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THE MORPHOSYNTAX OF GHOMÁLÁ' VERBS: FOCUS ON INHERENT COMPLEMENT VERBS AND SERIAL VERB CONSTRUCTIONS.

A dissertation submitted in partial fulfilment of the requirements for the Award of a Master's Degree in Linguistics

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DEDICATION

To

The almighty God,
CHOUDJA Marc family,
FOKO Jean family.

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ABSTRACT

This dissertation tackles the morphosyntactic properties of verbs in Ghomálá' with special focus on syntactic behaviors of inherent complement verbs and serial verb constructions. The work is confined within the Minimalist Program as developed by Chomsky (1995, 2000, 2001, 2008, and 2013) though an eclectic approach is sometimes adopted. The data discussed have been gathered beside native speakers of the language using both the elicitation and the observation methods. In doing so, the argument structure of Ghomálá' is discussed by tackling the issue of transitivity. The verbs are grouped according to their argument structural characteristics. The unaccusative hypothesis (Perlmutter 1978) is also addressed. The work reveals that a two-way distinction (unaccusative vs. unergative) of verbs that occur within intransitive clause cannot hold in Ghomálá', and argues for a three-way distinction of these verbs. Looking at the semantic relationship between the verb and its complement, it is argued that most of the transitive verbs in Ghomálá' can select a generic meaning DP as object. However, there are some verbs which require a more specific meaning DP as complement namely, inherent complement verbs. As for the latter, it is shown that both the verb root and its nominal complement contribute to the meaning of the [V-N] complex and this meaning can be either compositionally or metaphorically derived. The study discloses that the inherent complement bears phi-features since it can undergo pronominalization in certain discourse context though it cannot be marked with a question feature. Both the verb and its complement can be focused. However, the focused IC has a predicate focus reading instead of having an argument focus interpretation. This syntactic behavior leads to the conclusion according to which, the IC is not a semantic but a syntactic argument of its verb which is a functional verb. Being a functional verb, the ICV is purely merged under a functional position wherein it fails to assign theta-roles to its arguments. As far as SVCs are concerned, the study shows that they are not instances of covert coordination and distinguishes them from other multiverb constructions. In terms of their composition, they are split into two broad classes, asymmetrical and symmetrical SVCs. It is demonstrated that asymmetrical SVCs are used to express various functions such as direction, aspect and tense, comparison and instrumentation. As for their morphosyntactic features, it is argued that tense, negation, nominalizer as well as subordinator are expressed once per SVC, an evidence of their monoclausality. However, aspect can receive a concordant marking. Similarly, each component of the SVC can be focused or questioned. SVCs components share at least one argument, mostly the external argument. Given the morphosyntactic properties display by Ghomálá' SVCs, it is argued that apparently object sharing is asymmetrical and does not exist in syntax.

RÉSUMÉ

Ce travail aborde les propriétés morphosyntaxiques des verbes en ghomálá' en s'intéressant aux comportements syntaxiques des verbes à complement inhérent et des verbes en serie. Il puise ses fondations théoriques dans le programme minimaliste tel que développé par Chomsky (1995, 2000, 2001, 2008, et 2013) bien qu'une approche éclectique soit parfois utilisée. Les données utilisées ont été recueillies auprès des locuteurs natifs en utilisant les méthodes d'observation et d'élicitation. Pour se faire, la structure argumentale du ghomálá' est étudiée en abordant la question de la transitivité. Les verbes sont regroupés selon les caractéristiques de leurs structures argumentales. L'hypothèse non-accusative (Perlmutter 1978) est également évoquée. Le travail révèle qu'une distinction bidirectionnelle (non-accusative vs. non-ergative) des verbes intransitifs ne fonctionne pas en ghomálá, et plaide pour une distinction tri-directionnelle de ces verbes. Analysant le rapport sémantique entre le verbe et son complément, il s'avère que la plupart des verbes transitifs en ghomálá' peut sélectionner un DP ayant un sens générique comme complément. Cependant, il y a quelques verbes qui exigent un DP ayant un sens plus spécifique comme complément notamment, les verbes à complément inhérent. Quant à ces derniers, il est démontré que le verbe et son complément contribuent à la signification du complexe [V-N] et cette signification peut être compositionnelle ou métaphorique. L'étude révèle que le complément inhérent possède les traits phi puisqu'il peut être pronominalisé dans certain contexte discursif bien qu'il ne peut pas être questionné. Le verbe et son complément peuvent être focalisés. Cependant, la focalisation du complément inhérent est interprétée comme étant une focalisation verbale et non une focalisation argumentale. Ce comportement syntaxique conduit à la conclusion selon laquelle le complément inhérent n'est pas un argument sémantique mais syntaxique de son verbe qui, est un élément fonctionnel. Étant un verbe fonctionnel, le verbe à complément inhérent est généré sous une position fonctionnelle où il ne peut pas assigner les rôles thématiques à ses arguments. En ce qui concerne les constructions en série, l'étude indique qu'ils ne sont pas des cas de coordination nulle et les distingue des autres types de construction pluriverbale. En fonction de leur composition, elles sont subdivisées en deux classes, les constructions asymétriques et symétriques. Il est établit que les constructions asymétriques sont employées pour exprimer diverses fonctions telles que la direction, l'aspect et le temps et la comparaison. Quant à leurs propriétés morphosyntaxiques, l'étude révèle que le temps, la négation, la particule de nominalisation ainsi que le marqueur de subordination sont exprimés une fois par construction, une évidence de leur mono-propositionalité. Cependant, l'aspect peut avoir une expression concordante. De même, chaque composante de ladite construction peut être focalisée ou questionnée. Ces composantes ont en commun au moins un argument, l'argument externe la plupart du temps. Au regard des propriétés morphosyntaxiques présentées par ces constructions en ghomálá', il est suggéré que le prétendu partage de l'argument interne est asymétrique et n'existe pas dans la composante syntaxique.

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ABBREVIATIONS AND SYMBOLS

1 2 3 4 5 6: noun class FUT2: Near future

1 2 3: person FUT3: Distant future

ACC: Accusative FUT4: Hypothetic future

APPL: Applicative **G**: Glide

AspP: Aspect Phrase **GBT**: Government and Binding Theory

ATT: Attenuative **HAB**: Habitual

C: Consonant IC(s): Inherent Complement(s)

CI: Conceptual Intentional system ICV(s): Inherent Complement Verb (s)

CleftP: Cleft Phrase I-language: Internal language

COM: Comparative marker **INF**: Infinitive marker

COMP: Complementizer INST: Instrument

COND: Conditional **IP**: Inflectional Phrase

CP: Complementizer Phrase **IT**: Iterative

DAT: Dative LCA: Linear Correspondance Axiom

DEM: Demonstrative marker **LF**: Logical Form

DIST: Distributive **MP**: Minimalist Program

DP: Determiner Phrase **NEG**: Negation

D-S: Deep Structure NegP: Negation Phrase

E-language: External language **NOM**: Nominative

EPP: Extended Projection Principle **NP**: Noun Phrase

EST: Extended Standard Theory **PERF**: Perfective

EXT: Extension **PF**: Phonological Form

FOC: Focus marker **PL**: Plural

FocP: Focus Phrase **POSS**: Possessive marker

FUT: Future tense **PPT**: Principles and Parameters Theory

FUT1: Immediate future **PROG**: Progressive

PRS: Present tense

PRS1: Accomplished present

PRS2: Latent present

PRS3: Immediate present

PRS4: Progressive present

PSG: Phrase Structure Grammar

PST: Past tense

PST1: Immediate past

PST2: Recent past

PST3: Distant past

PST4: Remote past

QM: Question Marker

REC: Reciprocal

REF: Reflexive

ReinP: Reinforcer Phrase

REL: Relativizer

/ : Or

* : Ungrammatical

Ø : Zero morpheme

/ / : High tone

/ `/ : Low tone

/ ^/ : Falling tone

/ */ : Rising tone

REST: Revised Extended Standard Theory

SG: Singular

SM: Sensorimotor system

Spec: Specifier

S-S: Surface Structure

SUB: Subordinator

SVC (s): Serial Verb Construction (s)

SVO: Subject Verb Object

TAM: Tense Aspect Mood

TOP: Topic marker

TP: Tense Phrase

T-rules: Transformational rules

V: Verb

V: Vowel

vP: Light verb Phrase

VP: Verb Phrase

GENERAL INTRODUCTION

Morphosyntax deals with the interaction between morphology and syntax. To be more precise, it focuses on the way in which morphemes are ordered depending on properties of the grammatical system of a language. In fact, it is well known that in producing a grammatical sentence, both the form and the relative order of morphemes that are produced are a reflection of the underlying syntactic representation of this sentence. This interaction between morphology and syntax can be either at the derivational/lexical level or at the inflectional one. This work has to do with the inflectional level. It provides a morphosyntactic description of verbs in Ghəmálá' with a particular emphasis on the syntactic properties of Inherent Complement Verbs and Serial Verb Constructions. In this part of the dissertation, the objective of the study, its motivation and significance, the methodology as well as the presentation of the language under study are addressed. This general introduction ends with the summary of previous descriptive works on Ghəmálá' and the outline of the dissertation.

Objective of the study

The primary objective of this dissertation is to contribute to the full documentation of Ghomálá', my native language, within the generative enterprise. This language has been extensively studied using both the structural and generative approaches. However, generative studies on Ghomálá' are few (Mamgno (1997, 2000) Mamno (2005, 2006), Bakam (2014) and Tala (2015)). Most of these works have been focused on the C-domain and the D-layer by laying emphasis on the typology of the clause, the different movements that target both the C-layer and D-layer, as well as the structure of the aforementioned domains. As one may notice, the verb, an essential constituent of the sentence, has not received a deep generative attention though Mamno (2005 and 2006) addresses verb movement. To be more precise, the v-domain, the locus of the expression of argument structure, has not received enough attention so far within a generative spirit in Ghomálá'. The present dissertation tries to fill the gap by analyzing the morphosyntactic features of two verbal constructions in this language namely, inherent complement verbs (ICVs) and serial verb constructions (SVCs).

The work aims at handling the morphosyntactic properties of ICVs in this language by addressing the structural properties of ICVs, their argument structure as well as their derivation. This inquiry will not only help us to situate Ghomálá' vis-a-vis other African languages

wherein ICVs are attested, but also to see how Ghomálá's data can be useful in a cross-linguistic characterization of ICVs.

As for serial verb constructions, they are contrasted with other multiverb constructions by addressing their typology as well as their derivation. The work also tackles the issue of argument sharing as well as others morphosyntactic features of these constructions. After having presented the objective of the study, its motivation and significance will be addressed in the next section.

Motivation and significance of the study

The choice of this topic has been motivated by a certain number of reasons which I will outline the salient ones below. Firstly, as a member of Ghəmálá's speech community, I should contribute, in one way or another, to the promotion of this language. By realizing this work, I want to make my humble contribution to the ongoing process of standardization of this language; especially since Ghəmálá', as many other Cameroonian languages, is introduced in the educational system. In this vein, the results of this piece of work can be useful in the designing of didactic materials for the teaching of Ghəmála' verbs.

Secondly, I realized that inherent complement verbs are not popular objects of linguistic inquiry in Cameroonian languages as it is the case in West African languages (Kwa languages). The desire of knowing if these constructions exhibit the same patterns in Ghəmálá' as the ones attested in West African languages gives birth to this dissertation.

Finally, there is the need to find out whether the phenomena comprising ICVs and SVCS in Ghomálá' can be described within the recent theoretical and empirical developments in generative grammar and more precisely, the Minimalist Program and how useful can be the Ghomálá's data in the development of this theory. The following section has to do with the methodology.

Methodology

The data presented in this dissertation deal with the *Jo* variety of Ghəmálá', the central dialect which is spoken in Bandjoun in the Koung-khi division. They were collected gradually during fieldwork especially throughout holidays. These data were gathered via both elicitation and observation methods. The sentences were translated into Ghəmálá' by informants who were native speakers of the language. Observation has been mostly used during farm work and familial meetings.

As a native speaker of the language, my intuition was helpful in selecting relevant constructions while observing people interacting. My phone was useful in the recording of

these data especially when I was in farm for harvesting. In order to rend the data exploitable by everyone. However, the principle according to which mid tones are not marked in the language since they are recurrent is adopted. For a scientific orientation, I also got data and analysis from the existing literature by previous researchers in our domain of investigation. The table below presents the informants.

Table 1: Presentation of informants

Names	Languages	Occupations	Residence	Sex	Age
Tala Blaise	French,	student	Yaounde	M	30
	English,				
	Ghəmálá'				
Kapche	French,	Housewife	Bandjoun	F	47
Micheline	Ghomálá'				
Taghetue Jean de	French	Farmer	Bandjoun	M	45
Dieu	Ghomálá'				
Siego Suzanne	French,	Retired trader	Mbalmayo	F	72
	Ghomálá'				
Djuidje	French,	Retired trader	Mbalmayo	F	71
Clémence	Ghomálá'				
	Ewondo				

In the precedent section, the data collection methods and informants have been presented. The next section presents the language under study.

The language

This section aims at presenting Ghomálá', the language under study. In doing so, emphasis will be laid on its geographic location, its genetic classification as well as its dialectal situation.

> The geographic location

Ghomálá', literally "the language of village people", is an Eastern grassfield Bantu language spoken in the West region of Cameroon. This region is geographically characterized by mountains which altitude varies between 1400 and 1700 meters (Foba 2015:1). The climate as well as the quality of soil render this region a propitious area for the development of socioeconomic activities such as agricultural and pastoral farming. This geographic location is the reason why Dieu and Renaud (1983) assigned the linguistic code [960] to Ghomálá'.

The language covers five of the eight divisions that form the west region. These divisions are: Bamboutos, Hauts-plateaux, Koung-khi, Mifi and Menoua. More precisely, the linguistic area of Ghomálá' is made up of the following localities: Bafounda, Bamoungoum, Bansoa, Bafoussam, Baleng, Bandjoun, Bameka, Bamendjou, Bahouan, Batie, Baham, Bapa, Badenkop and Bayangam. The following map shows the location of Ghomálá' within the West region.

