcription in Koelle (1854) and Ward (1938) is accurate, there is an indication that Shupamem vowels seem to have shifted in an interesting way as exemplified in the following minimal sets drawn from three sources.

(7) Possible vowel shift in Shupamem

Vowel shift	Koelle (1854)	Ward (1938)	Modern Shupamem	Meaning
(a) [o]>[o]>[u]	ŋgɔ	ŋgox	ŋgù	'the country'
	e-sɔ	fox	sù	'tooth'
	fɔ	fox	fú	'call!'
(b) u~o > [ø]>[y]	e-ʃūe	ʃøʔ	ʃỳ	'night'
	jafo	føt	fỳt	'feather'
	-é-lo	ɲø	ɲỳ	'bee'
(c) a > [a] >[ɛ]	-mbara	mbarə	mbɛ́rə́	'mountain'

The data in (7), drawn from Ward (1938) suggest some coda consonants (7a) that were not found back in the days in Koelle's (1854) data. Modern Shupamem as shown in my own data also lack those coda consonants that are not present in Koelle's data. It would be very surprising that Koelle did not indicate the coda consonant at the end of the lexical item *a-tɔ* 'head' which correspond to Modern Shupamem *tu* 'head' today. Moreover, Ward (1938) examples like (2c, d, e, and f) or (3a, e, and f) seem to suggest that Shupamem had a prefix V- for those lexical items that no longer exist. It is important to note that the apparent lost vocalic prefixes in Shupamem are retained in cognate forms in other Mbam-Nkam languages (e.g., Ngwe retains prefixes for "radio", "head", "leg", "belly", etc) as pointed out to me by Lovegren (pc). From a diachronic point of view, this seems like a strange historical progression reminiscent of the so-called "Duke of York" as reported in Geoffrey K. Pullum (1975). I assumed that we might be dealing with three dialects of Shupamem with Ward's (1938) dialect exhibiting coda consonants.

Koelle's (1854) and Ward (1938) are clearly the most important studies in Shupamem that shed some light on the evolution of the language by providing reliable data that can be easily compared in order to check the direction of the sound change in progress. The examples in (7) and many others that I will not be able to cover here clearly indicate that Shupamem might have evolved from a VCV system to a CV(C) system throughout a period of 84 years. It appears that the

vowel [ɔ] took 84 years to become [o] while [o] took 68 years to become [u]. This might be a very strong claim to make, although there are reasons to believe that the changes we have seen so far cannot be an accident or an error of transcription, given the regularity that those vowels exhibit throughout Koelle's (1854) and Ward's (1938) data. I will leave this issue for further investigation.

As far as the grammar of Shupamem is concerned, there are only three studies available nowadays: (1) the structural phonology of Shupamem in Boum (1977); (2) Nchare's (2005, 2007, 2008) on morphosyntax and (3) Molu's (2009) study on Shupamem morphology. While providing a useful phonological analysis of Shupamem, Boum (1977) is couched in terms of the theoretical framework of Martinet (1960), making it inaccessible to many modern linguists.

Molu (2009) offers an in-depth analysis of Shupamem noun classes with respect to the alternation of tones depending on whether the head noun is singular or plural. This is the first morphological research done on Shupamem by a native speaker who offers a very accurate picture of both noun class prefixes and the tonal configurations in terms of formal principles on how the surface representations are derived. However, further investigation is still required to determine the status of certain noun classes that the author has not characterized yet.

Shupamem is also well-known as one of the rare languages in Subsaharan Africa to have its original script developed by King Njoya and his palace scribes around 1895 (see Dugast and Jeffers, 1950 or Smith 1963 for the description of Njoya's script). The Bamum-syllabary, also referred to as A-ka-u-ku script, was reported by Martin Göhring, a member of the Basel-Mission in 1907. It has been reported in Tuchscherer *et al* (2007) that Shupamem writing system was 'devised around 1896 by Sultan Njoya and his scribes'. Njoya's aim in creating his own writing system was an attempt to resist the domination of western cultures. Very recently, new fonts have been proposed for digital publications by The Transcultural Design-Creative Solutions[3]. More than 7000 documents on the Bamum manuscripts are claimed to be preserved by the Bamum Scripts and Archives Preservation Project directed by Konrad Tutscherer.

It is worth pointing out that the invention of a self-sustaining and self-governing writing system and printing device to document and archive the history of the Bamoun people by Sultan Njoya in the beginning of the 20th century can be viewed as a revolution and a turning point in the history of Shupamem language for many reasons. It is one of the most remarkable achievements of the century in Sub-Saharan Africa in that the invention is known to have started around 1896 and to be completed in 1903 without any influence of the outside world.

[3]The Studio For Transcultural Design-Creative Solutions, Vienna/Australia, http://www.members.aon.at/africanfonts.at/bamum1.htm (17.05.2006).

By the time the Germans set foot in Foumban, the writing system was in use in conjunction with Shupamem. The administrative map of the kingdom and an impressive amount of administrative records and legal codes were archived using the Bamum scripts. Local schools were opened in Foumban (the capital of the Bamum Kingdom) and other surrounding towns to teach the writing system and Shupamem to the community. Many manuscripts and other documents were produced, including laws and customs of the Bamum people and their neighbors exclusively in those scripts (Claude Tardits 1980:39). The writing system was thus used as a device par excellence to keep the record of the history of the kingdom, describe some recipes about the traditional medicine, the local cartography, personal correspondences, many folktales or the genealogy of the Kingdom. I will not be able to give further detail on the description of the Shupamem writing system here since it is outside the scope of the present inquiry. A detailed linguistic study of the scripts can be found in Dugast and Jeffers (1950) or Tushcherer (1999, 2007). I illustrate the Bamum writing system here for convenience.

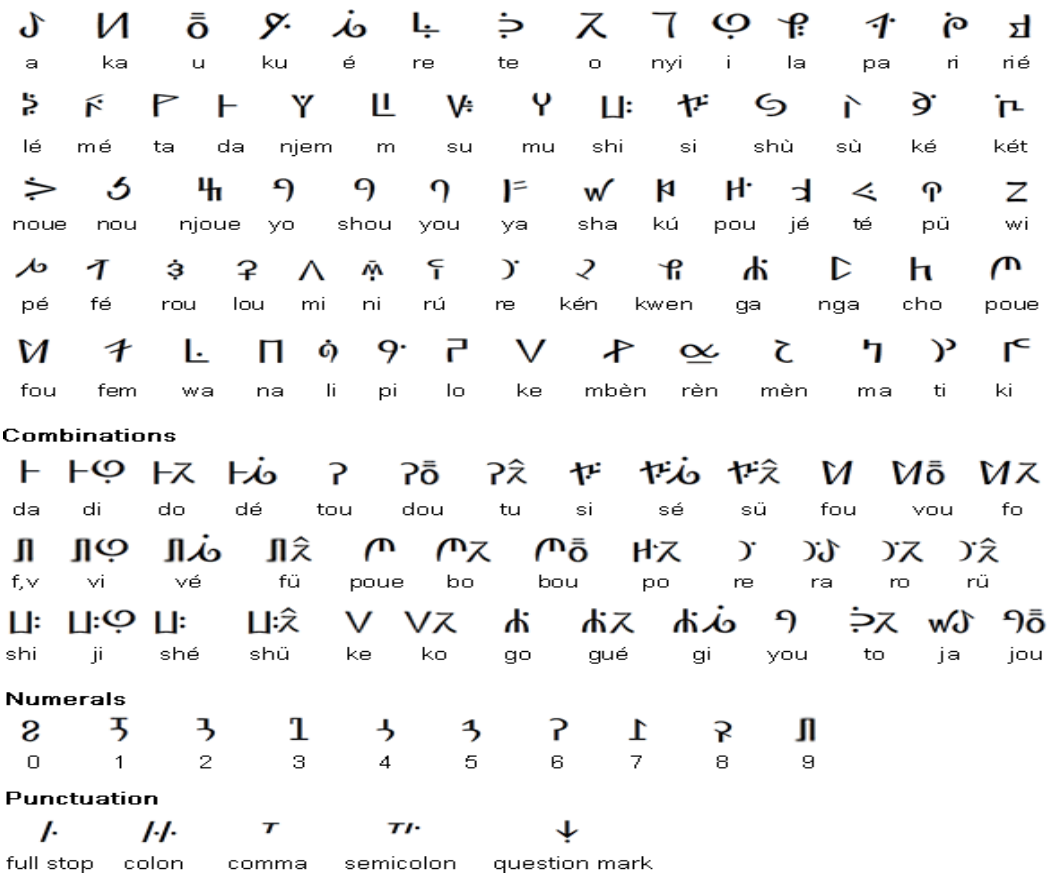


Fig. 1.4- Shupamem Scripts (source:http://www.omniglot.com/writing Bamum.htm)

It is worth pointing out that Njoya's script has fallen into decline and is in danger of losing what Tuchscherer (2007:49) refers to as its 'script community'. Tuchscherer reports in this respect that 'there remains only one single man, a traditional healer, who uses the script as his first and only mean of writing'. He also pointed out to me (pc), that there are literally thousands of books and documents written in the script which deals with Shupamem and Shumom (the court language which is different from Shupamem).

However, the Bamum script does not mark the tones, with some little exceptions. This is not surprising, granting that all the indigenous scripts in Africa do not actually mark tones. As its turns out, while many linguists are particularly interested in the science of transcription, users of the Bamum scripts are more interested in the signs that are more economical and efficient to them in conveying meanings. As for a roman orthography of Shupamem, people fall back to the script proposed by the Bible Society and used for the transcription of the language.

4.Presentation of the data

Although, a general alphabet of Cameroon languages has been proposed in Tadadjeu and Samdembouo (1984), I will continue to use the symbols of the International Phonetic Association (IPA) to transcribe the data discussed here, following a descriptive approach proposed in Tamanji (2009) for Bafut, a closely related language to Shupamem. The main reason for doing so is to facilitate the investigation of the data by other theoretical linguists or typologists, who may not claim some familiarity with the language. For instance, the IPA has a significant advantage of providing the readers with useful phonological details about complex segments, nasal place assimilations, the indication of contour tones (e.g., rising versus falling), downstep, and other tonal rules (e.g., High or Low tone spreading) that would have been completely lost if Shupamem alphabet has been adopted.

This does not mean that the Cameroon Alphabet is useless and should be abandoned altogether, but rather that, because I think it is crucial to provide the readers with some details about the configuration of the surface tonal melody in a number of grammatical categories or constituents, the alphabet would not have been more efficient in capturing all level of complexities of Shupamem. The most compelling argument for adopting the IPA instead of the Cameroonian Alphabet is that the tonal marking conventions of the Cameroonian Alphabet may not be familiar to linguists not specializing in cameroonian languages. Relevant examples described here will be presented in the following template in (8) and (9).

(8) Ø-p^{w}ó Ø-á tâ ŋ-kâʃə ndáp
1-hand 1-Poss.1sg PROG PTCP-draw 6-house
'My hand is drawing a house.'

(9) m-b^{w}ó m-á tâ ŋ-kâʃə ndáp
2-hand 2-Poss.1sg PROG PTCP-draw 6-house
'My hands are drawing a house.'

The second line in (8) and (9) represents the morpheme-by-morpheme translation of the sentences. Morpheme boundaries are separated by hyphens. I will obligatorily mark the paradigmatically zero prefix Ø- as shown in (8) before the head noun *p^{w}ó* 'hand' because it can be replaced by a nasal *N*- (9) to encode the plural prefix in Shupamem. The second line represents the morpheme-by-morpheme translation. The digits that occur before the head noun in this line indicates the noun class prefix. For instance, in the above examples, the noun

pʷó ‘hand’ is interpreted as a class 1 noun (i.e., singular) when the digit preceding it is 1, and class 2 (i.e., plural) when the same digit is replaced by 2. A similar contrast in found on the possessive pronoun *–à* surfacing right after the head noun where the possessive shows a concord with the head noun. For example, class 1 is marked by zero on the possessive pronoun *–à* and class 2 is marked by the nasal *N-* which assimilates in place with the next segment. The nasal prefix N- surfacing before the main verb *kâʃə* will be analyzed as a nominalizer for the reason that it correspond to the noun class prefix for the singular and generally turn any verb into a noun. The third and last line represents the translation of the sentence in English. So, the International Phonetic Alphabet has a significant advantage of laying out the data in a way that makes it easy to capture and crosscheck the transcription of the tone as well as some subtle idiosyncrasies that would have been completely lost if we were using the Cameroonian Alphabet.

5.Organization of the Dissertation

The dissertation is organized in the following way. Chapter Two provides an outline of the Grammar of Shupamem. It contains a cursory and basic discussion of some essential but crucial phonological, morphological aspects of Shupamem. Its main objective is to explain some general properties of Shupamem that may

facilitate the understanding all the more complicated constructions investigated here, with respect to the indication of noun classes and the tonal morphology.

Chapter Three is devoted to the internal syntax of DP in Shupamem where I propose that a number of word order alternations attested within the DP can be accounted for by using Kayne (1994) and Cinque (1999, 2005) LCA-based approach. I also argue for the Agreement Trigger Hypothesis (Henceforth ATH) which basically assumes that NP movements are triggered by some agreement features within Shupamem DP in general. For instance, Shupamem distinguishes a [Adjective > Noun] versus [Noun>Adjective] word order alternation that can be accounted for by movement. The canonical order is [Adjective > Noun]. When the noun moves pass the adjective, the DP is interpreted as definite. The definite article only spells out if and only if the head noun moves pass through the agreement head. This approach also considers the *Freezing Effects* discussed in Rizzi (2007) as a crucial factor which explains some restrictions imposed on NP movement internal to the DP in general. The freezing effects also referred to as criterial freezing can be defined as a syntactic principle that required every fronted XP (phrase) to be frozen in place (e.g., their targeted specifier position) without moving further.

Chapter Four describes the TAM system of Shupamem to set the stage for an in-depth analysis of negative sentences. Building on a number of tense and aspectual markers attested in Shupamem, I propose an analysis of the interaction between tense, aspect, negation and focus that shows how the surface forms of tense markers

are influenced by aspect and focus. I mainly focus on the distinction between perfective and imperfective and how they affect the tonal melody on the main verb.

Chapter Five considers the syntax of negation in Shupamem where two types of negation are distinguished, namely, a bipartite negation for finite sentences which always have a postverbal pronoun, and non-finite negation constructions where the postverbal pronoun does not show up.

This chapter critically reviews some derivational approaches and arguments that have been proposed to account for bipartite negation in other languages (e.g. Bell 2004; Belletti 1990, Zanuttini 1991, Pollock 1989, Nkemnji 1995 among others) to show that an alternative approach which argues that postverbal pronouns are instances of the second negative particle encoded by a Low tone, can offer a better and straightforward analysis of Shupamem negation and various related phenomena. It is also demonstrated that Shupamem is a negative concord language.

Chapter Six is concerned with the syntax of questions. In its first half of this chapter, I provide a survey of the main features of focus strategies used in all question types in order to provide some descriptive generalizations that are crucial to the understanding of the internal structure of CP with respect to left peripheral and post-verbal focus. Using Rizzi (1997, 2004) cartographic approach and related works (e.g. Aboh 2004, Collins and Essizewa 2007, Zabel 2004, Buel 2004, among others) I show that the argument structures in interrogative sentences can be better

accounted for if we assume that both focus fields have strong features that trigger overt movement.

Chapter Seven is concerned with the description and interpretation of the syntactic properties of the *body-part* (BP) reflexive expressions attested in Shupamem within the framework of Chomsky's (1981, 1986) Binding Theory. I show the difference between body reflexives and head body reflexives in terms of how they pattern together with adjective modifiers and different types of predicates. I also show how only body reflexives in combination with a reciprocal yield the reciprocal reading of the sentence. Then I move on to the discussion of how the Binding Conditions are implemented in Shupamem.

The last chapter contains the concluding remarks for this study.

Chapter Two: Outline of the Grammar of Shupamem

1.Introduction

This chapter presents a comprehensive overview of different aspects of the grammar of Shupamem that I intend to discuss in greater depth in the chapters that will follow. Since no comprehensive descriptive grammar has been published yet, I am therefore not going to attempt a review of the literature on Shupamem. I will rather provide a description of the phonology, the morphology and the syntax of simple constructions that display considerable complexities that are interesting to look at from the point of view of theoretical frameworks dealing with word order, affix order and to some extent suprasegmental phenomena. Therefore, the discussion of the noun class system as well as its interaction with various tonal patterns will serve a dual purpose here. On the one hand, it extends our knowledge of Shupamem, including the particularly understudied area of noun class systems and agreement properties internal to the DP. On the other hand, it contributes to a growing literature on the theory that guides syntax-phonology interactions cross-linguistically by providing us with reliable data for further investigation.

For instance, the reader will see in chapter 4 how grammatical tones play a crucial role in the understanding of the TAM system where the surface tone on the main verb in the clause depends on tense, aspect and modality. Moreover, chapter 5 illustrates how tones play a crucial role in the Shupamem polarity system with respect to the syntax of what I characterize as bipartite negation (Bell 2004).

This chapter is organized as follows. The first two sections present the sketch of the phonological inventory of Shupamem. Specifically, I provide a broad overview of the phonological system where I analyze the properties of underlying segments as well as surface ones. The process of nasal place assimilation that is a source for a number of segmental alternations is briefly discussed. Section 3 introduces the tonal morphology of Shupamem where I describe the underlying tones on grammatical categories taken in isolation. Section 4 describes a number of grammatical tones and explains how to derive the surface tones on each lexical entry when inserted into the clause. Although my analysis of tones here is couched in terms of the framework of Autosegmental Phonology (Goldsmith 1976a, Hyman 2010), the approach adopted here is only motivated by my desire to offer a workable analysis of the data rather than favouring any particular theory. Of course, this section is not supposed to be exhaustive, but rather it offers the reader a more general picture of how tones interact with noun classes in the language to express distinct meanings both at the phrasal level as well as at the sentential level.

Section 5 discusses the noun class system of Shupamem where I provide some illustrations of the noun classes with a particular emphasis on how they interact with the concord system on the noun modifiers. The last section concludes the chapter.

2.Notes on Phonology

This section deals with segmental as well as suprasegmental phonology of Shupamem. In this thesis I have deliberately opted for the term 'suprasegmental phonology' instead of 'autosegmental phonology' on the ground that the former is usually taken to include only things not deemed segmental, while the status of a unit as autosegmental generally depends on language-specific analyses and grammatical argumentation. This section begins with the syllable structure and moves on to the discussion of how phonological segments interact with each other. The transcription convention used in this dissertation generally corresponds to the IPA symbols. I will continue to use *j* instead of *y* for the palatal glide. The reason for doing this is to distinguish the front high rounded [y] (e.g., *fý* 'white', *tý* 'spit!') from the palatal glide (e.g., *jî* 'wisdom', *já* 'illness').

2.1.Segmental Phonology

The significant elements in the syllable are vowels, consonants and tones in Shupamem. The syllable has an onset; the peak which is generally a vowel, the most sonorous element in the syllable and an optional coda. Shupamem distinguishes three types of syllables, namely: (a) a peak (with a tone) which can be either a vowel or a nasal (V/N); (b) an onset and a peak (with a tone) (CV) and (d) an onset, a peak and a coda CVC. Like many other Bantu languages, Shupamem is also a tone language, as previously described in Ward (1938). Thus, the common syllables are CV and CVC, e.g., Ø-*lí* 'eye' versus *m-í* 'eyes' and *pàm* 'bag' versus *pǎm pàm* 'bags'. It is important to note that Ø- stands for a zero prefix for singular. Similarly, the labial nasal *m*- stands for the homorganic nasal prefix for plural, and the high tone on the first syllable of the plural form of 'bag' is a grammatical tone that expresses the plural (also see section 5 for a detail discussion of noun class prefixes in Shupamem). This explains why, in order to better understand Shupamem grammar, one first needs to take a step back and explain what the segment as well as tonal changes in a sentence mean. Helping the uninformed scholars understand the interaction between segmental and suprasegmental properties of Shupamem is a particular burden, because it is so complex and should be dealt with very carefully.

The data analyzed here suggest that only six consonants may contrast in coda position (e.g., *m, n, ŋ, t, p* and *ʔ*). It also turns out that there are other interesting restrictions imposed on certain segments word finally. For instance, no consonant cluster is allowed either in onset position or in coda position. In other words, consonant clusters are less harmonic in Shupamem because they are not allowed at all in the grammar. Nevertheless, when two consonants do co-occur consecutively, the epenthetic vowel is systematically inserted to avoid having such a combination. This is very common in loan words that have entered Shupamem lexicon such as *ŋgàrét* 'glass' (<*Eng. glass*), *mbàrét* 'bread' (<*Eng. bread*), or *màtàrásì*'mattress' (<*Eng. mattress*).

In this study, prenasalised consonants will be viewed as single consonants as in *ndáp* 'house' or *ntàp* 'tent'. Nasals are always syllabic when carrying a grammatical tone, e.g., *ŋ̀-gwàn* from *mà wàn* 'I went' where *mà* stands for the first person singular and *wàn* for the verb 'go' in the past perfective. The onset of the canonical syllables may also be labialized or palatalized, e.g., *Ø-p^{w}ó* 'hand' versus *m-b^{w}ó* 'hands'; *p^{j}á* 'avocado'. It is reported in the literature that affixes in many Grassfields Bantu languages 'typically consist of a CV, V, VC, N, and CVN' (Watters, 2003:233).

Now that is clear that there are certain complex segments of Shupamem, we need to clarify few things about them. People who will be tempted to analyze a segment that look like a consonant cluster should always keep in mind that there are severe constraints on which consonant may occur next to each other. Recognizing the value of these restrictions and other rules that apply to syllable structure is crucial. Thus, NC, CG, and NCG (where N stands for the homorganic nasal consonant, and G for either of the glides, e.g., j and w). Table 2.1 offers a general outlook of all possible syllables in Shupamem.

Structure	Examples	
CV	ʃú	'seat down!'
CVː	ʃúː	'catch!'
CVV	síè	'graveyard'
CVC	kún	'bed'
V	í	'he/she/It'
NCV	ntú	'insult'
NCVC	ndáp	'house'
CGV	kwɔm	'woodwork'
NCGV	mbwɔ́m	'clay'

Table 2.1. Shupamem Syllable Structure

The consonant and vocalic inventories of Shupamem will be analyzed in the next sections. I will offer a description of underlying segments accompanied by relevant rules that derive their surface representations.

2.1.1.The Vocalic System

Shupamem has ten vowels with an interesting contrastive length, although the role of length may not be relevant to all vowels. Contrastive length is commonly hard to perceive even though it is very productive in the language. Still, vowel length can be illustrated by using pairs of words that only differ in vowel length. It is very important to note that the length contrast is more prominent in word final position. Vowels also lengthen before nasal and prenasalized consonants. Table 2.2 represents the vocalic system of Shupamem.

Short Oral	[+front] [-back] [-round]	[+front] [-back] [+round]	[-front] [-back] [-round]	[-front] [+back] [-round]	[- front] [+back] [+round]
[+high, -low]	i	y		ɯ	u
[-high, -low]	e		ə		o
[-high, +low]	ɛ		a		ɔ

Table 2.2. Shupamem Vocalic System

In Shupamem, the vowels in table 2.2 exhibit a length contrast that can be illustrated using some minimal pairs. Data from Shupamem reveal a short and long vowel distinction as shown in (1) except from the back vowels [o] and [ɔ] that seem not to have a minimal pair respectively (see (2i&j). Vowel length is evident in CV:(C) contexts.

It is important to note that vowel length, compared to the tones, is less perceptually silent. The examples in (1) illustrate several pairs of lexical items that only differ in vowel length.

		Short		Long	
(1)	a.	sí	'count!'	síː	'turn around'
	b.	pé	'pay!'	péː	'hole'
	c.	fý	'white'	fýː	'be white!'
	d.	pɛ́t	'glue!'	pɛ́ːt	'be crazy!'
	e.	tá	'hit!'	táː	'count!'
	f.	tú	'head'	túː	'investigate!'
	g.	tɔ́ʔ	'can'	*tɔʔ	
	h.	sŏ	'saw'	*sŏː	
	i.	ŋʒʊ́	'earth'	ŋʒʊ́ː	'bell'
	k.	ʃɛ̀ʃə	'carpet'	ʃɛ̌ʃəː	'carpet'

The lack of a length contrast for [o] and [ɔ] as illustrated in (1g&h) makes me wonder whether these vowels were originally short and long counterparts of a vowel with the same quality. This is a problem other Bantuists are facing with lower Fungom languages; and some Eastern Beboid languages that are reported to have quality differences in short versus long vowels as well. No matter what the right answer is, it is very odd that only those two vowels lack a length contrast in Shupamem. Shupamem also has diphthongs as reported in Ward (1938:429). I repeat Ward's examples in (2) for convenience.

	Glide	*Example*	*Gloss*
(2)	a. /iɛ/	líɛ́nʒɯ́	'day'
	b. /ia/	nđia?ʃì	'today'
	c./ie/	nsîé	'ground'
	d. /oa/	pòá	'we' (Inclusive)
	e. /oə/	nóə́	'drink'
	f. /ɯə/	ngɯ́ə̀	'leopard'

This is not very surprising among many Grassfields Bantu languages where long vowel and diphthongs are very common (Watters 2003:234). As can be observed in (2), it is clear that Shupamem distinguishes monomorphemic diphthongs. The diphthongs such as /*iɛ*/, /*ie*/, /*oə*/ have a high tone. The diphthongs /*oa*/ and /*ɯə*/ have a rising and a falling tone respectively. The remainder have a Low tone. Since Ward's (1938) data repeated in (2), there has been no significant change in the shape of diphthongs in today's Shupamem.

It should also be pointed out that word final /*a*/ is subject to the vowel coalescence rule when an adjacent vowel is added as exemplified in (3). All the coalesced vowels are underlined.

(3) a. ndà#à > nd̲à ‘My house.’
house-1sg.POSS

b. ndà#ù > nd̲ò ‘Your house.’
house-2sg.POSS

c. ndà#ì > nd̲e ‘His house.’
house-3sg.POSS

d. ndà#ùtà > nd̲ŏtà ‘Our house (Dual)’
house-1pl.POSS.dual

e. ndà#ùpwə > nd̲ŏpwə ‘Our house (Inclusive)’
house-1pl.POSS.Incl

The examples in (3) involve coalescence at the juncture between the final vowel of the noun *ndà* ‘house’ and the possessive pronoun that follows it.

Onset consonants in Shupamem can be labialized or palatalized, that is why, within a morpheme, a non-homorganic vowel sequence CVV(C) creates a glide. Across word boundaries, vowels tend to glide or to coalesce. The status of the glide is therefore determined by the quality of the first vowel that immediately follows the consonant in a CV_1 V_2 (C) non-homorganic vowel sequence. For example, a *i*V sequence results in *j*V (e.g., *pîá* > p^{j}*á* ‘avocado’) whereas a *u*V becomes *w*V (*sú-à* > s^{w}*á* ‘wash me!’). I will still treat these kinds of syllables as CV(C) granting that labialization and palatalization are more often treated in the literature as consonant modification (See Tamanji 2009:18 for a similar argument in Bafut).

Examples of labialized and palatalized consonants are repeated in (4) and (5) for convenience.

(4)	a. p^{j}á	‘avocado’	(5)	a. p^{w}ó	‘hand’
	b. s^{j}à	‘trick’		b. s^{w}ó	‘put!’
	c. t^{j}ɛ̌t	‘paint!’		c. $ʃ^{w}$ó	‘those’
	d. tíè	‘pierce!’		d. p^{w}á	‘my hand’
	e. f^{j}u	‘sell yours!’		e. k^{w}à	‘like me!’

It is important to note from (4) and (5) that the palatalization and labialization rules are obligatory. The gliding systematically occurs in a CV_1 V_2 context where V_1 is a high front vowel (4a-e) or high back vowel (4a-e) that is immediately precedes any other vowel of Shupamem vocalic system. As a result, when the gliding rule applies, the high vowel (either front or back) becomes a glide before any other vowel. After this brief presentation of the vocalic system, let me now turn to the phonemic inventory of consonants. For the time being, I will leave the discussion of the tones aside to come back to it with more detail in section 3.

2.1.2.Phonemic Consonants of Shupamem

This section presents the phonetic segment inventory of Shupamem. There are 26 consonants, 20 of which are identified as underlying forms. The aim of this section is twofold: (a) it presents the basic phonetic inventory of Shupamem, and (b) it discusses cases of allophony.

A detailed discussion of all minimal pairs of consonants is beyond the scope of this dissertation. Nevertheless, I will offer few illustrative cases to show the readers how Shupamem consonants are combined both word internally and across word boundaries. The consonants in parenthesis are not underlying forms of the basic segments; rather they are allophones of the underlying segments in Shupamem.

	Labial	**Labio-dental**	**Alveolar**	**Palatal**	**Velar**	**Labio-velar**	**Glottal**
Oral Stops	p		t		k	kp	(ʔ)
	(b)		(d)		(g)	gb	
Fricatives	(β)	f	s	ʃ	ɣ		
		v	(z)	(ʒ)			
Nasal Stops	m	ɱ	n	ɲ	ŋ		
Approx.	w		l,r	j			

Table 2.3. Shupamem Consonant System

First of all, as can be observed in table 2.3, Shupamem has no simple voiced oral stops identified as underlying segment (e.g., /b/, /d/, /g/) although there is a contrast in voicing between labio-velar stops in isolation or after a homorganic nasal (e.g., *kpáʔ* 'match!' vs *gbáʔ* 'throw away!' and *ŋkpèn* 'slave' vs '*ŋgbèn* 'stick').

Voiced oral stops are systematically banned word initially although they can be found either after a nasal (e.g. **bùm* vs *Ø-pùm* 'egg' > *m-bùm* 'eggs'; **dòn* vs

ndòn ‘malediction’; **gàm* vs *ŋgàm* ‘problem’ or in between vowels [i.e. word/stem-internally (e.g., *kòbà* ‘robe’, *fiʃɪdɛ̀ʔ* ‘trouble’; *muːdù* ‘cup’; *múgù* ‘idiot’)]. Furthermore, a nasal plus bilabial voiceless plosive cannot occur in onset position (e.g., **m-pùm* > *m-bùm* ‘eggs’. The glottal stop is contrastive (e.g., *lí* ‘eye’ vs. *líʔ* ‘poison’), but has limited distribution, appearing only word finally (e.g., *páʔ* ‘tent’, *káʔ* ‘calabash’) or in intervocalic positions (e.g., *ʃúʔú* ‘free!’; *fúʔú* ‘become rich!’). Since the plosives [p] and [t] occur in coda position, but not [k], there are reasons to believe that the glottal stop may be an allophone of [k] in that position. It is therefore very crucial to note that in Shupamem there is no underlying segments such as */b/*, */ß/*, /d/, /g/, /z/, /ʒ/ or /ʔ/ per se. Therefore, those segments will be treated in this chapter as allophones as illustrated in table 2.3 where the arrows indicate the direction of allophony.

In addition to the segments summarized in table 2.3, Shupamem also has prenasalized voiced and voiceless consonants repeated in table 2. 4. They may surface word initially or in intervocalic positions.

	Bilabial	Labio-dental	Alveolar	Palatal	Velar	Labiovelar
Plosive	mb		nt nd		ŋk ŋg	ŋkp ŋgb
Fricative		mf mv	ns nz	nʃ nʒ		
Affricate						
Approximant	nw				nj	

Table 2.4. Shupamem Prenazalised Consonants

Lexical items with prenazalised segments in table 2. 4 are exemplified in the paradigms in (7).

(7)	Singular	Plural	Meaning
(a)	Ø-mbí	pà-mbí	'cockroach'
(b)	mvá	mvâ mvà	'clift'
(c)	ntàp	ntăp ntàp	'tent'
(d)	ndáp	ndâp ndàp	'house'
(e)	nʒàm	nʒăm nʒàm	'ax'
(f)	Ø-nʃá	pà nʃá	'fish'
(g)	Ø-ŋkɔ́m	pà ŋkɔ́m	'noble'
(h)	ŋgùp	ŋgûp ŋgùp	'skin'
(i)	nsʊ́m	nsʊ̂m nsʊ̀m	'garden'
(j)	nzə̀m	nzə̂m nzə̀m	'hip'

So far, while there are good reasons to believe that the segments in table 2.4 illustrated in (7) can be viewed as two separates sounds, I will argue that they are single unit sounds that consist of two separate segments. Similar arguments can be found in Catford (1977) who argues that prenasalized segments are single units. It is very important to point out that the nasals in table 2.4 are not syllabic, since they

are not tone-bearing (in contrast to other Grassfields languages). The examples in (7) also show the application of the nasal place assimilation rule and segment changes that are discussed in the next section.

2.2.Segment Changes in Shupamem Consonant System

This section provides a discussion of some segment changes that are very common in the context of nasal place assimilation. It also offers a brief discussion of few examples and rules of allophony that will be crucial for the explanation of some segment alternations in many syntactic constructions analyzed in the dissertation. Shupamem has an interesting asymmetry in voicing with respect to its consonantal system that cannot be covered completely here. I will rather limit myself only to some descriptive generalizations. The readers who are interested in an in-depth analysis of nasal place assimilation in Shupamem are referred to Nchare (2007) where I provide a Feature Geometry based analysis of relevant facts as well as other references on similar phenomena.

2.2.1.Plosives

As we can observe in table 2.3, there is no phonemic voicing opposition for Shupamem plosives, except for the labiovelars /*kp*/ and /*gb*/ (e.g., *kpáʔ* 'join!' versus *gbáʔ* 'throw away!'). In other words, the voiced plosives [b], [d] and [g] are

extremely rare in the language and only appear in loan words (e.g., *bàtô / bâtôó* ‘ship(s)’, *dôtàʔ > lôtàʔ / pà dôtàʔ/lôtàʔ* ‘doctor(s)’ and *gàtô/gâtôó* ‘cake(s)’).

The bilabial voiceless stop /p/ becomes voice [b] after a nasal as in (8). However, in any intervocalic position, it becomes a voice fricative [β] as in (9). The voiceless alveolar stop /t/ becomes an approximant [r] in any intervocalic position (10). Moreover, the voiceless velar stop /k/ becomes a glottal stop /ʔ/ word finally or in coda positions as shown in (11).

(8) a. /ĵɪn-pám/ > ĵɪm-bám ‘to hold’
b. /ĵɪn-pónə́/ > ĵɪm-bónə́ ‘to assemble’
c. /ĵɪn-púʔnə́/ > ĵɪm-búʔnə́ ‘to rush’

(9) a. /láp # à/ > lǎβ-à ‘Hit me!’
Hit 1sg.POSS

b. /sǎp # ɪ́ / > sǎβ-ɪ́ ‘Sterilize him!’
sterilize 3sg.

(10) a. /tɛ́t # à/ > tɛ̀r-à ‘my pot’
Pot 1sg.POSS

b. /pɛ́t # ɪ́ / > pɛ́r-ɪ́ ‘Carry him!’
carry 3sg

(11) a. /lík/ > líʔ ‘poison’
b. /púk/ > púʔ ‘package’
c. /kák/ > káʔ ‘calabash’
d. /*tákʃə̃*/ > *táʔʃə́!* ‘Carry something!’

The above examples suggest that the voiced plosives [b], [d] and [g] can only be treated as allophones in Shupamem due to the fact that they have a very limited distribution (e.g., the occur only in a post-nasal position. This is consistent with Hyman's (1972) and Anderson's (1991) assumptions that the consonant sets {b, d, and g} are allophones of the phonemes /p, l, and ɣ/. The evidence for this argument comes from the additional data from Shupamem in (12) where the first person singular of the past completive surfaces as a nasal prefix on the verb stems. That nasal prefix systematically changes the initial segment of those verbs.

(12) a. *mə pɛ́m lám > m-bɛ̌m lám
1sg accept.COMPL marriage
'I accepted the marriage'

b. *mə lánə́ mɔ́n > n-dǎnə́ mɔ́n
1sg forget.COMPL 1-child
'I forgot the child.'

c. *mə ɣánə́ mɔ́n > ŋ-gánə́ mɔ́n
1sg scare.COMPL 1-child
'I scared the child'

Note that, of all the voiceless stops, only the labial one undergoes a voicing assimilation. The voiceless consonants such as /t/, /k/ or /kp/ are inert to the voicing assimilation rule, thus remain voiceless even after the homorganic nasal as shown in (13).

(13) a. * mə tă mɔ́n > ǹ-tàà mɔ́n
1sg leave.COMPL 1-child > 1sg-leave.COMPL 1-child
'I left the child'

b. *mə ká ŋgbɔ̌m > ŋ̀-kà ŋgbɔ̌m
1sg fry.COMPL 6-corn 1sg-fry.COMPL 6-corn
'I fried some corn.'

c. *mə kpáʔʃə́ pɔ́n > ŋ̀-kpàʔʃə̌ pɔ́n
1sg pair.COMPL 2-child 1sg-pair 2-children
'I paired the children'

It is important to note from (12) and (13) that the nasal also assimilates in place with the following segment in Shupamem. For concreteness, let us look at the nasal place assimilation rule more systematically. The infinitival prefix in Shupamem *ɲ̀n-* can attach to a verb stem and assimilates in place with the initial segment of the verb stem as in shown in the following examples.

(14)	Stems	Infinitive	Meanings
(a) Labial	*pám*	**ɲ̀m-pám > ɲ̀m-bám*	'to hold'
	fá	*ɲ̀m-fá*	'to give'
	máʔ	*ɲ̀m-má*	'to launch'
(b) Coronal	*tá*	*ɲ̀n-tá*	'to count'
	sám	*ɲ̀n-sám*	'to shatter'
	ná	*ɲ̀n-ná*	'to cook'
	lɔ́ntə́	**ɲ̀n-lɔntə́ > ɲ̀n-dɔntə́*	'to beg'
	rǐ	**ɲ̀n-rǐ > ɲ̀n-zǐ*	'to choose'
(c) Palatal	*jáʔ*	**ɲ̀ɲ-jáʔ > ɲ̀ɲ-ʒáʔ*	'to pass'
	ʃáʔ	*ɲ̀ɲ-ʃáʔ*	'to wish'
	ɲɛ́ʔ	*ɲ̀ɲ-ɲɛ́ʔ*	'to spy'
(d) Velar	*kúpʃə́*	*ɲ̀ŋ-kúpʃə́*	'to change'
	ɣúʃə́	**ɲ̀ŋ-gúʃə́ > ɲ̀ŋ-gúʃə́*	'to pray'
	wúmə́	**ɲ̀ŋ-gúmə́ > ɲ̀ŋ-gúmə́*	'to respect'
	ŋɔ́m	*ɲ̀ŋ-ŋɔ́m*	'to bent'

The data in (14) suggest two predictable rules in Shupamem, namely: (a) the nasal place assimilation rule defined in (15) and (b) a consonant modification rule defined in (16).

(15) Nasal Place Assimilation

$$[+\text{nasal}] \longrightarrow [\text{place}_i] / \_\_\_ \begin{bmatrix} \text{-syllabic} \\ \text{Place}_i \end{bmatrix}$$

(16) Consonant Modification Rules

a. labial voicing: /p/ > [b] / N__
b. delateralization: /l/ > [d]./ N__
c. despirantization: /ɣ/ > [g]./ N__
d. postnasal hardening: /r/ > [z]./ N__
/w/ > [g^w]./ N__
/j/ > [ʒ] / N__

I will adopt Odden's (1996:90) analysis of Kimatuumbi which steps up *p*, *l*, *w* phonemes with rules for voicing of the labial stop, delateralisation of *l*, and postnasal hardening of *w* and *ɤ* to *g*. Each of the rules in (16) is assimilatory in nature.

From a diachronic point of view, it seems historically plausible that the postnasal voiced segments in (16) (e.g., b, d, g, g^w, z, and ʒ) are the original phonemes in Shupamem, and their voiceless counterparts (e.g., p, t, k, k^w, s, and ʃ) came via sound change. /p/, for example, is often not found as an onset, and here it

seems likely that it is derived from /b/ (the form occurring after the nasal), likewise, a rhotacisation of /z/ to /r/ has been historically attested in a variety of other languages.

This is very consistent with the facts found in Koelle (1854) data where only voiced segments are overwhelmingly licensed in onset, postnasal, between vowels as well as in coda positions. I repeat Koelle's (1854) data in (17) for convenience.

(17)	Koelle (1854)	Modern Shupamem	Meaning
	a. bo	a.' vý?	'nine
	b. nega	b'. nìkà	'gun'
	c. ndab	c'. ndàp	'cotton'
	d. nʒut	d'. nʃút	'mouth'
	e. ŋgban	e. ŋkpɛ̀n	'slave'
	f. gum	f'. ɣòm	'ten'

This of course does not count as evidence for a synchronic analysis; it is just to offer some context. The discussion of the theoretical aspect of nasal place assimilation is beyond the scope of this dissertation; therefore, I will not get into the detail of the theoretical discussion of nasal assimilation here, since it is not possible for it to be properly developed in the available space.

For the purpose of the thesis, I will limit myself only to the discussion of basic descriptive generalizations that are needed for the interpretation of relevant syntactic constructions.

Readers who are interested in an in-depth analysis of nasal place assimilation in Shupamem are referred to Nchare (2007) and relevant references therein that discuss the asymmetry in voicing between Shupamem segments in a postnasal context.

2.2.2.Fricatives

Shupamem exhibits a number of changes with respect to the realization of fricatives in certain contexts. There are three sets of fricatives, namely: (a) the labial set that includes the voiceless /f/ and the voiced [v]; (b) the alveolar set that includes the voiceless /s/ and the voiced [z]; (c) the post-alveolar or the palatal set that includes the voiceless /ʃ/ and the voiced [ʒ]. On top of these three sets of fricatives, Shupamem also has a voiced velar fricative /ɣ/ whose voiceless counterpart is not attested in grammar even as an allophone.

The voiceless labial fricative /f/ may appear word initially, sometimes between vowels (e.g., *kɨ̀fɛ̀* 'short person' and *kàfɛ̀* 'coffee') and never word finally. It forms a minimal pair with the voiced fricative that may appear in similar positions. Examples of minimal pairs for labial fricatives are given in (18).

(18)	a. fý	‘white’	a’. vý	‘aches’
	b. fʊ́ɣə́ʃə́	‘blow out’	b’. vʊ́ɣə́ʃə́	‘turn up!’
	c. fírə́	‘withdraw from fire!’	c’. vírə́	‘blow up!’

The voiceless alveolar fricative /s/ appears word initially, between vowels and never word finally. However, the voiced fricative only occurs in a postnasal context; that is after a nasal place assimilation rule has taken place. In that context, the hardening rule changes the lateral /r/ into a voiced [z] as shown in the following examples. The nasal in (19d-e) stands for the first person singular that systematically changes /r/ into [z].

(19)	a. sátá	‘veil’		
	b. tásá	‘plate’		
	c. sí	‘black’		
	d. *n-ránə́	>	n-zánə́	‘I rinsed’
	e. *n-rèn	>	n-zèn	‘I uprooted’

The voiceless palatal fricative /ʃ/ appears word initially and between vowels but never word finally. However, the voiced palatal fricative only appears in a postnasal context where the glide /j/ is hardened into [ʒ] as shown in the following examples.

(20)	a. ʃíʃá	‘scissors’		
	b. ʃúʔʃə́	‘messy’		
	c. ʃá	‘unruly’		
	d. *n-jánə́	>	ɲ-ʒánə́	‘I dried’
	e. *n-jín	>	ɲ-ʒín	‘I abandoned’

The only velar fricative /ɣ/ that is voiced may appear word initially, between vowels and never word finally. However, when it occurs in a postnasal context, it becomes a voiced velar stop as shown in (21d-e).

(21) a. ɣóm ‘ten’
b. kʉ́ɣə́ ‘to cough’
c. ɣám ‘shout!’
d. *n-ɣánə́ > ŋ-gánə́ ‘I scared (someone)’
e. *n-ɣúpmə́ > ŋ-gúpmə́ ‘I thought’

The examples discussed in (8)-(21) suggest many segments changes attested in Shupamem that are worth analyzing. Let me now turn to the discussion of nasals.

2.2.3.Nasals

There are four nasal stops in Shupamem: the bilabial nasal /m/, the alveolar nasal /n/, the palatal nasal /ɲ/ and the velar nasal /ŋ/. They all may occur word initially, in some intervocalic and in final positions except from the palatal nasal. Examples of each nasal are given in the following examples.

(22) /m/

a. mɔ́n ‘child’
b. wúmə́ ‘respect’
c. lám ‘marriage’

(23) /n/

a. nă	‘mother’
b. púnə́	‘hurry up!’
c. kún	‘bed’

(24) /ɲ/

a. ɲàm	‘horse’
b. pɛ́ɲá	‘new!’

(25) /ŋ/

a. ŋá	‘palm leaf”
b. ŋàŋà	‘now!’
c. mbúŋ	‘nails’

It is very important to point out that the homorganic nasal /N-/ that commonly expresses the noun class prefix for the singular (Class 1) in Shupamem may assimilates in place with the following segment of the lexical item. Thus on the surface, the nasal prefix may appear as /m-/, /n-/, /ɲ-/ or /ŋ-/ depending on the status of the following segment (see the discussion of noun classes in section 4).

2.2.4.Liquid consonants and approximants

The remaining consonants that require further discussion at this point are: (a) the liquid consonants /l/ and /r/, (b) the palatal approximant /j/ and the labiovelar

approximant /*w*/; none of which can appear word finally. Relevant examples that show how those segments contrast are given in (26)-(29).

(26) /l/

a. lɔ́n	‘trousers’
b. pílà	‘shelve’
c. mbàmbúlɛ̀	‘potato’

(27) /r/

a. rúʔ	‘greedy’
b. pərɛ̀n	‘blanket’
c. párə́	‘foolishness’

(28) /j/

a. jějɛ́n	‘court’
b. râjé	‘luck’
c. júʔnə̀	‘politeness’

(29) /w/

a. wó	‘stone’
b. wóʔ	‘grind’
b. lâwó	‘bald’
c. ŋwó	‘snake’

As already mentioned in (16) all these segments hardened in a post-nasal context. I will not go over the exemplification of the hardening of /l/, /r/ and /j/. For present purposes, the important information is that the labiovelar glide /w/ becomes [g^w] or [g] immediately after a nasal as shown in (30).

(30)	a. N+ wó	>	ŋ-g^wó	'stones'
	b. ɲin-wóʔ	>	ɲiŋ-g^wóʔ	'to grind'
	c. ɲin-wónə́	>	ɲiŋ-g^wónə́	'to go'
	d. ɲin-wúmə́	>	ɲiŋ-gúmə́	'to respect'

The above examples suggest that in Shupamem the simple consonants such as [p, l, r, j, and ɣ] do not appear in a postnasal context whereas their voiced counterparts [b, d, z, j, g] only occur in postnasal context.

Moreover, the data discussed here confirm Watters' (2003) observation regarding the most widespread process nasal assimilation in Grassfields Bantu languages. We have seen earlier that it is very common that a nasal prefix assimilates in place 'to the point of articulation of the initial root consonant' (Watters, 2003:236). Let us turn now to prenasalisation.

2.3.Prenasalisation

As we have already seen in the above sections, both voiced and voiceless segments can surface as prenasalized, both in underived as well as in derived contexts. This section discusses additional prenasalized forms that I claim to be part of Shupamem consonants inventory. In (31) are examples of segments that indicate that voiced as well as voiceless segments can contrast in a postnasal environment of Shupamem at the lexical level without having anything to do with any morphological process. This is so because lexical items in Shupamem are inherently associated with a noun class prefix (see the discussion of noun classes in sections 4).

(31) Prenasalized segments and examples

	Nouns	Morphology	Meanings
(a) Labial	*m-bàrə́*	**n-párə́ > m-bárə́*	'fool'
	mfɔŋ		'king'
	mvá		'canyon'
(b) Coronal	*ntá*		'plot'
	nsén		'forest'
	ndám		'net'
	n-dɔ́ntə́	**n-lɔ́ntə́ > n-dɔ́ntə́*	'begging'
	n-zum	**n-rum > n-zùm*	'witch'
(c) Palatal	*ŋ-ʒàm*	**n-jəm > ɲ-ʒə́m*	'dark'
	nʃá		'fish'
	ɲʒàp		'meat'
(d) Velar	*ŋkùp*		'debt'
	ŋgùp		'skin'
	ŋ-kpèn	*n-kpén > ŋ-kpèn*	'slave'
	ŋgbèn		'stick'

As can be observed in (31), postnasal hardening occurs among the glides (e.g., *n-jə́m > ŋʒə́m)* and the liquids (e.g., **n-rùm > n-zùm* ; **n-lɔ́ntə́ > n-dɔ́ntə́*) whereas the voicing assimilation takes place among the labial stops (e.g., **n-párə́ > m-bárə́*) in a postnasal context. Throughout the examples in (31), the morphemes boundaries, when isolable are indicated by the hyphen.

It is important to note that some nouns in Shupamem may derive from other nouns (e.g., from *párə́* 'foolishness' derives another noun *m-bárə́* 'fool' by adding a noun class prefix N- on nouns that commonly refer to people) or from a verb (e.g., from *lɔ́ntə́* 'beg' one can derive the noun *n-dɔ́ntə́* 'begging'). These data suggest that the prenasalization of voiceless fricatives are not ruled out categorically (e.g., *mfɔ̀n* 'king'; *nʃá* 'fish'). However, it is also clear from the data discussed so far that prenasalized fricatives are highly marked in Shupamem (see (14) and (31) for all the starred examples that show that certain pre-nasalized fricatives are systematically ruled out).

I conclude this subsection by claiming that the patterning of prenasalisation in Shupamem is very consistent with Anderson's (1976) conclusion. A similar conclusion is discussed at length in Steriade (1993), and Ladefoged and Maddieson (1996) that 'non-continuants are far more likely to accommodate prenasalization than are continuants' (Silverman, 1995:09). Banfanji (Silverman 1995), another close related Grassfields Bantu language to Shupamem is also known to display similar characteristics.

3.Shupamem Tonal System

This section provides a comprehensive description of Shupamem tonal system. I focus on the tonal domains with a particular interest on the placement of tones on the main verbs and and its arguments. It seems fair to point out that while a number of Grassfields Bantu languages have been described in considerable detail, none of them is well understood because of the complexity of the tonal system. Existing studies, while theoretically sound in many respects, provide a confused and at times a sloppy description of the tones in the language under investigation, due in part to the absence, until now, 'of a unified, theoretically consistent framework for describing the tone and accent' as acknowledged by Clements and Goldsmith (1984:1). It is also important to emphasize that even where such a framework is available, the complexity of the tonal systems is such that a correct description of the facts requires a very scrupulous attention to details on the part of the analysts. One famous example of the inherent difficulty of the tonal systems of Grassfields Bantu languages can be found in Hyman (1985) and Bird (1995) where those authors provide conflicting analyses of the tone on associative constructions in Yemba.

This section is my first step toward analyzing the tonal system of Shupamem by providing a brief overview of tonal inventories and tone rules of the language using the representation of the Autosegmental Phonology (Goldsmith 1976a). The basic question addressed here is what exactly counts as the underlying tone on each part of the lexical category attested in Shupamem and what are the tone association rules that account for the surface tones in a clause. The data provided here are not supposed to be exhaustive, but rather, they only serve as a way of defining the optimal transcription system of the language.

3.1.Shupamem Tonal System

Like other related Grassfields Bantu languages, Shupamem has a highly complex tonal system. Phonetically, four tones are attested in Shupamem, namely a High tone indicated by an acute accent [ˊ], a Low tone indicated by a grave accent [ˋ], a rising (LH) tone indicated by a hatcheck [ˇ] and a falling (HL) tone indicated by a circumflex [ˆ]. Moreover, a downtepped tone will be indicated by an arrow (ꜜ) before the syllable in question where the rule applies.

I assume that Shupamem is a four tone-language underlyingly, although in some cases there are reasons to believe that the rising (LH) and the falling (HL) tones are derived. There are significant tone contrasts in Shupamem lexical items: e.g., *ndáp* 'house' versus *ndàp* 'cotton', and in grammatical situations where the tone distinguishes (a) the singular from the plural: e.g., *màtwá* 'car' and *mătwâá* 'cars', (b) a perfective past tense ('e.g., *î twò* 'He came' and a tenseless verb (e.g., *î twó* 'He comes') (also see chapter 4 on TAM). In what follows, I will proceed stepwise by looking at the tone of each grammatical category in isolation, then, insert it into a phrase in order to formalize the tonal rules as suggested in Hyman (2010). For each case, I will offer few minimal pairs to illustrate how the generalization works. Thus, I will make a distinction between lexical tones (i.e., the tones on a morpheme as represented in the lexicon) and grammatical tones (i.e., the surface tones on lexical categories when used in context).

3.2.Lexical tones of nouns

Lexical tone patterns in Shupamem nouns distinguish between High, Low, and rising (LH) tones in the singular forms. The tones on plural forms usually differ from those of the singular forms. Thus, taken in isolation (citation forms), the tone realizations in (32) through (34) exhaust all tonal pattern options available in Shupamem for nominal expressions.

(32) Singular and plural forms of High toned nominal expressions

Syllable & Tonal Types		Singular forms	Plural forms	Meaning
(i)	1syll: Cv́	(a) ndáp	(a') ndâp ndàp	'house'
		(b) mɔ́n	(b') pɔ́n	'child'
		(c) ɲʃá	(c') pà ɲʃá	'fish'
		(d) nsún	(d') Ø-sún	'friend'
(ii)	2syll: Cv́ Cv́	(a) tútú	(a') tútú	'tree'
		(b) sísá	(b') sísá	'sugar cane'
		(c) tásá	(c') tásá	'plate'
(iii)	3Syll:Cv́ Cv́ Cv́	(a) ʃóʃóró	(a') ʃóʃóró	'teenage girl'
		(b) ʃĭŋgírí	(b') ʃĭŋgírí	't-shirt'
		(c) sísɔ́bə́	(c') sísɔ́bə́	'ants'

Clearly, what the examples in (32) suggest is that monosyllabic (32i), disyllabic (32ii) and three syllables nouns (32iii) belong to the same tone pattern (e.g., High toned nouns). Note that, of all the examples in (32), except from the plural form of *house* (32i-a) which uses a doublet *ndâp ndàp* 'houses' as its pluralisation strategy, the remainder of High toned nouns in Shupamem keep their High tones in their plural forms.

It is important to point out that the High tone is inserted into the overall tonal melody following the first High tone. Pluralization is a very interesting issue, but I will not be able to provide its more detailed analysis here. I will leave

the issue of how tones are used to represent the pluralisation for further investigation.

Now, what about the roots in nominal expressions that bear underlying Low-tones? I claim that, just like the High toned nouns, monosyllabic (33a), dissyllabic (33b) and three syllables (33c) Low-toned nouns also belong to the same tone pattern (e.g., Low-toned nouns). The tonal patterns of the underlying Low toned nouns are depicted in (33).

(33) Singular and plural forms of low toned nominal expressions

Syllable & Tonal Types		Singular forms	Plural forms	Meaning
(i)	1syll: Cv̀	(a) tàm	(a') ntâm tàm	'swamp'
		(b) mfɔ̀n	(b') mfôn mfòn	'king'
		(c) tà	(c') pà tà	'insect'
(ii)	2syll: Cv̀ Cv̀	(a) nìkà	(a') nǐkà	'gun'
		(b) ʃɪrə̀	(b') ʃǐrə	'trap'
		(c) làrə̀	(c') lărə	'bicycle'
(iii)	3Syll:Cv̀ Cv̀ Cv̀	(a) sàsɛ̀rə̀	(a') săsɛ́rə	'Praying mantis'
		(b) ʃɛ̀kɛ̀rɛ̀ʔ	(b') ʃɛ̌kɛ́rɛ̀ʔ	'sifter'
		(c) màlòrĭ	(c') mălórĭ	'rice'

Notice that while the lexical tones on the noun root (e.g., Low) considerably change in their plural forms, what all those Low-toned nouns have in common in the plural is the Low tone on the final syllable of the plural forms. Furthermore, except for monosyllabic nouns (33a) which use either a doublet (33i-a'&b'), a noun class prefix (33i-b'&c') to form their plural, the remainder of the examples use a High tone to form their plural, in which case, the first syllable (33ii) and (33iii) surfaces with a rising (LH) tone followed by a High tone.

Let us now consider the tonal patterns in (34) illustrating rising toned nouns (34-i), L-H toned nouns (34-ii), and H-L toned nouns. Here, the tonal alternation is very tricky. First, monosyllabic rising (LH) toned nouns form their plural by prefixing a noun class *pà-* to the nominal root (34i-a&b), in which case the rising (LH) tone does not change. Secondly, for the rising (LH) toned nouns that uses reduplication as its pluralisation strategy (34i-d'), the tone on the nominal root remains the same and the following syllable is High.

The disyllabic nouns in (34) consist of an initial Low tone followed by a High tone, except for the example in (34ii-c) which has a prefix *mə-* where the L-H sequence becomes LH-H in the plural, which implies that the plural is marked by a High tone. However, in (34ii-c), the plural is marked by a combination of a prefix plus a High tone.

For disyllabic nouns with a H-L tones, the surface tones on plural forms are identical with those of the singular forms, whether a prefix is used or not.

(34) Singular and plural forms of (i) Rising and (ii) L-H and (iii) H-L toned nominal expressions

Syllable & Tonal Types		Singular forms	Plural forms	Meaning
(i)	1syll: Cv̌	(a) nă	(a') pà nă	'mother'
		(b) wă	(b') pà wă	'father'
		(c) sŏ	(c') sŏ	'saw'
		(d) lăp	(d') lăp láp	'bunch'
(ii)	2syll: Cv̀ Cv́	(a) kùsá	(a') kŭsá	'rag'
		(b) tìtá	(b') tĭtá	'elder'
		(c) mə-fá	(c') pə̂-fà	'twin'
(iii)	2Syll:Cv́ Cv̀	(a) kákù	(a') pà kákù	'goods'
		(b) já?fù	(b') pà já?fù	'leaf'
		(c) tɛ́bɛ̀	(c') tɛ́bɛ̀	'table'
		(d) tɛ́ndɛ̀	(d) tɛ́ndɛ̀	'tent'

In sum, as we can see from the above examples, Shupamem clearly has a rising (LH) tone that is lexical (e.g., *nă* 'mother') as well as one that is grammatical (e.g., *kŭsá* 'rags'). It follows from the above examples that Shupamem distinguishes three underlying tones for nominal expressions: a Low, High, a rising (LH) tone.

3.3.Lexical tones on Adjectives

This section discusses the lexical as well as grammatical tones of adjectives in Shupamem. I focus on the discussion of the tonal properties of the adjective as taken in isolation with some illustrations to set the stage for formalizing some generalizations about the grammatical tones. All the underlying tones on the adjectives are repeated in (35).

(35) Lexical tones on the adjectives in Shupamem

Syllable & Tonal Types		Singular forms	Plural forms	Meaning
(i)	**1syll: Cv́**	(a) sí	(a') sí sí	'black'
		(b) fý	(b') fý fý	'white'
(ii)	**2syll:Cv́Cv́**	(a) nté́né́	(a') nté́né́ nté́né́	'straight'
		(b) pámʃə́	(b') pámʃə́ pámʃə́	'narrow'
		(c) pʊ́tə́	(c') pʊ́tə́ pʊ́tə́	'red'
(iii)	**2syll:Cv̀ Cv́**	(a) pàké́t	(a') pàké́t pàké́t	'red'
		(b) pỳké́t	(b') pỳké́t pỳké́t	'bad'
		(b) kàmké́t	(b') kàmké́t kàmké́t	'rare'
(iv)	**1syll: Cv̀**	(a) mbù	(a') mbŭ mbù	'raw'
		(b) ndù	(b') ndŭ ndù	'naked'
		(c) n-sà	(c') nsă nsà	
(v)	**2syll: Cv̀Cv̀**	(a) kəmʃə̀	(a') kəmʃə́	'short'
		(b) tàmì	(b') ntăm ntám	'long'
		(c) nɗınə̀	(c') nɗınə̀	'last'
(vi)	**2Syll:Cv̀-Cv̌**	(a) mə̀-tɔ̌ʔ	(a') pə̂-tɔ̌ʔ	'small'
		(b) mə̀-tǐt	(b') pə̂-tǐt	'tiny'
		(c) mə̀-kăm	(c') pə̂-kăm	'messy'
		(d) rànə̌	(d') rànə̌	'smart'

I am very cautious here to assume that the English "adjectives" automatically correspond to Shupamem "adjectives". Note that Shupamem only has a few "true" adjectives. It is therefore important to note that some of the adjectives in (35) look more like "nominal" and others more like "verbal". To put it more explicitly, the lexical items that I have characterized as "adjectives" in (35) do not represent a coherent class of adjectives in Shupamem, rather, they should be understood as semantic adjectives. Nevertheless, it is important to point out that the adjectives in (35) belong to three different coherent classes both semantically and morphologically:

(a) Morphologically, Shupamem distinguishes adjectives that can be referred to as "nominal adjectives" (35-vi). Those adjectives correspond to the class of adjectives that show all the morphological characteristics of nominal expressions (e.g., noun class prefixes, gender and number values) (also see section 4 for the discussion of the noun class system;

(b) Semantically, Shupamem also distinguishes a number of lexical items that can be referred to as "inherent adjectives" (35-i, ii, iv, and v). They correspond to a class of adjectives that do not show any morphological property of the noun. They are sometimes referred to as 'true adjectives' in the literature of Grassfields Bantu languages and can only function as adjective modifiers in the grammar ;

(c) There is also a group of adjectives that can be referred to as "participle/verbal adjectives". They correspond to a class of adjectives that are derived from verbs (see (35iii-a, b, c)). For example, the adjective for *nice* usually functions as a predicate that may literally translate as *The child is nice* (e.g., *mɔ̀n pŭ* 'the child is nice' with *pŭ* as a full predicate) in a context where one would expect *a nice child* or *the nice car*.

Let me point out that one has to be careful when talking about "adjectives" and "verb" while discussing the properties of certain types of adjectives in Shupamem. Compare (36a) in English and (36b) in Shupamem.

(36) a. My child *is* tall (*is* functions as a copula and *tall* as an adjective)

b. *mɔ̀n-à* *sǎ*
1-child-1sg.Poss be tall
'My child is tall'. (*sǎ* functions as a verb)

c. *mɔ̀n-à* *pâ* *n-sà*
1-child-1sg.Poss COP 1-tall
'My child is tall'. (*pâ* functions as a verb and *n-sà* as an adjective)

As can be seen in (36b&c), Shupamem unlike English, is a language that displays two possibilities, namely (i) the intransitive predicate *sǎ* 'be tall' or (ii) the combination of the copula verb *pâ* and the derived adjective *n-sà* where the homorganic nasal that commonly indicates the singular noun class for humans, is

prefixed to the verb root -*sǎ*. Crucially, the reader should keep in mind that a semantic adjective in Shupamem can be expressed using an intransitive predicate like *sǎ* 'be tall', a combination of a copula verb and a true adjective such as *ntàm* or a derived one such *n-sà* 'tall' to mean exactly the same thing.

Going back to the discussion of the tonal classes observed in (36), I will conclude this subsection with the claim that Shupamem clearly distinguishes four tonal contrasts when it comes to adjectives: High toned adjectives (35i&ii), Low toned adjectives (35iv & v); L-H (34iii) and rising (L-LH) toned adjectives (35vi). The plural of the adjectives is expressed either (a) by a reduplicant (35i-v) or (b) by a noun class prefix *pɪû*- with a falling tone (35vi). Right now, I will not say much about the plural tones of the adjectives that show a great deal of alternation. Let me move on to the underlying tones on adverbs, prepositions and conjunctions.

3.3.1.Lexical tones of Adverbs, Prepositions and Conjunctions

This section briefly describes the tonal configuration on the set of grammatical categories that are invariable in Shupamem. Granting that adverbs, prepositions and conjunctions are functional elements belonging to a closed class, I will treat them all together to see what contrast we have in terms of their tonal features.

(37) Tonal patterns on adverbs, conjunctions and preposition.

	H	L	LH	HL
(i) Adverbs.				
1syll : Cv	kú ‘ truly’	ndjàʔ ‘today’	rěn ‘many ’	ndâː ‘really’
2syll: C vCv	nəkʉ́ ‘quickly’ púnní ‘quickly’	nkùrə ‘yesterday’		
(ii) Conj.: Cv	ná ‘but’	kè ‘or’; nə̀ ‘and’		pŷ ‘and excl’ pô ‘and incl.’
(iii) Prep: Cv	má ‘at’	tə̀ ‘on’		
	jé ‘front of’	ŋkə̀p ‘near’	--	--

This is obviously not an exhaustive list of adverbs, conjunctions and prepositions in Shupamem. Note that of all the categories in (37), only adverbs display the four tonal contrasts (37-i). Conjunctions distinguish between High, Low and falling (HL) tone. Prepositions only have two tones: High versus Low (37-iii). Let us now turn to the underlying tones on the verbs.

3.3.2.Lexical Tones on Verbs

This section provides a comprehensive description of tonal patterns on Shupamem verbs taken in isolation. Verbs in Shupamem belong to one of the two possible underlying tone classes: High (H) or rising (LH) at least for monosyllabic verbs (as in their imperative and infinitival forms). The paradigms in (38) give a general outlook of the tonal contrast between lexical tones taken in isolation and their surface forms when they occur in the perfective forms. Notice that there is a two ways distinction among verbs with respect to tone: (a) a vowel length distinction (e.g., short versus long vowels) and the tonal pitch distinction (e.g., High tone versus rising tone).

(38) High toned Verb roots versus past perfective forms

Syllable & Tonal Types		Verb roots	Perfective Forms	Meaning
(i)	1syll: Cv́	(a) sí	(a') mə ˡsí	'I calculated'
		(b) síː	(b') mə ˡsíː	'I turned around'
		(c) tá	(c') mə ˡtá	'I abandoned'
		(d) táː	(d') mə ˡtáː	'I counted'
(ii)	2syll: Cv́Cv́	(a) síkɛ́t	(a') mə ˡsíkɛ́t	'I calculated repeatedly'
		(b) síːkɛ́t	(b') mə ˡsíːkɛ́t	'I turned repeatedly'
		(c) tákɛ́t	(c') mə ˡtákɛ́t	'I hit repeatedly'
		(d) táːkɛ́t	(d') mə ˡtáːkɛ́t	'I counted repeatedly'
(iii)	3Syll: CvCvCv	(a) síʃəkɛ́t	(a') mə ˡsíʃəkɛ́t	'I calculated repeatedly'
		(b) síːʃəkɛ́t	(b') mə ˡsíːʃəkɛ́t	'I turned repeatedly'
		(c) táʃəkɛ́t	(c') mə ˡtáʃəkɛ́t	'I hit repeatedly'
		(d)táːʃəkɛ́t	(d') mə ˡtáːʃəkɛ́t	'I counted repeatedly'

The examples in (38) clearly reveal the contrast between the underlying tonal structure (e.g., High) and the surface tone on the verb. The arrow (ˡ) before the perfective forms show the all these High tones are downstepped. When two High tones co-occur next to each other, if they are separated by a word boundary, the second is systematically downstepped.

This generalization holds true for monosyllabic (38i), disyllabic (38ii) and three syllable (38iii) verbs. Downstep is very common in Grassfields Bantu languages. It is viewed in the literature as ‘a manifestation of accent, with essentially demarcative function: it separates items making up a phrase or utterance’ (Guarisma (2003:312). It is worth pointing out that there is no Low toned verb underlyingly in Shupamem. However, from a rising toned monosyllabic verb, one can derive up to three syllables with the following tonal distribution in (39).

(39) Rising tone verbs in the past perfective

Syllable & Tonal Types		Verb roots	Perfective Forms	Meaning
(i)	1syll: Cv̌	(a) sv̌	(a') mə sv̌	'I farted'
		(b) sv̌ː	(b') mə sv̌ː	'I buried'
		(c) kǎ	(c') mə kǎ	'I spit'
		(d) kǎː	(d') mə tǎː	'I peeled'
(ii)	2syll: CvCv̌	(a) svkv̌t	(a') mə svkv̌t	'I farted repeatedly'
		(b) sv̌ːkv̌t	(b') mə sv̌ːkv̌t	'I buried repeatedly'
		(c) kàkv̌t	(c') mə kàkv̌t	'I spit repeatedly'
		(d) kàːkv̌t	(d') mə kàːkv̌t	'I peeled repeatedly'
(iii)	3Syll: CvCvCv̌	(a) svʃəkv̌t	(a') mə svʃəkv̌t	'I farted repeatedly'
		(b) sv̌ːʃəkv̌t	(b') mə sv̌ːʃvkv̌t	'I turned repeatedly'
		(c) kàʃəkv̌t	(c') mə kàʃəkv̌t	'I hit repeatedly'
		(d)kàːʃvkv̌t	(d')mə kàːʃvkv̌t	'I counted repeatedly'

What is seen here in (39) is a clear distinction between a rising short (39i-a) versus rising long vowel (39i-b) contrast. This also holds true for disyllabic and three syllables verbs. The tonal distribution in (39) illustrates all patterns on the Shupamem verb. Speaking of the underlying tones on the verb, it is clear that the rising tone is predictable. It systematically falls on the last syllable of the verb

(usually the verb extension). The rising tone changes to Low on the verb's root whenever a suffix is added, but still has a surface realization as rising on the suffix This is a classic autosegmental tone behavior. The rising tone is really a sequence of LH, so the Low gets stretched out over the initial syllables. Notice that in the perfective, all lexical tones on the verb remain the same. It follows from (39) that downstep rule does not apply to the rising tone verbs in Shupamem. This is understandable; granting that the rising tone starts with a Low tone and there is no H-H sequence that would have triggered the downstep rule.

To conclude this section, I claim that a number of grammatical or semantic functions in Shupamem (e.g., word order, tense, aspect, and to some extend mood) are expressed by segments or tones. Furthermore, floating tones are very common in Shupamem. They result from a deletion of a morpheme that used to indicate a grammatical function. For example, the pronoun *mà* 'first person singular' has a underlying Low tone in its citation form, but always surfaces as a rising tone in subject position. That is why I will claim later that the nominative case in Shupamem is encoded by a default High tone. I will come back to this finding in the next section where I describe the grammatical tones in more detail.

4.Shupamem Grammatical Tones

In this section, I take a closer look at the tonal patterns, thus, within the IP, in order to familiarize the reader with the kinds of structures I will be looking at throughout this dissertation. I begin with some background information about the indication of the underlying tones on each pronoun in their citation forms as well as their surface realizations in subject position or in object position. I build on everything I have said earlier about the underlying tone on a number of lexical categories to provide an analysis of the surface tones. Thus, I will present the tonal domains in the sentence as to how some functional categories affect the underlying tones we have presented in the above sections.

4.1.The Surface tones on subject and object DPs

This section describes the tonal configurations of Shupamem VP arguments in order to show how both nouns and pronouns behave in subject and object positions with respect to their surface tones. The following are Shupamem pronouns and their underlying tones in table 2.5.

	Strong Pronouns		Weak Pronouns		
Case	Nom/Acc	Genitive	Nominative	Accusative	Genitive
1sg	mà	já	mə̌	ă	ă
2sg	wù	jú	ŭ	ŭ	ŭ
3sg	wí	jí	í	ĭ	í
1pl(Incl.)	pwə	júpwə	pwə̌	úpwə	úpwə
1pl(Excl.)	pỳ	jý	pў	ý	ý
1pl.dual	tà	jútà	tə̌	tà	tà
2pl	pʉ̀n	jʉ̀n	pʉ̀	ʉ̀n	ʉ̀n
3pl	pwó	jáp	pə́	áp	áp

Table 2.5. Shupamem Pronouns

Table 2.5 reveals the following about the tonal configuration of all Shupamem pronouns in their citation forms:

(i) Of all the nominative and accusative pronouns, only the third person singular or plural bears a High tone.

(ii) All possessive pronouns bear a High tone in their strong form but not in the weak genitive.

There is not much we can say about the weak forms for now, granting that we need to put them in context to actually decide on their surface tones. In this section, I am trying to understand whether full DPs and pronouns differ with respect to their tonal morphology within a sentence. Let us compare the behaviour of a High tone noun *mɔ́n* 'child' and a Low tone noun *mfɔ̀n* 'king' to that of a Low tone pronoun

mà ‘first person singular’ and High tone pronoun *wî* ‘third person singular’ both in the subject positions (see (40)-(41)) as well as in object positions (see (42).

(40) a. mɔ́n pî mè
1-child P_3 arrive.PFV
‘The child arrived.’

b. mfɔ̀n pî mè
6-king P_3 arrive.PFV
‘The king arrived.’

(41) a. í pî mè
3sg P_3 arrive.PFV
‘He arrived.’

b. mǎ pî mè
1sg P_3 arrive.PFV
‘I arrived .’

(42) a. mfɔ̀n pî ʃàʔʃə́ mɔ́n
6-king P_3 greet.PFV 1-child
‘The king greeted the child’

b. mɔ́n pî ʃàʔʃə́ mfɔ̀n
1-child P_3 greet.PFV 6-king
‘The child greeted the king.’

c. mfɔ̀n pî ʃàʔʃə́ # á
6-king P_3 greet.PFV 1sg
‘The king greeted me’

d. mfɔ̀n pî ʃàʔʃə́ # î
6-king P_3 greet.PFV 3sg
‘The king greeted him’

The examples in (40)-(42) suggest that the full DP underlying tones (40a&b) do not change in subject position. But in (41b), we see that the underlying Low tone on *mə̌* '1sg' has become a rising (LH) as a consequence of the application of a Phrasal High tone rule associated with the nominative case in Shupamem that assigns a High tone to any Low tone pronoun in subject position. I conclude that only pronouns are sensitive to the nominative case High tone in Shupamem. There is not much to say about (41a) because the third person pronoun already has a High tone.

With respect to the object positions, we can observe from (42a&b) that the full DPs keep their underlying tones whereas in (41c&d), all pronouns surface with a default High tone. This implies that only the pronouns are sensitive to the Phrasal High tone that encodes the accusative case in Shupamem. That is why all pronouns in Shupamem that occur in direct object position surface with a default High tone whether they have an underlying High tone or not. It follows from these observations that:

(i) All underlying Low toned subject pronouns surface with a rising tone because of the phrasal High rule that encodes the nominative case. All High tone pronouns remain High.

(ii) All pronouns in direct object positions surface with a default High tone because of the phrasal High tone that encodes the accusative case.

Now, what about the pronouns that occur in indirect object positions (oblique case)? In other words, what happens to pronouns that occur immediately after a preposition? As we can see in (43), in indirect object position, all pronouns surface with a default Low tone that encodes the oblique case in Shupamem. It does not matter whether they have an underlying High tone or not.

(43) a. mfɔn pì fà ndáp nə́ mà
6-king P_3 give.PFV house to 1sg
'The king gave the house to me'

b. mfɔn pì fà ndáp nə́ # ì
6-king P_3 give.PFV house to 3sg
'The king gave the house to him'

The examples in (43) offer the full tonal paradigm for all the pronouns. As we have seen earlier, our finding is very consistent for all the pronouns in that, all underlying Low tone pronouns surface with a rising tone in subject position because of the phrasal High tone spreading. The High tone pronouns in (44c) and (44h) remain High.

(44) a. mə̌ ˈjɪ́ 'I know'
b. wŭ ˈjɪ́ 'You know'
c. ɪ́ ˈjɪ́ 'He/ she knows'
d. pwə̌ ˈjɪ́ 'We know' (Incl.)
e. pў ˈjɪ́ 'We know' (Excl.)
f. tə̌ ˈjɪ́ 'We know' (Dual)
g. pŭ ˈjɪ́ 'You know'
h. pə́ ˈjɪ́ 'They know

As for the object pronouns repeated in (45) and (46); comparing the High tone verb *pám* 'to touch' and the rising tone verb *tă* 'to leave' using the past tense and the future tense, the Low tone pronoun *à* '1sg' (45a&b) still surfaces as High as the consequence of the High spreading rule that encodes the accusative case. The High tone pronoun *áp* '3pl' remains the same (45a&b).

(44) a. í pí pám # á
3sg P_3 touch.PFV 1sg
'He held me'

b. í ná twó pám # á
3sg IRR F_1 touch.PFV 1sg
'He will hold me.'

(45) a. í pí ˈpám # áp
3sg P_3 touch.PFV 1pl.
'He held them'.

b. í ná twó pám # áp
3sg IRR F_1 touch.PFV 1pl.
'He will hold them.

The tonal configuration is still the same even with a rising tone verb *tă* 'to abandon' illustrated in (46) and (47). In the past perfective, the verb *tă* 'abandon' surfaces with a Low tone whereas in the future tense, it remains rising. Nevertheless, all object pronouns surface with a default High tone.

(46) a. í pí tà ŋá
3sg P_3 abandon.PFV-1sg
'He abandoned me'

b. í ná twó tă ŋá
3sg IRR F_1 abandon 1sg
'He will abandon me'

(47) a. í pí tà wáp
3sg P_3 abandon.PFV 1pl.
'He abandoned them'.

b. í ná twó tă wáp
3sg IRR F_1 abandon 1pl.
'He will abandon them.'

4.2.The surface tones on the Noun Phrase

Let me now turn to the tonal configuration of the noun phrase. Typically, a noun phrase in Shupamem consists of the head noun and its various modifiers (adjectives, possessives, etc). Depending upon the kind of modifier that follows the head noun, an associative marker that is encoded by a floating Low tone may link the head noun to its modifier. The examples discussed here will include all types of nominal modifiers to show how the underlying tones on the noun may change depending on the surface position of the noun modifiers.

4.2.1.Surface tones on the Noun and Adjectives

Let us start by comparing the underlying tones of the head nouns in combination with adjectives both in pre-nominal position as well as in post-nominal position. Let us start with adjectives in pre-nominal positions as illustrated in (48) and (49). Our sample nouns in this case will be *mɔ́n* 'child' and *pɔ́n* 'children' for the High tone nouns and *mfɔ̀n* 'king' and *mfɔ̀n mfɔ̀n* 'kings' for the Low tone nouns. We want to test whether the underlying tone changes when an adjective modifier is added.

(48) a. *kʉ́kɛ́t mɔ́n > kʉ́kɛ́t ` mɔ̀n
strong 1-child
'A strong child

b. *kʊ́ké́t pɔ́n > kʊ́ké́t ` pɔ̀n
strong 2-child
'Strong children.'

(49) a. kʊ́ké́t ` mfɔ̀n
Strong 6-king
'A strong king.'

b. kʊ́ké́t kʊ́ké́t ` mfɔ̀n mfɔ̀n
strong 7-king
'Strong kings.'

Here we observe that, when the High tone adjective precedes a Low tone noun (48a&b), the underlying High tone nouns *mɔ́n* 'child' and *pɔ́n* 'children' automatically take a default Low tone that encodes the associative marker. But, with the underlying Low tone nouns (49a&b), nothing happens. Note that the underlying High tone on the adjective remains High in pre-nominal position.

Now, if we switch the order between the head noun and the adjective, we obtain the following tonal configuration in (50) and (51).

(50) a. mɔ́n jɪŋ̂-kʊ́ké́t
1-child 1-Def-strong
'The strong child

b. pɔ́n pɪ̀ŋ-kʊ́ké́t
2-child 2-Def-strong
'The strong kings.'

(51) a. mfɔ̀ŋ jɪŋ̂-kʊ́ké́t
6-king 1-Def-strong
'The strong king'

b. mfɔ̃n mfɔ̀n pɪ̀ŋ-kʉ́ké̋t
7-king 2-Def-strong
'The strong kings.'

In post-nominal position, the associative marker does not play any role at all. Instead, the head noun positioned word initially triggers the spell out of an agreement marker that occurs immediately before the noun modifier. I will come back to the detail of word order alternation and agreement in noun class in chapter 3. What is important here is the idea that the surface tone on the head noun many vary under certain circumstances.

4.2.2.The tones on the head noun in possessive constructions

There is also an interesting tonal alternation in Shupamem possessive constructions depending on the position of the possessive pronoun or DP. As we can see in the paradigms in (52) and (53), the underlying tone on the possessive pronoun changes depending on its surface position with respect to the head noun. When the possessive pronoun occurs before a head noun, it keeps its underlying High tone due to the fact that the focus position is associated with an underlying H tone. But given that all possessive pronouns in their citation forms already bear a high tone, the spreading rule becomes redundant, and there is not much to say about the surface form.

(52) a. já ndáp ‘MY house’
b. jú ndáp ‘YOUR house’
c. jí ndáp ‘HIS/ HER house’
d. júpwə ndáp ‘OUR house’ (Incl.)
e. jý ndáp ‘OUR house’ (Excl.)
f. jútà ndáp ‘OUR house’ (Dual)
g. jʉ́n ndáp ‘YOUR house’
h. jáp ndáp ‘THEIR house’

(53) a. já ndàp ‘MY cotton’
b. jú ndàp ‘YOUR cotton’
c. jí ndàp ‘HIS/HER cotton’
d. júpwə ndàp ‘OUR cotton’ (Incl.)
e. jý ndàp ‘OUR cotton’ (Excl.)
f. jútà ndàp ‘OUR cotton’ (Dual)
g. jʉ́n ndàp ‘YOUR cotton’
h. jáp ndàp ‘THEIR cotton’

However, if the possessive pronoun occurs after the head noun as in (54) and (55), it takes the tone of the head noun.

(54) a. ndà à ‘My house’
b. ndà ù ‘Your house’
c. nda ì ‘His/ her house’
d.ndà ùpwə ‘Our well’ (Incl.)
e. ndà jỳ ‘Our house’ (Excl.)
f. ndà jùtà ‘Our house’ (Dual)
g. ndà jʉ̀n ‘Your house’
h. ndà jàp ‘Their house’

(55) a. ndàβ à ‘My cotton’
b. ndàβ ù ‘Your cotton’
c. ndàβ ì ‘His/ her cotton’
d. ndàβ ùpwə ‘Our cotton’ (Incl.)
e.ndàβ ỳ ‘Our cotton’ (Excl.)
f. ndàβ ùtà ‘Our cotton’ (Dual)
g. ndàβ ʉ̀n ‘Your cotton’
h. ndáβ àp ‘Their cotton’

Again, the associative marker plays a crucial role in the alternation observed on the tones of both the head noun and the possessives. In (52), the underlying High tone on the head noun *ndáp* ‘house’ becomes Low. I have no explanation for this unexpected change. But I assume that the floating Low tone of the associative marker is responsible to the tonal changes on the possessives. We can see this more explicitly on the following possessive DPs in (56) and (57). Note that the possessee always comes before the possessum and the associative marker is expressed by a Low tone as seen earlier.

(56) a. *tásá* ` ˡmɔ́n
Plate 1-child
‘The child’s plate’

b. *tásá* ` ˡpɔ́n
plate 2-children
‘The children’s plate’

(57) a. *tásá* ˡmfɔ̀n
Plate 6-king
‘The king’s plate’

b. *tásá* ` ˡmfɔ̌n mfɔ̀n
plate 7-king
'The kings' plate'

With the possessive DPs, the underlying High tone on the possessum *mɔ́n* 'child' and *pɔ́n* 'children' is downstepped because of the floating Low tone that encodes the associative marker. If we replace the High tone noun *tásá* 'plate' with a Low tone noun *ʃìrà* 'trap', we obtain the following tonal configuration in (58) and (59).

(58) a. *ʃìrà* ` ˡmɔ́n
trap 1-child
'The child's trap.'

b. *ʃìrà* ` ˡpɔ́n
trap 2-children
'The children's trap.'

(59) a. *ʃìrà* ` ˡmfɔ̀n
trap 6-king
The king's trap.'

b. *ʃìrà* ` ˡmfɔ̌n mfɔ̀n
trap 7-king
'The kings' trap.'

By way of conclusion of this section, it is worth pointing out that the tonal patterns that emerged from this discussion suggest that tone plays lexical and functional roles in Shupamem. In subject position, a default high tone encodes the nominative case. Evidence from this argument comes from the rising tones on all

Low toned pronouns that occur in subject position. In object position, there is also a default High tone that encodes the accusative case. And in the indirect object position, there is a default Low tone that indicates the oblique case. As mentioned before, this investigation was not meant to be exhaustive, I have deliberately excluded many aspects of Shupamem verbal morphology. The readers are referred to chapter 4 where I provide a detailed analysis of the TAM system. Now that we have clarified what lexical tones are in Shupamem, we are in a happy position to talk about the noun class system which plays a crucial role within the noun phrase in terms of word order and inflectional morphology.

5.The Shupamem Noun Class System

This section provides a detailed description of the noun class system of Shupamem. It is very common in the literature of Grassfields Bantu syntax to assume that that noun classes have been part of the morphological system of their proto-language. Previous studies such as Dunstan (1966a), Hyman (1972), Hyman, Voeltz, and Tchokokam (1970), Voorhoeve (1968, 1971b), Hombert (1980) and most recently Watters (2003) argue that the noun class system of the GB languages can be reconstructed from the Proto-Bantu (PB). Thus, the current description of Shupamem noun classes helps not only theoretical linguists working in syntax or morphology (e.g., works on the correlation between word order and agreement morphology), but also scholars interested in the typological characteristics of a

cluster of languages (e.g., the investigation of an unusual linguistic feature among languages that belong to the Niger Congo group outside Bantu). Moreover, it may also help typologists or historical linguists who are interested in comparative aspects of individual grammars.

Of particular note is the fact that Shupamem, along with other Eastern GB languages, has a much reduced noun class system (15 classes) as compared to Wide Bantu languages discussed in Greenberg (1977). I claim that Shupamem has a Bantu-like noun class system of a moderate complexity. Nevertheless, it is significant that, although Shupamem noun class system has been significantly reduced 'to the point that the pronominal subject markers for third person distinguish only animate versus inanimate referent rather than the full set of noun classes' (Hombert, 1980:163), it still retains typical Bantu-like noun class system that corresponds to Proto-Bantu reconstructions.