[501] tikar 25Km REGION DU NORD-OUEST 6°N REGION DU SUD-OUEST samom REGION DU CENTRE [996] medumba [901]kwa [930]mengaka [940] ngomba [997]mungaka REGION DU LITTORAL

Map 1: The administrative and linguistic map of the West Region

Legend:

- Ghomálá's area border
- —— Divisions border within the Ghəmálá's area
 - Border of a linguistic area
 - Subdivision border
- Division border
- Division corde
- Region border
 - Region headquarter
 - Division headquarter

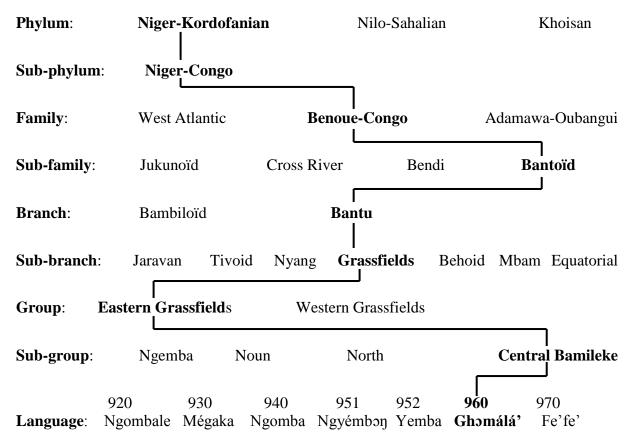
Subdivision headquarter

Source: adapted from Binam Bikoi (2012:192).

> Genetic classification and dialectal situation

Cameroonian languages are classified into three major linguistic families namely the Afro-asiatic, The Niger-Kordofanian and the Nilo-Sahalian phylum. As for Ghəmálá', it belongs to the Niger-Kordofanian phylum, the Niger- Congo sub-phylum, the Benue-Congo family, the Bantoid sub-family, the Bantu group, the Grassfield sub-group, the Eastern Grassfield branch, the Central-Bamileke sub-branch. This is schematically represented as follows:

Figure 1 : Linguistic classification of Ghəmálá'



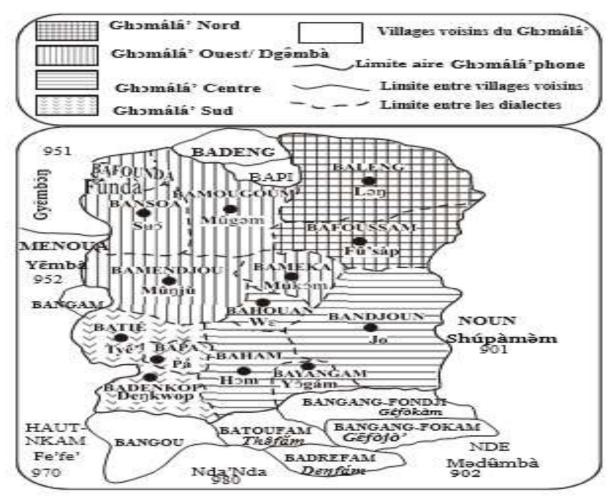
Source: Adapted from Binam Bikoi (2012:141)

As far as the dialectal situation is concerned, the dialects of Ghɔmálá' are grouped into four major areas namely Ghɔmálá' central, Ghɔmálá' south, Ghɔmálá' north and Ghɔmálá' west (Ngômba).

- ✓ The central Ghomálá' gathers together the following varieties: Jo (spoken in Bandjoun), Wε (spoken in Bahouan), Hom (spoken in Baham) and Yogam (spoken in Bayangam).
- ✓ The southern Ghomálá' is made up of the Dəŋkwop (spoken in Badenkop), the Tε'
 (spoken in Batie) and the pá (spoken in Bapa) varieties.
- ✓ Suó (spoken in Bansoa), Méka (spoken in Bameka), Mûnjǔ (spoken in Bamendjou), Fû'nda (spoken in Bafounda) and Mûgəm (Bamougoum) constitute the western Ghəmálá' zone.

The Jo variety has been recognized as the standard dialect by previous studies (Domche-Teko 1978), Binam Bikoi (2012: 116). The following map presents the dialects of Ghəmálá'.

Map 2 : Dialects of Ghəmálá'



Source: Tala (2015:8)

After having presented the geographical location, the linguistic classification and the dialectal situation of Ghomálá', the summary of previous studies on the language under study will be addressed in the following section.

Previous works on the language

This section aims at presenting preceding works that have been carried on Ghəmálá'. Since many studies have been done on this language, I will focus my attention on descriptive works. Special attention will be paid on work that are related to this dissertation.

In the area of phonology and morphology, the following contributions have been made:

- ✓ Nissim, G. (1972) *Etude phonologique du parler Jo*. Yaounde: SLA, Université Fédérale du Cameroun.
- ✓ Nissim, G (1980) Les classes nominales dans quelques parlers Bamiléké de l'Est, expansion Bantoue. Paris: SELAF.
- ✓ Domche-Teko (1980) Guide pratique de l'alphabet Ghəmálá'. Yaounde: SIL.
- ✓ Nissim, G. (1981) Le Bamiléké ghɔmálá (parler Bandjoun-Cameroun) phonologie, morphologie nominale, comparaison avec les parlers voisins. Paris: SELAF.
- ✓ Mba, G. (1997) "Les extensions verbales en ghɔmálá" in Journal of West African Languages, 26 (1), pp 78-101.
- ✓ Mamno, H. (2005) Morphologie verbale du ghɔmálá': le cas du temps, de l'aspect et du mode. Mémoire de Maitrise, Université de Yaoundé I.

As far as structural grammar is concerned, the following works have been done:

- ✓ Nissim, G. (1975) "Grammaire bamiléké" in *Cahier du département des langues africaines et linguistique*, 6.
- ✓ Soffo, S. (1979) Grammatologie du ghəmálá'. Yaoundé: SIL.
- ✓ Foba, M. (2015) Les adverbes et les ideophones en ghomálá': description, analyse et exploitation didactique. Mémoire de Master, Université de Yaoundé I.
- ✓ Moguo, F. (2016) Setting the bridge between descriptive and pedagogic grammar in the revitalization process of cameroonian languages: the case of ghɔmálá'. Doctorat/Ph.D thesis, the University of Yaounde I.
- ✓ Moguo, F., and Bessala, G. (2017). The conditional mood in Ghomálá'. *Studies in African Linguistics*, 45, 142-156.

In the domain of generative syntax, Ghomálá' has about five works. These include:

- ✓ Mamgno, M. (1997) Analyse syntaxique de la phrase Ghəmálá'. Mémoire de Maitrise. Université de Yaoundé I.
- ✓ Mamgno, M. (2000) La phrase ghomálá': Approche minimaliste. Projet de thèse, Université de Yaoundé I.
- ✓ Mamno, H. (2006) Movement operation in Ghomálá': A minimalist approach. DEA dissertation. The University of Yaoundé 1.
- ✓ Bakam, E. (2014) La structure du déterminant en ghomálá'. Mémoire de Master, Université de YaoundéI.
- ✓ Tala, M. (2015) The structure of the left periphery in Ghomálá'. Master dissertation, the University of Yaoundé I.

Nissim (1972) describes the sound system, the syllable pattern in Ghəmálá' as well as some phonological processes attested in the language. This work served as a raw material for the establishement of the writing system of the language by Domche-Teko (1980). Nissim refines his analyses in 1981 by addressing issues of neutralization, glottal and tones in relation with Ghəmálá' neighbouring languages. Nissim (1980) reveals that six noun classes are attested in Ghəmálá'; three classes for singular nouns represented by the numbers 1, 3 and 5. The three others classes are designed for plural nouns and are represented by the numbers 2, 4 and 6. Mba (1997) identifies two verbal suffixes in the language namely -ta and -pa. The study reveals that these morphemes fulfill several semantic functions. -pa generally encodes the reciprocity while -ta generally expresses the plurality effect on the subject or the object. Most of the outcomes of these work in the domain of morphology and phonology are used in this dissertation.

As for structural studies on the language, Nissim (1975) discusses the verb and the temporal setting. Soffo (1979) focuses on tones by looking at the phenomenon of tones interference. He also describes some tenses and interrogative structures. Foba (2015) provides a systematic description of the phonology, morphology and syntax of adverbs and ideophones as well as how to use the results as didactic materials. Moguo (2016) describes the internal structure of the language and gives guidelines for the elaboration of a pedagogic grammar of Ghomálá'. Using a structural approach, she does a fine grained analysis of the sound system, the noun morphology, the verb morphology, the TAM system as well as basic syntax of the language. She also shows how the outcomes of this description can be used by language practitioner to design teaching material. Moguo and Bessala (2017) examine the conditional mood in Ghomálá'. This study reveals that this language uses past tenses for unreality conditionals whereas present and future tenses are used for reality conditionals.

As far as generative syntax is concerned, Mamgno (1997) uses the principles and parameters theory to analyze sentence. She does a representation of Ghəmálá''s clause structure using the X-bar model. Mamgno (2000) analyses the sentence, how it is derived and how movement occur in. She identifies two head movement in the language, namely attraction and adjunction. She argues for the existence of subject-auxiliary inversion in the language under study on the basis of the following data:

(1) a. Sîmŏ fíŋ nɔ́-ʒû gɔ́p

Simo can INF-steal chicken

"Simo can steal the chicken"

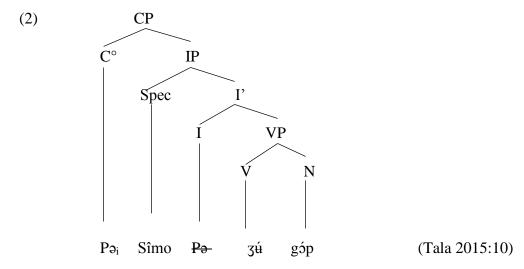
b. Pəi Sîmo ti zû gɔ́p

Can Simo steal chicken

"Simo can steal chicken"

(Tala 2015:10)

The following diagram is the tree representation of sentence (1b):



As shown in the tree diagram above, Mamgno (2000) argues that the $p\partial$ particle is base-generated under I° and later internally merge to C°. Although Tala (2015:11) refutes this idea by claiming that $p\partial$ is a lexical mood, he does not provide neither empirical nor theoretical arguments against the subject-auxiliary inversion postulated by Mamgno (2000). If $p\partial$ is a mood particle as claimed by Tala (2015), it should appear within the I-domain and therefore occupy a position below the subject within the clause. She also claims that verb moves from its pure merged position to a final-clause position in negative structures as illustrated below:

(3) Ŋwâfo ka t_i mú y δ_i Wafo NEG Child see

"Wafo has not seen the child"

(Tala 2015: 11)

This derivation is problematic. Empirically, it cannot account for the derivation of other types of negative structures. Theoretically, rightward movement is prohibited by modern approaches to syntax.

Mamno (2005) describes how tense, aspect and mood are expressed in Ghəmálá' as well as how they are marked and their structural position in the clause. In 2006, she addresses different movements attested in the language using a minimalist perspective in her DEA dissertation. On the derivation of negative structures, she considers that the negation morpheme is a set of "a tə" with a specifier "a" and the head "tə"; or a discontinuous morpheme (tə...á / tó...pó). Tala (2015) reviews this proposal by arguing that "tə" is the head of the negative phrase meanwhile the second particle (á or pó) is a negative reinforcer which projects a reinforcer phrase at the final-clause position. This rationale is adopted in this work with a refinement. It is argued that the second particle appears to the final-clause position as a result of the piedpiping of vP to the specifier position of the negative reinforcer phrase which is selected by NegP. The verb and its complement are therefore sandwiched between the negative particle and its reinforcer.

Bakam (2014) tackles the internal structure of Ghomálá' DP with regard to Cinque's (2005) typology and Greenberg's universals 20. More precisely, she addresses word order variation observed in Ghomálá' noun phrases that combine the demonstrative, the numeral, the adjective and a head noun as well as movement operations that occur within the determiner phrase.

The last but not the least generative work done on Ghomálá' has been realized by Tala (2015). He explores the structure of the left periphery in Ghomálá' using a minimalist approach. In doing so, he addresses question formation, focus strategies, topicalization and relativization in the language under study as well as different movement operations that target the C-domain in this language. Looking at focalization especially the so-called in-situ focus (post-verbal), he argues that it is derived position. He thus projects a recursive FocP in order to accommodate the focused item (see Tala 2015:139). As for predicate focus, he claims that Ghomálá' displays verbal focus in the VP-periphery with a kind of verb doubling. In order to account for this fact, He follows Nkemnji (1995), Koopman (1996) and argues that in Ghomálá' like Nweh, the focused verb moves to the head of low focus phrase, following by the raising of the entire VP to the specifier position of the focus phrase. Since focalization is discussed in the context of inherent complement verbs in this dissertation, Tala's (2015) proposals are adopted here with some adjustments. On post-verbal focus, given the fact that the focus marker (á or pá) precedes the focused element, it is proposed that these particles should be hosted by the head position of

CleftP, which is above the FocP that hosted the focused constituent in its specifier position. Indeed, these focus markers are different from those attested in left peripheral focus, namely $n\hat{\sigma}$ and $t\hat{\sigma}$. Moreover, these particles seem to look like cleft markers. As far as verb focus is concerned, Aboh and Dyakonova (2009)'s parallel chains analysis is adopted to derive Ghəmálá' predicate doubling structure. It is argued that the focalized verb moves both to the head of the low focus phrase and to the head of the vP, following the fronting of the entire vP to the specifier position of the focus phrase.

Organization of the dissertation

Apart from the general introduction in which the objectives of the study, the methodology, the geographical situation, the linguistic classification of Ghomálá' as well as an overview of previous works have been discussed; the dissertation is split into five chapters organized as follows.

Chapter one deals with the theoretical assumptions adopted in the dissertation. The main focus is the Minimalist Program as developed by Chomsky (1995, 2000, 2001 and subsequent works). This presentation is completed by a review of proposals that have been done on SVCs and ICVs in a sketchy fashion.

Chapter two is devoted to the grammatical sketch of Ghomálá'. It contains a cursory of basic discussion of some essential phonological, nominal and TAM aspects of the language under investigation. Its main objective is to explain some general properties of Ghomálá' that may facilitate the understanding of the constructions investigated in this work.

Chapter three provides an overview of Ghəmálá' verbs. The morphological, the syntactic and semantic properties of verbs are discussed. The basic verb structure is addressed as well as the derivative verbal affixes attested in the language. Moreover, the chapter also explores the issue of transitivity in the language and groups verbs on the basis of their argument structural characteristics.

Chapter four investigates the structural as well as morphosyntactic properties of ICVs in order to see whether they are syntactically different from regular verbs or otherwise. In doing so, it tackles the nature of ICVs and ICs by characterizing them. Their morphosyntactic properties are also addressed by looking at their behavior when they are used within some constructions in order to distinguish them from regular verbs. The derivation of ICV is discussed by laying emphasis on their argument structure.

Serial verb constructions are the subject matter of the fifth chapter. Their typology as well as their morphosyntactic properties in Ghomálá' are investigated in this chapter. In doing

so, they are distinguished from other types of multiverb constructions and classified following their typology. Their derivation is also addressed.

The dissertation ends with a general conclusion

Chapter 1: Theoretical Framework

Introduction

This chapter aims at presenting theoretical assumptions as far as this research is concerned. In doing so, the essential features of the Minimalist Program (MP), the most recent "theory" in the generative grammar enterprise, are discussed as well as aspects of MP that are relevant in the analysis of this topic. Some proposals on Serial Verb Construction (SVC) and Inherent Complement Verb (ICV) complete the presentation. Works of certain authors who put up the setting for the description of SVC and ICV are summarized; namely Baker (1989), Collins (1997, 2002), Aboh (2009), among others. In this vein, the chapter is split into four sections. Section one presents an overview of the Minimalist Program. Section two has to do with sentence derivation within the minimalist framework. Section three deals with approaches to SVCs within generative enterprise. The subject matter of the last section is the general presentation of ICVs.

1.1. The Minimalist Program: an overview

This section aims at giving an overview of MP from its inception up to today. It also presents the different mutations that undergo the generative enterprise since its inception.

1.1.1. Setting the bridge

The generative model developed by Chomsky is a breakdown vis à vis the structuralist approach used by some famous linguists such as Leonard Bloomfield, André Martinet and Zellig Harris. In this model, Chomsky continues to stress on descriptive adequacy but also adds explanatory adequacy to emphasize the interest in how the language faculty is represented in humans. The focus is on what a native speaker knows about its language (competence) and ceases to know about the linguistic production of this one (performance). The main task of the generative enterprise is to elucidate the computational system within the mind/brain of the language user.

The generative approach has also revolutionized the field of language learning highly dominated by behaviorism in 1950. In fact, the input to language learning is poor and the evidence of this poverty of the stimulus is that speakers know so much more than what they

¹ Chomsky (2000: 92) claims that MP is a program, not a theory that seeks to discover to what extent minimal conditions of adequacy suffice to determine the nature of the right theory.

have evidence for from the input. The answer to this problem of the impoverished input is Universal Grammar, the initial state of the language faculty. This biologically innate organ helps the learner to make sense of linguistic data and build an internal grammar (I-language), which then produces the sentences that the speaker utters (E-language). According to Chomsky (1975: 36), when the language faculty is stimulated by appropriate and continuing experience, it creates a grammar that generates sentences with formal and semantic properties. Thus, as it is outlined by Elly Van Gelderen (2013), our innate language faculty (or Universal Grammar) enables us to create a set of rules, or grammar, by being exposed to (rather chaotic) language around us. The set of rules that we acquire enables us to produce sentences that we have never heard before. These sentences can also be infinitely long. As it is shown on the figure below, language acquisition, in this framework, is not imitation but an interaction between Universal Grammar and exposure to a particular language

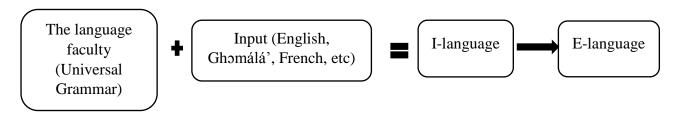


Figure 2: The model of language acquisition in Generative Grammar

Source: Adapted from Van Gelderen (2013)

The main task of generative grammar since its inception is to design a theory of Universal Grammar which satisfies the following criteria: universality, descriptive adequacy, explanatory adequacy and learnability. The universality criterion requires that a theory of UG should feed us tools to develop a grammar for every and any human language. A grammar is descriptively adequate if it can correctly distinguish grammatical constructions from ungrammatical ones by describing and interpreting those constructions may have. An explanatorily adequate grammar is the one which can provide answers to the following preoccupation 'why do natural language grammars have the properties they do?' A linguistic theory must produce a grammar which is learnable by young children in a relatively short period of time. This quest of the "best" theory, especially the one where there is a balance between the descriptive and the explanatory adequacy, pushes Chomsky to review what he proposed so far in *syntactic structures*.

1.1.2. From *Syntactic structures* to *The Minimalist Program*: what has fundamentally changed?

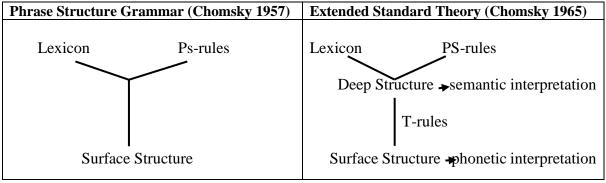
This subsection aims at presenting the evolution of generative grammar. The emphasis is laid on the different mutations as far as the computational procedures as well as representations are concerned.

1.1.2.1. From Phrase Structure Grammar (PSG) to Government and Binding Theory

The first step of Generative Grammar is Phrase Structure Grammar (PSG) proposed in *syntactic structures* and refined in *Aspects of theory syntax*. The model of generative grammar presented in Chomsky (1957) uses vocabulary that includes variable category symbols that may be rewritten to represent syntactic structures. It was based on Phrase Structure Rules that are made up of rewritten rules. The latter generates phrase markers associated with strings of morphemes that underlie the kernel sentence. The sentence is represented by the Σ /S symbol, sentences are derived from top to bottom starting with the category Σ /S.

Unfortunately, the 1957 model described here presents a certain number of lacunae which pushes Chomsky to refine it in Aspects. One of those lacunae is recursion. As we said, the backbone of PSG was phrase structure rules which are rewritable and unlimited. Then, the rules were recursive. The fact of repeating rules leads to ungrammaticality. Recursion leads to infiniteness in derivation of syntactic structures. Furthermore, Phrase Structure Grammar has just one level of representation, surface structure, the actual representation of sentence in the way it is spelled out. Due to this, PSG can't disambiguate all ambiguities and can't account for some derived constructions such as passives, interrogatives...etc. This was found explanatorily inadequate since it could not explain the relevant phenomena in natural languages. Chomsky (1965) tried to overcome those weaknesses by introducing another level of representation namely the deep structure. In fact, Chomsky claims that there must be a pair of structural descriptions for each sentence (Deep Structure "DS" and Surface Structure "SS"). This was another considerable breakthrough in the attempt to reach the descriptive and explanatory adequacy. The transformational rules (T-rules) apply cyclically to the constituents at this level to derive those in the surface structure. The deep structure contains the information relevant to semantic interpretation whereas surface structure deals with the information relevant to phonetic interpretation. This mutation can be graphically represented as shown below:

Figure 3: The models of grammar developed within the early generative grammar



Source: Adapted from Howard Lasnik and Terje Lohndal (2013)

The review of the Extended Standard Theory (EST) gave birth to the Revised Extended Standard Theory (REST) (Chomsky 1976). These models finally gave birth to a new conception of Generative Grammar known as Government and Binding Theory (GBT) or the Principles and Parameters Theory (PPT) which is the basis of the Minimalist Program.

1.1.2.2. From Government and Binding Theory to the Minimalist Program

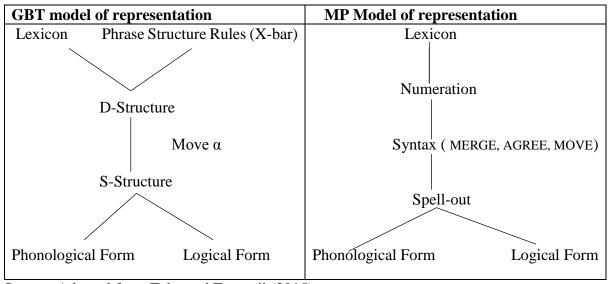
The Government and Binding Theory is the second step in the evolution of generative grammar and constitutes the foundation of MP. Although the book devoted to this framework appears in 1981, some ideas developed within the GBT originate from several papers committed before 1981. This theory is mainly characterized by the modularization of the grammar. The grammar is split into modules that have their own specific roles to play in government and binding theory. The modules comprise: X-bar theory, theta theory, case theory, control theory, bounding theory and binding theory.

The GBT focuses on the application of cross-linguistic principles and parameters of Universal Grammar in the description of natural languages. The principles are invariants of human language and are innate whereas parameters are possible cross-linguistic variations. Many of the principles restrict how movement is constrained. For instance, Subjacency limits movement to crossing no more than two phrases of a particular kind, the Structure Preserving Hypothesis states that transformations, i.e. movement, can only move elements to positions that could be generated by means of Phrase Structure rules. According to Borer (1984), parameters consist of choices of feature specifications as the child acquires a lexicon (Chomsky 2004; 2007). The computational system of every language is seen as the same. Thus, all parameters are lexical and they account for the variety of languages. If the child has evidence for gender in the language it hears, gender will be included; if not, it won't be.

The model of grammar developed within GBT has four levels of representation. Unlike the model of the Extended Standard Theory (1965) wherein semantic interpretation was at the level of deep structure and phonetic interpretation at the level of surface structure, these ones constitute each one a level of representation. Thus, in addition to precedent levels found within the Extended Standard Theory (deep structure and surface structure), we have two others levels which are Logical Form (LF) and Phonological Form (PF). Transformation rules are generalized by a single rule Move α (move anything anywhere at anytime) which maps structures from the deep structure to surface structure. Lexical items extracted from a lexicon are combined at D-Structure. The sentence undergoes phrasal movement (move α) in order to provide input to the S-Structure. Within the S-Structure the sentence is factored into PF for sounds and shapes verifications and LF for semantic interpretation. Within the S-S, several more rules must be satisfied, the theta criterion and the case filter.

The Principles and Parameters theory approach was a key development toward showing how natural language variation could be traced to a more fundamental linguistic capacity via the setting of parameters (Chomsky and Lasnik, 1993). Its refinements gave birth to the Minimalist Program. Chomsky (1993) sets the basis of MP and develops it in subsequent works (Chomsky 1995, 1999, 2000, 2001, 2006, 2008, 2013...etc). The minimalist program is, as Chomsky (2000:92) claims, a program, not a theory that seeks to discover to what extent minimal conditions of adequacy suffice to determine the nature of the right theory. It was conceived in order to overcome the tension between the descriptive adequacy and the explanatory adequacy by making a balance between them since the preceding framework was more descriptive than explanatory. The central guiding principle in the MP is that language is an optimal solution to map sound to meaning given constraints set by the sensorimotor system and the Conceptual intentional system (the Strong Minimalist Thesis, Chomsky 2000). The backbone of this program is the economy principle which, following Chomsky (2000:99), seeks to eliminate anything unnecessary, that is superfluous elements in representations and superfluous steps in derivations. This can be captured graphically by contrasting the GBT model of representation against the MP style as shown below:

Figure 4: The GBT model of representation against the MP style



Source: Adapted from Tabe and Tamanji (2015)

As it is outlined on this diagram, the model of grammar developed within the MP framework has two levels of representations, namely the Logical Form (LF) and the Phonological Form (PF). These ones are interfaces, the LF deals with the conceptual-intentional system meanwhile the PF has to do with the sensory motor system. As one can notice, the two other levels of the GBT (Deep-structure and Surface-structure) have been deleted since Chomsky realized that they were operating in a similar fashion and were not forced by interface conditions. Structures are built up through pure Merge and Move by combining elements drawn from the lexicon. Interfaces are attained by three major operations that hold in syntactic component namely Merge, Agree and Move. Furthermore, Chomsky (2001, 2008) claims that derivations should proceed by phases to avoid computational burden. He identifies CP and vP as phases and once a phase is completed, it undergoes transfer at the interfaces. As far as Move is concerned, Chomsky hammers that it should be implemented only as "last resort" since it is costly. In addition, Long distance movement should be avoided if need be or wherever necessary. Structure derivation within MP follows a particular canal.

1.2. Sentence derivation within the Minimalist Program

This section presents how structure derivation proceeds within MP such that this one can converge at the interfaces, point of checking of the sentence's legibility. Emphasis is laid on the significance of phases, Merge and feature checking within the Probe-Goal framework in the MP architecture.

The derivational procedure within MP starts with the mental Lexicon, which is the storage organ or warehouse of all the lexical items in the language. Lexical items are selected from the lexicon to constitute a numeration. The latter comprises all the lexical items extracted from the lexicon for the derivation of a sentence. Following Tabe and Tamanji (2015), the numeration is important because it is where violation of Inclusiveness Condition is checked appropriately. Given Inclusiveness Condition, the numeration constitutes the only lexemes available for the syntactic component. It bars the introduction of new categories into the syntax in the course of the derivation other than those from the numeration. Examples of such category are traces (a "kind of footprint" of a moved or displaced category from one position of the clause to another) and bar levels. Because they are not constituents of the numeration, their introduction into the syntax violates Inclusiveness Condition. Furthermore, Aboh (2010: 19) argues "that strict application of the Inclusiveness Condition requires that core notions of information structure (interrogative force, topic, and focus) project in syntax." The next derivational step holds within the syntax wherein three operations take place: Merge, Move and Agree.

1.2.1. Merge

Merge is the syntactic-building operation within MP. Syntactic structure is built from bottom-up fashion via Merge. According to Chomsky (2000:101), it is one of the three major operations which operate in the syntactic component. Merge operation is an optimal solution for language to be accessible to the Sensorimotor (SM) and Conceptual Intentional (CI) systems with which it must interface. It can be internal or external.

External Merge, also referred to as *pure Merge* by Chomsky (2000), is an operation which consists in combining, in a pairwise fashion, syntactic objects of the numeration to form a larger constituent. A lexical item has a property such as edge feature that permits it to be merged. When a lexical item X merges with a syntactic object Y, it forms the pair {X, Y} where X is the head and Y is its complement as shown below:

(1)

$$Merge (X, Y) = \underbrace{\begin{array}{c} XP \\ X \end{array}}_{} merge (the, book) = \underbrace{\begin{array}{c} DP \\ D \end{array}}_{} N$$

$$the book$$

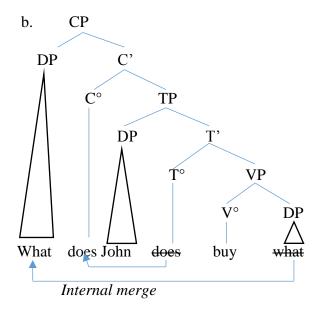
This is strongly supported by Chomsky's "no-tampering condition" formulated as follows:

"Merge of X and Y leaves the two SOs unchanged. If so, then Merge of X and Y can be taken to yield the set $\{X, Y\}$, the simplest possibility worth considering. Merge cannot break up X or Y, or add new features to them" (Chomsky 2008:138).

External Merge comes free and yields generalized argument structure and Internal Merge yields discourse-related properties such as old information and specificity, along with scope effects at the CI interface.

As for Internal Merge, it re-arranges elements in the syntax by determining a new position. A single syntactic constituent (a phrase or lexical item) is associated with two or more syntactic positions. Internal Merge is operation *Move* under the copy theory of movement and it creates copies. It is free as external merge and it has been regarded by Chomsky as an imperfection of language that has to be postulated as an unexplained property of UG unless it can be motivated in some principled way. At the phonetic interface, internal merge yields the displacement phenomenon. This operation is illustrated below:

(2) a. What does John buy?



As one can observe in (2b), *what* internally merges from its position of complement of V° to the specifier position of CP. Internal merge is another label of operation *move* which has a new conception within the minimalist framework.