	Animate	**Inanimate**
3rd person singular	jí	á
3rd person plural	pá	á

Table 2 .6 Shupamem Third Person Pronouns

All these pronouns in table 2.6 are weak forms that are commonly used in subject position. The animate forms *jî* (third person singular) and *pá* (third person plural) are used for animate subjects whereas the inanimate *á* is used for inanimate subjects as well as in focus subjects. The inanimate *á* is used for both singular and plural inanimate objects. The majority of Shupamem nouns distinguish their plural from their singular form by the change in the noun prefix. However, many nouns that have identical forms in the singular and the plural, namely those which lack an overt noun prefix, indicate number agreement in various ways: (1) some use the quantifier *rěn* 'many' for the plural, as in *rěn ɲý* 'many bees' or (2) *pá* 'plural prefix' as in *pá ɲý* 'the bees' (note that *Ø-ɲý* 'bee' differs from *pá ɲý* 'bees' just in noun class); (3) concords elements as in *pàm-à* 'my bag' vs *pǎm-ʃá* 'my bags; (4) tones as in *ʃırə̀* 'trap' versus *ʃĭrə́* 'traps'; reduplication as in *ndáp* 'house' versus *ndǎp ndàp* 'houses or *mfɔ̀n* 'king' versus *mfɔ̌n mfɔ̀n* 'kings'.

Hombert (1980:145) argues that it is quite impossible to identify a noun class in Shupamem by just looking at the noun prefixes. In this regards, I will opt for his idea of using the status of the onset consonant in every lexical item to identify different classes attested in Shupamem.

5.1.Distribution and Pairing of Noun Classes

Due to some terminological confusions that arise with respect to the concept of *noun class* and *gender*, it has been proposed in recent theories of nominal classifications that those two concepts refer to the same grammatical construct (typologically). This argument received significant support in Corbett (1991); Aronoff (1994), Aronoff and Fudeman (2005); Corbett (2006), among other studies. This fusion results in the term 'gender'(Corbett, 1991:146) which commonly refers to morphologically overt agreement features on the noun, the adjective, the verb, determiners and to some extent some complementizers. In this respect, it is argued that a given language has gender if it displays 'some syntactic covariance between a semantic or formal property of one element and a formal property of another' (Steele, 1978:610 cited in Corbett 1991, 2006). In this section, I offer an in-depth analysis of the Shupamem noun class system. I will use relevant data to illustrate how the agreement morphology can be identified on a set of lexemes displaying the same paradigmatic pairs *singular-plural*.

Building on Hombert (1980:145) where six noun classes have been identified for Shupamem after comparing both noun prefixes and consonant onsets for possessive concords, I expand the analysis of noun classes to other nouns that have not been discussed before . Thus I will add additional data to illustrate each noun class with respect to possessive concords and other noun modifiers such as

adjectives, numerals, possessive pronouns, demonstratives and relative pronouns. I will only illustrate the possessive concords here, but it is reasonable to assume that all the illustrations that are discussed later on for possessive will have similar behavior to that of the other post-nominal modifiers.

Class	Noun Prefix	Noun concords on post-nominal modifiers		
		POSS	**DEM**	**Numeral; Adj.; Relative Pro.**
1 /2	m-/p-	Ø-ѵ̀/p-ѵ́	Ø-ѵ̌/p-ѵ̌	Ø-ѵ́/p-ѵ́
1a/2a	N-/Ø-	Ø-ѵ̀/p-ѵ́	Ø-ѵ̌/p-ѵ̌	Ø-ѵ́/p-ѵ́
1b/2b	Ø-/pa-	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/ʃ- ѵ̌	Ø-ѵ́/ʃ-ѵ́
3 /4	mɯ/pɯ	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/ʃ-ѵ̌	Ø-ѵ́/p-ѵ́
5/6	Ø-/N-	Ø-ѵ̀/m-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
7/8	CV/red.	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
9/10	LL/LHH	ʃ-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
11/12	L-HL/LH-HLH	ʃ-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
13/14	ɟ̃in-/pɨ̃n-	--	--	--
15	N-	--	--	--

Table 2.7. Shupamem Noun Class System

Table 2.7 suggests that any noun modifier (e.g., possessives, demonstratives, numerals, adjectives, relative pronouns etc) that immediately follows the head noun agrees in noun class with that noun.

However, I have to admit that the modifiers only show one of a small set of patterns. Therefore, it is hard to argue that everything agrees. As we can see in table 2.7, the great majority of modifiers have zero in the singular and ʃ- in the plural, which could be seen as simply showing number agreement, but not class/gender agreement.

Nevertheless, I will maintain that the noun classes are of two seperate kinds: (a) the class prefix on the noun stem and (b) its corresponding agreement concord on the noun modifier as summarized in table 2.8. It is important to note that unlike in many Bantu languages, Shupamem verbs do not show any noun class agreement, so Shupamem noun classes do not include the verbal agreement the way many Bantu languages do.

Table 2.7 suggests that nouns in Shupamem belong to 15 noun classes according to their noun class prefixes. Countable nouns pair together so that singular nouns in class X will have their plural forms in class Y. Each noun class prefix agrees with a specific noun class concord on the noun modifier that comes after the head noun. In this analysis, I will make a distinction between a zero morpheme (Ø) that is paradigmatically contrastive with another overt morpheme (e.g., a homorganic nasal, a CV prefix etc). Thus, Shupamem noun class prefixes[4]

[4] In this analysis, I will assume following Demuth (2000:275) that class 1a and class 1b (1a&b) semantically refer to singular forms of nouns such as humans, personified animals, proper names and other animates. They are usually paired with class 2 that encodes their plural forms. Class 3 denotes nouns such as trees, plants or inanimate entities, and they are paired with class 4 that

exhibit various phonological shapes that may sometimes overlap in meanings. Different approaches are used in dividing noun classes in the literature, resulting in more or fewer classes. For this analysis, I have adapted Hombert's (1984) system to incorporate other classes that were not present in his study. Of the 15 major classes established for Shupamem, the odd-numbered classes (1, 3, 5, 7, 9, 11, 14) are used for singular nouns and even-numbered classes (2, 4, 6, 8, 10, 12) are used for plural nouns. Due to a number of variations that occurs in class 1 and class 2, instead of creating new classes there, I have just added a letter suffix (e.g. 1a/2a and 1b/2b). The reason for treating all the allomorphs of class 1 as subclasses, not a new class, is that they all share a single agreement concord on the post-nominal modifier. Examples of nouns and their noun class prefixes are given in table 2.8 for convenience.

encodes their plural forms. Class 5 encodes miscellaneous, pair things, and they are usually paired with class 6 that encodes their plural forms.

Class	**Singular Prefix**	**Plural Prefix**	**Gloss**
1/2:m-/p-	1 mɔ́n	2 pɔ́n	‘child(ren)
1a/2a:N-/Ø-	1a n-sàsʉ́	2a Ø-sàsʉ́	‘elder sibling(s)
1b/2b: Ø-/pa-	1b Ø-wa	2b pa-wa	‘father(s)
3/4: mɯ/pɯ	3 mʉ̀-mví	4 pʉ̂-mvì	‘goat(s)’
5/6: Ø-/N	5 Ø-pùm	6m-bùm	‘egg(s)’
7/8: Cv́/red. H> HL-L	7 ndáp	8 ndâp ndàp	‘house(s)’
9/10:LL/LHH	9 ʃɪrə́	10 ʃɪ̌rə́	‘bicycles’
11/12: L-HL/LH-HLH	11 màtwâ	12 mătwâá	‘car(s)
13/14: jin/pin	13 ĵɪn-Adjective	14 pin-Adjective	‘adjective(s)’
15 N-	--	--	Participle marker

Table 2.8- Singular versus Plural Noun Classes

Table 2.8 brings us to the question of how we came up with the noun class pairs. Put differently, do we have any semantic coherence among each noun class in table 2. 8? I will answer to this question in next section in my discussion of both semantic and morphological coherence that can be observe among the nouns that belong to the same class.

5.2.Noun class pairs and their semantic content

In principle, each noun class pair row in table 2.7 and 2.8 (e.g., 1/2; 1a/2a; 1b/2b; 3/4; 5/6; 7/8; 9/10; 11/12; 13/14) stands for a singular/plural pair. The noun class prefix that expresses the participle (e.g., class 15) is not paired since it has no corresponding plural morpheme. Class 15 is encoded by a homorganic nasal that may attach to any verb stem in the imperfective/progressive aspect of the indicative mood.

5.2.1.Class 1 and 2

Class 1/2 and their subclasses 1a/2a and 1b/2b represent a major class that includes most human nouns (kinship terms, proper names, titles, etc) as well as a number of animals. It follows from table 2.7 that class 1 can be subdivided as follows:

(a) The noun prefix of Class 1 is *m*-(e.g., *m-ɔ́n* 'child') and is substituted by the plural prefix *p-/pà* (e.g., *pɔ́n* 'children') in Class 2. It mostly includes human nouns.

(b) The noun prefix for the subclass 1a is N-(e.g., *n-sàsú* 'elder sibling') whose plural noun class prefix is a zero morpheme Ø-(e.g., *Ø-sǎsú*

'elder siblings') that encodes class 2b. Many kinship terms are found in this category.

(c) The noun class prefix for the subclass 1b is a zero morpheme Ø- (Ø-*wă* 'father') whose corresponding plural noun class prefix is *pà-* (e.g., *pà-wă* 'fathers') encoding Class 2b. Proper names and a number of kinship terms are found within this subclass.

Rather than illustrating each class and subclass separately, I repeat these examples in (60) to show why it makes more sense to group these nouns under class 1 and it subclasses in Shupamem. I have also added the possessive concord to show how all these nouns share similar agreement concords on the possessives.

(60)

Class 1: *m-*	Class 2: *p-*
a. m-ɔ́n # Ø-à 1-child 1-Poss.1sg 'My child.'	a'. p-ɔ́n # p-á 2-child 2-Poss.1sg 'My children.'
b. m-ɔ́n m-ɔ́n # Ø-à 1-child 1-child 1-Poss.1sg 'My grandchild.'	b'. p-ɔ́n p-ɔ̀n # p-á 2-child 2-child 2-Poss.1sg 'My grandchildren.'

(61)

Class 1a : *N-*	Class 2a: Ø-
a. n-sàsʉ́ # Ø-à 1a-elder brother 1-Poss.1sg 'My elder brother.'	a'. Ø-sǎsʉ̀ # p-á 2a-elder brother 2-Poss.1sg 'My elder brothers.'

b. m-bɛ̀tnʒèm # Ø-à
1a-junior brother 1-Poss.1sg
'My junior brother.'

b'. Ø-pɛ́tnʒám # p-á
2a-junior brother 2-Poss.1sg
'My junior brothers.'

(62) Class 1b: Ø - Class 2b: *pà*

a. Ø-nă # ʃ-á
1b-mother 1b-Poss.1sg
'My mother.'

a'.pà-nă # ʃ-á
2b-mother 2-Poss.1sg
'My mothers.'

b. Ø-wă # ʃ-á
1b-father 1b-Poss.1sg
'My father.'

b'.pà-nă #ʃ-á
2b-father 2-Poss.1sg
'My fathers.'

The most interesting aspect of the possessive pronouns in (60)-(62) is that it reveals the morphological coherence between the nouns that belong to class 1/2 just by looking at the noun prefixes on the head noun and what kind of agreement concords they require on the possessive pronouns that they govern. For instance, all the noun class prefixes for class 1 (60) and class 1a (61) take the same agreement concord ('[Ø + Low tone]' for the singular possessives and '[*p*- + High tone]' for plural possessives). However, in (62), the noun class prefixes for nouns that belong to class 1b and class 2b all take the same agreement concord ('[ʃ-+High tone]' for both singular and plural forms.

5.2.2.Class 3 and 4

Class 3 and Class 4 include some names of animals, small items (e.g., small boxes, containers etc) and other plants among other things. The noun prefix of class 3 is expressed by *-mù* with a Low tone (e.g., *mù-mvî* 'goat') and is substituted by the prefix of Class 4 *pʉ̂-* with a falling (HL) tone in the plural (e.g., *pʉ̂-mvì* 'goats'). The following are examples of Class 3 and Class 4 nouns with their agreement concords on the possessives.

(63) Class 3: *mù-* Class 4: *pʉ̂-*

a. mʉ̀-vì # ʃ-a
3-goat 3-Poss.1sg
'My goat'

a'. pʉ̂-vì # ʃ-á
4-goat 4-Poss.1sg
'My goats.'

b. mʉ̀-sì # ʃ-á
3-bird 3-Poss.1sg
'My bird'

b'. pʉ̂-sì # ʃ-á
4-bird 4-Poss.1sg
'My birds.'

c. mʉ̀-tɔ̀ʔ # ʃ-á
3-box 3-Poss.1sg
'My goat.'

c'. pʉ̂-tɔ̀ʔ # ʃ-á
4-box 4-Poss.1sg
'My boxes.'

d. mʉ̀-ŋì # ʃ-á
3-knife 3-Poss.1sg
'My knife.'

d'. pʉ̂-vì # ʃ-á
4-knive 4-Poss.1sg
'My knifes.'

Note that the agreement concord on the possessives both for Class 3 and Class 4 is the palatal *ʃ-* plus a High tone.

5.2.3.Class 5 and 6

The majority of nouns that belong to Class 5 are signalled by a zero prefix (Ø-) (e.g., *Ø-pùm* ‘egg’). Their plural forms belong to Class 6 whose noun class prefix is a homorganic nasal N-(e.g., *N-pùm* > *m-bùm* ‘eggs’). It is important to point out that the homorganic nasal that expresses Class 5 may assimilate in place with the following segments of the noun stem. Class 5 and Class 6 include body part terms (e.g., arms, legs, eyes, ears etc), hunting items (e.g., arrows, spear etc) and all kinds of eggs. The examples given in (64) illustrate Class 5 and Class 6.

(64) Class 5: Ø- Class 6: *N*-

a. Ø-pùm # Ø-à
5-egg 5-Poss.1sg
‘My egg’

a’. m-bŭm # m-á
6-egg 6-Poss.1sg
‘My eggs.’

b. Ø-kùt # Ø-à
5-leg 5-Poss.1sg
‘My leg’

b’. ŋ-kŭt # m-á
6-leg 6-Poss.1sg
‘My legs.’

c. Ø-pwò # Ø-à
5-hand 5-Poss.1sg
‘My hand’

c’. m-bwó # m-á
6-hand 6-Poss.1sg
‘My hands.’

d. Ø-tŭ̀t # Ø-à
5-ears 5-Poss.1sg
‘My ears’

d’. n-tŭ̀t # m-á
6-ear 6-Poss.1sg
‘My ears.’

e. Ø-kjɛ̀t # Ø-à
5-arrow 5-Poss.1sg
‘My arrow.’

e’. ŋ-kjɛ̆t # m-á
6-arrow 6-Poss.1sg
‘My arrows.’

f. Ø-fỹt # Ø-à
5-feather 5-Poss.1sg
'My feather'

f'. m-fỹt # m-á
6-feather 6-Poss.1sg
'My feathers.'

As can be seen in (64), while Class 5 has a zero prefix for its noun prefix and a zero prefix for its agreement concord plus a Low tone on the possessive, Class 5 has an homorganic nasal that assimilates in place with the first segment of the noun stem (e.g., *m-bŭm* 'eggs'; *n-tŭt* 'ears' *ŋ-kŭt* 'legs'). However, the agreement concord for Class 6 is consistently an homorganic nasal *N*-plus a High tone.

5.2.4. Class 7 and 8

The nouns that fall in classes 7 and 8 are mostly monosyllabic. Their singular forms (e.g., *ndáp* 'house') commonly bear an underlying High or Low tone. The corresponding plural form is expressed by a reduplicant that consists of a CV copy of the noun stem (e.g., *ndâp ndàp* 'houses'). I claim that class 8 is a class of reduplicants in Shupamem. Note that in the singular form (i.e., Class 7), the noun has an underlying High tone that becomes a falling (HL) tone in the plural form with the second syllable bearing a Low tone. I also argue that Class 7 nouns are signalled by an underlying High whereas Class 8 nouns are expressed by a Low (L) tone. The nouns that fall under class 7 and 8 are mostly locative expressions

(e.g., house, forest, farm, places, towns, etc). The following examples illustrate Class 7 and class 8.

(64) Class 7: Cv̀- Class 8: Cv̌.Cv̀

a. ntàβ # Ø-à
7-tent 7-Poss.1sg
'My tent'

a'. ntǎp ntàp # ʃ-á
8-tent tent 8-Poss.1sg
'My tents.'

b. nsɛ̀n # Ø-à
7-forest 7-Poss.1sg
'My forest'

b'. nsɛ̌n nsɛ̀n # ʃ-á
8-forest forest 8-Poss.1sg
'My forests.'

c. ndà # Ø-à
7-house 7-Poss.1sg
'My house'

c'. ndǎp ndà # ʃ-á
8-house house 8-Poss.1sg
'My houses.'

d. nsù # Ø-à
7-farm 7-Poss.1sg
'My farm'

d'. nsŭm nsùm # ʃ-á
8-farm farm 8-Poss.1sg
'My farms.'

The juxtaposition of the head nouns with the possessives in (64) shows some interesting segment changes in coda positions of nouns in class 7 as well as class 8. For instance, the nouns *ntàp* 'tent' (64a); *ndáp* 'house' (64c) and *nsúm* 'farm' (64d) automatically drop their oral labial nasal labial consonants /p/ and /m/ before the zero agreement concord for Class 7. However, in the plural, those coda consonants are maintained (except the reduplicant *ndàp* in (64c')) before the palatal *ʃ*- that encodes the agreement concord for Class 8). Notice that the agreement

concord for Class 7 is a zero morpheme plus a Low tone. The agreement concord for Class 8 is a palatal *ʃ-* plus a High tone.

5.2.5.Class 9 and 10

Classes 9 and 10 represent the pairs of nouns (mostly disyllabic) that only differ in terms of their surface tones. Class 9 nouns that encode the singular forms have an underlying Low (L-L) tone (e.g., *ʃɪrə̀* 'trap'). In the plural, the nouns that belong to Class 10 appear with a LH-H sequence (e.g., Cv̌.Cv́) where the first syllable bear a rising tone (LH) while the second one bears a High tone (e.g., *ʃɪ̌rá* 'traps'). These classes display a different range of nouns that include things that are made of ion (e.g., mice traps, bicycles, umbrellas, etc) or cotton (some traditional clothing). The examples of Class 9 and 10 are given in (65) for convenience.

(65) Class 9: Cv̀-Cv̀ Class 10: Cv̌.Cv̀

a. ʃɪrə # Ø-à
9-trap 9-Poss.1sg
'My trap'

a'. ʃɪ̌rá # ʃ-á
10-trap 10-Poss.1sg
'My traps.'

b. màpàm # Ø-à
9-coat 9-Poss.1sg
'My coat'

b'. măpám # ʃ-á
10-trap 10-Poss.1sg
'My coats.'

c. fèʃə # Ø-à
9-needle 9-Poss.1sg
'My (sewing) needle'

c'. fĕʃə́ # ʃ-á
10-needle 10-Poss.1sg
'My (sewing) needles.'

The striking fact about Class 9/10 nouns is that they are disyllabic and only differ at the autosegmental level. The agreement concord for Class 9 is zero whereas that of Class 10 is the palatal ʃ-.

5.2.6.Class 11 and 12

Classes 11 and 12 represent a group of nouns (mostly dissyllabic) that also differ only in terms of their surface tones. They are mostly loan words whose singular forms such as *màtwâ* 'car' have a L-HL tone sequence that becomes LH-HLH (e.g., *mătwâá* 'cars') in the plural forms. The following examples in (66) illustrate the nouns that fall in Class 11 and 12.

(66) Class 11: Cv̀-Cv̂ Class 12: Cv̆.Cv̂v́

a. màtwâ # ʃ-á
11-car 11-Poss.1sg
'My car'

a'. mătâá # ʃ-á
12-car 12-Poss.1sg
'My cars.'

b. gàtwô # ʃ-á
11-cake 11-Poss.1sg
'My cake'

b'. gătôó # ʃ-á
12-cakes 12-Poss.1sg
'My cakes.'

c. kàkâ # ʃ-á
11-cacao 11-Poss.1sg
'My cacao.'

c'. kăkâá # ʃ-á
12-cacoa 12-Poss.1sg
'My cacaos.'

d. tèlê # ʃ-á d'.tětêé # ʃ-á
11-television 11-Poss.1sg 12-television 12-Poss.1sg
'My television' 'My televisions.'

The data in (66) provide some evidence that phonology in addition to semantics is a crucial factor in loan word noun class assignment in Shupamem. For instance, all the loan words assigned to Shupamem Class 11 and 12 are disyllabic. Once they have entered Shupamem lexicon, they are assigned particular tones in a way that conform the schema in Class 11 and 12 nouns in the language. This implies that loan words are adapted systematically to the phonology of Shupamem.

5.2.7. Class 13 and 14

Class 13 with its prefix *ĵìn-* primarily functions as an infinitive. Nevertheless, "nominal adjectives" exhibit a plural form that is encoded by the prefix *pìn-*. That prefix encodes class 14. Note that although the prefix *ĵïn-* primarily functions as the infinitive marker, it is also used in Shupamem as a class prefix that only appears before the adjectives that immediately follow the head noun (see chapter 3 for the discussion of the internal syntax of Shupamem).

In some citation forms that describe the qualities of people or things as in English expressions like *the nice one, the strong one etc*, those noun class prefixes are very productive in the language. I repeat a few examples in (67) for

convenience. Those forms do no accept any of the agreement concords we have described so far.

(67)

Class 13: *ǰ̈n*	Class 14: *p̀̈n*
a. ǰɪm-bòkɛ́t 13-nice 'The nice one.'	a'. pìm-bòkɛ́t 14-nice 'The nice ones.'
b. ǰɪm-bɏ̀kɛ́t 13-bad 'The bad one.'	b'. pìm-bɏ̀kɛ́t 14-bad 'The bad ones.'
c. ǰɪŋ-kàmkɛ́t 13-rare 'The rare one.'	c'. pìm-kàmkɛ́t 14-rare 'The rare ones.'
d. ǰɪm-zɛtkɛ́t 13-heavy 'The heavy one.'	d'. pìm-zɛ̀tkɛ́t 14-heavy 'The heavy ones.'

5.2.8. Class 15

Class 15 is the last class in our classification. It is indicated by a nasal prefix N- that usually attaches to the verb root to form a class of what I refer to as 'verbal adjectives and to some extent a participle. I claim that the homorganic nasal that encodes Class 15 is an adjectivizer that derives an adjective from a verb as shown in the following examples.

(66)	Verb	Adjectives
	a. sǎ ‘be tall’	a’. n-sà ‘tall’
	b. lǎm ‘to gossip	b’. n-dàm ‘gossiping’
	c. rànkə̌ ‘harden’	c’. n-zànkə̀ ‘hardened’

The examples in (66) show how from some verbs are derived a class of adjectives in Shupamem that express quality or properties. One on the property of these adjectives is that they all have a Low tone whether it is a monosyllabic or a dissyllabic adjective.

6.Conclusion

This chapter has analyzed three important features of Shupamem. It has mainly focused on the description of (1) the phonological system, (2) the tonal system and (3) the noun class system of the language. Those three grammatical features are what I consider to be at the core of Shupamem grammar. I have shown how tones and noun classes are interrelated not only at the phrasal level, but also at the sentential level. It is clear from the above description that, in order to have a better understanding of many aspects of Shupamem syntax; one has to pay a particular attention to the configuration of the noun class system as well as the tonal system. We have shown that what may appear as an underlying form in one sentence may surface with a different form in another context. Nasal place assimilation as well as many tonal changes are very common in Shupamem sentences.

Having discussed those key features here, we are now better equipped to analyze other aspects of the grammar. I will build on the arguments developed here to provide a principled account for word order alternation internal to Shupamem DP. In other words, this chapter sets the stage for the analysis of the syntax of DP.

Chapter Three:The Syntax of Shupamem DP and Greenberg's Universal 20

1.Introduction

This chapter presents a case study of word order variation observed in Shupamem noun phrases that combine the demonstrative, the numeral, the adjective and a head noun. The analysis proposed here adopts the minimalist approach to account for the trigger of a number of movement operations within the noun phrase. Specifically, it is demonstrated, contra previous theories such as Greenberg's Universal 20 (Greenberg 1963); Hawkins (1983); Rijkhoff (1990, 2002); and Cinque (2005) that 19 orders are grammatical in Shupamem data. Building on Greenberg's (1966) Universal 20 discussed in references like Cinque (2005), Abels and Neeleman (2006, 2009) where it is argued that only 14 orders are attested and derivable in UG, I offer an alternative approach that describes not only the 19 acceptable orders, but also provides principled explanations of why the remaining order possibilities are ruled out. Thus, the central questions addressed in this analysis are the following:

(a) What is the internal syntactic structure of a DP in Shupamem with respect to the surface position of the head noun and its modifiers (e.g., the demonstrative, the numeral and the adjective)?

(b) Granting that Shupamem is a language with a noun class system, what role do noun class prefixes play in a number of syntactic movement operations observed within the DP?

(c) What is the nature of syntactic movement operations? In other words, are movement operations internal to the DP phrasal constituents (XP) or heads (X)?

(d) What is the nature of head movement if any? Is it syntactic or phonological?

As a first step, I assume that NP movements apply for semantic reasons (e.g., information structure effects such as focus or topic) as well as for morphological reasons (e.g., agreement in number or noun class). The *Agreement Trigger* (henceforth AT) adopted in this analysis shows that previous hypotheses about word order alternations internal to the DP were too restrictive and do not actually hold on empirical ground, at least for a language like Shupamem. I conclude that the apparent word order freedom of nominal modifiers observed in Shupamem follows from agreement morphology (e.g., noun class prefix, definite article) which determines the surface form of the whole DP.

In terms of the analysis that is developed here, I argue that Shupamem data provide empirical evidence for a functional projection (e.g., AgrP) located below D, and that its specifier position may serve as the landing site for any of the constituents (e.g., head noun and its modifiers). I will maintain Kayne's (1994) key assumptions of the Linear Correspondence Axiom[5] that (a) with respect to base generation, specifiers universally should come before lexical heads, which in turn precede their complements and that (b) concerning syntactic movement operations, all movement is to the left.

Concerning Greenberg's Universal 20, I argue contra Cinque (2005) that of the twenty-four logically possible orders that combine the demonstrative, the numeral, the adjective and the head noun, 19 are actually grammatical in Shupamem. I understand that Cinque's inquiry was not dealing primarily with focus orders, but for the purpose of a better understanding of more facts about DP inflectional domain of Shupamem, I think it is worth to extend Cinque's hypothesis to focus oriented DP orders as well. That may account for the extra-unexplained five order

[5] In this analysis, I will only present the core idea of the LCA. See Kayne (1994) for the original discussion of the antisymmetry approach. Note in particular as discussed in Kayne's (1994) monograph, that the Linear Correspondence Axiom (LCA) together with a particular definition of asymmetric c-command predicts only SVO and OVS as underlying orders in UG. Typically, the LCA assumes that SVO is the universal underlying word order from which other possible orders are derived as a result of movement to the left. The centerpiece of the LCA is based on three different concepts: (a) (Asymmetric) c-command, (b) the dominance relationship of an order pair of non terminal nodes (X, Y) and (c) linear ordering. The original definition of the LCA can be summarized as follows:

(i) *Linear Correspondence Axiom*
Let P be a phrase marker, T the set of P's terminals and A the maximal set of ordered pairs {<X, Y>} such that X and Y are non-terminals in P and X asymmetrically c-commands Y. Then d (A) is the linear ordering of T (adapted from Kayne 1994:3-6).

possibilities available in Shupamem. I will show that phrasal movements that give rise to word alternations in Shupamem are subject to Rizzi's (2006, 2007) freezing effects. That is why I will explore some aspects of Rizzi's insight about the Freezing Principle in my explanation of a body of restrictions imposed on phrasal movements within the DP. I explore the agreement mechanism along the lines of Chomsky (2000, 2001, 2004, 2005), Collins (2004), Carstens (2010) among others. Although demonstrative and possessive pronouns occasionally come before the head noun in Shupamem, the structure in (1) will be viewed as a plausible working hypothesis for the unique universal underlying order, realized in the S-structures of English-type DPs, where no overt movement has taken place.

(1) [DemP [NumP [AP [NP]]]]

Among the concrete issues discussed here are those related to the trigger for movement and the technical implementation of why certain orders and not the others are grammatically acceptable as Shupamem noun phrases. On the empirical side, the findings I present here are important for the theory of word orders within the DP in Grassfields Bantu in general and Shupamem in particular in that they show the implication of agreement effects on syntactic movement operations (e.g., freezing effects) internal to the noun phrase.

This chapter is organized as follows. Section 2 provides a brief overview of a number of prominent analyses pertaining to account for Greenberg's Universal 20. Section 3 discusses the key premises of the *Agreement Trigger* approach proposed here. Its core assumption is this: the apparently free word order attested in Shupamem DP follows from the obligatory movement of the noun phrase to the specifier position of the functional projection dominating the agreement head that I claim to encode the definite article preceding the noun modifier. Sections 4 and 5 discuss the morphosyntax of the noun phrase where details about Shupamem noun classes are offered. Section 6 provides a detailed account of the linear order of elements within the DP with a particular focus on the *Freezing Principle* with respect to the derivation of marked orders as well as unmarked ones. It explains why certain orders are grammatical while others are not in a way that naturally highlights the cartography of the left periphery of Shupamem NPs. Section 7 discusses the derivations of grammatical as well as ungrammatical sequences in comparison with Cinque's (2005) typology. It is shown that many phrasal movements are subject to the freezing effect. The last section summarizes all the findings of the study.

2.Previous Analyses of Greenberg's Universal 20

Greenberg's (1963) word order universals have received significant attention of formal grammarians as well as historical linguists trying to uncover and account for 'cross-language word order patterns' (Hawkins 1983:3) in what can be viewed today as the theory of word order universals in generative grammar. This section briefly comments on three major contributions to research on Greenberg's Universal 20. In what follows, I offer a cursory overview of (a) Greenberg's Universal 20 and its revisited version proposed in Hawkins (1983), (b) Cinque's (2005) LCA-based approach and (c) Abels and Neeleman (2006, 2009) non-LCA approach.

2.1. Greenberg's Universal 20

In language typology research, a linguistic universal is a very general statement that is meant to be true for an impressive number of natural languages. This section comments on one of Greenberg's implicational universals describing correlations between features within the noun phrase. It was first highlighted in Greenberg's (1966) work describing word order universals and other grammatical correlations across typologically different languages. In his definitions of the so-called language universals, Greenberg (1966:87) writes about the universal order of elements in the *Noun Phrase* that:

(1) Universal 20 (Greenberg 1966:87)

> When any or all of the items – demonstrative, numeral, and descriptive adjective – precede the noun, they are always found in that order. If they follow, the order is either the same or its exact opposite.

In other words, to the left of the N only one ordering is possible (cf. (2)), while to its right both the same ordering, (3a), or its mirror-image, (3b), are possible:

(2) a. *Dem > Num > A > N*[6]

b. **A > Num > Dem >N*

(3) a. *N> Dem > Num > A*

b. *N > A > Num > Dem*

As it turns out, this formulation in (1) appears to be too strong, because exceptions have been found, specifically in cases where all the three modifiers follow the head noun. Notice that the first part of this statement has remained unchallenged as interpreted in Cinque's (2005) LCA-based approach. Researchers like Heine (1981) and Hyman (1979:70) reported the existence of the order *N>Num>A>Dem*, which conforms neither to *N>Dem>Num> A*, nor to *N>A>Num>Dem*. Hawkins (1983:119), citing Hyman (1979: 27), mentioned the existence in Aghem (Grassfields Bantu) of the order *N>A>Dem>Num*, which again conforms neither to *N> Dem>Num>A*, nor to *N>A>Num> Dem*. He also reported

[6] Dem= demonstrative; Num= numeral; A= attributive adjective; N= noun.

from Hyman (1981: 31), that Noni (Grassfields Bantu), in addition to *N> Dem >Num >A*, displays the order *N>Dem>A>Num*, again unexpected under Greenberg's formulation. Informally, on the basis of these counterexamples to Greenberg's universal 20, Hawkins proposed a revised version of the same universal which reads as follows (cited in Cinque (2005:02).

(4) Revised Greenberg's Universal 20 (Hawkins 1983)

> When any or all of the modifiers (demonstrative, numeral, and descriptive adjective) precede the noun, they (i.e., those that do precede) are always found in that order. For those that follow, no predictions are made, though the most frequent order is the mirror-image of the order for preceding modifiers. In no case does the adjective precede the head when the demonstrative or numeral follow. (= (20') of Hawkins (1983, 119-120, (20')).

It is important to clarify these observations from Hawkins (1983) pertaining to word sequencing within the noun phrase typologically. According to Hawkins' (1983) generalization in (4), only four major patterns are attested in over 350 typologically different languages when one considers the ordering of modifiers (e.g., numeral, adjectives, demonstrative) with respect to the head noun.

The four major patterns from Hawkins's database are repeated in (5) for convenience. Specifically, the sequence in (5a) corresponds to languages where modifiers come before the head noun (i.e., Demonstrative > Numeral > Adjective> Noun). The sequence in (5d), on the other hand corresponds to the frequent order in languages where the modifiers appear after the head noun. The starred sequences in (5) represent unattested orders in natural languages according to Hawkins' (1983) database. Notice that Hawkins's revised version of Greenberg's Universal 20 above predicts that all starred sequences should be ruled out in UG. As it turns out, many of the orders predicted to be ungrammatical, are grammatical in Shupamem. It is very important to mention here that there is a crucial distinction between "basic" word order and "allowable" word order. Some researchers (e.g., Greenberg) have only been concerned primarily with "basic" word order. Such researchers may not see Shupamem as a problem. Nevertheless, I have added Shupamem as well as languages found in Heine's (1983) database to confirm or disconfirm Hawkins' (1983) predictions.

(5)*Typological combination of Dem-Num-Adj-N in Hawkins (1983)*

(a) 3 Modifiers on the left/0 on the right *Dem-Num-Adj-N*	VO: English, German, Norwegian, Russian, Finnish, Syrian Arabic (1), Taiwanese, Mandarin, Palauan, Shupamem OV: Turkish, Korean*, Japanese, Alambak (1), Quechuan*
(b) 2 Modifiers on the left and 1 on the right *(i) Dem-Num-N-Adj* *(ii)*Dem-Adj-N-Num* *(iii)*Num-Adj-N-Dem*	 VO: French, Italian, Spanish, Mam, Shupamem VO: Syrian Arabic (2), Shupamem VO: Shupamem
(c) 1 Modifier on the left/2 on the right *(i) Dem-N-Adj-Num* *(ii) Num-N-Adj-Dem* *(iii) *Adj-N-Num-Dem*	OV: Karbadian, Warao, Lahu (1), Hualapai (1), VO: Shupamem VO: Shupamem, Irish, Welsh, Hebrew, Basque, Maori, Vietnamese etc. OV: Ute VO: Shupamem
(d) 0 modifier on the left/3 on the right *(i) N-Adj-Num-Dem* *(ii) N-Dem-Num-Adj* *(iii) N-Adj-Dem-Num* *(iv) N-Dem-Adj-Num* *(v) N-Num-Adj-Dem* *(vi) N-Num-Dem-Adj*	VO: Yoruba, Igbo, Turkana (?), Lamang (?), Kusaiean, Selepet, Shupamem OV: W. Greenlandic, Amele, Manam (1) VO: Kikuyu VO: Aghem, Shupamem VO: Noni, VO:Shupamem VO: not attested

The findings of this study suggest that, not only do we have evidence for the existence of unattested orders in Hawkins' system, but also, data from Shupamem seem to be significantly at odds with the generalization in (4), granting that 19 possible orders appear to be grammatical. This actually implies that previous assumptions made in linguistic typology about DP internal word orders were not accurate. To this end, I ask the following two questions:

(a) What is the internal structure of the left periphery of the noun phrase in Shupamem?

(b) How can we account for the existence of multiple definite articles attested in Shupamem (just as it is the case in Scandinavian or Modern Greek)?

Before answering these questions, let me first turn to the theoretical status of Cinque's (2005a) *LCA-based* approach also devised to derive Greenberg's Universal 20.

2.2.Cinque's (2005) LCA-based Approach

In his discussion of Greenberg's Universal 20 based on Kayne's (1994) *Linear Correspondence Axiom*, Cinque (2005) made an implicit claim that the *Adjectives-as-Specifiers* approach should be universal, even for superficial head-final languages. Cinque assumes that the sequence in (6a) represents the merge order that is very common in many languages of the world, whereas both combinations in (6b&c) are the result of NP movement through the various functional projections of the DP. Crucially, the NP may move by successive cyclic movement or in a "roll-up" fashion through pied-piping. The former movement produces the order in (6d) which occurs only in a few languages, while the latter produces the very common word order in (6x).

Cinque's (2005) marked and unmarked possible orders are reproduced in (6) for convenience. It is very important to point out that Cinque's (2005) research inquiry was not concerned about focus related DP orders (i.e., DPs that involve any phrasal movement to a DP initial position for focus purposes). He was more interested in recording only the "default" order for each language, presumably to avoid any XP movement due to focus. This was reasonable in part because of the great amount of languages he had to compare in order to refine his previous analyses of Greenberg's universals 20 proposed in Cinque (1996, 2000).

(6) All possible combinations with *Dem >Num > A > N* attested in natural languages.

a.	√	Dem	Num	A	**N**	(very many languages)
b.	√	Dem	Num	N	A	(many languages)
c.	√	Dem	**N**	Num	A	(very few languages)
d.	√	**N**	Dem	Num	A	(few languages)
e.	*	Num	Dem	A	**N**	(Ø – Greenberg 1963; Hawkins 1983)
f.	*	Num	Dem	**N**	A	(Ø – Greenberg 1963; Hawkins 1983)
g.	*	Num	**N**	Dem	A	(Ø – cf. Lu 1998,183)
h.	*	**N**	Num	Dem	A	(Ø – cf. Greenberg 1963; Lu,1998,162)
i.	*	A	Dem	Num	**N**	(Ø – Greenberg 1963; Hawkins 1983)
j.	*	A	Dem	**N**	Num	(Ø – Greenberg 1963; Hawkins 1983)
k.	√	A	**N**	Dem	Num	(very few languages)
l.	√	**N**	A	Dem	Num	(few languages)
m.	*	Dem	A	Num	**N**	(Ø – Greenberg 1963; Hawkins 1983)
n.	√	Dem	A	**N**	Num	(very few languages)
o.	√	Dem	**N**	A	Num	(many languages)
p.	√	**N**	Dem	A	Num	(very few languages – possibly spurious)
q.	*	Num	A	Dem	**N**	(Ø – Greenberg 1963; Hawkins 1983)
r.	√	Num	A	**N**	Dem	(very few languages)
s.	√	Num	**N**	A	Dem	(few languages – but see fn.32)
t.	√	**N**	Num	A	Dem	(few languages)
u.	*	A	Num	Dem	**N**	(Ø – Greenberg 1963; Hawkins 1983)
v.	*	A	Num	**N**	Dem	(Ø – Greenberg 1963; Hawkins 1983)
w.	√	A	**N**	Num	Dem	(very few languages)
x.	√	**N**	A	Num	Dem	(very many languages)

The "√" and "*" before the DP sequences in (6) show whether the order exists or does not exist respectively. The "Ø" and references following some of the DP sequences point out that the sequence in question is viewed as not attested at all cross-linguistically. The key questions in Cinque's (2005a) inquiry are the following:

(a) Of the conceivable 24 orders summarized in (6), which ones are actually attested in natural languages?

(b) How are the sequences attested in many languages derived in the LCA-based approach?

(c) How do we account for the ungrammatical sequences?

The hypothesis developed then was based on the fact that the possible combinations of Dem, Num and A with the head noun generate 24 options (4!:4x3x2x1). Among them, only 14 were actually attested in the languages of the world according to Cinque. The remaining 10 orders are assumed to be universally ungrammatical under Cinque's (2005) typology. Crucially, although Cinque's NP raising approach was designed to derive all the 14 attested orders while predicting the impossibility of deriving the 10 remaining unattested ones, there is no discussion of any morphological factor in determining NP movement (e.g., noun class agreement morphology that sometimes determines whether the head noun has to move or not).

The most important feature of Cinque's (2005) analysis is, I believe, its demonstration that Kayne's (1994) LCA hypothesis can be used to account for grammatical sequences and rule out those that are ungrammatical as well. Cinque argues that this is possible if the following two basic assumptions are adopted:

(7) Cinque's (2005) key assumptions

(a) the following fixed merged order of nominal modifiers: *[[$_{wP}$ Dem[$_{XP}$ Num [$_{YP}$ AP[$_{NP}$ N]]]]]* should be considered as the universal basic order*;*

(b) NP may move partially or totally with or without pied-piping through the extended nominal projection. Furthermore, head movement or movement of a phrase which does not contain an NP is not possible (i.e., remnant movement are banned).

On the basis of (7a&b), Cinque confronts the facts that go by the name Greenberg's Universal 20 with Kayne's (1994) *Linear Correspondence Axiom (LCA)* whose key assumptions are repeated in (8).

(8) LCA assumptions

(a) Concerning base generation, specifiers universally precede heads and heads universally precede their complements;

(b) Only leftward movement is permitted.

Thus, Cinque explicitly made it clear that (a) the syntactic structure in which DemP, NumP, and AP are generated is a universally fixed order to the left of the head noun, each in the specifier of agreement projection, (b) only 14 orders are derivable in UG and that (c) unattested orders are derived via remnant movement (i.e., moving a constituent from which the head noun has been already extracted) which is not allowed in UG according to him.

In Cinque's (2005) system, the prohibition of remnant movement significantly weakens the predictability power of his theory. It is reasonable to assume that unexpected orders discovered in other natural languages can be derived via remnant movements. For instance, nothing in Cinque's system provides any explanation as to why remnant movement should be banned in UG in the first place. Shupamem displays five extra word order options predicted to be typologically impossible in Cinque's (2005) typology. I will address this issue later on when I discuss all the possible orders and their syntactic derivations. The findings of this analysis clearly show that Shupamem offers 19 grammatical options out of the conceivable 24 possibilities when one combines the head noun with the demonstrative, the numeral, and the adjective. In fact, noun modifiers may come before or after the head noun in Shupamem as I will show later in my illustration of Shupamem DP sequences summarized in (10).

Cinque's (2005) LCA-based approach was initially designed to account for not only the 14 grammatical orders among the 24 available options, but also those that are ungrammatical as well. The contrast between Cinque's (2005) database and Shupamem's repeated in (10) clearly demonstrates that there are considerably more word orders within the DP with respect to Greenberg's Universal 20 than what has been predicted so far in previous theories. It is not clear in Cinque's theory why remnant movement cannot apply at all. It is even inconsistent with an exhaustive derivation of Cinque's own typology, since, remnant movement is necessarily required to derive the unpredicted grammatical sequence such as (6i) *A* > *Dem* > *Num* >***N*** attested in Shupamem.

The alternative approach I propose here provides a way of preserving remnant movement in the grammar by appealing to the Freezing Principle where pied-piping (Nkemnji 1995) is abundantly used. Thus, the unattested orders in Cinque's system that are claimed to be grammatical in Shupamem will be explained using various types of movement operations that are subject to the 'freezing effect' (Rizzi 2006). This analysis examines the factors that explain the grammaticality of a sequence such as (6p) ***N***>*Dem*>*A*>*Num* attested in Shupamem left unexplained in Cinque's system. I assume that the NP is allowed to move cyclically through specifier positions of the functional projections encoding agreement feature.

As we can observe in (10), Cinque's system is inconsistent with Shupamem data for many reasons. For instance, there are grammatical sequences in Cinque's system that are ungrammatical in Shupamem (e.g., (10c) and (10d)). There are also other sequences that are ungrammatical in Cinque's system that are grammatical in Shupamem (e.g., (10e), (10f), (10i), (10m), (10q), (10u) and (10v)). It is therefore open to debate how to analyze word order alternation within the DP in Shupamem in a way that accounts for both grammatical sequences as well as ungrammatical ones. It is clear that the ordering data for Shupamem DP is more complex with a flexible system in which the appropriate syntactic structure follows from the accurate distribution of morphological agreement prefixes with both 'universal' and 'mirror-image' orders appearing under certain circumstances. According to the current approach, remnant movement are acceptable and even required to account for some grammatical orders that cannot be explained under Cinque's (2005) typology. The comparison of Shupamem data and Cinque's typology is given in (10) where one can observe that the conceivable orders in Shupamem display a more complex structural representation due to the presence versus lack of agreement elements (e.g., noun classes) that determines the surface ordering of elements within the DP.

One methodological point should be mentioned immediately. The present analysis is a revision and expansion of the idea I developed in Nchare (2011) where I proposed a theory of movement that accounts for word order alternations in Shupamem DPs. In my previous analysis, I deliberately ignored the agreement facts (e.g., the morpheme *p-* that stands for Class 2 prefix that encodes the plural nouns in Shupamem) about demonstratives that appear to be crucial in the discussion of both movement and agreement morphology internal to the noun phrase. The apparent counterexamples that have been pointed out to me by anonymous reviewers were due to some noun class agreement errors on the demonstratives and to some extent on the adjectives and numerals. The table presented in Nchare (2011:144) unfortunately contains a number of errors that need to be corrected here. Some orders were duplicated and some missing. For instance, there are seven lines starting with *kpà* 'four' (see (9e-f-g) and (9q, r, s and t)) and the Shupamem examples in (9u, v, w, x) do not correspond to Cinque's (2005) u, v, w and x lines. Similarly, there are too many lines starting with Dem for the Cinque column where the bottom two blocks are duplicates (cf. (9a, b, c, m, n, o, u, v, w)). I repeat the old table from Nchare (2011) comparing Cinque's and Shupamem data in (9) here for convenience. The only omission from the old table is the column for "OTHER LANGUAGES" that is not necessary for the purpose of this analysis. The crucial information here is the contrast between Shupamem data and Cinque's.

(9) Shupamem typology as in Nchare (2011)

	Cinque (2005)	Shupamem	
a.✓	Dem Num A N	a.✓	ʃɪ kpà mɪ̀ŋkét pòn
b.✓	Dem Num N A	b.✓	ʃɪ kpà pón (pí) mɪ̀ŋkét
c.✓	Dem N Num A	c.*	ʃɪ pón píkpà (pí) mɪ̀ŋkɛ̀t
d.✓	N Dem Num A	d.*	pón ʃɪ píkpà (pí) mɪ̀ŋkét
e.*	Num Dem A N	e.✓	kpà ʃɪ mɪ̀ŋkét pòn
f.*	Num Dem N A	f.✓	kpà ʃɪ̀ pón (pí) mɪ̀ŋkét
g.*	Num N Dem A	g.*	kpà pón ʃɪ̀ (pí) mɪ̀ŋkét
h.*	N Num Dem A	h.*	pon píkpà ʃɪ (pí) mɪ̀ŋkét
i.*	A DemNum N	i.✓	mɪ̀ŋkét ʃi kpa pon
j.*	A Dem N Num	j.*	mɪ̀ŋkét ʃi pón píkpà
k.✓	A N Dem Num	k.✓	mɪ̀ŋkét pón ʃi pí-kpà
l.✓	N A Dem Num	l.✓	pón (pí)mɪ̀ŋkét ʃɪ pí-kpà
m.*	Dem A Num N	m.✓	ʃi mɪ̀ŋkét kpà pón
n.✓	Dem A N Num	n.✓	ʃɪ mɪ̀ŋkét pón pí-kpà
o.✓	DemN A Num	o.✓	ʃɪ pón pɪ̀-mɪ̀ŋkét pí-kpà
p.✓	N Dem A Num	p.(*)	pón ʃɪ̀ (*pì)mɪ̀ŋkét pí-kpà
q.*	Dem A Num N	q.✓	kpà mɪ̀ŋkét ʃɪ̀ pón
r.✓	Dem A N Num	r.✓	kpà mɪ̀ŋkét pón ʃɪ
s.✓	Dem N A Num	s.✓	kpà pón pɪ́-mɪ̀ŋkét ʃɪ
t.✓	N Dem A Num	t.✓	kpà pón pɪ́-mɪ̀ŋkét ʃɪ̀
u.*	Dem A Num N	u. ✓	mɪ̀ŋkét kpà ʃɪ pón
v.*	Dem A N Num	v.✓	mɪ̀ŋkɛ̀t kpà pón ʃɪ̀
w✓	Dem N A Num	w.✓	mɪ̀ŋkét pón pí-kpà ʃɪ
x.✓	N Dem A Num	**x.✓**	pón pɪ́-mɪ̀ŋkét pí-kpà ʃɪ̀

So overall, the serious problem in (9) is the correct ordering of elements and the agreement noun class prefix *p-* on post-nominal demonstratives.

In the present analysis, these errors are corrected in order to provide a more consistent pattern that is repeated in (10). I will return to the discussion of the contrast between Shupamem data and Cinque's (2005) typology and the derivation of both grammatical and ungrammatical orders in section 7.

(10) Comparison of Shupamem data with Cinque's (2005) typology

	Cinque (2005)		Shupamem[7]
a.✓	Dem Num A N	a.✓	ʃɪ kpà mɪŋkét pɔ́n
b.✓	Dem Num N A	b.✓	ʃɪ kpà pón pí-mɪŋkét
c.✓	Dem N Num A	c.*	ʃɪ pɔ́n pí-kpà pí-mɪŋkét
d.✓	N Dem Num A	d.*	pɔ́n pǐ pí-kpà pí-mɪŋkét
e.*	Num Dem A N	e.✓	kpà ʃɪ mɪŋkét pɔ́n
f.*	Num Dem N A	f.✓	kpà ʃɪ pɔ́n pí-mɪŋkét
g.*	Num N Dem A	g.*	kpà pɔ́n pǐ pí-mɪŋkét
h.*	N Num Dem A	h.*	pɔ́n pí-kpà pǐ pí-mɪŋkét
i.*	A DemNum N	i.✓	mɪŋkét ʃi kpà pɔn
j.*	A Dem N Num	j.*	mɪŋkét ʃi pón pí-kpà
k.✓	A N Dem Num	k.✓	mɪŋkét pɔ́n pǐ pí-kpà
l.✓	N A Dem Num	l.✓	pɔ́n pí-mɪŋkét pǐ pí-kpà
m.*	Dem A Num N	m.✓	ʃi mɪŋkét kpà pɔ́n
n.✓	Dem A N Num	n.✓	ʃɪ mɪŋkét pɔ́n pí-kpà
o.✓	DemN A Num	o.✓	ʃɪ pɔ́n pí-mɪŋkét pí-kpà
p.✓	N Dem A Num	p. ✓	pɔ́n pǐ pí-mɪŋkét pí-kpà
q.*	Num A Dem N	q.✓	kpà mɪŋkét ʃɪ pɔ́n
r.✓	Num A N Dem	r.✓	kpà mɪŋkét pɔ́n pǐ
s.✓	Num N A Dem	s.✓	kpà pɔ́n pí-mɪŋkét pǐ
t.✓	N Num A Dem	t.✓	pɔ́n pí-kpà pí-mɪŋkèt pǐ
u.*	A Num Dem N	u. ✓	mɪŋkét kpà ʃɪ pɔ́n
v.*	A Num N Dem	v.✓	mɪ̂ŋkèt kpà pɔ́n pǐ
w✓	A N Num Dem	w.✓	mɪŋkét pɔ́n pí-kpà ʃɪ
x.✓	N A Num Dem	**x.✓**	pɔ́n pí-mɪŋkét pí-kpà ʃɪ

Again, let me stress that Cinque's (2005) main concern was to record only the "default" order for each language, presumably to avoid displacement due to focus. This makes a lot of sense when considering all languages, and UG.

[7] *ʃɪ* = Demonstrative 'this'; *kpà* = Numeral 'four'; *mɪŋkét*= Adjective 'dirty'; *pón*= noun 'children'; *p-ì*= agreement head consisting of the noun prefix *p-* and the definite article *–î*.

Nevertheless, for a single language like Shupamem, we do need to know all possible orders. This is what makes the current data interesting. The revisited typology repeated in (10) will include focus as well as non focus orders. The relevant facts observed in (10) suggest that of the 24 conceivable orders that include the demonstrative, the numeral, the adjective and the head noun, 19 are in fact grammatical. Unlike in the 18 previously grammatical strings discussed in Nchare (2011), all the agreeing forms of the demonstratives, the numerals and adjectives are incorporated in the current analysis. In my previous interpretation of the data, I suggested that word order alternation in Shupamem is so because of the presence version lack of movement of certain elements within the noun phrase that constraints the spell out of agreement morphemes (e.g., noun class, definite article). The overall system is subject to the freezing principle (Rizzi 2006, 2007). The crucial difference between Nchare's (2011) comparative table and the current version is that the (9p) was ungrammatical, but in the current analysis, the data in (10) show that the post-nominal demonstrative takes its noun class prefix *p-* (see (10p)), which upgrades the number of grammatical strings from 18 to 19.

In (10) above, we can observe the following general and specific morphosyntactic behaviours of the orders of elements that build a Shupamem noun phrase as well as the agreement patterns that emerge between the head noun and its

various modifiers (e.g., the demonstrative *ʃɪ~pǐ* 'these', the adjective *mìŋkét~ pí-mìŋkét* 'dirty' and the numeral *kpà~pí-kpà* 'four').

(i) Of the 24 possible orders in (10), 19 are grammatical in the new survey[10].

(ii) The head noun may precede or follow any of its noun modifiers.

(iii) If any of the noun modifiers occurs after the head noun, it automatically agrees with that head noun in noun class. However, when the modifier precedes the head noun, it surfaces as a bare form.

(iv) The agreement concord marker *-ɪ̂* that I refer to as 'definite article' is obligatorily licensed right after the head noun that is followed by at least one modifier. Each instance of a noun modifier that follows a head noun requires an agreement marker that precedes it (see (10l) N-A-Dem-Num).

(v) Any noun modifier (e.g., the demonstrative *ʃɪ,* the numeral *kpà* 'four' and the adjective *mìŋkét* 'dirty') that follows the head noun systematically agrees in class with the head noun prefix (see Chapter 2 for a detailed discussion of Shupamem noun prefixes and agreement concords).

[10] For this analysis, a new survey that includes all relevant noun agreement concords on the demonstrative, the numeral and the adjective was submitted again to native speakers of Shupamem to double-check the grammatical judgments of all conceivable orders.

(vi) As we will observe later in the next sections below, Cinque's (2005) system captures some of the NP orders in Shupamem but needs further explanations on orders that are hard to explain following its main assumptions (e.g., the idea that remnant movement is universally ungrammatical).

It is from these observations that this chapter aims to discuss Shupamem data from natural settings and establish what principles regulate the flexibility of word order within a Shupamem noun phrase. It is also important to stress that, based on the inconsistency I have shown in the contrast between Cinque's database and Shupamem in (10), a straightforward implementation of an NP-raising approach à la Cinque (2005) is therefore not adequate for Shupamem. As we can observe in (10), the demonstrative, the adjective, and the numeral may precede or follow the head noun with a number of other sub-option possibilities. When they precede the head noun, there is no need to mark the noun class agreement, but when they follow, the noun class is obligatorily marked (e.g., the agreement head *p-î*) in which case the noun phrase is in the specifier position of the functional phrase (e.g., Agreement Phrase) dominating the noun modifier (e.g., demonstrative, adjective and numeral). I conclude that the agreement morpheme that is pronounced between a head noun and its modifier follows naturally the movement of NP into the specifier of AgrP.

I argue that noun class concord (agreement) systematically spells out in Shupamem and other Bantu languages in general because it contains basic morphosyntactic features (e.g., number, gender) that are useful for the interpretation of the noun phrase, that is why the noun phrase has to move higher up within the DP to check those features. Before moving on to the discussion of conceivable orders of Shupamem, let me first go over the key arguments of a non-LCA alternative approach proposed in Abels and Neeleman's (2006, 2007).

2.3.Abels & Neeleman's (2006, 2007) non-LCA approach

Abels & Neeleman (2006, 2009) is a further development of Cinque's (2005) LCA-base right-branching hierarchical ordering: Dem[onstrative] > Num[eral] >A[djective] > N[oun]. Its basic line of reasoning is that Kayne's (1994) is too restrictive and should be dispensed with to allow rightward movement. This analysis however is a contradiction to Kayne's key assumption that all movement are to the left. Thus, according to Abels and Neeleman, typological patterns can equally be well derived from Cinque's (2005) assumptions at least if the fourth assumption replaces the *LCA.* In other words, there is no need to appeal to Kayne's LCA, but rather to 'a theory which allows branching to the left and to the right but restricts (at least certain kinds of) movement to the left' (Abels & Neeleman 2009:1). The outcome of the reformulated set of assumptions is repeated in (11)

and conspires to allow the fourteen attested orders, while excluding the ten unattested ones.

(11) a. The underlying hierarchical order of Dem, Num, A and N in the extended nominal projection is Dem > Num> A>N, where > indicates c-command;

b. All (relevant) movements moves a sub-tree containing N;

c. All movements target a c-commanding position;

d. All movements are to the left (LCA is not relevant here).

Abandoning the *LCA* in favor of (11d) according to these authors will base-generate eight of the fourteen attested linear strings, simply by allowing cross-linguistic variation in the linearization of sister nodes in the hierarchical structure described by (11a). This is inconsistent with the agreement facts observed in Shupamem DP syntax in Vázquez-Rojas's (2008) analysis where it is claimed that the noun class concord correlates with word order between the head noun and its modifiers. The challenge that these facts pose for Abels and Neeleman's (2005) theory should be obvious.

If the head noun moves past its modifier only if an overt agreement morpheme (e.g., noun class prefix and or number prefix) is spelled out, then nothing in a simple cross-linguistic variation in the linearization of sister nodes in Abels and Neeleman's system can explain why the definite article for instance is always post-nominal in Shupamem.

Furthermore, it is argued that seven of the eight orders are derived through movement in Cinque's system. Abels and Neeleman (2006) claim that non-terminal nodes should be unlabeled. Therefore, the demonstrative, numeral and adjective are not introduced by dedicated functional heads. This is because nothing in their argument hinges on the label of the nodes in the extended projection of the noun or the existence of dedicated functional heads hosting DEM, NUM, and A as specifiers. It is important to recognize that a system like Abels and Neeleman's (2006) says little about the trigger of movement internal to the DP. More importantly, Abels and Neeleman (2006), just like the alternative approaches presented so far all failed to predict more than 14 possible orders cross-linguistically.

Building on the frameworks proposed in earlier theories, the question we need to address is the following:

(a) What word orders out of the conceivable 24 orders in Cinque's system is grammatical in Shupamem?

That is, we must seek to define all and only the grammatical sequences of Shupamem. Once we have answered the first question, we must then address the more explanatory question:

(b) Why does Shupamem only select these orders as grammatical rather than the other remaining sequences?

At issue then is how to reconcile Shupamem facts with existing data from previous theories in a way that explains the trigger of movement operations within the DP.

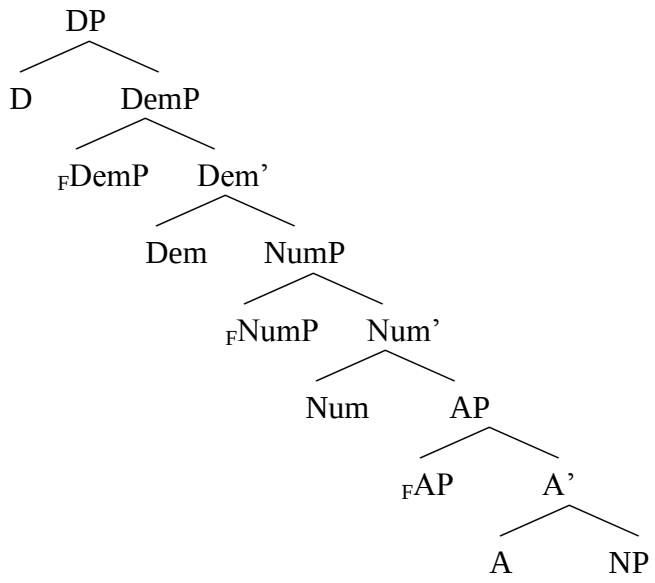
3.Proposal

In this section, I introduce the main proposal of this analysis concerning the internal syntax of Shupamem DP. I outline the key assumptions of the *Agreement Trigger* approach developed here in order to show how relevant agreement inflections (e.g., noun class prefixes) attested in Shupamem impact on word order alternations within the DP. I will also summarize Rizzi's (2006) Freezing Principle and show how its extension to the left periphery of the noun phrase is more likely to explain why certain orders are ungrammatical in Shupamem.

3.1.The Agreement Trigger Model

First, let me assume that the structure in (12) represents the cartographic hierarchy of constituents within the noun phrase in Shupamem.

(12)



The basic order Dem> Num> AP > NP follows naturally from the structure in (12). For the remainder, I use DemP, NumP and AP with an index (e.g., $_{F}$XP) as a way to distinguishing the maximal projections of the head noun modifiers from their specifier positions. In order to derive the alternative orders attested in Shupamem, the Agreement Trigger Model developed here will adopt the following assumptions:

(a) Shupamem adjectives are indeed merged following a universal hierarchy of functional projections;

(b) All noun modifiers (demonstratives, numerals, adjectives etc) project their own functional projections (DemP, NumP, AP) and are located at the specifier position of those projections;

(c) All noun modifiers agree in noun class with the head noun whenever they follow it except under certain conditions.

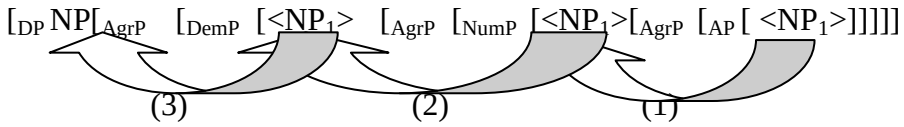
(d) The Agreement Phrase (AgrP) which hosts the definite article projects if and only if the NP moves pass through it, in which case an agreement affix is overtly spelled out.

(e) The head noun may move pass any of its modifier if and only if there is a morphosyntactic features it has to check.

Thus, as we can see in the structure in (12), there is no agreement phrase in the basic order because no agreement concord is overtly pronounced, and the head noun is in situ. It is important to recognize, as pointed out in Fortuny (2008:18), that 'the LCA cannot be formulated in a bare phrase structure, which dispenses with the distinction between maximal, intermediate and minimal categories'. I will therefore not attempt any reformulation of LCA as proposed in Fortuny (2008), rather I will maintain all levels of projections in my discussion of word order alternations in a way that highlights how each order attested in Shupamem is derived. Thus, assuming Kayne's (1994) universal hypothesis that all languages are of the type specifier-head-complement.

It follows that the order DEM > NUM > ADJ > N will be basic in Shupamem and all the other sequences will be obtained via movements of different kinds (e.g., head/phrasal movement or pied piping). (For a similar proposal, see Hawkins 1983; Abney 1987; Szabolcsi 1987, 1994; Carstens 1991, 2000; Cardinaletti 1994; Ritter 1991, Kayne 1994; Cinque 1994, 2005; Aboh 2004, among others). I further assume that to derive a structure like (10d) N> Dem> Num> A from the underlying structure in (12), the NP will have to move higher up cyclically through the specifiers positions of the agreement phrases (e.g. AgrP) as exemplified in (13). I will come back to this in section 5.

(13) *N > Dem > Num>A*



While it is a standard assumption in the literature that determiners encode (in)definiteness and need to project their own functional projection, namely the Determiner Phrase (DP), I will claim that the definite article is encoded in the head of the Agreement Phrase (AgrP) that I indicate as indexes of DemP, NumP, and AP in (13). It follows that the overt realisation of an agreement head (e.g., noun class prefix) in Shupamem is responsible for the NP movement within the DP.

Thus, in the structure in (13), DemP, NumP, AP, and NP represent the maximal projections of the demonstrative, the numeral, the adjective and the head noun respectively dominated by AgrP whose phi-features may attract the NP to its specifier position. AgrP may surface recursively depending on the number of NP movements taking place. If for instance, the NP moves all the way up to the highest AgrP dominating the demonstrative, the DP will have three noun classes that give rise to definite spreading[11] in Shupamem. I assume that agreement parameter in Shupamem is similar to the one proposed in Barker and Collins' (2006:317) principle that they describe as characteristic of the agreement rich-Bantu language. I repeat Baker and Collins's principle in (14) for convenience.

(14) Suppose Agree (X, YP), where X contains unvaluable phi-features and XP contains the goal. Then X has an EPP feature that is satisfied by movement of YP to spec X. (see Baker and Collins 2003, and see also Carstens 2005 for similar ideas about agreement).

I will adopt a similar proposal with respect to the analysis of various XP movements internal to Shupamem DP with a small twist that, what Baker and Collins (2006) refer to as 'associative (genitive) particles' will be characterized here as the definite article. My hypothesis that AgrP is recursive within the DP has a rather interesting implication for the internal structure of the DP in Shupamem.

[11] Shupamem behaves more like Greek, Scandinavian or Swedish where noun modifiers (e.g., adjective and numeral) may surface with a determiner or a determiner like particle. See Alexiadou (2003), Delsing (1993) and references therein for an in-depth discussion of definite spreading with relevant examples.

For instance, in a noun phrase containing more than one modifier at the same time, if both modifiers come after the head noun, two agreement heads will be obligatorily licensed. I will come back to Section 4 where I provide basic facts about noun modification in Shupamem with respect to the status of noun concords in post-nominal position. Before getting to that issue, let me say few words about the freezing principle that I also assume to govern a number of XP movements internal to the Shupamem DP.

3.2.Multiple Movements and Rizzi's (2006, 2007) Freezing Principle

This analysis establishes some parallel between the left periphery of the noun phrase (NP) and that of the IP in terms of agreement relations internal to the DP. It is now common practice among the Minimalists to consider Rizzi's (2006, 2007) Freezing Principle[12] as probably the most adequate theory of phrasal movement at the sentential level. But the sense in which this principle can be extended to the nominal left periphery just as it is the case to the sentential left periphery needs to be commented on, by distinguishing phrasal (XP) movement (which is subject to the freezing effect) from remnant movement (which is not). More precisely,

[12] In this analysis, I discuss only the general argument about the Freezing Principle that I have adopted to explain the paradigms illustrating word order alternations within the DP. See Rizzi (2004, 2007); Rizzi and Slonsky (2007) or Boškovic (2008) for the original descriptions of this principle with adequate illustrations. Note, in particular, that under the Freezing Principle, when a XP moves into a specifier position of a targeted functional phrase, it is frozen in place and cannot move further.

building on Agree mechanism put forward in Chomsky (2000, 2001, 2004, 2005) that accounts for phrasal movement possibilities in a given sentence, Rizzi argues that it is impossible to further extract a previously moved phrase out of its first landing sites where it form a constituent and is frozen in place. This is a principle that goes by the Freezing Principle defined as in (15).

(15) Criterial Freezing

A phrase meeting a criterion is frozen in place.

Criterial freezing can be better understood as a version of Chomsky (2000, 2001) Activation Condition repeated in (16).

(16) Activation Condition

Inactive elements (i.e., elements whose features are already checked) are inaccessible for further operations.

At an explanatory level, Rizzi's (2006) Freezing Principle was originally designed as a principle of UG that accounts for a number of movement operations such as wh-movement, focalization, topicalization, quantifier raising or NPI movement that usually give rise to operator-variable relations (Bošković 2008:250) (for related data and additional discussion, see Collins 1997, Epstein 1992, Müller & Sternefeld 1996, and references therein).

It is clear that based on Rizzi's explanations, the Freezing Principle requires a spec-head agreement relation with respect to the features of the relevant class of functional projections in the left periphery (e.g., Force, Topic, Focus etc). Concretely speaking, the Freezing Principle offers a theoretical framework that accounts for subject/non-subject asymmetries based on the syntactic properties of what Rizzi (2006, 2007) refers to as "Criterial position" (i.e., the Subject Phrase where the nominative case is usually assigned). Thus, under Criterial Freezing, it is proposed that once an XP reaches a Criterial position, it is systematically frozen in place and cannot move any further. This is what explains a number of "freezing effects" encountered cross-linguistically wherein any XP which undergoes a A'-movement is barred from undergoing a further A'-movement (cf. Wexler and Culicover 1980, Boškovic 2008, Chomsky 2008, Boeckx 2009). The most recent version of Criterial Freezing is defined in (17).

(17) Criterial Freezing (Rizzi 2007: 149)

In a criterial configuration, the Criterial Goal is frozen in place.

It is this principle that Rizzi and Shlonsky (2007) exploit to explain subject/non-subject asymmetries, arguing that they arise as a repair strategy to circumvent the Criterial Freezing configuration in SubjP (Subject Phrase). In short, as Gallego (2009:33) puts it, criterial freezing can be better understood as 'an interface constraint precluding XPs from being assigned multiple interpretations of the same type, for legibility/convergence reasons ultimately related to the *Principle of Full Interpretation*'. Following these assumptions, I propose that criteria freezing can be extended to the NP left peripheral domain where there are a number of functional projections (e.g., D, Agr) that attract the noun phrase for agreement purposes. Thus, once the noun phrase is moved into one phase, it is frozen in place and cannot move further unless it moves along with the functional projection where its interpretation has taken place. I will come back to this in Section 6 where I discuss the derivation of Shupamem word orders that include the demonstrative, the numeral, the adjective and the head noun. Let me first go over some crucial facts about Shupamem noun classes and concords with some illustrative examples.

4.The Nominal Inflection Domain in Shupamem

Before turning to the analysis of word order within the DP, it is useful to provide a brief description of how noun modifiers such as possessives, numerals, adjectives, demonstratives and relative pronouns are inflected in noun class whenever they occur after the head noun. It is worth stressing that, under this analysis, the agreement head that I assume to encode the definite article only spells out if and only if the NP moves through the agreement head terminal positions, in which case the noun automatically precedes its modifier. I will show this in the following section.

4.1.Shupamem Noun Class Prefixes and Concords

This section comes back to the discussion of Shupamem noun class system in connection with the internal syntax of DP. The previous chapter was mainly focused on the morphological aspects of noun classes without explaining in detail how they play a crucial role in word order alternations within the noun phrase. In this section, I look at the classes of affixes on the noun stem and/or concord elements on the noun modifiers (e.g., possessives, demonstratives, numerals adjectives and relative pronouns) in order to explain the syntactic derivations of a number of word order options available in Shupamem. The readers should keep in mind that a noun class is ‘a group of nouns which do not differ in prefix and which

govern the same concord' as defined in Fortune (1955:51). For convenience, let me repeat the noun class system of Shupamem in table 3.1 where we can see how each noun class corresponds to a type of concord prefix that attaches to a noun modifier (e.g., possessives, demonstratives, numerals, adjectives and relative pronouns). It is important to note that of all the post-nominal concords in table 3.2, only the demonstrative has a rising (LH) tone (cf. v̌). I argue that the rising tone on the demonstrative results from the combination of the High tone from the definite article and the Low tone of the demonstrative. As we have previously shown in Chapter 2, the most important features of the Noun Phrase in Shupamem are noun classification, number, post-nominal modification and noun concords, definiteness and word order alternation.

Class	Noun Prefix	Noun concords on post-nominal modifiers		
		POSS	**DEM**	**Numeral; Adj.; Relative Pro.**
1 /2	m-/p-	Ø-ѵ̀/p-ѵ́	Ø-ѵ̌/p-ѵ̌	Ø-ѵ́/p-ѵ́
1a/2a	N-/Ø-	Ø-ѵ̀/p-ѵ́	Ø-ѵ̌/p-ѵ̌	Ø-ѵ́/p-ѵ́
1b/2b	Ø-/pa-	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/ʃ- ѵ̌	Ø-ѵ́/ʃ-ѵ́
3 /4	mɯ/pɯ	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/ʃ-ѵ̌	Ø-ѵ́/p-ѵ́
5/6	Ø-/N-	Ø-ѵ̀/m-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
7/8	CV/red.	Ø-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
9/10	LL/LHH	ʃ-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
11/12	L-HL/LH-HLH	ʃ-ѵ̀/ʃ-ѵ́	Ø-ѵ̌/-ʃѵ̌	Ø-ѵ́/ʃ-ѵ́
13/14	ɟ̃in-/pĩn-	--	--	--
15	N-	--	--	--

Table 3.1. Shupamem Noun Prefixes and Concordial Morphemes

Table 3.1 reveals that every Shupamem noun belongs to a class. Shupamem nouns are allocated to 15 noun classes according to their noun class prefixes. The countable nouns include regular noun class pairs of singular and plural forms. The nominal root is therefore lexically specified in noun class either by a prefix or a zero morpheme Ø- (see table 3.2 for the illustration of the noun class pairs). It is important to note that my use of 'zero morpheme' in this analysis corresponds to an empty morpheme that is paradigmatically contrastive with other morphemes in the grammar.

For instance, in table 3.2, the noun class prefix for the plural form of Ø-*sún* 'friends' is zero and paradigmatically contrasts with the nasal prefix N- for singular in *ǹ-sún* 'friend'. The noun class prefixes[13] here have various phonological shapes and may sometimes overlap in meanings. The morphological configuration of the noun class system in table 3.2 provides different noun classes.

[13] In this analysis, I will assume following Demuth (2000:275) that class 1a and class 1b (1a&b) semantically refer to singular forms of nouns such as humans, personified animals, proper names and other animates. They are usually paired with class 2 that encodes their plural forms. Class 3 denotes nouns such as trees, plants or inanimate entities, and they are paired with class 4 that encodes their plural forms. Class 5 encodes miscellaneous, pair things, and they are usually paired with class 6 that encodes their plural forms.

Class	Singular Prefix	Plural Prefix	Gloss
1/2:m-/p-	1 mɔ́n	2 pɔ́n	‘child(ren)
1a/2a:N-/Ø-	1a n-sàstʉ́	2a Ø-sàstʉ́	‘elder sibling(s)
1b/2b: Ø-/pa-	1b Ø-wa	2b pa-wa	‘father(s)
3/4: mɯ/pɯ	3 mtʉ̀-mví	4 ptʉ̂-mvì	‘goat(s)’
5/6: Ø-/N	5 Ø-pùm	6 m-bùm	‘egg(s)’
7/8: Cv́/red. H> HL-L	7 ndáp	8 ndâp ndàp	‘house(s)’
9/10:LL/LHH	9 ʃɪrə	10 ʃɪ̌rə̀ə̀	‘bicycles’
11/12: L-HL/LH-HLH	11 màtwâ	12 mătwâá	‘car(s)
13/14: jin/pin	13 ĵɪn-Adjective	14 pín-Adjective	‘adjective(s)’
15 N-		-- --	Participle marker

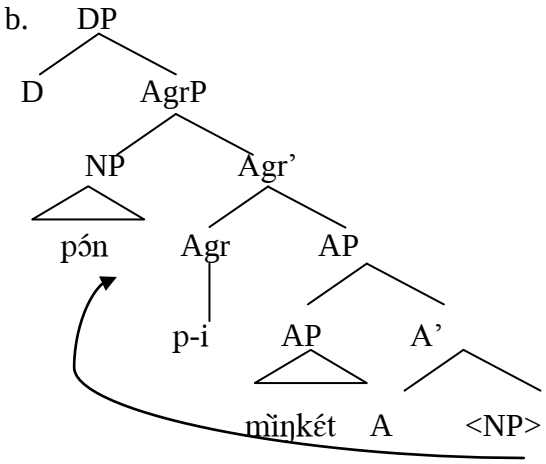
Table 3.2. Singular versus plural noun classes in Shupamem.

As we can see in the above table, the singular noun classes 1, 3, 5, 7, 9, 11, and 13 take their plurals in classes 2, 4, 6, 8 and 10 and 14 respectively. In principle, each row stands for a singular/plural pair except from class 15, which I claim, behaves like a participle marker on the main verb in the imperfective/progressive aspect of the indicative mood.

I will not repeat the illustrations and discussion of Shupamem noun classes here. The reader is referred to Chapter 2 where the noun class system is described more extensively. Nevertheless, leaving aside the expression of the morphological indication of noun class prefixes in Shupamem, I assume that all noun classes of the Banu types displayed on nominal expressions in Shupamem are functional elements that can be described as extended projections of the noun (e.g., Agrement Phrase). It is important to note that, the noun class I am dealing with here is more about number (e.g., singular versus plural). For the purpose of this dissertation then, I will assume the abstract structure shown in (18b) as a way to indicate the overt expression of the number agreement on a noun.

(18) a. p-ɔ́n p-î mînkɛ̀t
2-children 2- DEF dirty
'Dirty children'

b.



As we can observe in (18b), the noun class prefix *p-* preceding the adjective *mĭŋkɛ́t* 'dirty' indicates the plural as opposed to zero that indicates the singular. The next section briefly addresses the issue of concord agreement on the post-nominal modifiers (e.g., adjectives, numerals, demonstratives).

4.2. Shupamem Noun Phrase and the Concord Agreement on Shupamem Modifiers

In this section, I argue that noun phrase modifiers (possessives, demonstratives, numerals, adjectives and relative pronouns) agree in noun class with the head noun. The following examples show that the predictions of the concord system summarized in table 3.1 are born out. By looking at the behaviour

of post-nominal modifiers with respect to the head nouns, I conclude that the noun class specification on the noun modifier in Shupamem, unlike in other Bantu languages is limited in post-nominal position. To show this, I use the noun *mɔ̀n* 'child' which belongs to Class 1 and its plural *pɔ́n* 'children' which belongs to Class 2. There is no consensus on whether the number feature opposition (e.g., singular versus plural) is strictly a nominal affix or the head of a functional projection (see Carstens 1991, Bernstein 1991, and Ritter 1992 for the later hypothesis).

For the present purpose, I will treat the noun class prefix on the head noun (NCP) separately from the noun concord on nominal modifiers. Since we know that every noun, whether it is a singular noun or a plural one, belongs to a specific noun class with an inherent number feature. It makes more sense to assume that the syntactic treatment gender agreement (e.g., noun class prefixes) on the head noun is independent from that of its modifiers. Thus, Shupamem noun concords on the modifiers (e.g., adjectives, numerals, possessives, demonstratives will be treated as functional heads that only spell out if and only if the head noun is fronted. The illustrations of postnominal modifiers and how they agree with the head noun are given in table 3.3 and table 3.4 below (also see (19b) and (19c)).

	Pre-nominal Modifiers	Post-nominal Modifiers
Quantifier	*nʃə̀ mɔ́n* 'any child'	**mɔ́n nʃə̀*
Possessive	*já mɔ́n* 'my child'	*mɔ́n-Ø-à* 'my child'
Demonstrative	*ʃì mɔ́n* 'this child' *jwò mɔ́n* 'the child'	*mɔ́n Ø-ǐ* 'this child' *mɔ́n Ø-wǒ* 'that child'
Numeral	*ndì mɔ́n* 'one child'	*mɔ́n Ø-i mɔ̀ʔ* 'the one child'
Adjective	*pỳkét mɔ́n* 'a bad child'	*mɔ́n Ø-î mbýkét* 'the bad child'
Relative Pronoun	**jwó mɔ́n i twó nə́*	*mɔ́n Ø-wó í twó nə́* 'The child who came'

Table 3.3.Noun phrase morphology for singular and singular modifiers

	Pre-nominal Modifiers	Post-nominal Modifiers
Quantifier	*ŋgù pɔ́n* 'all children'	**pɔ́n ŋgù*
Possessive	*já pɔ́n* 'my children'	*pɔ́n-p-à* 'my children'
Demonstratives	*ʃɪ pɔ́n* 'those children' *ʃwò pɔ́n* 'those children'	*pɔ́n* p-*ǐ* 'these children' *pɔ́n* p-*wǒ* 'these children'
Numeral	*kpà pɔ́n* 'four children'	*mɔ́n* p-*í kpà* 'the four children'
Adjective	*pỳkét pɔ́n* 'bad children'	*pɔ́n p-î mbýkét* 'the bad children'
Relative Pronoun	**pwó pɔ́n î twó nə̀*	*pɔ́n* p-*wó í twó nə́* 'The children who came'

Table 3.4: Noun phrase morphology for plural and plural modifiers

As we can observe in table 3.3 and table 3.4 above, only adjectives modifiers may occur before or after the head noun. When they come before the head noun, the noun class prefix does not show up at all and the noun is interpreted as an indefinite noun as observed by Vazquéz Rojas (2008) (cf. Prenominal adjectives and numerals in table 3.3 and 3.4). However, when they immediately follow the head noun, they agree in class with its noun class prefix and are interpreted as definite nouns (see Postnominal adjectives and numerals in table 3.3 and 3.4).

As a starting point, it seems reasonable to assume that the definite article is the morphologically dependent affix *–í* in *Ø-í* versus *p-í* in what we have described as class 1 and 2 prefixes that express the singular and the plural in Shupamem. This idea was suggested to me by Kayne (pc). He observed that the contrast between indefinite and definite DPs in Shupamem is similar to that of that of some romance languages where only post-nominal adjectives are interpreted as definite with an affixed morpheme inserted between a head noun and the adjective that behaves like a definite article.

But, the agreement elements that come before the adjectives modifiers in Shupamem are often expressed in other languages by other word categories such as 'the associative marker' (Collins 2004) in what commonly appears as a *N1 of N2* construction. For the purpose of this analysis, I analyze the morpheme that appears between the head noun and its modifiers not as an associative marker, but rather as a definite marker. The evidence for this argument comes from the fact that the associative marker in Shupamem is marked by a floating High tone just like in Medumba (Voorhoeve 1971). The effect of the associative marker is exemplified in the following examples in (19). As we can see, the underlying Low tone on the possessee systematically becomes a High tone due to the influence of the floating High tone of the associative marker. I use the nouns *fìtù* 'pictures', *tàsà* 'plates',

nʃɛ̀ʃə ‘carpet’ and *nʃỳnʃỳt* ‘guard’ which all have a underlying Low tone to show how this works.

(19) a. *fítù ´ mfɔn* > *fítú mfɔn* ‘The king’s picture.’

b. *tásà ´ mfɔn* > *tásá mfɔn* ‘The king’s plate.’

c. *nʃɛ̀ʃə ´ mfɔn* > *nʃɛ̂ʃə̌ mfɔn* ‘The king’s carpet.’

d. *nʃỳnʃỳt ´ mfɔn* > *nʃýnʃỹt mfɔn* ‘The king’s guard.’

As we can see in (19), all the underlying Low tones on the nouns that come before the noun *mfɔn* ‘the king’ becomes High because of the associative marker that is expressed by the floating High tone. I argue that Shupamem has lost the Bantu-like prefix that would have functioned as the associative marker and the floating tone High tone behaves as a residue of that prefix. While the effects of these floating tones might look minimal in isolation, the reader should notice that they are very crucial in describing certain effects in context. It is therefore likely that the agreement that occurs between the head noun and its modifiers in Shupamem can be characterized as definite articles as repeated in (20) where the head noun is combined with the demonstrative, the numeral and the adjective. Since the noun modifiers in Shupamem mostly take the NCP in post-nominal positions, not in pre-nominal positions, I argue that the agreement prefixes that I refer to as definite articles result from NP movements.

(20) a. ʃı kpà pɔ́kɛ́t pɔ́n ná ŋ-gʊ́ʔ fàʔà
Dem.pl four nice 2-children IRR PTCP-like work
'These four children like the work.'

b. pɔ́n pí-kpà pí-mbɔ́kɛ́t p-ǐ ná ŋ-gʊ́ʔ fàʔà
2-children 2-four 2-good 2-Dem.pl IRR PTCP-like work
'These four children like the work.'

So far, we see that Shupamem word order within the DP is flexible. What we need to understand is the internal structure of DP as a whole in Shupamem with a particular focus on the discussion of the derivation of all grammatical orders including the demonstrative, the numeral and the adjectives. An example like (22) is very similar to Carstens' (2010b:05) example repeated in (21) where the NP occurs at the edge of DP, hence claimed to be adjoined phonologically to a null D (Carstens 1991).

(21) chipuni change chipuru [Shona]
7spoon 7my 7big
'My big spoon.' (Carsten 2010b)

A question arises as what is the internal syntax of DP in Shupamem given the apparent word order alternation between the head noun and its adjective modifiers (e.g., possessives, adjectives, numerals, demonstratives) as observed in (10). If we compare Shona's example in (21) to Shupamem's in (22), it follows that Shupamem has a similar concord paradigm where the head noun agrees in class with its post-nominal modifiers.

(22) a. m-ɔ̀n Ø-ùpwò ɲɪ̀ŋ-gáʔkɛ́t
1children 1our 1big
'Our big child.'

b. p-ɔ̀n p-úpwò pɪ́ŋ-gáʔkɛ́t
2children 2our 2big
'Our big children.'

My ultimate goal in this analysis is to provide a principled explanation of why certain XP movements within the DP are grammatical and others are not without having to resort to any ad hoc rule or stipulation. Before getting to this, let me first go over some of the previous studies on the syntax of DP in Bantu languages.

5.Previous works on DP Internal Agreement

The studies of agreement system internal to the DP in Bantu and the type of concord discussed here that I am aware of include Hyman (1972b), Hombert (1980), and a number of syntactic analyses on languages such as Nweh by Nkemnji (1995), Kiswahili by Carstens (1991, 2000), Bafut by Tamanji (1999, 2006), and the analysis of agreement parameters by Collins (2004), also see Baker and Collins (2006) and references cited there.