1.2.2. Move

According to Chomsky (2000), move is a complex operation which combines merge and agree. Since it is costly, Chomsky claims that it is a "last resort" chosen when nothing else

is possible. Movement is seen as copying and deletion operation. In other words, when a constituent moves, it leaves behind a null copy of itself. This copy has a null spell-out, that is, its phonetic features are unpronounced, hence deleted. The edge feature is the mechanism that drives A-bar movement whereas phi-features are the ones which drive A-movement. Move has as purpose to check and value uninterpretable features in the course of the derivation. Given the Full Interpretation principle which bars the presence of uninterpretable features at the interfaces, the Phonetic Form of an expression must contain only features that contribute to its phonetic interpretation, and its Logical Form must contain only features that enable the semantic interpretation of this one; otherwise the derivation crashes and hence is illegible. So, operation move displaces constituents from their pure merged position to a position wherein their uninterpretable features can be checked, valued and deleted. This feature checking is done within the Probe-Goal configuration. More precisely, feature checking and valuation is realized through another operation in syntax called Agree.

1.2.3. Feature checking within the Probe-Goal framework

The generative component assembles structures, by Merge and Move, to a point where the conceptual-intentional and the articulatory-perceptual processes diverge. This point is Spell out. During Merge, there will be features inserted in the structure which must be 'checked' before Spell out. Following Chomsky (2000), feature checking and valuation are done under Agree.

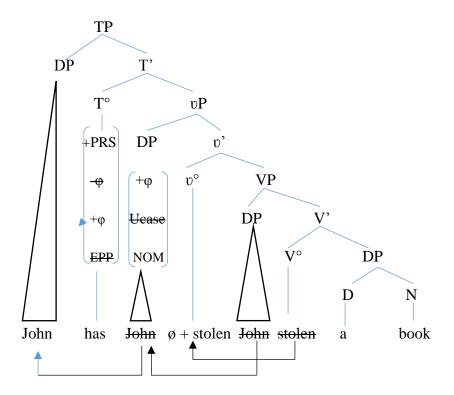
Agree is one of the operations which take place in the syntactic component. It deals with matching of uninterpretable features against their interpretable counterparts to check, value and delete the uninterpretable features for the structure to converge at the interfaces. According to Chomsky (2000), Agree establishes a relation (agreement, Case checking) between a lexical item α and feature F in some restricted search space (its domain). Matching is a relation that holds of a probe (P) and a goal (G). For a matching pair to induce Agree, G must be in the domain of P D (P) and satisfy locality conditions. The conditions for Agree to hold are formulated as follows:

- Matching is feature identity: that is, it is the same features which are involved in the matching operation. It is asymmetric, an uninterpretable feature matches with its interpretable counterparts
- Domain of P is the sister of P.
- ➤ Locality reduces to "closest c-command"

The domain of P is the c-command domain of P, and a matching feature G is closest to P if there is no γ (gamma) in the domain of P matching P such that G is in D (γ). There must be minimal search within a probe-goal framework.

To these conditions, we can add the activeness condition. Chomsky claims that probe and goal must be both active that is they should have one or more uninterpretable feature. Let us consider the following example:

(3) a. John has stolen a book b.



The tree diagram in (3b) shows how the derivation of sentence (3a) proceeds. In the above diagram, the noun *book* merges with the determiner a to form the DP [a book]. This latter merges with the verb stolen to derive the V-bar level [$stolen\ a\ book$]. Given the VP Internal Subject Hypothesis, the DP [John], the external argument of the verb, merges with the V-bar level to make up the VP [$John\ stolen\ a\ book$]. This in turn merges with v° , the head of the v° which is a phase, to form v-bar level. This latter merges with the empty specifier to derive the v° . At this level, The v° , which is designed to host verbal affix such as causative, attracts the lexical verb stolen. The raising of the verb stolen from v° leads to the fronting of the subject stolen from Spec-VP to Spec-vP. The auxiliary stolen merges with the v° to v° to make up the T-bar level. This is turn merges with the empty specifier to build the TP. At this level, T (stolen)

will probe and search for a goal. Since *John* is in its closest c-command domain, there is a minimal search between the probe (T) and the goal (*John*), and both are active, the phi-features of the goal match with their uninterpretable counterparts on T. These ones are checked, valued and deleted. Subsequently, the finiteness nature of T checks and values the uninterpretable case feature of the goal and assigns a nominative case. Then, the EPP on T will subsequently trigger the movement of *John* from Spec-vP to Spec-TP. At this level of the derivation, all the uninterpretable features of the probe and the goal have been valued through the operation Agree. The derivation can be handed over to the interfaces. Within MP, derivation proceeds by phases and once a phase is completed what is actually transferred to the conceptual intentional and the sensorimotor systems is the complement of the phase.

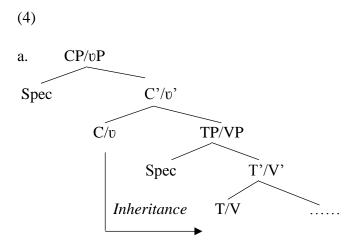
1.2.4. Phases

Within the precedent framework (principles and parameters theory), the interpretive interface levels LF (Logical Form) and PF (Phonetic or Phonological Form) were accessed once through the single application of the operation Spell-Out. In the MP, linguistic interfaces are fed by the operation Transfer. Going by what Lasnik and al (2005) claim, Transfer is the 'super-operation' that feeds the modular interfaces, made up of Transfer to LF (Interpret) and Transfer to PF (Spell-Out). The relevant unit of the derivation subject to Transfer is the phase. It operates more than once during the derivation: at the end of each phase and at the end of the overall derivation.

A phase is the very local unit for computation. In fact, Chomsky (2001) proposes that 'the derivation of expression proceeds by phase' in order to ensure a 'reduction of computational burden'. He hammers that phases should be as small as possible to minimize memory. He also suggests that phases are 'propositional' in nature, and include CP and vP. His rationale for taking CP and v*P as phases is that CP behaves as a complete clausal complex containing essential elements of the clause (e.g., the force markers, topic, focus markers, and so on) and v*P represents a complete thematic (argument structure) complex, including a subject in a specifier position. Thus, a phase contains only the lexical array that is needed for its building and constitutes a local computational domain for narrow syntax. Once a phase is completed, it undergoes Transfer and becomes impenetrable for further computation. Given the Phase Impenetrability Condition (PIC, Chomsky 2004:108) formulated as follows: "At the phase ZP containing phase HP, the domain of H is not accessible to operations, but only the edge of HP"; what is frozen and become inaccessible to further operations is the domain of the phase head. Accordingly, only the edge remains accessible and this one includes the phase

head itself and its specifiers. To put things differently, the complement of the head of a phase is out of reach for further computations, but its edge is accessible to operations like agreement and movement as the phase heads C and v^* contain two types of features: Agree features (Φ -features) and the Edge feature. The latter is the current version of the "generalized EPP" of Chomsky (2000, 2005, 2007), and triggers movements to the specifier position of the phase head.

Chomsky (2008) suggests that all syntactic operations are driven solely by phase heads. What this implies is that T is not a phase head, nor a probe. The operations apparently driven by T are in fact triggered by the phase head C, which is above T. Chomsky's argument is based on the conceptual consideration of language design. Thus, the Agree- and Tense-features are inherited by T from C, the phase head as well as the phase head v^* transmits its Inheritance features (accusative Case and Φ -features) to V as illustrated below:



After having presented briefly the minimalist architecture, the next section discusses some approaches to serial verb constructions.

1.3. On serial verb constructions

A serial verb construction (SVC) is a sequence of verbs that act together as a single predicate, without any overt marker of coordination, subordination or syntactic dependency of any other sort (Aikhenvald 2006). There have been various approaches to SVCs. The main approach is the Argument Sharing Hypothesis (Baker 1989, Hale 1991 and Collins 1997) which has been explored differently so far in the literature. The Argument Sharing Hypothesis states that verbs which occur within a serie must share an object. As far as object sharing SVCs are concerned, early transformational analyses of SVCs assumed that it results from deletion under identity. Modern analyses of SVCs are briefly discussed below.

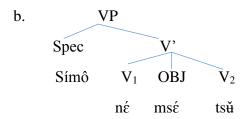
1.3.1. The ternary-branching account

Baker (1989) proposes a ternary-branching structure wherein we have a double-headed VP. Within this structure, the internal argument is literally shared by the two verbs. This implies that V_1 and V_2 directly theta-mark the object as shown below:

(5) a. Símô né msé tsǔ

Simo cook fufu corn eat

"Simo cooks and eats fufu corn"



Assuming the Projection Principle, Baker concludes that because the object of V_1 is an immediate constituent of V' projection of V_2 , V_2 must theta-mark it as any other verb must theta-mark its object. However, the Baker's proposal has some consequences both at the theoretical and empirical levels.

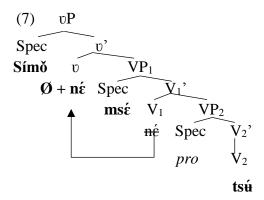
As it is outlined by Aboh (2009), at the empirical level, the Baker's approach supposes that no internal argument can appear after V_2 and it cannot license an overt pronoun object coreferential with the first object. So constructions such as (6) below pose problem to Baker's analysis:

From a theoretical point of view, the Baker's proposal posits the existence of a serializing parameter" within the Universal Grammar which sets serializing languages apart from non-serializing ones. Furthermore, ternary-branching is odd with standard assumptions of X-bar theory specially the binarity principle as formulated by Kayne (1984).

1.3.2. The VP-Shell approach

Collins (1997) proposes a VP shell account to SVCs. In this approach, the argument sharing hypothesis is translated into obligatory control. In realis, Collins argues that object–sharing is mediated by a null pronoun *pro*. Within the VP-shell structure, the external argument is introduced by little v, whereas the direct object is introduced by V1. The latter subsequently

fronts and adjoins to v, where it is licensed. The Spec-VP2 position is filled by the empty category *pro* which is controlled by the object of V1 as shown below:



This analysis is adopted by scholars such as Nishiyama (1998), Larson (1991), and Stewart (2001) amongst others and overcomes the technical problem of ternary branching. However, as it is claimed by Aboh (2009), a VP shell approach to SVCs that relies on obligatory control only to meet the ASH cannot accommodate series wherein control cannot hold.

1.3.3. Aboh's refinements

Aboh (2009) doesn't deny the VP-shell approach to SVCs. He rather argues for an extended VP-shell wherein the object merges as complement of V2. Unlike Collins (1997, 2002) who stresses on control and posits the argument sharing hypothesis (ASH) as a necessary condition on verb series, Aboh puts forward object movement in SVCs.

In *Clause structure and verb series*, Aboh strongly argues that the ASH is not a condition on verb series since it is freely violated by series where V1 and V2 don't share an internal argument such as (8) below. He therefore claims that object sharing doesn't and can't exist in syntax.

(8) Sésínú kùn mótò cè só àdó
Sesinu drive car 1SG._{POSS} hit wall

"Sesinu drove my car hit the wall" (Gungbe, Aboh 2009:5)

Aboh proposes an unified analysis for V1-XP-V2 and V1-V2-XP series built from Kwa as well as Khoisan empirical data. He claims that the space between V1 and V2 holds more syntactic positions than previously assumed because in some serializing languages such as Edó some constituents namely middle-field adverbs appear between the object and V2 as in (9).

(9) Òzó dùnmwún èmà [gié!gié] khién

Ozo V1-pound yam quickly V2-sell

"Ozo pounded the yam and quickly sold it" (Edó, Stewart 1998:34)

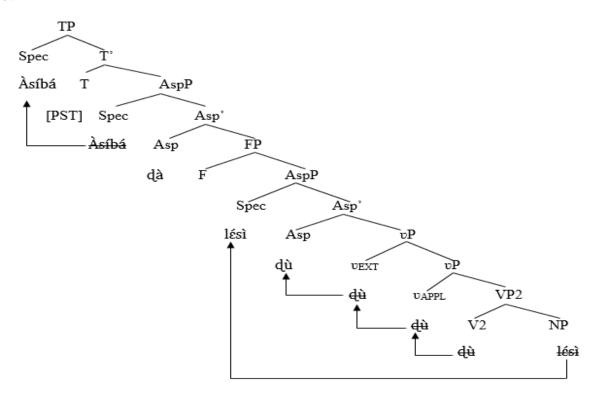
From this rationale, Aboh, analyzing instrument and comitative series in Kwa, noticed that V1 and V2 don't form a complex constituent neither in syntax nor at the LF interface. There are some I-type functional projections between the two verbs, V1 and V2 belong to two different fields of the clause structure. This observation leads to the conclusion that V1 heads a projection (AspP) in a higher functional zone, whereas V2 merges in the lexical field within the VP-shell. The V1 being merged in a functional projection (AspP) doesn't have an internal theta-role to assign but selects for complement within which the object is being licensed. In the SVC with one internal argument below, the V2 moves from its merged position to the lower Asp° and the EPP feature under this head triggers the movement of the object as illustrated below:

(10) a. Àsíbá dà lésì dù

Asiba cook/prepare/make rice eat

"Asiba cooked/prepared/made rice and eat" (Gungbe, Aboh 2009: 8)

b.



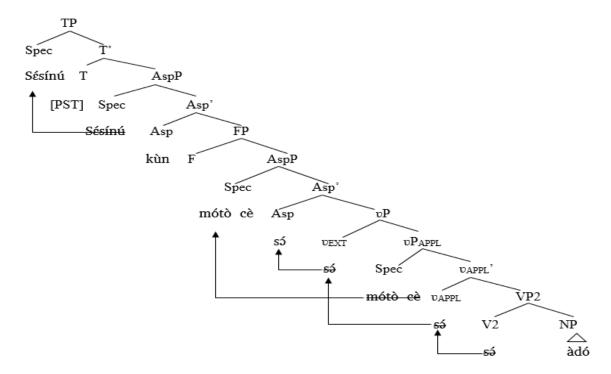
In the SVCs with two internal arguments, it is the first internal argument which is introduced by vP_{APPL} that raises to the specifier position of the lower AspP as shown below:

(11) a. Sésínú kùn mótò cè só àdó

Sesinu drive car 1SG._{POSS} hit wall

"Sesinu drove my car hit the wall" (Gungbe, Aboh 2009:5)

b.



From these empirical facts, Aboh claims that crosslinguistic variation in SVCs derives from the interaction between object movement, which is triggered by EPP licensing, and verb movement that leads to V1-XP-V2 or V1-V2-XP series. Thus, he concludes that the serializing parameter deals with the lexicon rather than with core syntax as it has been claimed by some scholars.

After having given a brief presentation of approaches to SVCs, the next section focuses on some literature on ICVs.

1.4. On Inherent Complement Verbs (ICVs)

Also referred to as obligatory complement verbs (Essegbey 1999, 2003 and 2010), an Inherent-Complement Verb has been defined by Nwachukwu (1987) as a verb whose citation form is obligatorily followed by a meaning-specifying noun complement. In other words, it can be described as a verb which requires a complement in their citation form of which includes a nominal element that may or may not be cognate with the verb. Let us consider the following examples:

```
(12) a. Ná jô gŏ? "to be painful"
```

- b. Ná jô **ʒùm** "to dream"
- c. Ná jô **ŋwá** " to menstruate"

The meaning of the verbs in (12) changes depending on the following nominal element $g\acute{o}$? "pain", $3\grave{u}m$ "dream" and $\eta w\acute{o}$ "moon". As Nwachuku (1985) remarks, the root and its nominal complement form one semantic unit. The meaning of the verb is tied to the meaning of the inherent complement. To put things differently, the inherent complement is a part of the meaning of the verb and it is impossible to dissociate the meaning of the verb from the meaning of its inherent complement. This semantic unicity creates divergences in the glossing of the verb unit of ICVs.

Essegbey (1999) decides to gloss the verb as ICV since it is semantically underspecified such that it requires its IC to make its meaning in any particular construction more precise as shown below:

```
(13) a. Kofi fú tsi
Kofi ICV water
"Kofi swam"

b. Kofi fú kó Amí
Kofi ICV fist Ami
"Kofi knocked Ami"
(Ewe, Essegbey 1999:2)
```

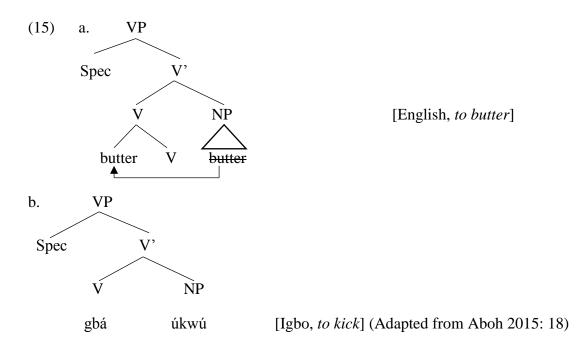
Aboh (2015) glosses the verbal part of ICVs as "Vx" in which x encodes an approximate meaning as illustrated below:

```
(14) a. Félé tún tán
Fele V<sub>RELEASE</sub> saliva
"Fele spat"
b. Félé nyìn cìn
Fele V<sub>THROW</sub> atishoo
"Fele sneezed" (Gungbe, Aboh 2015:11)
```

Following (Aboh 2015), the approximate meaning of the verb will be given.

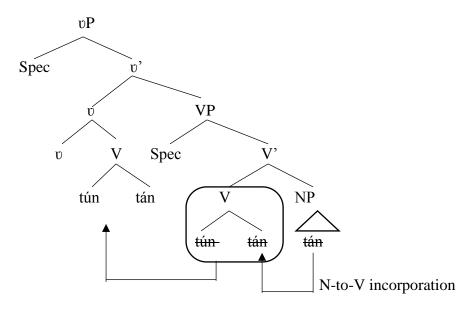
As far as the derivation of ICVs is concerned, Ihionu (1992) analyses Igbo ICVs in terms of abstract incorporation. In fact, the author argues that the structure of ICVs is similar to the one of denominal verbs in English. This is motivated by the fact that the only difference between an ICV verb and a lexical one, according to Ihionu, resides in their selectional

properties. This indicates that, as for lexical verbs, the pure merged position of ICV verbs is V°. However, unlike a lexical verb, an ICV verb selects a bare NP as complement which is not a semantic argument because it doesn't receive a semantic role. Morphological incorporation is attested in English and denominal verbs are derived via NP-incorporation to V in the sense of Baker (1988). Denominal verbs are verbs that are derived from nouns and have the same form as the nouns. Their derivation has been argued to be a syntactic process. They are formed by means of incorporation, this the reason why they are said to be true intransitive verbs since their complements incorporate to the verb and loss their semantic role (see Hale and Keyser 1993 for more details on denominal verbs). Following this rationale, Ihionu proposes that Igbo ICVs are derived via abstract incorporation at the LF interface since the surface order observed in Igbo ICV's such as gbá úkwú 'to kick' does not reflect structural adjacency as shown below:



The view that ICV verbs are generated under V° and take a bare NP as complement is also adopted by Essegbey (2010). Unlike Ihionu (1992), Essegbey, on the basis of data from Gbe languages, argues that the configuration in which V selects a bare NP would license N-to-V incorporation (Baker 1988). The complex V_{ICV} -N would latter move to v as in (16), a representation of the Gungbe verb $t\acute{u}n$ $t\acute{a}n$ "to spit".

(16)



V + N moves to v

Aboh (2015) considers ICV verbs as functional verbs and proposes an analysis in which they are bare roots that first merge in υ . The υ selects a VP headed by an abstract V as complement. The VP takes the NP as complement which is headed by the IC and the head noun (IC) raises to V; it is left-adjoined to V.

Conclusion

The main of objective of this chapter was to put forward the theoretical framework adopted for the present dissertation. In doing so, I have retraced the evolution of Generative Grammar from its inception up to the MP in order to capture improvements brought by Chomsky to overcome some weaknesses inside the generative enterprise. This evolution help us to capture both early and modern approaches to SVCs since some refinements of the generative enterprise lead to the review of analyses of SVCs. Subsequently, we have move from deletion under identity based on early generative grammar features to the VP-shell approaches based on recent developments within generative grammar. I also stressed on the significance of some operations that hold within the syntactic component during the computation procedure. This presentation of relevant features of MP was completed by a sketch of approaches to SVCs as well as some literature on ICVs which are the phenomena discussed in this dissertation. The following chapter has to do with grammatical aspects of the language under study.

Chapter 2: The grammatical sketch of the language

Introduction

In the last chapter, theoretical assumptions adopted in the work have been discussed. As for this chapter, it provides background information on the language under study with an emphasis on grammatical features. This grammatical sketch aims at familiarizing the reader with the data which will be presented and discussed throughout the work. In this vein, it describes the phonological system, noun morphology as well as functional categories related to verb. The structure of the clause is also discussed. The chapter is split into four sections. Section one looks into the sound system. The consonant system, the vowel system as well as the tonal system are explored. Section two tackles noun morphology with a special focus on noun classes, gender, pronouns and noun modifiers. As far as section three is concerned, it explores the Tense-Aspect-Mood system since the following chapter deals with verb. The last section presents the basic syntax of the language.

2.1. Phonological system

This section lays emphasis on consonants, vowels and the tonal systems. This presentation is based on works of some linguists who did a deep phonological study of the language, namely Nissim (1972) and Domche Teko (1980).

2.1.1. The consonant system

Table 2 : The Ghəmálá' consonant chart (from Domche Teko 1980)

	Labials	Apicals	Palatals	Velars	Glotals
Stops	p	t		k	3
	b	d		g	
Fricatives	f	S	ſ		h
	V	z	3	γ	
Affricates	pf	ts	t∫		
	bv	dz	dз		
Nasals	m	n	n	ŋ	
Pre-Nasalized Stops	mpf	nt		ŋk	
Lateral		1			
Glides	w		J		

2.1.2. The vowel system

The Ghəmálá' vowel system is made up of ten vowels, namely four back vowels, four front ones and two central vowels as it is represented in the table below.

Table 3: The Ghəmálá' vowel chart

	Front	Central	Back
High	i	u	u
Mid-high	e	2	0
Mid-Low	ε	Э	Э
Low	a		a

2.1.3. The tone system

Richards and Schmidt (2010) define tone as a height of pitch which is associated with the pronunciation of syllables or words and which affects the meaning of the word. As many Bantu languages, Ghɔmálá' is a tone language wherein tone is a distinguishing feature between different patterns. In line with previous works on the language, three simple tones as well as two contour tones are attested in Ghɔmálá'.

As simple tones, Ghomálá' distinguishes a high tone marked by an acute accent ['], a low tone marked by a grave accent ['] and a mid-tone marked by [] or simply unmarked. Since the mid tone is predominant in the language, it may be optionally marked. They are illustrated below:

Table 4: Ghəmálá' tones

High tone []	sím "to spend"	dá? "already"
Mid tone [-]	sīm "market"	dā? " only"
Low tone []	sìm "to spread"	dà? " to be angry" (2 nd form)

Two musical tones are attested in the language, namely the rising tone and the falling one as shown below:

Rising tone [*]	pŭ? "package"	lăm "lamp"
Falling tone [^]	sâp "sharper"	puô " madness"

Tone is very significant in the language. It has both a lexical value and a grammatical value. A tone is lexical when it distinguishes the meaning of two or more lexical items in the language as in (1):

Grammatical tone is used to distinguish between functional categories such as verb tenses as in the example below:

The tones on the first person pronoun subject differentiate sentence (2a) from sentence (2b). In facts, in sentence (2a), the high tone which marks the accomplished aspect clings to the tone of the

pronoun subject and derives the rising tone. Meanwhile in (2b), the low tone that marks the habitual aspect clings to the tone of the pronoun subject and derives the falling tone.

2.2. Noun morphology

This section is concerned with the nominal system of the language. A description of the noun structure is provided by examining some of its relevant aspects such as the noun classes, possessive and demonstrative adjectives as well as the personal pronouns. As in other Bantu languages, the noun in Ghəmálá' is made up of a prefix which can be null² or covert and a root. Ghəmálá' is a noun class language in the sense that nouns are classified according to the class to which they belong.

2.2.1. Ghəmálá' noun classes

The classification of substantives into classes is done on the basis of criteria proposed by Kadima (1969) namely the form of prefixes, agreement elements and the semantic content. The first criterion is relevant in Narrow Bantu languages wherein noun prefixes are attested and overtly marked. The semantic content criterion is no longer reliable in accounting for the noun classification in noun class languages. As it is claimed by Hedinger (1980), semantic classification of nouns is a purely arbitrary system wherein no class containing nouns of only one semantic content can be found.

The agreement criterion appears to be the most eminent criterion in noun classification in Bantu languages especially grassfields Bantu languages such as Ghomálá', Mədumbα...etc. Thus, on the basis of this criterion, a noun class is made up of nouns that share common agreement features. To put things in other way, nouns are said to belong to the same class if and only if they exhibit the same agreement morphology in relation with noun modifiers, or/and they make use of the same pairing system. Previous works by Nissim (1980), Domche and al (2008) and Moguo (2016) argue that six (06) noun classes are attested in Ghomálá'; three classes for singular nouns represented by odd numbers (1, 3, 5) and three classes for plural nouns indicated by even numbers (2,4,6). This classification is done on the basis of possessives markers. Three series of singular possessive markers are attested in the language as well as three series of plural possessive markers.

² Ghomálá' is devoid of noun class affixes. The sole noun affixes attested in the language is the plural maker *m*-

Class 1 is made up of singular nouns which express their possessive by using the \dot{a} , \dot{o} , e, j > k, $j > j \bar{a} p$ possessive markers as illustrated below:

Class 2 deals with plural nouns that express their possessive by using the pŏ, pŭ, pjó, pók, pó,páp possessive markers as shown below:

 \triangleright Class 3 gathers together singular nouns which their possessive is marked by the following possessive particles \acute{a} , \acute{o} , \acute{e} , $\acute{j}\acute{o}k$, $\acute{j}\acute{o}$, $\acute{j}\acute{o}j\acute{a}p$ as demonstrated below:

(5) a.
$$\int w \hat{\mathbf{a}}$$
 "my mouth"
Mouth 1SG.3.POSS
 $\int w \hat{\mathbf{o}}$ "your mouth"
mouth 2SG.3.POSS

∫wè é "his/her mouth"

mouth 3SG.3.POSS

b. pa? jók "our house"

House 1PL.3.POSS
Pa? jó "your house"

House 1PL.3.POSS
Pa? jáp "their house"

House 1PL.3.POSS

Class 4 contains plural nouns that mark their possessive by using the må, mű, mjå, mák, má, máp possessive particles as illustrated below:

"my books" (6) a. m-ηwa?ηə **mð** PL-book 1SG.4.POSS "your books" m-ηwa?ηə **mǔ** PL-book 2SG.4.POSS m-ŋwaʔɲə **mj**ə́ "his/her books" PL-book 3SG.4.POSS "our spoons" b. m-lû? mók PL-spoon 1PL.4.POSS "your spoons" m-lû? mź PL-spoon 2PL.4.POSS m-lû? máp "their spoons" PL-spoon 3PL.4.POSS

Class 5 hosts singular nouns which their possessive markers belong to the *tså*, *tså*, *tsjå*, *tsók*, *tsó*, *tsáp* sequence as shown below:

(7) a. Suŋ "my tooth" tsă Tooth 1SG.5.POSS "your tooth" Sun tsŭ Tooth 2SG.5.POSS "his/her tooth" Suŋ tsjá tooth 3SG.5.POSS Ъ. tsé tsók "our forehead" forehead 1PL.5.POSS tsź "your forehead" tsé Forehead 2PL.5.POSS tsáp "their forehead" tsé forehead 3PL.5.POSS

Class 6 is made up of plural nouns that express their possessive by using *tså*, *tså*, *tsjå*, *tsók*, *tsó*, *tsáp* possessive markers as demonstrated below:

(8) a. m-vàm **ts**5k "our stomaches"

PL-stomach 1PL.6.POSS

m-vàm **ts**5 "your stomaches"

PL-stomach 2PL.6.POSS

b. m-yəm	ts ŭ	"your speeches"
PL-speech	2SG.6.POSS	
m-yəm	tsjá	" her/his speeches"
PL-speech	3SG.6.POSS	

Nissim (1975) proposed the following table which sums up noun classes as well as their concord markers in Ghəmálá':

Table 5 : Ghəmálá' concord markers

Classes	Concord markers	Tones ³
1	Ø-	Low
	j-	1
2	p-	High
3	Ø-	1
	j-	
4	m-	1
5	ts-	
6	ts-	1

2.2.2. The notion of gender in Ghəmálá'

As in other Bantu languages, the gender system is based on the pairing of singular noun classes with the plural ones, contrary to the Indo-European languages where the gender system is based on the masculine/feminine distinction. In the language understudy, both regular and irregular gender are attested. We can also find gender made up of only one noun class instead of two.

Regular genders

They are obtained from the singular/plural pairing between two consecutive noun classes. These include the following below.

Gender I: class 1/class 2

(9) a. só / m-sô b. tá / m-tâ

Friend / PL-friend "friends" father/ PL-father "fathers"

Gender II: class 3/ class 4

(10) a. sjap/ m-sjap b. sú / m-sû

38

³ These tones are marked on the possessive particles.