Nkemnji (1995) proposes to analyze agreement in Nweh DPs as involving a *spec-head* relation where he reanalyzes the noun phrase as consisting of a new phrase, namely the *Class Phrase* (*ClassP*). He also projects a *Genitive*/*Operator Phrase* (G/OP) above *NumP*. Under Nkemnji's (1995) approach, there are three XP movement processes (e.g., *NP*, *ClassP*, *NumP* movement) and three head raising processes (e.g., Num^0, G/O^0 and D^0) that account for observed word order facts in Nweh.

Carstens (2000) offers an alternative analysis to Nkemnji's approach. Based on her examples from Swahili, she argues for N^0-to-Num^0-to-D^0- raising for Bantu akin to the type observed in Romance languages. It is also argued that the more articulated feature-checking theory developed in Chomsky (1995) provides a better account of Bantu DP concord since checking relations are more numerous in this framework and are intrinsically symmetrical. Adopting the *Government Transparency Corollary* (Baker, 1988), Carstens assumes that D inherits the *Government Domain* of Num and N. From D, the complex [D + Num + N] transmits gender plus number agreement feature to every constituent within the C-command Domain of D, Num and N, aside from items with their own gender.

In contrast, Tamanji (1999, 2006), another important study on Bafut, a closely related language to Shupamem, argues for two structural configurations with respect to the syntax of DP and agreement facts, namely: *spec-head* and *head-head*. According to this argument, the *head-head* relation is needed to check agreement on lexical categories via covert raising of features of adjectives and genitives, in a head-to-head fashion, to the noun in Num^0. Moreover, features of functional categories (determiners and quantifiers) are checked via movement of NumP to *spec-DP* through *spec-QP* in the familiar way of *spec-head* agreement. The model the author is arguing for could be extended to Romance and Bantu *DPs*. Adopting Chomsky's (1995) proposals for checking Φ-features on arguments in clauses to the checking of non-argument agreement relations in the DP, Tamanji suggests a way of dealing with a really rich agreement system without resorting to the projection of agreement phrases.

Following this line of reasoning, it is argued that the account of agreement follows naturally from the internal syntax of Bafut *DPs*. Therefore, variation in distribution and interpretation of constituents of the *DP* results from movement to positions that correlate with different interpretations. Configurationally, NP is embedded inside four functional projections: *FocP*, *DP, QP* and *NumP*. N-raising to Num^0 and subsequent movement of NumP to *Spec-QP* and *Spec-DP* yield the unmarked noun-initial word order commonly attested in Bantu.

Further raising of functional heads to Foc^0 produces the contrastive focus interpretation when functional heads exceptionally precede the noun. The following examples in (23) through (25) from Kiswahili (Carstens 2000), Bafut (Tamanji 2006) and Nweh (Nkemnji 1995) respectively, are illustrative data showing agreement in noun classes in Bantu languages:

(23) a. kiti change [Swahili] (Carstens, 2000:322-323)
7chair 7my
'My chair

b. viti vyangu
8chair 8my
'My chairs'

c. ndizi yangu
9banana 9my
'My banana'

b. ndizi zangu
10banana 10my
'My bananas'

(24) a. fɨ ndzɔ́ɔ́ fɨ fùù [Bafut] (Tamanji, 2006)
19-frog 19-white
'A white frog'

b. mɨ́ ndzɔ́ɔ́ mɨ́ fùù
6-frog 6-white
'White frogs.'

(25) a. afû à liɨ́ [Nweh] (Nkemni, 1995:97)
7medecine 7sweet
'sweet medicine.'

b. mbzaŋ n-juŋ
9-peanuts 9-dry
'dry peanuts'

My treatment of agreement relations between the head noun and its various modifiers will be similar to the one proposed in Nkemnji (1995) and Collins (2004). The core idea will be that Shupamem agreement obeys a syntactic configuration where a noun modifier that agrees with the NP stands higher than the NP within the DP, and the NP is fronted to a functional position dominating that modifier. Once the NP moves pass its modifier, the agreement head spells out as an agreement concord that I will characterize as a definite article, not an associative marker as in Collins (2004). I will add that the Shupamem DP has a flexible word order and that all *Phrasal/XP*-movements within the DP are subject to the *Freezing Effect* (Rizzi 2006). For the purpose of this analysis then, I will make the following set of assumptions, the first three of which are similar to the first three made by Cinque (2005) with minor changes. The following are the principles that explain XP movements internal to the DP in Shupamem:

(26)

a) The underlying hierarchical order of Dem, Num, A and N in the extended nomimal projection is Dem > Num > A > N where > indicates c-command.

b) All (relevant) movement is XP movement.

c) All movements target a commanding position.

d) All (relevant) movements are to the left in the LCA sense.

e) The Agreement Phrase is only licensed in a context where the head noun moves pass its modifier (e.g., demonstrative, numeral or adjective).

f) The movement of head noun triggers the morphological spell out of the agreement head or any functional projection hosting it.

g) All movements are subject to the freezing principle.

The above assumptions lead to two main (and welcome) results: (i) they involve fewer restrictions than the previous assumptions and therefore result in a superset of permitted derivations with respect to the set of derivations in Cinque's approach, and (ii) the linear asymmetry in the order of elements within the extended nominal projection still follows from the LCA but also from the restrictions on movement described above.

Unlike Tamanji (1999, 2006), I consider the projection of *AgrP* to be crucial in configurations where there is any agreement within the DP (e.g., multiple instances of definite morphemes). XP movement as well as remnant movement are permissible as long as they do not violate the freezing effect. These fairly natural assumptions seem to force us to the conclusion that Greenberg's Universal 20 and subsequent theories seem to be inconsistent with Shupamem for two main reasons: (a) that the *participial* adjectives create room for more word orders (prenominal or postnominal); (b) the post-nominal adjective is the direct consequence of a cyclic movement of *NP* to *Spec-AgrP* creating a criterial freezing configuration between Spec-*AgrP* and *Agr*. Following Chomsky (1995:281), if we assume that the features of the probe which enters into checking relations are uninterpretable, it follows that the *AgrP* head bears uninterpretable phi-features which must be checked at the latest by LF. To ensure that the checking occurs in overt syntax, I assume further that this optional feature picked up by an agreement head as it enters the numeration is STRONG (or it has an obligatory EPP feature). Now that I have outlined the key assumptions of my proposal, let me move on to the internal syntax of Shupamem DP.

6.The Linear Order of Elements in Shupamem DPs:Synthesis

This section discusses the relative order of noun modifiers (e.g., demonstrative, numeral, adjective) with respect to the surface position of the head noun. My analysis of word order variation within the DP is grounded in the conceptual considerations which underpin and motivate the Antisymmetry research program initiated in Kayne (1994). If one considers the surface order of the head noun and a noun modifier, one can think of the variation in word order within the DP as a direct consequence of movement. Assuming Kayne's (1994) LCA is correct, it follows that the basic component of a given DP in Shupamem would be universally configured as [$_{XP}$YP [X ZP]] where YP is a specifier and ZP a complement. Following this line of reasoning, if the order *Determiner > Modifiers (Adjectives, Numeral, Demonstrative)> Noun* is taken to be basic as I assume below, then the order displayed by various elements within Shupamem DPs and related languages must be (transformationally) derived. One way of showing this is to consider each noun modifier from Cinque's (2005) sequences in (10) and other noun dependents (e.g., quantifiers, intensifiers, relative pronouns, etc) in isolation and combine them with the head noun to see what the predictions are about word order within the noun phrase.

Let me stress in the outset that the major characteristic of the noun phrase in Shupamem is that the head noun may either follow or precede its modifiers. Only relative clauses are strictly post-nominal.

6.1.Adjective Modifiers in Shupamem

In Shupamem as in many other Bantu languages, adjectives are subdivided into two groups, namely (a) simple adjectives and (b) verb-like adjectives (i.e., participial adjectives). Simple adjectives are those that are listed in the lexicon as inherent adjectives contrary to participial adjectives that are always derived from lexical verbs. The adjective classes are summarized in table 3.5 below. The list of adjectives given in table 3.4 is not exhaustive. Its purpose is to establish some generalizations about the distributional properties of Shupamem adjectives. The distinction between the adjective types offered here is based on morphological and syntactic factors. Type 1 adjectives (i.e., participial adjectives) are productively derived from lexical verbs and may precede or follow the head noun. Unlike Type 1 adjectives, Type 2 adjectives are listed in the lexicon as inherent adjectives and are always pre-nominal. They lack any kind of morphological complexity and never inflect in noun class because of their pre-nominal surface position within the noun phrase. Type 3 are also inherent adjectives but only surface post-nominally, thus inflect for noun class.

For this analysis, I will only focus on the discussion of the participial adjectives that are either interpreted as definite or indefinite depending on their surface position as discussed in Vasquéz Rojas (2008). Since there seems to be more lexical options in describing a state in Shupamem, it is important to mention that a state like the English adjective '*big*' may be encoded by either a *lexical verb* such as 'ɣáʔ' (be big) or a real adjective 'ŋgbə̀m' (big) which also corresponds to a prenominal participial adjective *ɣáʔkét* "big" or a post-nominal participle adjective *îŋ-gáʔkét* "the big".

All Adjective Classes			
	Singular	Plural	Meanings
a. Participial Adj. *V-ɛt* (*Pre & Post-nominal Adj*)	a.pɔ́két b.pýkét c.ràànə́ d.ʃỳʔrə́	pɔ́két pɔ́két pýkét pýkét ràànə́ ràànə́ ʃỳʔrə́ ʃỳʔrə́	'beautiful' 'bad/ugly' 'smart' 'stupid'
b. *Nominal* *(Only Pre-Noninal Adj)*	a. kúḿ b. kə̀mʃə̀ c. ŋgbə̀m d. ntám	kúm kúm kə̀mʃə̀ kə̀mʃə̀ ŋgbə̀m ŋgbə̀ m ntám ntám	'old' 'short' 'big' 'long'
c. *Nominal* *(Only Post-Nominal Adj)*	a. sî b. fý c.pʊ́tə́ e.ŋgùrə̀	sîsî fýfý pʊ́tə pʊtə́ ŋgʊ̆t ŋgùrə̀	'black' 'white' 'red' 'big'

Table 3.5. Adjective Classes in Shupamem

The morphosyntactic properties of adjectives in table 3.5 clearly suggest that adjectives in Shupamem do not seem to belong to a single lexical category. They may show some morphosyntactic properties of nouns or verbs depending of the context. Syntactically speaking, when an adjective, whether it is a participial adjective or an inherent adjective, occurs after the head noun, it systematically agrees in noun class with the head noun (28a&b). Simple adjectives are either strictly pre-nominal or strictly post-nominal as shown in (27) and (28) while participial adjectives may occur before or after the head noun as show in (29).

(27) a. ŋgbə̀m mə́n
1- big 1-child
'The/a big child.'

a'. *mə́n ŋgbə̀m
1-child 1-big

b. ŋgbə̀m ngbə̀m pə́n
2-big 2-big 2-children
'The big children.'

b'. *pə̂n ŋgbə̀m ŋgə̀m
2-children 2-big 2-big

(28) a. nsɛ̀n Ø-í ŋgùrə̀
5-forest 5-Def 5-large
'The/a large forest.'

a'. *ŋgùrə̀ nsɛ̀n
5-large 5-forest

b. nsɛ̂n nsɛ̂n ʃ-í ŋgût ŋgùrə̀
6-forest 6-forest6-Def 6-big 6-big
'The/ large forests.'

b'. *ŋgût ŋgùrə nsɛ̀n nsɛ̀n
6-big 6-big 6-forest 6-forest

(29) a. sénkɛ̂t mɔ̀n
black 1-child
'A black child.'

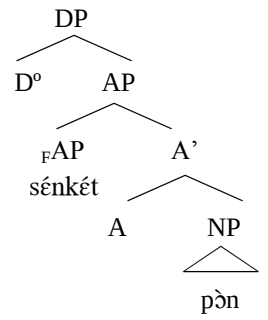
a'. mə́n Ø-ì nsénkét
1-child 1-Def. black
'The black child'

b. sɛ́nkə̂t pɔ̀n
black 2-children
'Black children.'

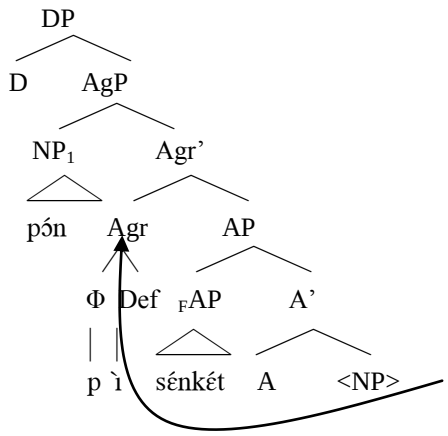
b'. pɔ́n p-ì nsɛ́nkɛ́t
2-chidren 2-Def. black
'The black chidren'.

It is very important to point out that a strictly prenominal adjective is ambiguous between a definite and an indefinite reading as shown in (27a&b). However, all postverbal adjectives (whether it is a simple adjective or a participial adjective) are interpreted as definite DP as exemplified in (29a'&b'). Note that a preverbal participial adjective is systematically interpreted as an indefinite DP as shown in (29a&b). These facts are due to Vázquez-Rojas's (2008). The distribution of the definite article described in the above examples is very consistent with the *existential or There be sentences* or the *have-constructions* test that are usually explored by linguists to determine the distinction between indefinite versus definite DPs. Under these tests, only the examples in (27a&b) which are ambiguous and those in (29a &b) would meet the conditions for the indefinite interpretation. The next question, given the distribution of those adjectives, is how to derive postnominal versus prenominal adjectives in a way that accounts for the existence of postnominal definite article observed in Shupamem. I propose that (29b) and (29b') for instance will have the following derivations in (30) where the noun phrase moves higher up to the specifier of AgrP.

(30) a. AP > NP



b. NP> AP



(30b) thus yields the order *NP>AP* by means of NP movement to *spec-AgrP*. This actually shows that apparent head movement in this analysis is reduced to phrasal movement. Moreover, the agreement head consists of the noun class prefix *p-* and the definite article *–ì*. I argue that variations in word order are used in Shupamem to make one part of the DP more prominent than another. For instance, the elements of the DP in (31) can be rearranged in various ways to produce different shades of meaning.

(31) a. màpɔ́n fá ŋkɛ̀ nə [$_{DemP}$ʃì [$_{NumP}$kpà [$_{AP}$ pɔ́kɛt [$_{NP}$pɔ́n]]]]
Mapon give water to Dem_{pl} four nice 2-children
'Mapon gave those four nice children some water.'

b. màpón fá ŋkɛ̀ nə́ [$_{DemP}$ʃì [$_{NumP}$kpà [$_{NP}$pɔ́n [$_{AP}$(p-î) m-bɔ́kɛ́t]]]]
Mapon give water to Dem_{pl} four 2-children 2-Def 2-nice
'Mapon gave those four nice children some water.'

The example in (31a) has a reading by which the children are treated as *handsome* via the A-N order, while (31b) has a reading by which the children are treated as *nice* (extrinsic reading) via N-A order. Moreover, the adjective in (31a) is doubled to mark the plural agreement while in (31b), the plural agreement in indicated by a number agreement prefix. I show in the next section that numerals behave exactly like adjective modifiers in terms of their surface position with respect to the head noun.

6.2.Numerals and Definiteness

In Shupamem, numerals may precede or follow the head noun. A prenominal numeral has an indefinite interpretation while a postnominal numeral is interpreted as a definite numeral. This is consistent with Shupamem numerical system (e.g., cardinal and ordinal numerals) summarized in table 3.6 below.

Figures	Cardinals		Series	Ordinals
	Pre-nominal	Post-nominal		
1	mɔ̀ʔ/ndɨ	ø-ɨ̂-mɔ̀ʔ	First	pùm-ø-ɨ̀
2	mbă/pɛ̀ʔ	p-ɨ̂-pà:	Second	mbá:rə ɨ̂-pà:
3	tɛ́t	p-ɨ̂-tɛ́t	Third	mbá:rə ɨ̂-tɛ́t
4	kpà	p-ɨ̂-kpà	Fourth	mbá:rə ɨ̂-kpà
5	tɛ̀n	p-ɨ̂-tɛ̀n	Fifth	mbá:rə ɨ̂-tɛ̀n
6	ntú	p-ì-ntú:	Sixth	mbá:rə ɨ̂-ntú
7	sàmbà	p-ì-sàmbà	Seventh	mbá:rə ɨ̂-sàmbà
8	fámə	p-ì-fà:mə	Eight	mbá:rə ɨ̂-fá:mə́
9	vý	p-ì-vɨ̌ʔ	Ninth	mbá:rə ɨ̂-vɨ̌ʔ

Table 3.6: Cardinals and Ordinal Numbers and Noun Class Prefix Agreements in Shupamem.

The contrast between numerals taken in isolation and those that occur as postnominal suggests that the noun class prefix is only added to the numeral stem when it appears after the head noun. In the later section of this analysis, I will use the label numeral (Num) to represent cardinal numbers. Table 3.6 is crucial in that it shows that numerals that occur before the head noun lack any noun class prefix while those that occur after the head noun always carry a noun class prefix (e.g., zero for singular and *p*-for plural). It is very important to note that ordinal numbers differ from numerals in that they have a definite article but do not vary in noun class as is the case with numerals.

Cardinal numbers in Shupamem by and large, display a freedom of occurrence just as in Hebrew where they may precede or follow the head noun (See

Slonsky, 2004). The data discussed here confirm the idea that prenominal numerals are associated with indefiniteness while postnominal numerals are associated with definiteness as argued in Vázquez-Rojas' (2008) analysis of the semantics of numeral in Shupamem. Accordingly, the acceptability judgements about cardinal numerals and ordinal numerals suggest that only the former may occur before or after the head noun while the later is confined to a pre-nominal position, otherwise the sentence will be ungrammatical as in (33b).

(32) a. (mɔ́ʔ) kpà pʉ̂-mvì
Ind. four 2-goat
'Four goats'

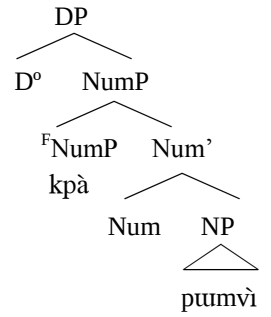
b. (*mɔ́ʔ) pʉ̂-mvì p-î kpà
Ind. 2-goat 2-Def four
'The four goats'

(33) a. ùm pʉ̂-mvì
First 2-goat
'The first goats'

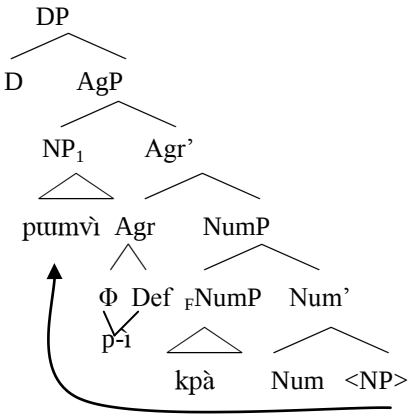
b. *pʉ̂-mvì ùm
2-goat first

It is clear from the above examples that cardinal numerals have similar morphosyntactic properties as modifying adjectives. If the configuration in (30) is correct, it follows that the prenominal cardinal numerals and postnominal cardinal numerals will be derived as in (34). Here, if cardinal numeral precedes the head noun, the corresponding structure of such a configuration can be represented as in (34a). From (34a), the inverse order where the numeral follows the head noun is derived as in (34b) by raising *NP* to the specifier position of *AgrP* dominating NumP.

(34) a. NUM > NP



b. NP> NUM



Quite obviously, the projection of AgrP in (34b) triggering the movement of NP to its specifier position suggests that the agreement head has a strong feature and also indicates an instantiation of definiteness distinction. Then we can conclude that Shupamem includes the noun class prefix among its determiner features (e.g., the zero versus *p*- distinction before the definite morpheme in table 3.5). Next, let us turn to the syntax of demonstrative constructions to see what the predictions are for the surface position of the definite article.

6.3.Demonstratives and (In)definiteness

Determiners are commonly used by many linguists for definite and indefinite articles, as well as other functional elements such as demonstrative determiners and possessive pronouns. Lyons (1999:1) for instance claims that the element that encodes definiteness or indefiniteness 'may be a lexical item like the definite and the definite articles in English (*the, a*), or an affix of some kind like Arabic definite prefix *al-* and indefinite suffix *–n*.' Notice, however that this kind of a characterization of the term 'determiner' is better reserved for languages like English or French where there are functional categories which articles do no co-occur with, like demonstrative determiners and possessive pronouns (e.g., **the my house*; **the this bag*). If one assumes that the determiner corresponds to the set of such words that surface in the same position in the noun phrase (e.g., specifier of the noun phrase), and do not co-occur with each other in languages such as English or French, then defining the status of determiners in a language like Shupamem will face a serious problem with respect to such a characterisation of the determiner.

Shupamem distinguishes two kinds of demonstratives, namely (a) the proximal demonstratives *jîĩ̃* 'this' and *ʃĩĩ̃* 'these' and (b) their distal counterparts *júó* 'that' and *ʃúó* 'those'. Those demonstratives can be used to indicate referentiality. One first major point about Shupamem is that, it may allow demonstrative determiners to co-occur not only with the definite article (43), but also with the indefinite one (44c). Thus, I stress that the definite article is morphologically marked by the suffix prefix *–î* that occurs before any postnominal modifier (e.g., adjective, numeral) while the indefinite is marked by a zero morpheme or the morpheme *mɔ́ʔ* 'a'. In Shupamem, demonstrative modifiers can appear either in pre-nominal position as in (35c) and (36c) or in postnominal position as in (35a) and (36a).

Morphologically, when the demonstrative follows the head noun, it obligatorily shows agreement in noun class with the head noun (see the (a) examples in (35)-(36)). But, if the demonstrative comes before the head noun, it does not agree in noun class with the head noun otherwise the sentence will be ungrammatical (see the (c) examples in (35)-(36c)). Note also that all prenominal demonstratives are interpreted as focused.

(35) a. m-ɔ̀n Ø-î b. *Ø-í Ø-mɔ̀n c. ɲ̀ı Ø-mɔ́n
1-child 1-Dem 1-Dem 1-child Dem 1-child
‘This child (here).’ ‘THIS child (here)’ ‘THIS child (here).’

(36) a. p-ɔ̀n p-î b. *p-í p-ɔ́n c. ʃ̀ı p-ɔ́n
2-children 2-Dem 2-Dem2-children Dem 2-child
‘These children (here).’ ‘THESE children (here)’ ‘THESE children (here).

Distal demonstratives behave the same as proximate demonstratives as shown in the following examples.

(37) a. m-ɔ́n Ø-wó b. *Ø-wó Ø-mɔ́n c. juó Ø-mɔ́n
1-child 1-Dem 1-Dem 1-child Dem 1-child
‘That child .’ ‘THAT child’ ‘THAT child.’

(38) a. p-ɔ́n p-wó b. *p-wó p-ɔ́n c. ʃwó p-ɔ́n
2-children 2-Dem 2-Dem2-children Dem 2-child
‘These children.’ ‘THOSE children ’ ‘THOSE children .

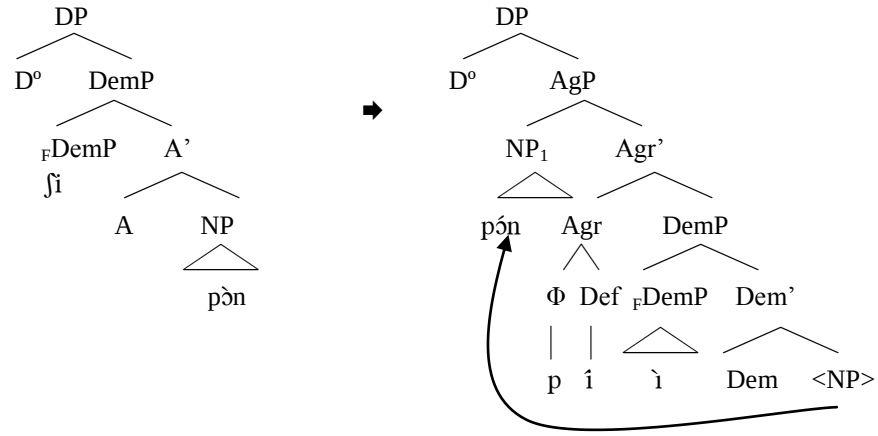
It is important to point out that Shupamem has a semantic/pragmatic difference between prenominal and postnominal demonstratives (with formal differences other than position). While emphatic demonstratives can precede the head noun, normal demonstratives can only follow it. Judging from the following examples in (39), *emphatic demonstrative* here can mean that the demonstrative expresses contrastive focus (the emphatic demonstrative is underlined).

(39). a. á jʊ́ nà pó ɲ̲ì mɔ́n pájʊ́
Es eat PFV Foc Dem_{sg} 1-child food.
‘It is THIS CHILD who did it’

b. á jʊ nà pó ʃ̲ì pɔ́n pájʊ́
Es eat PFV Foc Dem_{pl} 2-children food.
‘It is THESE CHILDREN who did it’

The examples in (35)-(39) suggest some similarities between demonstratives and noun modifiers like adjectives and numerals. Like adjectives and numerals, demonstratives agree in noun class with the head noun if they follow it. Granting the idea that all regular demonstratives are postnominal in Shupamem, it follows that the NP > Dem order is always obtained via a movement of NP to spec-AgrP dominating the demonstrative phrase as illustrated in (40).

(40) a. AP > NP b. NP> AP



Strictly speaking, as we can see in the derivation in (40b), under the analysis, in terms of the distribution of the definite article with respect to the demonstrative, the surface form of the NP suggests that when the demonstrative is postnominal, the definite article which agrees in class with the head noun precedes the demonstrative.

Leu's (2008:23-24) hypothesis that demonstratives in West Germanic 'are adjectival in some sense' therefore are incorporated into the DP, is very consistent

with Shuapmem data in (41) and (42) that show similar morpho-syntactic properties between demonstrative and adjectives with respect to agreement in noun class with the head noun. While I agree with the hypothesis that demonstratives are phrasal and may consist of an adjectival component and a definite marker morpheme as argued in Dryer (1992, p.120ff), Delsing (1993, chapter 4.3), Chomsky (1995, p.338), Bernstein (1997, p.93), Elbourne (2005), Julien (2005) among others, I also argue that they are morphologically complex, thus spelling out different heads in an extended adjectival projection.

	Prenoninal Modifiers	*Postnominal Modifiers*
(41) DEM	a. ĵĩ pŭŋgbíe 'THESE women'	b. pŭŋgbíe pĭ 'These WOMEN'
	a'. * pĭ pŭŋgbíe 'THESE women'	b'.* pŭŋgbíe ĵı 'These WOMEN'
(42) ADJ	a. pòkét pŭŋgbíe 'NICE women'	b. pɔ́n pımbòkét 'The nice WOMEN'
	a'.*pí mbòkét pŭŋgbíe 'NICE women'	b'. * pŭŋgbíe pokɛ́t 'The nice WOMEN'

As we can observe in (41)-(42), the demonstrative (41b) and the adjective (52b) agree in class with the head noun when they immediately follow it. However, if the head noun remains in situ, in which case the noun modifier appears in a prenominal position, the definite article does not spell out, otherwise the DP sequence would be ungrammatical as in all the (a'&b') examples in (41)-(42). It is important to note that the nasal prefix N- before the adjective comes from the class prefix 15 that commonly encodes the infinitive marker (see Chapter 2 for the extensive discussion of Shupamem noun classes).

The syntactic similarity between adjectives and numerals in Shupamem confirms Leu's (2008) hypothesis that the demonstrative is adjectival and is complex, due in part to the fact that it may co-occur with the definite article. For the purpose of this analysis, I will argue that the demonstrative as well as the adjective project their own functional projections and surface in the specifier positions of those functional projections. I further adopt the fundamental assumptions of Kayne' (1994) LCA hypothesis that the order where the head noun appears before its noun modifiers results from the movement of the noun to a functional position dominating those modifiers (e.g., AgrP).

6.4.Quantifiers, Intensifiers and Relative pronouns

In this section, I will address the issue of what the surface position of other noun modifiers corresponds to. As far as Shupamem data is concerned, the label noun modifiers used here covers lexical words that occur beyond determiners. There are two sets: (a) modifiers 1 (e.g., numeral and quantifiers) and (b) modifiers 2 (e.g., adjectives, intensifiers and relative clauses). In what follows, I will provide a brief discussion of the how quantifiers, intensifiers and relative clauses combine with the head noun.

6.4.1.Quantifiers

Shupamem has three lexical words playing the role of quantifiers as repeated in (43).

(43) a. ŋgù: pɔ́n
All 2-chilren
'All childen'

b. *pɔ́n ŋgù:
children all

b. məkièt pɔ́n
few 2-children
'Few/little children'

b'. *pɔ́n məkièt
2-childen few

c. rɛ̌n/jàm/ŋkwǎt pɔn
many 2- children
'Many/a lot of children.'

c'. *pɔ́n rɛ̌n/jǎm/nkwǎt
2-children many

As can be observed from the examples in (43), quantifiers differ from numerals and other modifiers such as demonstratives, and possessive pronouns in that they always come before the head noun, otherwise the sentence will be ungrammatical. Moreover, they are always interpreted as indefinite, thus never agree in noun class, as it was the case with other noun modifiers. For reason of space, I will not be able to offer a full analysis of these examples. However, the fact that quantifiers are always prenominal implies that they are the topmost node dominated by the DP.

6.4.2.Intensifiers

Intensifiers are adverbs that denote degrees (Mwihaki 2007:28). I will adopt Givón's (2001) label of intensifiers that refer to the three adverbs in (44) usually used to intensify the meaning of the lexical items they modify.

(44). a ndàː lɔ̀ʔkɛ̀t pɔ̀n
Very stubborn 2-child
'Very stubborn children'

a'. *lɔ́kɛ́t pɔ́n ndàː
stubborn 2-child very

b. ndàː pɔ̀n p-ɨ̌ n-dɔ́ʔkɛ́t
Very 2-child 2-Def. 2-stubborn
'The very stubborn children'

b'. * pɔ́n p-ɨ̌ n-dɔ̀kɛ́t ndàː
2-child 2-Def. 2-stubborn very

As we can observe in (44), intensifier also comes before the head noun. What about the relative pronoun?

6.4.3.Relative clauses

Shupamem distinguishes 2 types of relative pronouns, namely (a) the relative pronoun *júó* 'who/that' that takes the shape of the distal demonstrative presented earlier, usually used to modify both non locative expressions and locative expressions (45) and (b) the relative pronoun *ŋà* which only modifies locative expressions (45'a&b). Morphologically, only the relative pronoun *júó* agrees in noun class with the head noun. In any event, no matter which type of relative pronoun is considered, all of them follow the head noun.

(45) a. mɔ́n Ø-wó î ʃéʃə́ nə́ pàː ràn̆ĭ
1-Child 1-Rel 3sg commission COMP be smart
'The child that he commissioned is smart.'

b. pɔ́n p-wó î ʃéʃə́ nə́ pâː ràn̆ĭ
2-Child 2-Rel 3sg commission COMP be smart
'The children that he commissioned are smart.'

c. *mɔ́n ŋá î ʃéʃə́ nə́ pàː ràn̆ĭ
1-Child Rel 3sg commission COMP be smart
'The child that he commissioned is smart.'

d. *pɔ́n ŋá î ʃéʃə́ nə́ pâː ràn̆ĭ
2-Child Rel 3sg commission COMP be smart
'The children that he commissioned are smart.'

(45') a. ndáp ŋá léraʔ ŋ̀-ʃù nə́ pâː rɛ́nkérî
3-house Rel. 1-teacher PTCP-stay COMP be clean
'The house where the teacher stays is clean.'

b.ndáp ndâp ŋá léraʔ ŋ̀-ʃù nə́ pâː rɛ́nkérî
3-house 6-house Rel. 1-teacher PTCP-stay COMP be clean
'The houses where the teacher stays are clean.'

c. ndáp Ø-wó leraʔ jún nə́ pâː rɛ́nkérî
6-house 3-Rel. 1-teacher buy.PST COMP be clean
'The house that the teacher stays is clean.'

d.ndáp ndáp wó leraʔ jún nə́ pâː rɛ́nkérî
6-house 6-house 6-Rel. 1-teacher buy.PST COMP be clean
'The houses that the teacher buy are clean.'

As a summary of what we have presented so far with respect to the internal structure of Shupamem DP, if we were to combine the head noun with all its modifiers (e.g. the quantifier, the intensifier, the demonstrative, the numeral, the adjective and the relative pronoun), one would obtain a structure like (46) where the quantifier precedes the demonstrative which in turn is immediately followed by the intensifier.

(46) ŋgùː ndàː ʃì pɔ́kɛ́t kpà pɔ́n p-wó léràʔ fú nə̀ pàː ràn̂ì
All very these nice four 2-children 2-Rel teacher call.Past C be smart
'All these very nice four children that the teacher called are smart.'

The example in (46) is the most natural sequence. However, other word order possibilities can be used depending on the context. Data on Shupamem actually confirms Givón's (2001:02) hypothesis that adjectives, numerals,

possessives, determiners and even the relative pronouns follow a hierarchical ordering in Bantu.

Now that we have outlined the syntactic distribution of noun modifiers taken in isolation, let us now move to the discussion of the internal structure of the DP in Shupamem.

7.DP Internal Word Order Variation and Greenberg's Universal 20

It has become a tradition in generative grammar to study cross-linguistic as well as language internal word order in terms of syntactic movement of lexical categories within the noun phrase. This section intends to account for word order variation within Shupamem DPs in terms of constituency and adjacency. My analysis of the noun left periphery in Shupamem offers a different version of Cinque's (2005) cartographic model that integrates Carstens's (1991, 2000) theory of agreement in Bantu DPs and the extension Rizzi's (2004, 2007) Freezing Principle to the internal structure of DPs. Although I also integrate many aspects of Kayne (1994) LCA assumptions, I do not adopt his syntactic analysis en bloc. This is due to the fact that Shupamem DP elements (e.g., demonstrative, numeral, adjectives and the head noun) seem to have a more complex structure than what was originally proposed in Cinque's (2005) system. I will therefore follow the dominant idea in the field that projects the functional DP as the topmost node

dominating other functional phrases encoding various inflections within the noun phrase (cf. Abney 1987; Longobardi 1994; Stowel 1989, Szabolcsi 1987, 1994). This section answers two main theoretical questions. First, what kind of movement (head movement or phrasal movement) better accounts for word order variation within the DP? Second, does Shupamem exhibit a choice between head movement and phrasal movement within the DP? In this analysis, I claim (a) phrasal movement and (b) roll up movement will be necessary to account for a number of word order variations observed in Shupamem.

7.1. XP Movements and the Freezing Effects in the DP

In this section, I consider DPs including more than one noun modifier to see what the predictions are with respect the movement of the head noun over a modifier to the specifier position of a functional phrase (e.g., AgrP) dominating that modifier. It naturally follows from the Agreement Trigger hypothesis developed here that in Shupamem, whenever the head noun comes first in the noun phrase as a result of movement, each subsequent noun modifier will agree in class with it. Thus, an overt definite article is systematically spelled out whenever the head noun moves pass its modifier.

What I am trying to accomplish in this section is to account for the syntactic derivation of the mirror image of a DP sequence such as *Modifier$_1$ > Modifier$_2$ > Noun* using two of the three noun modifiers, namely: the demonstrative, the numeral, and the adjective when they combine with the head noun. Let me start with what happens when a demonstrative in addition to a numeral are combined with the head noun.

7.1.1.Demonstrative > Numeral > Noun

At first sight, it seems that, all the 6 mathematically possible orders combining the 3 elements *Dem, Num, and N* (factorial 3: 3x2x1=6) are grammatical in Shupamem, unless the noun class agreement is incorrectly spelled out (see (49b&c). Any violation of the freezing effect (49c) will generate an ungrammatical DP sequence as well. I repeat all the possible sequences in (47)-(49) to show how crucial are the agreement morphemes to DP well-formedness in Shupamem.

(47) a. ʃi (mɔ́ʔ) kpà pɔ́n (DEM> NUM> N)
Dem Ind. four 2-children
'THESE four children.'

b. ʃi pɔ́n p-í kpà (DEM> N> NUM)
Dem 2-children 2-Def four
'THESE four children (specific).'

(48) a. kpà ʃi pɔ́n (NUM>DEM> N)
four Dem 2-children
'THESE four children. '

b. kpà pɔ́n p-ĭ-ɨ́ (NUM> N> DEM)
four 2-children 2-Def.-Dem
'THESE four children.'

c. *kpà p-ɨ́-ĭ pɔ́n (NUM> DEM> N)
four 2-Def.-Dem 2-children
'THESE four children.'

d. *kpà pɔ́n ʃi (NUM> N> DEM)
four 2-children Dem
'THESE four children.'

(49) a. pɔ́n p-ɨ́-ĭ p-ɨ́ kpà (N> DEM> NUM)
2-children 2-Def.-Dem 2-Def. four
'THESE four children.'

b. pɔ́n p-ɨ́ kpà ʃi (N> NUM> DEM)
2-children 2-Def. four Dem
'These four children.'

c. * pɔ̀n ʃi p-ɨ́ kpà (N> DEM> NUM)
2-children Dem 2-Def. four
'THESE four children.'

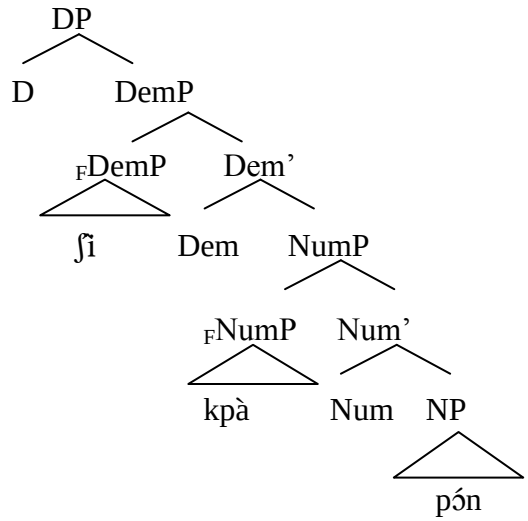
d. *pɔ́n p-ɨ́ kpà p-ɨ́-ĭ (N>NUM>DEM)
2-children 2-Def. Four 2-Def.-Dem
'These four children.'

As can be observed in the above examples, Shupamem noun class prefixes also participate in a pervasive concordial agreement system where a postnominal demonstrative agrees with the head noun in terms of it class features.

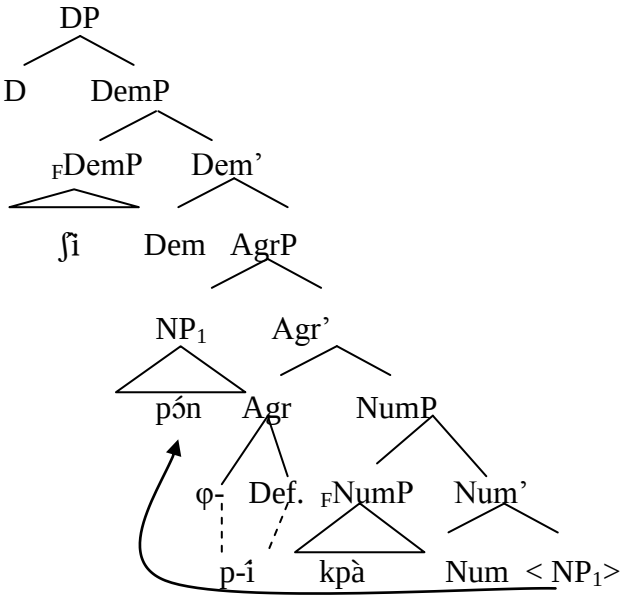
The examples in (47) through (49) demonstrate that all 6 possible orders combining the demonstrative, the numeral and the head noun are grammatical. Moreover, they demonstrate how the agreement system works with respect to the indication of the definite article (suffix), NP movement and the co-occurence of the demonstrative with the definite article. Configurationally, when a NP moves to the functional projection dominating either NumP or DemP, the morpheme *p-î* (agreeing in person and number) with the noun class prefix is overtly spelled out as shown in (47b), (48b), and (49a&b). However, when the NP stays in situ (i.e., when it follows the demonstrative and/or the numeral), the morpheme *p-î* is not needed.

Evidence for movement to the functional projection comes from word order variations between DPs with overt definite articles (47b, 48b) and (49a&b) and those without (47a, 48a). If we assume that the order Dem>Num> N is the basic order, it follows that the order in (47b) must be derived by movement. Based on examples like (47a) and Cinque's (2005) observations about the universal basic hierarchy of elements within the DP, I propose that (47b) is derived from (47a) as shown in (50).

(50a) . [Dem> Num> NP]= Zero movement



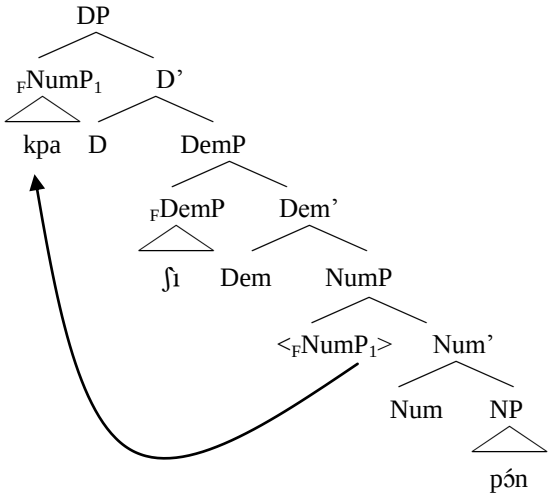
(50b). [Dem> NP> [$_{AgrP}$Num]= NP movement



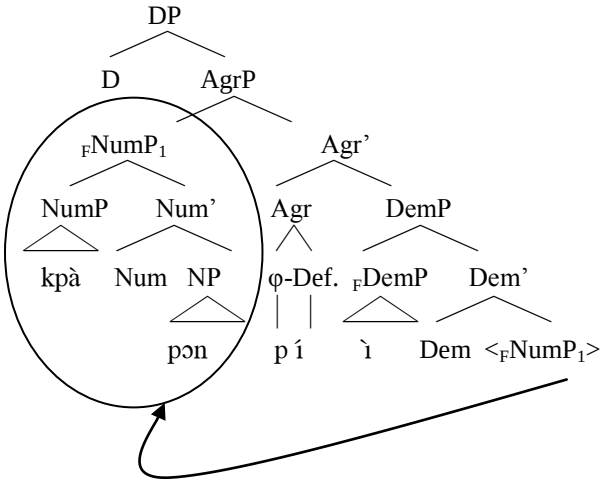
The derivation in (50b) explains among other things why the definite article occurs right after the head noun. When the head noun moves to spec-AgrP, the agreement head is overtly spelled out as a definite article which agrees in noun class. I argue that the AgrP head should be split into a phi feature which encodes the singular (zero) or the plural (*p*-) and the definite article which spells out as *–í.*

In (56a&b), the numeral comes first. The only difference between those two examples is that of word order between the head noun and the adjective. (56a) is derived via the movement of the numeral to spec-DP where the adjective and the head noun remain in situ as shown in (51a). In such a configuration, no noun class agreement is required. However, in (48b), we have a complex {Num+N} moving as a constituent into spec-AgrP as shown in (51b). (48c&d), in contrast, are ungrammatical just because of the incongruence of the noun class agreement showing up on the demonstrative. In (48c), the demonstrative bear a noun class without having any head noun preceding it. In (48d), the demonstrative lacks a noun class where it should have one because of the movement of the head noun into spec-AgrP as shown in the grammatical example in (51b).

(51a). Num> Dem> N



(51b) Num>N> [$_{AgrP}$Dem]



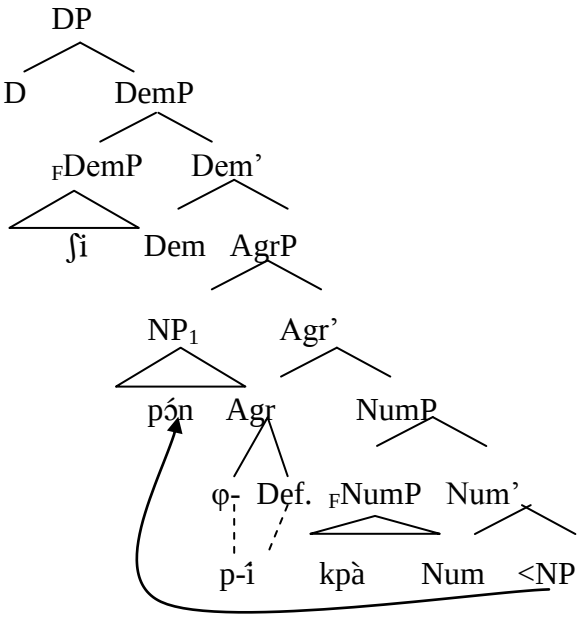
Syntactically speaking, (48b) represented in (51b) shows that the agreement head is syntactically conditioned (e.g., it only spells out after the NP movement)

and consists of the phi-feature *p-* and the definite article[14] *–î*. I argue that the agreement head in Shupamem has to do with definiteness and specificity of the noun phrase. It can only be used for things that are known or contextually given. Thus, it triggers the movement of the head noun with or without its modifiers. I claim that NP movement is subject to the freezing effect. This is what explains why an example such as (49c) is ungrammatical. The head noun has moved away from its criterial position as shown in (52b). Note that, the NP once it moves to spec-AgrP, it stands in an agreement relation with both the noun class prefix and the definite article under the agreement head, thus can not move further. However, if there is a higher AgrP dominating the demonstrative as in (49a) represented in (53), an extra movement of the NP into the higher specifier position of AgrP is acceptable.

[14] Note that it is the combination of the definite article to the demonstrative that gives rise to a falling tone. The vowel *–î* that stands for the definite article bears an underlying high tone while the vowel *–ĭ* of the demonstrative morpheme has an underlying low tone.

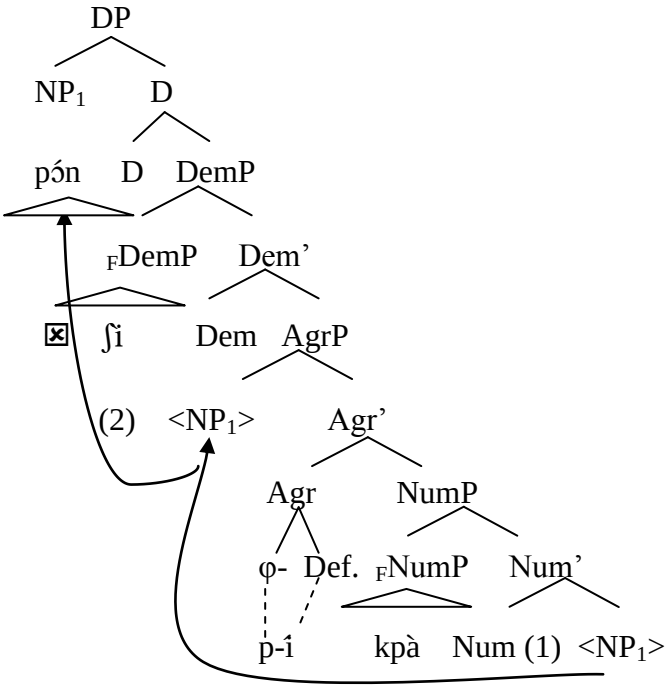
(52a) No Violation of the freezing effect

Dem> NP> Num= NP movement



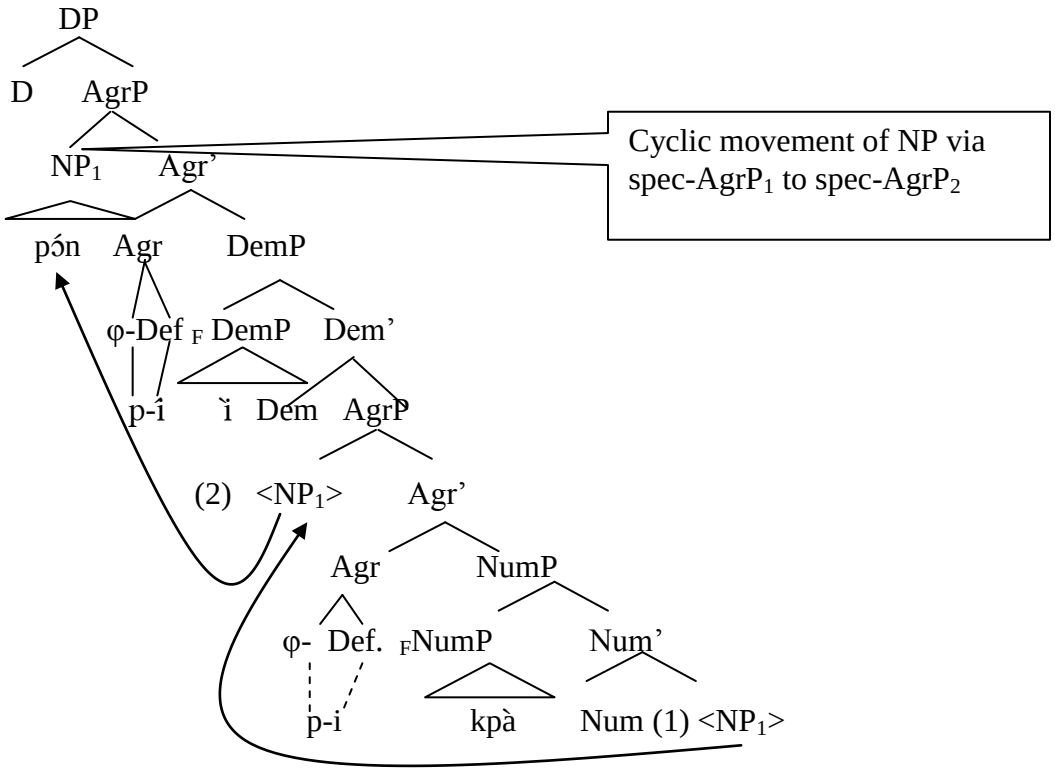
(52b) Violation of the Freezing Effect

*NP> Dem> Num= NP movement



The ungrammaticality of the word order in (49c) repeated in the derivation in (52b) suggests that the syntax of Shupamem DP does not allow any violation of the freezing principle. Once the NP moves into the specifier of AgrP, it is frozen in place and any movement further away from that criterial position is ruled out unless there is a higher AgrP to host the fronted NP.

(53) Definite spreading: NP> *Concord$_1$-Def*-DemP>*Concord$_2$-Def*-NumP



Therefore, as we can observe in (53), the system developed here is constrained by the freezing principle which only allows cyclic movement through similar functional projections. The derivation in (53) unlike that in (52b) is permissible because the noun class prefix that precedes the definite article is recursive in Shupamem. That is what gives rise to definite spreading.

The grammaticality of the word initial position of the NP in (49a&b) can be accounted for easily because none of the derivations in those examples violates the freezing principle. (49a), as we have shown in (53) has two agreement phrases due to the licensing of two noun class prefixes. However, (49b) has a different derivation where the head noun first moves to spec-AgrP and then moves to spec-DP.

7.1.2. Demonstrative >Adjective > Noun

This section discusses the freezing effect in relation to the syntax of agreement and postnominal modifying adjectives. From a theoretical point of view, I will assume following Cinque's (2010) idea that adjectives in general enter the nominal phrase either as "adjectival" modifiers to the noun or as predicates of reduced relative clauses. I will also adopt Cinque's proposal that N-raising should be abandoned in favor of XP-raising in a language like Shupamem where the head noun agrees with modifying adjectives. Thus, when the head noun moves to a functional position (e.g., AgrP), it is barred from moving further due to the freezing effect imposed on movement operations within the DP. I argue that the distribution of adjectival phrases in Shupamem is empirical evidence that argues strongly in favor of phrasal movement of NP as shown in (54) through (56).

(54) a. ʃi (mɔ́ʔ) nsɛ́nkɛ́t pɔ̀n (Dem> A> N)
Dem Ind. black 2-children
'THESE four children'

b. ʃi pɔ́n p-í nsɛ́nkɛ́t (Dem> N> A)
Dem 2-children 2-Def black
'THESE black children'

c.* ʃi pɔ́n Ø-ì nsɛ́nkɛ́t (Dem> N> A)
Dem 2-children Def black
'THESE black children'

(55) a. sɛ́nkɛ́t ʃi pɔ́n (A> Dem> N) (+Focus)
black Dem 2-children
'THESE black children'

b. *sɛ́nkɛ́t p-í-ì pɔ́n (A> Dem> N)
black 2-Dem 2-children
'THESE black children'

c. *sɛ́nkɛ́t pɔ́n ʃi (A> N> Dem)
black 2-children Dem
'THESE black children'

d. sɛ́nkɛ́t pɔ́n p-í-ì (A> N> Dem)
black 2-children 2-Def-Dem
'THESE black children'

(56) a. pɔ́n p-í-ì p-í nsɛ́nkɛ́t (N> Dem> A)
2-children 2-Def-Dem 2-Def. black
'THESE black children'

b. * pɔ́n ʃi pì nsɛ́nkɛ́t (N> Dem> A)
2-children Dem 2-Def. black
'THESE black children.'

c. pɔ́n p-í nsɛ́nkɛ́t ʃi (N> A> Dem)
2-children 2-Def. black Dem
'These black children.'

If the freezing principle is correct, everything being equal, it follows that my account for the syntactic distribution of the numeral in (47) through (49) also holds for the syntactic distribution of the adjective in (54) through (56) that combine the demonstrative, the adjective and the head noun. I argue that there is a *spec-head* agreement relation between the fronted *NP* and *AgrP* head and that all NP movement is subject to the freezing effect. For reason of space, I will not repeat the derivations of the examples in (54)-(56). However, I will go over the details of similar structures in the next section where Shupamem sequences are compared with Cinque's typology.

7.2. Deriving Cinque's Typology in Shupamem

Let us now consider in more detail the derivation of all Shupamem sequences in (10) to establish how Rizzi's (2006) freezing principle straightforwardly accounts for a number of ungrammatical DP orders in the Agreement Trigger approach. Under Kayne's (1994) universal hypothesis that all languages are the type *specifier-head-complement*, it follows that only one basic order, the one in (10a) in Cinque's (2005) system exists. The main question in this section is the following: given Cinque's (2005) DP sequence *Demonstrative > Number> Adjective > Noun* that is hypothesized to be basic, how do we derived the 19 DP

sequences of Shupamem summarized in (10) that are all described as grammatical? Moreover, how do we rule out the starred sequences that are viewed as ungrammatical?

Let me point out from the outset that a number DP sequences in (10) display internal double agreement as can be observed in (10c), (10d), (10h), (10l), (10o), (10p), (10t), and (10x). Note that each instance of NP movement over a noun modifier is associated with an agreement head that encodes the definite article. Thus, two instances of NP movement through two specifiers of the functional projections governing the definite article will give rise to two agreement heads. Such configurations are reminiscent to Greek 'poly-definite' or 'definite-spreading' constructions discussed in references like Alexiadou and Wilder (1998), Alexiadou (2001a), and Ramaglia (2007). A parallel that can be drawn from Greek poly-definite exemplified in (57) with Shupamem double agreement in (10) is that in Shupamem, just like in languages such as Greek and Scandinavian/Germanic, a plain definite noun phrase does not usually feature a DP-initial definite article, but when the noun phrase is modified by an adjective or a numeral, the adjective or the numeral is preceded by a definite marker (see Leu 2008 for similar arguments). But the small distinction to be made here is that Greek has three definite articles whereas Shupamem has only two in a similar paradigm.

(57) Poly-definite constructions

a. to megalo to kokkino to vivlio
the big the red the book
'The big red book'

b. to megalo to vivlio to kokkino

c. to kokkino to vivlio to megalo

d. to vivlio to kokkino to megalo

e. to vivlio to megalo to kokkino

f. (*) to kokkino to megalo to vivlio

(Ramaglia, 2007:163)

The term 'poly-definite' or definite spreading used to describe the examples in (57) suggests that there is more than one definite article in those examples. That is why in standard descriptions of Greek, the morpheme *to* is taken to be a definite article. I will set aside the issue of definite spreading/poly-definite construction in Greek to focus only on what happens in Shupamem. See Alexiadou & Wilder 1998 for a detailed discussion of this phenomenon.

7.3. The Definite Article and Postnominal Modifiers

In Shupamem the prenominal modifiers (e.g., demonstrative, adjectives, numerals, possessives etc) do not agree in noun class with the head noun. However, if they occur postnominally, the agreement heads that encode the definite article systematically spell out.

Thus, I claim that the definite article is obligatory when the noun modifier follows the head noun and is systematically ruled out when the noun modifier precedes the head noun. Furthermore, the only possible form of the article in the noun phase where the noun modifiers are postnominal is the definite one as shown in all the ungrammatical forms in the (a'&b') examples in (58) through (61). The (a&b) examples, compared with those in (a'&b') in (58)-(51), raise the following questions:

1. Why is it that the definite article is obligatory when the noun modifier appears in postnominal position (58b)-(61b), while its absence is necessary when the nominal modifiers show up in a prenominal position (58a)-(61a)?
2. Why is it that the only feliticious form of the article is the definite one when noun modifiers are postnominal?
3. What does the difference in the distribution of the agreement features in Shupamem within the DP tells us about its internal structural configuration with respect to the functional projections that encode the inflectional morphology and their impact on the surface position of the DP constituents (e.g., noun, adjective, numeral and demonstratives?
4. What does all this imply to Cinque typology in a broader sense?

	Prenoninal Modifiers *(the CF falls on the modifier)*	*Postnominal Modifiers* *(the CF falls on the noun)*
(58) DEM	a. ĵĩ pɔ́n 'These children' a'. * pĭ pɔ́n 'These children'	b. pɔ́n pĭ 'These CHILDREN' b'.*pɔ́n ĵı 'These CHILDREN'
(59) NUM	a. kpà pɔ́n 'Four children' a'. *pi kpà pɔ́n 'FOUR children'	b. pɔ́n pí kpà 'The four CHILDREN' b. *pɔ́n kpà 'The four CHILDREN'
(60) ADJ	a. pòkét pɔ́n 'NICE children' a'. *pí mbòkét pɔ́n 'NICE children'	b. pɔ́n pĭ mbòkét 'The nice CHILDREN' b'. *pɔ́n pokét 'The nice CHILDREN'
(61) POSS	a. jà pɔ́n 'MY (own) children' a'.*pá pɔ́n 'My (own) children'	b. pɔ́n pá 'My CHILDREN' b'.*pɔ́n já 'My CHILDREN'

For the purpose of this analysis, I will assume, following Cinque (1994, 2005), that in Shupamem, the presence of nominal modifiers right after the head noun (i.e., at the right of the head noun) as in all the (b) examples in (58)-(61) is to be attributed to the raising of the noun to the specifier of the Agreement Phrase whose head spells out as a definite article once the head noun has reached its landing site.

I argue that Shupamem has strong features in the agreement phrase heads (e.g., number and noun class features) that need to be checked before Spell Out as proposed in Chomsky (1995). Typologically speaking, the feature checking approach adopted here implies that the type of variation observed across other languages depends on whether agreement head feature is strong (in which case the checking process systematically occurs at the Phonological Form) or weak (in which case the checking process must be carried only at the Logical Form). Because the agreement feature within the DP in Shupamem is strong, the checking process results in a movement rule that applies to the head noun, a movement that triggers the overt realisation of the definite article as shown in (58b)-(61b). Therefore, I formulate for Shupamem noun modifiers the following parameterized constraints for agreement features checking within the DP.

(62) Constraints on agreement features checking in Shupamem DP.

a) The head noun automatically moves to the specifier position of AgrP to check its agreement features. In this case, it is claimed that the agreement feature is strong, thus attracts the head noun to the specifier position of AgrP.

b) The head noun remains in situ if the contrastive focus falls on any of the modifiers. In this case, I claim that the agreement feature is weak; therefore, there is no need for the head noun to move.

Let us check what the predictions are for the 19 possible DP sequences attested in Shupamem out of the 24 possible orders (4!=4x3x1). The next section provides an in-depth description of the order possibilities within the DP using Rizzi's (2006) freezing principle extended to the functional structure of the DP. The core issues that the next section takes on are: (a) the distribution of definite article with respect to the head nouns and its various modifiers; (b) the freezing effects imposed on NP movement operations and (c) how the parameters of feature checking defined in (62) work in Shupamem data.

7.4. Criterial Freezing and Agreement Relations

For the sake of clarity, I will discuss all the derivations of DP sequences in Shupamem by following the alphabetic order of the paradigms summarized earlier in (10). I assume that the underlying order in (10a) Dem > Num > A > N is represented as in (64a). The syntactic structure in (64a) has a nice and welcome consequence that it will help to reflect on how the alternative order possibilities combining the *Demonstrative*, the *Numeral*, the *Adjective* and the *Noun* are derived. For each example, I will compare Cinque's derivation with Shupamem to see what the implication is for UG. Let me repeat for convenience the assumption of Cinque's approach in (63).

(63) Cinque's (2005) assumptions:

(a) The basic order for all languages is Dem-Num-Adj-N, with the alternative orders claimed to be derived from movement.

(b) All movements are leftward and upward (i.e. the DP satellites can only target a specifier position in the left periphery of the noun phrase).

(c) Only constituents that contain the head noun can move.

(d) Different combinations of movement operations are more or less marked.

Interestingly, it is curious that in Cinque's typology, the DP sequences such as (10a), (10b), (10c) and (10d) are claimed to be all attested and derivable. (10a) Dem >Num> A>N is claimed to be derived by moving nothing. (10b) Dem > Num > N> A is derived from (10a) by moving the NP one notch around A according to Cinque (2005:321). (10c) Dem> N>Num>A can be derived by moving the NP two notches around A and Num without pied piping and (10d) can be derived by moving the NP three notches around A, Num, and Dem without pied piping. The markedness constraints that Cinque assumes can be summarized as in (63).

(63) Cinque's (2005) Markedness Constraints

a. No movement all is unmarked.

b. Any movement of NP in combination with pied-piping of the *whose-picture type* is unmarked.

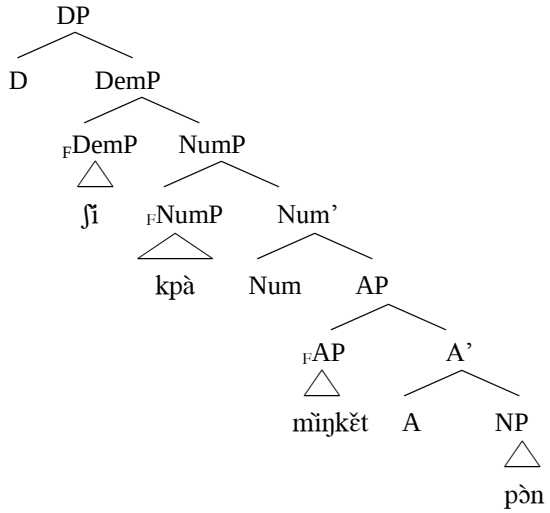
c. Any movement of NP without pied-piping is marked.

d. Any movement in combination with pied-piping of *the picture-of-who type* is severely marked.

e. Partial movement is marked while total movement is unmarked.

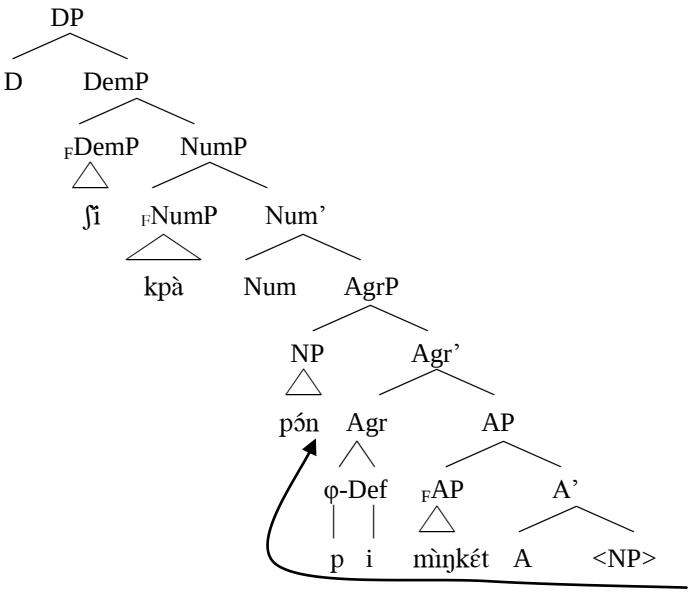
Returning now to the linear ordering of elements within the DP in Shupamem, Cinque's predictions about (10a-d) do not hold on empirical ground. Contrary to Cinque's predictions, of all the four examples (10a-d) claimed to be grammatically acceptable and derivable, only (10a) and (10b) appear to be acceptable in Shupamem data. Under this analysis, I argue that the phi features of a number of functional projections (e.g., noun class agreement, Focus, Specificity/Definiteness etc) in a three-layered DP representation of DP-XP-NP form are responsible for NP movement in general. Next, for obvious reasons, I also assume that the specifier of the functional projection that governs the agreement head is the landing site for NP movement of any type (Phrasal or pied piping).

(64a) *Dem> Num>A> N*



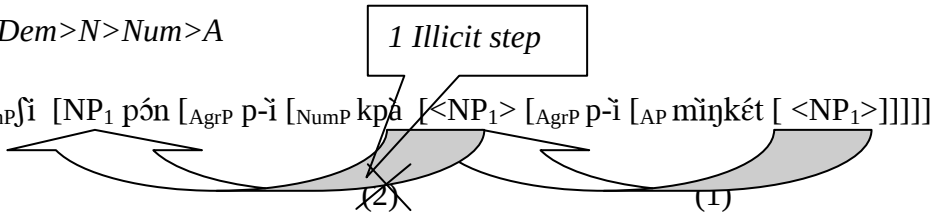
Under (64a), I assume that no movement has taken place as stated in Cinque (2005). This order follows naturally from base generation of the four elements of the noun phrase. From (64a), (10b) can be derived as follows:

(64b). *Dem>Num>N>A*



As can be observed in (64b), the *NP pɔ́n* 'children' moves to the specifier position of AgrP dominating AP. Spec-AgrP corresponds to the *Criterial Probe* in Rizzi's (2006, 2007) terms. It is there that the NP enters into an agreement relation with the definite article *–î* that in turn takes the noun class prefix *p-* for plural. The configuration in (64b) does not violate the freezing principle. Recall that under criterial freezing, the *NP* is frozen in place once it reaches *spec-AgrP*. That is why both (10c) and (10d) are ungrammatical. The DP sequence in (10c) *Dem>N>Num>A* can only be obtained via a phrasal movement[15] of NP away from spec-AgrP where it stands in spec-head agreement with the AP. That extra movement is ruled out under criterial freezing as shown in (64c).

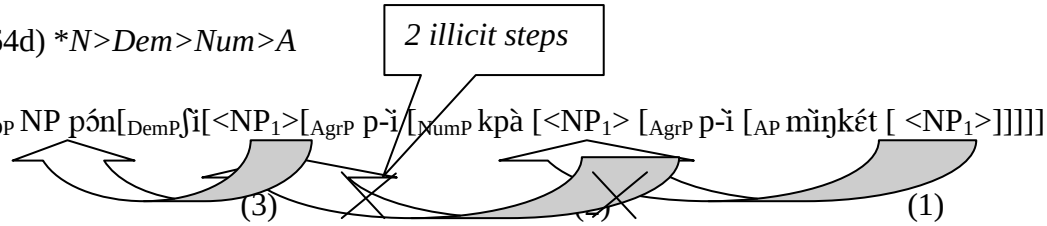
(64c) **Dem>N>Num>A*



In a similar vein as shown above, note that (10d) *N>Dem>Num>A* is also ruled out under *Criterial Freezing*, because the NP undergoes a movement further to the spec-DP as shown in (64d). A cyclic movement of the NP all the way up to spec-DP is a double violation of the freezing effect.

[15] Phrase movements are indicated by <...> throughout the dissertation.

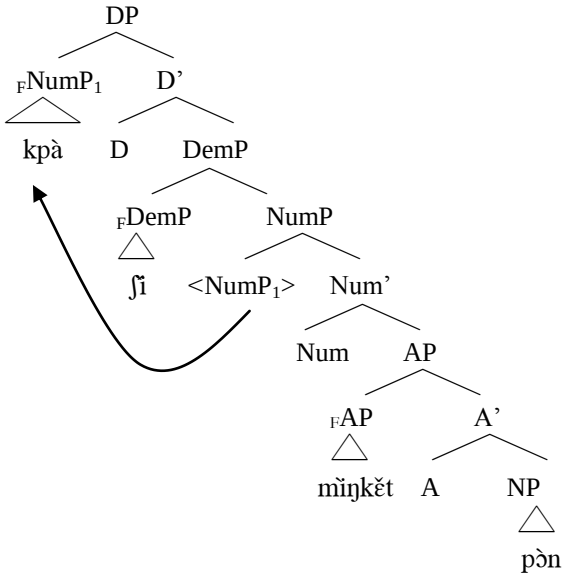
(64d) **N>Dem>Num>A*



Fronting *NP* further to *Spec-DP* would yield the expected order in (10d). But such a derivation is a doubled violation of *Criterial Freezing*, hence forces the sequence to be ungrammatical.

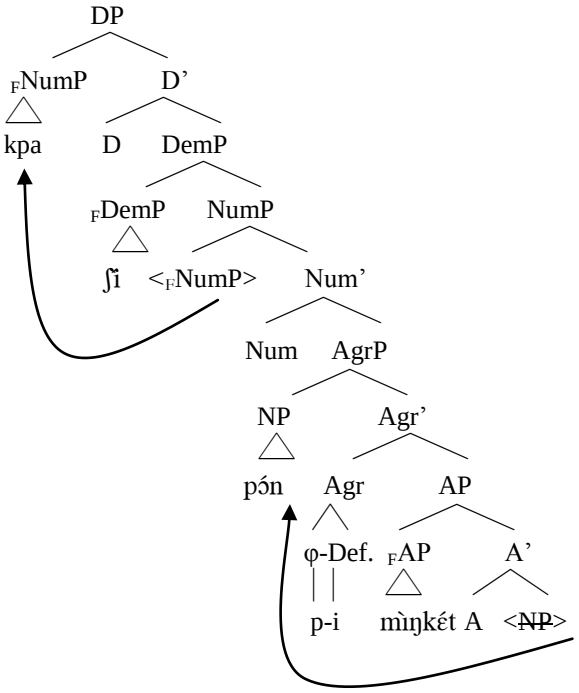
What is intriguing in Cinque's typology is its finding that the sequences such as (10e-f) are all unattested and therefore not derivable cross-linguistically. Data from Shupamem on the contrary suggest that among those sequences claimed to be not derivable, (10e&f) are in fact grammatical in Shupamem. As a matter of fact, only the examples in (10g&h) are ruled out because they fatally violate the freezing effect. The order in (10e) Num > Dem> A > **N** can be derived if we assume that there is a phrasal movement of the numeral to the specifier of DP where it checks the focus feature under D as shown in (64e). From (10e), (10f) Num> Dem> **N>**A the head noun moves to spec-AgrP as shown in (64f)

(64e) *Num>Dem>A> N*

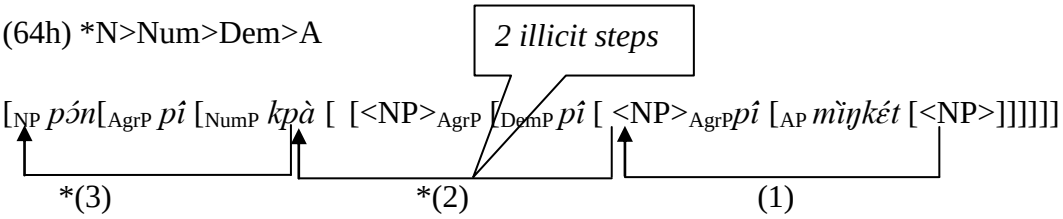


It is obvious from the derivations in (64e&f) that there is no violation of the freezing principle. Once the NP *pɔ́n* 'children' moves to spec-AgrP, it enters in an agreement relation with the definite article *-ĩ* that it c-commands and therefore cannot move further. However, the examples in (10g&h) are ungrammatical because of the fatal violation of the freezing effect as shown in (64g&h). Note that Num-N is not a constituent and its movement would be ruled out as a non-constituent. Therefore, it cannot be extracted as suggested to me by Collins (pc).

(64f) *Num>Dem>N> A*



(64h) *N>Num>Dem>A

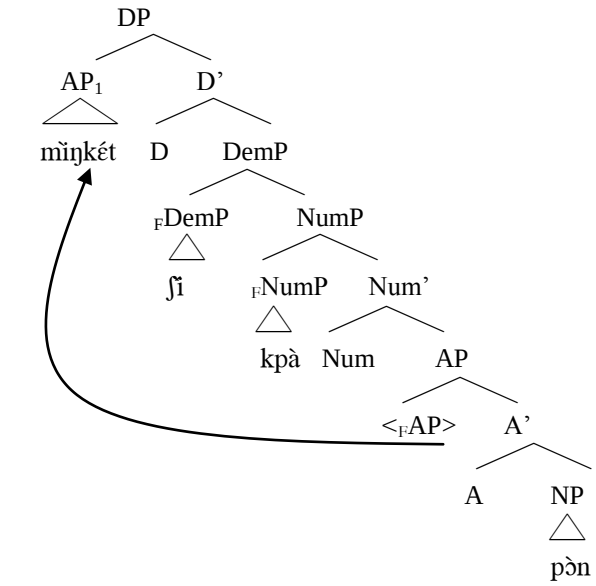


Descriptively, under criterial freezing, (10g) Num > N > Dem > A derived as in (64g) is ruled out because it has one illicit NP movement away from its criterial position (e.g., spec-AgrP). Similarly (10h) N> Num> Dem> A is ruled out because of 2 illicit NP movements. Under the freezing principle, the ungrammaticality of (10g&h) is explainable and, in fact, fully predicted by the proposal made here: if the NP moves to the specifier position of AgrP to enter an agreement relation with the definite article, it is anchored and interpreted there, once it moves further away from that position, it generates a fatal violation of the freezing principle, therefore creates an illicit sequences illustrated in (64f&g).

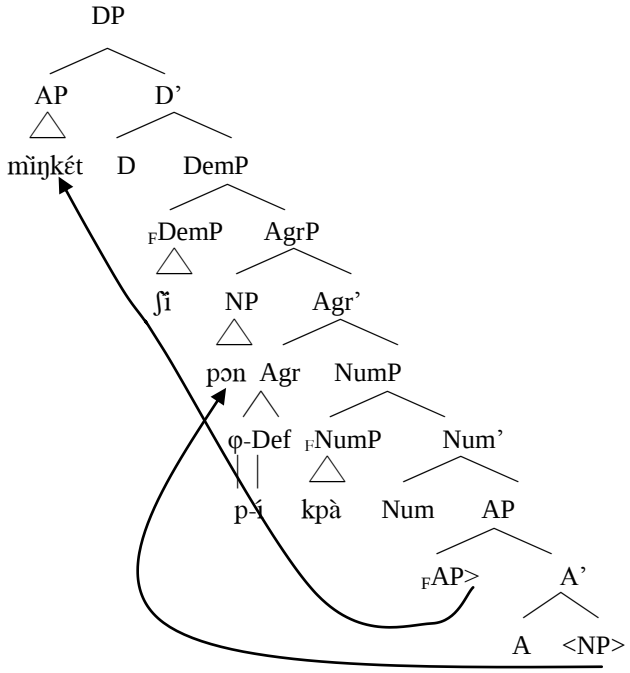
Let us now turn to the sequences in (10i-l) where the adjective is mostly fronted word initially. Cinque's findings suggest that (10i&j) are ungrammatical and cannot be derived. However, Shupamem has three grammatical orders that can be derived by raising NP followed by pied-piping. As it turns out then, contrary to Cinque's predictions, of all the sequences in (10i-l), only (10j) is ungrammatical in Shupamem. This is understandable, given that (10j) is in conflict with the freezing effect. (10i) A> Dem > Num > N is derived by fronting the AP *mĭŋkét* 'dirty' to the specifier position of DP to check its focus feature under D as shown in (64i).

However, (10j) A > Dem> N >Num could be derived via two separate phrasal movements: (a) the NP movement to the specifier position of AgrP and (b) the AP movement to the specifier of DP, which could constitute a blatant violation of the freezing principle as shown in (64j). Of the two movements, only NP movement projects an agreement phrase because it has an inherent noun class feature that the adjective does not have. Therefore, the extra movement of the AP above NP in (64j) puts it in a farther position where it cannot agree with the NP fronted at the specifier of AgrP.

(64i) *A>Dem>Num> N*

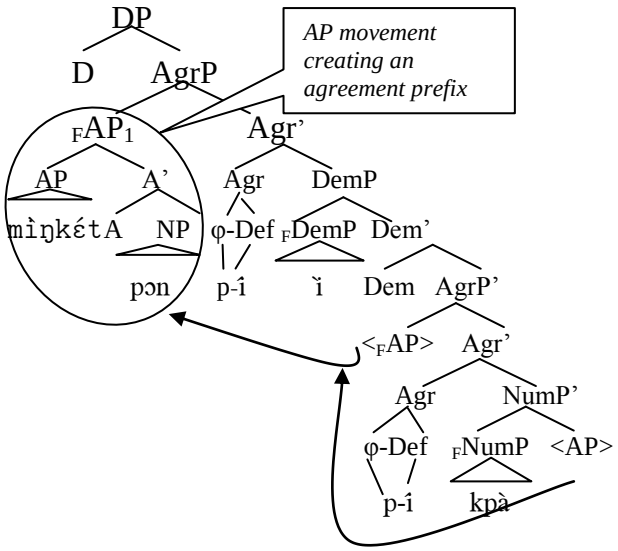


(64j) * *A>Dem>N> Num*

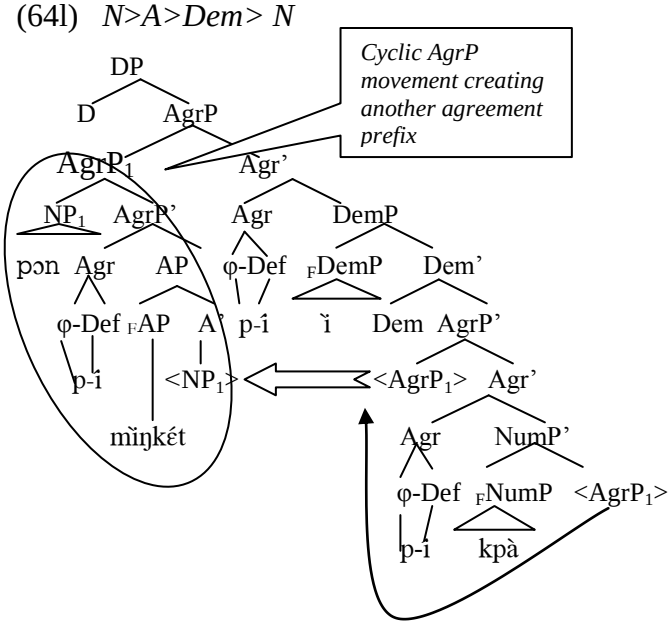


The derivations of (10k&l) involve more complex strategies consisting of phrasal movements of different types: (a) the AP movement along with the head noun to the specifier position of the topmost AgrP dominated by DP (64k) and (b) the movement of AgrP to the specifier position of the upper AgrP(64l).

(64k) *A>N>Dem> Num*



(64l) *N>A>Dem> N*



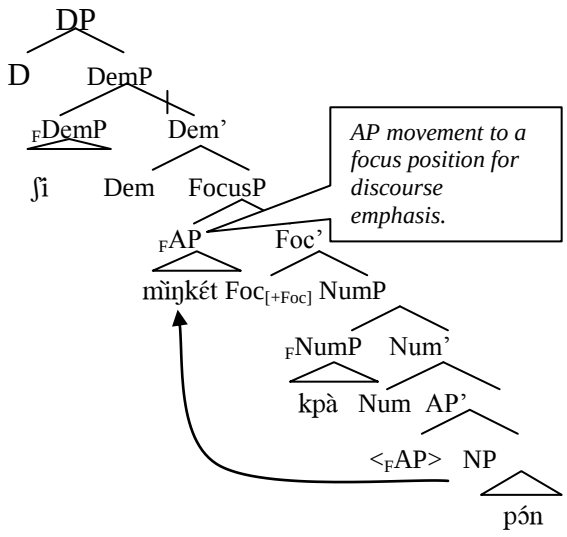
For all the grammatical sequences in (10i-l), only (10j) A>Dem > N > Num seems to violate the freezing effect. This is so because of the extra extraction of AP away from the agreement head *pî* that governs it after the movement of NP to spec-AgrP. There it stood in agreement relation with the head noun and its further movement into D would disrupt such an agreement relation.

In fact, even in complex structures such as (64k&l), once a phrase is frozen in place after the first movement, it only moves further via a roll up movement where the functional projection (e.g., AgrP) also moves along with the NP to the specifier of the upper AgrP to keep its agreement relations preserved.

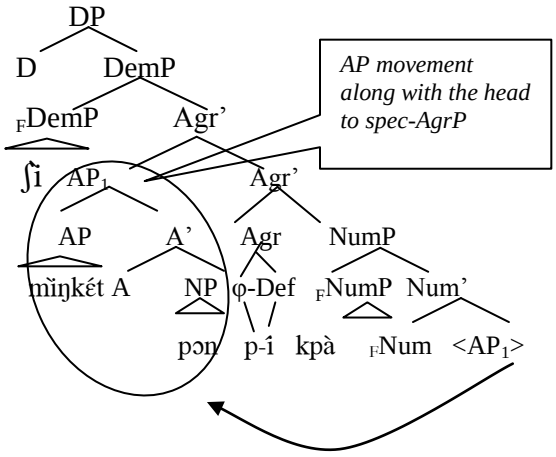
Thus, I conclude that the unexpected grammatical DP sequences under Cinque's (2005) typology described above follow from different strategies available in Shupamem to circumvent the freezing effect. Note that any instance of NP movement whether it is alone (64f), along with a modifier (64k) A> **N>** Dem >Num or incorporated into another AgrP (64l) **N>** A> Dem> Num always targets a specifier position of AgrP where it can agree with the definite article.

With these observations in mind, let us move on to the discussion of the sequences in (10m-p), where the demonstrative comes first. In Cinque's system, (10m) Dem>A>Num>N is claimed to be unattested, therefore not derivable, but the remaining orders are predicted to be grammatical. In Shupamem, all these four sequences are grammatical. (10m) Dem A Num **N** and (10n) Dem > A> **N >** Num can be easily derived if we assume that: (a) the adjective undergoes a phrasal movement to a specifier position of a functional phrase dominated (e.g., Focus Phrase) by DemP in (10m) and (b) the adjective and the head noun moves as a constituent to the specifier position of AgrP as exemplified in (64m) and (64n).

(64m) *Dem>A>Num> N*



(64n) *Dem>A>N> Num*

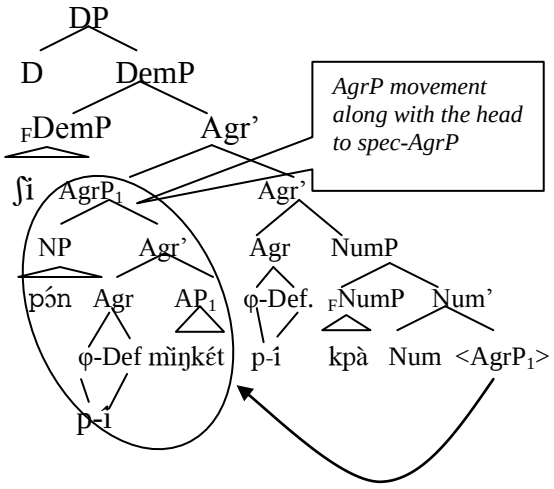


The contrast between the derivation of (10m) and (10n) suggests that we are dealing with two separate kinds of movement to two different syntactic positions. In (64m), the adjective undergoes a phrasal movement to a focus position, but in

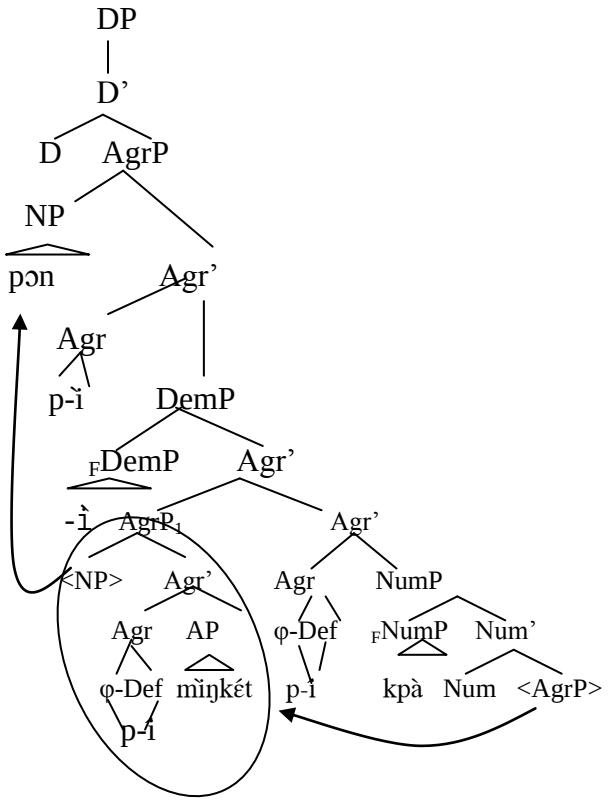
(64n), the adjective along with the head noun move together to the specifier of AgrP giving rise to different orderings.

(10o) Dem> N>A>Num has a slightly different derivation from the one exemplified in (64n). As we can see in the derivation of (10o) illustrated in (64o), the head noun undergoes a phrasal movement cyclically, giving rise to a single DP with two definite articles.

(64o) Dem> N> A> Num



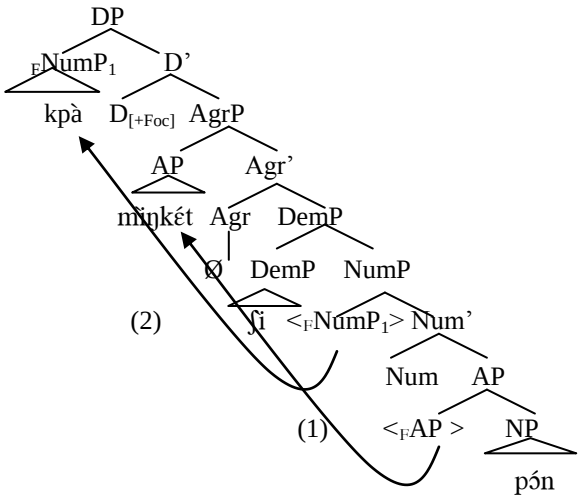
(64p) N> Dem> A> Num



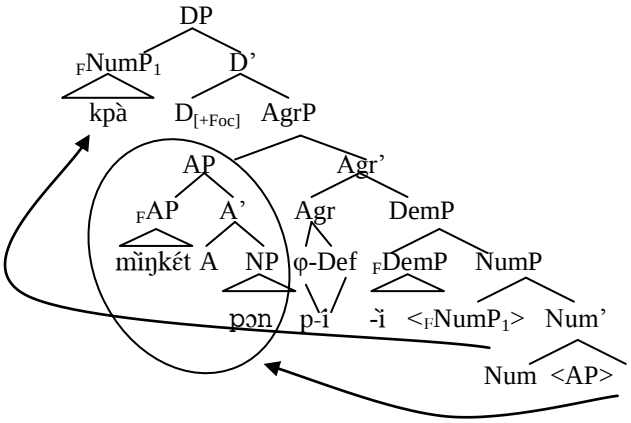
In the case of (10p) that I previously described as ungrammatical in Nchare (2011), the new survey that indicates the agreement head on the demonstrative indicates that (10p) was unambiguously grammatical.Nevertheless, as we can observe in the derivation in (64p),the extraction of NP from spec-AgrP to front it into the higher spec-AgrP seems to violates the freezing principle. I have no handy explanation for this violation in (64p). I will leave this issue for further investigation.

Consider now the sequences such as (10q), (10r), (10s) where the numeral comes first and (10t) where it comes second right after the head noun. Cinque (2005:324) claims that only (10q) Num> A > Dem > N cannot be derived, thus is not attested cross-linguistically. As it turns out, all those sequences are grammatical in Shupamem. (10q) Num> A > Dem > N and (10r) Num> A> N> Dem are derived as in (64q&r).

(64q) *Num>A>Dem> N*



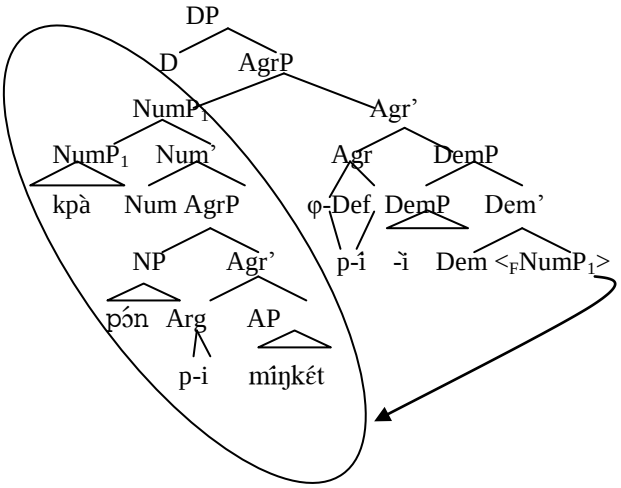
(64r) *Num>A>N>Dem*



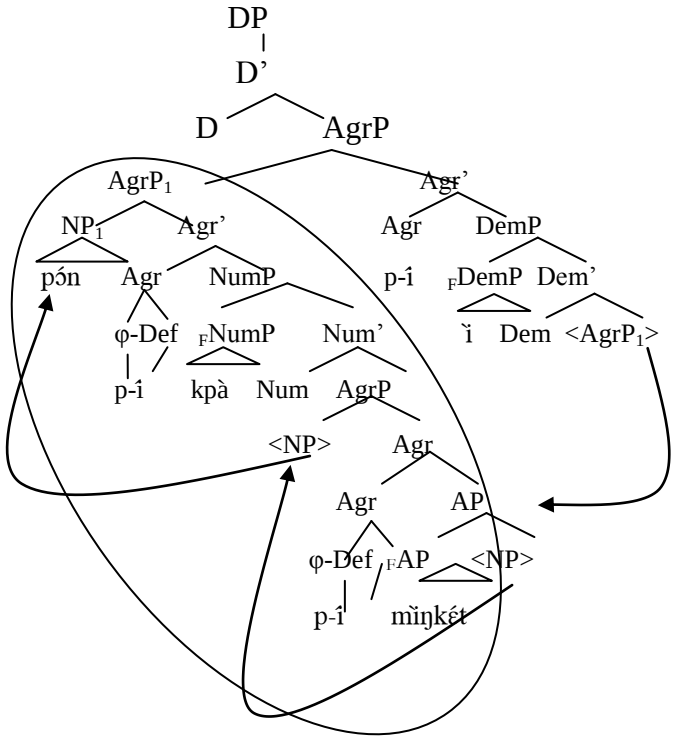
The key distinction between (64q) Num> A> Dem > N and (64r) Num> A> N> Dem is the following. In (64q) there are two separate phrasal movements, namely: (a) AP movement to spec-AgrP and (b) NumP movement to spec-DP. In (64r) contrary to (64q), there is one single movement, namely the movement of AP along with the head noun to spec-AgrP. Note that in (64q), the AP does not form a constituent with the head noun. That is why the agreement head is zero. However, in (64r) AP agrees with the head noun therefore when it moves to spec-AgrP, the agreement head is overtly spelled out. I argue that none of these structures violates the freezing principle defined earlier.

Let us now move on to the derivation of (10s) Num> N> A> Dem and (10t) N> Num > A>Dem represented as in (64s) and (64t).

(64s) *Num>N>A > Dem*



(64t) *N>Num>A>Dem*

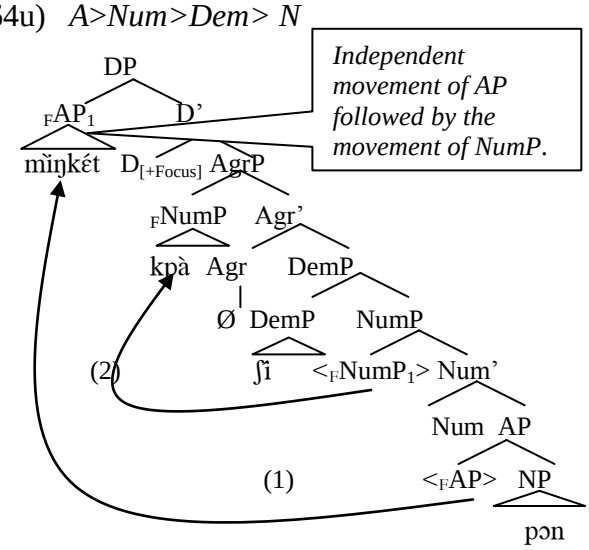


As we can observe in (64s), the numeral moves along with the adjective and the head noun to the spec-AgrP to enter in agreement relationship with the definite article that precedes the demonstrative. However, (64t) has a different derivation where AgrP moves along with the noun, the numeral and the adjective to the spec-AgrP that dominates DemP to enter in agreement with the demonstrative.

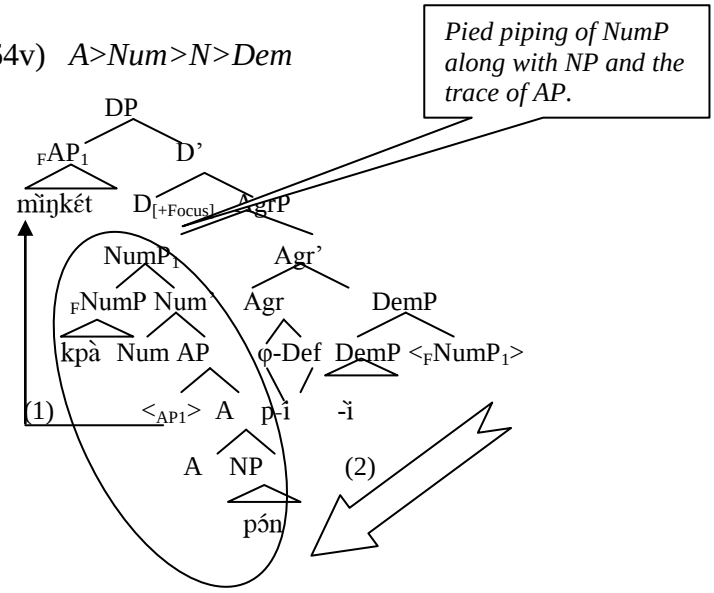
Let us now consider the sequences such as (10u-w) where the adjectives comes first and (10x) where it follows the head noun that surfaces word initially. In Cinque's (2005:324) typology, (10u) A >Num> Dem >**N** and (10v) A> Num >N > Dem are claimed to be unattested, thus cannot be derived in UG. He claims that (10w) A> **N>** Num> Dem can be derived via NP movement followed by pied-piping while (10x) **N>** A >Num> Dem can be derived via NP movement followed by successive pied-piping. Our findings suggest that contra Cinque's prediction, all the sequences in (10u) through (10x) are grammatical.

According to the current system, (10u) through (10x) have the following derivations in (10u)-(64x).

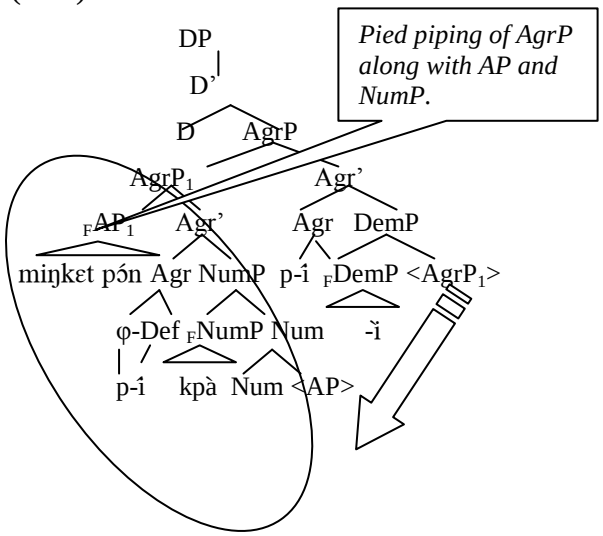
(64u) *A>Num>Dem> N*



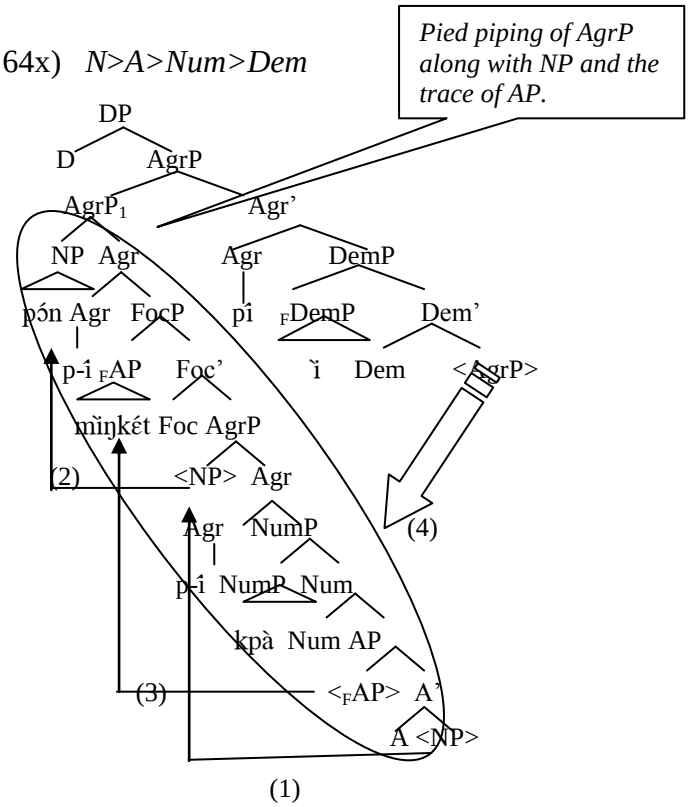
(64v) *A>Num>N>Dem*



(64w) *A>N>Num>Dem*



64x) *N>A>Num>Dem*



(64u) is derived via two separate movements: (a) AP movement to spec-DP to check its focus feature and (b) NumP movement to spec-AgrP. I have no ready explanation as to why NumP has to move to spec-AgrP in this context.

Note that under this analysis in (64v) through (64w), the demonstrative occurs in final position as a consequence of different types of movements. In (64v), the adjective moves to spec-DP followed by a phrasal movement of NumP along with the head noun, the numeral and the adjective trace to spec-AgrP dominating DemP. (64x) has a different derivation where AP moves to spec-DP followed by AgrP along with the head noun, the numeral and the trace of the adjective.

(64w) has a more complex derivation where AgrP moves to the spec-AgrP dominating DemP after the NP has moved to its own specifier position. Moreover, AgrP dominates the AP and the NumP. It is important to observe that in all these derivations, the demonstrative may surface as a bare form as shown in (64u), or as inflected with the agreement morphemes as in (64s), (64t), (64v), (64w) and (64x) where the head noun precedes the demonstrative. When the noun phrase moves past the demonstrative, an agreement phrase is systematically projected and the definite article surfaces in a position where it precedes the demonstrative.

Evidence for this argument comes from the falling tone on the agreement head *p-î-ì* (noun class+ Definite article + Demonstrative) in the derivation in (64s), (64t), (64v), (64w) and (64x).

To conclude this section, I claim that the derivation of the 19 DP orders attested in Shupamem suggests that Cinque's (2005) LCA-approach has its shortcomings in relation to Shupamem and the Bantu languages in general. This is so in part because Cinque's theory did take into account the agreement facts internal to the Bantu noun phrase that are crucial in the representation of the surface orders. The apparent free word order is better explained in the approach adopted here, using the freezing principle tu rule out the ungrammatical strings. Unfortunately, the freezing principle does not explain all the facts, especially the example in (10p) that needs further investigation.

8.Conclusion

In this analysis, I have expressed some skepticism about Greenberg's Universal 20 and previous theories designed to account for it. Based on data from Shupamem which allows 19 acceptable options out of the 24 possible sequences that combine the demonstrative, the numeral, the adjective and the head noun, I argue for an alternative theory, namely the Agreement Trigger approach which claims that word order alternation observed within the DP in Shupamem follows from the the

presence of a strong agreement features that usually triggers the movement of the NP, in which case the definite article spells out automatically.

Although the issue of linearization of syntactic structures internal to the DP has been extensively investigated in previous approaches, we are still far from a comprehensive account. In this study, I have put forward an alternative way of capturing phrasal movements (e.g., NP, AP, NumP, and AgrP) internal to the DP where it is argued that XP movement in general is triggered by agreement morphology and that all phrasal movements are subject to the freezing effect. This amounts to saying that a strict replication of Cinque's (2005) approach and Abels & Neeleman (2006) to Shupamem DP-internal ordering is untenable. If correct, the *Agreement Trigger* approach adopted here suggests that phrasal movements involve feature checking in the lines of *spec-head* agreement relationship put forward in Kayne's (1994) LCA-based approach. Typologically speaking, data on Shupamem (poly)-definite clearly suggest a cross-linguistic correlation between Bantu languages and languages like Greek, Scandinavian/West Germanic where definite spreading has been documented. This implies that the assumptions adopted here could also account for similar facts in those languages.

Chapte Four: The Syntax of Tense-Aspect-Mood in Shupamem

1.Introduction

Bantu languages in general and Grassfields Bantu in particular are highly complex with respect to the expression of tense/aspect and negation. This is due to the interaction between suprasegmental, morphological and syntactic factors that affect the surface form of inflected verbs. This chapter offers an overview, with exemplification, of a number of Shupamem morphological and periphrastic devices that are used to express tense, aspect, and mood contrasts in the verbal system that were not fully discussed in the previous chapters. In other words, this chapter provides a comprehensive discussion of the morphosyntax of Shupamem verb affixes (e.g., tense, aspect, mood, negation, adverbs etc). It focuses on the description of the concepts of tense, aspect and mood within simple as well as complex sentences.

Building on the functional/functional-typological framework proposed in Comrie (1976, 1985), Anderson and Comrie (1991), Dahl (1985), Bybee *et al.* 1994, Givón (1984), and Tonhauser (2006) among others, this analysis is intended not only for theoretical linguists working on formal aspects of the TAM systems in general, but also for scholars interested in a comparative/typological perspective. Data from Shupamem suggest that there needs to be a distinction between mood (which is a verbal category) and modality (which is a sentential category), although modality can also be expressed by mood, or lexically by modals as well as lexical verbs.

Concerning temporal, aspectual and modal properties of the verb, it will be shown that Shupamem verbal system is tense oriented rather than aspect oriented although there are two aspects namely (a) the perfective and (b) the imperfective. One could also possibly think of an aspect that looks like the perfect/retrospective. In this chapter, I focus on the distribution of various verb inflectional affixes and other adverbs of tense and time that commonly surface before the main verb. One major contribution of tense-aspect description to the understanding of the clausal structure of Grassfields Bantu languages in general and Shupamem in particular is the extent to which the TAM interacts with negation and focus. I will start with the discussion of Shupamem verb morphology to show how the alternation in tense and aspect may affect the tonal pattern on the main verb in a clause. In addition to the

present tense, there are four past tenses and three future tenses, differentiated according to the degree of remoteness with respect to the present moment.

It is worth pointing out that the Shupamem verb rich TAM system, like in many other Bantu languages, has syntactically active high and low Focus positions that significantly affect the surface morphological realization of tense affixes. Thus, focused tenses are morphologically encoded in a way that implies that the conjugational paradigm of Shupamem distinguishes between [+focus] tenses and [-focus] tenses. It will thus appear to be reasonable to show how focus tenses differ from non-focus tenses in this chapter. I will also draw attention to some instances of grammaticalization attested in the morphology of Shupamem verbs.

This chapter is organized as follows. Section 2 offers some general background information about Shupamem verb morphology where I describe how suprasegmental as well as overt morphemes contribute to the expression of the TAM. Section 3 offers an assessment of relevant definitions of tense, aspect and mood that will serve as my theoretical assumptions. Section 4 presents the general description of Shupamem TAM inflectional affixes. Section 5 offers a brief discussion of the imperative mood. Section 6 describes the infinitive. Section 7 provides details about the indicative mood where tenses are divided into perfectives and imperfectives. Section 8 describes the conditional mood. Section 9 is a very compressed sketch of the analysis of the subjunctive mood.

In section 10, I describe the hypothetical mood. Section 11 offers a brief discussion of the difference between focus and non-focus tenses. The last section concludes the chapter. One of the important points of this chapter will be to set the stage for a formal analysis of negation in the next chapter.

2.Verbal Morphology

As in many other Bantu languages, much of the TAM morphemes show up in the verb morphology where both auxiliaries and tones are used to indicate tense, aspect or mood. This section goes into quite a bit of detail on the underlying forms of the verb. This includes the preverbal morphology and other suffixes or final vowels that might combine with the verb root. The readers may look at chapter 2 to see the discussion of verb extensions and how various suffixes fit into the tonal system of Shupamem.

2.1.Inflectional morphology of the verbs

Before getting into the details of various Shupamem tenses, let us make some clarifications about the indication of subject and object pronouns and how the tonal information are represented with respect to tense, aspect and mood. The verb phrase in Shupamem just like in many other Grassfields Bantu languages follows a subject noun phrase or a pronoun.

What is important here is how the verb and its arguments are assigned their surface tones in the clause. Table 4.1 presents the major different forms of Shupamem pronouns. Subject pronouns always come before the verb in a simple declarative sentence (although that order might change in focus constructions), while the independent pronouns are used for all other argument positions, including object.

	Subject	**Object**	**Independent**	**Emphatic**	**'….too'**
1st pers. sg.	mə ~N-	-à	mà	mà	mà nkà à
2nd pers. Sg	wù	-ù	wù	wù	wù nkà ù
3rd pers. sg.	wí	-í	wí	wí	wí nkà ĭ
1st pers. pl. incl.	pwə	-úpwə	pwə	pwə	pwə nkà pwə
1st pers. pl. excl.	pỳ	-úpỳ	pỳ	pỳ	pỳ nkà pỳ
1st pers. pl. dual.	tə	-útà	tà	tà	tà nkà tà
2nd pers. Pl	pʉ̀n	-úpʉn	pʉ̀n	pʉ̀n	pʉ̀n nkà pʉ̀n
3rd pers. Pl	pwó	-úpwó	pwó	pwó	pwó nkà pwó

Table 4.1- Shupamem pronominal system.

The order of inflectional elements is summarized in (1), where # indicates a word boundary. It is also important to note that there will be a number of complications to this basic template in (1), which means it will not always cleanly apply.

(1) (Subject) (TAM) (Negation) verb-root-(Extensions) # Object

Shupamem verb morphology is very similar to that of many other Bantu languages such as Nen (A44) where 'tenses are expressed by a combination of inflectional elements and tone on the verb' (Mous 2003:283:291). The verb itself does not actually agree in person and in number with the subject DP in declarative sentences in general. However, in standard negation sentences of the indicative mood (e.g., those that use either the negation morpheme *ntáp* or *mâ*), the main verb always takes a postverbal pronoun that agrees with the DP subject and exceptionally exhibits a Low tone even for pronouns that have an underlying High tone as shown in (2b), (3c), (4c) and (5c). The examples in (2)-(5) show a contrast between the past perfective (2), the future (3), the present (4) of the indicative mood and the epistemic mood (5) where the past tense marker *pî* combines with two aspectual morphemes (e.g., the epistemic modal *nâ* 'might' and the perfective *tê*). Let me clearly indicate that these are just introductory examples and many more will follow over the course of the chapter.

The verbal complex therefore consists of the tense/aspectual marker followed by the main verb that may take a final vowel to express agreement with the DP subject in negation.

It is also important to point out that the syntactic word order of tense, aspect and negation morphemes may change depending on the morphological status of the tense affix (e.g., modals versus ordinary auxiliaries) with respect to the negation morpheme. The following examples roughly illustrate the verbal complex in a Shupamem clause where a number of TAM elements seem to be in complementary distribution.

I will assume in the current analysis that there is a morphological distinction between Shupamem future tenses and past tenses. I argue that Shupamem future tenses are modals/or periphrastic future (e.g., F_1: *twó*, F_2: *lɔ́ʔ* and F_3: *twó lɔ́ʔ*) and are analogous to English modal *will* whereas the past tense markers (e.g., P_1: Ø, P_2:*pê*, P_3: *pî*, P_4: *kàpî*) are inflectional elements analogous to the English past tense suffix *–ed*. The evidence for such a distinction can also be found in studies like Comrie (1989), Lyons (1977) and Jesperson (1931) among others. Based on these arguments, I conclude that Shupamem future tenses are modal auxiliaries which syntactic distribution is identical to that of English modal auxiliaries such as *will* and *shall*.

This distinction will be crucial in the analysis of the syntactic difference in word order between the negative morpheme *ntáp* (for future tenses) and *mâ* (for past perfective) within the sentence. The examples in (2)-(5) are illustrations of the

template in (1) using the past, the present, and the future tense both in their positive as well as negative forms.

(2) a. *î pî Ø-jùn ndàp*
3sg P_1 buy house
'He bought a house'. (Positive Past Perfective)

b. *î pî mâ ɲ-ʒùn ǐ ndàp*
3sg P_1 Neg buy 3sg house
'He bought a house'. (Negative Past Perfective)

(3) a. *î tâ ɲ-ʒùn ndàp*
3sg P_1 PTCP.buy house
'He is buying a house'. (Positive Present progressive)

b. * *î tâ ntàp ɲ-ʒùn ndàp*
3sg PROG Neg PTCP.buy house
'He is not buying a house'. (Negative Present Progressive)

c. *î ná ntàp* ɲ-*ʒùn ndàp*
3sg IRR Neg PTCP.buy house
'He is not buying a house'. (Negative Present Progressive)

(4) a. *î nâ ɲ-ʒùn ndàp*
3sg EVD PTCP.buy house
'He is buying a house'. (Positive Present Evidential)

b. * *î tâ ntàp ɲ-ʒùn ndàp*
3sg EVD Neg PTCP.buy house
'He is not buying a house'. (Negative Present Evidential)

c. *î ná ntàp* ɲ-*ʒùn ndàp*
3sg IRR Neg PTCP.buy house
'He is not buying a house'. (Negative Present Evidential)

(5) a. *î* *ná* *two* *Ø-ʒùn* *ndàp*
3sg IRR F_1 buy house
'He will buy a house'. (Positive Future tense)

b. * *î* *ná* *twó* *ntàp* *Ø-ʒùn* *ǐ* *ndàp*
3sg IRR F_1 Neg buy 3sg house
'He will not buy a house'. (Negative Future)

c. *î* *ná* *ntàp* *two* *Ø-ʒùn* *ǐ* *ndàp*
3sg IRR Neg F_1 buy 3sg house
'He will not buy a house'. (Negative Future Progressive)

The examples in (2)-(5) suggest and interesting paradigmatic difference between the future tense that behaves more like a modal and the past and present tense that behave as tense inflections. The main verb surfaces in two forms: (a) a bare form (i.e. the uninflected verb stem (2a) and (b) a participle form (2b) encoded by a nasal prefix that attaches to the verb stem after either a negation morpheme *mâ* (or any imperfective or perfect aspect. Pro stands for the postverbal pronoun that is obligatorily required in negative sentences of the indicative mood.

As we can see from the examples in (2)-(5) above, there is room for debate as to what counts as tense, aspect and mood affixes using only morphosyntactic criteria. The question we intend to answer in this chapter is how to indentify various tenses systematically, distinguishing them from other temporal adverbials (e.g., *today, yesterday, a long time ago, in the future* etc). The verb root in (2)-(5) is *–jún* 'to buy' with an underlying High tone (cf. the infinitive form *ǰìn-ʒún*).

In the past perfective, the High tone on the main verb becomes Low in the affirmative sentence (2a), but in the negative sentence (2b), the main verb takes a homorganic nasal *n-* that encodes the participle. When the participle occurs before the verb's first consonant, the glide '*j*'of the verb root becomes '*ʒ*'. The verb root also keeps its High tone after the past tense marker *pí*, the perfective Ø and the negation morpheme *mâ*. Moreover, in negation sentences such as (2b), (3c), (4c) and (5c), a final vowel *ì* that encodes the third person singular and agrees with the subject DP is added to the main verb root as part of the negation marker. That postverbal pronoun always surfaces with a Low tone instead of its underlying High tone. In the past imperfective, the past tense marker precedes the negation morpheme *mâ*. However, in the future tense (3), the negation morpheme *ntáp* occurs before the future tense marker *twó*, otherwise, the sentence would be ungrammatical (3b).

The examples in (4) illustrate the present tense where the zero tense marker (Ø) is preceded by the progressive morpheme *tâ* that never co-occurs with the negative morpheme *ntáp*, rather, the progressive marker is replaced by the irrealis morpheme *ná*.

The example in (5) illustrates the epistemic or dubitative mood encoded by the epistemic modal *nâ* that precedes the past tense marker *pî*. What is interesting in such a TAM combination is the surface position of the negation morpheme *mâ* that cannot occur right after the perfective aspect morpheme *tê* (5b). Based on these data, I will later claim that the future tense markers in Shupamem behave like modal verbs whereas the past tense morphemes behave like auxiliaries. This distinction will have interesting consequences with respect to word order alternation between tense morphemes and various negation particles in Shupamem. The data discussed in (2)-(5) show a subtle morphosyntactic interaction between tense, aspect, mood and even negation in Shupamem in a way that makes it impossible to analyze them without considering how they pattern with each other in a clause. Before getting to this, let me present the underlying tone classes of verb in Shupamem.

2.2.High versus Rising Tone Verbs

As we have already seen in chapter 2, Shupamem monosyllabic verb roots can be assigned to one of the two tonal classes; either a "High" (H) or a "Rising" (LH) tone class. Some of the minimal pairs that establish this distinction are listed in (6).

(6) a. *ĵɪn-sí* ‘to turn’ a’. *ĵɪn-sǐ* ‘to fart’
b. *ĵɪn-fý* ‘to become white’ b’. *ĵɪn-fỹ* ‘to spit’
c. *ĵɪn-ká* ‘to fry’ c’. *ĵɪn-kă* ‘to spit out’
d. *ĵɪn-ʒí* ‘to know’ d’. *ĵɪn-ʒǐ* ‘to forbid’

All the verbs in (6) are listed in their infinitival forms with a Low tone prefix *ĵɪn-*. I will leave aside the discussion of the tonal status of polysyllabic verbs to focus only on monosyllabic verbs and how those verb roots are inflected once they enter the TAM system. The readers should note that the elements that can read prefixes in the Shupamem TAM system are the homorganic nasal N- that encodes the gerund, and the infinitival prefix *ĵɪn-* that expresses the infinitival verb forms. As for the suffixes, we have seen in chapter 2 that a number of Shupamem monosyllabic verbs may take the following suffixes in (7).

(7) a. *-ʃə* (e.g. *ĵɪn-dăp* ‘to beat’ > *ĵɪn-dàp-ʃĕ*
‘To beat smoothly’

b. *-kɛ́t* (e.g. *ĵɪn-dăp* ‘to beat’ > *ĵɪn-dàp-kĕt*
‘To beat repeatedly or in different places.’

c. *-ə̀* (e.g. *ĵɪn-dăp* ‘to beat’ > *ĵɪn-dàβ-ằ* ‘
‘Beating.’

Thus, I claim that the suffix *-ʃə* (7a) corresponds to the *attenuative suffix* while the suffix *–kɛ́t* (7b) corresponds to the *pluractional* or the *distributive* suffix. The suffix *ə̀-* in (7c) when combined to the verb root encodes the gerund.

2.3.The Surface Tones on the Main Verb and its Pronominal Arguments

One important note about the pronominal system is that of all the pronouns listed above, only the third person singular forms bear an underlying High tone, while all the remainder surface with a Low tone. However, when those pronouns combine with the verb phrase, the surface tones on both the main verb and its various arguments vary very much. The subject pronouns are subject to a High tone spreading rule that assigns a floating High tone encoding the nominative case to all subject pronouns. The verb root tone may also change if assigned a perfective aspect default Low tone.

Careful examination of the subject pronouns and the verbs in (10) and (11) clearly shows that the underlying tones have changed due to the floating tones (e.g. Phrasal High tone spreading on the subject pronoun and a default Low tone on the main verb in all perfective past tenses) that creates the following tonal rules in (8) and (9).

(8) Phrasal High Spreading in subject position: Any pronoun that occurs in subject position is assigned as High tone that encodes the nominative case in Shupamem.

(9) High tone delinking rule on the verb in the past perfective: Any underlying High tone on the main verb that occurs after the imperfective aspect marker is assigned a default Low tone. Underlying rising tone (LH) verbs are not affected by this rule.

Therefore, in order to produce the correct surface form of a sentence like (10) and (11), one would have to apply the High tone spreading and the High Tone Delinking as shown below.

(10) a. *mə pí Ø té ⟶ b. mə̌ pí Ø tè
1sg P_2 PFV flee 1sg P_2 PFV flee
'I fled.' 'I fled'

(11) í pí Ø sŭ màtwà
1sg P_2 PFV wash car
'He washed the car'

In the example in (10) above, we have seen that (10a) is ungrammatical because: (a) the High tone spreading rule did not apply on the subject pronoun *mə* 'I' that has an underlying Low tone and (b) the delinking rule did not apply on the verb *té* 'flee' that has an underlying High tone. Note that the example in (11) unlike (10a) is grammatical because the pronoun *í* 'he' already has a High tone, therefore High tone Spreading rule still applies but is not visible because of the underlying High tone on the pronoun.

In addition, the verb *sŭ* ‘to wash’ already has an underlying rising (LH) tone, that is why the High tone delinking rule is not visible as well. One may ask what happens to the object pronouns with respect to their surface tones. All object pronouns, whether it is a Low or a High tone pronoun, which occur after a High tone or rising tone verb surface with a default high tone. Relevant examples are given in (12)-(15).

(12) a. *mɔ́n ná twó fú ŋà
1-child IRR F_1 call me
‘The child will call me.’

b. mɔ́n ná twó fú ŋá
1-child IRR F_1 call me
‘The child will call me.’

(13) mɔ́n ná twó fú ŋí
1-child IRR F_1 call me
‘The child will call me.’

(14) a.*mɔ́n ná twó sŭ ŋà
1-child IRR F_1 wash me
‘The child will wash me.’

b. mɔ́n ná twó sŭ ŋá
1-child IRR F_1 wash me
‘The child will wash me.’

(15) mɔ́n ná twó sŭ ŋí
1-child IRR F_1 call hi
‘The child will call him.’

The verb *fú* ‘to call’ in (12) and (13) that has a High tone, systematically spreads its tone to the following pronouns as shown in (12b). That is why even an underlying Low tone pronoun such as *-ŋà* ‘me’ surfaces with a High tone. The verb *sŭ* ‘to wash’ in (13) and (14) that has a rising (LH) tone spreads its High tone to the following pronoun. For that reason, the underlying Low tone pronoun *ŋà* ‘me’

systematically surfaces with a High tone as in (14b). The examples in (13) and (15) are grammatical because the third person pronoun *í* already has an underlying High tone so that the High tone spreading rule is not as transparent in that context.

What is interesting about Shupamem TAM system is how the underlying tones on the main verb and its pronominal arguments changes on the surface once the TAM morphemes are inserted. The following two tables summarize how the forms for a High tone transitive verb *ʃ̃ìn-fíí* 'to call' and rising (LH) verb *ʃ̃ìn-tǎ* 'to leave' combine with both pronominal arguments (e.g. subject and object pronouns) on the surface.in all tenses. Attention should not be paid to the meaning of these examples, but rather on the surface tone on the main verb. I have deliberately ignored the glosses just to focus on the tones here.

High tone verb: *fĭn-fú* ‘to call’					
	Examples	Subject Pronouns		Object Pronouns	
		+L	+H	+L	+H
Past PFV	*mă fù í*	LH	H	H	H
Past IPFV	*mă pú m-fú í*	LH	H	H	H
Past Perfect.	*mă tè m-fù í*	LH	H	H	H
Past Subj.	*mă pú twó fù í*	LH	H	H	H
PR-PROG	*ǹtâ m-fú í*	L	H	H	H
PR-Hab	*mă ná m-fú í*	LH	H	H	H
F_1	*mă ná twó fú í*	LH	H	H	H
PR.Cond	*ǹ-kə̀ m-fú í*	L	H	H	H
Past-Cond	*ǹ-ká m-fú í*	L	H	H	H
Inf.	*fĭn fú*	N/A	N/A	N/A	N/A
Imp.(2sg)	*fú î*	N/A	N/A	H	H

Table 4.2- Surface tones of an underlying High tone verb and its pronominal

Rising (LH) tone verb: *ʃ̃ĭn-tă* ‘to leave’					
	Examples	Subject Pronouns		Object Pronouns	
		+L	+H	+L	+H
Past PFV	*mă tà í*	LH	H	H	H
Past IPFV	*mă púˊ n-tă í*	LH	H	H	H
Past Perf.	*mă tè m-tă í*	LH	H	H	H
Past Subj.	*mă púˊ ntwó tă í*	LH	H	H	H
PR-PROG.	*ǹtâ n-tă í*	L	H	H	H
PR-Hab	*mă ná ǹ-tă í*	LH	H	H	H
Future	*mă ná twó tă í*	LH	H	H	H
PR.Cond	*ŋ̀-kə̀ n-tắ í*	L	H	H	H
Past-Cond	*ŋ̀-ká n-tắ í*	L	H	H	H
Infinitive	*ʃ̃ĭn tă*	N/A	N/A	N/A	N/A
Imperative (2sg)	*tă î*	N/A	N/A	H	H

Table 4. 3 Surface tones of an underlying rising (LH) tone verb and its pronominal.

It is entire clear from table 4.3 and 4.4 that all High tone subject pronouns surface with a High tone whereas Low tone pronouns surface with a rising (LH) tone except from when they occur in the present progressive (PR.PROG), the present conditional (PR.Cond) and the past conditional (Past.Cond). As for the object pronouns, whether they are underlying High or Low tones, they always surface as a High tone right after any verb (High tone or rising tone verb). The main verb whether it is an underlying High or rising (LH) tone verbs only changes its underlying tone in the past perfective. In the past perfective, all verbs are assigned a default Low tone.

I will conclude this section by claiming that the tonemic configuration of the verb and its various argument is crucial in the understanding of Shupamem TAM, thus one has to pay closer attention to it when looking at the opposition between positive and negative sentences or focus and non-focus tenses. Let us now turn to the definitions of concept of tense, aspect and mood to set the stage for a more elaborate analysis of Shupamem TAM system.

3.Outline of Tense, Aspect and Mood in Shupamem Main clauses

This section covers some definitions of the concepts of tense, aspect and mood that have been proposed in the literature. They will serve as theoretical assumptions of my analysis of what corresponds to the grammatical forms or categories that

encode tense, aspect or mood in the language. I make a terminological distinction between cross-linguistic formal categories and language-specific categories with respect to the expression of tense, mood and aspect. The distinction between tense, aspect and mood has not been transparent across languages. It would be misleading to analyze grammatical forms in Shupamem based on their translation equivalent in well described languages.

That is why, it is crucial for the present analysis not to look at Shupamem through the lenses of European languages such as English, French etc., but rather through its own grammatical forms that do not always correspond to relevant grammatical categories available in the literature. For instance, when we look at the paradigmatic and syntagmatic relations between forms in French, English and Shupamem, what is commonly described as the future tense is more a tense marker in French than it is in English and Shupamem where the forms that correspond to the future tense belong with modal auxiliaries. I will come back to the detail of this assumption in Section 4.4 that discusses how the future tense is expressed in Shupamem.

3.1.Tense, Aspect and Mood

According to Dahl (1985:1), 'tense, aspect and mood' can be characterized as 'semantic categories' that are indicated by various 'linguistic means'. It has become

a tradition in the literature to use TAM to refer to these categories. Note that TAM is the abbreviated form of tense, aspect and mood/modality.

Of all the grammatical sub-systems, as pointed out in Givón (1984:269), tense-aspect-modality is the most difficult to analyze to any linguist. This is due in part to the fact that the analysis of the structure of tense, aspect and modality with respect to other grammatical categories (e.g., negative particles, clitics, adverbials etc.) requires a full understanding of the inflectional properties of the lexical verb within a single clause as well as a complex one. Hence, there have been no agreed-upon definitions for tense, aspect and modality in the literature over the past few decades. In what follows, I will go over relevant definitions that will serve as the departing point of my investigation of various morphemes that are commonly used to express TMA in Shupamem. Tonhauser (2006) surveys the literature and claims that the diverse definitions of the TAM can be summarized as in (16)-(18).

(16) TENSE: a relation between times, one of which is the perspective time.

Tonhauser (2006:15)

(17) ASPECT: an operation on eventuality descriptions.

Tonhauser (2006:20)

(18) MODALITY: the relation between the actual world and the worlds of evaluation.

Tonhauser (2006:22)

In other words, tense is generally characterized in terms of the position of two times with respect to each other (e.g. pastness, presentness, or futurity); aspect tells us something about the state or event being described and modality is used to describe non-actual states of affairs (see Cover 2010). In very simple terms, tense and aspect can be characterized as grammatical categories that express the semantic notion of time in natural languages (Comrie 1976, Dahl 1985). Comrie (1976:47) claims that aspect can be viewed as 'different ways of viewing the internal temporal constituency of a situation'. An alternative way of describing tense is to view it as 'a deictic category' that describes an action or event 'with respect to a fixed point of view' as pointed out in De Haan (2003:2). This definition is closer to Dereck's (2003:94) claim that 'tenses are representations of time that contains the event'.

Formally speaking, there are three parameters in the literature that are used to characterize tense, namely: (a) the situation time (S) i.e. the specific time at which the statement is being delivered (the moment of the speech), (b) the event time (E) i.e. the specific time at which the situation being described in the statement took place, and (c) the reference time (R) i.e. the time against which the event time is measured (De Haan 2000:02, see also Comrie 1985:122-124). When the situation time equals the reference time, the events being described are measured against the moment of speech, and one will talk of an absolute tense.

The formal representation of the absolute tenses in Shupamem just like many other Bantu languages is thus remarkable for its multiple degrees of past and future tense references that can be summarized as follows:

(i) When the event time comes before the situation time, the time reference that corresponds to such a scenario is the past tense, and is subdivided into four subtypes, namely: the immediate past (P_1), the recent past (P_2), the intermediate (P_3) and the remote past (P_4).

(ii) When the event time is simultaneous to the situation time (or overlaps), the time reference of such a scenario is the present tense.

(iii) When the event time follows the situation time, the time reference will be the future tense, which is subdivided into three subtypes, namely: the immediate future (F_1), the intermediate future (F_2) and the remote future (F_3). (see Comrie 1985:122-130)

Based on these definitions, various morphosyntactic relationships between different verb affixes (e.g., tense, aspect, mood and negation) will come to light as well as any word order issues as we proceed.

3.2.Survey of Tense/Aspect/Mood Forms in Shupamem

This section briefly presents the range of TAM morphemes in Shupamem. For ease of description of various TAM forms, I offer an illustrative sample clause and explain how its positive form is negated. The examples presented here are built using only the third person singular pronoun '*í*' as well as full NPs to show how the underlying tones of a number of elements that build the clause may change on the surface. Typologically, Shupamem is very similar to Ngiemboon (Anderson 1983:52-57) and, just like other Grassfields Bantu languages, it divides its TAM system between on the one hand, realis and irrealis forms and on the other hand, between imperfective and perfective. It is important to point out that focus is relevant to the TAM system too, the readers who are not familiar to these features are referred section 10 where this is covered. The imperfective distinguishes a non-progressive (i.e. general imperfective/habitual) and a progressive. The perfective aspect is associated with the past tense as well as the future tense. The present is always imperfective in form (e.g., habitual, progressive) while the past is either perfective or imperfective. Again, the imperfective future subdivides into non-progressive and progressive (See Watters 2003:246 for a similar discussion of GB). Negation is one of the verb prefixes that vary depending on tense, aspect, and mood.

Thus, Shupamem lacks the Bantu system of verb prefixation and the majority of tense, aspect, mood and polarity morphemes are expressed by means of clitics and particles and to some extent by grammaticalized auxiliaries (e.g. future tense morphemes).

Table 4.5 summarizes all the TAM morphemes and negation morphemes that will be discussed in this chapter. Here I give a list of Shupamem TAM morphemes and their corresponding negation morphemes that gives the reader a general idea of what to expect in the remainder of the chapter with respect to the semantics and pragmatics of particular TAM markers in general. These markers are tense; imperfective, perfective and perfect aspects; infinitive, conditional, subjective, and negation morphemes. It is worth pointing out that negation morphemes in Shupamem vary depending on (a) aspects (e.g., *mâ* for perfective versus *ntáp* for imperfective), and (b) mood (e.g., *mâ* & *mà~ntáp* for the imperative versus indicative mood distinction; *jé* for the potential, *ʃɨ́* for the infinitive & conditional, *múú* for prohibitive negation). I will return to the discussion of negation in chapter 5. The labels P_1, P_2, P_3, P_4 and F_1, F_2, F_2, in the following the degree of remoteness in the past and the degree of uncertainty in the future. Note that, just like many Grassfields Bantu languages divided the past and the future in a way that reflect the speaker's characterisation of the world.

That is why the time line is cut into lapses to reflect with a certain degree of specification when the event being describe actually happened or will happen with respect to the time of the speech. The present tense as we can see in table 4.4 distinguishes the progressive, the evidential and the habitual. The conditional is divided into a present and a past. Again, the negative morphemes also vary depending on tense, aspect and mood. It is also important to notice that the conditional morpheme may come first (e.g., *nəkɑ́*) or after the main verb (e.g. *kɯ̀* versus *kɯ́* for the present and past conditionals) in the clause.

Moods	**Aspects**	**Tense values**	**Neg. Marker**
A.Non Stative verbs (Indicative)	Perfective= *Ø~mbí*	(1) Past:*Ø~pé~pí~kapí* (2) Future: *twó~lɔ́ʔ~twó lɔ́ʔ* (3) Present: Ø	*mâ*
	Imperfective= *Ø~ mbú́*	(1) Past:*pá~pú́~kápú́* (2) Future: *twó~lɔ́ʔ~twó lɔ́ʔ* (3) Present: Ø (a) Progressive: *tâ* (b) Habitual: *ná* (c) Evidential: *nâ*	*ntáp*
Stative verbs (Indicative)	Imperfective	(1) Past: *pú́~kápú́* (2) Future: *twópú́ ~lɔ́ʔpú́~ twó lɔ́ʔ pú́* (3) Present: *pâ*	*ndîʔ*
General	Historical Past	*ká*	*mú*
Conditional = ø~nəká	No aspectual value	Past: *kú́* Present: *kù*	*ʃı*
Potential	Periphrastic via the modal *jètnə* (‘can’)		*jé*
Imperative	Expressed a floating high tone verb		*mà*
Infinitive	Expressed by adding the prefix *jìn-* to the verb root.		*ʃı*

Table 4.4. The inventory of TAM markers and corresponding negation markers in Shupamem

Morphologically, the following examples in (19)-(22) illustrate details of the TAM paradigm for a rising toned verb such as *jîn-sǔː* ‘to wash’. Thus in Shupamem, the distinction between (19a) and (19b) is one of tense; the one between (20a) and (20b) is one of aspect; the one between (21a) and (21b&b’) is one of modality, and the one between (22a) and (22b) is one of polarity.

(19) a. mɔ́n ná twó sǔː màlòrɪ̀ fámnʒɯ́
1-child IRR F_1 wash 3-rice 3-tomorrow
‘The child will wash the rice tomorrow’ (Future Tense)

b. mɔ́n pí sǔː màlòrɪ̀ ŋkùrə̀
1-child P_3 wash 3-rice 3-yesterday
‘The child washed the rice yesterday’ (Past Perfective Tense)

(20) a. mɔ́n pí sǔː màlòrɪ̀
1-child P_3 wash 3-rice
‘The child washed the rice’ (Past Perfective Aspect)

b. mɔ́n pɯ́ mbɯ́ ǹ-sùː màlòrɪ̀
1-child P_3 IPFV PTCP-wash 3-rice
‘The child was washing rice’ (Past Imperfective Aspect)

(21) a. mɔ́n jɛ̀tnə́ sǔː màlòrɪ̀
1-child POT wash 3-rice
‘The child can wash the rice.’ (Potential Mood)

b. nə̀ká mɔ́n n-sǔː màlòrɪ̀ nə́
If 1-child PTCP- wash 3-rice COMP
‘If the child washes rice.’ (Conditional Mood)

b’. mɔ́n kə́ nsǔː màlòrɪ̀
1-child Cond. PTCP-wash 3-rice
‘If the child washes the rice.’ (Conditional Mood)

(22) a. mɔ́n ná twó sŭː màlòrĭ fámnʒʊ́
1-child IRR F_1 wash 3-rice 3-tomorrow
'The child will wash the rice tomorrow.' (Positive Future)

b. mɔ́n ná ntáp twó̰ sŭː ŋ̀ĭ màlòrĭ fàmʒʊ́
1-child IRR NEG F_1 wash 3sg 3-rice 3-tomorrow
'The child will not wash the rice tomorrow.' (Negative Future)

Despite the seemingly straightforward nature of the definitions in (16)-(18) and their illustration in (19)-(22), further complicating issues need to be addressed in order to clarify the interaction between tense, aspect, mood and negation. Note for instance that the underlying rising tone on the main verb is claimed to vary depending on the interaction between tense, aspect and mood inflectional morphemes.

3.3.Grammatical Tenses and Time adverbials in Shupamem

I build on Comrie (1985: 1, 6) hypothesis that tense is 'grammaticalisation of location in time' and aspect is 'grammaticalisation of expression of internal temporal constituency' to analyze relevant tenses of Shupamem. Although tense and aspect may be very close conceptually, the boundaries between them are not always obvious at least for a language like Shupamem where a bare verb may read as a present or a recent past tense depending on the context or type of verbs used in the clause (e.g., *to know, to ripe,* etc).

The most basic distinctions that are made in Shupamem as well as in other Grassfields Bantu languages are that of the imperfective, the perfective and the perfect across all tenses except for the present tense. Morphologically speaking, grammatical tenses are always obligatory in Shupamem whereas time adverbials may be optional. Shupamem has a tense system where there are some degrees of remoteness both for the past tense and for the future tense. The absolute tenses of the indicative mood in Shupamem can be described schematically as in figure 4.1. Note that the past tense is broken down into degrees of remoteness in the past. However, the future tense is broken down into not degrees of remoteness, but degrees of uncertainty. For instance, in the future tense, unlike in the past tense, when a Shupamem speaker envisions an event or action to take place, he does not obviously have any evidence that the event or action he has in mind will actually materialize. Thus, the difference between F_1, F_2 and F_3 in Shupamem cannot be characterized in terms of the degree of remoteness in time, but rather in terms of degree of certainty with respect to whether or not the event in question being described is actually going to take place. (Wilkendort,1991:110).

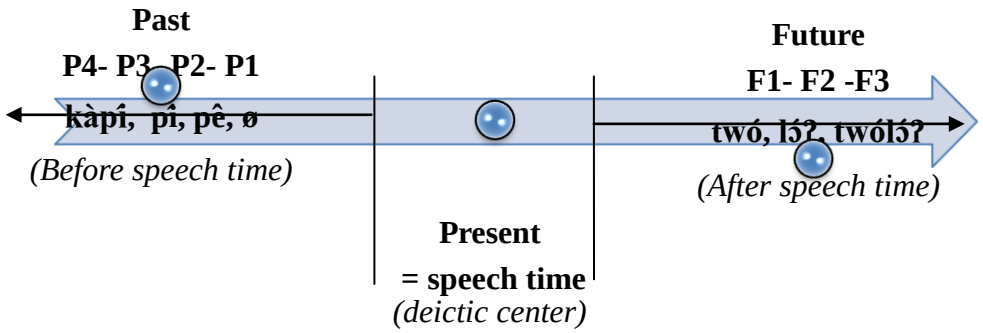


Fig.4. 1 Absolute Tenses in Shupamem

As we can observe in figure 4.1, Shupamem is consistent with Comrie's (1985:85) idea that the reference point is the present tense (i.e., the speech time). However, it is important to observe that the tense references between two degrees of remoteness may actually overlap as shown in table 4.5 adapted from Wilkendorf (1991:109). For instance, there is a clear overlapping between the present tense and the immediate past (P_1) in Shupamem. The boundaries between those tenses are blurred. Evidence for such overlapping comes from the fact that the time adverb *ŋâŋâ* 'now' can be used interchangeably for both the present tense and the immediate past in Shupamem to mean the same thing.

Time Adverbs		***Past tenses***				***Pres.***	***Future Tenses***		
Examples	*Meanings*	P_4 *kàpî*	P_3 *pî*	P_2 *pé*	P_1 *Ø*	*Pres. Ø*	F_1 *twó*	F_2 *lɔ́ʔ*	F_3 *twó lɔ́ ʔ*
sâkérî	'long time ago'	√	×	×	×	×	×	×	×
mɔʔ lùm/ fùìʔ	'some year/time (unspecified)	√	×	×	×	×	×	×	√
júó múút	'last month'	×	√	×	×	×	×	×	×
júó ŋgàp	'last week'	×	√	×	×	×	×	×	×
jɨ̌ːŋ̀kùrə	'before yesterday'	×	√	×	×	×	×	×	×
ŋ̀kùrə	'yesterday'	×	√	×	×	×	×	×	×
ʃùìʔ	'(last) night'	×	√	×	×	×	×	×	×
ŋ̀kŭʔnʒú	(this) morning'	×	×	√	×	×	×	×	×
fúíʔʃîrə̄	'next'	×	×	√	×	×	×	×	×
ŋâŋâ	'now'	×	×	×	√	√	×	×	×
fúíʔʃîrə̄	'few hours later/later on'	×	×	×	×	×	√	×	×
ǹdútŋ̀gwán	'afternoon'	×	×	×	×	×	√	×	×
fâmǹʒú	'tomorrow'	×	×	×	×	×	√	×	×
júó muut	'next month'	×	×	×	×	×	√	×	×
júó lúm	'next year or any time'	×	×	×	×	×	×	√	√

Table.4. 5. Tense Adverbs: Degree of Remoteness of The Tense Reference in Shupamem

Note that, for the purpose of this chapter, I use the term TIME ADVERB in table 4 5 to refer to any lexical item that occurs as an adjunct to mark the time reference it the clause. Those lexical items may function as nouns, adverbs, or preposition phrases depending on the context. The "√" and "✖"after the time adverbs in table 4.5 show whether the time adverbs is grammatical or ungrammatical respectively if associated with the relevant tense morpheme(s). Notice that grammatical morphemes significantly differ from lexical temporal adverbials such as time adverbs. Tense morphemes are obligatory in Shupamem whereas the time adverbs are optional. Just by looking at the tense morpheme, unlike in English, a speaker can tell right away when the action being described actually took place. For example, in the English sentence *John came*, although we can infer that the event of coming took place in the past, there no specific information about the exact time in the past that might help us to specify it. It is worth pointing out that in Shupamem, different past tense morphemes (e.g., immediate, recent, intermediate and remote past) and future tense morphemes (e.g., immediate future, intermediate and remote future) tell us more about the exact time reference in the past and the degree of certainty in the future with respect to the reference time of the discourse.

In the past tense, while the remote past (P_4) *kàpî* can only accept the time adverbs referring to a remote past such as *sàkérî* 'long time ago' or the time adverb

mɔ̀ʔ lùm/fúʔ ‘a year or some time’ that corresponds to an unspecified period in the past, the intermediate past (P_3) *pî* may select up to five different time adverbs. However, the immediate past P_1 and the present tense may only accept the time adverb *ŋâŋâ* ‘now’.

In the future, the immediate future (F_1) *twó* may correspond to up to four different time adverbs that also correspond to any reference point in the near future. The intermediate future *lɔ́ʔ* only goes with the time adverb *júó lúm* ‘next year’ while the remote future tense marker *twó lɔ́ʔ* goes with the time adverb *mɔ̀ʔ lùm/fùʔ* ‘one (unspecific) year/one time’. Now that we have a general idea about what the tense morphemes, let us move on to the discussion of how they interact with various aspects.

The tense morphemes described so far correspond to what is referred to as ‘time metaphor’ as described in Lakoff and Jonson (1980). For instance, one can establish a correlation between the past, the present and the future with three specific locative place references in Shupamem such as *mánʒàm* ‘behind’, *ŋà* ‘here’ and *nkú súʔ* ‘in front of’. These three locative place references are described following certain deictic encodings. One may therefore obtain the following analogy in Shupamem that is very similar to what is found in English.

(23) ĵı pə́sàʔkwó shíʔáʔ mbʉ́ pò mánʒə̀m úpwò
Dem. matter stay be Foc behind us
'This matter is behind us'

(24) ĵı pə́sàʔkwó pâ ŋà
Dem. matter be.Pres here
'This matter is here.'

(25) ĵı pə́sàʔkwó káʔà mʉ̀ sʉ́ ʃùpwò
Dem. matter remain.Pres in front us
'This matter is still in front of us/ahead of us'

Thus, one distinguishes two levels of time metaphor in Shupamem: (a) the conceptual level where the metaphoric process takes place, and (b) the linguistic level that corresponds to the level where such a metaphoric process is expressed.

4.Formal Characteristic of Shupamem TAM System

This section discusses the morphological characteristics of the TAM system in Shupamem with a particular reference to how the tense morphemes, modals and the negative morphemes combine with each other in a clause. Before getting into the details of the TAM system, let me briefly provide some general comments about the morphosyntactic properties of what can function as a verb in Shupamem. Any lexical item that has one of the following characteristics will be considered a verb in Shupamem:

(a) Inflection: the verb in the sentence is commonly inflected for tense (past tense, present tense, or future tense), aspect, and to some extend mood. It

can also be negated using different types of negation particle (e.g., perfective versus imperfective negative particle, prohibitive, potential negation etc).

(b) Function: the verb commonly functions as the head of the VP. As we will see later, non-tensed verb forms will behave more like nouns or adjectives depending on their syntactic slot in the clause.

Auxiliaries, unlike verbs cannot be used on their own in the imperative or negated. Shupamem verb phrase therefore consists of a head element and one or more dependents (auxiliaries). The dependents position can be filled by:

(i) Tense markers, negation, modals etc.

(ii) The infinitive particle *ĵìn-* which serves much the same function in Shupamem as in languages like French (e.g., chant-*er* 'to sing', fin-*ir* 'to finish', vend-*re* 'to sell', cr-*oir* 'to believe') or English (e.g., *to* sing) where the suffixes *–er, ir, -re, oire* for French and the independent morpheme *to* for English correspond to Shupamem infinitival prefix *ĵìn-* (e.g.,*ĵìn-ʒwə̌p* 'to sing'), especially in infinitival clauses.

One important principle governing the structure of the VP in Shupamem is the idea that each auxiliary that comes before the verb determines the form of that verb.

The verb forms in combination with tense and aspect can be summarized as in table 4.6 where I list all tense inflectional morphemes for the indicative mood. In table 4.6 for example, any verb that comes after a tense marker associated with the imperfective surfaces with the homorganic nasal (e.g., the past participle form). However, if the verb is inflected by a tense marker associated with the perfective, the verb surfaces as a bare form. It is also shown that tense affixes associated with the perfective are the only ones that can be focused. As it will be shown in the next sections, Shupamem verb system distinguishes two non-finite verb forms: *the infinitive* and *the imperative*, and five moods: *the indicative, the subjunctive, the conditional, the potential and the simultaneous*. All these moods employ a variety of tense morphemes to encode past, present as well as future events, situations, or actions (see Tamanji 2009: 127 for similar arguments). The interaction of tense morphemes, aspect, mood, negation and focus is a complex issue that will be discussed in further details later on. Let me just quickly make one clarification about the table below that distinguishes the morphological shape of the main verb depending on whether it is positive or negative.

Tense/Modal	**Aspects**	**Neg**	**Positive verb**	**Negative verb**	**Description**
Ø, pê, pí, kàpî	Low tone	mâ	Bare	Participle	*Past PFV*
pâ, pứ́, kàpứ́	mbứ́	ntáp	Participle	Participle	*Past IMPFV.*
Ø, pê, pî, kàpî	tê	mâ	Participle	Participle	*Past PFT*
Ø	Ø	mâ	Bare	Participle	*Simple PR.*
Ø	ná (mbứ́)	ntáp	Participle	Participle	*Present Hab.*
Ø	tâ	*	Participle	Participle	*Present Prog.*
Ø	nâ	*	Participle	Participle	*Pres.(Evid)*
t*wó*, lɔ́?, twɔ́ lɔ́?	ná	ntáp	Bare	Bare	*Simple Future*
t*wó*, lɔ́?, twɔ́ lɔ́?	pứ́	ntáp	Participle	Participle	*Future Imperfective*
t*wó*, lɔ́?, twɔ́ lɔ́?	pí + tê	ntáp	Participle	Bare	*Future Perfect*

Table 4.6. Shupamem tense morphemes and verb forms.

The star "*" after the progressive marker *tâ* and the evidential marker *nâ* suggest that those elements are incompatible with both negation markers commonly used in the indicative mood in Shupamem (also see Chapter 5 for an extensive analysis of those types of negation).

Table 4.6 reveals the following morphological outlook for the main verb:

(i) In the positive sentences, the verb surfaces as a bare form (i.e., without the prefixed homorganic nasal) if it is inflected by a past perfective, a present tense, a simple future (as opposed to the imperfective or progressive) tense morpheme. However, if the verb is inflected by any imperfective tense marker (e.g., past imperfective, present progressive/evidential, and the future imperfective), it surfaces as a participle.

(ii) In negative sentences, the verb mostly surfaces as a participle except from the simple future tense (as opposed to the future imperfective that requires a participle form).

(iii) The past tense markers are inflectional (just like the English past tense – *ed*) whereas the future tense markers are modals (just like the English modal *will*).

One point that is worth mentioning about the tense morphemes as presented in table 4.6 is how they can co-occur and how their combinatorial semantics work with respect to the indication of certain particular tenses, aspects and moods as well as the indication of negation. For instance, later on, it will be shown that Past and Future tense morphemes may combine in a single sentence to express the future imperfective (see 33a-c) and the future perfect (see (34a-c).

It will also be shown that the negative markers have different relative ordering with respect to the past/future. My position in this dissertation is that while it is clear to me that the simple past tense and future tense have identifiable morphemes for the imperfective and the perfective aspect in a declarative sentence, Shupamem also make use of different negation morphemes and other tense adverbs which orders vary depending on their pragmatic functions in the discourse. It is also possible to combine past tense and future tense morphemes to obtain a more complex tense or aspectual interpretation.

It should also be pointed out that Shupamem does not have a passive voice. In the next sections, I look into the details of the morphosyntactic properties of tense, aspect and mood. Particular focus will be made on a number of interactions that exist between various grammatical forms in terms of their surface order and the status of grammatical tones that affect the underlying tones on the main verb in the clause.

The following examples in the rest of this section explicitly explain how the tense morphemes provided in table 4.6 above literally read in specific contexts. I will use the intransitive verb *ʃ̀ɪn-twó* 'to come' in its third person singular form both in affirmative and negative forms to show how the correct surface form of a negation morpheme depends on that of the TAM morpheme used in the clause. It is very important to note that Shupamem makes a three way aspectual distinction for

past and future tenses, namely: (a) the perfective, (b) the imperfective and (c) the perfect aspects.

4.1.Past Perfective

The perfective is encoded by a floating Low tone that precedes the main verb in Shupamem. I assume that, because any verb, whether it is a rising tone verb or a High tone verb, that occurs in the past perfect always surfaces with a Low tone, that unexpected change on the tone of the verb is the result of a floating Low tone that deletes the underlying tone on the verb. The striking difference between the positive verb (27a-d) and the negative verb (27a'-d') is in their morphological composition. Recall that Shupamem has four past tense markers which indicate different degrees of temporal distance with respect to the actual time of the utterance. The four temporal domains in the past in Shupamem can be described as follows:

(26) a. Ø : Immediate past (now)

b. *pê*: Same day past (earlier today)

c. *pí*: Yesterday past up to a month.

d. *kàpí:* Long ago past.

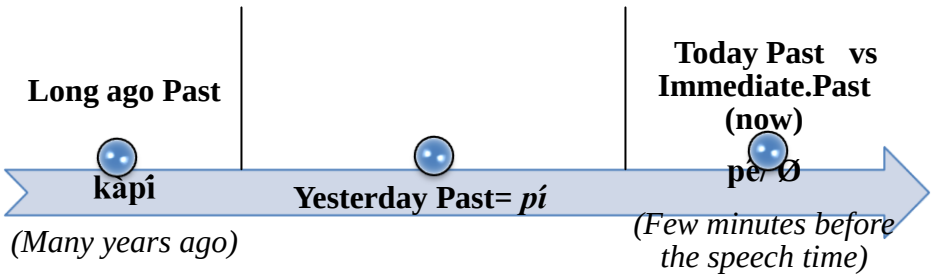


Figure 4.2- Past tense markers in Shupamem

One has to wonder what really governs the selection of a more recent over a more distant past tense marker in such a system. Nurse (2003), Comrie (1985), and Dahl and Velupilai (2005) provide a theoretical account of the time scaling crosslinguistically and note a certain flexibility. In Shupamem, the choice of each degree of past tense is dictated by the context and the speaker's evaluation and recollection of the event being described.

Note in (27) that there is a difference in the morphological properties of the affirmative verb (e.g., *-twò*) and that of the negative verb (e.g., *n-twó*) where the former is referred to as bare form and the later as the participle form or inflected form.

Thus, I will claim that the homorganic nasal on the main verb is the head of a participle phrase (PartP) so that all inflected verb forms in the clause will be viewed as participles. It is also important to note that, in all standard negation sentences, the negative morpheme *mâ* (for perfective) and *ntáp* (for imperfective) systematically require a postverbal pronoun that agrees with the DP subject (see the discussion of all negation construction types in Chapter 5). The tense markers are underlined whereas the negation morphemes are bold.

(27) Past PFV	(27) Negation	Meanings
(a) *í <u>Ø</u> twò*	(a') *í <u>Ø</u>* ***mâ*** *n-twò* ***ŋì***	'He came' (a minute ago)
(b) *í <u>pê</u> twò*	(b') í *<u>pê</u>* ***mâ*** *n-twò* ***ŋì***	'He came' (earlier today)
(c) *í <u>pí</u> twò*	(c') *í <u>pí</u> mâ n-twò* ***ŋì***	He came' (few days, weeks or even months ago)
(d) *í <u>kàpí</u> twò*	(d') *í <u>kàpí</u>* ***mâ*** *n-twò* ***ŋì***	He came' (many years ago)

It is important to note that all underlying High tone verbs in the past perfective in Shupamem are assigned a Low tone in the surface. I argue that the past perfective is the trigger of a High tone delinking rule (see the definition of this rule in (9) that changes the underlying High tone on the main verb into a Low tone.

The verb *fĩn-twó* ‘to go’ is one of those verbs that systematically drops its underlying High tone when it appears in a context of past perfective.

4.2.Past Imperfective

At first glance, the immediate (P_1) and today past (P_2) in the imperfective aspect are encoded by the same morpheme *pâ* (27a&b). The intermediate and the remote past are encoded by *pú́* (P_3) and *kàpú́* (P_4) respectively. The imperfective morpheme is encoded by the morpheme *mbú́* that immediately follows the tense marker. It is important to note that the past tense morphemes of the imperfective are different from those of the perfective aspect. The TAM combination in (28a-d) convey an aspectual interpretation that can be literally translated as “he was coming”. If we compare the morphological configuration of the main verb in the perfective (27a-d) with that of the imperfective aspect (28a-d), we can easily see that the former surfaces as a bare root (e.g., *-twò* ‘come’) whereas the latter exhibits a homorganic nasal (e.g., *n-twó* ‘coming’), just like what we have seen for all negative verbs in the perfective aspect. Another important observation is that the negative morpheme that is used in the imperfective (28a’-d’) is completely different from that of the perfective aspect (28a-d).

(28) Past Imperfective	(28) Negation	Meanings
(a) *í <u>pâ</u> mbú n-twó*	(a') *í <u>pâ</u> mbú* ***ntáp*** *n-twó* ***ŋì***	'He was coming' (a minute ago)
(b) *í pâ mbú n-twó*	(b') *í pâ mbú* ***ntáp*** *n-twó* ***ŋì***	'He was coming' (earlier today)
(c) *í <u>pú</u> mbú n-twó*	(c') *í <u>pú</u> mbú* ***ntáp*** *n-twó* ***ŋì***	He was coming' (few days, weeks or even months ago)
(d) *í <u>kàpú</u> mbú n-twó*	(d') *í <u>kàpú</u> mbú* ***ntáp*** *n-twó* ***ŋì***	He was coming' (many years ago)

As we can observe in the contrast between (27a'-d') and (28a'-d'), the negative morpheme for the perfective is *mâ* whereas that of the imperfective is *ntáp*. While the morpheme *pâ*, *pú* and *kàpú* in (28) are described here as the past tense markers in the imperfective, they also function as different forms of the stative verb (or copula) as exemplified in the following examples. The examples in (28a&b) may look confusing to the readers since the tense marker for the immediate past and the today's past tense in the imperfective aspect looks identical. I argue that they are just homophonous.

(29) Past Imperfective	(29) Negation	Meanings
(a) í pâ nsà	(a') *í ndìʔ ŋ̀ nsà*	'He is tall'
(b) *í púnsà*	(b') *í pú ndìʔ ŋ̀ nsà*	'He was tall'
(c) *í kàpú nsà*	(c') *í kàpú ndìʔ ŋ̀ nsà*	He was tall'

The negative morpheme that is used for a stative verb is *ndíʔ* and is immediately followed by a post-verbal pronoun *ŋ̀* as in (29a'-c). It is very important to point out that the present tense form of the stative verb (e.g., *pâ*) systematically deletes in the presence of the negation morpheme *ndìʔ* as shown in (29a') whereas the recent past tense form *pú* and the remote past tense form *kàpú* may co-occur with the same negative marker.

4.3.Past Perfect

The following examples in (30) illustrate what I refer to as past perfect clauses in Shupamem where the perfect aspect is encoded by the morpheme *tê* that immediately follows the past tense marker (30a-b). In the past perfect, the perfect marker *tê* does not co-occur with the negation marker *ʃì*, rather it is replaced by the

morpheme *káʔà* that literally reads as *still/yet* (e.g. *He still has not come*/*He has not come yet*). Based on the examples in (30), I will argue the following:

1. The negative marker *ʃì*, unlike the negative marker *mâ* or *ntáp*, never requires any postverbal pronoun.
2. The negative marker *ʃì* behaves like the imperative or subjunctive marker *mà* in that it bears a Low tone and does require a postverbal pronoun.
3. The syntactic distribution on *ʃì* and *mà* is therefore similar in that there are adjacent to the main verb.

(30) Past Perfect	(30) Negation	Meanings
(a) *í Ø tê n-twó*	(a') *í Ø* ***káʔà ʃɪ*** *twó*	'He has come' (a minute ago)
(b) *í pê tê n-twó*	(b') í *pê* ***káʔà ʃɪ*** *twó*	'He had come' (earlier today)
(c) *í pí tê n-twó*	(c') *í pí* ***káʔà ʃɪ*** *twó*	He had come' (few days, weeks or even months ago)
(d) *í kàpí tê n-twó*	(d') *í kàpí* ***káʔà ʃɪ*** *twó*	He had come' (many years ago)

The basic puzzle for the aspectual morphemes *tê* (perfect) and *kàʔá* 'still/yet" is how to specify their semantic contribution to the clause and explain the constraints on their distributions with respect to aspect and polarity. While I can hardly provide a complete solution to this puzzle, I simply argue that *tê* and *káʔà* are in complementary distribution in a sense that they are not interchangeable as shown in the following examples in (31)

.

(31) Past Perfect	(31) Negation	Meanings
(a) **í pî kàʔá twò*	(a') *í pî* ***káʔà ʃì*** *twó*	'He has come' (Yesterday)
(b) *í pî tê n-twò*	(b') *í *pî* ***tê ʃì*** *twó*	'He had come' Yesterday)
(c) **í kapíkàʔá twó*	(c') *í kàpí* ***kàʔá ʃì*** *twó*	He had come' (many years ago)
(d) *í kàpí tê n-twó*	(d') **í kàpí* ***tê ʃì*** *twó*	He had come' (many years ago)

Comparing the affirmative past perfective clauses, we observe that (31a) and (31c) are ungrammatical because we have forced the use of the aspectual marker *kàʔá* 'still/yet' in the affirmative sentences where only the perfect aspect marker *tê* is allowed as shown in (31b) and (31d). The examples in (31b') and (31d') show that it is not possible to use the regular perfect aspect marker *tê* with the negation morpheme *ʃɨ* which only accepts the aspectual marker *kàʔá* 'still/yet' as shown (3a1') and (31c').

Overall then, the perfect aspect in Shupamem is encoded by the morpheme *tê* that is in complementary distribution with the negative morpheme *ʃɨ* that only accepts the aspectual marker *kàʔá* 'still/yet'. I will come back to the detail of this issue in chapter 5. For the time being, let us move on to the description of the future tenses.

4.4.Future Tenses

The analysis of the future tense in Shupamem can be claimed to be complicated by its inherent uncertainty. I have claimed that the future tense, unlike the past tense is divided into degrees on uncertainty. Although Comrie (1985) assumes that, the morpheme *will* in English is a modal (cf. 'John will be getting frozen yogurt right now, if I know him').

However, it is not obvious to find across languages a grammatical morpheme that refers to the future tense only. The morpheme that stands for the future tense usually functions as a modal category. The future tense in Shupamem is encoded by three different modal verbs: (a) *twó* which originally means 'come', (b) *lɔ́ʔ* which means 'leave' and (c) *twɔ́ lɔ́ʔ*, a sort of serial verb that literally means 'come leave'. These modals correspond to the immediate future, the intermediate future and the remote future respectively as shown in (32).

(32) Future (Perfective)	(32) Negation	Meanings
(a) í <u>ná twó</u> twó	(a') *í <u>ná</u> ntáp twó twó* ***ŋ̀***	'He will come' (Immediate Future)
(b) *í <u>ná lɔ́ʔ</u> twó*	(b') *í <u>ná</u> ntáp lɔ́ʔ twó* ***ŋ̀***	'He will come' (Intermediate Future)
(c) *í ná lɔ́ʔ twó twó*	(c') *í <u>ná ntáp lɔ́ʔ twó</u> twó* ***ŋ̀***	He will come' (Remote Future)

It is very important to note that Shupamem also makes an aspectual distinction between Future Imperfective (progressive) and Future Perfect (completive) as can be shown in the contrast between (32) and (33).

In the future imperfective, the tense markers intervene between the irrealis morpheme *ná* and the imperfective aspect *púˊ*. The appropriate negative marker for the future imperfective is *ntáp*. The main verb in the future imperfective has the same shape (e.g., participial) both in its affirmative form as well as its negative form.

(33) Future Imperf.	Negation	Meanings
(a) í *<u>ná twó</u> púˊ n-twó*	(a') *í <u>ná</u> ntáp twó púˊ n-twó* ***ŋ̀***	'He will be coming' (a minute ago)
(b) í *<u>ná lɔ́ʔ</u> púˊ n-twó*	(b') *í <u>ná</u> ntáp lɔ́ʔ púˊ n-twó* ***ŋ̀***	'He was coming' (earlier today)
(c)í *ná lɔ́ʔ twó <u>púˊ</u> n-twó*	(c')*í <u>ná ntáp lɔʔ twó</u> púˊ n-twó* ***ŋ̀***	He was coming' (few days, weeks or even months ago)

In the case of future imperfective (34), the morphemes that encode the irrealis, the future tense, the past tense and the perfect aspect combine in order to express the future imperfective.

(34) Future Perfect	Negation	Meanings
(a) í *<u>ná twó</u> pí tê n-twó*	(a') *í <u>ná</u> ntáp ntwó pî tê n-twó* ***ŋ̀ì***	'He will be not have come' (In few minutes)
(b) í *<u>ná lɔ́ʔ</u> pí tê n-twó*	(b') *í <u>ná</u> ntáp lɔ́ʔ pî tê n-twó* ***ŋ̀ì***	'He will not have come' (earlier today)
(c) í *ná lɔ́ʔ twó <u>pî tê</u> n-twó*	(c') *í <u>ná ntáp twó lóʔ</u> pî tê n-twó* ***ŋ̀ì***	He will not have come' (Remote Future)

4.5.Present Tenses

In Shupamem, the morphological forms that can be characterized as PRESENT TENSES pose a number of analytical puzzles, including whether one should be even talking about the present tense in Shupamem in the first place. If we assume Klein's (1994) idea that tense expresses the deictic correlation between the time of utterance and the 'topic time' described in the utterance, the implication of this assumption for the interpretation of the present tense will be that 'the topic time' automatically 'includes perspective time' (see Crane, 2011:158) citing Klein, 1994). Under this assumption, the present tense is supposed to refer to the time of utterance. In other words, the present tense describes an event or a situation that is still going on now. One can, however, realize that such a straightforward assumption is challenged by the following uses of the present tenses in Shupamem and even in other Bantu languages:

(35) a. ndǎm ná ŋ-gʉ́ʔ ŋgbɨ̀-ɨ̀
Ndam IRR PTCP love wife-his
'Ndam loves his wife.' (Stative)

b. ndǎm ná mbʉ́ n-ʒánkə́ lɛ̀rwà
Ndam IRR IMPFV PTCP-read book
'Ndam reads books.' (Habitual/Frequentative)

c. mə̌ jàβ ú mə̀ mfɔ̀n
1sg name you as king
'I name you the king.' (Performative)

d. mɔ́n tâ n-kŭt ndáp
child PROG PTCP-build house
'The child is building a house.' (Progressive)

e. mɔn nâ n-kŭt ndáp
child EVD PTCP-build house
'The child is building a house.' (Evidential)

f. pàngɛ̀n ná nʃû jɛ́nkɛ̀
crocodiles IRR live river
'Crocodiles live in the river.' (Descriptive)

g. ndăm ná ntɯm ndanʒəm famnʒɯ́
Ndam IRR come-out prison tomorrow
'Ndam comes out of prison tomorrow.' (Futurate)

Shupamem also makes a distinction between a progressive reading (35d) and an evidential reading (35e) of a durative verb like *ĵìn-kút* 'to build'. The progressive aspect is encoded by *tâ* whereas the evidential is marked by *nâ* in positive clauses. Therefore, I claim that Shupamem has a grammaticalized evidential whose function is to reinforce the truth of an assertion. The example in (36b) is an example of an evidential in Shupamem that literally reads as '*Actually, it is raining*'.

(36) a. mbɯ̀ tâ n-tó
Rain PROG PTCP-fall
'It is raining.'

b. mbɯ̀ nâ n-tó
Rain EVD PTCP-fall
'It is raining (EV=speaker sees that it was raining)

c. mbʉ̀ ná mbʉ́ n-tó
Rain IRR PTCP-fall
'It (usually) rains.'

d. mbʉ̀ nă tó
Rain Mod fall
'It must rain!'

e. mbʉ̀ nă pí tò
Rain Mod P_1 fall.Compl.
'It might have rained'

In a much general way, an example like (36b) indicates some sort of speaker's commitment to the truth of his utterance. However, if all the examples in (36) are negated, only the irrealis marker *ná* would co-occur with the negative marker *ntáp*, otherwise the sentence will be ungrammatical. I conclude that the evidential as well as the progressive markers are not compatible with any negative morpheme attested in Shupamem. This is due in part to the fact that universally, the evidential does not occur within the scope of negation but rather on top of it as suggested to me by A. Szabolcsi (pc). Note that the progressive marker *tâ* does not co-occur with any negative morpheme as well. I argue that the progressive is also a kind of evidential. That is why both the progressive and the evidential, when they are negated licence the default irrealis morpheme *ná*.

It is obviously not the case that all these present tense uses also correspond to the time of utterance. Moreover, some stative such as *ǰïn-ʒǐ* 'to know' only allows a Simple Present reading in Shupamem (37a). The progressive reading (37b) as well as the habitual reading (37c) are completely ruled out.

(37) a. ndǎm ǰı mfɔn
Ndam knows king
'Ndam knows the king.' (Simple present)

b. *ndǎm tâ nʒǐ mfɔ̀n
Ndam Prog know king
'Ndam is knowing the king.' (Progressive/continuous)

c. *ndǎm ná mbʊ́ nʒǐ mfɔ̀n
Ndam IRR HAB know king
'Ndam knows the king.' (Habitual)

As we can observe in the examples in (36)-(37), the PRESENT TENSE may have quite different uses and restrictions that need to be carefully explained. Let me now turn to the interactions of the present tense morpheme with aspect and negation in Shupamem.

4.6.The Interactions of the Present Tense Morphemes with Aspect and Negation

As we have seen in the previous examples in (36)-(37), it is not quite clear what can be considered a present tense marker in Shupamem. It is not also clear what negation morpheme may be licensed for each of the above examples. We have seen that a stative verb such as *to know* is grammatical only when used as a simple present, which is identical to what we have described earlier as past perfective. The negation morpheme that is felicitous in this context is *mâ* (that usually goes with the perfective aspect) as shown in (38a). The other negation form *ntáp* (that usually goes with the imperfective aspect) is ruled out (38b-c)

(38) a. ndǎm mâ n-ʒì ŋ̀ǐ mfòn
Ndam NEG PTCP-know 3sg king
'Ndam does not know the king.' (Simple present)

b. *ndǎm ntáp n-ʒí́ mfòn
Ndam Prog know king
'Ndam does not know the king.' (Simple)

c. *ndǎm ná mbʊ́ ntáp nʒí́ ŋ̀ǐ mfòn
Ndam IRR HAB NEG PTCP-know 3SG king
'Ndam does not know the king.' (Habitual)

When non-statives verbs are represented as states, they are interpreted as habitual as in (39a) or the futurate in the sense of Michealis (2006:234). The negation form that is acceptable for those examples is *ntáp* that corresponds to the imperfective aspect.

(39) a. ndǎm ná mbɯ m-búʔ lúː
Ndam IRR IPFV PTCP-play music
'Ndam plays music.' (Habitual)

b. ndǎm ná mbɯ́ ntáp m-búʔ ŋ̀ lúː
Ndam IRR IPFV NEG PTCP-play 3sg music
'Ndam does not play music.' (Habitual)

(40) a. ndǎm ná mè famʒú
Ndam IRR arrive tomorrow
'Ndam arrives tomorrow.' (Futurate)

b. ndǎm ná ntáp mè ŋ̀ famʒú
Ndam IRR NEG arrive 3SG tomorrow
'Ndam does not arrive tomorrow.' (Futurate)

Based on these examples, I conclude that aspect in Shupamem has three features. First, following Corver (2010:69), I argue that the perfective aspect in Shupamem, just as in Badiaranke, an Atlantic Niger-Congo language, can be used for past events as well as present states.

The imperfective aspect is used to describe ongoing or habitually occurring events in the past, present and future tenses. The perfect aspect *tê* when its occurs immediately after the past tense or future tense marker refers to a state resulting from a previous action that literally reads as an English sentence like *I had just arrived when the meeting started*. The perfect aspect is obtained when the event time comes before the topic time. The present tense may also correspond to the progressive (35d), the habitual (35b), the generic, the descriptive or the futurate (35d).

In this section, we have given an overview of all tenses in the indicative, let us now move to the imperative forms where negative imperatives look a lot more like the past perfective.

5.The Imperative Mood and Its Negation Markers

In this section, I discuss the morphosyntactic properties of Shupamem verbs in the imperative mood. For ease of presentation, I will separate the data under investigation into two classes: (a) positive imperatives and (b) negative imperatives. One general observation about the imperative verb in Shupamem is that it is the most basic form of the verb without any affix. In other words, Shupamem verbs in the imperative do not take any prefix (e.g. homorganic nasal) nor any suffix.

5.1.Positive Imperatives

In Shupamem, unlike in many other European languages (e.g., English, French etc), the same imperative form of the verb may refer to the first and second person in singular as well as plural imperatives. Thus, Shupamem distinguishes singular and plural imperfectives. In this presentation, I will pay attention to the behaviour of the main verb with respect to surface tones once it occurs as an imperative form. I use the High tone verb *fĩn-ká* 'to fry' and the rising tone (LH) *fĩn-kǎ* 'to peel' to show tonal changes that happen when those verb take the imperative shape. The following examples in (41) and (42) illustrate all forms of the imperative in Shupamem.

(41) a. ká
Fry.2sg.IMP
'Fry it' (2sg)

b. pwə ká
1pl. fry.IMP
'Let us fry it' (1pl)

c. tə̀ ká
1pl.Dual fry.IMP
'Let us fry it' (1pl.Dual)

d. ká ntʉ̀n
fry.IMP 2pl
'Fry it!' (2pl)

(42) a. kǎ
peel.2sg.IMP
'Peel it!' (2sg)

b. pwə̀ kǎ
1pl. peel.IMP
'Let us peel it' (1pl)

c. tə̀ kǎ
1pl.Dual peel.IMP
'Let us peel it' (1pl.Dual)

d. kǎ nʉ̀n
Peel.IMP 2pl
'Peel it!' (2pl)

These verb forms are characterized as imperatives by virtue of the fact that they are common forms that are used to issue an order or a command in Shupamem. The contrast between imperative verb forms in (41) and (42) and their indicative counterparts in (43) and (44) allows us to observe that the surface forms of subject pronouns as well as those of the main verb differ in those paradigms.

(43) a. wǔ kà
2sg.fry.Past.PFV
'You fried it' (2sg)

b. pwə̌ kà
1pl. fry.Past.PFV
'We fried it' (1pl)

c. tə̌ kà
1pl.Dual fry.Past.PFV
'We fried it' (1pl.Dual)

d. pʉ̌ kà
2pl fry.Past.PFV
'You fried it!' (2pl)

(44) a. wǔ kǎ
2pl peel.Past.PFV
'You peeled it!' (2sg)

b. pwə̀ kǎ
1pl. peel.Past.PFV
'We peeled it' (1pl)

c. tə̀ kǎ
1pl.Dual peel.Past.PFV
'We peeled it' (1pl.Dual)

d. pʉ̌ kǎ
2pl Peel.Past.PFV
'You peeled it!' (2pl)

In the imperative mood, the verb roots *ká* 'fry' and *kǎ* 'peel' in (41) and (42) keep their underlying High and rising (LH) tones respectively. Moreover, the first person pronouns *pwə̀* and *tə̀* (see (41b&c) and (42b&c)) also keep their underlying Low tones. Unlike in the imperative, the underlying tones of the main verb and pronouns in the past imperfective (cf. indicative mood) always change as shown in (43) and (44). For instance, the underlying Low tone on the first person pronouns *pwə̀* and *tə̀* (see (40b&c) and (42b&c)) become a rising tone (LH) because of the phrasal High tone spreading rule that assigns a High tone to any pronoun in subject position.