Needle/ PL-needle "needles" hoe/ PL-hoe "hoes"

Gender III: class 5/class 6

(11) a. nən/m-nən

b. tsó/mtsô

hair/ PL-hair "hairs"

name / PL-name "names"

Irregular gender

It is obtained from singular/plural pairing between two non-consecutive noun classes as shown below:

Gender IV: class 5/ class 4

(12) a. suŋ/ m-suŋ

b. γὸ'/ m-γὸ'

tooth/ PL-tooth "teeth"

jaw/ PL-jaws "jaws"

Gender V: class 1/class 6

(13) g5p/g5p

chicken/ PL. chicken "chickens"

Single class genders

They are made up of invariable nouns which are inherently either singular or plural.

These include the following below:

Gender VI: class 1

(14a) ŋkáp "money"

Gender VII: class 3

(14b) Jiə "water"

Gender VIII: class 4

(14c) m-lu? "wine"

PL-wine

2.2.3. Noun satellites

This subsection focuses on some noun satellites which can occur in a simple noun phrase, namely possessive adjectives and demonstrative adjectives.

2.2.3.1. Possessive adjectives

The form of possessive adjectives varies depending on the noun class of the noun that they modify. They occupy different positions within the noun phrase. According to their positions in the noun phrase, two types of possessive adjectives are attested in Ghɔmálá': pre-posed possessive [POSS___N] adjectives and post-posed possessive adjectives [N___POSS]. In terms of information packaging, post-posed possessives are said to be neutral whereas their pre-posed counterparts are emphatic. In fact, the [POSS___N] order encodes contrastive focus in some Bantu grassfields languages (Tamanji 1999; Kouakem 2011) especially in Ghɔmálá'.

2.2.3.1.1. Neutral possessive adjectives

As I said above, there are three series of possessives for singular nouns as well as three series for plural ones. The following table presents the neutral possessive adjectives attested in the language.

TT 11 /	α_1 $\gamma_1\gamma$, 1		7
Table 6.	(thomala)	neutral	possessive	adjectives
I word o.	Onomaia	neun ai	Possessive	aujectives

Person	Person Singular			Plural			Glosses
	Class 1	Class 3	Class 5	Class 2	Class 4	Class 6	
1st SG	à	á	tsǎ	pš	mš	tsă	my
2 nd SG	ò	ó	ts ŭ	pŭ	mŭ	ts ŭ	your
3rd SG	e	é	tsjá	pjá	mjś	tsjá	His/her/its
1 st PL	jok	Jók	tsók	pók	mók	tsók	our
2 nd PL	jэ	Jó	tsś	pό	mố	tsó	your
3 rd PL	Jap	Jáp	tsáp	páp	máp	tsáp	their

2.2.3.1.2. Focused possessives adjectives

As their neutral counterparts, three series of focused possessives for singular nouns and three other series for plural nouns. The following table outlines the emphatic possessive adjectives attested in the language.

Table 7 : Ghəmálá' emphatic possessive markers

Person	Singular		Plural			Glosses	
	Class 1	Class 3	Class 5	Class 2	Class 4	Class 6	
1st SG	Ja	Ja	tsa	pə	mə	tsa	my
2 nd SG	Ju	jú	tsu	Pu	mu	tsu	your

3 rd SG	jə	Já	tsjá	pjá	mjá	tsjá	His/her/its
1 st PL	Jok	Jók	tsók	pók	mók	tsók	our
2 nd PL	Jo	Jó	tsó	рэ́	mớ	tsó	your
3 rd PL	Jap	jáp	tsáp	Páp	máp	tsáp	their

a. pô pš
PL.child 1SG.2.POSS
"My children"
b. m-γρm tsŭ
PL-speech 2SG.6.POSS
"Your speech"
c. ŋwaʔɲə é
book 3SG.3.POSS
"his/her book"

(16) a. pó рə 1SG.2.POSS PL.child MY children "My children" b. tsu m-yəm 2SG.2.POSS PL-speech YOUR speech "Your speech" c. Já ŋwa?nə 3SG.3.POSS book HER/HIS book "Her/his book

As one can observe in the data above, the examples in (15) illustrate neutral possessive adjectives whereas the ones in (16) are instances of focused possessive adjectives. In (16), the possessive adjectives occur before the noun as in some Indo-European languages but the interpretation is different. Here, the speaker is laying emphasis on the fact that the object referred to belongs to the owner, nobody else.

2.2.3.2. Demonstrative adjectives

Depending on the relative distance between the speaker, the listener and the object referred to, three kinds of demonstrative adjectives are attested in Ghomálá'. The noun class to which the noun belongs also determines the form of the demonstrative adjective. According to their position within the noun phrase, there are two types of demonstrative adjectives: neutral demonstrative adjectives and emphatic demonstrative adjectives.

2.2.3.2.1. Neutral demonstrative adjectives

They occur after the noun. The table below presents the different simple demonstratives attested in the language.

Table 8: Neutral demonstrative markers

Noun classes		The degree of proximity					
	Near speaker	Near listener	Far from both S and				
			L				
1	Jěŋ	Jaś	Jš				
2	Pš	Páá	pjš				
3	Jěŋ	jαέ	Jš				
4	Mš	Mớá	Mjš				
5	Tsŏ	tsaś	Tsjě				
6	Tsš	Tsớ	Tsjě				

2.2.3.2.1. Emphatic demonstrative adjectives

They appear before the noun. The following table shows the different emphatic demonstrative adjectives attested in the language.

Table 9: Emphatic demonstrative particles

Noun classes	The degree of proximity					
	Near speaker	Near listener	Far from both			
1	Jəŋ	jáá	Jə			
2	Рэ	Pâ	Pjə			
3	Jəŋ	Jə	Jə			
4	Мэ	Mâ	Mjə			
5	Tso	tsα̂	Tsjə			
6	Tso	tsά	Tsjə			

(17)a. mú jěŋ
Child 1.DEM
"This child"
b.ŋwaʔɲə jě
Book 3.DEM
"That book"

(18)a. jəŋ mú
1. DEM child
"THIS child (not that one)"
b. jə ŋwa?ŋə
3. DEM book
"THAT book (not this one)"

2.2.4. The pronoun system

It is shared knowledge that pronoun is a word that substitutes a noun or a noun phrase. This section focuses on absolute pronouns. Like in other grassfields Bantu languages, simple pronouns as well as coordinate absolute pronouns are attested in Ghəmálá⁵.

2.2.4.1. Ghəmálá's simple personal pronouns

The following table presents simple personal pronouns found in the language.

Table 10 : Ghəmálá's simple personal pronouns

Persons	Nominative	Glosses	Accusative	Dative	Glosses
1SG	ga	I	á	mjè	me
2SG	0	you	ó	wú	you
3SG	е	He/she	é	J ú	Her/him
1PL	Pjə	we	Wók	Pjə	us
2PL	po	you	Wó	po	you
3PL	wáp	they	wáp	pú	them

Dative pronouns, especially singular ones, are subjected to morphological modifications when they are merged with the preposition bi "to" as shown below

b. Gǎ wó-góm bû
1SG.NOM.PRS PROG-talk to.2SG.DAT
" I am talking to you."

(21)

a. *O kè-há m-táp bí jú 2SG.NOM PST2-give PL-shoe to 3SG.DAT "You gave her/him shoes"

b. O kà-há m-táp bí í2SG.NOM PST2-give PL-shoe to 3SG.DAT"You gave her/him shoes"

2.2.4.2. Ghəmálá' complex personal pronoun

The table below outlines complex personnal pronoun found in the language.

Table 11: Complex personnal pronoun

	Nominative		Accusative			
Covert	Person Pronoun glosses		person	pronoun	glosses	
coordination	1+2	Pû	We (You and I)	1+2	Wókpú	We
	1+2	Pà	We (inclusive)			andyou
	1+3	Pjə é	I and him	1+3	Wókpje	We and
	2+3	Po é	You and him			him
Overt	1+3	Pàapú	We (inclusive)	1+3	Wók púa pú	We and
coordination			and they			them
	1+3	Pjəapú	We (exclusive)	2+3	W ɔ́po é	You and
			and they			him
	2+3	po a pú	You and they	3+3	wáp pú é	Them and
						him
	3+3	pú a pú	They and they	3+3	Wáp púa pú	Them and
						them

After this overview of the noun morphology, emphasis will be laid in the next section on the inflectional system of the Ghomálá' verb.

2.3. Tense, Aspect and Mood

This section provides an overview of grammatical categories of the verb, namely tense, aspect and mood in order to familiarize the reader with the inflectional system of the Ghəmálá verb.

2.3.1. Ghəmálá's tense system

This subsection discusses the three tense types identified in the language by previous works (Moguo 2016) in terms of their structural distribution and semantic interpretation.

2.3.1.1. The present tense (PRS)

Moguo (2016) identifies four forms of present tense in the language namely the accomplished present, the latent present, the immediate present and the progressive present. The first two are tonologically marked meanwhile the last two are morphologically realized.

➤ The **accomplished present** indicates a completed action in the present time. It is marked by a floating high tone which merges with the register tone borne by the subject (personal pronouns) to derive musical tone (raising tone).

➤ The **latent present** expresses the idea of habitual action. This form is used to indicate actions or activities we usually carry out and it is marked by a floating low tone that attaches with the register tone borne by the subject to derive the falling tone. In this form, it is the second form of the verb that is used.

The **immediate present**⁴ is used to denote action that will be completed immediately after the moment of utterance. It is marked by the morpheme *go* which is also used to derive future tense makers.

```
(24) a. E g5-l5
3SG.NOM PRS3-cry
"He /She cries"
b. wáp g5-tí
3PL.NOM PRS3-sleep
"They cry"
```

The **progressive present** indicates action that is going on at the moment of speaking. It is marked by *w*^{*} which is an aspectual marker and the second form of the verb is used.

```
(25) a. pā-dʒwǐ wá-dó
PL-woman PRS4-cry
"Women are crying"
b. wáp wá-sók m-ké
3PL.NOM PRS4-wash PL-dish
"They are washing dishes"
```

2.3.1.2. The past tense (PST)

Four forms of past tense depending the time frame covered are attested in Ghomálá', namely the immediate past, the recent past, the distant past and the remote past.

The **immediate or today past** is used to denote action that is completed hour (s) ago prior to the moment of utterance. It is marked by \hat{e} .

```
(26) a. Tâmo ê - ɣɔ tʃɔ̂sì

Tamo PST1-go church

"Tamo went to church"

b. wáp ê-sɔ́k m-kɛ́

3PL.NOM PST1-wash PL-dish

"They washed dishes"
```

 \triangleright The **recent past** describes events that happened some days or a day before the present moment. It is marked by $k\partial$.

⁴ Domche-Teko and al (2008) refers to this tense as immediate present, however, it is significant to keep in that this is a future tense. One can refers to it as general future since future tense markers are derived from this morpheme.

b. Tâmo kə-sòk m-dzá Tamo PST2-wash PL-dzá "Tamo washed clothes"

> The **distant past** indicates action that is completed months ago prior to the present moment. It is marked by *l*_∂.

(28)a. wáp la-sók m-kέ
3PL.NOM PST3-wash PL-dish
"They washed dishes "
b. Fôtsŏ la- pfά gáfa
Fotso PST3-eat maize
"Fotso ate maize"

The **remote past** describes an event that took place many years ago before the moment of speaking. It is marked by the morpheme *lədá?* and the second form of the verb is used. This tense also refers to situations or events which occurred many years ago and sometimes so long that the speaker cannot even remember the exact moment.

(29)a. Fôtsŏ ládá'- dzú m̄sĕ
Fotso PST4-eat fufu corn
"Fotso ate fufu corn"
b. Tâŋə ládá'-dʒú gôp
Tagne PST4-steal chicken
"Tagne stole chicken"

2.3.1.2. The future tense (FUT)

This tense is often defined as a prediction on the part of the speaker that the situation in the proposition which refers to an event taking place after the moment of speaking will hold. It is used to express an action that has not been completed and to locate a situation at a time subsequent to the present moment. Four forms of future depending on the time frame within which the action will be realized are attested in Ghomálá: the immediate future, the recent future, the near future, the distant future and the hypothetic future.

The **immediate or today future** is used to denote an action that will happen minutes or hours after the moment of speaking. It is marked by *goyo*.

The **near future** or future of tomorrow expresses action that will be completed a day or several days after the moment of utterance. It is marked by *goti*.

The **distant future** locates a situation which will happen some months or few years after the moment of speaking. It is marked by got/wó.

The **hypothetic future** is used to denote an action that will be realized within an undetermined time after the present moment. It is marked by *golá?*.

"My children will go to the market"
b. Fotue **gɔlá?-**jó t∫jépa?
Fotue **FUT4**-buy land for house

"Fotue will buy a land"

After this overview of the tense system, emphasis is now going to be laid on the aspect system in a very sketchy fashion as discussed by Tala (2015), Foba (2015) and Moguo (2016).

2.3.2. Aspect

Talking about aspect, Comrie (1976) refers to different ways of viewing the internal temporal constituency of a situation/event/action, that is whether this latter is accomplished or not at the moment of utterance. Two aspectual features are addressed in this section: the inherent aspect and the derived aspect.

2.3.2.1. The inherent aspect

Also referred to as "semantic aspectual" (Comrie 1976:40), it is the aspect described or expressed is contained in the verb and it is tied to this latter. The verb carries both the action and its development. Talking of inherent aspect, Wiesemann et al (1993) argue that "certains procès ont un déroulement relativement long, d'autres par contre se déroulent très rapidement. Certains aboutissent à un résultat, ce qui n'est pas le cas pour d'autres". The verb is in the infinitive form and six inherent aspectual forms are attested in Ghomálá': punctual, durative, dynamic, static, telic and atelic.

➤ The **punctual aspect** characterizes actions which proceed within an interval of very short time.

```
(34) a. Nó -lôŋ
INF- jump
"To jump"
b. Nó - vù sí
INF - fall down
"To fall"
```

The durative aspect describes action that takes place in a long period of time.

```
(35) a. Nớ – jwôk

INF- spend the day

"To spend the day"

b. Nớ- kwô?
```

INF-spend the night

"To spend the night"

➤ The **dynamic aspect** characterizes action which implies movement.

➤ The **telic aspect** is found in the verbs whose action implies a concrete and tangible result.

The difference between the telic aspect and the durative one lies in the fact that the first stresses on the result of the process (concrete), whereas the second insists rather on the duration of the process.

➤ The **atelic aspect**, according to Wéga Simeu (2016), does not imply a tangible result. The interruption of the action of the verb implies a completed process, i.e. an accomplished action.

2.3.2.2. The derived aspect

There are two groups of derived aspects, namely the perfective aspect and the imperfective aspect. This section briefly discusses some derived aspectual categories with reference to their distribution and interpretation.

2.3.2.2.1. The perfective aspect

The perfective aspect in Ghəmálá' overlaps with some tenses such as the different past tenses previously discussed. Semantically, an event is said to be perfect or perfective if it is accomplished at the moment of speaking. Accordingly, Comrie (1976) points out that the verb is in a perfective aspect when: "it presents a totality of the situation referred to without reference to its internal temporal constituency". Although not morphologically marked, the perfective aspect is going to be materialized as PERF as in the following sentences.