The imperative verbs are no subject to the phrasal High tone spreading rule, that is why the underlying tones of pronouns occurring before the verb in the imperative do not change. The High tone verb *ká* 'fry' becomes Low in the perfective past, contrary to what happens in the imperatives. The verb paradigm in negative imperative is very different. Let us now turn to the morphosyntax of Shupamem negative imperatives.

5.2.Negative Imperatives

Note first that the main verb in negative imperative paradigms is systematically assigned a Low tone, such that any underlying High tone verb like *ká* 'fry' in (45) and (46) surfaces with a Low tone whereas a rising tone verb like *kǎ* 'peel' remains the same, granting that it already has a Low tone. Second, the tones on the pronouns remain unchanged, which implies that the syntactic structures of imperatives and those of indicatives are different. I claim that negative imperative verb forms are slightly similar to those of the past perfective verb forms with respect to the surface tones on the main verb:

(a) If the verb has an underlying High tone, once it enters the negation domain, it is assigned a Low tone as shown in (46)-(47);

(b) However, if the verb has an underlying rising LH tone, nothing happens. Pronouns in negative imperatives keep their underlying tones (see (46b-c) and (47b-c). The negation marker in the imperative spells out as *mà* (with a Low tone) whereas that of the past perfective of the indicative is *mâ* (with a falling HL tone).

(45) a. mà kà
Neg Fry.2sg.IMP
'Fry it' (2sg)

b. pwə mà kà
1pl. Neg fry.IMP
'Let us not fry it' (1pl)

c. tə mà kà
1pl.Dual Neg fry.IMP
'Let us not fry it' (1pl.Dual)

d. mà kă jʉ̀n
Neg fry.IMP 2pl
'Don't fry it!' (2pl)

(46) a. mà kă
Neg peel.2sg.IMP
'Don't peel it!' (2sg)

b. pwə mà kă
1pl. Neg peel.IMP
'Let us not peel it' (1pl)

c. tə mà kă
1pl.Dual Neg peel.IMP
'Let us not peel it' (1pl.Dual)

d. mà kǎ ntɯ̀n
Neg peel.IMP 2pl
'Don't peel it!' (2pl)

The contrast between positive imperative sentences and negative ones leaves us with the following two questions regarding the syntactic form of imperatives in Shupamem:

(a) Why do the underlying tones of the main verbs (e.g. High tone verbs) in negative imperatives systematically change on the surface contrary to those of positive imperatives?

(b) Does the insertion of a negative particle in the imperative tell us anything about the internal structure of imperatives at all?

In this analysis, I will argue that in the positive imperatives, the head carrying the imperative feature is *ImP* (cf. Imperative Phrase) under which there is a Floating High tone, which is specified for [+V] such that the verb moves higher up to check it. In the negative imperative, by contrast, while the imperative *ImP* still has the same categorial features as a positive imperative [i.e. a floating High tone], it is the introduction of the negation head *mà* that attracts the verbs, not the imperative head such that once the verb moves into the NegP domain, it systematically carries a Low floating tone.

I argue that Shupamem is a bipartite negation as discussed in (Bell, 2004) and that the Low tone encodes the second part of negation in Shupamem (see Chapter 5), in which case there is no need to spell out a postverbal pronoun that are required in past perfective forms of the indicative mood. The readers are referred to Chapter 5 for an extensive discussion and analysis of schematic diagrams for the derivational differences between positive and negative imperatives. For simplicity, I will leave aside the discussion of the internal syntax of negative imperatives in this chapter. The reader should keep in mind that the main verb carries a default Low tone in the imperative (unlike in the indicative where it is a postverbal pronoun that carries a Low tone) because it moves into the negation field that dominates the imperative mood and receives a floating Low tone that encodes negation. I will return to this question more extensively in the next chapter where I provide a unified analysis of negation constructions in Shupamem.

6.The Infinitive Mood

This section describes the morphosyntax of infinitival constructions with a particular focus on how the negative infinitives are expressed. The simple infinitive in Shupamem consists of the prefix *ʃ̃ɨn-* and the verb root. Verb roots are lexically either High or rising toned verbs, at least for monosyllabic verbs. Hence, the infinitive form *ʃ̃ɨn-tá* ‘to count’ differs from the verb *ʃ̃ɨn-tă* ‘to abandon’ just by the

tonal contrast (e.g., high versus rising). The following are examples of infinitival verbs in Shupamem.

(47) a. *ʃ̃ɨn-sî* 'to calculate'
b. *ʃ̃ɨn-táʃə́* 'to deny'

(48) a. ʃ̃ɨn *mbú ʃ̃ɨ̂ sî* 'not to calculate'
b. *ʃ̃ɨn mbú ʃ̃ɨ̂ táʃə́* 'not to deny'

The negative particle that goes with the infinitive verb is *ʃ̃ɨ* that immediately follows what we have described earlier as the imperfective marker *mbú* 'be'. The infinitive morpheme *ʃ̃ɨn-* comes first in the infinitival VP, immediately followed by the imperfective marker as shown in (48a&b). In a number of cases, the infinitive functions as a noun and may occur in subject (49a) or in object position (49b). Moreover, it can be modified by an adjective (49c), a demonstrative (49d) or a relative clause (49e).

(49) a. ʃ̃ɨn-ʒʉ́ɣə̌t ɣɛ̀n mâ m-bŭ ŋ̀ɨ
To-steal robbery NEG PTCP-be good 3sg
'To steal is not good'

b. pà lójà pɛ̌n ʃ̃ɨn-ʒʉ́ɣə̌t ɣɛ̀n
2-lawyer hate.Pres to-steal robbery
'Lawyers hate stealing'

c. pápkɛ̌t (ʃ̃ɨn)-ʒʉ́ɣə̌t ɣɛ̀n já²á ŋkùrə
Awful to steal robbery happen-Past yesterday
'An awful stealing happened yesterday.'

d. ji (ʃ̃ɨn)-ʒʉ́ɣə̌t ɣɛ̀n mâ vètkérî
Dem. to steal robbery Neg strange
'This stealing is strange'

e. (ʃĭn)-jʊ́ɣə̌t ɣɛ̀n juó á já?á ŋkùrə nə́ pí mâ m-bŭ ŋ̀ì
to steal robbery that it happen yesterday COMP P_1 PTCP-be good 3sg
'The stealing that happened yesterday was not good'

The infinitival phrase may also surface as the complement of verb such as *want, need, ask, start, finish* etc or as the complement of an attributive adjective as shown in (50).

(50) a. mɔ́n nâ tà?à ʃĭn-ʒú pájú
1-child IRR want Inf-eat food
'The child wants to eat.'

b. pá sónʒàm líʃə́ ʃĭn-sù mátwá
2- soldiers finish-Pst Inf-wash car
'The soldiers finished washing the car'

c. á pà lá?ʃi ʃĭn-sù mátwá
It be difficult Inf-wash car
'It is difficult to wash a car'

This brings us to the discussion of inflected verbs in the indicative mood.

7.The Indicative Mood

Exactly what counts as a boundary between tense, aspect and mood is very difficult to define in Grassfields Bantu languages in general. It would have been very confusing to treat them separately here in this analysis. For convenience, I describe the TAM system in the indicative mood all together to show how various tense morphemes take different forms when they appear in different contexts (e.g., imperfective versus perfective tense morphemes, focus versus non-focus contexts).

For each tense found in the positive conjugation, I will provide its negative counterparts for analytical purposes. To facilitate the comparison of TAM, I will use High toned verbs and rising toned verbs in my elicitations of tonal perturbations. This is useful for the elicitations of a number of tonal alternations (e.g., downstep H, flipping, lowering etc). The indicative mood is used to express a fact that happened, is happening or will happen. It thus covers a wide range of tenses (past, present, future). It is certainly an unmarked or a default mood used in realis as well as irrealis situations. Many statements are expressed using the indicative mood. The indicative mood is used for assertions, that is when the speaker is stating a fact without questioning it. The indicative mood also referred to as the declarative mood is unmarked in Shupamem. This section deals with formal means that are available in Shupamem to encode the present, the past and future tense in the indicative mood.

7.1.The Present Tense and the Imperfective

Aspect appears to be more basic than tense in Shupamem present tense. Morphologically, there is no present tense morphology per se at least for dynamic verbs (i.e. non-stative verbs). The present tense expresses immediate factuality (descriptive fact about the present) (Lewis 1986). The present tense is mostly used with the imperfective aspect.

However, there are more controversies about what the imperfective really is. According to Comrie's (1976), the imperfective is a cover term for habitual, progressive and continuous. Nevertheless, Bybee *et al* (1994) have a different view of the imperfective. According to them, it is an aspect that 'represents an event as occurring over a longer or undefined period' (Nurse 2003:97). Whatever definition turned out to be correct, the reality is that available data from individual languages suggest that there is no agreed-upon definition that can capture all the facts about the imperfective aspect cross-linguistically. Even in a well documented language like English, when someone says '*I am selling*', he could possibly mean the progressive, and to some extent the habitual. The question is which one of these interpretations is correct. This issue also arises with the interpretation of the present tenses. If someone says '*I sell*' or '*I am selling*' it not obvious whether he is using the present tense or any other time reference. My analysis of the present tense in Shupamem will build on Comrie's (1976:52) claim that aspect is the 'internal temporal constitution of a situation'. Although it can be claimed that the major aspectual opposition that cuts across tenses in Shupamem is the perfective versus imperfective in the past and future, it is also legitimate for the purpose of this analysis to endorse Comrie's (1976) aspectual hierarchy summarized in figure 4. 3 for the present tense.

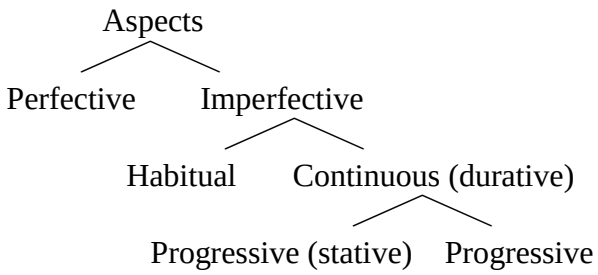


Figure 4. 3: Aspect Hierarchy in Shupamem **(Adapted from Comrie 1976:25)**

Situation types are crucial for the analysis of aspect in Shupamem. In particular, one needs to draw a clear distinction between verb classes (e.g. stative, dynamic, accomplishment, accomplishment or semelfactive verbs). These classes can be discussed in terms three features [+/-dynamic], [+/-durative] and [+/-telic] as in table 4.7 adapted from Hayashi (2011:05).

Class	**Examples**	**Dynamic**	**Durative**	**Telic**
State	*Know, believe, know, have*	×	✓	×
Activity	*Run, swim, drive a car, push a cart, deliver a sermon, etc.*	✓	✓	×
Accomplishment	*Paint a picture, build a house*	✓	✓	✓
Achievement	*Find, lose, arrive at the station, reach the summit*	✓	×	✓
Semelfactive	*Cough, knock the door, hiccup, blink*	✓	×	×

Table 4.7. Aspectual classes and their semantic specifications (adapted from Hayashi 2011:05).

I claim that Shupamem offers a four way distinction of the present tense, namely: (a) the habitual, (b) the general present, (c) the progressive present, and (d) the present stative. The following examples illustrate each type of the present tenses.

(51) a. ŋʉ̀m ná mbʊ́ n-tá nə̀ ntù ŋʉ̀m ngŭ kúʔʒʊ́
3-sun IRR HAB PTCP-rise at six 3-hours every 3-morning'
'The sun rises every morning at 6.00 o'clock.'

b. ŋvʊ̌ɣəŋám ná n-ʒʊ́ pàyú júó pʊ́ɣɛ̀n n-ʒʊ́ nə́
2-chimpanzees IRR PTCP-eat 3-food that 2-humans PTCP-eat COMP
'Chimpanzees eat food that humans eat'

c. mɔ́n tâ ŋ-kă:ʃə ɲàm
1-child Prog. PTCP-draw 1-horse.
'The child is drawing a horse.'

d. nă ʃá Ø jî ʃý fərɛnʃî
1-mother Poss.3SG PR know language French
'My mother knows French.'

e. mɔ́n pâ kʊ́kɛ́rî
1-child COP strong
'The child is strong.'

Morphologically, the irrealis aspect *ná* in combination with the imperfective aspect *mbʊ́* (50a) encode the habitual which describes a repetitive event, action or habit. The general present is marked by the irrealis *ná* (51b) and expresses a general truth.

It follows from the examples in (51) that the present tense does not necessarily correspond to the time reference that overlaps with the time of the utterance. Shupamem also makes a clear distinction between the habitual, the progressive and a version of the progressive that receives an evidential reading in a way that shows that the speaker has direct or inferential evidence for the event/situation being described. The examples (52a, b, c, and d) illustrate the present progressive, the evidential, the present habitual and the focused present tense respectively.

(52) a. mɔ́n tâ ǹ-ʒánkə́ lɛ̀rwà
1-child PROG PTCP-read book
'The child is reading (a book).' (Continuous)

b. mɔ́n nâ ǹ-ʒánkə́ lɛ̀rwà
1-child EVD PTCP-read book
'The child is reading (a book).'

c. mɔ́n ná (mbɯ́) ǹ-ʒánkə́ lɛ̀rwà
1-child IRR HAB PTCP-read book
'The child reads (a book).' (=The child can read).

d. mɔ́n ná: ǹ-ʒánkə̀ lɛ̀rwà
1-child Foc.Pres PTCP-read book
'The child is READING (a book).' (Not BURNING it)

As we can observe in the above examples, the present tense in Shupamem formally carries four way distinctions. In (52a), the progressive is expressed by the morpheme *tâ* associated with the progressive meaning.

In (52b), the evidential is used to signal that the speaker has some strong evidence (e.g., direct or indirect) that the child is reading the book. In (52c), unlike in (52a&b), the speaker is claiming that the child has the ability to read. Therefore, it is more like a general present conveying a simple fact about the child ability to read. (52d) is more about the contrast between reading a book and doing something else (e.g., writing a book).

Morphologically, what all these examples have in common is the use of the irrealis aspect *ná* in their negative form as shown in (53). Note that, of all the examples in (54), only the irrealis aspect in (54c) can co-occur with the negative particle. If the other aspectual markers combine with the negative particle, the sentence becomes ungrammatical.

(53) mɔ́n ná ntáp ǹ-ʒánkə́ ŋǐ lɛ̀rwà
1-child IRR NEG PTCP-read 3sg book
'The child is not reading (a book).' (Continuous)

(54) a.* mɔ́n tâ ntáp ǹ-ʒánkə́ ŋǐ lɛ̀rwà
1-child PROG NEG PTCP-read 3sg book
'The child is not reading (a book).' (Continuous)

b. * mɔ́n nâ ntáp ǹ-ʒánkə́ ŋǐ lɛ̀rwà
1-child EVD NEG PTCP-read 3sg book
'The child is reading (a book).'

c. mɔ́n ná ntáp (mbʊ́) ǹ-ʒánkə́ ŋǐ lɛ̀rwà
1-child IRR NEG HAB PTCP-read 3sg book
'The child does not read (a book).'

d. *mɔ́n náː ntáp ǹ-ʒánkə̀ ŋ̀ì lɛ̀rwà
1-child Foc.pres NEG PTCP-read 3sg book
'The child is not READING (a book).' (He is BURNING it)

Thus, the auxiliary verb *mbuí,* which literally means 'be' and also functions as a copula in the past and future tense is the morpheme that encodes the imperfective aspect. Recall that in the present tense, the progressive aspect is formally marked by the progressive marker *tâ* or the evidential marker *nâ* whose literal meaning corresponds to English's progressive verb form 'verb-*ing*'.

Before moving on to the discussion of various past and future categories, let me point out some practical problems with respect to the use of the progressive. It is a standard assumption in many reference grammar books that the use of stative verbs in the BE + *ing* progressive form is proscribed. According to such a grammatical rule from traditional grammarians, verbs such as *like*, *love*, *want*, *need* etc unlike dynamic/action verbs such as *build, run, cook* etc are claimed to be incorrect or ungrammatical in the progressive because they cannot express an action, an activity or an event in progress. From what I have heard from many native speakers of Shupamem, it seems to be the case that the use of stative verbs with their stative meanings in the progressive is very common and even productive.

This is in direct contradiction to the rule prohibiting the use of stative verbs in the progressive form in well-documented languages like English or French. One

has to wonder whether verb forms, which can literally translate as *needing, wanting,* are quite acceptable in Shupamem. As it turns out, all the following verbs in (55) were fairly acceptable in their progressive meaning.

(55) Shupamem stative verbs that can be used in the progressive

(a) *Verbs of emotion* (e.g., *jinguɪʔ* 'to like', *jîŋkû* ' to love', pɛ̂n 'to hate', *jîntâʔ* 'to want/need'.

(b) *Verbs of cognition* (e.g., *jînzî* 'to know', *jînzúʔ* 'understand', *jîŋgúpmə́* 'to think', *jĩŋkúmʃə́* 'to remember', *jĩndânə̀* 'to forget', *jĩŋgûʃə̂* 'believe'.

(c) *Verbs of relation* and state of being or possessing (e.g., jĩnzɛ́t 'to weigh', *jĩmbú* 'to be' *jĩŋgɛ́t* ' to have/own', and,

(d) *The sense verbs* (e.g., *jĩnzúɣə́n* 'to see'; *jĩnzúʔ* 'hear/smell/feel' *jĩnzúʔʃə́* 'to taste',

Examples of the progressive use of a stative verb in Shupamem are given in the following paradigms.

(56) a. mɔ́n tâ ǹ-ʒî ʃỳpămə̀m
1-child PROG PTCP-know Shupamem
'The child is acquiring Shupamem.'

b. mɔ́n tâ ǹ-ʒɯɣə́n ŋgámbɛ́kɛ́t
1-child PROG PTCP-see truth
'The child is seeing the truth.'

A matter not much discussed in the literature is whether a class of verbs that are viewed in English as stative verbs is really a good label cross-linguistically. I argue that many verbs that fall under the stative category have a different semantic interpretation in Shupamem. Having said that let me now turn to the discussion of past and future tenses.

7.2.Perfective versus Imperfective Past and Future Tenses

In many treatments of aspect and tense in the literature, the basic opposition seems to be perfective versus imperfective (see Comrie 1976, chapter 1). In the above section, I have treated the present tense separately because there is no obvious aspectual opposition between imperfective and perfective as it is the case for the past tense and future tense (at least morphologically). In other words, it was clear from the data illustrating the present tense that there is no present tense morpheme per se. However, as we will see later on, Shupamem makes a clear distinction between perfective and imperfective in the past tense as well as the future tense. For ease of presentation, I will treat the past tense and future tense all together to be able to keep track of not only the tense morphemes, but also the tonal changes that might occur across different tenses. This section will therefore investigate grammatical as well as tonal alternations that affect the TAM with respect to the indication of the past tense and the future tense.

7.2.1.The Perfective

According to Comrie (1976:21), the perfective aspect can be described as the aspectual form that 'involves lack of explicit reference to the internal constituency of the situation.' In this regards, the perfective aspect can be viewed as a single event. The sets of relations established between the situation time (S), the event time (E) and the reference time (R) earlier will constitute the framework for my analysis of aspectual opposition. The aspect will be judged between the event time and the reference time. Thus, the perfective aspect in Shupamem corresponds to a state that is obtained when the event time comes before the reference time (speech time).

In the past tense and the future tense, it is possible to encode the distinction between perfective (PFV) and imperfective (IPFV) aspect. A verb with a lexical High tone takes a Low tone in the perfective without an overt marker of aspect while in the imperfective the aspect marker is overt and the verb keeps its lexical tone. Paradigms of perfective and imperfective for both past tense and future tenses are given in (57)-(57') and (58)-(58') where (57) and (58) illustrate the High tone verb *fĩn-táːm* 'to like' whereas (57') and (58') illustrate the rising tone (LH) verb*fĩn-kǎm* 'to play'.

(57) Paradigm of perfective forms of the verb of *fĩn-táːm* 'to like'

	Subject	Aspect	Tense	PFV	Verb	Meaning
a. **P_4**	î		kàpí	Ø	tàm	‘He crossed’ (long ago)
b. **P_3**	î		pî	Ø	tàm	‘He crossed’ (yesterday)
c. **P_2**	î		pê	Ø	tàm	‘He crossed’ (earlier today)
d. **P_1**	î		Ø	Ø	tàm	‘He crossed’ (a minute ago)
	Subj.		**Modal**		**Verb**	**Meaning**
e. **F_1**	î	ná	twó		tám	‘He will cross’ (later today)
f. **F_2**	î	ná	lɔ́		tám	‘He will cross’ (tomorrow)
g. **F_3**	î	ná	twó lɔ́		tám	‘He will cross’ (someday)

(57') Paradigm of perfective forms of the verb of *ǰĭn-kăm* 'to play'

	Subject	Aspect	Tense	PFV	Verb	Meaning
a. P_4	î		kàpî	Ø	kăm	'He played' (long ago)
b. P_3	î		pî	Ø	kăm	'He played' (yesterday)
c. P_2	î		pê	Ø	kăm	'He played' (earlier today)
d. P_1	î		Ø	Ø	kăm	'He played' (a minute ago)
	Subj.		**Modal**		**Verb**	**Meaning**
e. F_1	î	ná	twó		kăm	'He will play' (later today)
f. F_2	î	ná	lɔ́		kăm	'He will play' (tomorrow)
g. F_3	î	ná	twó lɔ́		kăm	'He will play' (someday)

There are points worth noting about the paradigm in (57). First, the constructions that encode the past tense (57a-d) lack an overt marker for the perfective aspect. However, the main verb's lexical tone has completely flipped to a Low tone for the perfective past (57a-d) whereas the lexical tone on the main verb in the future remains High. Second, the future tense (57e-g) unlike the past tense, licenses an overt irrealis mood morpheme *ná*. It follows that in the positive clauses, the perfective past aspect is encoded by a zero morpheme (Ø) and the future is marked by a modal, but the main verbs in both tense have different surface tones.

In the past perfect, the main verb with an underlying High tone systematically takes a default Low tone whereas in the future tense the tone of the main verb remains High. The underlying rising (LH) tone on the main verb in (57') remains the same across the past and simple future tenses.

There is a complex negation strategy available in Shupamem by which the whole clause or sentence is negated using the perfective negative particle *mâ* (i.e., a negative particle that is inherently associated with the perfective) for the past tense and *ntáp* for the future. All of those negative morphemes obligatorily require a resumptive pronoun right after the verb as shown in (58) and (58').

(58) Negative forms of Past Perfective and Simple future of the verb ǰin-táːm ‘to cross’

		Subj		Tense		Neg	N+Verb+ 3sg	Meaning
a.	P_4	î		kàpí		mâ	ntâm ǐ	‘He did not cross’ (long ago)
b.	P_3	î		pí		mâ	ntâm ǐ	‘He did not cross’ (yesterday)
c.	P_2	î		pê		mâ	ntâm ǐ	‘He did not cross’ (earlier today)
d.	P_1	î		Ø		mâ	ntâm ǐ	‘He did not cross’ (a minute ago)
		Subj	***Asp.***	**Modal**			**verb+3sg**	**Meaning**
			Irr.	NEG				
e.	F_1	î	(ná)	**ntáp**	twó		tám ǐ	‘He will not cross’(later today)
f.	F_2	î	(ná)	**ntáp**	ló		tám ǐ	‘He will not cross’ (tomorrow)
g.	F_3	î	(ná)	**ntáp**	twó ló		tám ǐ	‘He will not cross’ (someday)

(58') Negative forms for Past Perfectif and Simple Future of the verb *ǰĭn-kăm* 'to play'

	Subj			Tense	Neg	N+Verb+ 3sg	Meaning
a. P_4	î			kàpî	mâ	ŋ-kăm ǐ	'He did not play' (long ago)
b. P_3	î			pî	mâ	ŋ-kăm ǐ	'He did not play' (yesterday)
c. P_2	î			pê	mâ	ŋ-kăm ǐ	'He did not play' (earlier today)
d. P_1	î			Ø	mâ	ŋ-kăm ǐ	'He did not play' (a minute ago)
	Subj	***Aspect***		**Modal**		**verb+3sg**	**Meaning**
		Irr.	NEG				
e. F_1	î	(ná)	**ntáp**	twó		kăm ǐ	'He will not play' (later today)
f. F_2	î	(ná)	**ntáp**	lɔ́		kăm ǐ	'He will not play' (tomorrow)
g. F_3	î	(ná)	**ntáp**	twó lɔ́		kăm ǐ	'He will not play' (someday)

The patterns of the negative forms of past perfective and simple future in (58) and (58') reveal a number of morphological differences between the past tense and the future tense. First, the negative particle for the past perfective is different from that of the past imperfective. Secondly, in the past tense, the negative particle *mâ* immediately follows the tense morphemes *kàpî*, *pî*, *pê* and Ø, but in the future tense, the negative particle *ntáp* immediately precedes the modals *twó*, *lɔ́ʔ* and

twó lɔ́ʔ that encodes the future tense. Moreover, the irrealis aspect *ná* is licensed not in the past perfective, but in the future. The TAM features of the examples in (58') do not change as much from those of (58), the only difference being that of the underlying tone on the main verb. Because Shupamem does not have a uniform negation strategy for the past tense and the future tense, one has to wonder whether the negative morpheme in the perfective is an independent TAM category or a negative equivalent of an affirmative TAM. Before trying to answer this question, let us look at the paradigm of imperfective past and future.

7.2.2.The Imperfective

The imperfective contrary to the perfective can be viewed as 'an explicit reference to the internal temporal structure of a situation' (Comrie 1976:24). Shupamem data conform the subdivision of the imperfective proposed in figure 2. Thus, the imperfective in Shupamem corresponds either to a habitual situation or situation that is dynamic (e.g., progressive). In this section, I describe the distinction between the habitual aspect and the progressive. I look at the formal characteristics of the past and the future imperfective with respect to the interaction between tense, aspect and negation.

Essentially, the syntactic distribution of the negative particle is quite the same as what we have seen in the previous section, except that in the imperfective, the same negative morpheme is used in both the past and the future tense.

(59) Paradigm of imperfective forms of the verb of ǰin-tá:m ‘to cross’

		Subj.	Asp.	Tense	IPFV	N+V	Meaning
a.	P_4	î		kàpʉ́	(mbʉ́)	!ntám	‘He was crossing’ (long ago)
b.	P_3	î		pʉ̀	(mbʉ̀)	!ntám	‘He was crossing’ (yesterday)
c.	P_2	î		pâ	*(mbʉ́)	!ntám	‘He was crossing’ (earlier today)
d.	P_1	î		pâ	*(mbʉ́)	!ntám	‘He was crossing’ (a minute ago)
		Subj.	**Asp. Irr.**	**Modal**	**IPFV**	**N+V**	**Meaning**
e.	F_1	î	ná	twó	pʉ́	!ntám	‘He will be crossing’ (later today)
f.	F_2	î	ná	lɔ́	pʉ́	!ntám	‘He will be crossing’ (tomorrow)
g.	F_3	î	ná	twó lɔ́	pʉ́	!ntám	‘He will be crossing’ (someday)

As these data suggest, the imperfective is encoded either by the morpheme *mbʉ́* that corresponds to the past tense morphemes *kàpʉ́*, *pʉ́*, and *pâ* . Note that P_1 and P_2 have merged into one morpheme *pâ*. In the future tense, the imperfective is encoded by *pʉ́*. It is important to understand that the tense form for P_1 and P_2 is originally an inflected form of present stative in Shupamem. That might be the

reason why it cannot attach to the main verb without the overt imperfective marker *mbú*, otherwise the sentence would be ungrammatical as shown in (59c-d).

The negative imperfective verb forms are marked by *ntáp* both for the past and futures tenses. It can be hosted by any particular verb except from the stative verb *ʃ̃ím-bə́* 'to be' which negative marker is *ndî?*. The imperfective negative particle also requires a resumptive pronoun for all tenses as shown in (60).

(60) Negative forms for Past Imperfective and Future Imperfective of the verb of ʃ̃in-tá:m 'to cross'.

	Subj.	***Aspect***		***Tense/ Modal***	***IPFV***	***Neg***	***N+V+3sg***	***Meaning***
a.P$_4$	î			kàpʉ́	(mbʉ́)	*ntáp*	!ntámʼì	'He was not crossing' (long ago)
b.P$_3$	î			pʉ̀	(mbʉ̀)	*ntáp*	!ntám ʼì	'He was not crossing' (yesterday)
c.P$_2$	î			pâ	*(mbʉ́)	*ntáp*	!ntám ʼì	'He was not crossing' (earlier today)
d.P$_1$	î			pâ	*(mbʉ́)	*ntáp*	!ntám ʼì	'He was not crossing (a minute ago)
	Subj	**Neg**		**Modal**	**IPFV**		**N+V+3sg**	**Meaning**
		Irr.	Neg					
a.F$_1$	î	ná	*ntáp*	twó	pʉ́	-	!ntám ʼì	'He will not be crossing' (later today)
b.F$_2$	î	ná	*ntáp*	lɔ́	pʉ́	-	!ntámʼì	'He will not be crossing' (tomorrow)
c.F$_3$	î	ná	*ntáp*	twó lɔ́	pʉ́	-	!ntámʼì	'He will not be cross' (someday)

From the above examples in (60), we can make the following observations about the morpho-syntactic characteristics of negation in the imperfective past and future:

(i) Despite the fact the same negative particle *ntáp* is employed both the past and the future imperfective, it nevertheless surfaces in different syntactic positions (e.g., before the tense marker for the future tense and right after the tense marker for the past tense even though it certainly precedes the main verb).

(ii) The resumptive pronoun is licensed right after the main verb once the negative particle is inserted.

(iii) The irrealis aspect only occurs in the future tense.

The paradigm of negation in Shupamem raises interesting questions with respect to the internal structure of TAM system in general. The comparison between the examples in (58) and those in (60) consistently suggests that negative particles in Shupamem occupy different syntactic positions if one assumes the proposals of Pollock (1989) or Bell (2004). One of the most intriguing aspects of sentence negation in Shupamem concerns the syntactic distribution of the second part of the negative particle (e.g., resumptive pronoun) which will be outlined in the next chapter.

Granting the syntactic distribution of past tense inflectional morphemes and future tense morphemes, I argue that the future tense is a modal morpheme, not a tense morpheme. That is why it always occurs after the negative particle. This makes more sense when one considers the fact that all the morphemes (e.g., *twó*

'come', *lɔ̀ʔ* 'leave' and two lɔ̀ʔ 'come leave') that encode the future tense can occur as verbs independently in the language. I conclude this section by arguing that the future tense morphemes are grammaticalized modals that function as a periphrastic future in Shupamem.

7.2.3.Tenses in Possessive, Locative, Equational/Existential Clauses

More generally, the point of this section is to demonstrate that tense inflections which are morphologically supposed to belong to same paradigm in terms of how they pattern with negation morphemes in general exhibit some restrictions in specific environments. There is in Shupamem an interesting asymmetry between possessives verbs and stative verbs with respect to the surface form of past tense morphemes that co-occur with their negative forms. Before getting to the details of this asymmetry, let me first present the positive forms of possessive, locative and existential clauses.

Possessive clauses (61a) in Shupamem are commonly expressed using the verb *ʃ̃ɪŋ-gĕt* 'to have' in a construction that has the form 'X has Y' where X is the possessor and Y the the possessee/possessum. Locative clauses (61b) are expressed using the copula *pâ* the inflected form of the state verb *ʃ̃ɪn-bù* 'to be'.

They commonly have the form ‘X is at Y’ where X represented any entity that is being pointed at and Y its location. Existential (61c) and equative (61d) clauses also use the copula and have the form ‘X is Y’ where X is the entity that is described and Y the sets of qualities of that entity.

(61) a. mfɔ̀n ɣét ɲàm
1-king have.pres horse
‘The king has a horse.’

b. mfɔ̀n pâ má ndùntɛ́n
1-king COP.pres prep market
‘The king is at the market.’

c. ŋ̀iŋ̀i pâ ŋɯ́rɯ́t
1-god COP.pres there
‘God is there/exists.’

d. gbáʃ̀i pâ laʔʃə̀ mɯ́ŋàm
1-lion COP.pres wild animal
‘The lion is a wild animal.’

All the above examples are in the general present tense. Notice that the above constructions use different negation strategies that suggest that the surface form of the negation morpheme depends on the status of the verb as we can observe in the following examples.

(62) a. mfón mâ ŋ-gér ì ɲàm
1-king NEG PTCP-have.pres 3sg horse
‘The king does not have a horse.’

b. mfón ndî ŋ̀ì má ndùntɛ́n
1-king NEG 3sg prep market
‘The king is not at the market.’

c. ŋ̌iŋ̌i ndî? ŋ̌i ŋà
1-god NEG 3sg here
'God is not there/does not exist.'

d. gbájǐ ndî? ŋ̌i lá?ʃə̌ mʊ́ŋàm
1-lion NEG 3sg wild animal
'The lion is not a wild animal.'

Here, the possessive verb root -*ɣɛt* 'have' selects the standard negative particle *mâ* whereas the state verb selects the negative particle *ndî?* although both negations are bipartite negations. From a phonological point of view, it is worth noting that the fricative segment [ɣ] of the verb root *ɣét* becomes a voiced velar stop [g] after the homorganic nasal. Moreover, the voiceless alveolar stop [t] occurring in coda position of the same verb root becomes a lateral [r] when followed by any vowel. Beside the contrast in the morphology of the negative particle, we cannot convincingly make a claim about the aspect differences between the examples in (63) because there is no overt tense marker to tell us what the aspect might be. But when we look at the morphological form of these verbs in the past and the future tenses as in (63) and (64), a more coherent pattern emerges.

(63) Negative tense forms of the possessive verb

	Subj.	**Aspect**		**Tense**	**Neg**	**Verb+3sg**	**DO**	**Meaning**
a.P$_4$	mfɔn			kàpí	mâ	*ngěr* ì	ŋàm	'The king did not have a horse' (long ago)
b.P$_3$	mfɔn			pí	mâ	*ngěr* ì	ŋàm	'The kind did not have a horse' (yesterday)
c.P$_2$	mfɔn			pê	mâ	*ngěr* ì	ŋàm	'The king did not have a horse' (earlier today)
d.P$_1$	mfɔn			Ø	mâ	*ngěr* ì	ŋàm	'The kind did not have a horse (a minute ago)
	Subj.	**Aspect**		**Modal**		**Verb+3sg**	**DO**	**Meaning**
		Irr.	Neg					
a.F$_1$	mfɔn	ná	*ntáp*	twó		*yěr ì*	ŋàm	'He will not have a horse' (later today)
b.F$_2$	mfɔn	ná	*ntáp*	lɔ́		*yěr ì*	ŋàm	'He will not have a horse' (tomorrow)
c.F$_3$	mfɔn	ná	*ntáp*	twó lɔ́		*yěr ì*	ŋàm	'He not have a horse' (someday)

In the examples in (63), the possessive verb is inflected by different forms of negations: (a) *mâ* exclusively limited in its distribution (only acceptable with past perfective) and (b) *ntáp* with coverts a wider number of tenses (e.g., past, present, future tense imperfective). While the examples in (63) fall in line with the paradigm of tenses discussed earlier, the examples in (64) show that the stative verb licenses the negation morphemes that are morphologically identical across both past and future tenses (e.g., *ndîʔ*).

(64) Negative tense forms of the copula/stative verb

	Subj.	**As**	**Tense**		**IPFV**	**V+3sg**	**LOC**	**Meaning**
a.P$_4$	mfɔn		kàpɯ		*(mb ɯ́)	*ndîʔ ŋǐ*	ŋà	‘The king was not here’ (long ago)
b.P$_3$	mfɔn		pɯ		*(mb ɯ́)	*ndîʔ ŋǐ*	ŋà	‘The king was not here’ (yesterday)
c.P$_2$	mfɔn		pâ		mbɯ́	*ndîʔ ŋǐ*	ŋà	‘The king was not here’ (earlier today)
d.P$_1$	mfɔn		pâ		mbɯ́	*ndîʔ ŋǐ*	ŋà	‘The king was not here (a minute ago)
	Subj.	**As pe ct**	**Modal**			**Verb+ 3sg**	**LOC**	**Meaning**
		Irr.	Neg					
a.F$_1$	mfɔn	ná	*ntáp*	twó	pɯ́	*ndîʔ ŋǐ*	ŋà	‘The king will not be here’ (later today)
b.F$_2$	mfɔn	ná	*ntáp*	lɔ́	pɯ́	*ndîʔ ŋǐ*	ŋà	‘The king will be here’ (tomorrow)
c.F$_3$	mfɔn	ná	*ntáp*	twó lɔ́	pɯ́	*ndîʔ ŋǐ*	ŋà	‘The kind will be here’ (someday)

If we compare the morphology of the tenses in (63) to those in (64), it is clear that although the possessive verbs in (63) pattern with two different negative types, they are nevertheless inherently perfective even though there is no overt morpheme to indicate the aspect. In (64) unlike in (63), the negative particle *ndîʔ* exclusively requires an imperfective aspect whether it is a past tense or a future tense, otherwise the sentence will be ungrammatical. Thus, one can conclude that the negative morpheme *ndîʔ* is inherently imperfective in nature. Clearly then, negation in Shupamem varies in tense and aspect as has been demonstrated in this section using the negation data on possessive verbs and stative verbs.

7.3.Irrealis versus Realis Aspect/Mood

Despite their widespread use, particularly in the analysis of many Grassfields Bantu languages (Watters 2003:246-7), the distinction between 'realis' and 'irrealis' is not easy to make cross-linguistically. For that reason, it is very challenging to come up with a language independent definition of (ir)realis. This has led many authors such as Bybee (1985, 1998), Bybee *et al*. (1994), Givón (1994), Lazard (1998), Elliott (2000), Verstraete (2006), Palmer (1986, 2001), Plungian (2005), among others to object to the notion of (ir)realis as a typologically valid category.

An author like Mithun (1995:386) contrarily has argued for the usefulness of the (ir)realis as a cross-linguistic category. In this section, I look at the status of the (ir)realis specification in Shupamem.

Typologically, Shupamem is very similar to Ngiemboon (Anderson 1983:52-7) which 'divides its TAM system between realis and irrealis forms as follows. Realis subdivides into past and present tense forms. Both of these further subdivide perfective and imperfective categories. Irrealis subdivides into present and future. Present is always imperfective in form, either non-progressive or progressive. Future is either perfective or imperfective, with the imperfective again distinguishing between non-progressive and non-progressive.' (Watters 2003:246) Comparing Shupamem's facts against the facts in Ngiemboon; it appears the irrealis in Shupamem also corresponds to the present tense and future tenses. The irrealis morpheme in Shupamem is *ná* and is commonly used to encode the events/actions that have not taken place yet and cannot (yet) be described as part of the real world. Indeed, in the present and futures tenses of Shupamem, the irrealis is licensed as a means to express the temporal unspecificity of the event/action being described, as in the following examples.

(65) a. mə̌ ná tàʔ ĵɪn-ʒún màtwà
1sg IRR want Inf-buy 3-car
'I want to buy a car.' (Present tense)

b. mə́ ná ntáp tàʔ ŋà ʃɪn-ʒún màtwà
1sg IRR NEG want.Pres 1sg Inf-buy 3-car
'I do not want to buy a car.' (Negation)

(66) a. mə́ ná twó jún màtwà
1sg IRR F_1 buy 3-car
'I will buy a car.' (Future tense)

b. mə́ ná lɔ́ jún màtwà
1sg IRR F_2 buy 3-car
'I will buy a car.'

c. mə́ ná twólɔ́ jún màtwà
1sg IRR F_3 buy 3-car
'I will buy a car.'

(67) a. mə́ ná ntáp twó jún à màtwà
1sg IRR NEG F_1 buy 1sg 3-car
'I will not buy a car.' (Negation)

b. mə́ ná ntáp lɔ́ jún à màtwà
1sg IRR NEG F_2 buy 1sg 3-car
'I will not buy a car.'

c. mə́ ná ntáp twolɔ́ jún à màtwà
1sg IRR NEG F_3 buy 1sg 3-car
'I will not buy a car.'

It will thus appear to be reasonable to conclude, based on the above examples, that the present tense and the future tenses in Shupamem are inherently associated with the imperfective and the irrealis aspects. Even in negative clauses in the present tense (65b) and future tenses (67), the irrealis morphemes are obligatorily required. With respect to the realis, there is no overt marker per se.

I will not go over the details of realis here, rather I assume that the past perfective tense will naturally fall under the realis category, which implies that the realis is encoded by a paradigmatically zero morpheme.

7.4.Adverbs of Tense and Time

Before concluding our discussion of the meanings associated with the TAM system in the indicative in Shupamem, let me point out that because of the semantics of tense-aspect combinations, there are also a category of adverbs of tense and time that often surface before the main verb that are not easy to categorize. For instance, adverbs of indefinite time such as *kàʔà* 'still/yet' *fúʔʃîrə́* 'soon', *kù* 'anymore, *tê* 'already' and *ndɔ́ʔ* 'just' may replace ordinary tense/aspect morphemes or co-occur with them in a way that makes it hard to label them within the spectrum of TAM system. In other words, there are in Shupamem adverbs that enter the TAM system without a clear status as the class of tense or aspect morphemes I have presented so far. Consider, for example, the question in (68) below, where a student is asking his classmate whether their teacher has finished the lecture or not.

(68) léráʔ ǐiʃə́ mʉ̌ lèrəwà nə́?
1-teacher finish Acc. lecture QM
'Has the teacher finished the lecture?'

The following are conceivable answers that could be given in response to the question above, using indefinite tense and time adverbs that cannot be viewed as inherently grammatical tense or aspects in Shupamem.

(69) a. hʉ̀ːm ɨ̂ tê n-ɗíʃə́ lɛ̀rə̀wà
Yes, 3sg already PTCP-finish lecture
'Yes, he already finished the lecture.'

b. hʉ̀ːm ɨ̂ ná n-ɗə́ʔ ɲin-ɗíʃə̌ lɛ̀rə̀wà
Yes, 3sg IRR PTCP-come INF-finish lecture
'Yes, he just finished the lecture.'

c. mbɛ̀j ɨ̂ káʔà ndɪ̀ʃə̀ lɛ̀rə̀wà
No, 3sg still PTCP-finish lecture
'No, he is still finishing the lecture.'

d. mbɛ̀j ɨ̂ káʔà ʃi ɲiʃə̌ lɛ̀rə̀wà
No, 3sg still NEG finish lecture
'No, he has not finished the lecture yet.'

e. mbɛ̀j ɨ̂ ná twó ɲiʃə̌ lɛ̀rə̀wà fʉ́ʔʃɨ̀rə̌
No, 3sg IRR F_1 finish lecture soon
'No, he will finish the lecture soon.

f. mbɛ̀j ɨ̂ ntáp kʉ́ ɲiʃə̌ ŋɨ̀ lɛ̀rə̀wà
No, 3sg NEG anymore finish 3sg lecture
'No, he is not finishing the lecture anymore.'

In (69a), the adverb *tê* 'just' refers to a result that occurred previously (at any point in time the same day) and is already completed while in (69b), the grammaticalized verb *ndə́ʔ* that literally translates as the English adverb 'just' signals a very recent completion (a few minutes ago).

In (69c), the adverb *kà?á* 'still' describes a state of affair that is ongoing in the present tense (perhaps longer than expected by the speaker). In (69d), the combination of the morpheme *kà?á* 'still' with the negative particle *ʃi* literally translates as the adverb 'jet' to indicate that the lecture is still not completed. In the example in (69e), the adverb *fú?ʃírə́* 'soon' implies a future completion of the lecture. In (69f), the adverb *kú* occurring right after he negation particle *ntáp* suggests a disappointment that implies that the lecture is never going to be completed although there were higher expectations that it will be completed.

The data in (69) raise interesting questions with respect to the syntax of those adverbs of tense and time. For instance, if one assumes Cinque's (1999) hypothesis that 'adverbs are the overt manifestation of (specifier of) different functional projections' and that there is universal hierarchy of adverbs and functional heads, one interesting research question that can be raised is that of the hierarchy of the adverbs of tense and time in (69) with respect to other TAM morphemes. The account of the syntax of adverbs is beyond the scope of this chapter. I will return to those issues in chapter 5 where I provide a full account of word order between inflectional affixes and various types of negation particles. For the meantime, let me us move on the conditional mood.

8.The Conditionals and Counterfactuals

The conditional clause consists of several types of relationships. One of them is encoded by the expression 'if-then'. Shupamem displays several ways of expressing the conditional. This section focuses on different linguistic devices that are available in the language for encoding the conditional. Shupamem may express its conditionals by placing a conditional morpheme *nəká* 'If' or the adverbial of time *fúʔká* 'When' clause initially. Complement clauses of the conditional consist of clauses that can be in the indicative or hortative. Syntactically, a conditional construction follows the order <protasis, apodisis>, <*if …, (then)…*> under the form <*nəká….mbúː…*> in (70a) although the present conditional morpheme *kʉ̀* (70b) or the past conditional *kʉ̀* (70c) may also be used, in which case the clause initial conditional morpheme is not licensed.

(70) a.*nəká* mɔ́n nʒánkə́ lɛ̀rwà nə́,
Cond. 1-child PTCP-learn lesson COMP,
'If the child revises his lessons..'

b.mɔ́n *kʉ̀* nʒánkə́ lɛ̀rwà nə́
1-child Cond.PR. PTCP-learn lesson COMP,
'If the child revises his lessons,.' (Present Conditional)

c. mɔ́n *kʉ́* n-ʒánkə́ lɛ̀rwà nə́,
1-child Cond.Pst PTCP-learn lesson COMP,
'If the child had revised his lessons, (Past Conditional)

Thus, the Low toned conditional *kʉ̀* corresponds to the present and the future tenses whereas the High toned conditional *kʉ́* is mostly used for all past tenses. The choice between one of these morphemes seems to depend on individual preference. What all the conditional constructions in (70) have in common is the fact that they share the same negative marker *ʃi* as illustrated in (71).

(71) a *nəká* mɔ́n mbʉ́ ʃì jánkə́ lɛ̀rwà nə́,
Cond.1-child IPFV Neg learn lesson COMP,
'If the child does not revise his lessons,'

b. mɔ́n kʉ̀ mbʉ́ ʃì jánkə́ lɛ̀rwà nə́,
1-child Cond.Pres IPFV NEG learn lesson COMP,
'If the child does not revise his lessons, .'

c.mɔ́n kʉ́ mbʉ́ ʃì jánkə́ lɛ̀rwà nə́,
1-child Cond.Pst IPFV Neg learn lesson COMP,
'If the child had not revised his lessons,

Note that, unlike in the indicative mood where the lexical tones of the main verb are unstable, the conditional constructions have a very stable tonal melody across all tenses. As one can observe in (70) and (71), both positive and negative conditionals do not affect the underlying tones on the main verb. One general observation about negation in the conditional is that, unlike in the indicative mood where there is a bipartite negation (see all the indicative clauses that are complements to the conditional clause in (71)), negation in the conditional consists of one negative particle.

The negation particle of the conditional does not require any resumptive pronoun after the main verb. Notice that the first part of the conditional sentences above corresponds to what people refers to as 'the conditional protasis' whereas the second part corresponds to 'the conditional adposis' (Frajzyngier, 2001: 419). The conditional protasis commonly comes before the adposis although in some marginal cases, it is possible to reverse that order. When that happens, the morpheme *mbúú* that literally translates in English as *then* is obligatorily dropped.

To conclude this section, I claim that both the protases and apodoses of Shupamem conditionals as well as its counterfactuals, may accept a variety of tense and aspect morphemes (e.g., present habitual, future conditional, general past etc) (Also see Crane 2011:333 for the discussion of similar facts in Totela).

9.The Hortative and the Subjunctive Mood

Hortatives and subjunctives in Shupamem usually indicate some doubts or hesitations on the part of the the speaker about the truth of the proposition. These constructions ('may he VP; let him VP, 'That he does X etc.') are made of a subject pronoun, the verb stem, any object DP or pronoun and a subjunctive final vowel *-ə*.

The main verb always surfaces with a High tone regardless of its underlying tone. The subjunctive is also introduced by the complementizer *mí*. The second person singular subjunctive forms in (72a) and (73a) are used as a polite positive imperative and the forms in (72b) and (73b) are used as a negative imperative.

(72) a. Positive Subjunctive

mî wù twó!
That 2sg come.SUBJ
'Come! (2sg)

b. Negative Subjunctive

mî wù mà twò!
That 2sg NEG come.SUBJ
'Don't come!

(73) a. Positive Subjunctive

mî pwə twó!
That 1pl come.SUBJ
'Let us come! (2sg)

b. Negative Subjunctive

mî pwə mà twò!
That 2sg NEG come.SUBJ
'Let us not come!

Other uses of the subjunctive in main sentences in Shupamem are obligation or questions as shown in the following examples in (74).

(74) a. á ná táʔ mí mɔ́n twò
It IRR need that child come.SUBJ
'The child has to come.

b. á nà táʔ mí mɔ́n mà twò
It IRR need that child Neg come.SUBJ
'The child should not come'

(75) mí á fé mɔ́n twó ó?
That it HYP child come.SUBJ QM
'Is the child going to come?'

In subordinate clauses, the subjunctive is used after main verbs such as verbs of fearing, hoping, denying, volition among others. The following examples of other subjunctives in Shupamem.

(76) a. mɔ́ ná mbwó mí mɔ́n mà gbʉ̀ kpàʔnɔ́
1sg IRR fear that child NEG fail.SUBJ exam
'I fear that the child fails his exam.'

b. mə ná ʃàʔà mí mɔ́n twó
1sg IRR hope that child come.SUBJ
'I hope that the child would come.'

One general comment about all the subjunctive constructions presented in (72)-(76) is that they are significantly different from indicative sentences. The negative particle that is appropriate for the subjunctive is *mà* and unlike standard negation morphemes *mâ* and *ntáp*, it actually does not require a postverbal pronoun that surface with a Low tone in standard negation sentences.

Notice that all the subjunctive verbs, unlike the indicative, have no specific temporal or aspectual meaning. Let me now move to the description of the hypothetical mood.

10.The Hypothetical Mood

The hypothetical mood is encoded by either a hypothetical marker *nâpí* that occurs right before the predicate (77a) or *mɔ́ʔbú* clause initially (78a) to express the likelihood of an event to have taken place. If the hypothetical mood semantically conveys some uncertainty on the part of the speaker making the assertion, it is commonly used as an explicit expression of incomplete evidence of the proposition.

(77) a. nă ʃá nâpí ˈjún ndáp ŋkùrə
1-mother Poss.1sg HYP buy 3-house yesterday
'My mother might have bought a house'
(It is possible that my mother bought a house)

b. nă ʃá nâpí mâ n-ʒún ɨ́ ndáp ŋkùrə
1-mother Poss.1sg HYP NEG PTCP-buy 3sg 3-house yesterday
'My mother might not have bought a house.'

(78) a. mɔ́ʔmbɔ́ nă ʃá !jún ndáp ŋkùrə
HYP 1-mother Poss.1sg buy 3-house yesterday
'My mother might have bought a house'
(It is possible that my mother bought a house)

b. mɔ́ʔmbɔ́ nă ʃá mâ ˈnʒún ì ndáp ŋkùrə
HYP 1-mother Poss.1sg NEG buy 3sg 3-house yesterday
'My mother might not have bought a house'

It is not odd to follow up a sentence like (78a) with an assertion like 'In fact I don't believe that she did'. Thus, the hypothetical mood is used to express the incomplete nature of the evidence for the situation being described to avoid being accused of lying if the assertion turns out to be false. Of the two types of the hypothetical mood, only the clause initial one can be inflected for past, present and future tenses. The hypothetical past, present and future tense morphemes are identical to those discussed in the imperfective. Therefore, I will not repeat them again.

11.Focus Tenses

The analysis of focus tenses in this section will be very brief. It is very important to note that Focus in Shupamem as in many related Grassfields Bantu languages is a very elaborate system which analysis here would have occupied a lot of space. This section will not attempt to provide the summary of the whole focus system in Shupamem, but rather focuses only on the part expressed by the verb.

The readers are referred to chapter 7 for an extensive discussion of Focus constructions in Shupamem.

Watters (1979:137) describes focus in general as 'that information in the sentence that the speaker believes, assumes or knows the hearer does not share with him or her'. The data presented so far suggest that Shupamem displays a highly grammaticalized TAM system where many factors are at play in terms of the surface representation of grammatical forms. On top of tense, aspect and mood distinction, Shupamem also has focused tenses where the distinction between focus and non-focus tenses is systematically made. What I refer to as focus corresponds to what has been previously described in Hyman and Watters (1984:234) as 'grammatically controlled focused tenses' (e.g., the tense marker for today past tense is *mɔ̂* and becomes *máà* when focused) in Aghem a Grassfields Bantu Language or 'focusing conjugations'(Robert 2010:237). Shupamem also distinguishes between non-focused past perfective and focused past perfective markers as shown in (79).

(79) Past Perfective tense markers.

	[-Focus]	**[+Focus]**
P_1 Immediate Past	Ø	pâ
P_2 Recent	pê	pâ
P_3 Intermediate Past	pí	pú́
P_4 Remote Past	kàpí	kàpú́
PR	Ø	nà
Future Tense	N/A	N/A

It is important to understand that the future tenses in (79) do not actually have different forms when they surface as focused tenses although they can be focused as is the case for the past and present tense morphemes that have a focused counterpart. The tense affixes that I label as [-Focus] in (79) correspond to the past imperfective in the affirmative indicative mood and those labelled as [+Focus] correspond those that are controlled by focus. All the focused tenses attested in Shupamem are summarized in the following table. Those focus tenses asserts that the situation been described did actually occur or will definitely occur.

T	Non-focus		With focus	
	Examples	Glosses	Examples	Glosses
P_1	wŭ Ø twò	'You came.'	*à pâ ǹ-twó wù*	'You DID come'
P_2	wŭ pê twò	'You came.'	*à pâ ǹ-twó wù*	'You DID come'
P_3	wŭ pî twò	'You came.'	*à púí ǹ-twó wù*	'You DID come'
P_4	wŭ kàpî twò	'You came.'	*à kàpúí ǹ-twó wù*	'You DID come'
PR. Prog	wŭ tâ ntwó	'You are coming.'	*à nă twó wù*	'You ARE coming'
PR. HAB	wŭ ná twó	'You come.'	*à ná twó wù*	'You COME'
F_1	wŭ ná twó t wó	'You will come.'	*à ná twó twó wù*	'You WILL come'
F_2	wŭ ná lɔʔ tw ó	You will come.'	*à ná lɔ́ʔ twó wù*	You WILL come'
F_3	wu ná twoɭɔ ʔ twó	You will come.'	*à ná twó lɔ́ʔ twó wù*	'You WILL come'

Table 4.8. Non focus versus focus tenses with the verb ǰin-twó 'to come'

Comparing the focus and non-focus tense morphemes in table 4.8, one can definitely conclude that the Shupamem TAM system is very sensitive to focus. One might wonder what the function of these focus tense forms is. I claim that they do not seem themselves to put focus on the verb. Rather, they seem to indicate that there is something "unusual" about the focus structure of the sentence. Shupamem focus tenses are more like the verb forms that Good (2005:08) labels "disfluentive" for Naki (another Grassfields Bantu language). He goes on to explain that such verb forms are 'used in cases where the canonical information structure relations in the sentence are in some sense, "disrupted" (Good 2005:ibid). As we can see in table 4.8, the word order of non-focus verb form is SVO and that of the focus forms is completely different.

12.Conclusion

In this chapter, I have offered a descriptive analysis of the Shupamem TAM system. Data from Shupamem presented here shed light on the morphological complexity of Shupamem TAM system. It has been shown that many factors are at play with respect to the surface forms of tense inflectional morphology in Shupamem.

At the phonological level, I have shown that one has to pay careful attention to both lexical and grammatical tones in order to better capture the distinction between tense and aspect. It is clear that any High tone verb that is inflected for the past perfective aspect is systematically assigned a default Low tone although the perfective aspect is marked by a zero morpheme (Ø).

Morphologically, the Shupamem TAM system reveals many morphological alternations where tense markers morphologically control other grammatical categories such as negation. Apparently, focus is expressed by a synthetic or grammaticalized strategy consisting of a special tense form (e.g., focused tenses). Similar facts are documented in other languages in other Grassfields Bantu languages such as Aghem (Hyman 2002), Bafut (Tamanji 2009), Nweh (Nkemnji 1995), Naki (Good 2005) among others. The reader will have noticed that I have deliberately omitted any syntactic analysis of all the fact discussed in this chapter, not because it was not necessary, but for the sake of clarity. Any attempt of trying to account for the syntactic distribution of various tense morphemes would have made the presentation less clear. I will return to these issues in the next chapter since the arguments developed here are meant to set the stage for an in-depth analysis of bipartite negation morphemes that display an interesting interaction with the TAM system.

Chapter Five: The Syntax of Negation in Shupamem

1.Introduction

This chapter is concerned with the issue of different negation patterns whose surface forms are dictated by tense, aspect and mood. I put a particular focus on discontinuous negation patterns, a feature which is theoretically characterized as 'bipartite negation' in studies by Bell (2004) and Nkemnji (1995), among others. Data from Shupamem reveal a remarkable diversity of negation patterns that requires a special conceptualization of negation types in a way that group some negative particles together depending on some similarities they display in terms of their distribution features within the clause with respect to the main verb.

The following are the main three issues that will retain our attention in the remainder of this chapter:

(i) What are the main ways of expressing standard (clausal) negation in Shupamem?

(ii) What are the distributional possibilities of negative markers for standard negation in relation to other main constituents in the clause?

(iii) What do the answers to these questions imply about the syntactic analysis of negation in general?

The main claims are going to be as follows.

(a) Shupamem has several distinct negative morphemes that serve to negate the finite verb; the choice depends on tense, aspect, and mood.

(b) Clausal or standard negation occurs preverbally in finite clauses, between the tense and the modal markers (e.g. past tense > negation > future modal > verb).

(c) Clausal negation, with the exception of imperative, subjunctive and expletive negation, is obligatorily accompanied by a postverbal personal animate pronoun with the same person/number features as the subject DP. This pronoun has a Low tone, although the same pronoun does not have a Low tone anywhere else; I owe this observation to R. Kayne (p.c.). In negative imperatives, the verb itself assumes a Low tone. In contrast, constituent negation does not exhibit a Low-tone pronoun or a tone-shift within the negated constituent.

(d) I argue that Shupamem is a "bipartite negation" language, similarly to the languages discussed in Bell (2004). I analyze the tonal morpheme mentioned in (c) as the second part of bipartite negation. The gist of my analysis is that the Low tone represents the head of a Negative Phrase close to the verb phrase ($NegP_1$). In negative imperatives, the verb moves to $NegP_1$, picks up the Low tone, and stays in $NegP_1$. In all other cases of clausal negation, the verb must move to a higher position (see the explanation in (e)), and the Low tone is picked up, instead, by a pronominal copy that the subject leaves in the specifier position of $NegP_1$ on its way from vP to TP.

(e) With the exception of imperatives, clausal negation (in $NegP_2$) in Shupamem selects for a futurate modal, and/or a participle, or is itself a negative modal. The modal or participial head attracts the verb. The verb cannot first pick up the Low tonal morpheme in $NegP_1$ and then move on to the Modal/Participial Phrase; the reason why this is not possible may have to do with the Freezing Principle or the First Over First Constraint. Therefore, in non-imperatives the verb skips $NegP_1$, and a pronominal carrier of the Low tone is obligatorily needed.

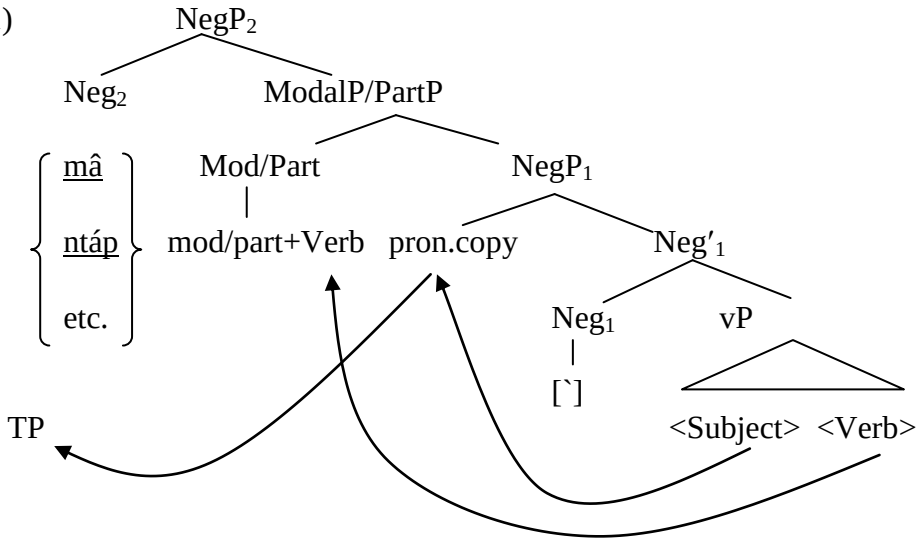
(f) Shupamem is a negative concord language in the sense that the same "n-words" occur within the environment of clausal negation and as short negative answers to positive questions (Giannakidou 2006, Zeijlstra 2004). However, Shupamem differs from both Slavic-type and French-type negative concord languages in that the same "n-words" occur within the scope of weaker affective operators and as free choice items. In other words, they cover the full distribution of English *no one* and *anyone*. I owe this observation to A. Szabolcsi (pc).

(g) "N-words" ('no one / anyone') as well as negative adverbs and aspectual markers occurring in the preverbal and initial position of a non-finite clause always have a Low tone. I assume that the Low tone marks these items as dependent on overt or phonetically null negation, or on affective operators/modals. The same analysis may extend to the second part of bipartite negation. (I pursue this analysis in ongoing work with A. Szabolcsi, though not in this dissertation.)

In this way, I analyze Shupamem as a "bipartite negation" language, similarly to Nkemnji (1995) for Nweh and Bell (2004) for Bukusu. Shupamem represents the same basic pattern, even though the postverbal part of the bipartite negation is a pronoun that carries a Low tonal morpheme, not a dedicated segment; cf. Hoyt's (2005:3) "pronoun of negation."

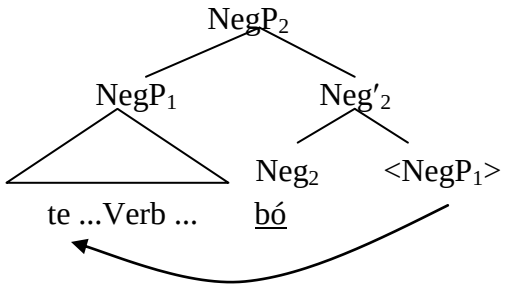
In the schematic structure below, [`] represents the Low-tonal morpheme that constitutes the Neg_1 head and floats onto the pronominal copy of the subject in the specifier position of $NegP_1$. (In the diagram, angle brackets <...> indicate "moved", i.e. copied and deleted, items.)

(1)



The analysis proposed here differs from Nkemnji's and Bell's in a crucial respect. Both Nkemnji and Bell assume that (in the languages they analyze) the linearly second negative element is the head of the syntactically higher $NegP_2$, and the constituent that contains both the preverbal negative marker and the verb is the syntactically lower $NegP_1$; $NegP_1$ ends up preceding Neg_2 by movement, so-called heavy pied-piping. Schematically, they assume the following structure in (2) for Nweh where. *te* is the preverbal negative marker, and *bó* is the final negative marker.

(2) Nkemnji and Bell for Nweh:



Bell (2004) further argues that Northern Hausa, which differs from Nweh in that the linearly second negative marker (the counterpart of *bó*) is not clause-final but immediately postverbal, has a similar analysis, with a smaller chunk of structure contained in the $NegP_1$ that moves to the specifier of $NegP_2$. The position of the Low-tone postverbal pronoun in Shupamem is virtually identical to that of the postverbal negative marker in Northern Hausa. Moreover, the Shupamem postverbal pronoun is similar to Nweh *bó* in that both can be absent if the verb moves to the pertinent position (in Shupamem, the imperative verb picks up the Low tone; in Nweh, the verb occurs in final position). Nevertheless, I do not adopt a heavy pied-piping analysis for Shupamem. The main theoretical reason is that the status of some of the movements involved in the derivation of the Northern Hausa order is problematic, in view of Collins' (2001b, 2002) discussion of verb movement in ≠Hoan, where what could be characterized as a verbal string is in fact in a displaced position.

The question arises as to whether the bipartite negation constructions of different languages admit a unitary analysis. This dissertation being a grammar of Shupamem, I do not attempt to develop a unitary analysis here.

This chapter is organized as follows. Section 2 introduces the *full inventory of negative markers* in Shupamem, recapitulating to some extent the discussion in Chapter 4, and places it into a typological context to set the stage for an in-depth description. Section 3 describes the morphosyntactic properties of various negative particles that express standard negation, i.e. negation of *main verbs in the indicative mood*. It discusses what they have in common and how they vary depending on tense and aspect, moving on to the expression and the positioning of negation morphology. Section 4 compares the negative particles in *copula constructions* (locative, existential, predicative, and cleft) with negative morphemes associated with verbs in the indicative mood. Section 5 describes the morphological configuration of negation in the *imperative*. Section 6 briefly presents the syntactic characteristics of *potential, prohibitive and deontic modal* negative morphemes. In section 7, I describe the distributional properties of the negative concord morpheme *ŋʃə̀*. Section 8 discusses the syntactic features of the negative morpheme *ʃɪ* with respect to standard negation morphemes. Section 9 offers a theoretical analysis of the postverbal pronoun in Shupamem adapted from Bell's (2004) expanded NegP, with the proviso noted above.

Section 10 offers a syntactic analysis of the postverbal pronouns with respect to preverbal negative particles. I discuss the implications of the derivational approach adopted here to the theory of negation in UG in section 11. Section 12 is the conclusion of the chapter.

2.The Inventory of Negative Markers in Shupamem

The structural and syntactic configuration of negation has been given little consideration in the grammatical description of Grassfields Bantu languages, even though in many of those languages, there is a remarkable complexity of negation patterns. Nkemnji (1995) and Bell (2004) constitute two important exceptions that my work builds on. Shupamem is one of those languages with a complex system of expressing negation in which negation morphemes vary depending on tense, aspect and mood. Shupamem is syntactically SVO and morphologically an agglutinative language that employs a negative concord strategy. When the finite verb is negated, its existentially quantified dependents bear "n-word" marking. ("N-word" is a theory-neutral cover term for items that may be analyzed as negative quantifiers, polarity items, or concord items; see Zeijlstra (2004) and Giannakidou (2006).

One of the distinctive features of Shupamem indicative clausal (standard) negation as compared to other Grassfields Bantu languages is the fact that preverbal negation must be accompanied by a Low-tone animate pronoun, which shares the

person-number features of the subject and occurs in immediately postverbal position.

In the examples, I will gloss the preverbal morpheme as NEG, and the postverbal pronoun with its person-number features. When the verb ends in a consonant and the postverbal pronoun begins a vowel, an initial nasal is added to the pronoun; this allomorphy has no syntactic significance.

The examples in (3)-(9) illustrate that (i) the choice of the NEG morpheme depends on tense, mood, and aspect, and (ii) that a postverbal pronoun is obligatory.

(3) Past Imperfective Negation

nʒɨ̀kàm pí mâ m-fı *(ŋ̀ì) màvi
Njikam P_3 NEG PTCP-sell 3sg 1-goat
'Njikam did not sell a goat.'

(4) Future Imperfective Negation

nʒɨ̀kàm ná ntáp twó fí *(ŋ̀ì) màví
Njikam IRR NEG F_1 sell 3sg 1-goa
'Njikam will not sell a goat.'

(5) Prohibitive Negation

nʒɨ̀kàm má m-fı *(ŋ̀ì) màví
Njikam NEG PTCP-sell 3sg 1-goat
'Njikam never sells a goat.'

(6) Subjunctibe Negation

á fé nʒɨ̀kàm jé fɪ *(ŋ̀ì) məvɪ́
It Pot. Njikam NEG sell 3sg 1-goat
'Njikam cannot sell a goat.'

(7) Deontic modal negation

nʒɨ̀kàm tô fɪ *(ŋ̀ì) məvɪ́
Njikam NEG sell 3sg 1-goat
'Njikam IS NOT selling a goat (because he is not allowed to).'

(8) Copula Negation

nʒɨ̀kàm Ø ndíʔ *(ŋ̀ì) má ndáp
Njikam COP NEG 3sg at house
'Njikam is not at home.'

Throughout this chapter, I work on the assumption that Shupamem negation is typologically similar to negation in languages like French (Pollock 1989), Nweh (Nkemnji 1995), Ngie (Watters 2003), Hausa and Northern Hausa (Newman 2000), Afrikaans (Bell 2004 citing Oosthuizen 1998), and Moroccan Arabic (Benmamoun 2000). Relevant examples from these languages are given in (8) through (13) for convenience.

In French, sentential negation is expressed by some combination of the affixal morphemes *ne ...pas* that may occur in that order before the infinitival verb (9b) or sandwich the finite verb as in (9a). Pollock assumes French *ne* to be the overt head of the functional projection NegP, optional in present-day French.

The French negation adverb *pas* is analyzed as the specifier of NegP, and notes (1989: 367-368) that *pas*, not *ne*, is the counterpart of English *not*. Historically, both *pas* and *not* were "reinforcers" of "weakened" *ne*. The difference between finite (9a) and infinitival (9a') can be attributed to the fact that the finite verb moves to check its tense features, but the infinitival one does not. Although *pas* is the specifier of *ne*, *ne* always precedes it, because *ne* also moves to Tense in French.

(9) French

a. Pierre **ne** mange **pas**
Pierre NEG_1 eat-Pres NEG_2
'Pierre does not eat.' (Pollock 1989:393)

a'.*Pierre **ne** **pas** mange
Pierre NEG_1 NEG_2 eat.Pres
`Pierre does not eat.'

b. Pierre dit **ne** **pas** mang-er
Pierre say-Pres NEG_1 NEG_2 eat-Inf
'Pierre claims not to eat.'

b'. *Pierre dit **ne** mang-er **pas**
Pierre say.Pres NEG_1 eat-Inf NEG_2
'Pierre claims not to eat.' (Pollock 1989:412)

According to Nkemnji (1995:116), "It is plausible to think that French *ne* corresponds to Nweh *tè* and French *pas* corresponds to Nweh *bɔ̀*.". On Nkemnji's analysis, the *bɔ̀* head that occurs clause-finally is in fact the highest head in the clause, and its complement that also contains *tè* heavy-pied-pipes into its specifier.

(10) Nweh (Nkemnji 1995:112)

a. Njikèm à kɛ̀ **tè** fīā ŋkáp anbó Atem əjuá **bɔ́**
Njikem Agr P_2 NEG give money to Atem yesterday NEG
'Njikem did not give money to Atem yesterday.'

b. Njikèm à kɛ̀ **tè** ŋkáp anbó Atem əjuá fīā
Njikem Agr P_2 NEG_1 money to Atem yesterday give
'Njikem did not give money to Atem yesterday.'

Additional examples of bipartite negation are given in (11)-(14):

(11) Hausa (Newman 2000:358)

a. **bà** mù kāmà ɓàmāwòn **bà**
NEG we catch thief NEG
'We didn't catch the thief.'

b. **bà** mù kāmà **bà** ɓàmāwòn *(Northen Hausa)*
NEG_1 we catch NEG_2 thief
'We didn't catch the thief.'

(12) Afrikaans (Bell 2004:246, citing Oosthuizen 1998)

a. Ek sal jou nooit (**nie**) vergeet **nie**.
I will you never *nie*1 forget *nie*2
'I will never forget you.'

b. Dit blyk dat sy absoluut niks (**nie**) het opgedaag **nie**.
It seems that she absolutely nothing *nie*1 can remember nie2
'It seems that she can remember absolutely nothing.'(ibid.)

Ngie and Moroccan Arabic are like Shupamem in that the postverbal member of the bipartite negation is a pronoun:

(13) Ngie (Watters 2003:251)

wə-ə̀ kī kɔ̄m-ɔ̄ *(má) bə́u
3sg-P_2 NEG kit-IMPFV 3sg.Poss dog
'He did not hit the dog.'

(14) Moroccan Arabic (Benmamoun 2000:8)

Omar **ma** kteb-**š** lə-bra
Omar NEG_1-wrote.3MS-NEG_2 the letter
'Omar didn't write the letter.'

The above examples show that the expression of negation displays an interesting variation language internally (e.g., French and Nweh) as well as cross-linguistically (e.g., Shupamem versus Nweh). Syntactically, despite their different morphological surface forms. The generalizations that emerge from consideration of Shupamem data that distinguish six standard negative markers are the following:

(a) The standard negative markers (*mâ*, *ntáp*, *ndɨ̌ʔ*, *jé*, *tò*, *mə̀*) appear in the same syntactic position, between the tense marker (past) and the modal (future), if present, preceding the main verb.

(b) The standard negative markers are mutually exclusive.

(c) The standard negative markers behave as functional projections.

(d) The standard negative markers do not occur in isolation (e.g., as answers to a Yes/No question).

(e) The standard negative markers always select a Modal Phrase or a Participle Phrase (the latter is formed with a homorganic nasal prefix on the main verb). In other words, the complement of standard negation is never a bare verb.

(f) The standard negative markers require an immediately postverbal, animate pronoun that systematically agrees with the subject DP. Such postverbal pronouns, unlike accusative pronouns that may appear in the same position, always bear a Low tone. I argue that such pronouns spell out NEG_1 but I will indicate it for analysis purposes as person agreement with the subject DP (e.g., 3sg/pl)..

I will argue on the basis on the examples in (2)-(6) that these six negation markers compete for the same structural position in the clause's architecture, which I assume to be NegP along the lines developed in Pollock (1989).

For ease of presentation, I will use the term 'bipartite negation' as in Bell (2004) for all standard negations that consist of two parts, a negative marker and a Low-tone pronoun; the term 'imperative negation' for the case where the clausal negative morpheme is not accompanied by a Low-tone pronoun but instead the verb carries the Low tone; and the term 'constituent negation' for cases in which the negative particle consists of one morpheme (e.g., conditional, infinitive, and constituent).

In this analysis, I assume that the second part of negation in Shupamem is in fact a tonal morpheme (Low tone). The postverbal pronoun is inserted to carry the Low tone, when the verb is not available. The pronoun spells out the person-number features of the subject, because it is inserted when the subject transits through the specifier of NegP on its way to its surface position (specifier of TP) and leaves a pronominal copy. Observationally, therefore, the Low-tone postverbal pronoun is the second part of bipartite negation. I propose that the reason why the verb is not available to carry the Low tone has to do with the fact that standard negation in Shupamem selects for a Modal or Participle Phrase, and the verb must raise to the heads of these phrases. The only case where the verb can stay in NegP and pick up the Low tone is the case of imperatives. The negated imperative contains a bare verb (no futurate modal or participial prefix is present) and does not require the presence of a postverbal Low-tone pronoun.

The aim of this chapter is twofold: (a) to provide clear descriptive generalizations of all the facts about each negation strategy, and (b) to propose a unified syntactic analysis of the functional distribution of each negative morpheme with respect to tense, aspect and mood. It is important to point out that standard negation commonly distinguishes between *morphological* and *syntactic negation* (Dahl 1979, Kahrel and van der Berg 1994, Miestamo 2005, Payne 1985). Shupamem and Ngie (Watters 2003:251) are known as two of the very few

Grassfields Bantu languages where the second part of standard "bipartite negation" is a pronoun.

To bring some order in what looks like a chaos in the negation strategies used in Shupamem, I pull together in Table 5.1 the negative morphemes that are commonly used for finite clauses and those that are used for embedded clauses or just a constituent.

Not considered in Table 5.1 are the morphemes *mbɛ̀j* and *úʔùm* that literally mean 'no' as opposed to 'yes' as answers to a yes/no question. They are clearly distinct from any of the negative particles used in the clause for sentential or constituent negation. Neg_1 in Table 5.1 indicates that the postverbal negative markers occurring immediately after the verb may surface as a pronoun with a Low tone (e.g., standard negation in the indicative mood) or just as a Low tone (e.g., negative imperatives).

Description	T/Asp/Mood	Neg_2	Future (modal)	Part.	V	Neg_1
Ind. Past PFV (15)	kàpî, pî, pé, Ø-	mâ		n-	V	pro+[`]
Ind. Simple-Pres (16)		mâ		n-	V	pro+[`]
Ind. Future PFV (17)		ntáp	twó, lɔ́ʔ, twó lɔ́ʔ		V	pro+[`]
Ind. Future IPFV (18)		ntáp	twó, lɔ́ʔ, twó lɔ́ʔ	n-	V	pro+[`]
Ind. Past IPFV (19)	kàpɯ́, pɯ́, pá	ntáp	(mbɯ́)	n-	V	pro+[`]
Ind. Pres. Hab.(20)	ná+ (mbɯ́)	ntáp		n-	V	pro+[`]
Ind. Pres. Prog.(21)	tâ			n-	V	pro+[`]
Ind. Present. Evidential(22)	nâ			n-	V	pro+[`]
Copula (23) and (24)	kàpɯ́, pɯ́, pâ	ndɨʔ			V	pro+[`]
Potential (*can't/couldn't*) (25)		jé			V	pro+[`]
Prohibitive (*mustn't*) (26)		tô			V	pro+[`]
Prohibitive Past (*never*)(27)		mə́		n-	V	pro+[`]
Imperative (28) Subjunctive (29) Expletive (see (30)		mà			V	[`]
Past Perfect (31)	kàʔá	ʃì			V	
Conditional Past (32)	kɯ́	mbɯ́ ʃı			V	
Conditional Pres.(33)	kɯ̀	mbɯ́ ʃı			V	
Infinitive (34)	ʃɪn-	mbɯ́ ʃı			V	
Constituent Negation. (35) and (36)		ʃı nʃe			NP	

Table 5.1. Complete List of TAM Markers and Negative Markers

In the following sections, the understanding of the functional and morphological properties of all negation morphemes in Table 5.1 is a prerequisite for an appropriate syntactic analysis of negation strategies available in Shupamem. Each row contains the number of the full-sentential example, (15) through (36), that will illustrate the pertinent use of negation. Before getting to the illustrative examples given in (15)-(36); let us say few words about the syntactic distribution of each negative morpheme. Table 5.1 suggests two types of negative particles: (a) those that require a postverbal pronoun (e.g., *mâ*, *ntáp*, *ndîʔ*, *jé*, *mə̀*, *tô*) and (b) those that do not require a postverbal pronoun (e.g., *mà* and *ʃì*/*nʃè*). Note further that of all these negative particles only the negative particle *ʃì* may appear before the verb (finite and non-finite) or the head noun (e.g. constituent negation). It should also be stressed that in Table 5.1, Shupamem standard negation (mostly in the indicative mood) is expressed using a combination of a negative particle that precedes the main verb and a Low tone that immediately follows it. Nevertheless, in cases of negative imperatives/subjunctives or expletive negation, a postverbal pronoun is not needed, and the negation particle that is more appropriate is *mà*. The negative imperative/subjunctive particle precedes the imperative/subjunctive verb and the Low tone, which is the head of the lower negation functional projection (Neg_1) falls not on a postverbal pronoun as in standard negation, but rather on the verb stem.

The other negation particle that does not require a postverbal pronoun is *ʃi*. It has a wider distribution in the clause and will be treated in this analysis as surfacing in spec-Neg_1 if the first functional head of the bipartite negation is empty (e.g., Neg_2 is zero in which case no postverbal pronoun surfaces in spec-$NegP_1$). As can be seen in Table 5.1, negation particles vary depending on the TAM markers. One of the most intriguing features of negation patterns is the syntactic status of the overt negation morphemes that precede the main verb and the postverbal pronouns that always surface with a Low tone. The illustrations of all negation types summarized in Table 5.1 are given in (15)-(36) where both overt negation particles and the postverbal pronouns are underlined.

(15) Indicative Past Perfective (Inflectional)

a. Ali pí tà pʉ́vì
Ali P_2 count.PFV 2-goats
'Ali counted the goats.'

b. Ali pí mâ n-tà *(ŋ̀ì) pʉ́vì
Ali P_2 NEG PTCP-count 3sg 2-goats
'Ali did not count the goats.'

(16) Simple Present (Inflectional)

a. Ali ʃĩ ŋgə̀rĭʃì
Ali know.Pres English
'Ali knows English.'

b. Ali mâ n-ǯì *(ŋ̀ì) ŋgə̀rǐʃì
Ali NEG PTCP-know 3sg 2-goats
'Ali does not know English.'

(17) Indicative Future Perfective (Modal)

a. Ali ná twó tá pʊ́vì
Ali IRR F_1 count 2-goats
'Ali will count the goats.'

b. Ali ná ntáp n-tà *(ŋ̀ì) pʊ́vì
Ali IRR NEG PTCP-count 3sg 2-goats
'Ali will not count the goats.'

(18) Indicative Future Imperfective (Modal)

a. Ali ná twó tá pʊ́vì
Ali IRR F_1 count 2-goats
'Ali will be counting the goats.'

b. Ali ná ntáp twó pʊ́ n-tá *(ŋ̀ì) pʊ́vì
Ali IRR NEG F_1 IMPFV PTCP-count 3sg 2-goats
'Ali will not be counting the goats.'

(19) Indicative Past Imperfective (Inflectional)

a. Ali pʊ́ n-tá pʊ́vì
Ali P_2 PTCP.count.IMPF 2-goats
'Ali was counting the goats.'

b. Ali pʊ́ ntáp n-tá *(ŋ̀ì) pʊ́vì
Ali P_2 NEG PTCP-count 3sg 2-goats
'Ali was not counting the goats'

(20) Indicative Present Habitual (Modal)

a. Ali ná mbʊ́ n-tá pʊ́vì
Ali IRR IMPFV PTCP-count 2-goats
'Ali usually counts the goats.'

b. Ali ná ntáp mbʊ́ n-tá *(ŋ̀ì) pʊ́vì
Ali IRR NEG IMPFV PTCP-count 3sg 2-goats
'Ali does not count the goats.'

(21) Indicative Present Progressive

a. Ali tâ n-tá pʊ́vì
Ali Prog PTCP-count 2-goats
'Ali is counting the goats.'

b. Ali ná ntáp n-tá *(ŋ̀ì) pʊ́vì
Ali IRR NEG PTCP-count 3sg 2-goats
'Ali does not count the goats.'

(22) Indicative Present Evidential

a. Ali nâ n-tá pʊ́vì
Ali EVI PTCP-count 2-goats
'Ali is counting the goats (I am witnessing his counting of goats).'

b. Ali ná ntáp n-tá *(ŋ̀ì) pʊ́vì
Ali IRR NEG PTCP-count 3sg 2-goats
'Ali does not count the goats.'

(23) Copula (Present)

a. Ali pâ kʊ́kɛ́rí
Ali Pres strong
'Ali is strong'

b. Ali Ø nɗıʔı *(ŋ̀ì) kʊ́kɛ́rí
Ali COP. NEG 3sg strong
'Ali is not strong'

(24) Copula (Past)

a. Ali pʊ́ kʊ́kɛ́rí
Ali P_2 strong
'Ali was strong'

b. Ali pʊ́ nɗıʔı *(ŋ̀ì) kʊ́kɛ́rí
Ali P_2 NEG.COP 3sg strong
'Ali was not strong.'

(25) Potential

a. Ali ʃáʔ mí mó màp twó, ná í jé twò *(ŋ̀ì)
Ali wish.Past that brother his come, but 3sg NEG come 3sg
'Ali wished that his brother would come, but he could not (come)'

b. Ali rie mí mó màp twó, ná í jé twò *(ŋ̀ì)
Ali say.Past that brother his come, but 3sg NEG come 3sg
'Ali said that his brother would come, but he could not (come).'

(26) Obligation

a. A ná tàʔà mĭ Ali tá pʉ́vì
It IRR needs that Ali count 2-goats
'Ali must count the goats (external obligation).'

b. Ali náá n-tá pʉ́vì
Ali must PTCP-count 2-goats
'Ali must count the goats.'

c. Ali tô tâ *(ŋ̀ì) pʉ́vì
Ali NEG count 3sg 2-goats
'Ali must not count the goats.' (Prohibition)

(27) Prohibitive Past (Inflectional)

a. Ali ká n-tâ pʉ́vì
Ali Pres. PTCP-count 2-goats
'Ali always counts goats.'

b. Ali mə́ n-tâ *(ŋ̀ì) pévì
Ali NEG PTCP-know 3sg French
'Ali never counts goats.'

(28) Imperative

a. tá pʉ́vì!
Count.IMP 2-goats
'Count the goats.'

b. mà tà pʉ́vì!
NEG count.IMP 2-goats
'Don't count the goats.'

(29) Subjunctives

a. Ali rià mî ú tá pʉ́vì!
Ali say.Pst 2sg count.Subj 2-goats
'Ali asked you to count the goats.'

b. Ali rià mî ú mà tà pʉ́vì!
Ali say.Pst 2sg NEG count.Subj 2-goats
'Ali asked you not to count the goats.'

(30) Expletive Negation

a. Ali sièt mî ú mà tà pʉ́vì!
Ali prohibit.Pst that 2sg NEG count.Subj, 2-goats
'Ali prohibited you to count the goats.'

b. Ali ná m-bwó mî ú mà tà pʉ́vì!
Ali IRR PTCP-fear that 2sg NEG count.Subj 2-goats
'Ali fears that you count the goats.'

(31) Past Perfect

a. Ali tè tà pʉ́vì
Ali PFT count 2-goats
'Ali had counted the goats'

b. Ali kàʔà ʃì tà pʉ́vì
Ali modal NEG count 2-goats
'Ali had not count the goats.'