2.3.2.2.2. The imperfective aspect

The imperfective aspect denotes unaccomplished events at the moment of speaking. This aspect considers the action of the verb in one of the phases of its realization. In the imperfective statement, the speaker specifies if the action starts, if it is course, if it is repeated or if it is completed. Comrie (1976) distinguishes the imperfective aspect from the perfective one in the following words:

The perfective looks at the situation from the outside without necessarily distinguishing any of the internal situation of the situation, whereas the imperfective looks at the situation from inside and, as such, is crucially concerned with the internal structure of the situation.

The following imperfective aspects have been identified in Ghomálá'.

The **progressive aspect** describes an action which is under progress at the moment of speaking. Progressive in Ghomálá' is marked by the morpheme *wó*.

"I am cooking the soup"

1PL_{NOM} PST2-**PROG**- sell maize

"We were selling maize (yesterday)"

➤ The **habitual aspect** puts forward the habit of the action described by the verb. It is used to express the action of the verb which is usually realized. The habitual aspectual marker overlaps with the present tense. It is marked by a falling tone on the subject or the negative marker if present. The verb that follows always has the second form. It is also lexically marked by **d**3i which litterally means "often" as in (41b).

The **iterative aspect** indicates that the action of the verb is repeated. It is marked by *kwi?* or *piŋ* "again".

2.3.3. The mood system

This section discusses the mood system in Ghomálá⁵. According to Biloa (2004), mood is the grammatical category which expresses the speaker's attitude towards what is said. Below, only the conditional and the imperative are addressed.

2.3.3.1. The conditional mood

The conditional denotes a verbal form which expresses a condition owing to the realization of a given action. The subordinate clause (protasis) states a condition, the truth of which is not

asserted, under which the main clause (apodosis) holds. In Ghomálá', the protasis and the apodosis are separated by a conditional marker $b\boldsymbol{\partial}$ or $b\acute{\boldsymbol{\partial}}\boldsymbol{j}\boldsymbol{\partial}^5$. Syntactically, the morpheme $b\boldsymbol{\partial}$ is used when the protasis precedes the apodosis meanwhile $b\acute{\boldsymbol{\partial}}\boldsymbol{j}\boldsymbol{\partial}$ is used when the apodosis comes before the protasis. The examples below are some instances of conditional clauses.

(43)a. Bǎkâm kó səkú **bə** Tâlá gɔtʃwź- lóm é

Bakam.PRS enter school **COND** Tala FUT3-marry 3SG._{ACC}

"If Bakam schools /goes to school, Tala will marry her"

b. Tâlá gɔtʃwź- lóm é **bźjə** e kó səkú àà/lə

Tala FUT3-marry 3SG._{ACC} **COND** 3SG._{NOM} enter school DEF

"Tala will marry her if she schools /goes to school"

2.3.3.2. The imperative mood

The imperative mood is used to express orders, commands or strong obligations. The imperative is expressed in the second person singular, the first person plural and the second person plural counterpart. It is not morphologically marked as in the following sentences.

(44) a. sɔk mə́twâ

Wash._{IMP.2SG} car

"Wash the car!"

b. Pə sɔk mə́twâ!

1PL._{NOM} wash._{IMP} car

"Let us wash the car!"

c. Po sɔk mə́twâ

2PL._{NOM} wash._{IMP} car

"Wash the car!"

2.4. Negation

Negation is the verbal form which denies a positive assertion, it expresses the negative attitude of the speaker towards the action of the verb. Negation in Ghomálá' is bipartite, it is marked by two negative particles / tɔ́....pɔ́ or á /. The first one appears before the verbal base

⁵ Conditionals can also be expressed through the floating low tone placed on the verb of the protasis (see Moguo and Bessala 2017 for more details)

whereas the second particle occurs at the end of the sentence and it is optional. The negation morphology varies depending on tense in Ghəmálá'.

2.4.1. Negation with present and future tenses

Syntactically, the negative marker occurs before the tense marker in the present and future tenses as it is shown in sentences below:

2.4.2. Negation with past tenses

With past tenses, one observes some changes as far as the first negative particle is concerned. $T\dot{\sigma}$ directly follows the tense marker and this could be at the origin of the vocalic alternation observed on the tense marker. The structures in (46) below highlight this situation.

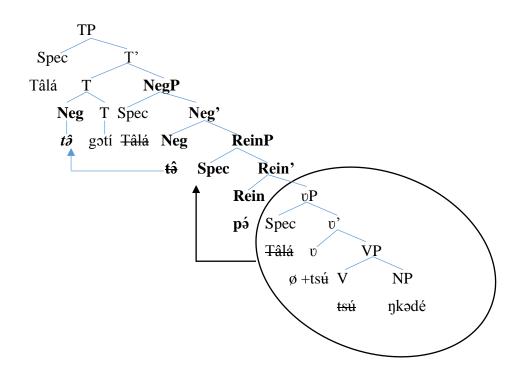
Adopting Pollock (1989)'s split-IP hypothesis, Tala (2015) argues that the first particle $t\bar{\sigma}$ or kə (Imperative negative marker) is the head of NegP in Ghəmálá' and the second particle is the reinforcer of Neg°. The reinforcer status of the second particle is based on the fact that it is

optional. In present and future tenses wherein the negative particle precedes the tense marker, the latter is left-adjoined to T°, the head of TP. This implies that negation is lower than tense within the I-domain. If negation was higher than tense, either it would raise rightward in past tenses or the tense particle would be right-adjoined to Neg° in present and future tenses. Rightward movement as well as right adjunction are proscribed by the LCA-based approach to syntax (Kayne 1994). The second particle projects a negative Reinforcer Phrase (ReinP) which is c-commanded by the NegP. The Reinforcer Phrase, being a functional projection, has the EPP feature that triggers the pied piping of the small vP to its specifier position as shown below:

(47) a. Tâlá **tô** gɔtí tsú ŋkədé **pó**Tala Neg FUT2 eat banana Neg

"Tala will not eat banana"

b.



2.5. Ghəmálá' clause structure

Ghomálá' is basically an SVO language as shown in (48) below:

(48) Fôtsŏ kè- wé- pfά géfè Fotso PST2-PROG- eat maize "Fotso was eaten maize" The external argument occupies the preverbal position meanwhile the internal argument appears after the verb. As in some Eastern grassfield Bantu languages such as Mədumba or Fe'fə', the subject verb agreement is totally absent. In other words, the subject marker, which displays class and gender agreement between the subject NP and the verb in some Bantu languages, isn't attested in Ghomálá'. In this vein, Ghomálá is not a pro-drop language. Moreover, tense, aspect and negative markers precede the verb. Thus, the order of functional categories is as follows:

```
(49) a. [Tense-Negation-Aspect]
       b. Fôtsŏ
                  kàtə- wá-
                               pfά gáfà (pà)
        Fotso PST2.NEG-PROG -eat maize NEG
       "Fotso wasn't eating maize"
```

It is significant to note that double object constructions are very rare in the language⁶. Most of the time, the language introduces the third argument of three place predicate verbs via dative complementation as illustrated below:

However, the unmarked word order described above can be affected by information structure. In fact, it is a shared knowledge that scope-discourse properties such as focus or topic internally merge constituents in a sentence. Looking at the information structure, both topic and focus (not exclusively) are expressed in the left periphery. The focused items are preceded or followed by a focus marker (FOC) whereas topicalized ones are followed by a topic marker (TOP) as illustrated in the following data:

(51) a. Fôŋkám né ηkədé gəti-tsú Fokam **FOC** FUT2-eat banana "FOKAM will eat banana"

⁶ What has been proposed by Tala (2015) as case of double object constructions are, in realis, case of dative complementation.

- b. Fôŋkám gɔtí-tsú pó ŋkədé

 Fokam FUT2-eat FOC banana

 "Fokam will eat BANANA"
- c. Fôŋkám **1ó**, é gɔtí-tsú ŋkədé
 Fokam **TOP** 3SG._{NOM} FUT2-eat banana
 "As for Fokam, he will eat banana"

The language displays two focus domains: the left peripheral focus and the post-verbal focus. As in any other Bantu languages, predicate focusing is expressed by verb doubling in Ghəmálá and the two copies of the verb figure in I-domain. Fronted wh-word are focused and therefore are followed by focalizers (see Tala 2015, for more detailed).

Conclusion

The main task of this chapter was to provide the reader with background information on the grammatical aspects of Ghomálá' based on previous works on the language. The sound system, noun morphology, the clause structure as well as functional categories have been discussed in a very sketchy fashion. The discussion reveals that Ghomálá' is a tone and noun class Bantu grassfield language with SVO as unmarked word order. Tone is significant in the language since it contributes in distinguishing two lexical items and marks some functional categories as well as some constructions. The language is devoid of noun class prefixes and agreement is the best criterion used in noun classification. Noun modifiers vary depending on the noun class to which belongs the head noun. Subject verb agreement is not attested in the language and its inflectional domain isn't enough rich of functional heads. We have two negative particles in Ghomálá'. The verb itself has not been addressed in this chapter; it will be deeply discussed in the following chapter.

Chapter 3: Ghəmálá' verbs

Introduction

The split of words into distinct categories or parts of speech is one of the well-known linguistic tradition. Some words are inflected for case whereas others are inflected for tense, aspect, mood and person. The verb refers to an activity or process performed or undergone and occurs as part of the predicate of a sentence. In the precedent chapter, functional categories related to verb have been addressed by exploring the TAM system of Ghəmálá'. The core issue of this chapter is to provide an overview of Ghəmálá verbs. The morphological, the syntactic and semantic properties of verbs are discussed. In doing so, a classification of verbs is done following three criteria namely the tonal, the syllabic and the morphological criterion. The basic verb structure is addressed as well as the derivative verbal affixes attested in the language. Moreover, the chapter also explores the issue of transitivity in the language and groups verbs on the basis of their argument structural characteristics. Semantic restrictions of some verbs are also analyzed. The chapter is structured as follows:

3.1. Classification of Ghəmálá' verbs

As we said earlier, three criteria are used to classify verb roots in Ghomálá'. Verbs can be grouped on the basis of their tone, their morphology and their syllable pattern. Adopting the tonal criterion, verbs roots are split into two groups: high tone verbs and low tone verbs. However, these tones can be subjected to some modifications due to TAM marking.

(1) Hig	h tone verbs	Low to	ne verbs
-há	"give"	ćγ -	"go"
- sá	" break"	- kwà	"carry"
- lớm	" bite"	- lò	"cry"
- tí	" sleep"	- sàm	"cover"
-pf ú	" die"	- sà	"bury"

One of the relevant peculiarities of Ghomálá' verbs is their form. Morphologically, verbs have two forms which are referred to as *forme nue* ⁷ and *forme alternative* by Mba (1997). The first form is used for accomplished actions and in imperative construction whereas the second is used for unaccomplished actions. The difference between the first form and the second one relies on the initial consonants of the verb root.

When the initial consonants of the first form are voiceless stops, those of the second form will be either voiced stops or pre-nasalized consonants as shown below:

(2) First form	Second form	
p é	b é	"take"
t ú m	d úm	"injure"
k é	ŋké	"call/read"
tó	nt ó	"braise"
pf óp	mpf źp	"cover"

Verbs beginning with voiced fricatives in their first form have their second form beginning either with the corresponding stops or affricates as illustrated below:

(3) First form	Second form	
γòm	gòm	" speak"
v ù	bv ù	" fall"
ʒwэ̀р	dʒwэ̀р	"sing"
Jú?	dʒú?	"understand"
wìm	gwìm	"possess"

Verbs beginning with the lateral / l/ in their first form have their second form beginning with the voiced stop alveolar /d/ as shown below:

(4) First form	Second form	
lé	dé	"look"
là	dà	"stick"
lù	dù	"leave"
15	dź	"cry"

⁷ bare form and alternative form

-

Verbs beginning with nasals and voiceless fricatives in the first form do not undergo the process of first consonant alternation as illustrated below:

(5) First form	Second form	
sò?	sò?	"come"
fà?	fà?	"work"
hé	hé	"open"
mì	mì	"swallow"
né	né	"cook"

Looking at the syllable pattern of the verb roots, verb roots are generally monosyllabic. The onset of a syllable in Ghomálá' is a consonant. This means that most of the words in this language begin with a consonant. However, we can find some words which are made up of a single sound that is a vowel such as personal pronoun. Verb roots in Ghomálá' exhibit the following syllable types.

➤ The CV syllable type

This is a combination of a consonant which is the onset and a vowel that is the nucleus and the tone bearing unit as in the following examples:

(6) fé	"turn"	pí	"lose"
έγ	"go"	tá	"narrate"
f ù	"deceive"	sò	"remove"
ké	"call"	là	"take"

> The CVC syllable type

According to Moguo (2016), this is the most common syllable pattern in the language. It is made up of a consonant which is the onset, followed by a vowel, the nucleus and the tone bearing unit, and another consonant that is the coda. All consonants, except the glottal 2, can figure at the onset position but only few can appear at the coda position namely p, k, m, η and 2 as shown below:

(7) táŋ	"hollow"	káp	"pick"
sóm	"miss"	fźk	"breathe"
píŋ	"accept"	γèm	"catch"
ηí?	"peel"	làk	"collect"

➤ The CGV syllable type

This syllable pattern is made up of a consonant followed by a glide and a vowel as in the following examples:

(8) kjè	"hang"	tjà	"slip"
kwì	"take"	pwá	"to be tired"
lwá	"cross"	hwé	"to be hot"

> The CGVC syllable type

This is a combination of a consonant followed by a glide, a vowel and a consonant as shown below:

(9)kjέ?	"unpack"	twóp	"germinate"
kjáp	"hold"	tjè?	"solve"
kwó?	"climb"	mjèp	"savour"

3.2. The structure of the verb in Ghəmálá'

The structure of the verb in the language under study is slightly different from what is attested in other Bantu languages such as Tuki, Basàá or Ewondo. In these languages, the basic verbal form is made up of a root and suffixes. The suffixes consist of extensive morphemes and the so called final vowel. Ghəmálá' is devoid of a final vowel (FV) and the verbal base can be preceded by the infinitive particle $n\dot{\delta}$ - which can be literally translated as the English infinitive morpheme "to".