(32) Conditional Past

a. Ali kə́ n-tà pʉ́vì, ú pé ŋ̀ì
Ali Cond.Past PTCP-count 2-goats, 2sg pay.Subj. 3sg
'If Ali counted the goats, you should pay him.'

b. Ali kə́ mbʉ́ ʃ̀ì tà pʉ́vì, ú mà pé ŋ̀ì
Ali Cond.Past be NEG count 2-goats, 2sg Neg pay.Pres 3sg
'If Ali does not count the goats, you should not pay him.'

(33) Conditional Past

a. Ali kə̀ n-tà pʉ́vì, ú pé ŋ̀ì
Ali Cond.Pres. PTCP-count 2-goats, 2sg pay.Subj. 3sg
'If Ali counts the goats, pay him.'

b. Ali kə̀ mbʉ́ ʃ̀ì tà pʉ́vì, ú tà ŋ̀ì
Ali Cond.Pres. be NEG count 2-goats, 2sg leave.Pres 3sg
'If Ali does not count the goats, leave him alone.'

(34) Negative Infinitives

a. ɲ̃in-tá pʉ́mvì pâ kâmkɛ́rí
To count 2-goats be.Pres difficult
'Counting goats is difficult'

b. ɲ̃im mbʉ́ ʃ̀ì tá pʉ́mvì kâmə̀
To be NEG count 2-goats be rare
'Not counting goats is rare.'

(35) Negative constituent

a. *nʃ̀*mʉ̀m pí *mâ* m-fù *(ŋ̀ì) wá
No-person P_2 NEG PTCP-call 3sg me
'Nobody called me' (*lit*.= Nobody did not call me)

b. **nʃ̀*mʉ̀m pí m-fù wá
No-person P_2 PTCP-call me
'Nobody called me.'

c. *mʉ̀m pí *mâ* m-fù *(ŋ̀ì) wá
Person P_2 NEG PTCP-call 3sg me
'A person did not call me.'

(36) Negative constituent

a. *nʃ̀*mʉ̀n pí *mâ* m-fà *(ŋ̀ì) *nʃ̀*jʉ́m nə̀ *nʃ̀*mʉ̀n
No-person P_2 NEG PTCP-give 3sg no-thing to no-person
'Nobody gave anything to anyone.'
(*lit*.= Nobody did not give nothing to nobody)

b. **nʃ̀*mʉ̀n pí m-fà *nʃ̀*jʉ́m nə̀ *nʃ̀*mʉ̀n
No-person P_2 PTCP-give no-thing to no-person
'Nobody gave anything to anyone.'
(*lit*.= Nobody gave nothing to nobody)

c. *mʉ̀n pí *mâ* m-fà *(ŋ̀ì) jʉ́m nə̀ mʉ̀n
Person P_2 NEG PTCP-give 3sg thing to person
'A person did not give a thing to a person.'

Perhaps the most interesting feature of standard negation in Shupamem is the fact that negation is expressed by two morphemes simultaneously: (a) a preverbal negative word (e.g., *mâ, ntáp, mə́, tô, jé* and *ndîʔĭ*) and (b) a Low tone [̀] that commonly spells out as a postverbal pronoun that agrees with the subject DP. However, since we are examining the surface position of the negative morpheme relative to the surface form of the verb, we will have to comment on the tones of the main verbs and its arguments. It is important to point out that the verb in Shupamem displays a considerable variety of tonal configurations depending on tense, aspect and mood. A similar tonal variation has been documented in Cahill (1999) and Kenstowicz (2003) in Konni and Buli respectively.

The interpretation of the data in (15)-(36) tries to put some order on what appears to be rather arbitrary and chaotic morphological changes of the negative particles in the clause. The paradigms in (15) and (36) suggest that the negative particles in Shupamem have the following syntactic distribution:

(i) The negative particle *ntáp* mostly goes with the imperfective aspect (e.g., past imperfective, present progressive and evidential, future Imperfective);

(ii) The negative particle *mâ* mostly goes with the past perfective, the simple present, the future perfect), and stative verbs (e.g., to know, to smell etc).

(iii) The negative particle *ndîʔi* is actually a negative copula verb.

(iv) The negative particle *jé* is mostly used to describe a situation or event that is unexpected under the normal presupposition of the speaker. (e.g., *î jé twò ŋì* '*But He did not come'*). For instance, imagine a situation where all students are supposed to take and exam the next day at 7 am in the morning and no one shows up because of a heavy rain. The most appropriate negative particle to use in such a scenario is *jé*.)

(v) The negative particle *tô* 'must not' behaves more like a modal and is commonly used in as a prohibitive (e.g., You must not come (even if you want to)).

(vi) The negative marker *mə̀* behaves more like a negation adverbial *never* in opposition to *always*or *ever* (e.g., *He always plays soccer vs He never plays soccer* (because he is afraid of injuries)).

(vii) The imperative/hortative, the subjunctive, and expletive negation require the negative morpheme *mà* (e.g., *Don't move!*).

(viii) *ʃì* is the negative particle that has a wider distribution. It may occur before a verb (e.g. *ʃì twò* 'without/not coming'); a noun (e.g. *ʃì ndáp* 'without a house'; or a verbal adjective (e.g., *ʃì pù* 'without being nice).

Despite the fact that Shupamem displays different kinds of negation morphemes depending on tense, aspect and mood, there are three coherent types of negation, namely:

(a) Type I that includes the negative markers *mâ*, *ntáp*, *má*, *tô*, *jé* and *ndîʔi*. Those negation particles all require a postverbal pronoun because of the second negation head indicated by the Low tone;

(b) Type II consists of the negative marker *mà* and is commonly used in the imperative, subjunctive and expletive negation. Type II negation also has a Low tone as its second head, but does not require a postverbal pronoun;

(c) Type III includes the negative particle *ʃi* that is mostly used in subordinate clauses. Note that when *ʃi* is used as a n-word, it surfaces as *nʃè* with n- playing the role of the noun class prefix.

Generally then, the examples in (15)-(36) suggest that negation in Shupamem is a bipartite negation as described in Bell (2004) at least for type I and type II negation.

This assumption implies that the higher NegP (Neg_2) directly selects the modal or the participle and is co-indexed with a lower NegP (Neg_1) that is encoded by a Low tone at least in finite sentences. As for the imperative, subjunctive and expletive, I will maintain that they still have Neg_2 and Neg_1, but Neg_1 is indicated by a Low tone that attaches directly to the verb stem, not by a pronoun as seen in type I and type II negation. While a Low tone is an index of negation in type I and type II, the constituent negation particle *ʃi* has a different structure, so that for this analysis, I will describe it as a 'negation adverbial' or 'an embedded sentence negation' following Wolff (1983), that is restricted to the subordinate clause domain. In other words, the negation marker of type II has a narrow scope, unlike the negation of type I, it cannot scope over the entire sentence (IP). I will come back to this sections 9 and 10.

3.Standard (Clausal) Negation of Main Verbs in the Indicative Mood

Previous work on the syntax of negation drew their data from a number of Indo-European languages, including English (Jespersen 1917), French (Pollock 1989, Moritz and Valois 1994), dialects of Italian (Zanuttini 1991, Cinque 1999), West-Flemish (Haegeman and Zanuttini 1991, Haegeman 1995), with the addition of Arabic (Benmamoun, 2000).

Apart from studies such as Nkemnji (1995), Tamanji (1994), and Bell (2004), there are very few studies on the syntax of negation in Grassfields Bantu languages. It is my goal in this chapter to add to the empirical base of negation data by examining how negative sentences are formed in Shupamem.

As we will see in the coming sections, the most common way of expressing negation in Shupamem is to introduce the negative marker *ntáp* or *mâ*. Either of these two negative markers appearing in the immediate preverbal position can negate the clause in question, as illustrated in (15)-(36). Though other negative markers identically negate a given sentence, they are in complementary distribution. As seen from the translation, verbs that are negated by the negative particle *ntáp* are associated with imperfective/progressive, whereas those that are negated by *mâ* are either perfective or stative verbs.

The common characteristic of those two negative markers is that they always introduce a clitic-like pronoun that surfaces immediately after the main verb. If that postverbal pronoun is omitted, the sentence becomes ungrammatical.

The types of negation in (15)-(36) are semantically identical in that they crucially contribute to converting a given sentence (a) into another sentence (b) such that (b) is true whenever (a) is false. For the time being, I focus just on the descriptive facts.

The primary goal of this chapter is to provide a comprehensive description of all negation types attested in Shupamem with a particular reference to how structural, semantic and pragmatic factors contribute to the meaning in general. Thus, it remains critically important to understand not only the structural and morphological constraints imposed on the surface form of the negative marker, but also the contexts and situations that control those forms. Let us consider the following paradigms illustrating positive and negative sentences in Shupamem. This section only exemplifies the negation of main verbs (not copula verbs) in the indicative mood; the rest of the data will be presented in subsequent sections.

A Present Tense

(37) *Present Progressive*

a. mɔ́n tâ ŋ-gbɯ̀
Child Prog PTCP-fall
'The child is falling.'

b. mɔ́n ná ntáp ŋ̀-gbɯ̀ ***(ŋ̀ì)**
Child IRR NEG PTCP-fall 3sg
'The child is not falling.'

(38) *Present Habitual*

a. mɔ́n ná mbɯ́ ŋ-gbɯ̀
Child IRR HAB PTCP-fall
'The child (usually) falls.'

b. mɔ́n ná mbɯ́ ntáp ŋ̀-gbɯ̀ ***(ŋ̀ì)**
Child IRR HAB NEG PTCP-fall 3sg
'The child does not (usually) fall.'

B Future Tense

(39) *Immediate & Recent Future*

a. mɔ́n ná twó ŋ-gbʉ̀
Child IRR F_1 PTCP-fall
'The child will fall.'

b. mɔ́n á ntáp twó ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child IRR NEG F_1 PTCP-fall 3sg
'The child will not fall.'

(40) *Remote Future*

a. mɔ́n ná twólɔ́ʔ ŋ-gbʉ̀
Child IRR F_3 PTCP-fall
'The child will fall.'

b. mɔ́n ná ntáp twó lɔ́ʔ ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child IRR NEG F_3 PTCP-fall 3sg
The child will not fall.'

C Past Tense

(41) *Immediate Past*

a. mɔ́n ∅ gbʉ̀
Child P_1 fall.PFV
'The child fell.'

b. mɔ́n ∅ mâ ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child P_1 NEG PTCP-fall 3sg
'The child did not fall.'

(42) *Recent Past*

a. mɔ́n pé gbʉ̀
Child P_2 fall.PFV‘
The child fell.’

b. mɔ́n pé mâ ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child P_2 NEG PTCP-fall 3sg
‘The child did not fall.’

(43) *Immediate Past*

a. mɔ́n pí gbʉ̀
Child P_3 fall.PFV
‘The child fell.’

b. mɔ́n pí mâ ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child P_3 NEG PTCP-fall 3sg
‘The child did not fall.’

(44) *Remote Past*

a. mɔ́n kápí gbʉ̀
Child P_4 fall.PFV
‘The child fell.’

b. mɔ́n kápí mâ ŋ̀-gbʉ̀ ***(ŋ̀ì)**
Child P_4 NEG PTCP-fall 3sg
‘The child did not fall.’

It follows from table 5.1 and all the illustrative examples in (15)-(44) that Shupamem has at least three negation strategies:

(i) The first strategy is that of negating a sentence by means of a bipartite negation morpheme where Neg_2 is the topmost negation head overtly spelled out morphologically (*mâ, ntáp, ndɪ̀ʔ, jé, tò, mə̀*) and Neg_1, the lowest negation head encoded by a floating Low tone. A postverbal pronoun is obligatorily required for this group of negation morphemes to be grammatically acceptable.

(ii) The second strategy is that of the means of a bipartite negation where Neg_2 is overtly spelled out as *mà* (with a Low tone) and Neg_1 is realized as a floating Low tone. This strategy does not require any postverbal pronoun as can be observed in imperative; subjunctive and expletive negation (see section 4).

(iii) The last strategy is that of the means of the negative particle *ʃi* that commonly appears in negative infinitives, negative conditionals, and constituent negation. The difference between this negation type and the previous ones is that, it does not require any postverbal pronoun.

These strategies as mentioned in the previous sections imply a different syntactic structure for Shupamem negation clauses, thus a different approach that

explains both morphological as well as tonal requirements imposed on negation structures.

Leaving aside the issue of verb movement for the moment, the negation patterns presented so far show an intriguing syntactic variation with respect to the placement of Neg_2 (the preverbal negation[16]) when one considers the difference between past perfective negation and negation in the future present and future tenses. Quite obviously, the overt negation morpheme *mâ* follows the past tense marker and *ntáp* precedes the future marker. I will assume that the future in Shupamem is a modal, much like English *will* is often analyzed. Thus, what we see is that NEG comes between the Tense and the Modal projections. This is shown in (45a) where the past and the future markers co-occur and flank NEG.

(45) Imperfective versus Perfect

a. mɔ́n kàpʉ́ ntáp twó pɛ́n *(ɪ) ndáp
1-child P_4 NEG F_1 paint 3sg 3-house
'The child would not paint a house.' (Conditional)

b. mɔ́n kápí mâ m-bɛ́n *(ɪ) ndáp
1-child P_4 NEG PTCP-paint 3sg 3-house
'The child did not paint a house.' (Past Imperfective)

c. mɔ́n ná ntáp twó pɛ́n *(ɪ) ndáp
1-child IRR NEG F_1 paint 3sg 3-house
'The child will not paint a house.' (Future Tense)

[16] As was anticipated in section 1, my label of the order of negation morphemes is backward as compared to Nkemnji (1995) and Bell (2004). What represents Neg_2 in their analysis is Neg_1 here, whereas their Neg_2 corresponds to Neg_1 in my own approach.

For the sake of clarity, it is important to point out that, for some reasons, the use of adverbial intensifiers of time such as *tê* 'already' and *káʔá* 'still' suggests that there are some restrictions on the distribution of the negative morphemes *mâ* and *ntáp* within the clause. For instance, those adverbs are mutually exclusive with respect to tense and aspect as shown in the following sentences in (46).

(46) Past Perfect

a. mɔ́n tê ŋ-gbʉ̀
Child Adv PTCP-fall
'The child (already) fell.'

a'. .*****mɔ́n tê mâ ŋ-gbʉ̀ *(ŋ̀ì)
Child Adv NEG PTCP-fall 3sg
'The child did not fall.'

b. mɔ́n káʔà ŋ-gbʉ̀
Child Adv. PTCP-fall
'The child still falls.'

b'. *mɔ́n káʔà ntáp ŋ-gbʉ̀ *(ŋ̀ì)
Child Adv. NEG PTCP-fall 3sg
'The child did not fall.'

It turns out that the time adverbials in (46a&b) do not allow any of the negative morphemes commonly used for sentential negation. The examples given in (46a'&b') are both ruled out because we have forced the adverb *tê* 'already' and the adverb *káʔà* 'still' to co-occur with the negative particles *mâ* and *ntáp* respectively. The ungrammatical examples in (46a'&b) implies that the adverbs *tê*

'already' and *kà?à* 'still' are incompatible with any of the standard negation particles that are commonly used in the perfective or the imperfective . This is understandable according to A. Szabolcsi (pc), who observes that semantically the adverb "already" in English is a positive polarity item. For that reason, it does not occur in the immediate scope of clausal negation. The adverb "still" also behaves the same with the appropriate stress. On the other hand, "yet" is a negative polarity item and it must occur within the scope of clausal negation. If the same assumption is true for the Shupamem words, then this seems to explain the contrasts in (46)-(47).

It should be pointed out that those time adverbs become grammatically acceptable when the adverb *tê* is dropped as in (48b) and the negative marker *ntáp* is replaced by the negative marker *ʃì* (49b) that commonly goes with infinitives, conditionals, or participials.

(47) a. mɔ́n (tê) ŋ-gbɯ̀
Child Adv. PTCP-fall
'The child (already) fell.'

b. mɔ́n mâ mbɯ́ gbɯ̀ *(ŋì)
Child NEG IPFV fall 3sg
'The child has not fallen (yet).'

(48) a. *Declarative Perfective sentence*

mɔ́n káʔa´ ŋ-gbʉ̀
Child Adv PTCP.fall
'The child still falls.'

b. *Negative Perfective sentence*

mɔ́n káʔá ʃì gbʉ̀ (*ŋ̀ì)
Child Adv. NEG fall 3sg
'The child has not fall (yet).'

Here, we can recognize that in the positive sentences in (48a) and (49a) that include the adverbs *tê* and *káʔà* respectively, the main verbs bear a homorganic nasal that encodes the participle. However, in the negative sentences in (48b) and (49b) where the negative particles are inserted, the main verbs do not bear any homorganic nasal. It follows from the contrast between the paradigms in (15)-(44) and those in (46)-(49) that grammatical tense morphemes and time adverbials require different syntactic structures.

Grammatical tense morphemes may select any of the negative morphemes that are used in standard negation without any problem. However, time adverbs may either delete as in (48b) or be replaced by another negative particle whose syntactic constraint allows it to occur in that context (e.g., *ʃì*).

In terms of the paradigms discussed so far, it appears that negative markers in Shupamem vary depending on tenses and aspects of the sentence. For instance, the presence of the imperfective aspect maker *mbú* in the habitual sentence in

(50a) requires for its negative counterpart the negative particle *ntáp* that is compatible with the imperfective aspect (50).

Consequently, the negative particle *mâ* that goes with perfective aspect is automatically ruled out as shown in (50c).

(50) *Present Habitual*

a. mɔ́n ná mbʉ́ ŋ-gbʉ̀
Child IRR HAB PTCP-fall
'The child (usually) falls.'

b. mɔ́n ná mbʉ́ ntáp ŋ̀-gbʉ̀ *(**ŋ̀ì**)
Child IRR HAB NEG PTCP-fall 3sg
'The child does not (usually) fall.'

c.* mɔ́n ná mbʉ́ mâ ŋ̀-gbʉ *(**ŋ̀ì**)
Child IRR HAB NEG PTCP-fall 3sg
'The child does not (usually) fall.'

It follows from the examples presented above that, at the sentential level, despite their different morphological forms, all negative markers share similar distributional properties with respect to the main verb in a simple clause, thus deserve a unified account. Before getting to the syntactic configuration of bipartite negation, let me briefly present the distributional features of other negative particles that are very similar to that of standard negation.

4.Negation in Locative, Existential, Predicative, and Cleft Copula Constructions

For the purpose of this analysis, I assume a rather restrictive definition of copula construction. Regardless of Curnow's (2000:1) idea that "a copula construction is defined as the most basic construction or constructions which a language uses to encode the meanings of: (a) identity of two participants normally encoded as noun phrases in the language (for example, 'the man is my father', 'the woman is Mary') and (b) group membership or classification using noun phrases", the negative copula in Shupamem is *ndîʔı*. The stative verb *ĵım-bú* 'to be' is the most common form that is used to encode the copula verb, the locative and the existential in Shupamem.

It is however very important to note as suggested to me by A. Szabolcsi (pc) that all the sentences that are discussed here have the same positive and same negative verbs, i.e. copulas, whereas only a fragment fit Curnow's definition. For that reason I will refer to all of these as copula verbs

The negation paradigms for copula constructions are illustrated in the (b) examples in (51) through (54). The copula verb is expressed by the morpheme *pâ* (the inflected form of *ĵım-bú*) which may express location (51), a state (52), existence (53) or a cleft (54).

When the copula verb is negated, the morpheme *pâ* becomes *ndɪʔi*, and the postverbal pronoun is obligatory required.

(51) a. mɔ́n pâ ŋɯ́rɯ́t
Child COP.Pres there
'The child is there.

b. mɔ́n Ø ndɪʔi *(ŋì) ŋɯ́rɯ́t
Child Pres NEG 3sg there
'The child is not there.' (Locative)

c. mə̌ pɯ́ ŋɯ́rɯ́t
1sg COP.Past there
'I was there.

d. mə̌ pɯ́ ndɪʔi *(ŋà) ŋɯ́rɯ́t
1sg COP.Past NEG 1sg there
'I was not there.' (Locative)

e. wŭ ná twó pɯ́ ŋɯ́rɯ́t
2sg IRR F_1 COP there
'You will be there.

f. wŭ ná twó pɯ́ ndɪʔi *(ŋù) ŋɯ́rɯ́t
1sg IRR F_1 COP NEG 2sg there
'You will not be there.' (Locative)

(52) a. mɔ́n pầ wɯ́ːmíː
Child COP reserved
'The child is reserved.'

b. mɔ́n Ø ndɪʔi *(ŋì) wɯ́ːmíː
Child COP.NEG 3sg reserved
'The child is not reserved.' (Predicative)

(53) a. ɲìŋì pâ ŋɯ́rɯ́t
God COP there
'God exists.'

b. ɲìŋì Ø ndɪʔi *(ŋì) ŋɯ́rɯ́t
God COP NEG 3sg there
'God exists.' (Existence)

(54) a. á pâ ndáp júó sètə nə́
Es COP house that destroy.PST COMP
'It is the house that collapsed.' (Cleft)

b. á Ø ndɪʔi *(ŋì) ndàp júó sètə nə̀
Es COP NEG 3sg house that destroy.PST COMP
'It is not the house that collapsed.'

The comparison between the examples in the earlier sections that illustrate standard negation patterns with main verbs and those in (51)-(54) that express negation in copula constructions suggests that there is syntactic similarity between those constructions. Negative particles in copula constructions, just like those in standard negation sentences also require a postverbal pronoun. Furthermore, there is an obligatory subject agreement requirement imposed on the postverbal pronouns in both types of negation constructions.

As can be seen in (51), the postverbal pronoun systematically agrees with the subject DP. For instance, the third person singular in (51b), the first person singular in (51d) and the second person singular in (51e) all agree with their respective subject DPs

This suggests that even in negative copula constructions, the agreement requirement on the postverbal pronoun with respect the subject DP also holds just like we have seen for regular standard negation sentences.

5.Negation in the Imperative Mood

In this section, I address two questions concerning negative imperatives in Shupamem: (a) what is the syntactic position of the negative imperative particle *mà* in the clause and (b) why is it impossible for the negative imperative verbs to have an obligatory postverbal pronoun as in standard negation constructions?

I present arguments that show that the structure of negative imperatives is completely different from that of a standard negation. Negative imperatives differ from the standard negation in three important ways: (i) the negative imperative verbs do not have a n-prefix that stands for the participle, nor any tense morpheme or futural modal; (ii) they always carry a Low tone, and (iii) they are not accompanied by a postverbal pronoun as in the case of negative declarative verbs. These facts suggest that the negative imperative verbs, unlike standard negation verbs, stay in Neg_1. The easiest way to understand the facts the imperative construction in Shupamem is to devide the data into positive and negative imperatives.

In what follows, I will analyze the tonal contrasts and alternations that are seen on negative imperative verbs. The role of tones in the inflectional morphology of imperatives will be mentioned. It is a common assumption in the literature (Zanuttini 1997, 2001) that languages differ with respect to the availability of negative imperatives. Imperative data from Shupamem suggest that there is variation in the position of subject pronouns. The variation in subject position in imperative constructions raises interesting questions such as the status of EPP, the trigger for Move, and the issue of why some subject pronouns are ruled out (55) and others are obligatorily required (56).

5.1.Negative Imperatives and the Distribution of Subject Markers

Imperative constructions are marked for subject relation in all environments except one- the second person singular form. All other imperative forms are marked for subject relation. The second person singular marker is *wù* '2sg', and the second person plural subject marker is *pùn* '2pl'. In other words, the second person singular is covert and the second person plural is overt and always come after the verb.

(55) a. *(wú) ná màlòrɨ̌!
2sg cook.IMP rice
‘Cook rice!’

b. (Maria) *(wú) ná màlòrɨ̌!
Mary, 2sg cook.IMP rice
‘Mary, cook rice!’

c. *(wú) mà nà màlòrɨ̌!
2sg NEG cook.IMP rice
‘Do not cook rice!’

d. (Maria) *(wú) mà nà màlòrɨ̌!
Mary, 2sg NEG cook.IMP rice
‘Mary, do not cook rice!’

(56) a. *(pʉ́) ná (*nʉ̀n) màlòrɨ̌!
2pl cook.IMP 2pl rice
‘Cook rice!’

b. (Maria pò Laila) *(pʉ́) ná (*nʉ̀n) màlòrɨ̌!
Mary and Laila, 2pl cook.IMP 2pl rice
‘Mary and Laila, cook rice!’

c. *(pʉ̌) mà nà (*jʉ̀n) màlòrɨ̌!
2sg NEG cook.IMP 2pl rice
‘Do not cook rice!’

d. (Maria pò Laila), *(pʉ́) mà nà (*jʉ̀n) màlòrɨ̌!
Mary, and Laila 2sg NEG cook.IMP 2pl rice
‘Mary and Laila, do not cook rice!’

The addressee in both positive and negative imperatives is a second person singular (55) or plural (56). The addressee may also be indicated through a topic phrase, which is separate from the rest of the imperative construction by a pause

mark indicated by the coma as in (55b and d)-(56b and d). The topic is always optional, for that reason, it always appears in brackets.

Morphologically, positive imperative verb stems differ from negative imperative ones by their surface tones. The positive imperative verbs appear with their underlying tones, whether it is a High or a rising (LH) tone. However, in the negative imperatives, the main verb appears with a default Low tone that indicates the second part of the negative particle *mà*, regardless of the underlying tone of the verb.

Syntactically, the most interesting property of Shupamem imperatives illustrated in the above examples in (55) and (56) turns out to be the surface positions of both second person singular and plural pronouns in subject position as summarized in table 5.2.

Addressee	**Positive**	**Negative**
2sg	No subject marker	No subject marker
2pl	*-nùn* as clitic subject marker	*-jùn* as clitic subject marker

Table 5.2 Subject pronoun marking in Shupame Imperatives

As can be seen, Shupamem is typologically unusual in that it strictly rules out the subject pronoun for the second person singular of the imperative as indicated by the ungrammaticality of (55); but at the same time obligatorily requires a subject pronoun for the second person plural forms (56). In summary, the imperative verbs do not inflect overtly for the second person singular pronouns in subject position, however, for second person plural, the subject pronoun is added postverbally (56). For the purpose of this analysis, I assume that what could be analyzed as first person plural and dual in the imperative are subjunctives in that they can be embedded. I leave the subjunctives constructions aside for the moment to return to them in my discussion of expletive negation later. Overall, the data in (55) and (56) raise the following issues:

(a) What is the true nature of the different surface positions for subject pronouns in Shupamem imperatives?

(b) Is there any restriction imposed on subject pronouns in the imperative?

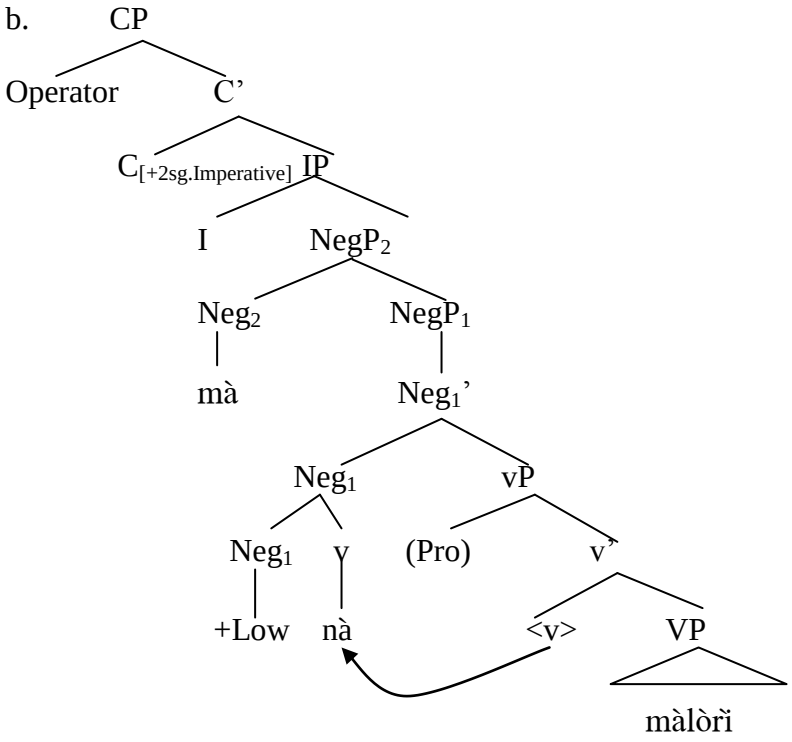
(c) What is the syntactic structure of the Shupamem imperatives?

5.2.The Syntax of Negative Imperatives

I assume that the null (Ø) subject pronoun in the case of the second person singular forms still refers to the addressee and is interpreted as an agent. The variation found in subject position of Shupamem imperative seems very odd with Chomsky's (1995: chapter 4) assumption that an element's distribution in a clause is strictly determined by its morphosyntactic properties. If the EPP requirement that any IP should have an overt subject in any clause is right, then, it is very unusual that the second person singular form of the imperative is ruled out as a subject pronoun at PF in Shupamem. To account for these facts, I will adopt Zanuttini's (2008) hypothesis that English imperatives are headed by a Jussive Phrase/CP. The Jussive Phrase head is claimed to host a second person phi features and is able to check a case. Under this approach, a sentence like (55c) will be derived as follows.

(57) a. mà nà màlòrĭ
Neg .cool.IMP 2sg
'Do not cool rice!'

b.



The core claim of the analysis of negative imperative in Shupamem is the following: (a) Negation in the imperative is a bipartite negation with *mà* as the head of the higher negation functional projection (Neg_2) and the Low tone as the head of the lower negation functional projection into which the verb moves in other to take its surface Low tone; (b) the second person singular pronoun agrees with the directive force operator in spec, Jussive/CP, and therefore gets a default and obligatory interpretation at LF.

This idea is adapted from Zannutini (2008). Furthermore, I will assume following Zannutini's assumption that there is no need to pronounce the second person singular overtly. However, I argue that the subject pronoun for second person plural must surface lower than TP. Specifically; it appears at spec-vP as indicated by the optional pronoun in the structure illustrated in (57b). Crucially, negative imperative do not project IP/TP since they lack tense inflections. The overt pronoun in this case has a contrastive interpretation where the speaker makes an implicit distinction between the default second singular (that must be covert) and the second person plural (that must be overt). Thus, the examples in (55) and (56) reveal the following properties as the defining characteristics of negative imperatives in Shupamem:

1. Shupamem negative imperatives are used to express a prohibition.
2. Shupamem negative imperatives allow overt and covert subjects.
3. Shupamem imperatives do not allow the tense makers, the modal, the n-prefix that expresses the participle, and the postverbal pronouns of the kind required in the indicative negation.
4. Shupamem negation imperatives cannot be embedded, otherwise the sentence will be ungrammatical.
5. Shupamem negative imperative verbs surface with a default Low tone regardless of whether the verb has an underlying High or rising tone.

6. Negative imperatives only go with the negation particle *mà* that takes not a postverbal pronoun, but a Low tone.

Under this analysis, the absence of a second singular subject pronoun in (55) does not imply that the subject is actually absent. Rather, it means that the subject is implied and its overt realization would have been redundant in the imperative. In other words, the subject pronoun for second person singular has a covert lexical content and is only expressed pragmatically by the illocutionary force of the imperative. It is very important to note that, all imperative subject pronouns are not subject to the same EPP effect as their declarative counterparts that are obligatorily assigned a default High tone indicating the nominative case in spec-TP position. I will leave this issue for further investigation. Let me move to the discussion of N-words and negative concords.

6.Potential Negation jé, Prohibitive Negation *mə́* and Negated Deontic Modal *tô*

This section briefly compares the syntactic behaviour of the potential negation *jé*, the prohibitive negation *mə̌* and negated deontic modal *tô* with that of standard negative markers such as *ntáp* and *mâ*.

The data in (58)-(60) suggest that, just as the negative particles *mâ* and *ntáp* presented in the earlier sections, these negation morphemes obligatorily require a postverbal pronoun.

The negation morpheme *jé* is used implicitly to negate a desiderative that conveys a desire (e.g., want, hope, wish, would like etc) as in (58b) or to negate a possibility as in (58d).

(58) a. lérâʔ pí ʃáʔ mí mɔ́n jáʔ kpàʔnə̀
teacher P1 hope that child pass exams
'The teacher hoped that the child would pass the exams.'

b. ná mɔ́n jé jáʔ *(ŋ̌i) kpàʔnə̀
but child NEG pass 3sg exam
'But the child did not pass the exam'

c. á fé mɔ̀n jāʔ kpàʔnə̀ ə̀ ?
It can child pass exams
'Can the child pas the exams?'

d. ą́ fé mɔ́n jé jáʔ *(ŋ̌i) kpàʔnə̀
It can child NEG pass 3sg exam
'The child cannot pass the exam'

As can be seen in (58b) and (58d), the interpretation of the modal negation morpheme *jé* depends on the context. When it is used to negate a desiderative, it literally reads as '*But X did not VP*'. Nevertheless, in a context where it is used as a negation of possibility, it is interpreted as '*X cannot VP* '.

No matter what the negation particle *jé* means, it is structurally similar to standard negation morphemes in that it also requires a postverbal pronoun.

In this analysis, I treat the negation morpheme *mə* as a bipartite negation as shown in (59b). .The negation particle *mə* is structurally analogous to the declarative negation morphemes *ntáp* and *mâ* in that is appears in a preverbal position and the main verbs takes a postverbal pronoun that stands for the second negation functional projection (Neg_1). Shupamem uses the negative particle *mə* to provide a 'never' response to a question like (59a).

(59) a. wú kà sé mə́ ndàpàʔ nə́ ? (=positive yes-no 'ever question)
2sg Past smoke ever tobacco QM
'Did you ever smoke cigarette?'

b. mbɛ̀j, mə̌ mə̀ n-sé *(ŋà) ndàpàʔ
No 1sg NEG PTCP-smoke 1sg tobacco
'I never smoke cigarette.'
(='never' response)

Shupamem makes a lexical distinction between simple declarative negation such as *ntáp* and *mâ* from a deontic modal negation *tô* that has a fairly broad set of meanings. The modal negation *tô* can denote negated ability (*may not*), a negated possibility (*cannot*), and a negated permission (*must not*) depending on the context. Consider the following sentences.

(60). a. wù tô ŋùn *(ù) màtwà nə ʃi məkjɛ̀t mbʉ̀m
2sg NEG buy 2sg car with this small money
'You may not buy a car with this small money.'
(=negated ability)

b. wù tô ŋi *(ŋù) nə ʃi nzə̌ mɔ́pùʔ
2sg NEG come in 2sg with this sort clothes
'You can not come in with this kind of close.'
(=negated possibility)

c. wù tô sỳ *(ŋù) màtwà ʃi pə̌kɛ̀n tú
2sg NEG wash 2sg car without paper 2sg.Gen
'You must not drive the car without your driving licence'
(=negated permission)

The modal *tô* is an inherently negative particle that can be replaced by the modal verb *jɛ̀tnə̌* 'can' in (60) to express the ability (60a), the possibility (60b) and the permission (60c) respectively. In (60a), the addressee is reminded that he cannot buy a car because he does not have enough money to be able to do so. In (60b), the addressee is denied a permission to get the access to a party by appealing to a dress code that does not allow anyone without the appropriate clothing. In (60c), the addressee is reminded that he must not drive without a license.

It is thus interesting that the syntactic distribution of the deontic modal negation *tô* in (60) is identical to that of the indicative negation morphemes such as *mâ*, *ntáp*, *ndîʔi*, which all require a postverbal pronoun. Again, whatever the meaning of the negative particle is, its syntactic distribution is identical to that of standard negation morphemes.

7.*N*-words and Negative Concord

This section discusses the status of *ŋfə̀*-items in Shupamem. For simplicity, I will label them as "*n*-words," although we will see that their distribution is not identical to that of n-words in any of the well-known negative concord (NC) languages described in the literature.

The term "*n*-word" was coined in Laka (1990) to refer to nominal and adverbial expressions in negative concord languages. In her 2005 survey article, Giannakidou notes that "Cross-linguistically, *n*-words form a quite heterogeneous class in terms of both their distribution and semantic properties," and offers the following distributional definition:

(61) *N*-word:

An expression α is an *n*-word iff

(a) α can be used in structures containing sentential negation or another α-expression yielding a reading equivalent to one logical negation, and

(b) α can provide a negative fragment answer.

Giannakidou's (2005) definition repeated in (61) will serve as the basis for the interpretation of negative concords and the status of n-words in Shupamem.

These patterns presented here certainly are not meant to be exhaustive, but rather they are organized in a way that makes it possible to conclude whether n-words in Shupamem can be characterized as having a negative status or not.

7.1.Shupamem *nʃə̀*-items are *n*-words with a very wide distribution

According to definition (61), the items bearing the *nʃə̀*-prefix in Shupamem qualify as *n*-words. (62)-(64) below exemplify property (61a), and (64) exemplifies the property in (61b). The noun class prefix for singular nouns will be glossed as "n-" and these items will be referred to as "*n*-words."

(62) a. *nʃə̀*mʉ̀m pɨ́ *mâ* m-fù *(ŋ̀ì) wá
N-person P_2 NEG PTCP-call 3sg me
'Nobody called me' (*lit*.= Nobody did not call me)

b.**nʃə̀*mʉ̀m pɨ́ m-fù wá
N-person P_2 PTCP-call me
'Nobody called me'

c. *mʉ̀m pɨ́ *mâ* m-fù *(ŋ̀ì) wá
person P_2 NEG PTCP-call 3sg me
'A person did not call me.'

(63) a. *nʃə̀*mʉ̀n pɨ́ *mâ* m-fà *(ŋ̀ì) *nʃə̀*jʉ́m nə̀ *nʃə̀*mʉ̀n
N-person P_2 NEG PTCP-give 3sg n-thing to n-person
'Nobody gave anything to anyone.'
(*lit*.= Nobody did not give nothing to nobody)

b. *ɲʃèmʉ̀n pí m-fà ɲʃèjʉ́m nə̀ ɲʃèmʉ̀n
N-person P_2 PTCP-give n-thing to n-person
'Nobody gave anything to anyone.'
(*lit*.= Nobody gave nothing to nobody)

c. *mʉ̀n pí *mâ* m-fà *(ŋì) jʉ́m nə̀ mʉ̀n
person P_2 NEG PTCP-give 3sg thing to person
'A person did not give a thing to a person'

(64) a. maria pí *mâ* m-fà *(ŋì) ɲʃèjʉ́m nə̀ ɲʃèmʉ̀n
Mary P_2 NEG PTCP-give 3sg n-thing to n-person
'Mary gave anything to anyone'
(*lit*.= Mary did not give nothing to nobody)

b. *maria pí m-fà ɲʃèjʉ́m nə̀ ɲʃèmʉ̀n
Mary P_2 PTCP-give n-thing to n-person
'Mary gave anything to anyone.'
(*lit*.= Mary gave nothing to nobody)

c. *maria pí *mâ* m-fà *(ŋì) jʉ́m nə̀ mʉ̀n
Mary P_2 NEG PTCP-give 3sg thing to person
'Mary gave a thing to a person'

The fact that n-words in (64a&b) can be used in Shupamem to provide a negative fragment answer supports the Giannakidou's definition in (61b). The n-words such as *ɲʃèmùn* 'nobody' and *ɲʃèlì?* 'nowhere' in (65) correspond to what Penka (2007) refers to as 'negative indefinites'

(65) a. *à lɔ́ʔ wó* ?
It leave.PFV who
'Who left?'

nʃè-mʉ̀n
n-person 'nobody'

b. wǔ ntáʔ ʃĩŋ-gwón jà?
2sg want Inf.go where
'Where do you want to go?

nʃè-ĩiʔ
n-place 'nowhere'

Returning now to the examples in (62)-(64), note that the *n*-word in those examples can be replaced by an overt indefinite article *mɔ́ʔ* as in (66) where the indefinite noun phrase reads as *someone* but not *no one*.

(66) a. a. *mɔ́ʔ* mʉ̀m pí *mâ* m-fù *(ŋì) wá
Ind. person P_2 NEG PTCP-call 3sg me
'Someone did not call me'
*'No one called me.'

b. *mɔ́ʔ* mʉ̀n pí *mâ* m-fà *(ŋì) *mɔ́ʔ* jʉ́m nə̀ *mɔ́ʔ* mʉ̀n
Ind. person P_2 NEG PTCP-give 3sg Ind. thing to Ind. person
'Someone didn't give something to someone'
*'No one gave anything to anyone'

c. maria pí *mâ* m-fà *(ŋì) *mɔ́ʔ* jʉ́m nə̀ *mɔ́ʔ* mʉ̀n
Mary P_2 NEG PTCP-give 3sg Ind. thing to Ind. person
'Mary didn't give something to someone'
* 'Mary didn't give anything to anyone.'

d. maria pí *mâ* n-ʃikét *(ı) nə́ *mɔ́ʔ* mʊ́m məʃiʔ *mɔ́ʔ* jʊ̀n
Mary P_2 NEG PTCP-give 3sg to Ind. person about Ind. thing
'Mary didn't speak to someone about something'
*'Mary didn't speak to anyone about anything.'

N-words occur in their canonical SVO constituent order positions in the sentence as shown in (67), otherwise the sentence would be ungrammatical as in (68).

(67) nʃè-mʊ̀n mâ ŋgér ì nʃè-lèrwà
n-person Neg PTCP-have-3sg n-book
'Nobody has any book.'

(68) * nʃè-mʊ̀n nʃè-lèrwà mâ ngér ì
n-person n-books Neg PTCP-have-3sg

The two main types of negative concord (NC) languages are those exhibiting strict NC (e.g. Slavic, Modern Greek, and Hungarian) and those exhibiting non-strict NC, also called negative spread (e.g. French, Italian). The data in (62)-(64) might suggest that Shupamem is a strict NC language, in which *n*-words must be accompanied by clause-mate standard negation. Notice, for example that (62) has a *nʃè*-item in the subject position, and the sentence is ungrammatical unless the verb is negated. This is exactly like what happens in Russian but not French as illustrated in (69):

(69) a. Nikto *(ne) videl Mariju (strict NC)
nobody not saw Mary
'Nobody saw Mary'

b. Personne a vu Marie. (non-strict NC)
nobody saw Mary
'Nobody saw Mary'

However, the distribution of *nʃə̀*-items is much wider than that of *n*-words in strict, or even non-strict, NC languages. The same *nʃə̀*-items also occur in the environment of (i) extra-clausal negation, (ii) merely monotonically decreasing quantifiers, such as *few(er than five) people*, and in conditionals, (iii) possibility modals, (iv) free-choice contexts without an overt modal, and (v) with expletive negation.

This indicates that the distribution of *nʃə̀*-items covers the joint distribution of NO-items, ANY-items and WH-EVER-items (French *n'importe qui* items):

(70) a. à lɔ́ʔ wó ?
It leave.Past who?
'Who left?'

-nʃə̀mʉ̀n 'Nobody."

b. m- mâ n-ʒjà mɨ́ nʃə̀mʉ̀n lóʔ
1sg NEG PTCP-think that anyone leave.Past
'I don't think that anyone left.'

c. m- mâ n-ʒʉ̀ ŋà nʃə̀jʉ̀n
1sg NEG PTCP-eat.Past 3sg anything
'I did not eat anything.'

d. màjú pɯɣən jù nʃèjɯ̀n
Few people eat.Past anything
'Few people ate anything'

e. nʃèmɯ̀n jètnə̀ ǰin-gèt júǰi
anyone can PTCP-do this
'Anyone can do this'

f. mə̌ ʃikèt nə̌ nʃèmɯ̀n juó i̯ kú nə́
1sg talk.Past to anyone that 3sg like COMP.
I talked to anyone who was interested.

g. C'est en faisant *n'importe quoi* qu'on devient sage

'Anything you do makes you smart.'

These properties will also be illustrated in the subsections below.

In pioneering articles, Ladusaw (1992, 2001) argues that negative concord is 'the indication at multiple points in a clause of the fact that the clause is to be interpreted as semantically negated' (Ladusaw, 2001:1) and that the best account of negative concord is one where 'concordant terms are interpreted as indefinites and the expression of negation is done abstractly, not by assigning argument phrases interpretations which express negation' (Landusaw, 2001:22).

Zeijlstra (2004) essentially follows Ladusaw, but departs from Ladusaw in that he interprets *n*-words as mere variables, to be bound by a negative existential (¬∃) operator. That operator may be either an overt standard negation marker, or a phonetically null one. Zeijlstra's interpretation of the following Italian examples illustrates both possibilities. *Nessuno* is always interpreted as contributing a free

variable, *u*, and it carries a [uNEG] feature. The semantic negation that carries an [iNEG] feature is *non*, where present, or else a null operator.

(71) Gianni **non** ha telefonato a nessuno.

gianni ¬∃ λy[phone'(x)(y)(e)] λP[person'(u) & P(u)]

[iNEG] [uNEG]

(72) ieri ∅ nessuno ha telefonato a nessuno.

y'day ¬∃ λP[person'(u) & P(u)] λy[phone'(x)(y)(e)] λP[person'(u) & P(u)]

[iNEG] [uNEG] [uNEG]

Although Zeijlstra does not extend his analysis to negative polarity licensing or to free choice, the possibility of extension seems natural. In those constructions the same *n*-words, interpreted as variables, would be bound, or licensed, by other operators (decreasing quantifiers, modal operators, or universal quantifiers).

This would be advantageous from the perspective of Shupamem because, as was observed above, *nʃə̀* -items appear in a variety of functions. In this dissertation, I do not develop a detailed semantics for these constructions, but I assume that such an extension of the Ladusaw—Zeijlstra theory will cover them. Where necessary, I will refer to *nʃə̀* –items as variables. It is in principle possible that a fully unified analysis of *nʃə̀*–items is not viable, and some ambiguity must be postulated.

7.2.The Segmental and Tonal Composition of *n*-words

N-words in Shupamem have at least three components:

(i) The nasal N-class prefix *n*-,

(ii) *ʃ̀e*, a component that they share with the negative markers that occur in Conditionals and Infinitival clauses, and under Adverbial and Constituent Negation, to be discussed in section 8, and

(iii) a nominal element, "indeterminate pronoun base" that contributes the "person," "thing", "place" or "time" restriction to the variable.

Table 5.3 summarizes the morphological composition of n-words in Shupamem.

N-words	**Possible meanings**
a. n-ʃè-mʉ̀n	no one, anyone
b. n-ʃè-jʉ́m	nothing, anything
c. n-ʃè-ɬiʔ	nowhere, anywhere
d. n-ʃè-fʉ̀ʔ	never, ever

Table 5. 3.N-words in Shupamem

From the perspective of this chapter, it is important to observe that *ʃè* bears a Low tone; this is the same tone, which, I argue, is the functional core of the second part of bipartite negation as illustrated in (73) and (74).

(73) n-ʃè-mʉ̀n

1- NEG-person

‘Anyone/no one/whoever

(74) n-ʃè̩ -John

1-NEG-John

‘Anyone of the name John’

(75) ŋgù pà-John

all-plural-John

‘All the Johns

7.3.*N*-words (*nʃè*-items) in other Negative Polarity Licensing Environments

As was pointed out below, *nʃè*-items occur as clause-mates of standard negation, but they also occur in other negative environments that license negative polarity items (NPIs) in English. The Russian equivalents of the examples below would not contain the *n*-word *nikto/nikogo* ‘nobody, nominative/accusative,’ and

the French equivalents would not contain the *n*-word *personne*, so these are more NPI-like uses of the *ŋʃə̀*-items in (76)-(78).

(76) a. màjú pʉ̀ɣən fù nʃèmʉ̀n
Few people call.Past anyone
'Few people called anyone'

b. májú pʉ̀ɣən ʃi pì mè pí-tèn fù nʃèmʉ̀n
Few people NEG be reach Def-five call.Past anyone
'Less/fewer than 5 people called anyone.'

c. mə mâ n-ʒì ŋà mì nʃè-mʉ̀n fù
1sg NEG PTCP-think 3sg that anyone call.Past
'I don't think that anyone called.'

(77) m mâ n-zjè ŋà mì ù jʉ̀ɣən nʃèmʉ̀n
1sg NEG PTCP-say.Past 3sg that 2sg see.Past anyone
'I did not say that you saw anyone

(78) n-zjà mí ú jʉ̀ɣən nʃèmʉ̀n
1sg say.Past that 2sg saw.Past anyone
'I said that you saw anyone'.

Similarly, in antecedents of conditionals:

(79) a. nʃèmʉ̀n nkə̀ fù, ù ɣám
Anyone Cond call, 2sg shout
'If anyone calls, (you) shout!' (Should anyone call (you) shout!)

b. nə̀ká nʃémʉ̀n fùù nə̀, ù ɣám

Cond anyone call COMP 2sg shout

'If anyone calls, (you) shout!'

But the *nʃe*-NP cannot be inverted as shown in (80) below.

(80) a. *ú ɣám, nʃèmʉ̀n nkə̀ fù.

2sg shout anyone Cond call.

'Shout if anyone calls.'

b.* ù ɣàm nə̀ká nʃémʉ̀n fú nə́

2sg shout Cond anyone call COMP

'Shout if anyone calls.'

(81) mà ɣàm mbă nə̀ká ɨ̂ fú nə́

NEG shout even Cond 3sg call COMP

'Do not shout even if he calls.'

The distribution of n-words in (76)-(81) reveals that Shupamem n-words may appear in any negative polarity environment without any major problem for the grammaticality of the sentence. Let us now see whether what happens when they occur as free choice items.

7.4 *N*-words (*nʃə̂*-items) as Free Choice Items

The fact that n-words occur as free-choice items licensed by possibility modals is crucial. Together with the NPI-facts, it indicates that these items are not inherently negative.

(82) nʃèmʉ̀n jɛ̀tnə̌ ʃ̌in-gɛ̀rə́
Anyone can Inf-do (it)
'Anyone can do it.'

(83) pjéʔ nʃémʉ̀n!
Take.IMP. anyone
'Take anyone!'

(84) nʃèmʉ̀n fù

Anyone call.Past

'Anyone called.'

(Anyone called = Everyone there called = An arbitrary member of the group called)

It is very important to note that *nʃə̀*-words only have a singular reading (85a&b). If we use them with any plural noun, the sentence will be ungrammatical (85c&d). This is understandable, granting that the homorganic nasal that precedes *ʃə̀* itself is the noun class prefix for class 1 nouns that are singular.

(85) a. ɨ̂ mâ m-fù *(ŋ̀jì) nʃèmʉ̀n
3sg NEG PTCP- call.Past 3sg anyone
'He did not call anyone.'

b. ɨ̂ mâ n-ʒù̀n *(ʃ̌ì) nʃèjʉ̀n
3sg NEG PTCP-buy.Past 3sg anyone
'He did not buy anything.'

c.* î mâ m-fù *(ŋ̌i) nʃè pɯ̀ɣən

3sg NEG PTCP- call.Past 3sg n- 2-people

'He did not call everyone.'

d.* î mâ n-ʒùn *(i̍) nʃè pájɯ̀n

3sg NEG PTCP-buy.Past 3sg n- 2-things

'He did not buy everything.'

e. î mâ m-fù *(ŋ̌i) ngùù pɯ̀ɣən

3sg NEG PTCP- call.Past 3sg all 2-people

'He did not call some friends.'

f. î mâ n-ʒùn *(i̍) ngùù jɯ̀n

3sg Neg PTCP-buy.Past 3sg all things

'He did not buy some things.'

As can be seen in (85), both singular indefinite (85a&b) and plural indefinite NPs (85e&f) are syntactically acceptable in the syntactic scope of negation.

In (86), the *nʃè* cannot be replaced by the negative marker *ʃi* without the homorganic nasal preceding it, otherwise the sentence will be ungrammatical as in (86b).

(86) a. ú jètnə̌ ɲingèt nʃé mfù

2sg can Inf-do any call

'You can make any call'

b. *ú jètnə̌ ɲingèt *ʃi mfù

2sg can Inf-do any call

Giannakidou and Yoon (to appear) argue that comparatives contain free-choice *any*, not polarity *any*. This is why I list the comparative in this subsection, although its classification is not critical.

(87) Tom sàà n-ʒáʔ nʃèmɯn

Tom be tall than anyone

'Tom is taller than anyone'

Now that we have provided some evidence that *ŋʃə̀*-items may appear as free choice items, let us now look at cases where they occur in the context of expletive negation.

7.4. *N*-words (*nʃə̀*-items) Occur in the Environment of Expletive Negation

In the examples below, *mà* is an expletive negation, triggered by the matrix verb. The occurrence of the expletive negation in Shupamem is similar (though not identical) to French:

(88) mə̌ pí kə̀n ǐ mí î mà twò (*ŋǐ)

1sg P_3 forbid 3sg COMP 3sg NEG come 3sg

'I forbade him to come' (lit. that he not come)'

(89) mə̌ ná mbwó mí î mà tè (*ŋǐ)

1sg Prog afraid that 3sg Neg flee 3sg

'I am afraid that he will flee'

Unlike standard negation, expletive negation does not allow a postverbal pronoun as shown in (88)-(89). However, in a subjunctive with real negation, only the negative marker *ntáp* may allow a postverbal pronoun (90b). The negative marker *mà* with a Low tone does not allow a postverbal pronoun, otherwise the sentence will be ungrammatical.

(90) Subjunctive with real negation

a. n-zié ná nə̀ ì mì ì mà tè (*ŋ̀ì)

1sg say-Past PFV to him that 3sg NEG flee 3sg

I told him not to flee (that he shouldn't flee)

b. ì ná mbwó mí ì ntáp n-twó *(ŋ̀ì)

3sg Prog PTCP-fear that 3sg NEG PTCP-come 3sg

'He am afraid that he won't come'

(not expletive NEG, participle, high tone)

As can be seen in (90), the postverbal pronoun is ruled out in the expletive negation/subjunctive (90a) where as it is required in a simple embedded clause (90b).

nʃə̀-items occur in the clause that contains expletive negation as shown in (91) and (92).

(91) mə̌ ná m-bwó mí ì <u>mà</u> ŋɔ̀ʔ nʃémʉ̀n/*móʔ mʉ̀n

1sg IRR PTCP-fear that 3sg NEG kill anyone /* someone

'I am afraid that he kills anyone.'

(92) mə̌ ná mbwó mí ì <u>mà</u> ŋɔ̀ʔ nʃə̀mʉ̀n

1sg IRR PTCP-fear that 3sg NEG kill anyone

'I am afraid that he kills someone.'

For some reason (93) is not as good as (91) and (92):

(93) *mə̌ nà m̀-bwó mí î mà ŋɔ́ʔ mɔ́ʔmʉ̀n

1sg IRR afraid that 3sg NEG kill someone

'I am afraid that he kills another person'

(he has already killed one)

Examples of expletive negation in French are given in (94)-(97) for convenience.

(94) J'évite qu'il ne découvre la raison

'I am avoiding his discovering the reason'

(95) Nie-t-il qu-il n'ait vu ce film?

'Does anyone deny seeing this movie?'

(96) Il est parti avant que nous n'ayons décidé:

'He left before we even decided'

(97) Luc en veut plus que Thierry n'en a.

'Luc wants it more than how much Thierry has'

In the light of the discussion of the examples of expletive negation data in (88)-(97), the first point to take away from these constructions is that expletive negation syntactically instantiates overt negative particles that play no role semantically. In other words, the semantic contribution of a negative morpheme *mà* that is commonly used in the subjunctive is cancelled in the context of expletive negation.

8.The Negative marker ʃi

The structural distribution of the negative marker *ʃi* is quite controversial in Shupamem grammar. In this section, I look at the syntactic contexts where it is likely to appear and how it differs from the other negation morphemes discussed so far.

Unlike standard negation morphemes, the negative marker ***ʃi*** does not include any postverbal pronoun as seen with the standard negative markers such as *mâ, ntáp, jé, mə, tô,* and *ndî?.* This negation morpheme type has a broader distribution. *ʃi* may occur before a noun (e.g., common and proper noun) (98), a verb (finite and non-finite) (99); a conjunction (100); and immediately after the adverb *kà?à* (101) that literally reads a 'still' in a positive sentence and 'yet' in a negative sentence. The materials that form the phrase with the negative particle *ʃi* will be in square brackets in the following examples.

(98) a. nă wó wàsɨbɨ̀tà [ʃi mɔ̀n]
Mother go.Past hospital NEG child
'The mother went to the hospital without the child'

b. mɔ́n ná ŋì [ʃɪ lápá?] (*ŋì)
Child IRR walk.Pres. NEG shoes 3sg
'The child is walking without shoes.'

c. maria twó lérwá [ʃi mɔ́n]
Mary come.Past school NEG child
'Mary came to school without the child'

(99) a. mɔ́n pí mè: [ʃı jʉ́χə̀n] (*ŋ̀ı) wá ʃi
Child P_3 arrive.PFV NEG see 3sg father 3sg.Gen
'The child arrived without seeing his father.'

b. ʃĭm-bʉ̀ [ʃi ʃi] tà pâ gbĭmĭ
Inf-be NEG know maths COP scary
'To not know math is scary.'

c. ì kə̀ m-bʉ̀ [ʃi mè], ú fù ŋĭ
3sg Cond.Pres PTCP-COP NEG arrive 2sg call.Pres 3sg
'If he does come, call him'.

(100) mɔ̀n pí mâ m-bɛ̀m *(ı) [ʃı pĭ sĭjɛ̀t (*ı̀)]
Child P_3 NEG PTCP-accept.PFV 3sg NEG and refuse 3sg
'The child did not accept nor refused.'

(101) mɔ́n kàʔà [ʃı kút (*ı̀) ndáp]
Child Adv. NEG build 3sg house
'The child has not built a house (yet).'

These examples in (98)-(101) suggest a number of generalizations about the negative marker *ʃi*:

(i) *ʃi* may occur in a conjoined (101) or subordinate clause (99a) and (99c), where it generally appears before the embedded verb.

(ii) *ʃi* does not allow a postverbal pronoun.

(iii) *ʃɪ*, unlike the negative markers that only occur before an inflected finite verb, may occur at the phrasal level (98) as well as the sentential level (99).

(iv) *ʃɪ* may follow an infinitival verb form (99b) or a copula verb (99c).

(v) *ʃɪ* may dominate a small clause, as in (98b), that literally translates as 'The child is walking without having the shoes'.

Now, why do negation markers such *ntáp*, *mâ*, *ndɨ̀ʔ*, *jé má*, and *tò* obligatorily require a postverbal pronoun while *ʃɪ* does not seem to have the same requirement? From a syntactic point of view, the above examples suggest that there is a significant difference between the particle *ʃɪ* and the standard negation morphemes *táp*, *mâ*, *jé*, *má*, *tò*, and *ndɨ̀ʔ*. Additional examples in (102) show the relevant syntactic contexts where *ʃɪ* is felicitous.

(102) a. á pâ kàmkérɨ́ jɨ́m-mbʉ́ [*ʃɪ* lʉ́ɣə́p (*ɪ̀) pìt]
It COP rare INF-be NEG fear 3sg war
'It is rare not to fear the war.'

b. mɔ́n pɨ́ jàʔà kpàʔnə̀ [ʃɪ wón (*ɪ̀) lɛ̀rwà]
Child P_3 pass. exam NEG go 3sg school
'The child passed the exam without going to school.'

c. jɨ́m-mbə̀ ʃi ɣɛ̀t (*ɪ̀) mbʉ̀m pâ ŋgàm
INF-be NEG have 3sg money COP problem
'Not having some money is a problem.'

d. mɔ́n ná n-ʃɪkɛ̀t (pô) [ʃɪ nûʃə (*ɪ) tú wɪ]
Child IRR PTCP-talk FOC NEG think 3sg head 3sg.Gen
'The child talks without thinking.'

I will argue that *ʃɪ* is a negative marker. Notice that all the nominal n-words we have presented earlier incorporate *ʃɪ*, as shown in their morphological build-up illustrated in Table 5.4 below.

n-words	**Possible meanings**
(a) nʃə̀-mʉ̀n	no one, anyone
(b) nʃə̀-jʉ́m	nothing, anything
(c) nʃə̀-lɪ̀ʔ	nowhere, anywhere
(d) nʃə̀-fʉ̀ʔ	never, ever

Table 5.4 Pattern of n-words in Shupamem

The items in Table 5. 4 contain a noun class marker (the homorganic nasal), the morpheme *ʃɪ*, and a pronominal base corresponding to 'person', 'thing', 'place', or 'time'. The contribution of *ʃɪ* is like that of English *any*, in that it indicates that the indeterminate pronoun is in the immediate scope of negation or a possibility modal (negative polarity and free choice interpretations). I assume that *ʃɪ* plays a similar role here. If so, *ʃɪ* is not accompanied by a postverbal pronoun, because it is

not a Neg_2 head as in a bipartite $NegP_2$—$NegP_1$ construction. Moreover, the complement of *ʃi* does not have an overt subject, so there is no element whose movement to TP would create such a postverbal pronoun.

In sum, a comparison of negation strategies as presented in the above sections shows that the difference between (a) standard negation markers (*ntáp*, *mâ*, *ndɪ̀ʔ*, *jé má,* and *tò*); (b) the negative marker *mà* commonly used in imperatives, subjunctives and expletive negation; (c) and the negative marker *ʃi* lies in their linear ordering with respect to the tense or modal maker. Note that of all these negation morphemes, only standard negation morphemes require a postverbal pronoun.

9.On the Status of the Postverbal Pronoun

As anticipated above, I am assuming that the postverbal pronoun is a simple carrier of the Low tone that encodes the second functional projection in the bipartite negation ($NegP_1$). I argue that Neg_1 overtly spells out as a postverbal pronoun that agrees with a subject DP. The postverbal pronoun exceptionally surfaces with an obligatory Low tone, contrary to ordinary pronouns that function as arguments of the main verb. In this section I provide data that show that the special postverbal pronoun is in fact the lower functional projection of negation and is neither an accusative, nor an emphatic pronoun. The gist of the argument is that

in those roles, these pronouns would not have a Low tone. Illustrative examples to show this distinction are given in (103)-(104). The arrow (ˈ) in (103)-(104) indicates the High tone downstep that applies in a sequence of High + High (H ˈH), where the second High tone is realised on a lower pitch than the first.

(103) a. mɔ́n ná twó ˈláβ ı́
1-child IRR F_1 hit 3sg
'The child will hit him.'

b. mɔ́n ná twó ˈláβ áp
1-child IRR F_1 hit 3pl
'The child will hit them.'

c. pɔ́n ná twó ˈláβ ı́
2-child IRR F_1 hit 3sg
'The children will hit him.'

d. pɔ́n ná twó ˈláβ áp
2-child IRR F_1 hit 3pl
'The children will hit them.'

(104) a. mɔ́n ná ntáp twó ˈláβ *(ı̀) wî
1-child IRR NEG F_1 hit 3sg 3sg
'The child will not hit him.'

b. mɔ́n ná ntáp twó ˈláβ *(ı̀) wáp
1-child IRR NEG F_1 hit 3sg 3pl
'The child will not hit them.'

c. pɔ́n ná ntáp twó ˈláβ *(àp) wî
2-child IRR NEG F_1 hit 3sg 3sg
'The children will not hit him.'

d. pɔ́n ná ntáp twó ˩láβ *(àp) wáp
2-child IRR NEG F_1 hit 3sg 3pl
'The children will not hit him'

There are three facts to bear in mind about the examples in (103)-(104). First, the third person pronoun *wî* for singular and for plural *wáp* exhibit a High tone both in their citation forms as well as when they occur in a direct object position in positive sentences (103a-d). Second, the same High toned pronouns shift into Low toned pronouns in postverbal position encoding the lower functional project of negation (104a-d). Lastly, when the accusative pronoun co-occurs with the obligatory postverbal pronoun of standard negative sentences; the accusative pronoun surfaces with its underlying High tone whereas the postverbal pronoun bears a Low tone (104a-d). These facts indicate that these pronouns have a behaviour here that they do not have elsewhere.

I will interpret these facts by assuming that the exceptional Low tone on postverbal pronoun attested in negative clauses of Shupamem encodes the second part of standard negative particle. I will therefore assume, building on the expanded negation hypothesis proposed in Bell (2004) in combination with R. Kayne's (p.c.) suggestion that the second part of negation in Shupamem is indeed encoded by a Low tone. I will come back to this in the discussion of the syntax of each type of negation in section 10.

Furthermore, animacy plays a crucial role both in direct object position as well as in indication the second part of negation. Only animate pronouns are allowed in direct object position.

The postverbal pronoun that marks the lower negation morpheme is also always animate. The crucial difference is that the direct object pronoun is null, when its intended referent is inanimate, whereas the postverbal pronoun in negatives is overt, even if there is a mismatch in animacy between it and the subject. Relevant examples that show the contrast in animacy both in direct object position as well as postverbally are given in (105)-(106).

(105) a. sɔ́nʒàm kûm mɔ́n
Soldier hit.PAST child
'The soldier hit the child'.

b. màtwá kûm í
car hit.past him
'The car hit him.'

c. î mâ ŋ̀-kûm ì wî
3sg NEG PTCP-hit 3sg him
'He did not hit him.'

d. * î mâ ŋ̀-kûm ì Ø
3sg NEG PTCP-hit 3sg him
'He did not hit him.'

e. *î mâ ŋ̀-kûm Ø Ø
3sg NEG PTCP-hit 3sg him
'He did not hit him.'

(106) a. màtwá kûm ŋ̀kɯɣə̀ʔrə̀
Car hit.PAST bicycle
'The car hit the bicycle.'

b. á kûm Ø
Es hit.PAST (it)
'It hit (it)

c. á mâ ŋ̀-kûm * (ì) Ø
Es Neg PTCP-hit 3sg it
'It did not hit it.'

d. *á kûm á
Es hit.PAST it
'It hit it.'

e. *á mâ ŋ̀-kûm ì á
Es Neg PTCP-hit 3sg it
'It did not hit it.'

f. *á mâ ŋ̀-kûm à á
Es NEG PTCP-hit 3sg it
'It did not hit it.'

The examples in (106d, e and f) show that the inanimate pronoun is obligatorily ruled out in direct object position. Furthermore, the grammatical contrast between (105c) and (106c) suggests that only an animate pronoun may function as the postverbal pronoun that encodes the lower function head of negation in Shupamem.

10.The Formal Treatment of Negative Constructions

The analysis I propose here is based on some basic assumptions of minimalism (e.g. Chomsky, 1995, Kayne, 1994). They explain the structure of the clause and movement operations or a lack of them that account for the distribution of negation markers and postverbal pronouns. At issue here is the treatment of negative markers of standard negation (e.g. those which consist of a negative head and a postverbal pronoun) and negative markers of constituent negation (e.g. those which do not require any postverbal pronoun).

Granting the syntactic behaviour of each negation types presented in the previous sections, I argue that standard negation should be treated as bipartite negation as in Nkemnji (1995) and Bell (2004) with minor changes. In other words, standard negation particles (e.g., *ntáp, mâ, jé, má, tò* and *ndîʔĭ*) should be treated as heads of $NegP_2$. Nevertheless, preverbal negation particles that do not require any postverbal pronoun (e.g., *ǰĭ, mà*) will have a different syntactic treatment. The data presented so far give us enough empirical justification for treating Shupamem standard negation as involving two NegPs.

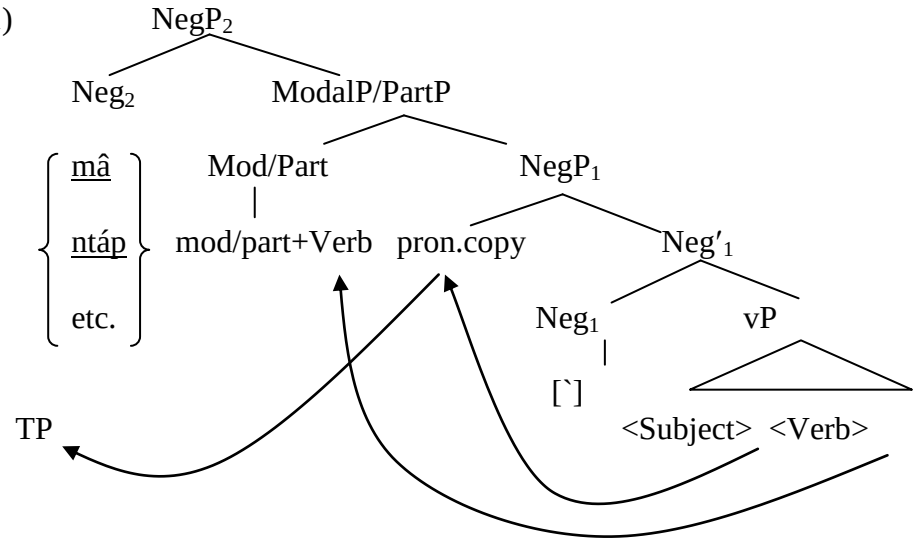
(a) The gist of my analysis is that the Low tone represents the head of a Negative Phrase close to the verb phrase ($NegP_1$). In negative imperatives, the verb moves to $NegP_1$, picks up the Low tone, and stays in $NegP_1$. In all other cases of clausal negation, the verb must move to a higher position (see the explanation in (e)), and the Low tone is picked up, instead, by a pronominal copy that the subject leaves in the specifier position of $NegP_1$ on its way from vP to TP.

(b) With the exception of imperatives, clausal negation (in $NegP_2$) in Shupamem selects for a futurate modal, and/or a participle, or is itself a negative modal. The modal or participial head attracts the verb. The verb cannot first pick up the Low tonal morpheme in $NegP_1$ and then move on to the Modal/Participial Phrase; the reason why this is not possible may have to do with the Freezing Principle or the First Over First Constraint. Therefore, in non-imperatives the verb skips $NegP_1$, and a pronominal carrier of the Low tone is obligatorily needed.

10.1.Syntactic Analysis of Bipartite Negation

I propose that there are two negation heads for Shupamem: (a) the topmost functional projection that is headed by *ntáp, mâ, jé, mə̂, tò* or *ndîʔ* and (b) the one that is headed by a Low tone. I replace what is abstractly characterized in Bell's (2004) system as XP (between $NegP_2$ and $NegP_1$) by the Participle Phrase or a Modal Phrase. In other words, $NegP_2$ immediately dominates Participle Phrase/Modal Phrase and $NegP_1$ is dominated by Participle/Modal Phrase as illustrated earlier in the structure in (1), repeated here:

(1)



Therefore, the core components of my analysis can be summarized as follows:

(i) Shupamem standard negation involves two separate functional projections: a higher $NegP_2$ and a lower $NegP_1$.

(ii) $NegP_1$ takes a little *vP* as its complement.

(iii) The specifier position of the $NegP_1$ must be filled.

(iv) In a finite clause, the head of $NegP_2$ may be *mâ*, *ntáp*, *mə̀*, *jé*, *nɗiʔ or tô*, whereas the postverbal pronouns must be in the specifier position of $NegP_1$.

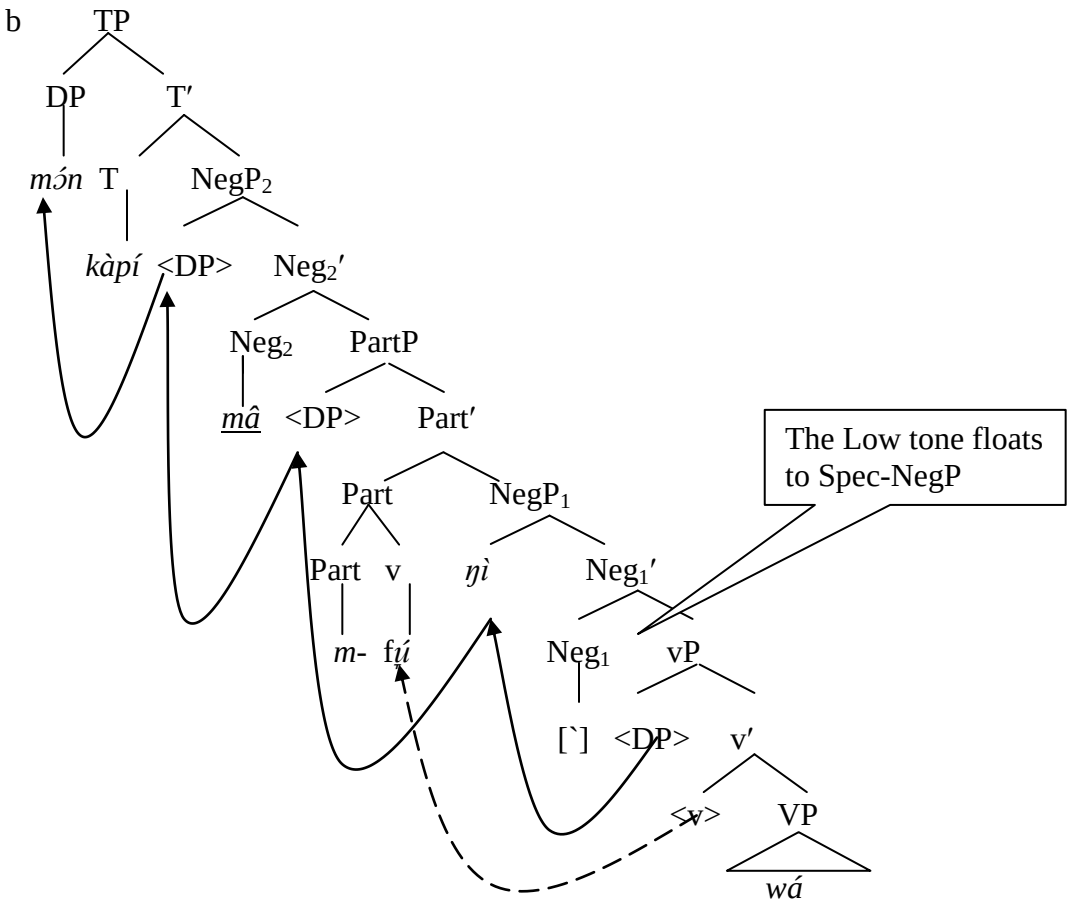
(v) All standard negation morphemes can license N-words.

(vi) The noun phrase moves through the lower negation phrase on its way to Tense/Modal Phrase and leaves behind a trace that spells out as a post-verbal pronoun at the specifier of $NegP_1$.

(vii) None of the standard negation morpheme can occur alone (even as answers to any question)

In sum, all the 6 negatives markers with postverbal pronouns compete for the same syntactic position in the clause. Thus, the (a) the Past Perfective negation and (b) the Future negation can be illustrated as in (107b) and (108b) respectively:

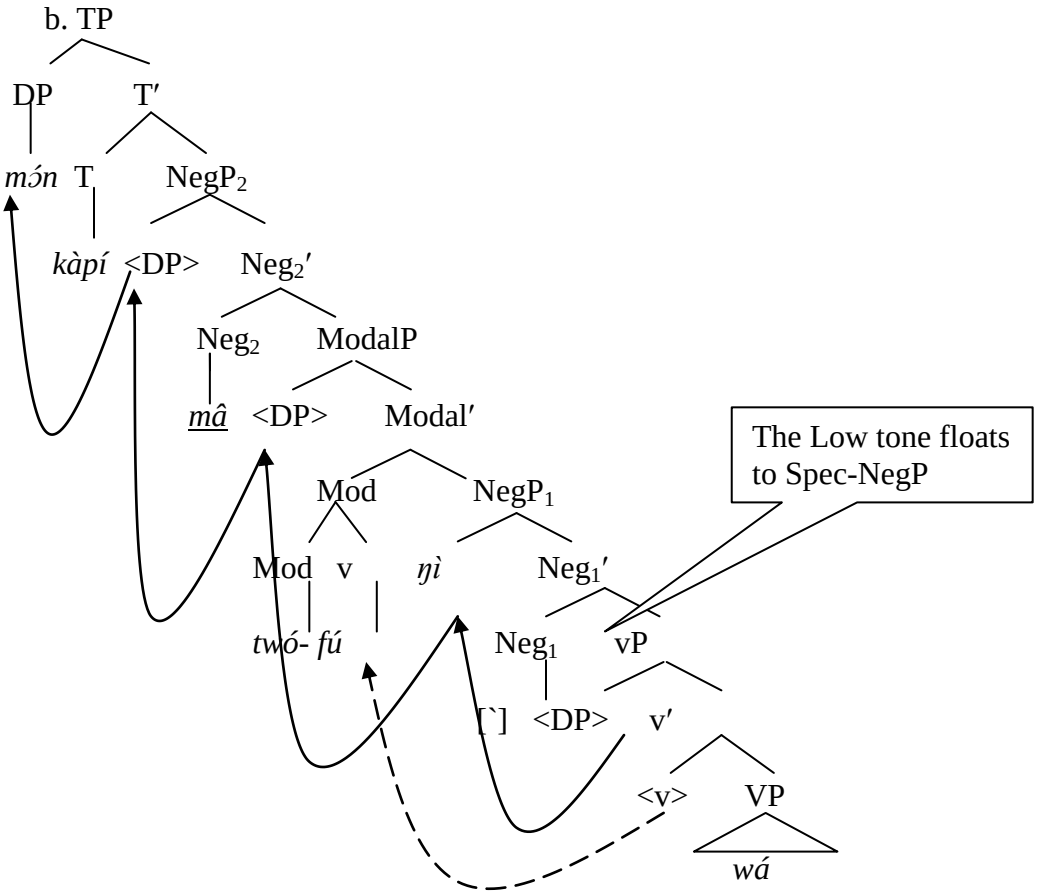
(107) a. *mɔ́n kàpî mâ m-fù ŋɥ̀ wá*
child P_4 NEG PTCP-call 3sg me
'the child did not call me'



This syntactic structure in (107b) nicely accounts for the positions of each negation head in a very simple and straightforward way without any further stipulation. The subject DP *mɔ́n* 'child' leaves a postverbal pronoun in spec-$NegP_1$ on it ways to spec-TP and the Low tone that is the head of $NegP_1$ floats leftward, hence the agreement relationship between the postverbal pronoun that bears a Low tone with the subject DP. Since the tense marker *kàpî* under T is higher than the preverbal negative particle *mâ*, we obtain a surface order where the tense

morpheme comes before the negative particle and the main verb. One immediate question arises as to whether the same explanation in (107b) can also account for the surface form of the modal *twó* 'will' in (108b) with respect to the negation morpheme *ntáp*. The illustration of the derivation of the future tense negation is give in (108b).

(108) a. mɔ́n ná ntáp twó fú *(ŋ̀i) wá
child IRR NEG PTCP-call 3sg me
'the child will not call me'



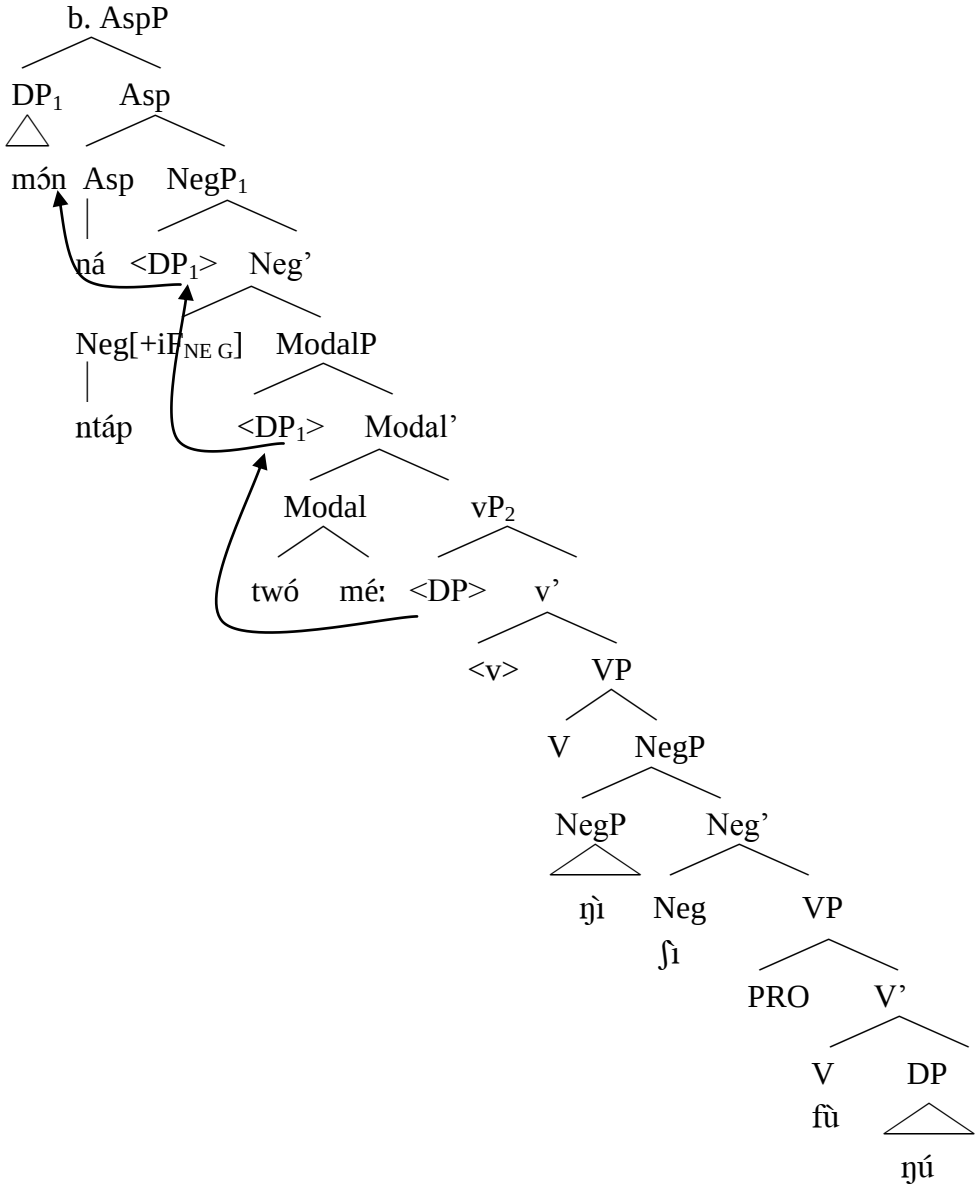
One immediate consequence of the theory proposed here is that it correctly predicts that a constituent negation *ʃì* should always appear before the verb and that Neg_2 (e.g., *mâ, ntáp, má, jé, tò, ndɪ̀ʔì*) might be separated from the verb, as pointed out to me by C. Collins (pc). This prediction is confirmed by (109a), derived as in (109b).

As can be seen in (109b), the negative particle *ntáp* is the higher NegP that carries the interpretable negative feature, thus triggering the overt spell out of the post-verbal pronoun *ŋì* in spec-$NegP_1$ that in turn immediately precedes the constituent negative marker *ʃì*. The expanded NegP analysis adopted here appears to have several empirical advantages. It definitely provides a unified account for all types of negations attested in Shupamem without any further stipulations. It further accounts for not only the structural position of the postverbal pronoun in (109a), but also that of both the higher $NegP_2$ in finite clauses and the $NegP_1$ in infinitival clauses. Notice that the future tense is assumed to be a modal, thus word order in (109a) straightforwardly follows from the structure in (109b). Also, note that the structure in (109b) is simplified, the lower VP is in fact dominated by the infinitival phrase, not TP (cf. Koopman and Szabolcsi 2000).

There are obviously lingering issues as to what is really the status of the negative particle *ʃì* in the clausal structure. I argue that it is accompanied by a zero negation.

(109) a. mɔ́n ná ntáp twó mé: *(ŋ̀ı) ʃı fú: (*ŋ̀ı) ŋú
Child IRR Neg F_1 arrive 3sg Neg call 3sg you
'The child will not arrive without calling you'

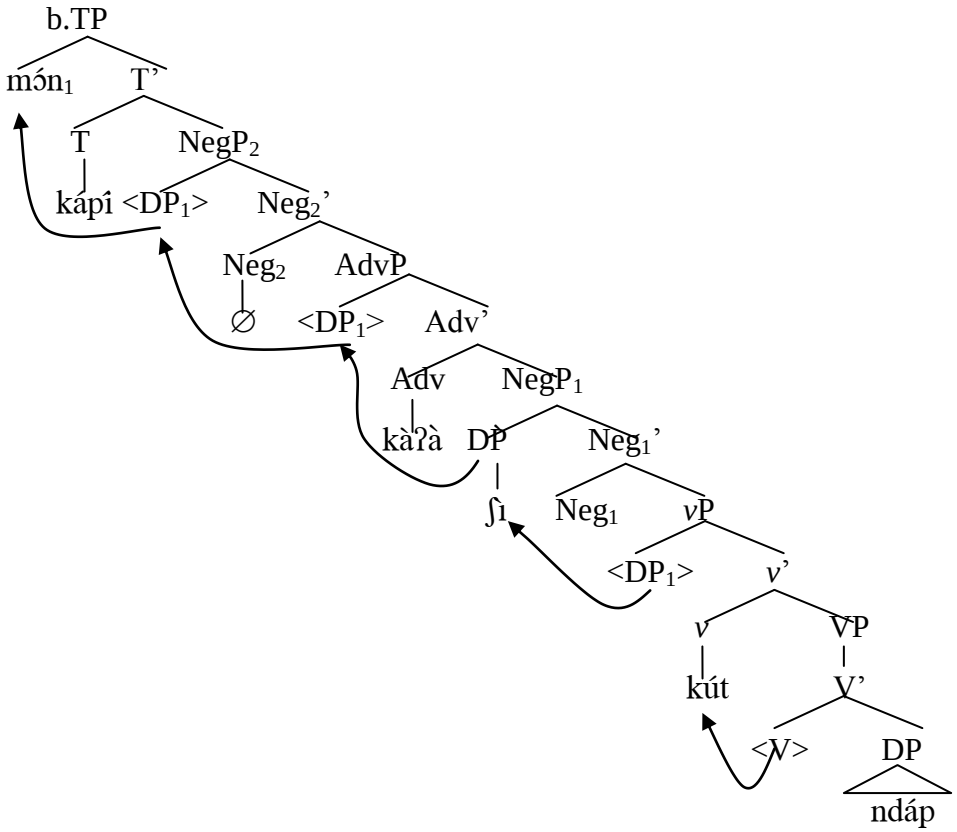
b.



Nevertheless, we have seen cases where the negative particle seem to surface on its own without the matrix negative particle such a *mâ*, *ntáp* etc. Crucially, I treat *ʃi* as a downstairs negation morpheme that is different from the regular standard negation morpheme at the clausal level. The idea is that it never combines with any of the TAM markers that commonly precede the main verb, although it has a wider distribution across lexical categories. I argue that this negation particle generally appears before a constituent (e.g., NP, PP, VP). When it occurs before a verb, the tense is mostly a tenseless adjunct, in which case it reads as without (e.g., *without a care*) or not (e.g., *not crying*). What the derivation in (110b) shows is that even when the overt matrix negation particle is absent, *ʃi* cannot surface in a higher negation particle slot, but is confined to the downstairs negation particle slot.

(110) a. mɔ́n kápî kàʔà ʃı kút (*ì) ndáp
Child PST_4 Adverb NEG build 3sg house
'The child had not built a house (yet).'

b.



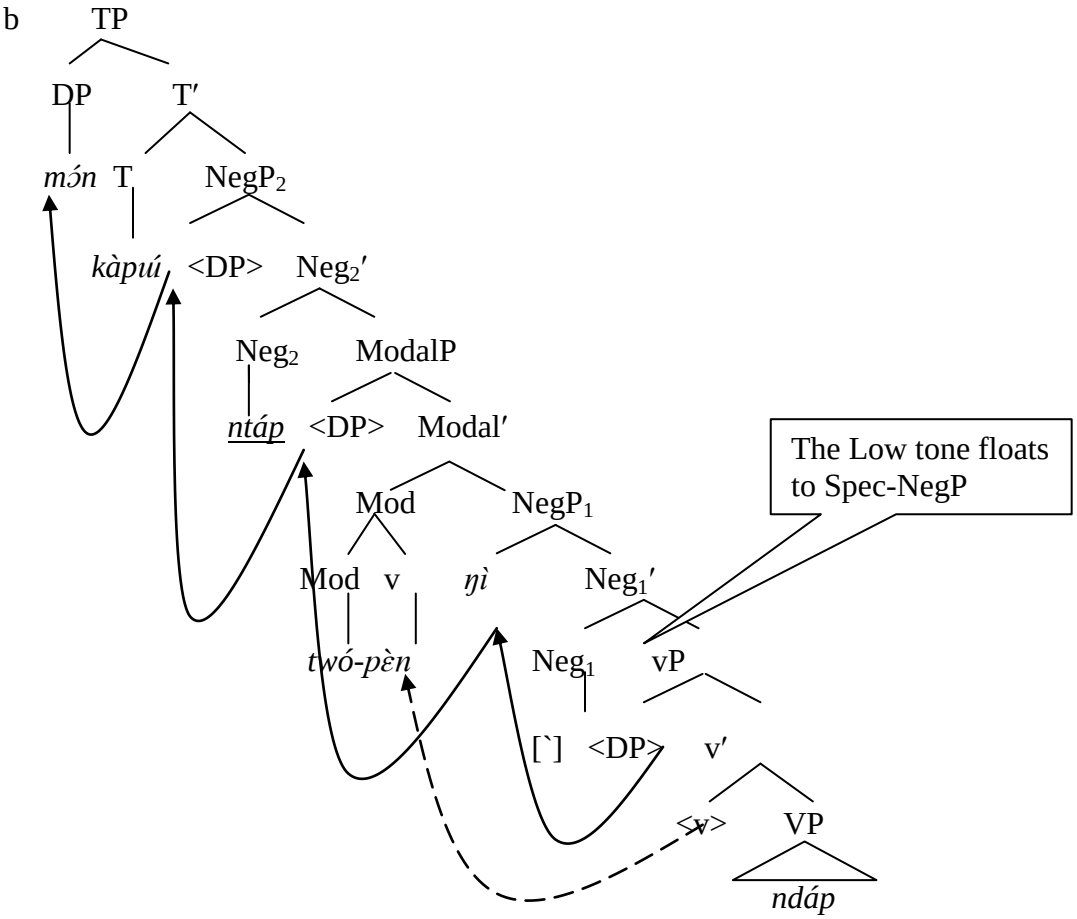
The theory of negation proposed here assumes that the postverbal pronoun and *ʃi* compete for the same specifier position (e.g. $NegP_1$). If we put together the assumption that in any infinitival clause, the specifier position of $NegP_1$ must be filled by the negative particle *ʃi* and the fact that *ʃi* is not allowed before finite verb (e.g., the slot that is commonly adequate for standard negation morphemes), then, one can argue that only a standard negative particle is felicitous in under the higher negation head in the clause. For that reason a postverbal pronoun is available to fill the specifier position of the lower negation phrase ($NegP_1$).

In sentences that combine both the tense affixes and the modal, the approach adopted here still holds. Consider the example in (111a) and its derivation in (111b). The order of the tense affix *kàpî* 'remote past' and the modal *twó* 'will' straightforwardly follows from the assumption that the tense and the modal have different surface position within the clause (Cinque 1999). Thus, the tense is higher than the modal. Under this approach then, an example like (111a) will have a structure like (111b) where the past tense precedes the future tense, which in turn precedes the negative particle.

The structure in (111b) yields the correct word order without any further assumptions and is thus a possible configuration for the syntactic relation between the past tense, future tense, and negation markers in Shupamem.

(111) a. mɔ́n kàpʉ́ ntáp twó pɛ́n *(nì) ndáp
1-child P_4 NEG F_1 paint 3sg 3-house
'The child would not have painted the house.' (Conditional)

b



To conclude this section, I claim that the expanded NegP analysis developed here contributed to determine the structural order of all negative types attested in Shupamem with respect to the surface position of various tense markers.

Additionally, we have been able to account for the status of postverbal pronouns that are obligatorily required in standard negation. It has been argued that the postverbal pronoun is the head of the lower negation functional projection. It has also been demonstrated that the two positions of negation within a clause serve different functions in Shupamem. The topmost NegP corresponds to that of finite verbs whereas the lower one corresponds to that of infinitival verbs.

10.2.Contexts without Post-verbal Pronouns

Shupamem displays a number of negation patterns in which the postverbal pronoun does not appear alongside the preverbal negation morpheme (Neg_2). The common ground between these patterns is of modal nature, namely, the fact that they are not declarative like the examples discussed in standard negation constructions. When negation appears in imperatives, subjunctives or expletive negation, the post-verbal pronoun does not occur.

(112) Negative Imperatives

a. mà fù mɔ́n
NEG call .IMP 1-child
'Don't call the child'

b. mà fù jɯ́ mɔ̀n
NEG call.IMP 2pl 1-child
'Don't call the child!'.

(113) Negative subjunctive

mə̌ rjé mí mɔ́n mà twó (*ŋ̀ì)
1sg ask.Past that child NEG come 3sg
'I asked that the child not to come.'

(114) Expletive negation

mə̌ siɛ́t mí mɔ́n mà twó (*ŋ̀ì)
1sg prohibit.Past that child NEG come 3sg
'I prohibited that the child not to come'

In terms of the examples given in (112) and (115), Shupamem and European Portuguese are quite similar in that expletive negation in the subjunctive complements is triggered by certain a matrix verb like *prohibit*. As the translations show, the complement clause does not involve semantic negation in both languages. I conclude that the syntactic structure of expletive negation of Shupamem is similar to that of Romance languages among others, see the following European Portuguese examples (S. Mascarenhas, p.c.):

(115) a. O João proibiu a Maria de não se ir embora.
the João prohibited the Maria of not refl go away
'João prohibited Maria from leaving.'

b. A Maria está proibida de não se ir embora.
The Marie is prohibited of not ref. go away
'Maria is not allowed to leave.'

It has been shown in the previous sections that in any instance of clausal negation, the postverbal pronoun is triggered by an overt clausal negation morpheme (e.g.), typically one of the negation particles that are discussed in section 9.1., with which it forms a bipartite negation pattern in Shupamem.

This actually means that if the postverbal pronoun is bound to the preverbal negative particle, the prediction is that the absence of any preverbal negation morphemes should induce the absence of a postverbal pronoun at sentential level. This claim is corroborated by adjunct clauses that are headed by the negative particle *ʃi* which does not require a postverbal pronoun.

It should be noted that, in general, the negative particle *ʃi* only appears in a lower level of the clause and in most cases, it behaves as a constituent negation morpheme as opposed to sentential ones. For that reason, it should be set apart from sentential negation morphemes. It is even likely that the negation marker *ʃi* sits in the specifier position of an XP governed by any of standard negation morphemes of the matrix IP. There is no clear answer as to whether it can be analyzed as a bipartite negation as well, I leave this issue open for further research.

10.3.Consequences for the Theory of Grammar

The types of negation established in Shupamem display different syntactic properties that raise a bigger question for the theory of grammar with respect to the typology of negation in general and the existence of a universal functional category Neg (cf. Belleti 1990, Zanuttini 1991, Aboh 2004, Bell 2004). This chapter set out the goals of providing a description and an analysis of negation in Shupamem and further answering the following questions:

(a) What are the mechanisms available to Shupamem to express sentential negation (standard negation)?

(b) What are the syntactic distributional properties of all negation types in relation to the whole clause as well as basic constituents of the clause?

(c) What is the implication of these two questions to the theory of grammar?

The above section addressed these questions, based on the data, issues and proposal of bipartite negation put forward in this analysis. Under the derivational approach adopted here, we have seen that Shupamem has two major strategies of expressing negation:

(a) the bipartite negation (e.g., *mâ, ntáp, má, jé, tò,* and *nđiʔi*) consisting of NEG_2 which immediately precedes the main verb and NEG_1 (e.g., post-verbal pronouns) encliticized to the right edge of the same verb;

(b) constituent negation (e.g., *ʃi*) that consists of a single negation particle, the head of a lower negation functional projection. Contrary to standard negative particles, the constituent negative particle does not require any postverbal pronoun

The approach adopted here has demonstrated that the surface form of the negative particles associated with standard negation depends on tense, aspect, mood and phi-features of the subject DP. As we can see in the paradigms illustrating standard negation, the surface form of preverbal negation particle is morphologically controlled by tense, aspect and mood. Furthermore, while the

postverbal pronoun is obligatorily required in standard negation, its morphological status depends on the phi-features of the subject DP, because it is coreferential to it, thus systematically agrees in person and number with it. Earlier data from Koelle (1854) suggest that bipartite negation is an old syntactic feature of Shupamem where the postverbal pronoun is obligatorily required. Koelle's (1854:187) examples like *ntá mbīn-a* 'I don't dance' clearly indicates that there is a number agreement between the subject pronoun *n-* 'I' and the postverbal pronoun *–a* cliticised to the verb *mbīn* 'dance'.

The obvious advantage of the syntactic approach adopted here is that it can easily capture distinct morphological and syntactic features of each negation type in a much more complete and adequate way. As we have shown in the previous sections, the syntactic component of our grammar bears the burden of most of the descriptive generalizations and explanatory resources with respect to the surface position of each negation type in the clause. The functional projections of the clause (e.g., ModalP, ParticipleP, TP, AspP, vP, VP) that include NegP and syntactic movements further our understanding of negation in Shupamem in a considerable way. We have also shown that Shupamem is a NC language using relevant examples that suggest that the highest NegP is the functional projection that triggers the NC reading.

11.Conclusion and Further Questions

The main objective of this chapter was to describe negation in Shupamem. Several questions have been raised about negative constructions in this analysis. Among these questions were the following:

a) What is the status of negative markers in Shupamem?

b) How do tense, mood and aspect interact with negative markers?

c) Why are postverbal pronouns obligatorily required in one set of negation constructions and not the other set?

In this discussion, I have demonstrated that negation in Shupamem may involve more than one negation strategies. Overall, despite the morphological differences between standard negation morphemes, we have seen that they all share similar distributional properties with respect to the main verb. I have argued for the expanded NegP approach developed in Bell (2004). Syntactically speaking, I conclude that standard negation in Shupamem can be argued to be a bipartite negation although Neg_1 that morphologically spells out as a postverbal pronoun agrees with the subject DP.

Chapter Six: Questions and Focus Constructions in Shupamem

1.Introduction

This chapter presents an in-depth analysis of question types attested in Shupamem, with a particular emphasis on the morphosyntax of focused constituents (left peripheral, postverbal focused constituents and focused VPs). Specifically, I describe the asymmetries between focused subject DPs and postverbal focused DPs (those which usually appear after the overt focus marker *pò*) in order to gain better understanding of their syntactic characteristics and functions in Shupamem grammar. Much like many Chadic languages (Hartmann and Zimmerman 2010) and many Grassfields Bantu languages, Shupamem uses a number of focus strategies both in declarative and interrogative sentences.

The basic devices used for focus marking in Shupamem are: (a) the cleft construction introduced by the expletive subject (Es) *á* 'it' (for left peripheral focused expressions) associated with movement of the DP arguments into the left periphery, (b) the postverbal focus marker *pò* (for postverbal focused expressions)

typically in cases such as focused direct object DPs, focused PPs or adjuncts, or focused locative or tense adverbs and (c) verb doubling inside the clause that encodes predicate-centered focus or verb fronting in a cleft construction. In this chapter, it will be shown that a simple argument or a wh-phrase in Shupamem may appear either after a postverbal focus particle *pô* (e.g. object wh-arguments, wh-adjuncts) or in a clause initial position introduced by an expletive subject *á* associated with a relative pronoun in cleft constructions (e.g. subject wh-expressions; object wh-expressions, and complex wh-adjuncts). It will also be argued that predicate-centered focus encoded by verb doubling is not derived from a cleft construction as formerly proposed in Aboh (2006). In support of the clefting analysis of wh-ex-situ, I present a set of structural parallels between cleft constructions and wh-ex-situ questions in Shupamem regarding (i) the complementizers *júó* 'that' and *ŋà* 'where' introducing the relative clause, and (ii) the optional presence of the copula. This analysis thus uncovers the structural asymmetry between focused subject DPs, focused object DPs and focused adjuncts both in interrogative and declarative clauses. The data from Shupamem discussed here show that canonical subject DPs, unlike object DPs, are systematically blocked from being interpreted as focused in a position immediately before the verb, i.e. between the tense marker and the verb.

This implies that an adequate analysis of focused expressions in Shupamem must take into account the asymmetry between subject DPs, object DPs as well as adjuncts with respect to the expressive devices that they use for the expression of focus. To date, there is a tendency in a number of focus theories in the literature, usually developed on the basis of intonation language; to assume that the 'focusability' of a constituent in a given language solely depends on its prosodic status, not on other factors (e.g., semantic, morphology or pragmatic) (Artstein, 2004). I demonstrate that there are other factors that also play a significant role in the interpretation of focused constituents, namely: (a) overt focus particles that encode the focused elements and (b) syntactic movements that place the focused elements in its appropriate syntactic position with respect to the main verb of the clause and (c) verb doubling that indicates a predicate-centered focus.

This chapter is structured as follows. Section 2 briefly discusses the distinction between focus positions (that are the main interest of this analysis) and topic positions as expressed in a clause. Section 3 offers a discussion of basic patterns of focus marking attested in Shupamem. Specifically, it explains the distinction between subject focus (SF) and non subject focus (NSF) as well as predicate-centered focus. Section 4 is devoted to the syntactic analysis of each focus type where a distinction between cleft constructions and postverbal focus is made.

It also discusses the syntax of verb doubling that encodes the focused verbs, using Chomsky's (2005) hypothesis of parallel chains where the trace of fronted predicate is viewed as replaced by its copy. The last section summarizes the findings of this analysis.

2.Initial Comparison of Focus positions and Topic Positions in Shupamem

Although this chapter is mainly interested in the structure of focus constructions both in declarative and interrogative sentences, it is important to clarify from the outset the differences between focus and topic positions as they will be relevant to the syntactic treatment of focus marking both in the left periphery and in the postverbal positions. Focus and topic constructions in Shupamem are each encoded by a pre-clausal XP as a consequence of movement into the left periphery. In Shupamem, the structures of focus and topic constructions are very similar in that there is always an expletive pronoun that precedes the focused XP or the topicalized XP in the clause. However, structurally, while the focused XP may come immediately after a covert copula (1c) that can overtly spell out as a negative counterpart (1d) (e.g. cleft), the topicalized XP is phonologically signaled by the topic marker *pò* (1b) and only appears in its positive form, otherwise the whole sentence will be ungrammatical.

From a simple sentence like (1a), one can obtain a topic (1b) and a focus (1c, d, and e)). Notice that the SVO order of the canonical sentence in (1a) changes as soon as the subject DP has to be focused as shown in (1c). I will provide more detail about the type of subject-verb inversion rule involved in (1c) later on.

(1) a. músá pí tè
Moussa P_1 escape
'Moussa escaped.'

b. á pò músá # î pí tè
Es Top Moussa 3sg P_1 escape
'As for Moussa, he escaped.' (Topic)

c. á té músá
Es escape Moussa
'It was MOUSSA who escaped.' (Subject Focus)

d. á músá júó î té nə́
Es Moussa who 3sg escape COMP
'It was MOUSSA who escaped.' (Cleft)

e. á ndîʔ músá júó î té nə́
Es NEG Moussa who 3sg escape COMP
'It is not MOUSSA who escaped.' (Negative Cleft)

The distinction between topic and focus positions becomes more transparent when both are expressed in a single clause. In a simple sentence like (2a), the subject DP *Moussa* precedes the direct object DP *ŋàm* 'horse'. However, the example in (2b) derived from (2a) shows these same DPs as topic (*á pò ŋàm* 'as for the horse') and focus (Moussa) constituents, respectively, with topic obligatorily appearing before focus. However, for some reason, only (2b) where subject DP focus appears in immediate postverbal position is acceptable after a topic. Clefts are systematically ruled out in a similar context as shown in (2c&d).

(2) a. músá pî ʃĩ ŋàm
Moussa P_1 attach horse
'Moussa attached the horse.'

b. á pò ŋám # á ʃi nà músá wî
Es Top horse Es attach PFV Moussa it
'As for the horse, it is MOUSSA who attached it.'

c. *á pò ŋám # á músá júó î ʃi nî nə́
Es Top horse Es Moussa who 3sg chain it COMP
'As for the horse, it is MOUSSA who attached it.'

d. *á pò ŋám # á ndîʔ músá júó î ʃi nî nə́
Es Top horse Es NEG Moussa who 3sg chain it COMP
'As for the horse, it is not MOUSSA who attached it.'

Despite some apparent structural similarities presented in the above examples, Shupamem topic and focus constructions differ significantly. Their grammatical differences become more transparent with closer scrutinity of the devices that are used to encode them. For instance, while a topicalized XP immedicately appears after the topic marker *pò* (1b) and is followed by a pause (phonetically marked by the symbol #), a focused XP occurs immediately after a covert copula or a negative copula (1d and e) and is followed by a relative pronoun *júó* (1d&e). In the next section, I will discuss general aspects of focus strategies of Shupamem with an emphasis on the structural differences between subject focus and object focus.

3.Quick Survey of Shupamem Focus Strategies

In this section, I offer an overview of various strategies commonly used in Shupamem to express focused XPs. I also provide some empirical evidence to support my claim that Shupamem has two focus fields, namely (a) the left peripheral field where there is no overt focus marker, and (b) the postverbal focus field whose head is the focus particle *pò* (not to be confused with the topic marker presented earlier) that may precede any postverbal DP, be it an argument or an adjunct.

Before moving on to the detail of focus strategies, let me point out that Shupamem neutral word order is SVO as exemplified in (3) where no movement triggered by focus has occurred nor any focus particle has been introduced. There is no overt morphological case on DPs whose functions are deduced from their surface position relative to the main verb in a clause. Like in Naki (Jeff Good, 2005) as well as many other related Bantu languages, Shupamem displays a Suject-Verb-Object (SVO) as its basic sentential word order, an order which is usually characterized as the 'canonical' word order as in Jeff Good (2005:37).

There is no overt agreement marker of the subject DP on the main verb in the sentence. Rather, verbal morphology is limited to some segmental tense, mood, aspect, and negation marking. Verbal tonal morphology also plays a crucial role in Shupamem syntax in that all underlying tones on the verbs and its various arguments (e.g., subject DP and pronouns, object DP and pronouns) are affected considerably once inserted into the sentence. Aspectual and tense information are expressed by independent morphemes that occur before the verb, as the irrealis marker *ná* and the future tense *twó* in (3a) or the past tenses *pî* and Ø- in (3b). At the phonological level, the tone on the verb may surface as Low when associated with the perfective in the indicative or in negative imperatives or High when associated with the imperfective.

(3) a. mbièrə́ ná twó wǒʔ ŋ̀gbɔ̌m

king IRR F_1 grind corn
'The king will grind the corn'

b. mbièrə́ pî Ø wǒʔ ŋ̀gbɔ̌m
king P_3 PFV grind corn
'The king ground the corn'

From a methodological standpoint, I will use 'question-answer pairs' to determine the status of the focus where the element sharing the same syntactic position will be assumed to be focused or not depending on many factors. Similar approach has been used in Good (2005) for the description of topic and focus fields in Naki. Thus, I build on the comparison of interrogative and declarative sentences that involve focused expressions to formulate some general principles that account for the syntactic distribution of the VP arguments and adjuncts with respect to focus both in cleft constructions as well as those that occur after the postverbal focus marker *pò*.

It is worth pointing out that the focus particle *pò* may appear with a rising tone in some contexts and provides important clues for the addressee's pragmatic interpretation of the focused expressions in Shupamem. As the following examples show, the focus particle may occur before any postverbal constituent, be it a direct object (4b), an indirect object (4c), or a DP adjunct (4d-g). It is important to point out that, in (4b-g), if the focus particle deletes, the focus interpretation will be lost

and the sentence will have a reading with no particular focus on any of the DP arguments or adjuncts.

(4) a. mɔ́n swò lɛ̀rwà tə̀ pàm

Child put.PST book into bag
'The child put the book into the bag. '

b. mɔ́n swò pò *lɛ̀rwà* tə̀ pàm
Child put.PST Foc book into bag
'The child put THE BOOK into the bag.'

c. mɔ́n swò lɛ̀rwà pǒ *tə̀ pàm*
Child put.PST book Foc into bag
'The child put the book INTO THE BAG. '

d. mɔ́n swò lɛ̀rwà tə̀ pàm pǒ *nàkúá*
Child put.PST book into bag Foc quickly
'The child put the book into the bag QUICKLY.'

e. mɔ́n swò lɛ̀rwà tə̀ pàm pǒ *ŋ̀kùrə̀*
Child put.PST book into bag Foc yesterday
'The child put the book into the bag YESTERDAY. '

f. mɔ́n swò lɛ̀rwà tə̀ pàm pò *ŋ̀kà ʃ̃ímò?*
Child put.PST book into bag Foc time one
'The child put the book into the bag ONE TIME.'

As can be observed in the above examples, a pragmatically neutral clause such as (4a) lacks a focus particle. The factors which determine which expression occurring after the verb is focused have to do with the placement of the focus particle *pò* before the direct object (4b), the indirect object (4c) or adjunct as shown in (4d-g) and some syntactic restrictions that the focus particle imposes on the element its precedes (e.g., the fact that only strong pronoun should appear after a

focus maker, no weak pronoun appears in that context.). The focus particle *pò* can also be used to focus a wh-expression as in (5).

(5) a. mɔ́n swò (pò) *kuə̀* tə̀ pàm mə́?

Child put.PST Foc what into bag QM
'WHAT did the child put in the bag?'

b. mɔ́n swò *kuə̀* *(*pǒ*) tə̀ pàm mə́?

Child put.PST what Foc into bag QM
'WHAT did the child put in the bag?'

c. mɔ́n swò lɛ́rwà *(pǒ)* tə̀ pàm mə́?

Child put.PST book Foc into bag QM
'The child put IN THE BAG.'

d. mɔ́n swò lɛ́rwà *(pǒ) *jà ə̀?*
Child put.PST book Foc where QM
'WHERE did the child put the book? '

e. mɔ́n swò lɛ́rwà tə̀ pàm *(pǒ) *nɛ̀ ə̀?*
Child put.PST book into bag Foc how QM
'HOW did the child put the book into the bag.'

f. mɔ́n swò lɛ́rwà tə̀ pàm *(pǒ) *ʃúʔnɛ̂ ə?*
Child put.PST book into bag Foc when QM
'WHEN did the child put the book into the bag?'

g. mɔ́n swò lɛ́rwà tə̀ pàm *(pò) *ỳkà jîsuə́ʔ ə́?*
Child put.PST book into bag Foc how many QM
' HOW MANY TIME did the child put the book into the bag?'

h. mɔ́n swò lɛ̀rwà tə̀ pàm (pǒ) *mə̀ŋgǎkùəʔ*
Child put.PST book into bag Foc why
'WHY did the child put the book into the bag?

The first generalization that emerges from the comparison of the examples in (4) and (5) with respect to the focus particle *pò* is that the postverbal focus marker is only optional when it comes before a on wh-adjunct (see (4b) and (5a), (4c) and (5c); and adverb or locative DP (see (4d-g). In the interrogative sentences, the focus particle obligatorily precedes the adjunct wh-XP (see (5d-g); otherwhise the sentence will be ungrammatical. This implies that *pò* can be characterized as a focus device that is optional before any expression that occurs after the verb except wh-adjuncts that obligatorily require an overt postverbal particle for grammaticality (5d-g).

I assume that any constituent that occurs after a verb, be it an argument or not, may be focused in Shupamem. However, the postverbal focus marker *pò* is systematically ruled out before any focused subject DPs as illustrated by the examples in (6a'&b').

(6) a. Q: à swò *mɔ́n* lérwà tə̀ pàm m*ə̀?*
Es put child book into bag QM
'Is it THE CHILD put the book into the bag?'

a'. Q: *à swò pò *mɔ́n* lérwà tə̀ pàm m*ə̀?*
Es put Foc child book into bag QM
'Is it THE CHILD put the book into the bag?'

b. A: à swò *mɔ́n* lɛ́rwà tə̀ pàm
Es put child book into bag
'It is THE CHILD put the book into the bag'

b'. A: * à swò pò *mɔ́n* lɛ́rwà tə̀ pàm
Es put Foc child book into bag
'It is THE CHILD who put the book into the bag'

We can see from the interpretation of the examples in (6) that in no circumstance, a DP subject is preceded by a postverbal focus marker *pò*. This in fact illustrates the asymmetry between subject focused DPs and non-subject focused DPs.

Another strategy commonly used to encode focus in Shupamem is verb doubling as illustrated in (7).

(7) a. Q: món *swò* lɛ́rwà *swò* tə pàm mə̀ ?
Child put book put into bag QM
'Did the child PUT the book in the bag?'
(or did he THROW it away?)

a'. Q:*món pò *swò* lɛ́rwà *swò* tʉ̀ pàm mə̀ ?
Child Foc put book put into bag QM
'Did the child PUT the book in the bag?'
(or did he THROW it away?)

b. A: món *swò* lèrwà *swò* tə̀ pàm

Child put book put into bag

'The child PUT the book in the bag'

b'. A: *món pò *swò* lèrwà *swò* tə̀ pàm

Child Foc put book put into bag

'The child PUT the book in the bag'

It emerges from these examples in (7) that the focus particle *pò* does not appear before the verb, hence its name "postverbal focus marker". Whenever the postverbal focus marker occurs before a verb, the sentence is systematically ruled out as shown in (7a'&b'). The nature of the focus marking strategies briefly presented in (4)-(7) can be schematically summarized as in (8), (9) and (10). Notice that the following structures are meant to indicate word order of elements within the sentence with respect to each type of focus involved.

(8) Subject Focused DPs

a. $[_{TP}$ Es $[VP_j\ [DP_{Subject}]_F\ [<VP_j>\ [\ (DP_{Object}/DP_{Adjunct})$ *VP movement*

b. $[_{TP}$ Es $[DP_{Subject}]_F\ [CP\ [<DP_{Subject}>$ VP $(DP_{Object}/DP_{Adjunct}]]]]$ *Cleft*

(9) Object Focused DPs

a. $[_{TP}\ DP_{Subject}\ [VP\ [(pò)\ DP_{Object}/\ *(pǒ)\ DP_{Adjunct}]_F]]]$ *Post-verbal focus pò*

b. $[_{TP}\ Es\ [DP_{Object}]_F\ [CP\ [DP_{Subject}[\ VP\ [DP]]]]$ *Cleft*

c. $[_{TP}\ Es\ [DP_{Adjunct}]_F\ [CP\ [DP_{Subject}[\ VP\ [DP]]]]$ *Cleft*

(10) Focused VP

a. $[_{TP}DP_{Subject}\ [VP_j\ [VP_j\ [DP/DP]]]$ *Focused VP*

b. $[_{TP}Es\ [VP\ [_{PredP}DP_{Subject}\ [VP]]]]$

A quick comparison of all focus strategies outlined in (9)-(10) reveals two basic asymmetries in Shupamem with respect to the grammatical expression of focus:

(i) Subject focused DPs do not take an overt focus marker, but direct object DPs (optionally) and adjuncts (obligatorily) take an overt post-verbal focus marker *pò.*

(ii) The verb uses a doubling process to encode focus.

(iii) Structurally, subject focused DPs are not allowed in the position immediately before the verb, therefore, subject-verb inversion is used as a repair strategy for subject DPs focusing. I will return to this later on in my discussion of the derivation of focused subject DPs.

(iv) Verb doubling that marks predicate-centered focus is in complementary distribution with the post-verbal focus marker *pò*.

(v) Only focus tense morphemes are felicitious in any focus construction.

The above account of focus in (8)-(10), though probably too general, aims at providing the reader a broad sense of focus strategies attested in Shupamem. For instance, (8a) is a DP subject focusing where there is verb-subject inversion followed by the insertion of the expletive subject for EPP reasons. (8b), contrary to (8a) is a cleft construction that extracts the subject DP into the left periphery. (9a) suggests that the postverbal focus marker *pò* is optional before a direct object, but obligatory before the adjunct. (9b&c) are are cleft constructions that extract the direct object and the adjunct respectively, into the left periphery as focus strategies. (10a&b) display verb doubling and verb cleft respectively as syntactic devices available to Shupamem for focusing the verb in a clause.

These generalizations can be summarized as in table 6.1.

Focus Stuctures	**Construction**	**Clausal Constituent Order**
(a) Subject focus	Canonical	Es > verb-subject> (DO/IO> Adjuncts)
	Cleft	Es > Subj> CP> pro> verb > (DO/IO> Adjuncts)
(b) Predicate focus	Canonical	Subj > verb > (DO/IO>Adjunct) verb
	Cleft	Es >verb> CP> Subj> verb> (DO/IO>Adjunct)
(c) Object focus	Canonical	Subj>verb> (pò) >DO/IO
	Cleft	Es > DO > CP > subject > verb
(d) Adjunct focus	Canonical	Subj > verb> *(pò)> Adjunct)

Table 6.1. Focus Structures and Constituent Order in Shupamem

Table 6.1 shows structural differences between all types of focus with respect to word order and the morphological devices used to encode focus.

There is a difference between subject focus and non subject focus. When the DP subject is focused, there is a subject-verb inversion as shown in (a). If it is the predicate that is focused, the verb either doubles or is fronted into the left periphery (b). The details of all these strategies will be given later on.

For the time being, the reader should bear in mind that there is a clear-cut asymmetry in the realisation of subject focus (SF) and non subject focus (NSF) in Shupamem as well as in many West African languages (e.g. Gur and Kwa languages) or Chadic languages (Hartman and Zimmerman, 2010) where subject

focused DPs are treated as a special case of focus that is usually used to avoid interpreting subject DPs as topics in their default grammatical preverbal position (Fielder *et al*. 2010:235). In what follows, I will pattern relevant examples in a way that facilitates the comparison between questions and corresponding appropriate answers. In doing so, it will also make it easy to draw relevant conclusions with respect the the distribution of the postverbal focused elements.

4.Basic Patterns of Focus Marking in Shupamem

This section discusses the basic pattern of focus strategies used in Shupamem. The essential observation is that focus may be expressed overtly by: (a) a cleft introduced by an expletive subject *á*, (b) a postverbal focus marker *pò* that governs a number of verb internal arguments or adjunct and (c) verb doubling that encodes a predicate-centered focus. Put differently, it is very common in Shupamem to focus a part of the sentence such as the DP subject, the verb or the DP object as well as other arguments occurring after the verb (e.g., PP, tense and locative adverbs). As we will see in this analysis, a postverbal focus marker *pò* may occur before DP objects (optionally) and DP adjuncts (obligatorily) while the cleft introduced by the expletive subject marker *á* is usually licensed as a focus device for focused DPs that occur in the left periphery.

Interestingly, focus is not limited to declarative sentences as will be shown in the coming sections. For that reason, interrogative and declarative sentences will be juxtaposed next to each other to facilitate some comparisons that may help drawing relevant generalizations that emerge.

4.1.Focus Marking on Verb Arguments

4.1.1.Subject versus Object Focused Expressions

Based on the following examples, I illustrate the asymmetry between subject DPs and object DPs or adjuncts with respect to the expression of focused constituents. Specifically, I compare subject questions exemplified in (11) and object questions exemplified in (12).

(11) a. Q: à wòʔ *wǒ* ŋgbǒm mə ə?
Es grind who corn COMP QM
'WHO ground the corn?'

b. Q: * *wǒ* wǒʔ ŋgbǒm mə ə?
who grind corn COMP QM
'Who ground the corn?'

c. A: à wǒʔ nà *mbièrə* ŋgbǒm
Es grind PFV king corn
'It is THE KING who ground the corn'

(11') a. Q: à wǒʔ *mbièrə* ŋgbǒm mə ə?
Es grind king corn COMP QM
'Is it THE KING who ground the corn?'

b. A: hmm, à wòʔ nà *mbièrə̌* ŋ̀gbə̌m
Yes, Es grind PFV king corn
'Yes, it is THE KING who ground the corn'

c. Q: mbièrə̌ wòʔ (pò) *ŋ̀gbə̌m* mə̀ ə̀?
King grind Foc corn COMP QM
'Did the king grind THE CORN?'

d. A: Hmm, (mbièrə̌ wə̌ʔ nà (pò) *ŋ̀gbə̌m*)
Yes, King grind ? Foc corn
'Yes the king ground the corn'

(12) a. Q: à *kúíə́* júó mbièrə̀ wòʔ nə̀ ə̀?
Es what that king grind COMP QM
'WHAT is it that the king ground?'

b. Q: * *kùə̌* júó mbièrə̀ wòʔ nə̀ ə̀?
what that king grind COMP QM
'WHAT did the king grind?'

c. Q: mbièrə̀ wòʔ (pò) *kùə̀*
king grind Foc what
'WHAT did the king grind?'

d. A: mbièrə̀ wòʔ nà (pò) *ŋgbə̌m*
king grind PFV Foc corn
'The king ground THE CORN?'

(12') a. Q: à *kùə̀* júó mbièrə̌ wòʔ nə̀ ə̀?
Es what that king grind COMP QM
'WHAT is it that the king ground?'

b. A: à *ŋ̀gbə̌m* júó mbièrə̌ wòʔ nə̀ ə̀?
Es corn that king grind COMP QM
'Yes, it is THE CORN that the king ground'

c. Q: mbièrə̌ wòʔ (pò) *ŋ̀gbŏ̌m* mə̀ ə̀?
King grind Foc corn COMP QM
'Did the king ground THE CORN?'

d. A: Hmm, (mbièrə̌ wòʔ (pò) *ŋ̀gbŏ̌m*)
Yes, king grind Foc corn
'Yes the king ground THE CORN'

The examples in (11) and (12) illustrate new information focus in Shupamem that is very similar to that of Lubukusu, a Bantu language which uses both the in situ strategy and the clefting strategy in regards to wh-constructions (Wasike, 2007). Observe from the examples in (11b) and is ruled out for a simple reason that the subject wh-question *wŏ* is not allowed to occur in the immediate preverbal position of the clause. A similar observation holds true for complex wh-expressions as exemplified in (13) where no complex wh-expression is allowed in a similar position as shown by the ungrammaticality of (13b) and (14b).

(13) a. Q: à wòʔ *fïjà mbièrə̀* ŋgbŏ̌m mə̀ ə̀?
Es grind what king corn COMP QM
'WHAT KING ground the corn?'

b. Q: * *fïjà mbièrə̀* wòʔ ŋgbŏ̌m mə̀ ə̀?
what king grind corn COMP QM
'WHAT KING ground the corn?'

c. A: à wòʔ nà *mbièrə̌ ŋ̀fɛ̀* ŋgbŏ̌m
Es grind PFV king new corn
'It is THE NEW KING who ground the corn.'

(13') a. Q: à wòʔ *mbièrə̌ ŋfɛ̂* ŋ̀gbə̌m mə ə?
Es grind king new corn COMP QM
'Is it THE NEW KING who ground the corn?'

b. A: hmm, à wòʔ nà *mbièrə̌ mfɛ̂* ŋ̀gbə̌m
Yes, Es grind PFV king new corn
'Yes, it is THE NEW KING who ground the corn'

c. Q: * *jî̀jà mbièrə̌* wòʔ ŋ̀gbə̌m mə ə?
What king grind corn COMP QM
'WHAT KING is it that who ground the corn?'

d. Q: á *jî̀jà mbièrə̌$_j$* júó î$_j$ wòʔ ŋ̀gbə̌m mə ə?
Es which king that 3sg grind corn COMP QM
'WHAT KING is it that who ground the corn?'

(14) a. Q: à *jî̀jà ŋgbə̌m* júó mbièrə̀ wòʔ nə ə?
Es what corn that king grind COMP QM
'WHAT CORN is it that the king ground?'

b. Q: * *jî̀jà ŋgbə̌m* júó mbièrə̀ wòʔ nə ə?
What corn that king grind COMP QM
'WHAT CORN is it the king ground?'

c. Q: mbièrə̀ wòʔ (pò) *jî̀jà ŋgbə̌m mə?*
king grind Foc what thing
'WHAT CORN did the king grind?'

d. A: mbièrə̀ wòʔ nà (pò) *ŋgbə̌m mfùə́*
king grind PFV Foc corn fresh
'The king ground THE FRESH CORN?'

(14') a. Q: à *jîjà ŋgbɔ̌m* júó mbièrə̌ wòʔ nə̀ ə̀?
Es what corn that king grind COMP QM
'WHAT CORN is that the king ground?'

b. A: à *ŋgbɔ̌m mfùə́* júó mbièrə̌ wòʔ nə̀
Es corn fresh that king grind COMP
'Yes, it is THE FRESH CORN that the king ground'

c. Q: mbièrə̌ wòʔ (pò) *ŋgbɔ̌m mfùə́* nə̀ ə̀?
King grind FOC corn fresh COMP QM
'Did the king ground THE FRESH CORN?'

d. A: Hmm, (mbièrə̌ wòʔ (pò) *ŋgbɔ̌m mfùə́*
Yes, king grind Foc corn fresh
'Yes the king ground THE FRESH CORN'

It should be mentioned on the basis of the above examples that there is a similarity between the formation of relative clauses and clefts in Shupamem. Judging from the data in (11)-(12), the generalizations that emerge are the following:

(i) Focused DP preceded by the postverbal focus maker *pò* is very local. In other words, postverbal focused DPs only occur in a very limited context (e.g., a postverbal position) both in declarative as well as interrogative sentences (see (11'c&d), (12c&d), (6'c&d), (12c&d) and (12'c & d).

(ii) Focused DPs preceded by the expletive subject *à* are limited to the left periphery (see (11a&c), (11'a&c), (12a&c), (12'a&c), (13a&c), (13'a&c), (13a&b) and (13'a&b). Those constructions can be viewed as cleft constructions where a relative pronoun is always licensed, and there is also a possibility of movement.

(iii) Wh-expressions and focused DPs cannot occur in an immediately preverbal position, when that happens the sentence is systematically ungrammatical.

This implies that the realization of focus on subject DPs differs from that of object DPs in Shupamem. Notice that no Shupamem wh-expression is allowed in an immediately preverbal position (e.g. in [spec-TP]), when that happens the sentence is systematically ruled out as shown in all the (b) examples in (11) through (14).

It should be pointed out that, although Shupamem may use a strict SVO order in yes/no question as shown in (14c) and (14'c), if any wh-expression surfaces in a preverbal position, that canonical SVO order is altered, due to a subject-predicate inversion rule that always applies as exemplified in all the (a) examples in (11)-(14). It appears that wh-expressions are ruled out in Shupamem specifier of TP as a general property of the language stated in (15).

(15). *Wh-in-Spec TP

The subject-predicate inversion rule attested for all subject wh-phrases must apply as a repair strategy to avoid a violation of the constraint in (15) which has been previously characterized in Sabel (2003) as a general property of many Bantu languages. He argues that 'wh-subjects are excluded from occurring in Spec-TP in other Bantu languages such as Kinyarwanda (Maxwell 1981), Dzamba (Bokamba 1976) and Kitharaka (Muriungi 2003) and also in Austronesian languages such as Malagasy, Tagalog, and Javanese, which are optional wh-in situ languages like Zulu' (Sabel, 2003:273). Sabel and Zeller (2006:274) also assert that 'the incompatibility of focus and subject position is not entirely surprising, given that even in subject-prominent languages, subjects are often associated with typical topical functions such as definiteness and referentiality' (Sabel and Zeller, 2006 after Givón, 1976). While wh-expressions are barred from occurring in a preverbal position in Shupamem, they can be clefted. Shupamem data confirm Fielder *et al* (2005:02) hypothesis that 'in a canonical SVO sentence the postverbal position is a default position for NSF' and 'the canonical SVO sentence represents a categorical utterance with topic-comment structure'. Constructions similar to Shupamem postverbal subject focus are found in close related languages to Shupamem.

For instance, Watters 1979:144-148), Hyman (1981:104-105) and Good (2005:46-54) have reported the existence of similar facts in Aghem, Noni and Naki (Grassfields Bantu, Cameroon) respectively. Shupamem is slightly different from those languages in that on top of the subject-verb inversion rule that applies in order to focus the subject DP in a postverbal position, the subject DP can be fronted into the left periphery as well, using a cleft-construction as in the following examples in (16).

(16) a. à fi wó ndáp mə́ ?
Es sell who house QM
'WHO sold the house?

b. à wó júó î fi ndáp mə́ ?
Es who that 3sg sell house QM
'WHO is it that who sold the house?

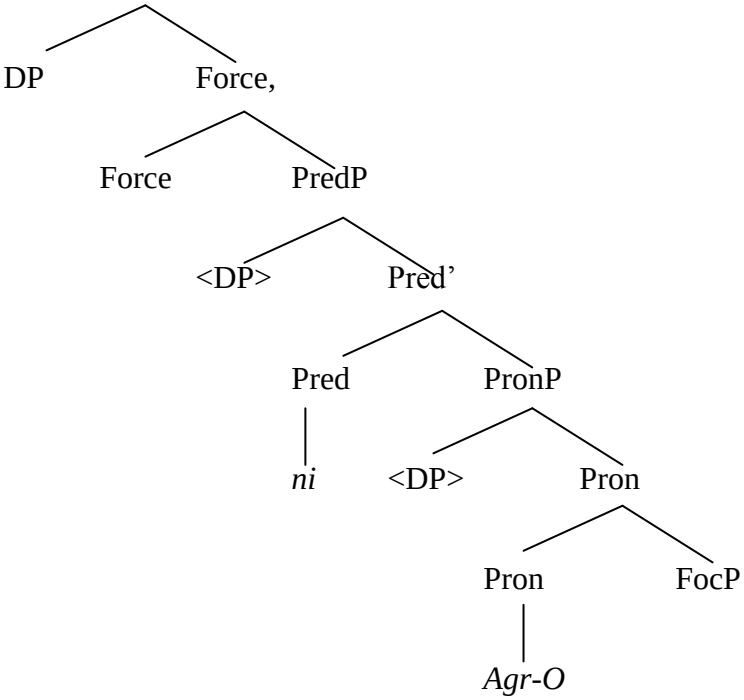
c. à fi na mɔn ndáp.
Es sell Foc child house
'It is the child who sold the house.'

d. à mɔ́n júó î fi ndáp mə́
Es who that 3sg sell house COMP
'It is the child who sold the house?'

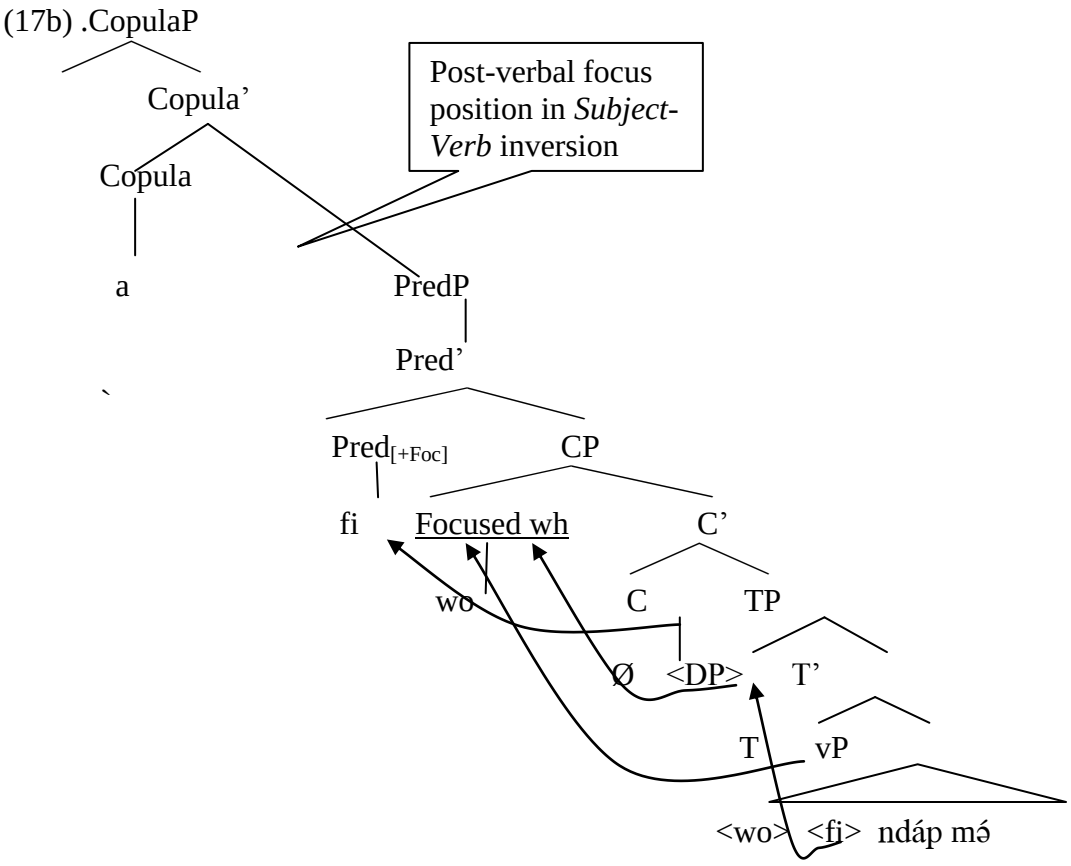
To sum up this section, one can observe that focused subject wh-expressions must appear in a position where they follow the main verb except in clefts, which in turn is preceded by the expletive pronoun *á*. The morphosyntactic realization of subject focus in Shupamem can thus be summarized schematically as in (17b&c) that show to movement of wh-element to spec-CP. The VP is fronted in a sentential initial position (16a) but not in (16b).

For the purpose of this analysis, I will build on Wasike's (2007:91) and Diercks' (2010:200) theories of cleft constructions to argue that ForceP should be replaced by a Copula Phrase. Wasike's orginal tree is repeated in (17a) for convenience. Though the structure in (17a) may account for all the facts about Lubukusu's clefts, it is not all clear why one would project a predicational phrase and a pronominal phrase in the left periphery. Thus, I will assume a simple structure of cleft contruction that is more in line with Diercks' (2010) theory of similar facts in Lubukusu.

(17a). ForceP (Wasike, 2007:91)



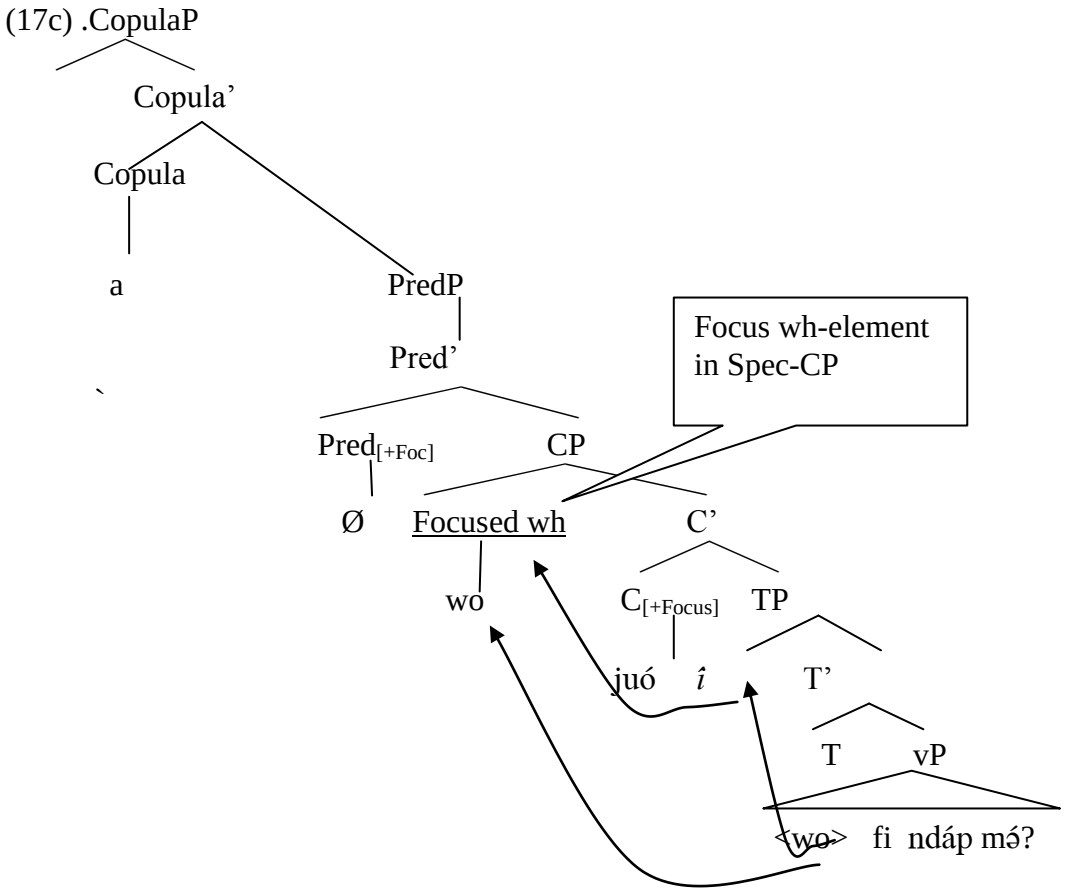
For the time being, I put aside Rizzi's (1997) cartography of the left periphery to focus only on the distribution of the copula and the focused wh-element. Therefore, I assume that a sentence like (16a) will be represented as in (17b) where the +focus subject wh-element *wò*, originates from spec-vP and raises through spec-TP to spec-CP. The verb *fì* also originates from vP and moves through T and C to finally lands in the PredP head, giving rise to the subject-verb invertion displayed in (16a).



The example in (16a) represented in the structure in (17b) shows how the wh-element *wó* 'who' moves stepwise to spec-CP, followed by the verb *fi̋* 'sell' into the head of the empty copula phrase. I argue that verb movement into the head of PredP is possible in (16a), not in (16b) because of the empty complementizer. The evidence for this argument comes from (16b) represented in (17c) where the overt complementizer *juó* blocks the movement of the verb, that is why the verb *fi̋* 'sell' remains in situ.

It follows from the structure in (17b) that what I have previously referred to as postverbal focus position for subject DPs is in fact the specifier position of CP that hosts the subject DP coming from the specifier of vP. The verb *fî* 'to sell' moves into PredP and we obtain the surface *Verb > Subject DP* in (17b). The reader should bear in mind that I have used a simplified structure in (17b) just for illustration.

The example in (16b) is derived as follows:



The kind of analysis schematized (17c) is different from (17b) in that the subject wh-element, fronted into the left periphery leaves a resumptive pronom *î* in the specifier position of TP. The structure in (17c) raises three interrelated questions about the analysis of the left peripheral field in Shupamem, namely: (a) what is the structural position of the expletive pronoun *á*? In particular, is it a functional head of the Focus Phrase (FocP) or is it just an expletive pronoun that occurs in the specifier position of TP that is required for EPP reasons? (b) What is the syntactic position of the focused subject DPs in (16a) and in (16b)? Put differently, is it located in the canonical subject position of TP, or has it moved into the specifier position of FocP? (c) What is the syntactic structure of the landing site where the VP moves into? In particular, is it just a VP, a TP or a bigger constituent? For the time being, I assume that the expletive pronoun *à* which precedes the subject focused DP is not the head of FocP, but rather just an expletive subject that is positioned in the head of the Copula Phrase for EPP reasons (see (17b&c). I will give an explanation for this assumption in the section devoted to the discussion of the syntactic structures of all focus strategies used in Shupamem. So far, I have limited my attention to the description of subject focused DPs and object focused DPs.

Having shown the strategies that are used to encode subject focused DPs as well as object DPs, let me now turn to to the marking of focused adjuncts such a PP, locative expression or time adverbs

4.1.2.Focused Wh-Adjuncts (Locational, Time and Manner Adverbs)

It is standard assumption in the literature since Aoun and Li's (1993) monograph to divide wh-adjuncts into two groups. The first group consists of *when* and *where* and the second group consists of *why* and *how*. In Sabel's (2003) analysis, the former group is treated as referential adjuncts while the later is viewed as non-referential adjuncts. This section offers a discussion of the syntactic properties of referential and non-referential adjuncts in Shupamem. Interestingly, much like many other Bantu languages such as Lubukusu (Wasike, 2007), Shupamem exhibits a striking contrast between wh-adjuncts and wh-arguments as summarized in (18).

(18)	a. *jà*	'Where'	(Referential wh-adjunct)
	b. *fúʔnɛ̂*	'When'	(Referential wh-adjunct)
	c. *nɛ̂*	'How'	(Non-referential wh-adjunt)
	d. *mùŋgǎkùə*	'Why'	(Non-referential wh-adjunct)

Shupamem sentences involving focused adjuncts always place the focused adjunct in the final position of the clause. That focused element is immediately preceded by the postverbal focus marker *pò* as shown in the following examples. In

other words, focused wh-adjuncts are banned from appearing in any position before the VP unless they are interpreted as regular DPs as I will show later.

(19) a. Q: lérà? jàp péʃi *(pǒ) *jà* à?
Teacher put pencil Foc where QM
'WHERE did the teacher put the pencil?'

b. Q: *à *jà* ŋá: lérà? jàp péʃi nà à?
Es where that teacher put pencil COMP QM
'WHERE is it that the teacher put the pencil?'

c. A: lérà? jàp nà péʃi *(pǒ) *ndù tébè*
teacher put PFV pencil Foc on table
'The teacher put the ON THE TABLE.'

d. A: *à *ndù tèbè* ŋá: lérà? jàp péʃi nà
Es on table that teacher put pencil COMP
'It is on the table that the teacher put the pencil.'

(20) a. Q: lérà? jùn péʃi *(pǒ) *fú?nɛ̂* à?
teacher buy pencil Foc when QM
'WHEN did the teacher buy the pencil?'

b. Q: *à *fù?nɛ̂* júó lérà? jùn péʃi nà à?
Es when that teacher buy pencil COMP QM
'WHEN is it that the teacher bought the pencil?'

c. A: lérà? jún nà péʃi *(pǒ) *nə ŋ̀kǔ?nʒú*
teacher put PFV pencil Foc at morning
'The teacher bought the pencil IN THE MORNING.'

d. A: * à *nə ŋ̀kǔ?ʒú* júó lérà? jùn péʃi nà à ?
Es at morning that teacher buy pencil COMP QM
'It is IN THE MORNING that the teacher bought the pencil?'

(21) a. Q: lérà? jùn péʃi *(pǒ) *nɛ̂* à?
teacher buy pencil Foc how QM
'HOW did the teacher buy the pencil?'

b. Q: *à *nê* júó lérà? jùn péʃi nə ə?
'Es how that teacher buy pencil COMP QM
'HOW is it that the teacher bought the pencil?'

c. A: lérà? jún nà péʃi *(pǒ) *nəkú*
teacher buy PFV pencil Foc quickly
'The teacher bought the pencil QUICKLY.'

d. A: * à *nəkú* júó lérà? jun péʃi nə
Es quickly that teacher buy pencil COMP
'It is QUICKLY that the teacher buy the pencil'.

(22) a. Q: lérà? jùn péʃi *(pǒ) *mùŋgákʉ̀ə̀* ə?
teacher buy pencil Foc why QM
'WHY did the teacher buy the pencil?'

b. Q: *à *mùŋgákʉ̀ə̀* júó lérà? jùn péʃi nə ə?
Es why that teacher buy pencil COMP QM
'WHY is it that the teacher bought the pencil?'

c. A: lérà? jún nà péʃi *(pǒ) *mùŋgà tʉ̀ə̀tə̌* lɛ̀rwà
teacher put PFV pencil Foc for writing book
'The teacher bought the pencil for writing a book'

d. A: * à *mùŋgákʉə tʉátə́ lɛ̀rwà* júó lérà? jun péʃi nə
Es for writing books that teacher buy pencil COMP
'It is for writing the book that the teacher bought the pencil'.

It is important to observe that all clefts in Shupamem have a complimentizer phrase sentence finally. I claim that these clefts include a relative pronoun that obligatorily requires complementizer.

For the purpose of this analysis, I conclude that the relative morpheme bipartite in Shupamem, as just like the negative particle. As can be observed in all the (b) and (d) examples in (19)-(22), wh-adjuncts and PP-adjuncts cannot be fronted into the left periphery in Shupamem. In all these constructions, the focus marker *pǒ* obligatorily appear in postverbal position. It must be noted, however, that none of the focused adjuncts in (19)-(22) can be fronted into the left periphery. Only complex wh-adjuncts that behave like regular DPs can be fronted as shown the following examples. This is shown by (23b) where the preposition *tə* 'at' deletes before the DP moves into the left periphery.

(23) a. Q: lérà? jàp péʃi *(pǒ) tə *jíjà li?* ə?
teacher put pencil Foc at what place QM
'At WHAT PLACE did the teacher put the pencil?'

b. Q: à *jijà lî?* ŋá: lérà? jàp péʃi nə ə?
Es what place that teacher put pencil COMP QM
'WHERE is it that the teacher put the pencil?'

c. A: lérà? jàp nà péʃi *(pǒ) ndù tébɛ̀
teacher put PFV pencil Foc on table
'The teacher put the pencil ON THE TABLE.'

d. A: *à ndù tɛ̀bɛ̀ ŋá: lérà? jàp péʃi nə
Es on table that teacher put pencil COMP
'It is on the table that the teacher put the pencil.'

(24) a. Q: lérà? jùn péʃi *(pǒ) *jì̀já fú?* ə?
teacher buy pencil Foc what time QM
'At WHAT TIME did the teacher buy the pencil?'

b. Q: à *ǰìjá fùʔ* júó léràʔ jùn péʃi nə ə?
Es what time that teacher buy pencil COMP QM
'At WHAT TIME is the teacher buying the pencil?'

c. A: léràʔ jún nà péʃi *(pǒ) *nə ŋ̀kŭʔnʒú*
teacher put ? pencil Foc at morning
'The teacher bought the pencil IN THE MORNING.'

d. A: * à *nə ŋ̀kŭʔʒú* júwó léràʔ jun péʃi nə ə ?
Es at morning that teacher buy pencil COMP QM
'It is IN THE MORNING that the teacher bought the pencil.'

(25) a. Q: léràʔ jùn péʃi *(pǒ) *ŋkỳ nɛ̂* ə?
teacher buy pencil Foc what manner QM
'In WHAT MANNER did the teacher buy the pencil?'

b. Q: à *ŋkỳ nɛ̂* júó léràʔ jùn péʃi nə ə?
Es what manner that teacher buy pencil COMP QM
'In WHAT MANNER is it that the teacher bought the pencil?

c. A: léràʔ jún nà péʃi *(pǒ) *nàkú*
teacher buy PFV pencil Foc quickly
'The teacher bought the pencil QUICKLY.'

d. A: * à *nàkú* júó léràʔ jùn péʃi nə
Es quickly that teacher buy pencil COMP
'It is QUICKLY that the teacher put the pencil.'.

(26) a. Q: léràʔ jùn péʃi *(pǒ) *mùŋgákùə̀* ə?
teacher buy pencil Foc why QM
'WHY did the teacher buy the pencil?

b. Q: *à *mùŋgákùə̀* júó léràʔ jùn péʃi nə ə?
Es why that teacher buy pencil COMP QM
'WHY is it that the teacher bought the pencil?'

c. A: léràʔ jún nà péʃi *(pǒ) *mùŋgà tùətə̌* lèrwà
teacher put PFV pencil Foc for writing book
'The teacher bought the pencil for writing a book.'

d. A: * à *mùŋgá tùətə̀ lɛ̀rwà* júó lérà? jùn péʃi nə̀
Es for writing book that teacher buy pencil COMP
'It is for writing the book that the teacher bought the pencil.'

In the context of questions and answers that illustrate instances of focused adjuncts in (19)-(25), it is clear that both simple and complex wh-phrases (those which have more than one element) are obligatorily preceded by a grammaticalized morphological focus particle *pǒ*. This also sustains the generalization that the focused constituents are naturally placed in the postverbal position. A similar conclusion has been previously reached for a number of West African languages as well as Chadic languages (Hartman and Zimmerman 2006:03).

To summarize, the data in (19)-(25) presented in this subsection suggest the following facts about wh-adjuncts in Shupamem.

(i) Shupamem bare wh-adjuncts (see (19)-(25)) are systematically ruled out in the left peripheral focus field, implying that they may only occur in lower focus field (i.e., after the postverbal focus particle *pǒ*).

(ii) Complex wh-adjuncts may occur after the postverbal focus marker as well in the left-peripheral focus field as long as they are DPs. The surface position of complex wh-adjuncts in the left periphery results from a movement operation that extracts the wh-adjunct from its base generated position to place it before the main verb.

(iii) The focus particle *pǒ* is obligatorily licensed for bare wh-adjuncts and complex wh-adjuncts in the postverbal focus field, otherwise the sentence is ruled out (see all the (a) and (c) examples in (9)-(25)).

The strategy choices available for Shupamem in regards to wh-questions can be therefore summarized as in table 6.2.

	Post-verbal	**Cleft**
Subject	Yes (*pò)	Yes
Object	Yes (pò)	Yes
Adverbial	Yes *(pǒ)	No
Complex adverbial/DPs	Yes *(pǒ)	Yes

Table 6.2: Cleft versus post-verbal focused Wh-expressions in Shupamem

It is not entirely clear whether we are dealing with the same postverbal focus maker *pò* or not, but whatever the right answer is, it obvious based on the data discussed in the above section suggest a contrast in tone depending on the context. Put together, all these facts presented above conspire to strongly suggest that syntactically focus marked constructions in Shuapmem are highly constrained. For instance, there is only one focused element per clause.

Whenever more than one focused elements occur in a single clause, the sentence is systematically ruled out. As for the nature of focus heads that occur before the DP arguments and adjuncts, the difference in tones suggests that verb arguments and adjuncts appear in different syntactic positions.

This becomes more transparent if one compares focused adjuncts with focused direct object. They clearly have different types of focus particles. Having discussed the asymmetry between the structural devices for marking subject focus and non subject focus in the above examples, let me now turn to how verb focus is marked in Shupamem.

4.2.Focused Predicates in Shupamem

In this section, I describe how focus is marked on the predicate in Shupamem. This type of focus is usually described in the literature as 'predicate-centered focus' (Fielder *et al*. 2005). My theoretical goal in this section is to contribute to the distinction between predicate focus and predicate cleft in Shupamem. More specifically, I show that focusing a VP and clefting it all involve two instances of the same predicate in the same sentence. The only difference is that (a) focusing the VP consists of a kind of verb doubling internal to the sentence (TP).

Furthermore, the fronted verb is always inflected and never occurs into the topic position while (b) clefting is another type of verb doubling where the fronted verb exclusively occurs in its infinitival form and its trace may be refilled by a resumptive verb or replaced by the verb *ɣɛ̀t* 'to make'. Both predicate centered focus and predicate cleft consist of a verb doubling in Shupamem as shown in the following examples in (27) and (28) for intransitive verbs.

(27) a. Q: *mɔ́n*$_k$ pʊ́ *ŋ̀-kʊ̂* *kʊ̂* kɛ̀ i$_k$́ pʊ̀ *ŋ̀-gʊ̀ə* *ɣʊ̀ə* ə?
Child P_3 PTCP-cry cry or 3sg P_3 PTCP-laugh laugh QM
'Was the child crying or laughing?'

a'. Q: **mɔ́n*$_k$ *fĭŋ̀-kʊ̂* *kʊ̂* kɛ̀ i$_k$́ *fĭŋ̀-gʊ̀ə* *ɣʊ̀ə* ə?
Child PTCP-cry cry or 3sg PTCP-laugh laugh QM
'Is the child crying or laughing?'

b. Q: * à *ŋ̀-kʊ̂* *mɔ́n* *kʊ̂* nə ə?
Es PTCP-cry child cry COMP QM
'Is it crying that the child is doing?

c. Q: à *ŋ̀-kʊ̂* *mɔ́n* nə ə?
Es PTCP-cry child COMP QM
'Is it THE CHILD who is crying?

d. A: mónk nà ŋ̀-gʊ̄ə ɣʊ̀ə, ɪ̂$_k$ ntáp ŋ̀-kʊ̂ ŋɪ̂$_k$ kʊ̀.
Child IRR PTCP-laugh laugh 3sg NEG PTCP-cry 3sg cry
'The child is laughing, he is not crying'

Shupamem verb doubling illustrated in (27a) encodes verb focus where the the trace of fronted verb *kʉ̌* 'to cry' is replaced by its own copy that I referred to as a resumptive verb. What is very typical about verb doubling that encodes predicate centered-focus in (27) is the fact that the fronted verb is obligatorily and fully inflected for tense. When the verb surfaces in its infinitival form as shown in (27a'), the whole sentence becomes ungrammatical. Predicate clefting in contrast has a completely different morphological configuration as shown in (28).

The fronted verbal category strictly spells out in its infinitival form and leaves its copy inside the clause. If the fronted verb is fully inflected for tense as shown in (28a' and b'), the whole sentence becomes ungrammatical.

(28) a. Q:
àjiŋ́-kʉ̂ j úó *mɔ́n kʉ̂* nə kè à *jiŋ́ gùə* júó î *ɣùə* nə ə?
Es Inf-cry that child cry COMP or Es Inf-laugh that 3sg laugh COMP QM
'Is it crying that the child did or is it laughing that he did?'

b. Q:
* à pʉ́ *ŋ-kʉ̂* júó *mɔ́n kʉ̂* nə kè à *pú-gùə júó î ɣùə* nə ə?
Es P_3 cry that child cry COMP or Es P_3-laugh that 3sg laugh COMP QM
'Is it crying that the child did or is it laughing that he did?'

c. A: à *jiŋ́-kʉ̂* júó *mɔ́n kʉ̂* nə ʃi pò *ʃ̈ŋ-guə*
Es Inf-cry that child cry COMP not Foc Inf-laugh
'It is crying that the child is doing, not laughing.

d. * A: à *pù-kʉ̂* júó *mɔ́n kʉ̂* nə ʃi pò *pù-guə*
Es P_3-cry that child cry COMP not Foc P_3-laugh
'Was it crying that the child is doing not laughing?

The contrast between predicate-centered focus and predicate clefting outlined in (27) and (28) for intransitive verbs also holds true for transitive verbs exemplified in (29) and (30).

(29) a. Q: *mɔ́n*$_k$ pʉ̀ *ŋ̀-kút* *ndáp kút* ə?
Child P_3 PTCP-build house build QM
'Was the child building a house?'

b. Q: * *mɔ́n*$_k$ *ji̋ŋ̀-kút* *ndáp kút* ə?
Child PTCP-build house build QM
'Is the child building a house?'

c. A: *mɔ́n* ná *ŋ̀-kút* ndáp *kút*
Child IRR PTCP-build house build
'The child is BUILDING A HOUSE'.

d. Q: * *mɔ́n* *ji̋ŋ̀-kút* ndáp *kút*
Child Inf-build house build
'The child is BUILDING A HOUSE'.

(30) a. Q: à *jiŋ̀-kút ndáp júó mɔ́n kút nə̀*?
Es Inf-build house that child build COMP QM
'Is it BUILDING A HOUSE that the child is doing?'

a'.Q:*à pʉ́-*kút ndáp júó mɔ́n kút nə̀* nə̀?
Es Inf-build house that child build COMP QM
'It is BUILDING A HOUSE that the child is doing?'

b. A: *à jiŋ̀-kút ndáp júó mɔ́n kút nə̀*
Es Inf-build house that child build COMP
'It is BUILDING THE HOUSE that the child is doing, '

b'. A: *à pʉ̀-*kút ndáp júó mɔ́n kút nə̀*
Es P_3-build house that child build COMP
'It was BUILDING THE HOUSE that the child is doing'

Again, as can be observed in (29b&c), the infinitival form of the main verb *ʃ̀ìn-kút* 'to build' is ruled out because verb doubling that is commonly used to encode predicate-centered focus in Shupamem requires a fully inflected verb form as in (29a&b). This means that verb doubling is very sensitive to tense, aspect and mood in Shupamem and that we are dealing with a phrasal movement in (29).

The Predicate cleft in (30a), unlike the predicate-centered focus in (26a) does not show any tense or aspectual specification. The fronted verb *ʃ̀ìn-kút* 'to build' always occurs in its infinitival form right after the expletive subject *à* leaving behind its trace which spells out as *kút* 'build'. The contrast between verb doubling and predicate cleft implies a rather interesting asymmetry in Shupamem, namely that, movement of inflected verb forms is ruled out in predicate cleft construction. Only infinitival verbs may follow an expletive pronoun in a cleft as shown in (31).

(31). a. Q: *à *pú ŋkùt mɔ́n kút* ndáp nə̀ ə̀?
Es P_3 build child build house COMP QM
'Was it BUILDING a house that the child was doing?'

b. Q: *à *pú ŋkùt* júó *mɔ́n kút* ndáp nə̀ ə̀?
Es P_3 build that child build house COMP QM
'Was it BUILDING A HOUSE that the child was doing?'

c. Q: à ʃ̀i*ŋkùt* ndáp júó *mɔ́n kút* nə̀ nə̀?
Es Inf-build house that child build COMP QM
'Is it BUILDING A HOUSE that the child was doing?'

d. A: *à *pú ŋkùt mɔ́n kút* ndáp nə
Es P_3 build child build house COMP
'It was BUILDING a house that the child was doing.'

e. A: *à *pú ŋkùt* júó *mɔ́n kút* ndáp nə
Es P_3 build that child build house COMP
'It was BUILDING a house that the child was doing.'

f. A: à *ʃĩŋkùt* ndáp júo *mɔ́n kút* nə
Es Inf-build house that child build COMP
'Is it BUILDING A HOUSE that the child was doing?'

The morphological differences between predicate-centered focus and predicate clefts presented in (27)-(31) suggest that those constructions are significantly different syntactically. More specifically, it has been demonstrated that verb doubling which is used for predicate-centered focus prevents the inflected verb from moving into the left periphery introduced by an expletive pronoun *à* (see (31a&b) and (31c&d). The principle against double focus can be defined as in (32).

(32) Only one focused expression is allowed per clause in Shupamem, otherwise the sentence is ungrammatical.

The principle in (32) is not specific to Shupamem, but has been argued to be more general in Rizzi (1997) or Lambrecht (2003) among others. To clearly see how the principle in (32) works, let me take a simple declarative sentence such as (32) and transform it into: (a) subject focused DP, (b) object focused DPs, (c) focused VP and then mix (a) with (c) and then (b) with (c).

(33) *mɔ́n* pî kùt ndáp
Child P_3 build house
'The child built a house'

The examples in (34) mainly test whether a focused subject DP may co-occur with (a) post-verbal focus marker *pò* that normally governs focused DP objects or adjuncts in Shupamem, (b) a focused object DP or (c) verb doubling.

(34) a. Q: à pú̱ ŋ̀-kút *mɔ́n* ndáp ə̀ʔ
Es P_3 PTCP-build child house QM
'Is it THE CHILD who was building the house?'

a'. Q: * à pî ŋ̀-kút *mɔ́n* ndáp ə̀ʔ
Es P_3 PTCP-build child house QM
'Is it THE CHILD who was building the house?'

b. Q: * à *pú̱ ŋ̀-kút* pò *mɔ́n* ndáp ə̀?
Es P_3 PTCP-build Foc child house QM
'Is it THE CHILD who was building the house?'

c. Q: * à *pú̱ ŋ̀-kút* *mɔ́n* pò *ndáp* ə̀?
Es P_3 PTCP-build child Foc house QM
'Is it THE CHILD who was building A HOUSE?'

d. Q: * à *pú̱ ŋ̀-kút* *mɔ́n* ndáp *kut* nə ?
Es P_3 PTCP-build child house build QM
'Is it THE CHILD who was BUILDING a house?'

e. Q: ** à *pú̱ ŋ̀-kút* pò *mɔ́n* pò *ndáp* *kut* nə ?
Es P_3 PTCP-build Foc child Foc house build QM
'Is it THE CHILD who was BUILDING A HOUSE?

The empirical generalizations that emerge from these examples in (34) are the following:

(i) When a subject DP is focused, only a past tense marker that corresponds to focus (34a) is allowed, for that reason, (34b) is ruled out because of the use of a regular past tense marker which is banned in any focused construction.

(ii) Only one focused expression is allowed per clause in Shupamem. If more than one focused expressions co-occur in a single clause, the sentence is systematically ruled out (see (34b, c, and d)).

(iii) Predicate-centered focus does not allow its inflected verb form to be fronted into the left periphery. (cf. Collins and Nchare 2009).

(iv) It is not possible to have verb focus and subject focus at the same time (see 34d).

The fact that the expletive pronoun *à* that introduces a cleft is in complementary distribution with the postverbal focus markers implies that Shupamem categorically excludes the possibility of having more than one focused element in a single clause. This is evidenced by the ungrammatical sentences illustrated in (34c&d). All the examples in (34) conspire to support the generalization stated in (32).

There is a striking similarity in behaviour between both subject and object focused DPs with respect to predicate-centered focus as shown in the examples in (34b, c, d and e). Neither a focused subject DP nor a focused object DP may co-occur with any verb doubling which indicates a focused VP in Shupamem, hence the ungrammaticality of any construction where a focused DP and a focused VP co-occur. (34e) is also ungrammatical under (32) because there are three focused expressions co-occuring in the same clause.Based on the facts presented in this section, I argue that Shupamem may focus the verb either by verb doubling or fronting the verb into the left periphery in a cleft construction.

To conclude this section, the central claim of my analysis of focused DPs and focused VPs is that there is a three way asymmetry with regards to focus both in interrogative as well as in declarative sentences in Shupamem. The first structural asymmetry concerns the subject focused DPs versus focused object DPs. Data from Shupamem show that both subject and object DPs can be clefted, but none of them can occur in preverbal position where an expletive morpheme *á* usually occurs.

Second, all simple focused wh-adjuncts appear in a postverbal focus position, thus are not allowed to move into the left periphery unless they are viewed as DPs.

Third, predicate-centered focus which is expressed via verb doubling is in complementary distribution with either the expletive pronoun *á* or the postverbal focus marker *pò*. That is why in no context, doubling combines with any other focused expression. The generalization seems to be that Shupamem (and many other African languages) allows only one focused expression per single sentence. From what we have seen so far, it appears that both predicate-centered focus and predicate clefting in Shupamem involve movement. In the next section, I discuss in more detail what kind of movement is involved in each focus type presented earlier.

5.Analysis

So far, I have established that Shupamem clause structure involves at three domains for encoding focus. Building on Rizzi's (1997) and Belleti's (2004) assumptions that the clause structure includes peripheral domains (above IP and VP) where specific functional positions host topic and focus expressions (e.g. TopP vs. FocP). I argue that Shupamem distinguishes:

1. A higher outer functional projection (i.e. above FinP) FocP that usually hosts subject wh-phrases, object wh-phrases and complex wh-adjuncts in cleft constructions.

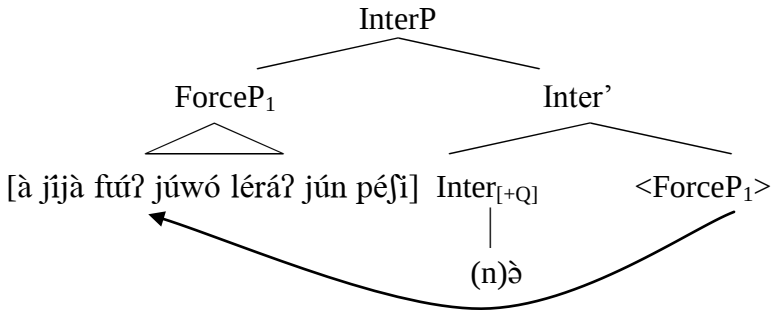
2. A lower functional layer FocP (i.e. above the VP) that hosts the fronted inflected verb in predicate-centered focus.
3. A postverbal FocP that serves as the landing site for both object wh-phrases and adjuncts. That lower FocP is usually dominated by the postverbal focus particle *pò*.

The implication of these assumptions is that Shupamem data provide us with empirical evidence for the existence of an articulated left periphery above IP (Rizzi 1997) and a lower periphery which encodes the post-verbal focus and verb doubling.

I assume that all interrogative sentences in Shupamem have a question marker positioned at the left edge of the clause. I also claim that on top of all movement types presented in (31b), the topmost node dominating the whole sentence in Shupamem wh-constructions is the Interrogative Phrase (IntP). The apparent final position of question marker in Shupamem results from pied- piping of the whole clause dominated by ForceP into the specifier position of the Interrogative Phrase (Nkemnji 1995). The interrogative head *(n)ə́* always occurs in the final position of the clause as shown in all the examples discussed above.

(35) a. à Ø *jíjà fùʔ* júó lérâʔ jùn péʃi nə ə ?
Es COP what time that teacher buy.PST pencil COMP Q
'At what time did the teacher buy the pencil?'

b.



The structure in (35b) is very similar to what Nkemnji (1995) describes as heaving pied-piping in Nweh.

5.1.Post-Verbal Focused Wh-phrases

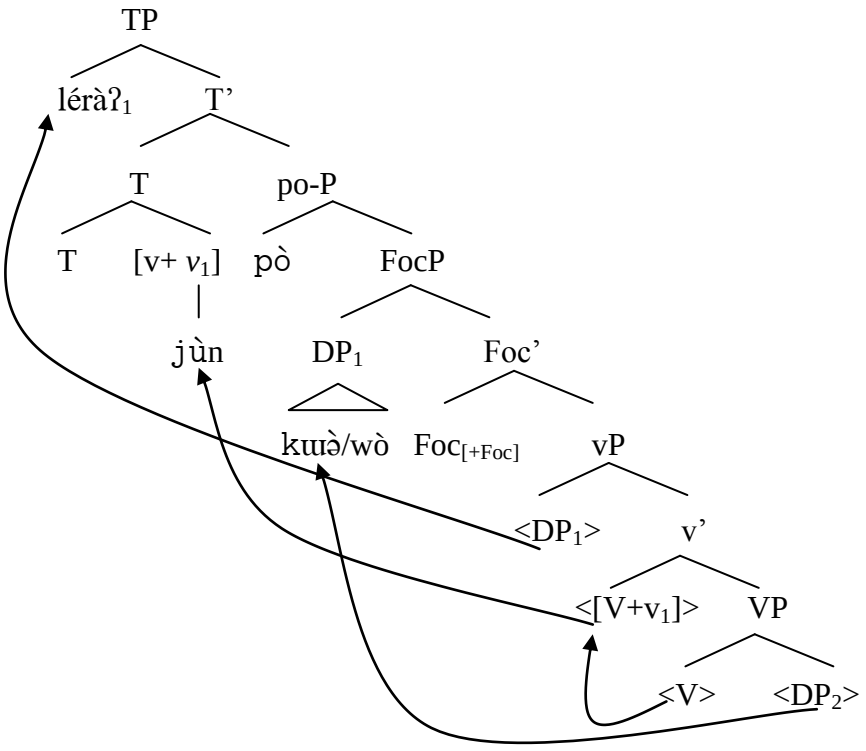
For concreteness, I assume that Shupamem has one lower focus head position *pò* that may govern both wh-arguments and wh-adjuncts. For non subject wh-phrases occurring after the verb and governed by the lower focus particle, I propose the structure in (36b) to account for word order in the lower focus field. This idea is adapted from Collins and Essizewa's (2007:194) discussion of Kabiye example repeated in (36).

(36) ma- nɨ́-ʊ Kabijɛ (ɖeké) na
1SG-understand-IMPF Kabije (only) Foc
'I understand only Kabije'

I argue that Shupamem is different from Kabiye because the wh-expression moves past the focus head *na* in Kabiye while such a movement is blocked in Shupamem. For that reason, I adopt Collins's idea (pc) that Shupamem projects a separate phrase, namely *pò*-Phrase which dominates FocP. Thus, the wh-expressions move into the specifier of FocP, yielding the correct order schematized in (37b).

(37) a. léràʔ jùn (pò) kɯə/wò ə ?
teacher buy.PST Foc what/who QM
'What/who did the teacher buy?'

b. Wh-X^0/XP movement into Spec-FocP.



The structure in (37b) illustrates how any postverbal focused expression is derived in Shupamem. This derivation would work the same if, instead of a focused object DP *kuə̀* 'what' or *wò* 'who', we had DP adjuncts such as *jà* 'where', *nɛ̀* 'how', *fúʔnɛ́* 'when' or *jîsuə́* 'how many'. For concreteness, examples with DP adjuncts are repeated in (38).

(38) a. léràʔ jùn (*pǒ) *jə̀* ə̀ ?
teacher buy.PST Foc where QM
'WHERE did the teacher buy it?'

b. léràʔ jùn (*pǒ) *nɛ̀* ə̀ ?
teacher buy.PST Foc where QM
'HOW did the teacher buy it?'

c. léràʔ jùn (*pǒ) *jísʊúə́* ə̀ ?
teacher buy.PST Foc how many QM
'HOW MANY did the teacher buy?'

d. léràʔ jùn (*pǒ) *fúʔnɛ̀* ə̀ ?
teacher buy.PST Foc when QM
'WHEN did the teacher buy it?'

However, the application of the above analysis to a sentence that includes both a direct object and adjunct where the adjunct is focused runs into a number of critical problems as Collins (pc) pointed out to me. They revolve around two issues: (a) first, if we assume that the focus particle *pò* that precedes verb argumenst as well as verb adjuncts is the only focus particle after the VP, then the analysis predicts a wrong order, namely, the order *v* > *pò* > *adjunct* > *Object*; (b)

it does actually explain why the tones on the focus particle *pò* changes when it occurs before the adjunct (e.g., rising tone) but not before direct objects.

To solve this problem, I propose an alternative analysis where I argue that there are two separate focus particles in postverbal position: (i) the focus particle *pò* with a Low tone (which optionally occur before direct objects) and the focus particle *pǒ* with a rising tone (which occurs before adjuncts). It is important to point out that no adjunct can possibly occur before a direct object and both types of focus particles are mutually exclusive in the same clause. This is shown in the following examples.

(39) a. lérà? jùn màtwá (*pǒ) *jà* à ?
teacher buy.PST car Foc where QM
'WHERE did the teacher buy the care?'

b. *lérà? jùn pò *màtwá* pǒ *jà* à ?
teacher buy.PST Foc car Foc where QM
'WHERE did the teacher buy THE CAR?'

c. *lérà? jùn pò *màtwá* *jà* à ?
teacher buy.PST Foc car where QM
'WHERE did the teacher buy THE CAR?'

d. *lérà? jùn pǒ *jà* *màtwá* à ?
teacher buy.PST Foc where car QM
'WHERE did the teacher buy THE CAR?'

e. *lérà? jùn pǒ *jà* pò *màtwá* à ?
teacher buy.PST Foc where Foc car QM
'WHERE did the teacher buy THE CAR?'

The above examples suggest that when the direct object co-occur with an adjunct, it is impossible to focus both of the them (39b&d); the adjunct cannot precede the direct object (39d); the direct object cannot be focused before an adjunct (39c). This implies that there are in fact two postverbal focus positions, one for direct objects and the other one for adjuncts. I will assume that an adjunct cannot move over its own obligatory focus marker *pǒ* that is lower than the direct object. I will leave this issue for further investigation.

5.2.Clefted wh-constructions

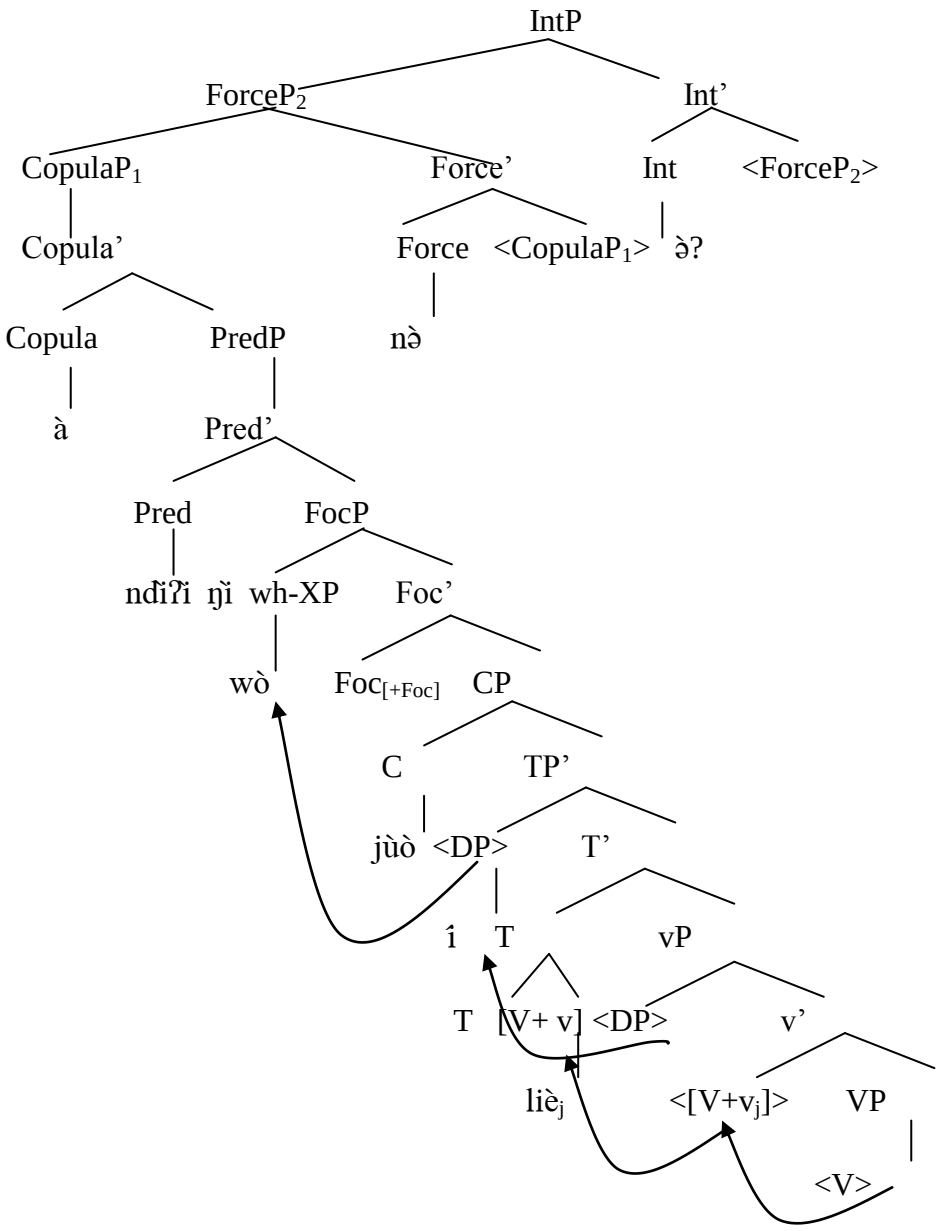
An exhaustive grammatical analysis of cleft constructions in Shupamem will be far beyond the scope of this chapter. Essentially, I will offer a brief discussion of each type of cleft to show how they differ with respect to how fronted focused elements behave. I assume that all Shupamem wh-constructions which use the cleft strategy have similar structures to those attested in Lubukusu (Wasike, 2007). Therefore, Shupamem analysis of cleft will be very similar to that of Lubukusu. I argue that clefts and relative clauses have the same form.

The analysis proposed here argues that examples such as those in (40) will have the structure in (40c) consisting of a matrix clause headed by a copula (which may be overt (40b) or covert (40a)) and a relative clause or a relative-like clause whose subject (e.g. the resumptive pronoun *î* '3sg') is coindexed with the wh-element *wó* located in the specifier position of FocP. The arguments developed here are adapted from Wasike's (2007:116) approach in which Lubukusu clefts are treated as bi-clausal. I assume that cleft constructions involving a subject DP as (40a&b) are very similar structurally to those involving an object DP in Shupamem wh-questions. The contrast between a declarative cleft in (40a) and a negative cleft in (40b) provides empirical evidence for a bi-clausal treatment of cleft constructions in Shupamem. In this analysis, I argue that the interrogative phrase is the topmost node that dominates vP. The subject wh-expression *wó* 'who' is base generated under spec-*vP* and moves cyclically into Spec-FocP. The FocP is the complement of T whose specifier is filled by an expletive pronoun. CP is headed by the complementizer *júó* 'that'.

(40) a. à ∅ *wò*$_1$ júó ǐ$_1$ lǐé nə̀ ə̀?
Es COP who that 3sg sleep.PST COMP Q
'Who is it that slept?'

b. à ndǐʔ ŋ̀ *wò*$_1$ júó ǐ$_1$ lǐjé nə̀ ə̀?
Es COP.NEG 3sg who that 3SG sleep.PST COMP Q
'Who is it that did not sleep?'

(40c)


IntP
ForceP2
Int’
CopulaP1
Force’
Int
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Copula’
Force
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è?
Copula
PredP
nɔ̀
à
Pred’
Pred
FocP
ndiʔi
ŋ̀
wh-XP
Foc’
wò
Foc[+Foc]
CP
C
TP’
jùò
<DP>
T’
î
T
vP
T
[V+ v]
<DP>
v’
liè
j
<[V+vj]>
VP
<V>

Configurationally, the wh-element moves into the specifier position of TP, then to spec-FocP. The trace of the moved wh-expression is always filled by a resumptive pronoun under the specifier position of TP. For EPP reasons, because Shupamem does not allow any empty subject position, the specifier of highest TP is filled by the expletive pronoun *á*. I assume that the topmost node that dominates the whole sentence in (40c) is IntP and the final position of the question marker *nə̀* can be accounted for by movement. That is, in the whole sentence dominated by ForceP, the complement of IntP moves into the specifier position of IntP as shown in (40c). Under this hypothesis, I claim that the difference between the movement strategy involving an object wh-expression and that involving a subject wh-expression is that in the former, there is no resumptive pronoun left behind whereas in the latter, a resumptive pronoun is always required.

5.3.Predicate Invertion in Subject Focus

I have claimed that in subject focus (SF), Shupamem standardly uses a predicate inversion rule as a focus device to indicate focus on the subject DP on a post-verbal positon to avoid violating the constraint according to which no subject expression can be focused in a preverbal position (see the constraint in (15)). The grammar of Shupamem requires that subject DPs to be focused DPs in the

postverbal position, in which case an expletive pronoun *á* dominates the clause. What is so special about the sentences in (6) repeated in (41) below is:

(i) Not their syntax, because they are still canonical SVO clauses. Even though the focused subject DP occurs after the main verb (the default subject focus position), the expletive pronoun fills the subject position of the whole clause where every DP is interpreted as a topic.

(ii) Not their semantics, because all the examples in (41) envolve only one argument (e.g., *wǒ* 'who' (41a) or *mbièrə* 'king' (41c)) and one predicative element (e.g., *wòʔ* 'build').

(iii) But the alignment of the main verb with respect to the focused wh/subject DP.

(41) a. Q: à wòʔ *wǒ* ŋ̀gbǒm mə ə̀?
Es grind who corn COMP QM
'WHO ground the corn?'

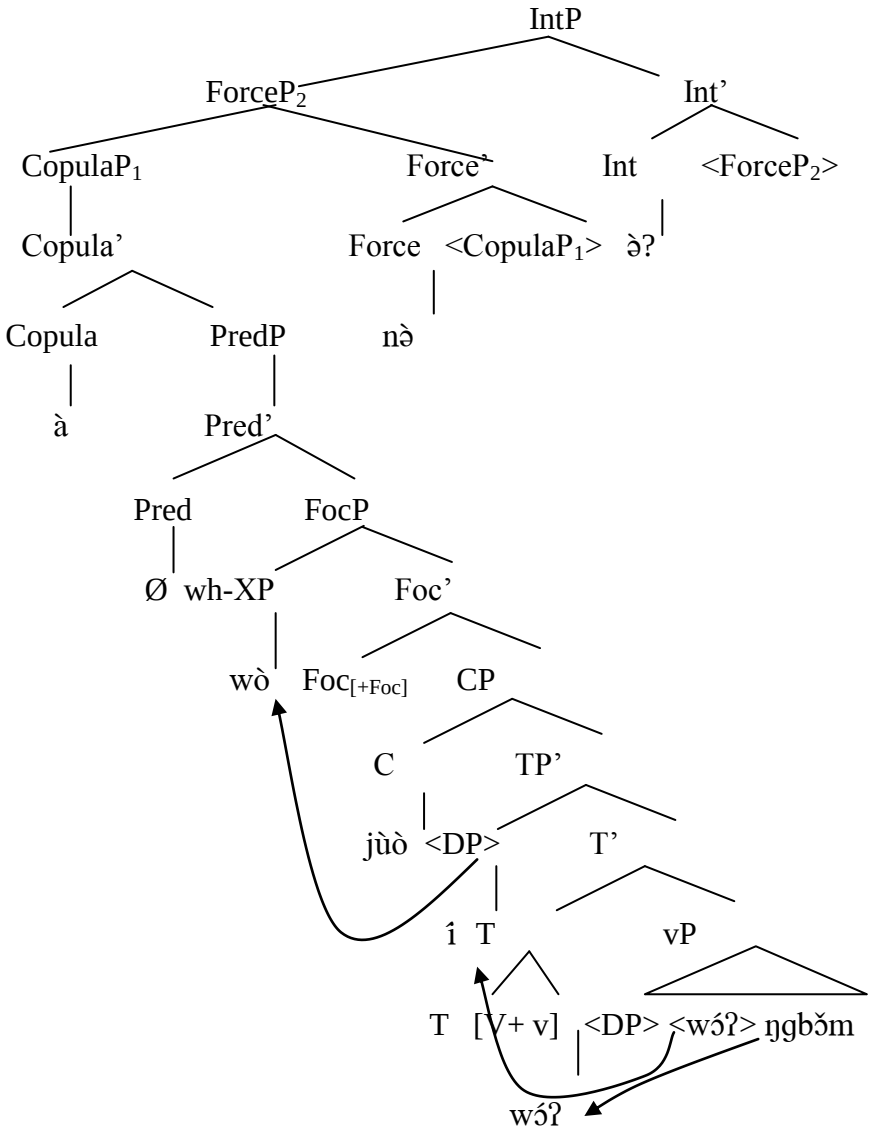
b. Q: * *wǒ* wǒʔ ŋ̀gbǒm mə ə̀?
who grind corn COMP QM
'Who ground the corn?'

c. A: à wǒʔ na *mbièrə̌* ŋ̀gbǒm
Es grind PFV king corn
'It is THE KING who ground the corn'

I argue that the unusual alignment in (41) can be accounted for by the idea that the information structure of Shupamem always requires a distinction between topic and focused expressions. That difference is marked by structural specification of the clause where all wh-expressions or focused expressions are ruled out in subject position as stated in (15). A sentence like (41) will be derived as in (42b). As we can observe in (41b), the main verb *wòʔ* 'to grind' moves into the vP head position followed by the movement of the subject DP *wǒ* 'who' into the specifier position of FocP, yielding the surface order where the focused subject DP occurs after the the main verb.

(42) a. Q: à wòʔ *wǒ* ŋgbǒm mə̀ ə̀?
Es grind who corn COMP QM
'WHO ground the corn?'

(40c)



By extension, Shupamem is distinct from a language such as Hungarian (Koopman and Szabolcsi (2000) with respect to focus. In addition to focused DPs (e.g., subject focus and object focus) attested in the cleft constructions derived in (42c) and (42b), the VP, whether it is inflected for tense or not can also be moved in as shown in predicate-centered focus constructions. This brings me to the derivation of predicate centered focus.

5.4.Verb Doubling and Predicate-centered Focus

It has been observed that Shupamem grammar uses verb doubling as a mean of indicating predicate-centered focus. The same stratety is very common in West African languages (Kru, and Kwa) as well as in Altlantic creole languages (Aboh, 2006). The examples in (43) represent instances of verb doubling that encodes verb focus in Shupamem. As we can see in (43), only the first verbal category of the verb doublet may be inflected for tense, negation or aspect.

(43) a. mɔ́n kápʉ́ *ŋkút* ndàp *kút* nə̀?
Child P_4 PTCP-build house build QM
'Was the child BUILDING a house?'

a'. *mɔ́n kápî ŋkút ndàp kút nə̀?
Child P_4 PTCP-build house build QM
'Was the child BUILDING a house?'

b. mɔ́n kápʊ́ *ŋkút* ndàp *kút*
Child P_4 PTCP-build house build
‘ The child WAS BUILDING a house?’

b’. *mɔ́n kápɨ́ ŋkút ndàp kút
Child P_4 PTCP-build house build
‘ The child WAS BUILDING a house’

c. mɔ́n ná two *ŋkút* ndàp *kút* nə̀?
Child IRR F_1 PTCP-build house build QM
‘Will the child BUILD a house (not destroy it)?’

d. mɔ́n ná ntáp twó *ŋkút* ì ndàp *kʉ́t* nə̀?
Child IRR NEG F_2 PTCP-build 3sg house build QM
‘Will the child be BUILDING house (not destroying it)?’

Note that verb doubling in (43) does not force any fronting of the verb in initial position of the sentence as suggested in previous examples. A similar example to (43) can be found in Nweh (Nkemnji 1995; Koopman 1997) another SVO Grassfields Bantu language where verb focusing behave like Shupamem as shown in (44).

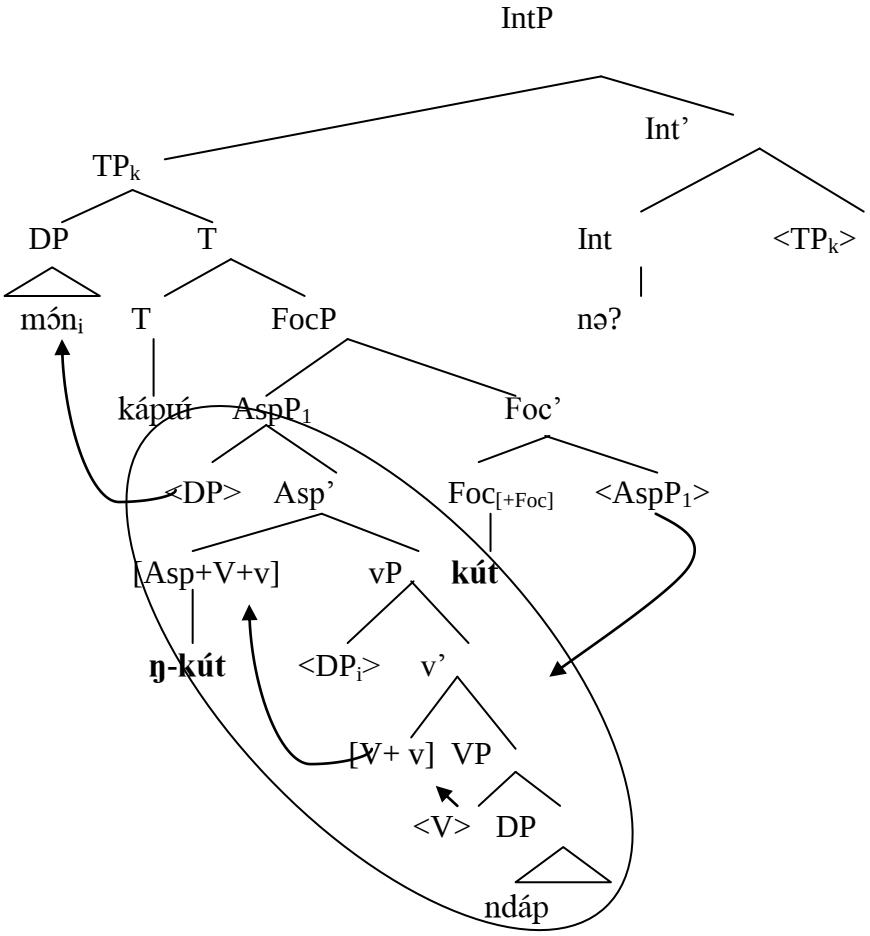
(44) Atem a kɛ̀ʔ n**čuu** akendoŋ **čuu**
Atem Agr PST boil plantains Ø-boil
‘Atem BOILED plantains’ (Nweh, Nkemnji 1995: 138)

The crucial question about constructions like (43) and (44) is what principle of Shupamem grammar accounts for verb doubling in predicate focus. My account of verb doubling builds on Chomsky’s (2005) copy theory of movement where I assume that predicate-centered focus in Shupamem can be better analyzed as a case of multiple spell-out of copies.

Following this line of argumument, I assume that verb focus with doubling is a type of construction where the displaced verb's trace is filled by its copy (see Aboh 2006, Nunes 2004, Landau 2006). The fronted verb moves into the focus position leaving a kind of resumptive verb behind to satisfy the tense/aspect feature of IP. Under this formulation, verb movement to FocP for focusing purposes in an interrogative sentence such as (43a) can be schematized as in (45b) where the whole *vP* hosted by the Aspectual Phrase (AspP) moves to the specifier position of FocP. For some reason, the copy of the verb resurfaces as the head of FocP yielding the accurate word order of the fronted *vP* with respect to its copy left behind.

(45) a. mɔ́n kápʉ́ *ŋkút* ndàp *kút* nɔ́ ?
Child P_4 PTCP-build house build QM
'Was the child BUILDING a house?'

b.



I argue that, what triggers the movement of the verb phrase in a structure like (45b) is the discourse-related focus feature of [+Foc] that attracts the verb *kút* 'build' and its complement *ndáp* 'house' to [spec-FocP] as an instantiation of Generalized Pied-piping (Chomsky 1995, Aboh 2004b, c, Nkemnji 1995, Koopman 1997). The verb copy in (45) stands in an agreement relationship with the fronted verb.

Shupamem also displays a second version of verb doubling that I have assumed without discussion to be clefted infinitives. I have shown that in cleft infinitives as those in (46), no tense, aspect, or participle can be allowed on the fronted verb.

(46) a. à *fĭm-bèn ndàp* júó *mɔ́n* pɛ́n nə̀ ə̀ ?
Es Inf.paint house that child paint COMP QM
'Is it painting a house that the child did?'

b.* à *pú mbèn ndàp* júó *mɔ́n* pɛ́n nə̀ ə̀ ?
Es P_3 PTCP-paint house that child paint COMP QM
'Was it painting a house that the child did?'

c. à *fĭm-bèn ndàp* júó *mɔ́n* ɣɛ́t nə̀ ə̀?
Es Inf.paint house that child do COMP QM
'Is it painting a house that the child did?'

d. à nɗiʔi ŋĭ *fĭm-bèn ndàp* júó *mɔ́n* pɛ́n nə̀ ə̀ ?
Es NEG 3sg Inf.paint house that child paint COMP QM
'Is it painting a house that the child did?'

The examples in (46) are clearly cleft constructions. Where the VP has been fronted just as a regular DP. Note that once the VP has been fronted into the left perfiphery, no other verb argument can move into the same position. That is why all the examples in (47) are ungrammatical.

(47) a. * mɔ́n, à *fĭm-bèn ndàp* júó î pén nə̀ ə̀ ?
Child, Es Inf.paint house that 3sg paint COMP QM
'Is it painting a house that THE CHILD did?'

b.* wò, à *fĭm-bèn ndàp* júó î pén nə̀ ə̀ ?
Who, Es Inf.paint house that 3sg paint COMP QM
'It is painting a house that WHO did?'

c. * jà, à *fĭm-bèn ndàp* ŋà î pén nə̀ ə̀ ?
where, it Inf.paint house that 3sg paint COMP QM
'It is painting a house that the child did where?'

d. * nɛ̀, à *fĭm-bèn ndàp* júó î pén nə̀ ə̀ ?
How, Es Inf.paint house that 3sg paint COMP QM
'Is it painting a house that the child did?'

Finally, clefted infinitive may precede or follow topics, suggesting that both types of expressions are competing for the same landing site in the left periphery. It also suggests that there two different kinds of landing site.

(48) a. à *fĭm-bèn* ndáp *ŋkù:rə̀* júó *mɔ́n* pén nə̀ ə̀ ?
Es Inf.paint house yesterday that child paint COMP QM
'Is it PAINTING A HOUSE that the child did yesterday?'

b. *ŋkù:rə̀* à *fĭm-bèn* ndáp júó *mɔ́n* pén nə̀ ə̀ ?
Yesterday, it Inf.paint house that child paint COMP QM
'Is it PAINTING A HOUSE that the child did yesterday?'

Based on all these facts presented in (46)-(48), I argue that clefted predicates in Shupamem should have a different syntactic structure to what I have described ealier a predicate-centered focus (where focus is incidated by verb doubling). I will leave the discussion of the internal structure of an example like (48) for further investigation. But I assume that it should be the same as a cleft.

6.Conclusion

In this chapter, I have provided a detailed discussion of all focus strategies attested in Shupamem, using both interrogative and declarative sentences to account for a number of structural asymmetries. This fits into the cartographic research project whose main purpose is to analyze the fine-grained structure of the CP domain. The standard assumption in the cartographic approach is that the number of functional projections attested in the syntactic structure is finite and that each syntactic projection has its own special syntactic and semantic features (Belleti, 2004:71). The analysis discussed here accounts for the distribution of: (a) subject focus (SF), (b) non subject focus (NSF) and (d) predicate-centered focus in Shupamem. I argue that Shupamem has three focus fields, namely (a) the left peripheral focus field (associated with the expletive pronoun a in clefted constructions), (b) a TP internal focus field located before the VP (for verb doubling) and a postverbal focus field (dominated by the postverbal focus marker).

The data discussed here suggest the following result concerning word order in Shupamem in terms of the clausal structure of wh-constructions:

(49) Shupamem Wh-construction features

a) The basic word order in neutral wh-constructions is SVO.

b) The specifier position of TP cannot serve as a landing site for focused subject DPs or *wh*-expressions.

c) Wh-arguments (e.g. subject wh-phrases and object wh-phrases) and complex wh-adjuncts may be clefted.

d) The focus particle *pò* is incompatible with the left peripheral focus field.

e) Clefting a PP adjunct or an adverbial wh-expression is ruled out;

f) Focused VPs which involve verb doubling are not available for movement into the left periphery.

g) Shupamem does not allow more than one focused expression in a clause, otherwise the sentence is ungrammatical.

Chapter Seven: The Syntax of Body Part (BP) Expressions and the Binding Theory

1.Introduction

Body-part expressions are well-kown cross-linguistically as an important source of polysemy. One such example is the grammaticalisation of Shupamem body expressions such as *ŋwát* 'body' and *tú* 'head' into reflexive anaphors. This chapter deals with the description and interpretation of the syntactic properties of the *body-part* (BP) expressions used in Shupamem as reflexive pronouns. I assume Chomsky's (1981, 1986) Binding Theory. Shupamem distinguishes two types of pronouns. The first type of pronoun has basically the same properties as non-reflexive pronouns in languages such as English (e.g. personal pronouns such as *I, you, he, we* etc). The second type of pronouns roughly corresponds to reflexives. Shupamem has two types of reflexive elements, namely (i) the *head-body* reflexives (e.g., *tú* + *ŋwát* + Genitive = 'head + body + Genitive') and (ii) the *body* reflexives (e.g., *ŋwát* + Genitive = 'body + Genitive'). Shupamem also has logophoric pronouns which are defined in the literature as 'pronouns that occur in

indirect discourse contexts or special embedded contexts to indicate reference to 'the person whose speech, thought or perceptions are been reported' (Clement, 1975). *Head body* reflexives in Shupamem are interchangeable with *logophoric* pronouns that refer back to the subject DP. Four issues will be discussed here: (1) the distinction between pronominals and anaphors (e.g., Shupamem *î* 'He' versus *tú ŋwár-î* 'himself'), (2) the distinction between *head body* reflexive and *body reflexives* (e.g., *ŋwár-î* 'his body/himself' and *tú ŋwàr-ǐ 'himself'*); (3) the binding conditions for each type of pronoun and (4) the distribution of logophoric pronouns. I will briefly present the syntactic features of reciprocal expressions as well in this analysis in order to show how they relate to Shupamem body-part (BP) reflexive expressions.

This chapter is organized as follows. Section 2 discusses the distributional properties of both regular pronouns and reflexive pronouns in Shupamem. Section 3 discusses the types of reflexive verbs attested in Shupamem with respect to how they interact with both types of reflexives attested in the language. Section 4 describes how the binding principles are implemented in Shupamem. Section 6 discusses the behaviour of logophoric expressions in regards to the binding theory. And the last section summarizes our findings.

2.Background

2.1.Shupamem Personal Pronouns

This section focuses on how Shupamem pronouns pattern in non-logophoric contexts. I will show that there is a clear distinction between weak pronouns and strong pronouns in Shupamem. Pronouns in Shupamem are gender neutral. They have only person and number features. They also vary depending on their case. The complete list of pronouns is given in table 7.1.

	Strong Pronouns		**Weak Pronouns**		
Case	**Nom/Acc**	**Genitive**	**Nominative**	**Accusative**	**Genitive**
1sg	mà	jà	mə̌	ă	ă
2sg	wŭ	jŭ	ŭ	ŭ	ŭ
3sg	wɨ́	jɨ́	ɨ̂	ɨ̂	ɨ̂
3sg logophor	wɨ̀	jɨ̀	ɨ̀	ɨ̀	ɨ̀
1pl (Incl.)	pwə̀	júpwə̀	pə̀	ùpwə̀	upwə̀
1pl(Excl.)	pỳ	jý	pə̌	ý	ý
1pl.dual	tà	jùtà	tə̌	útə̀	tə̀
2pl	pʉ́n	jʉ́n	pʉ̌	ʉ́n	ʉ́n
3pl	pwə́	jáp	pə́	áp	áp

Table 7.1. Strong versus weak pronouns in Shupamem

In Table 7.1, the strong forms correspond to the citation forms of the pronouns in Shupamem. Strong forms have a positional distribution significantly different from that of weak forms. In a simple sentence, only a weak pronoun can occur in an argument position. It could be a subject DP as in (1a) or an object DP as in (2a).

This is true for all pronouns, but I will only consider the third person singular pronoun here.

(1) a. î twò
3sg$_{WEAK}$ come.PST
'He came.'

b. *wí twò
3sg$_{STRONG}$ come.PST
'He came.'

(2) a. mɔ̀n làβ î
Child hit.PST 3sg$_{WEAK}$
'The child hit him.'

b. *mɔ́n làβ wí
Child come.PST 3sg$_{STRONG}$
'The child hit him.'

The ungrammaticality of (1b) and (2b) suggests that strong pronouns are excluded from ordinary subject and object position, except when they are focused as in (3a) and (4a) or followed by a reflexive pronoun as in (3c). In a reflexive construction such as (3c), a weak pronoun is barred from occurring before a reflexive as shown in (3d).

(3) a. à láp nà pò wí mɔ́n
Es hit.PST PFV FOC 3sg$_{STRONG}$ child
'It is him who hit the child.'

b. * à láb nà pò î mɔ́n
Es hit.PST PFV FOC 3sg$_{WEAK}$ child
'HE hit the child.'

c. wí nə̀ ŋwàr-ǐ làp mɔ́n
3sg$_{STRONG}$ with body-his hit.PST child'
'He himself hit the child.'

d. *í nə̀ ŋwàr-ǐ làp mɔ́n
3sg$_{WEAK}$ with body-his hit.PST child'
'He himself hit the child.'

e. wí mə̀ mə̀jíʔ ʃi làp mɔ́n
3sg$_{STRONG}$ with body-his hit.PST child'
'He alone hit the child.'

f. *î mə məjíʔ ʃi làp mɔ́n
3sg$_{WEAK}$ with body-his hit.PST child'
'He alone hit the child.'

(4) a. mɔ́n láb pò wí
Child hit.PST FOC 3sg$_{STRONG}$
'The child hit HIM.'

b. * mɔ́n láb pò î
Child hit.PST FOC 3sg$_{WEAK}$
'The child hit HIM.'

The occurrence of the strong pronouns in (3) and (4) is associated with contexts where the pronoun is modified by an emphatic reflexive. The focus particle is used to contrast them from other referents. Therefore, the implication is that weak pronouns are not associated with focus as shown by the ungrammatical examples in (3b) and (4b). I conclude that, a strong pronoun must be locally dependent on the overt focus marker *pô* or modification by a reflexive.

2.2.Body-Part (BP) Reflexives In Shupamem

I begin this section by an overview of the types of body part (BP) reflexive expressions attested in Shupamem as summarized in table 7.2. The data discussed in this section reveal that the morphological composition of body-part reflexive expressions distinguishes two types of reflexives, namely: (a) the *body*-reflexive which consists of a grammaticalized *ŋwát* 'body' followed by a possessive pronoun and (b) the *head-body* reflexive which consists of *tú-ŋwát* 'head-body' followed by

a possessive pronoun. Both types of body part (BP) reflexives expressions seem to differ starkly from each other with respect to their syntactic and semantic interpretation and the domain in which they must be bound. While *body* reflexives are homophonous with DPs where *body* has its literal or free interpretation, *head body* reflexives are morphologically grammaticalized morphemes that only correspond to reflexive pronouns in Shupamem. With these preliminaries out of the way, let me turn to a closer examination of the syntactic distribution of each type of reflexive as illustrated in (5)-(8).

	(a) *Body* reflexives	(b) *Head body* reflexives
I-SINGULAR		
1sg	ŋwàr-à body-1sg.Gen ‘myself’	tú ŋwàr-á Head body-1sg.Gen ‘myself’
2sg	ŋwàr-ù body-2sg.Gen ‘yourself’	tú ŋwàr-ú Head body-2sg.Gen ‘yourself’
3sg	ŋwàr-ĩ body-3SG.Gen ‘him/herself’	tú ŋwàr-ĩ́ Head body-3sg.Gen ‘him/herself’
3sg(inanimate)	ŋwàr-ĩ body-3SG.Gen ‘itself’	tú ŋwàr-ĩ́ Head body-3sg.Gen ‘itself’
II-PLURAL		
1pl(incl.)	ŋwàr-úpwə̀ body-1pl.Gen ‘ourselves	tú ŋwàr-úpwə̀ Head body-1pl.Gen ‘ourselves
1pl(excl.)	ŋwàr-ʉ̀ body-1pl.Gen ‘ourselves’	tú ŋwàr-ʉ̀ Head body-1pl.Gen ‘ourselves’
1pl(dual)	ŋwàr-útà body-1pl.Gen ‘ourselves’	tú ŋwàr-útà Head body-1pl.Gen ‘ourselves’
2pl	ŋwàr-ɨ̀n body-2pl.Gen ‘yourselves’	tú ŋwàr-ɨ̀n Head body-2pl.Gen ‘yourselves’
3pl	ŋwàr-àp body-3pl.Gen ‘themselves’	tú ŋwàr-àp Head body-3pl.Gen ‘themselves’

Table 7.2. Shupamem Reflexive Types

The first evidence showing the syntactic contrast in status between *body* reflexives and *head body reflexives* come from how they pattern together with the main verb or adjective modifiers as shown in the examples in (5)-(8) that are illustrative diagnostic contexts for the distribution of each type of reflexive.

(5) a. mɔ́n sŭ ŋwàr-ĭ
Child wash.PST body-3sg.Gen
'The child washed himself/his body/someone else's body.'

b. mɔ́n sŭ pôkɛ̀t ŋwàr-ì
Child wash.PST nice body-3sg.Gen
'The child washed his nice body/someone else's nice body.'

c. *mɔ́n sŭ pôkɛ̀t tú ŋwàr-ĭ
Child wash.PST nice head body-3sg.Gen
'The child washed his nice body/someone else's nice body.'

(6) a. m̀fɔ̀n$_1$ rĭjà mì mɔ́n$_2$ jʊ́ɣən ŋwàr-ĭ$_{2/*1}$ tə́ lénəmì
King say.PST that child see.PST body-3sg.Gen in mirror
'The king said that the child saw himself in the mirror.'

b. m̀fɔ̀n$_1$ rĭjà mì mɔ́n$_2$ jɯɣən tú ŋwàr-í$_{2/1}$ tə́ lénəmì
King say.PST that child see.PST head body-3sg.Gen in mirror
'The king said that the child saw himself in the mirror.'

(7) a. î sŭ màtwá
3sg wash.PST car
'He washed the car.'

b. tú ŋwàr-í sŭ màtwá
Head body-3sg.Gen wash.PST car
'He himself washed the car.'

c. *ŋwàr-î sŭ màtwá
Body-3sg.Gen wash.PST car
'He himself washed the car.'

d. wí$_1$ nə́ ŋwàr-í$_1$ sŭ màtwá
Body-3SG.Gen with body-3sg.Gen wash.PST car
'He himself washed the car.'

e.*wí$_1$ nə́ tú ŋwàr-í$_1$ sŭ màtwá
3sg with head body-3sg.Gen wash.PST car
'He himself washed the car.'

(8) a. m̀fɔn$_1$ kút jí$_{1/2}$ ndáp
King build.PST 3sg.Gen house
'The king built his house/someone else's house.'

b. m̀fɔn$_1$ kút tú ŋwát jí $_{1/*2}$ ndáp
King build.PST head body 3sg.Gen house
'The king built his own house.'

c. *m̀fɔn$_1$ kút ŋwát jí ndáp
King build.PST body 3sg.Gen house
'The king built his own house.'

The main differences between *head body* reflexives and *body* reflexives can be summarized as in (9).

(9) a. *Body* reflexives are homophonous with DPs that can be modified by an adjective as in (5b) whereas *head body* reflexives cannot be modified by an adjective (5c).

b. *Body* reflexives can only be locally bound anaphors (e.g., when they are interpreted as reflexives) as in (6a) whereas *head body* reflexives can be either locally bound or long distance bound anaphors (6b). (See section 4.1 for discussion)

c. Only *head body* reflexive may occur in subject position of the sentence (7b) whereas *body* reflexives can only do so if preceded by another pronoun (7d). Moreover, *head body* reflexives cannot co-occur with another pronoun in subject position (7e).

d. In a genitive construction, only *head body* reflexive can be the possessor (see (8b)).

Another type of constructions in which a body-part expressions are used are complex predicates in which the lexifier *tú* 'head' is interpreted as a third person pronoun as shown in (10). In all the examples in (10), the possessive DP *tú jî* 'his head' only reads as third person singular.

(10) a. tú jî rɛ̀rə̀
Head Gen.3sg be.heavy
'He is ashamed.'

b.tú jî pỳ
Head Gen.3sg be.uggly
'He is unlucky.'

c. tú jî ná ŋkɨ́
Head Gen.3sg IRR be.strong
'He is stubborn.'

(11) a. *jî tú rɛ̀rə̀
Gen.3sg head be.heavy
'He is ashamed.'

b. *jî tú pỳ
Gen.3sg head be.ugly
'He is unlucky.'

c. *jî tú ná ŋkɨ̀
Gen.3sg head IRR be.strong
'He is stubborn.'

Thus, the conclusion I draw from these examples is that body-part expressions such as *tú* 'head', *ŋwát* 'body' and *tú ŋwát* 'head body' in combination with the possessive pronoun that always comes phrase finally are grammaticalized forms that are used to encode a simple personal pronoun (10) and reflexive expressions ((5) & (6)) in Shupamem. After this brief overview of the syntactic properties of reflexive types, what follows now is a discussion of different class of predicates that show how each reflexive type behaves syntactically.

3.Classification of Reflexive Predicates in Shupamem

In this section, I present some selectional restrictions verb types impose on either *body* or *head body* reflexives in Shupamem. First, Shupamem distinguishes between *inherently* reflexive and *transitive* predicates. Inherently reflexive predicates do not allow any *head body* reflexive pronouns while transitive predicates may allow either type of reflexives outlined in table 7.2.

3.1.Inherently Reflexive Predicates

The first group of predicates repeated in (12a-y) involve what may be referred to as *inherent reflexive* predicates. They explicitly filter out any *head body* reflexives (12a'-y'). These verbs may be thought as represented in Shupamem lexicon as lexically or semantically reflexives. One common property to all these

verbs is that they describe a one-participant event whose action is generally self-oriented.

(12) Shupamem Inherent Reflexive Predicates

(a)	pém ŋwát	(a')	*pém tú ŋwát	'to praise onself'
(b)	lăp ŋwát	(b')	*lăp tú ŋwát	'to borther onself'
(c)	vèʃə̌ ŋwát	(c')	*vèʃə̌ tú ŋwát	'to restrain'
(d)	pěn ŋwát	(d')	*pěn tú ŋwát	'to hate onself'
(e)	púm ŋwát	(e')	*púm tú ŋwát	'to purge onself'
(f)	ʃ̃i ŋwát	(f")	*ʃ̃i tú ŋwát	'to control onself'
(g)	pétə́ ŋwát	(g')	*pétə tú ŋwát	'to protect onself'
(h)	tɔ́ʔʃə́ ŋwát	(h')	*tɔʔʃə tú ŋwát	'to take care of onself'
(i)	ɣúmə́ ŋwát	(i')	*ɣúmə́ tú ŋwát	'to behave'
(j)	sə̌ː ŋwát	(j')	*pém tú ŋwát	'to show off'
(k)	máʔnə̌ ŋwát	(k')	*pém tú ŋwát	'to expose onself'
(l)	kʊ́mʃə́ ŋwát	(l')	* kʊ́mʃə́ tú ŋwát	'to remember'
(m)	kút ŋwát	(m')	*kút tú ŋwát	'to block onself'
(n)	ŋɔ́ʔ ŋwát	(n')	*ŋɔ́ʔ tú ŋwát	'to commit suicide'
(o)	nê ŋwát	(o')	*nê tú ŋwát	'to vaunt'
(p)	tóʃə́ ŋwát	(p')	*tóʃə́ tú ŋwát	'to betraye onself'
(q)	túmə́ ŋwát	(q')	*túmə́ tú ŋwát	'to desist'
(r)	gbî ŋwát	(r')	*gbî tú ŋwát	'to worry/complain'
(s)	ɲ̃it ŋwát	(s')	*ɲ̃it tú ŋwát	'to faint'
(t)	lànə̌ ŋwát	(t')	*lànə̌ tú ŋwát	'to forget onself'
(u)	jŭʔʃə́ ŋwát	(u')	*jŭʔʃə́ tú ŋwát	'to be healthy'
(v)	fèʃə̌ ŋwát	(v')	*fèʃə̌ tú ŋwát	'to be happy'
(w)	mjètə̌ ŋwát	(w')	*mjètə tú ŋwát	'to protect onself'
(x)	tàmə̌ ŋwát	(x')	*tàmə̌ tú ŋwát	'to play with onself'
(y)	pwòbmə̌ ŋwát	(y')	*pwòbmə̌ tú ŋwát	'to feel sad'

The verbs listed in (12a-y) roughly correspond to verbs with a reflexive clitic in Ibero-Romance (Zubizarreta 1985). What it means to be an inherently reflexive verb in (12a-y) is that all the verbs belonging to this class take one argument in the lexicon.

A closer look at the verb class in (12) suggests that they behave in different ways: (a) one subset of verbs corresponds to those that may only be used intransitively (e.g. *Inherently* reflexives) as illustrated in (13)-(19); (b) another subset corresponds to those that may be used intransitively as well as transitively as illustrated in (14)-(22). In the second subset of verbs, when the verb is used transitively, it generally changes in meaning.

Let me start with *inherently* reflexive verbs that may be used only intransitively. This subclass systematically rules out any *head body* reflexive expression as shown in (13).

(13) a. mɔ́n$_1$ gbɨ̂ɨ ŋwàr-ɨ̀$_1$ (Inherent reflexive)
Child cut.PST body-his
'The child complained.'

b. *mɔ́n$_1$ gbɨ̂ɨ tú-ŋwàr-ɨ̂$_1$
Child cut.PST head-body-his

c. * mɔ́n$_1$ gbɨ̂ɨ-ɨ́ $_{1/2}$
Child cut.PST 3sg

d. * mɔ́n$_1$ gbɨ̂ɨ mʊ́ʊ́n
Child cut.PST man

In a different context, a verb such as *gbĩĩ* in (13) may also be interpreted as a transitive verb such as 'to cut' in (14a) meaning *to slaughter* or *to carve* in (14b). However, when it surfaces as an inherently reflexive predicate as in (16), it is always interpreted as an intransitive verb. That is why (13c-d) are ungrammatical.

(14) a. mɔ́n$_1$ gbĩĩ lɔ́t mʉ̀mvǐ
Child cut.PST neck goat
'The child slaughtered the goat'

b. mɔ́n̩ gbĩĩ tʉ̀tʉ̀
Child cut.PST tree
'The child carved the tree.'

I have claimed that the predicates listed in (12) are inherently reflexive verbs. This does not necessarily mean that they cannot be used as lexically transitive verbs (see (20)-(22), rather that in some contexts, when they are used as such, they yield a completely different meaning. A few verbs in (12) are categorically ruled out when used as lexically transitive verbs as shown in the (b) examples in (15)-(19). In Shupamem, to the best of my knowledge, all the (b) examples in (15) are systematically ruled out because of *head body* reflexives.

(15) a. mɔ́n̩ sǎ ŋwàr-ì$_1$ (Inherent reflexive)
Child show off.PST body-his
'The child showed off.'

b. * mɔ́n$_1$ sǎ tú ŋwàr-ì$_1$ (Inherent reflexive)
Child show off.PST head body-his
'The child showed off.'

c. *mɔ́n$_1$ sǎ nǎ-ʃí$_1$ (Transitive)
Child show off.PST mother-his
'The child showed off his mother.'

(16) a. mɔ́n$_1$ nê ŋwár-ì$_1$ (Inherent reflexive)
Child make full.PST body-his
'The child made full of himself.'

b. * mɔ́n$_1$ nê tú ŋwàr-ì$_1$ (Inherent reflexive)
Child make full.PST head body-his
'The child made full of himself.'

c. *mɔ́n$_1$ nê nǎ-ʃí$_1$ (Transitive)
Child make full.PST mother-his
'The child make full of his mother.'

(17) a. mɔ́n$_1$ fɛ̌ʃə́ ŋwár-ì$_1$ (Inherent reflexive)
Child enjoy.PST body-his
'The child enjoyed himself.'

b. *mɔ́n$_1$ fɛ̌ʃə́ tú ŋwár-ì$_1$ (Inherent reflexive)
Child enjoy.PST head body-his
'The child enjoyed himself.'

c. *mɔ́n$_1$ fɛ̌ʃə́ nǎ-ʃǐ$_1$ (Transitive)
Child enjoy.PST mother-his
'The child enjoyed his mother.'

(18) a. mɔ́n$_1$ vɛ̀ʃə́ ŋwàr-ì$_1$ (Inherent reflexive)
Child refrain.PST body-his
'The child refrained himself.

b. *mɔ́n$_1$ mjɛ̀tə́ tú njwàr-ì$_1$ (Inherent reflexive)
Child refrain.PST body-his
'The child refrained himself.'

c. *mɔ́n$_1$ mjɛ̀tə́ nǎ-ʃǐ$_1$ (Transitive)
Child refrain.PST mother-his
'The child refrained his mother.'

(19) a. mɔ́n$_1$ pwǒbmə́ ŋwàr-ì$_1$ (Inherent reflexive)
Child feel sad.PST body-his
'The child felt sad.'

b. *mɔ́n$_1$ pwǒbmə́ tú ŋwàr-ì$_1$ (Inherent reflexive)
Child feel sad.PST head body-his
'The child felt sad.'

c. *mɔ́n$_1$ pwǒbmə́ nǎ-ʃǐ$_1$ (Transitive)
Child feel sad.PST mother-his
'The child felt his mother.'

If the verbs in (13)-(19) were lexically ambiguous between an inherently reflexive meaning and a transitive meaning, then all the (c) examples would have been grammatical. But because only the inherently reflexive reading is available for this subset of verbs in (13)-(19), adding a direct object as we have done in the (c) examples is not permissible

The second subset of inherent reflexive verbs in (12) corresponds to verbs that may surface either as intransitive or transitive with a shift in meaning when used transitively as shown in (20)-(22).

(20) a. mɔ́n̩ jĩt ŋwàr-ì$_1$ (Inherent reflexive)
Child show off.PST body-his
'The child fainted.'

b. *mɔ́n$_1$ jĩt tú ŋwàr-ì$_1$ (Inherent reflexive)
Child show off.PST head body-his
'The child fainted.'

c. mɔ́n$_1$ jĩt nǎ-ʃ́i$_1$ (Transitive)
Child oblige.PST mother-his
'The child obliged his mother.'

(21) a. mɔ́n$_1$ túmɔ́ ŋwàr-ì$_1$ (Inherent reflexive)
Child desist.PST body-his
'The desisted himself.'

b. *mɔ́n$_1$ túmə́ tú ŋwàr-ì$_1$ (Inherent reflexive)
Child desist.PST head body-his
'The desisted himself.'

c. mɔ́n$_1$ túmə́ nă-ʃí$_1$ (Transitive)
Child bail out.PST mother-his
'The child bailed his mother out.'

(22) a. mɔ́n$_1$ wúmə́ ŋwàr-ì$_1$ (Inherent reflexive)
Child behave.PST body-his
'The child behaved/himself.'

b. *mɔ́n$_1$ wúmə́ tú ŋwàr-ì$_1$ (Inherent reflexive)
Child behave.PST head body-his
'The child behaved/himself.'

c. mɔ́n$_1$ wúmə́ nă-ʃí$_1$ (Transitive)
Child take care.PST mother-his
'The child took care of his mother.'

Based on the grammaticality of both (a) and (c) in (20)-(22), one may conclude that this subset of reflexive verbs are homophonous with transitive verbs in Shupamem although they are also listed in the lexicon as inherent reflexives verbs. Following this line of thought, one would better characterize the predicates in (15)-(21) as inherently intransitive verbs while those in (20)-(22) can be viewed as inherently transitive verbs. The expression *ŋwát* 'body' in (22) behaves more like

reflexivizing elements attested cross-linguistically, which turn many transitive verbs into reflexive ones.

3.2.Transitive Reflexive Predicates

The second group of predicates repeated in (23) can be characterized as transitive predicates (see Reinhart and Reuland 1993).

(23) Shupamem Transitive Reflexive Predicates

(a)	kwɔ́m ŋwát	(a')	kwɔm tú ŋwát	'to shave (onself)'
(b)	sŭ ŋwát	(b')	sŭ tú ŋwát	'to wash (onself)'
(c)	mètə̌ ŋwát	(c')	mètə̌ tú ŋwát	'to scrash (onself)'
(d)	tɔ́n ŋwát	(d')	tɔ̌n tú ŋwát	'to burn (onself)'
(e)	fúʔʃə̌ ŋwát	(e')	fúʔʃə tú ŋwát	'to imitate (oneself)'
(f)	kút ŋwát	(f")	kut tú ŋwát	'to dress up'
(g)	mĭnə̌ ŋwát	(g')	mĭnətú ŋwát	'to dirty (onself)'
(h)	kàʃə̌ ŋwát	(h')	kàʃə̌ tú ŋwát	'to draw (onself)'
(i)	ránə́ ŋwát	(i')	ránə́ tú ŋwát	'to rinse (onself)'
(j)	pěn ŋwát	(j')	pěn tú ŋwát	'to hate (oneself)'
(k)	gbètə̌ ŋwát	(k')	gbètə̌ tú ŋwát	'to scarify (onself)'
(l)	săp ŋwát	(l')	săp tú ŋwát	'to stab (oneself)'
(m)	jŭɣə́n ŋwát	(m')	jŭɣə́n tú ŋwát	'to mirror (onself)'
(n)	ɣùʃə̌ ŋwát	(n')	ɣùʃə̌ tú ŋwát	'to invite (oneself'
(o)	rĭ ŋwát	(o')	rĭ tú ŋwát	'to choose (oneself)'
(p)	fá ŋwát	(p')	fá tú ŋwát	'to sell (onself)'
(q)	tá ŋwát	(q')	tá tú ŋwát	'to count onself'

I assume that all the verbs in (23) are transitive verbs. Every verb in the list in (23) has the possibility of appearing with two arguments. That is why both *body* and *head body* reflexive pronouns may surface with them without generating an ungrammatical sentence. However, what remains to be explained is the distinction in interpretation between a reflexive predicate with a *body* reflexive and the one with a *head body* reflexive. Shupamem comparative deletion construction such as (24) where both reflexive types are used provides us with a clear contrast.

(24) a. nə̀$_1$ fɛ́t ŋwár-ɨ̀ nʒáʔ mfɔ̀n$_2$
Queen defend.PST body-3sg.Gen pass king
'The queen defended herself better than the king defended himself.'
'*The queen defended herself better than the king defended her.'

b. nə̀$_1$ fɛ́t tú njwár-ɨ́ nʒáʔ mfɔ̀n$_2$
Queen defend.PST head body-3sg.Gen pass king
'The queen defended herself better than the king defended himself'
'The queen defended herself better than the king defended her.'

c. nə̀$_1$ fɛ́t nâ ʃɨ́$_1$ nʒáʔ mfɔ̀n$_2$
Queen defend.PST mother-3sg.Gen pass king
'The queen defended her mother better than the king defended her'
'The queen defended her mother better than the king defended her.'

As we can see in (24a), when the *body* reflexive pronoun is used, only a sloppy reading is available. When the *head body* reflexive is used as in (24b), both sloppy and strict readings are available. In addition, the example in (24c) shows that a non reflexive pronoun allows both a a strict reading and a sloppy. The contrast between *body* reflexives and *head body* reflexives is summarized in table 7.3.

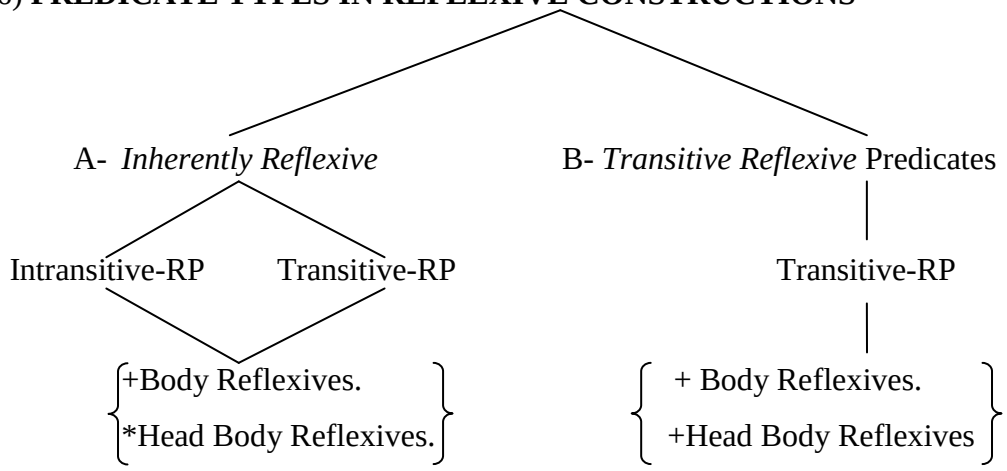
Syntactic environment	**Body reflexives**	**Head body reflexives**
After transitive verbs	✓	✓
Local binding as a reflexive	✓	✓
After inherently reflexive verbs	✓	×
After Adjectives (literal 'body' use)	✓	×
Modify pronoun	✓	×
Only Sloppy reading in comparative deletion construction	✓	×
As subject	×	✓
DP Possessors	×	✓
Long distance binding as a reflexive	×	✓
Used as logophors	×	✓
Strict & sloppy reading in comparative deletion constructions	×	✓

Table 7.3. Syntactic Properties of Shupamem Reflexive Types

To sum up, the discussion of what I have coined as inherently reflexive predicates in (12) seem to have two possible interpretations: (a) a reading where the verb surfaces either as intransitive (in which case no direct object is allowed) and (b) a reading where the verb surfaces as transitive (in which case a direct object may be allowed). Based on the examples discussed above, the argument structure of both reflexive predicate types attested in Shupamem can be summarized as in the following figure in (26). The figure in (26) suggests that *head body* reflexives in Shupamem behave exactly as English stressed reflexives repeated in (25) (see Collins and Postal, 2008, Chapter 16). According to Collins and Postal (2010:286), stressed pronouns cannot surface as DP complements of inherently reflexive constructions.

(25) *I am behaving MYSELF.

(26) **PREDICATE TYPES IN REFLEXIVE CONSTRUCTIONS**



The difference between the transitive reflexive verbs under the *Inherently Reflexive* Predicates branch and those under the *Transitive Reflexives* Predicates branch is that in the former, head body reflexives is always ruled out while in the latter, both types of reflexives are acceptable.

4.Binding of Body-part (BP) Reflexive Types in Shupamem

I have shown that the most common reflexivization strategy used in Shupamem is body- part (BP) reflexives such as *body* plus a possessive pronoun and *head body* plus a possessive pronoun. As illustrated in (5), only *body* reflexives can be used in its literal meaning. The question then is how the reflexivizing use of body-part expressions can be understood in terms of the Binding Theory. The standard binding conditions as proposed in Chomsky's (1981) are defined as in (27) for convenience.

(27) **Binding conditions**

Condition A: An anaphor must be bound in its binding domain.

Condition B: A pronoun must be free in its binding domain.

Condition C: An R-expression must be free.

(28) **A binds B** if and only if:

(i) A c-commands B and

(ii) A and B are coindexed. (Carnie, 2002:93)

(29) **A c-commands B** if and only if

B is the sister of A or B is contained within the sister of A.

Under the Binding Conditions stated above, reflexives are assumed to be in complementary distribution with pronominals. Reflexives always require a binder within their local domain, while a pronominal requires that a binder not be present. Thus, it is standard assumption that reflexives are taken to obey Condition A and pronominals are taken to obey Condition B.

4.1.Condition A

Condition A states that a reflexive (or a reciprocal) pronoun must be bound within its local domain. This can be tested in the following examples in (30)-(31). From now on, I will ignore the literal *body* reading to simplify the analysis. Nevertheless, I will refer to it if I need to disambiguate the interpretation of the sentence. The most common feature between body-part expressions and *self* is that they are both inherently relational. What do all these considerations imply for the

implementation of the binding theory in Shupamem? To answer this question, let me consider the following examples in (30) and (31).

(30) a. John$_1$ ná kàʃə ŋwàr-ì$_{1/*2}$
John IRR draw body-3sg.Gen
'John draws himself.'

b. John$_1$ ná kàʃə tú ŋwár-í$_{1/*2}$
John IRR draw head body-3sg.Gen
'John draws himself.'

(31) a. nă$_1$ John$_2$ ná kàʃə ŋwàr-ì$_{1/*2}$
Mother John IRR draw body-3sg.Gen
'John's mother draws herself/*himself.'

b. nă$_1$ John$_2$ ná kàʃə tú ŋwár-í$_{1/*2}$
Mother John IRR draw head body-3sg.Gen
'John's mother draws herself/*himself.'

As we can observe in (30a&b), both *head* and *head body* reflexives are bound within their local domains; therefore conform to condition A of the BT. This is also true in (31) where they are locally bound as least for transitive predicates. The standard BT requires reflexives to be obligatorily bound by a c-commanding NP in its local domain (either the subject of the clause). Now, let us consider a complex sentence like (32).

(32) a. John$_1$ ná ŋgúpmə̀ mì nʒ̀ìkàm$_2$ ná ŋkàʃə̀ ŋwàr-ì*$_{1/2}$
John IRR think that Njikam IRR draw body-3SG.Gen
'John thinks that Njikam draws himself'

b. John$_1$ ná ŋgúpmə̀ mì nʒ̀ìkàm$_2$ ná ŋkàʃə̀ tú ŋwár-ɨ́$_{1/2}$
John IRR think that Njikam RR draw body-3SG.Gen
'John thinks that Njikam draws himself'

(32a-b) illustrate cases of a non local binding (here outside of the embedded clause) which is only permissible with a *head body* reflexive (32b). What (32b) suggests is that condition A does not apply to *head-body* reflexives in Shupamem, because it allows non local binding. How do we then distinguish those anaphors that require a local binder from those that are exempt from this condition? Let us consider these examples in (33) and (34).

(33) a. mfòn$_1$ ná ntàʔ mí lòtàʔ ɣúʃə̀ tú ŋwár-ɨ́$_{1/2}$
King IRR want that doctor invite head body-3SG.Gen
'The king wants the doctor to invite himself' (*tú ŋwár-ì*= king)

b. mfòn$_1$ ná tàʔ mí lòtàʔ$_2$ ɣúʃə̀ ŋwár-ɨ́*$_{1/2}$
King IRR want that doctor invite body-3SG.Gen
'The king wants the doctor to invite himself' (*ŋwár-ɨ̂*=king)

c. mfòn$_1$ nâ táʔ mí lòtàʔ ɣúʃə̀ ɨ́$_{1/*2/3}$
King IRR want that doctor invite 3SG
'The king wants the doctor to invite him or someone else.'

The contrast between (32a) and (33b) suggests that only a *body* reflexive is necessarily locally bound as shown in (33b). Sometimes it looks like the binding is not local, but this is only when the word ‘body’ has its literal interpretation. However, the example in (33a) shows that *head body* reflexive has a non-local antecedent. Thus, one way of analyzing head body reflexives is to argue that they can be both locally and long distance bound.

The binding configuration in (34) which involves an inherently reflexive predicate is slightly different from the one in (33) involving a transitive reflexive predicate with respect to *head body* reflexive and *body* reflexives.

(34) a. *mfòn$_1$ nâ táʔ mî lòtàʔ̩ măʔnə̀ tú ŋwár-ɨ́$_{1/2}$
King IRR want that doctor expose head body-3sg.Gen
‘The king wants the doctor to expose himself.’

b. mfòn$_1$ nâ táʔ mî lòtàʔ$_2$ măʔnə̀ ŋwàr-ɨ̀ *$_{1/2}$ (Locally bound).
King IRR want that doctor expose body-3sg.Gen
‘The king wants the doctor to expose himself.’

c. mfòn$_1$ nâ táʔ mî lòtàʔ$_2$ măʔnə̀ ɨ́$_{1/*2/3}$ (Ambiguous).
King IRR want that doctor expose 3sg
‘The king wants the doctor to annoy him or someone else.’

(34a) is ruled out because in general, *inherently* reflexive predicates do not allow any *head body* reflexives. (34b) is only acceptable when it has a reading in which *body* reflexive is locally bound to *lòtàʔ* 'the doctor'. Therefore, I conclude that (33) contrasts with (34) because of the nature of the predicate, not that of the binding configuration. In (33), whereas the reflexives *tú ŋwár-î* and *ŋwàr-ì*'himself' may be coindexed with the local subject *lòtàʔ* 'doctor' (BC A), coindexing the pronoun *î* 'him' with the subject is ruled out (BC B), because then the pronoun would be locally bound in its binding category. The *head body* reflexive pronoun in (33a) is coindexed with either the subject of the matrix sentence or that of the embedded sentence. However, in (34b) the *body* reflexive is only bound to the subject of the embedded sentence (local binding).

Turning now to the binding configuration in the embedded clauses, the examples in (35) suggest a sharp contrast between *head body* reflexives and *body* reflexives compared to those in (33)-(34).

(35) a. *nàà$_1$ John$_2$ ŕíjà mǐ ŋwàr-ì$_{1/2}$ pâ ràǹǐ
Mother John say.PST that body-3sg.Gen COP smart
'John's mother said that she (herself) is smart.'

b. nàà$_1$ John$_2$ rî̀jà mì tú ŋwàr-ì$_{1/*}$ pâ ràǹì
Mother John say.PST that head body-3sg.Gen COP smart
'John's mother said that she (herself) is smart.'

In (35), the question here is whether which of *body* and *head body* reflexives may occur in the subject position of the subordinate clause without crashing the whole sentence. It turns out that only a *head body* reflexive is felicitous in that syntactic environment. (35a) is ruled out because we have forced a *body* reflexive to occur in subject position of the subordinate clause. It follows from (35b) that even though *head body* reflexive does not need to be locally bound, it does need a c-commanding antecedent.

4.2.Condition B

Turning to the second condition of the BT, namely Condition B, which states that a non- reflexive must be free within its local domain, the following examples will show what the predictions are for Shupamem.

(36) *John$_1$ ná nkúù ǐ$_1$
John IRR like 3sg
'John likes his body/him.'

(37) [nàà$_1$ John$_2$] ná nkúù ǐ$_{*1/2}$
Mother John IRR like 3sg
'John's mother likes him.'

(38) John$_1$ ná ŋgúpmə́ mí nʒɨ̀kàm$_2$ ná nkúù -ɨ́$_{1/*2/3}$
John IRR think that Njikam IRR like 3sg
'John thinks that Njikam likes his him.'

An example such as (36) is ruled out in Shupamem because the pronoun *ɨ̂*$_1$ is not free within its local domain, therefore violates condition B. (37) satisfies condition B in that the pronoun *ɨ́*$_1$ which is a non-reflexive pronoun is free in is local domain. However, the object pronoun *ɨ̂* '3SG' takes *nàà* 'mother' as its antecedent the sentence is systematically ungrammatical because of the violation of condition B which rules out such a binding relation.

(38) satisfies condition B in that the pronoun is free in the environment where pronouns must be free according to condition B. The antecedent of the pronoun *ɨ́* 'he' is *John* and there is no violation of Binding Condition B. In (37) *ɨ̂* '3SG' can either refer to *John* or someone else. The conclusion so far seems to be the following for Shupamem:

1. Head body reflexives do not satisfy condition A because they can be non-locally bound.
2. Body reflexives are always locally bound while head body reflexive may be locally or long distance bound.

3. Condition B is also satisfied in Shupamem because pronouns are always free in their local domain.

4.3.Condition C

Let us now turn to condition C effects in Shupamem. Condition C states that an R-expression (i.e proper names or definite description) must be free. In this analysis, the ungrammaticality of (39a, b and d) is grounded in a Condition C violation.

(39) a. *ŋʒɨ̀kàm$_1$ ná ŋkúù ŋʒɨ̀kàm$_1$
Njikam IRR like Njikam
'Njikam likes Njikam.'

b. *ḿ$_1$ ná ŋkúù ŋʒɨ̀kàm$_1$
3SG IRR like Njikam
'Njikam likes Njikam.'

c. [nàà$_1$ John$_2$] ná nkúù John$_2$
Mother John IRR like John
'John's mother likes John.'

d. *John$_1$ ná ŋ-gúpmə́ mî ŋʒikam$_2$ ná nkúú John$_1$
John IRR PTCP-think that Njikam IRR like John
'John thinks that Njikam likes John.'

e. *ḿ$_1$ ná ŋ-gúpmə́ mɨ̀ John$_1$ pâ râńí
3SG IRR PTCP-think that John COP smart
'He thinks John is smart.'

These sentences are consistent with the claim that R-expressions are free. Now, let us look at additional examples in (40) to see what those paradigms tell us about condition C when pronouns occur in subject positions.

(40) a. *ǐ$_1$ ná kwóm mfòn$_1$
3SG IRR shave king
'He is shaving the king.'

b. *ŋwár ǐ$_1$ nâ kwóm mfòn$_1$
body 3sg.Gen IRR shave king
'He is shaving the king.'

c. *tú ŋwàr ǐ$_1$ nâ kwòm mfòn$_1$
Head body 3sg.Gen IRR shave king
'He is shaving the king.'

It can be observed that while the binding condition on ǐ '3sg' (40a) is satisfied, coindexing both the pronoun (40a) and reflexives (40b&c) with the NP *mfòn* 'king' in (40) is still ruled out by Condition C. (40b&c) also violate the requirement that reflexives need c-commanding antecedents.

5.Reciprocals

This section is devoted to the morphosyntactic peculiarities of reciprocal constructions in Shupamem. In order to identify reciprocals in this section, I will borrow Haspelmath's (2007) concept of 'mutual situation' that he characterizes as 'a situation with two or more participants (A, B, …) in which for at least two participants A and B, the relation between A and B is the same as the relation between B and A'. On the basis of this definition, I argue that a reciprocal construction in Shupamem consists of a predicate with the reciprocal suffix -*nə̌* that takes a plural *body* reflexive with a high tone, not the one with a Low tone as illustrated in (41) and (422).

(41) a. Jean pô Maria kù-nə́ ŋwát- áp
Jean and Mary love-REC body-GEN.3pl
'John and Mary love each other'

b. Jean pô Maria kù-nə́ ŋwàr-àp
Jean and Mary love-REC body-GEN.3pl
'John and Mary love their bodies.'

(42) a. *Jean pô Maria kù-nə́ tú- ŋwát- áp
Jean and Mary love-REC head body-GEN.3pl
'John and Mary love each other'

b. Jean pô Maria kù-nə́ tú-ŋwàr-àp
Jean and Mary love-REC body-GEN.3pl
'John and Mary love themselves'

(43) a. Jean pô Maria kù ŋwát- áp
Jean and Mary love body-GEN.3pl
'John and Mary love their bodies/themselves (Distributive reading)'

b. Jean pô Maria kù ŋwàr-àp
Jean and Mary love body-GEN.3pl
'John and Mary love bodies/themselves (Collective reading)'

(44) a. *Jean pô Maria kù tú ŋwát- áp
Jean and Mary love head body-GEN.3pl
'John and Mary themselves'

b. Jean pô Maria kù ŋwàr-àp
Jean and Mary love-REC body-GEN.3pl
'John and Mary love themselves.'

The common feature of all these examples in (41) and (42) is easy to see: in each of the situations described above, the same action is performed by at least two participants. The contrast between (41a) and (42b) shows that only a plural *body* reflexive which has a High tone can be interpreted as a reciprocal sentence as shown in (41a).

However, for some reasons I have not been able to explain, when the *body* reflexive which bears a Low tone is used, the classifier *body* only reads as a possessive DP. From this viewpoint, it turns out that the true Shupamem counterpart of *each other*, as a natural expression denoting reciprocity, is the structure in (41a) which consists of a reciprocal suffix combined with a *plural body* reflexive that has a High tone. What the contrast in (42) tells us is that in no context, a plural *head body* reflexive with a Low tone can be interpreted as a reciprocal construction. When it combines with the reciprocal suffix, the sentence is systematically ruled out as shown (42a). Nevertheless, when its *Low tone* counterpart combines with the reciprocal suffix, the sentence reads as a regular reflexive construction.

Now, let us consider the examples in (43) and (44) where the reciprocal morpheme *nə̀-* is dropped. The plural 'body' in (43a) reads as their bodies or themselves with a distributive meaning whereas in (43b), it has a similar interpretation but with a collective meaning. (44a) is ungrammatical and (44b) reads as a strict reflexive sentence. This actually supports our claim that *head body* reflexives are only interpreted as strict reflexives. To view this, consider the additional examples in (45) and (46).

(45) a. pón lăb-mə́ ŋwát- áp
children hit-REC body-GEN.3pl
'The children hit each other'

b. pón lăb-mə́ ŋwàr-àp
Children hit-REC body-GEN.3pl
'The children hit their bodies'

(46) a. * pón lăb-mə́ tú- ŋwát- áp
children hit-REC head body-GEN.3pl
'The children hit each other'

b. pón lăb-mə́ tú-ŋwàr-àp
children hit-REC body-GEN.3pl
'The children (mutually) hit themselves'

These sentences in (45) and (46) show the same contrast in meaning as we observed in (41) and (42). Sentence (45a) depicts a fighting situation where at least one child hits another child and vice versa. (45b) is a different scenario which does not necessary mean a fight, but rather a situation where children mutually hit their bodies. (45b) can be better characterized as a *colliding* event where two groups of children hit themselves and there is no way to explain whether they did it reciprocally or not.

In a broad sense, the above examples show that the reciprocal meaning is semantically related to the reflexive meaning. Moreover, there must be a plural NP in the subject position of a sentence containing a reciprocal.

(47) a. *món lăb-mə́ ŋjwát- áp
Child hit-REC body-GEN.3pl
'The child hit each other'

b. *món lăb-mə́ ŋwàr-àp
Child hit-REC body-GEN.3pl
'The children hit their bodies '

Since reciprocity presupposes plurality, both (47a&b) are ruled out because they violate the basic prerequisite of plurality. I propose that Shupamem reciprocal suffix -*nə̌* has the following properties.

1. The reciprocal suffix -*nə̌* is only compatible with at least two participants event.

2. The reciprocal -*nə̌* only receives the reciprocal interpretation only when associated with body reflexives with a high tone.

6.Summary

The properties of Shupamem reflexives can be roughly summarized as follows.

(48) a. *Body* reflexives must be locally bound.

b. *Head body* reflexives may be locally or long distance bound in a sense that they impose neither a locality nor an antilocality requirement on the choice of their antecedent.

c. Unlike *head body* reflexives, *body* reflexives are acceptable with both inherently reflexives predicates and transitive reflexives predicates.

d. head body reflexives behave more like the English stressed reflexives which are never allowed with inherently reflexives predicates.

On the basis of these facts, I propose to analyze *body* reflexives as bound pronouns subject to principle A effects while *head body* reflexives are either locally bound or long distance bound, thus not subject to principle A.

7.Logophoricity versus Emphatic Reflexives

According to Clements (1974:1), logophoric pronouns are used to 'distinguish reference to individual whose speech, thoughts, or feelings are reported in a given linguistic context, from reference to other individuals'. Shupamem distinguishes two kinds of logophoric constructions: (a) the non-emphatic logophoric that is very similar to the third person singular (49b), except that the tone on the vowel is high; (b) the emphatic logoporic pronoun based on head body reflexives (53a).

7.1.Shupamem Logophoric *pro*-forms

In the scope of propositional-attitude verbs, non-logophoric and logophoric pronouns are in complementary distribution as regards their antecedents (i.e. binders) as shown in (49).

(49) a. mfɔn$_1$ rĩjà mí í$_{1/*2}$ twó
King say.PST that 3sg.logophor come.PST'
'The king said that he (the king) came.'

b. mfɔn$_1$ rĩjà mí ì$_{2/*1}$ twò
King say.PST that 3sg come.PST'
'The king said that he (someone else) came.'

In (49a), *mfɔ̂n* 'the king' is the only possible binder for the pronoun *î* 'he'. In this situation, *ǐ* must be bound by *mfɔ̂n*. But in (49b), the pronoun *ǐ* 'he' cannot be bound by the subject DP *mfɔ̂n*, consequently, the non-logophoric pronoun in this context can only function as a discourse anaphor in (49b). The contrast between (49a) and (49b) suggests that the pronoun *î* '3sg' in (49a) is a logophoric pronoun. This observation also holds for focused pronouns in the logophoric context as shown in (50), except that in such a context, only strong forms are acceptable.

(50) a. mfɔ̂n$_1$ rǐjà mî à twó wǐ$_1$/ *ǐ$_1$
King say.PST that it come.PST 3sg.logophor'
'The king said that HE (the king) came.'

b. mfɔ̌n$_1$ rǐjà mî à twò wì$_2$/ *ì$_2$
King say-PST that it come.PST 3sg
'The king said that he (someone else) came.'

Based on the examples in (49) and (50), I conclude that all logophoric pronouns must be bound by a subject antecedent. This is confirmed by the following examples in (51) which show that an indirect object cannot be the antecedent of the logophoric pronoun.

(51) a. Kofi$_1$ rĭjà nə mɔ́n$_2$ mì í$_{1/*2}$ twó
Kofi say.PST to child that 3sg-LOG come.PST
'Kofi told the child that he (Kofi) came.'

b.Kofi$_1$ rĭjà nə mɔ́n$_2$ mì ì*$_{1/2}$ twò

Kofi say.PST to child that 3sg come.PST

'Kofi told the child that he (Kofi) came.'

7.2.Shupamem Logophoric *Self*-forms

Shupamem logophoric self-forms are typically like reflexive intensifiers as shown in (52). Only *head body* reflexives may be used in a logophoric context. Also, logophoric self-forms are always bound to the subject DP.

(52) a. Kofi$_1$ rìjà mì tú njwár-í$_{1/*2}$ twó
Kofi say.PST that head body-3sg.Gen come.PST
'Kofi said that he (Kofi) came.'

b. *Kofi$_1$ rĭjà mì ŋwár-ɨ́$_{1/*2}$ twó

Kofi say.PST that body-3sg.Gen come.PST
'Kofi said that he (Kofi) left.'

Let us now consider an example like (51).

(53) a. Kofi$_1$ rĭjà nə mɔn$_2$ mì tú ŋwár-ɨ́$_{1/*2}$ twó
Kofi say.PST to child that head body-3sg.Gen come.PST
'Kofi told the child that he (Kofi) came.'

b. *Kofi$_1$ rĭjà nə mɔ́n$_2$ mì ŋwár-ɨ́$_1$ twó

Kofi say.PST to child that body-3sg.Gen come.PST
'Kofi told the child that he (Kofi) came.'

The fact that only a *head body* reflexive pronoun (53a) can be bound to the subject of the matrix clause suggests that (a) they are long distance anaphors; (b) they are interchangeable with lopophoric pronouns. A *body reflexive* is unacceptable in a similar context because it is only locally bound.

8.Conclusion

In this chapter, I have discussed the properties of the pronominal system of Shupamem in the context of the Binding Theory. Shupamem distinguishes two different types of reflexives, namely: (a) the *body* reflexive and (b) the *head body* reflexives whose distribution depends on the status of the main predicate (e.g. *inherently* reflexive versus *transitive* predicates). I argued using some syntactic diagnostics that *body* reflexives are homophonous to possessive DPs and can be used in reciprocal constructions. Body reflexives are locally bound while head body reflexives may be either locally bound or long distance bound.

Chapter Eight:General Conclusion

The aim of this chapter is to draw together the main topics discussed in chapter 1-7, in particular showing how the morphosyntactic features described in those chapters pattern together in a clause. It is thus not my intention to build up any formal theory of Shupamem syntax here, but rather to summarize the key features of the language that need to be taken into account by those who wish to set up such a formal account. The discussion proposed here follows overall the order of presentation of the earlier chapters. My ultimate goal in writing the grammar of Shupamem was to understand ways in which Shupamem organizes its meaningful lexical items, i.e., words and phrases, to build bigger minimal units that form a sentence. So many questions came to mind, namely: What is the clausal structure of Shupamem? Which elements or units are more characteristics of Shupamem? Is Shupamem homogeneous in respect to word order at the phrasal level as well as sentential level? Typologically speaking, what makes Shupamem very unique and worth studying among the Grassfields Bantu languages and Bantu languages in general? Furthermore, how does Shupamem make sense of its syntax with respect to negation, questions and to some extent the internal structure of the noun phrase with respect the apparent free word order?

In a broader sense, this dissertation has given a description of different aspects of Shupamem using the minimalist framework (Chomsky 1995, 2001, 2002). I have attempted to touch upon phonology, morphology and syntax to analyse a host of issues regarding word order, morphological processes as well as tonal melodies that interact in the the utterance of grammatical sentences. The collection of chapters discussed in this dissertation thus combine to form a coherent whole, trying to balance between descriptive generalizations and relevant theoretical assumptions. Concretly speaking, I looked at the syntactic constraints that govern movement operations at the phrasal level (e.g., NP movement operations internal to the DP for agreement purposes) or at the sentential level (e.g., distinction between focused subject DPs and focused object DPs or adjuncts).

1.Summary of the Results

Chapter One is the general introduction of the dissertation where I presented my general as well as specific objectives. I also introduced the readers to some general facts about Shupamem with respect to its people, its history and its classification among the Grassfields Bantu languages. Furthermore, I went over some of the key studies that have been done on Shupamem.

Most earlier studies on Shupamem such as Koelle (1854) and Ward (1938) have been very usefull to this analaysis at least from the diachronic point of view. Comparing earlier data to modern Shupamem today, one can possibly observe an interesting trend in what looks like of a sound change in progress. But, there needs to be further investigation to make a more compelling argument as to whether there is an ongoing phonetic change in Shupamem or not. Essentially, this chapter was an overview of previous research on Shupamem.

Chapter Two layed out the basic features of the Shupamem Grammar with a particular focus on some essential but its crucial phonological, morphological characteristics. Specifically, I touched upon the questions of how the phonological units pattern together to form bigger constituents. With respect to the phonological system, I provided an extensive analysis of nasal place assimilation to prepare the reader to a number of segment changes that are common in the language. At the suprasegmental level, I showed that tones play a major role in the language. Despite the tonal complexities that Shupamem displays with respect to the combination nouns and verb phrases, it appears that the tonal melody is ruled governed. For example, at the level of the sentence, tones are subject to a general downstep rule that is essentially used as a demarcative function. Thus, when two high tones are adjacent, the next one is systematically lowered.

Another issue discussed in this chapter was the issue of noun classes.I showed that there is a complex interaction between noun classes and the tonal system, especially with respect to the distinction between singular and plural. The noun class plays a crucial role in word order alternation. Overall, chapter Two provided some background information about the the internal syntax of Shupamem with respect to its complex inflectional system.

Chapter Three described and explained newly found data from Shupamem that provide significant counterevidence to Cinque's (2005:315) theory of Greenberg's Universal 20 that basically claims that 'Of the 24 mathematically possible orders of the four elements demonstrative, numeral, adjective, and noun, only 14 appear to be attested in the languages of the world.' I fundamentally adopted a feature based approach to phrasal movements which showed that the correct distribution of forms within the DP in Shupamem follows from the agreement asymmetry observed between the head noun and its various modifiers. Specifically, it is shown that the agreement marker that encodes the definite article is spelled out if and only if the noun phrase moves past the noun modifier. When the NP remains in situ (i.e., after the modifier), no agreement morpheme is ever pronounced.

Data from Shupamem showed contra Cinque's hypothesis that in fact, 19 orders out of 24 are grammatical and derivable in UG, when one look closely at the internal structure of a DP combining a noun phrase with the demonstrative, the numeral and the adjective. I was able to shown that previous theories devised to account for Greenberg's Universal 20, whether it is LCA-based or not do not actually hold on empirical ground. Cinque's grammar explicitly asserts that there can't be more than 14 orders cross-linguistically, which implies that the newly uncovered four extra orders in Shupamem cannot be derived without contradicting Cinque's major assumptions. I believe that Greenberg's universal 20 and previous theories describing it fail to explain the classic definite versus indefinite contrast agreement pattern and why the NP moves in Shupamem. It is mainly argued that s*pec-head* agreement relation hypothesis developed in Kayne's LCA is a crucial feature driving movement operations within the DP in general. It is also shown that the predictions made in Cinque's (2005) and Abels and Neeleman's (2006, 2009) theories do not actually hold. Therefore previous proposals need to be rethought in order to take into account the agreement facts that are crucial in many Bantu languages with respect to word order alternation.

In short, this chapter proposed a theory of movement that is better equipped to explain why certain sequences involving a phrasal movement of the head noun and a number of other noun modifiers are grammatical while others are ruled out. My discussion of word order variation has explored Rizzi (2006, 2008) *Freezing Principle* to explain a body of restrictions imposed on XP movement across a number of functional projections internal to the DP.

Chapter Four offered a comprehensive description of the TAM system of Shupamem. Building on Comrie (1975, 1985), I defined on a number of tense, aspectual and modal markers attested in Shupamem to discuss how they interact with each other. It is shown that grammatical tenses as well as time adverbials are used in a way that suggests the morphological varietiions of tense affixes in Shupamem are dictated by the contexts or situations. For instance, Shupamem tenses are either viewed as focused or non-focused depending on specific contexts, such that speakers have to keep track of some pragmatic presuppositions of the sentence to be able to select the appropriate tense morphemes. This chapter clearly suggests a distinction between positive versus negative sentences. Specifically, the agreement paradigms in negative clauses, unlike in positive ones are much more complicated. Negation morphemes differ according to the status of tense, aspects and mood displayed in the clause.

Chapter Five provided a survey of of all negation types attested in Shupamem. Data from Shupamem revealed that there is remarkable diversity of negative patterns observed in the language. Morphologically, I argued that the surface forms of the negative morphemes basically depend on tense, aspect, mood and to some extent the contexts or situations. Syntactically speaking, standard negation morphemes differ from constituent negation morphemes.

First, while standard negation morphemes obligatorily require a post-verbal pronoun, constituent negation morphemes never license any post-verbal pronoun. Second, at the sentential level, standard negative morphemes always surface higher than the constituent negation morphemes; otherwise, the sentence will be ungrammatical. The distibutional features of each negation types suggested that Shupamem belongs to the family of 'bipartite negation' discussed in Bell (2004). Therefore I opted for a derivational model developed in studies like Bell 2004; Belletti 1990, Zanuttini 1991, Pollock 1989, Nkemnji 1995 among others to show that post-verbal pronouns which agree in number with the subject DP are in facts instances the realization of NEG_2 in Shupamem. The theory of negation developed in chapter Five revealed that despite the surface differences of the morphological forms of standard negative particles, they all have similar syntactic and semantic functions that distinguish them in a unified manner from constituent negation morphemes.

The theory I have proposed adequately captured the generalizations across these two types of negations at the clausal level where it is shown that standard negative morphemes always occur in the main clause while the constituent negation cannot scope over it.

This in fact demonstrates that standard negation morpheme and constituent negation morphemes are mutually exclusive with respect to the tense, aspect and mood. Only standard negation morphemes pattern with the TAM inflectional affixes while constituent negation morphemes usually pattern with uninflected elements (e.g., infinitive, NP, preposition, conjunctions, focus etc).

Chapter Six was concerned with the syntax of questions. In its first half, I went over the key features of focus strategies used in all question types in order to provide some descriptive generalizations that are crucial to the understanding of the internal structure of CP with respect to left peripheral and post-verbal focus. This chapter thus assumed the cartographic approach developed in studies like Rizzi (1997, 2004) and related works (e.g. Aboh 2004, Collins and Essizewa 2007, Zabel 2004, Buel 2004, among others) to account for relevant facts in Shupamem. The discussion of focus marking in Shupamem showed that there is a wide variety of grammatical means to mark focus in the language. More interestingly, there is an asymmetry between subject focus and other argument focus (e.g., object and adjunct focus) in interrogative clauses.

While it is possible to focus a DP object or an adjunct in situ in interrogative clauses, using the contrastive focus marker *pò*, wh-elements as well as regular DPs are never focused in their canonical preverbal positions. In order to focus a subject DP or a wh-element in subject position, the subject-verb inversion is used to circumvent a violation of the constraint against focused expressions in preverval topic position (e.g., * Focus expression in Spec-TP). Further research on these focus features on other Grasslfields is needed to confirm whether these properties are peculiar to the focus-marking mechanism of Shupamem, or whether they reflect a more general characteristics of the Niger-Congo languages in general.

Chapter Seven was concerned with the description and interpretation of the syntactic properties of the *body-part* (BP) reflexive expressions attested in Shupamem using Chomsky's (1981, 1986) Binding Theory. It explored the gramaticalization of body-part expressions into reflexive pronouns. It is interesting to note that, data from Shupamem show distinct distributional properties between the noun *ŋwát* 'body' and *tú ŋwát* 'head of the body' that are used in combination with possessive pronoun to express the idea of reflexivity. In fact, it is demonstrated that *body-reflexives* are always locally bound whereas *head-body-reflexives* are long distance bound. Each type of reflexive expressions behaves differently with respect to the binding conditions as well as the predicates they can license. Shupamem also makes use of logophoric pronouns in a way that suggests significant similarities

with head-body reflexives. Overall, this chapter dealt with the morphosyntax of reflexive expressions where the paradigms of body-part expressions that appeared to be chaotic at the initial phase of my investigation, turned out to be systematically regular with respect the the binding conditions. Nevertheless, further investigation is needed to uncover the lexical restrictions imposed on the types of predicate that pattern with those expressions.

The last chapter concerns our concluding remarks about all the issues that have been discussed in the thesis.

2.Conclusion and Further Research Questions

This dissertation has left opened several morphosyntactic and as well as semantic questions about Shupamem that obviously need further investigation. On the syntactic front, one pressing issue is the question of word order between tense affixes with respect to the negation morphemes. We have seen that the surface position of the future tense morphemes and that of the the past tense morphemes are different. While I have argued that this occurs because of the fact that the future tense in Shupamem is more like a modal than it is a tense morpheme, such an argument needs to be worked out properly to show how it can account for word order asymmetries in the clause.

A second puzzle that came up in chapter 4 is the issue of post-verbal pronoun in standard negation. Although we have been convinced that those pronouns stand for the the second negative particle, we have not been able to completely put into a rest the issue of why such a pronoun is exceptionally required only in negative sentences. Since the semantic analysis of relevant facts about standard negation might give us more convincing arguments about why the post-verbal emphatic are critically required in Shupamem and even a number of Grassfields Bantu languages, futher investigation is needed in that direction to further our understanding of sentential negation in a broader sence. Since we have seen that negation morphemes are morphologically controlled by tense, aspect and mood, this leaves open the investigation of the semantics of negation with respect to its interaction with tense, aspect and mood in Shupamem. The issue of negation concords as well as they syntax-semantic interpretation is also of interest. A broader ramification of the syntactic analysis put forth here, which assumes that Shupamem is a bipartite negation, is its potential to inform our understanding of similar constructions in other natural languages. Furthermore, Shupamem has serial verb constructions; it will be interesting to look at the behaviour of the post-verbal pronoun in negative sentences with respect to the second verb in the SVC.

Another promising area in which further investigation is needed is the semantics of focus constructions in Shupamem as presented in chapter Six. It is not clear whether the asymmetry observed between non-subject focused expressions and subject focus expression with respect to the preverbal position is a property of UG. It will be thus desirable to develop a more formal analysis that can compare the generalizations that have emerged from Shupamem data discussed here, to other related Niger-Congo languages and beyond.

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