3.2.1. The infinitive form

The infinitive form in Ghomálá' is marked by nó- which, as I said earlier, precedes the verbal base and a floating low tone that is born by the last vowel of the first form of the verb. The floating tone is attached only to verb roots with high tones. In other words, when the tone borne by the root is a high tone, the floating tone attaches to it to form a falling tone as in the following examples:

(10) Prefix	Stem	Floating tone	Infinitive	
ná	pfά	`	nápfâ	"to eat"
ná	t∫ók	•	nát∫ôk	" to be severe"
ná	fé	•	náfê	"to turn"

nó kóm nókôm "to shew"
nó lé nólê "to look"

Being the nominalized form of the verb, the infinitive form can occupy different structural position in the language as in the following sentences:

(11) Subject position

a. Nớ-nê msê tʃjà Bǎkâm
INF-cook fufu corn be beyond Bakam
"To cook fufu corn is beyond Bakam"
b. Nớ-fâ? pùŋ
INF-work be good
"To work is good"

(12) Complement position

- a. Băkâm kỳ-wý dáný nó-nê msê

 Bakam PST2-PROG learn INF-cook fufu corn

 "Bakam was learning to cook fufu corn"
- b. Wáp ʒjɨ nɨ-fâ?3PL.NOM know INF-work"They know to work"
- c. lùŋgá nó-tû? ʃjô

 Bucket INF-fletch water

 "The bucket for fletching water"

In (11), the infinitive form is the subject of the sentences. It is relevant to indicate that the predicates of these sentences are not full lexical verbs but adjectives. In (12c), it is the complement of the noun within the noun phrase and it provides more information about the function of the bucket. Moreover, Mba (1997) observes that there is a restricted class of verbs that selects as complement an infinitive clause amongst which *to learn*, *to know*, *to want*, *to be able*, *to help*, etc. The verb base can be extended via the suffixation of extensive morphemes.

3.2.2. Derivative verbal affixes and their interpretations

Two derivative verbal morphemes are attested in the language: $-p\partial$ and $-t\partial$ (Mba 1997). They encode different interpretations and can affect the argument structure of the verb. These suffixes are attached to the simple verbal bases to generate extended verbs. Moreover, these morphemes have no meaning on their own. The two suffixes cannot be used simultaneously in a verb. This implies that a verb root can select only one extensive morpheme. Amongst these two suffixes, the suffix $-p\partial$ tends to affect the valency of the verb more than the other one.

3.2.2.1. The suffix -nà

As observed by Mba (1997), it is really difficult to attribute a general meaning to this suffix. The emphasis is laid on the participants of the action described by the verb. This suffix expresses the notion of reflexivity and reciprocity.

3.2.2.1.1. Reciprocity

The suffix $-n\lambda$ modifies the meaning of the verb by adding in some case the idea of reciprocity. Accordingly, Tamanji (2008) argues that the reciprocal meaning of a suffix expresses the idea of plurality of relations: A stands in a certain relationship with B and B also stands in exactly the same relation to A. When affixed to verb roots, the reciprocal suffix points out that the participants undergo the action inherent in the verb. The participants act as agents and recipients of the same action. The suffixation of $-n\lambda$ in this case has the effect of decreasing the valency of the verb as shown in the examples below:

(13) a. Tâlá ŋkúŋ Bǎkâm

Tala PRS.love Bakam

"Tala loves Bakam"

b. Tâlá pû Bǎkâm nkún-nà

Tala and Bakam PRS.love-REC

"Tala and Bakam love each other"

c. *Tâlá nkún-nà Băkâm

Tala PRS.love-REC Bakam

In the data above, the verb $\eta k \dot{u} \eta$ "love", inherently, is a two-place predicate verb. It selects two arguments: the lover (agent) and the loved (patient). In (13b), when $-\eta \dot{\partial}$ is suffixed to this verb, it becomes a one-place predicate verb since the agents of the action also function as the patient of

the same action. The subject also becomes plural as two (13b) or more participants in the action are at the same time agent of their own action and patient.

3.2.2.1.2. Reflexivity

The suffix $-n\dot{\partial}$ also changes the meaning of the verb by adding in some case the idea of reflexivity. The reflexive meaning of the suffix $-n\dot{\partial}$ expresses the idea of equality: A is equal to B. The reflexive suffix indicates that the agent undergoes the action described by the verb. The subject of the sentence blend with the object. When suffixed to the verb roots, this suffix has the effect of decreasing the valency of the verb as highlighted in the examples below:

(14) a. Tâlă tʃəŋ lùŋgá

Tala PRS1.tie bucket

"Tala has tied the bucket"

b. Tâlă tʃəŋ-ŋə

Tâla PRS1.tie-REF

"Tala has hung himself"

c. * Tâlă tʃəŋ-ŋə lúŋgá

Tala PRS.tie-REF

3.2.2.2 The suffix -tà

According to Mba (1997), the suffix $-t\hat{\partial}$ alters the meaning of the verb root by assigning a general pluractional meaning to the verb. This pluractionalisation can be mirrored through the iterative, the attenuative and the distributive nature of an action as well as the increasing of number of participants and the propagation of an action within time and space.

3.2.2.2.1 Distributive

The suffix $-t\hat{\partial}$ modifies the meaning of the verb by expressing, in some case, the idea of distributive. The distributive suffix $-t\hat{\partial}$, as claimed by Moguo (2016), indicates that the action implied in the verb affects the same object several times. Let us consider the following examples:

(15) a. Wáp kờ t∫àm pà?

3PL._{NOM} PST2 hit house

"They hit the house"

b. Wáp kà t∫àm**-tà** pà?

3PL._{NOM} PST2 hit-**DIST** house

"They hit the house on several spots"

c. Tâlá kờ pó? didjð

Tala PST2 break door

"Tala broke the door"

d. Tâlá kà pó?-tà didjě

Tala PST2 break-**DIST** door

"Tala broke the door in several pieces"

In the data above, the derived verb has a semantic link with the simple verb. The suffixation of the extensive morpheme $-t\hat{\partial}$ doesn't completely change the meaning of the verb; it rather adds some precisions on how the object is affected: it either undergoes the action in several spots (15b) or has been split into several pieces. Furthermore, this suffix doesn't affect the valency of the verb since its affixation neither decreases nor increases the number of arguments selected by the verb.

3.2.2.2.2 Iterative

When affixed to the verb root, the suffix $-t\hat{\sigma}$ indicates that the action is realized several times in some cases as in the examples below:

(16) a. Tâlá kờ vờ nwà?nə bí pú

Tala PST2 write letter to 3PL.DAT

"Tala wrote them a letter"

b. Tâlá kà và-tà nwà?nə bí pú

Tala PST2 write-IT letter to 3PL. DAT

"Tala wrote them a letter several times"

c. Mû tsé ké

Child PRS.lick dish

"The child licks the dish"

d. Mû tsέ-tè kέChild PRS.lick-IT dish

"The child licks the dish several times"

As one can observe, the suffixation of the extensive morpheme $-t \partial$ doesn't have an effect on the argument structure of the verbs. The extended verb keeps the meaning of its verb root. What has fundamentally changed in (16b and d) is the repetition of the action described by the verb.

3.2.2.2.3 Attenuative

The suffixation of the extensive morpheme $-t \hat{\partial}$ to some verb roots, especially those that denote an action which requires a physical force, indicates that the intensity of the action on the object is weakened, only part of the object is affected by the action or the entire action lasts for a short time as in the following examples:

(17) a. Bâkǎm wớ fi? Jjə nó ndʒàp

Bakam PRS4 water water on vegetables

"Bakam is watering vegetables"

- b. Bâkăm wó fì?-tò jɨp nɨ ndʒàp
 Bakam PRS4 water-ATT water on vegetables
 "Bakam is sprinkling vegetables"
- c. Sîmo wá kám ŋka?tà táp e Simo PRS4 scratch back father 3SG.1.POSS "Simo is scratching the back of his father"
- d. Sîmo wớ kớm-t**>** ŋka?t**>** táp e
 Simo PRS4 scratch-**ATT** back father 3SG.1.POSS
 "Simo is slightly scratching the back of his father"

3.2.2.4 Plurality of participants

When suffixed to some simple verbs, the extensive morpheme $-t\grave{\partial}$ has the overall effect of multiplying the participants in the action. More precisely, when suffixed to simple verbs, this suffix indicates that the action is either realized or undergone by several participants in the same location at the same time or in different locations at different times. Let us consider the example below:

- (18) a. Tâlá kà káp kâfé Tala PST pick coffee "Tala picked coffee"
 - kà káp-tè kâfé b. Wáp 3PL._{NOM} PST2 pick- **PL** coffee "They picked coffee in group"
 - (19) a. Ó Gγcg lák m-ké 2PL._{NOM} FUT1collect dishes
 - "You will collect dishes"

- c. Pjə kà tú kèlùŋ 1PL._{NOM} PST2 plant plantain "We planted plantain"
- kà tú-t**à** kàlùŋ d. Piə 1PL._{NOM} PST2 plant-PL plantain "We planted plantain in group"
- c. E lâ mì sjàp 3SG._{NOM} PST3 swallow needle "He had swallowed a needle"
- d. Wáp b. Po 1â lák-t**à** m-kέ mì-tà m-sjàp GYCg 2PL._{NOM} FUT1 collect-**PL** PL-dish 3PL._{NOM} PST3 swallow-**PL** PL-needle "You will collect a lot of dishes" "He had swallowed a lot of needles"

The above data are cases of pluralization of participants. In (18), the suffix $-t\dot{\partial}$ pluralizes the participant who is doing the action meanwhile in (19) it pluralizes the object. In (18b andd), the affixation of this morpheme indicates that the action is performed by several persons. This is the reason why the extended verbs select plural subjects. (19b and d) indicate that a good number of objects is referred to.

3.2.2.2.5 Extension of the action in space

The suffixation of $-t\hat{\partial}$ indicates, in some cases, that the action is spread over a space as in the following examples:

> (20) a. Tâlá kà nòk dzap Tala PST2 spread vegetable "Tala spread vegetable seat" b. Tâlá kà nòk-t**è** d₃ap Tala PST2 hang-PL vegetable "Tala spread vegetable seat all over." c. Bǎkâm sè nè Bakam PRS.destroy farm

"Bakam destroys the farm"

d. Bǎkâm sè-**tò** nè

Bakam PRS.destroy-PL farm

"Bakam destroys a large surface of the farm."

The suffix $-t\hat{\partial}$ tends to have no effect on the argument structure of the extended verb unlike the morpheme $-n\hat{\partial}$ which decreases the valency of the derived verb. Furthermore, certain verbs do not admit these suffixes (see Mba 1997 for more details). Notions of instrumental, causative, applicative, separative and benefactive are expressed in some Bantu languages such as Basàá, Tuki, Akoose via extensive morphemes. This is not the case in Ghəmálá' wherein these notions are expressed by prepositions which are positioned after the verb and causative is analytic. After having explore the structure of verb, the next section has do to with the argument structure in Ghəmálá'.

3.3. Argument structure in Ghəmálá'

This section looks at argument structure in the language under study. It aims at exploring what Ghomálá' verbs require in a simple declarative sentence. In doing so, the issue of transitivity in Ghomálá' is discussed and verbs are grouped on the basis of their argument structural characteristics.

3.1. Argument structure

Grimshaw (1992) defines argument structure as the lexical representation of grammatical information about the predicate. The argument structure of a lexical item is thus part of its lexical entry. To provide an account of the regularities in the syntactic expression of arguments has been one of challenges of linguistic theory. The central question is how to map the arguments onto the syntactic structure. In this vein, two approaches to argument structure have been developed within the generative enterprise: the lexicalist approach (Gruber (1965), Jackendoff (1972), and Chomsky (1981, 1995, and 2000...etc) and the constructionist one (Hale and Keyser (1993), Borer (1994: 2005), and Harley (1995)). In the first approach, the lexical item (the verb) determines the argument structure of the clause; the verb has theta-roles and these are projected onto the syntax. In the second approach, the verb is seen as composed of smaller events: the initiation or causing subevent, the process subevent and the result subevent. The structure around the verb plays a major role in the argument structure. The lexicalist and the constructionist approaches are both important since both the information about the verb in the lexicon and the structure around the verb play a

role in determining the argument structure of a clause. More precisely, argument structure is determined by properties of verbs, in particular by the syntactic configurations in which they must appear.

Two notions are essential for any discussion on argument structure: predicate and argument. A predicate is an expression that denotes an action, a state or a process in a sentence. In Ghomálá', this notion is illustrated by the verb as in the examples below:

"The bucket is clean"

In the examples above, bold constituents are predicates. In some languages such as English, other lexical categories like adjectives can function as predicates but for the purposes of the present study, predicates are restricted to verbs only. Accordingly, Haegeman (1994) considers verbs as prototypical predicates since crosslinguistically verbs tend to be predicates.

The argument, as claimed by Radford (2004), is an expression denoting a participant in the relevant activity or event. In other words, arguments are the participants that are required for a predicate to be expressed. In (21a) above, *Tâlá* and *ŋkədé* "banana" are the arguments of *tú* "plant". As far as arguments are concerned, Grimshaw (1979) and Pesetsky (1982) uses the dichotomy predicate's category-selection versus predicate's semantic-selection to distinguish semantic argument from syntactic argument.

Korsah (2011) argues that s(emantic)-selection refers to the semantic constraints that a predicate puts on its arguments whereas c(ategory)-selection deals with the subcategorization frame; it talks about the fact that every predicate requires an argument of a particular XP, where X stands for a particular phrasal head. In (21a), for example, $t\acute{u}$ "plant" s-selects two arguments, one which is able to realize the action of planting and another one that is capable of being planted. These arguments are DPs, that is, $t\acute{u}$ c-selects two DPs. Let us observe the data in (22) below:

- b. *Tâlá kà tsú mwà?ɲə Tâlá PST2 eat book
- c. * Tâlá kờ tú pa? Tala PST2 plant house
- d. *Tâlá kờ tú vò Tala PST2 plant old

In the data above, the c-selection of the verbs is satisfied in (22a-c) since they have two DPs as arguments. However, (22b) and (22c) are illegible because the semantic requirements of the verb are not satisfied. Unlike (22a), (22b) has an object that cannot be "eaten" as (22c) has a complement which is unable to be "planted". The ungrammaticality of (22d) is due to the fact that the predicate's c-selectional requirements are not met; (22d) has an AdjP instead of a DP. In fact, the idiosyncratic requirements of these verbs as specified in the lexicon are not met. The verbs $ts\acute{u}$ "eat" and $t\acute{u}$ "plant" are projected into the syntax with the following properties:

(23) illustrates the syntactic and the semantic requirements of these verbs. As highlighted in the square brackets, these verbs c-select two DPs where the first one precedes the verb and the other follows the latter; the hyphen represents the position of the verb. The semantic requirements of these verbs are represented within angle brackets. Following these semantic requirements, the first DP will be the one that realizes the action described by the verb meanwhile the second undergoes the action denoted by the verb. In the generative tradition, elements within the angle brackets are referred to as theta-roles (Chomsky 1981). Given the theta criterion formulated as follows:

(24) Theta-criterion

Each argument bears one and only one theta-role, and each theta-role is assigned to one and only one argument.

(Chomsky 1981: 335)

The argument structure of a verb includes the number and type of theta-roles it has to assign and the corresponding number and syntactic type of arguments required to receive these theta-roles. In this vein, once a constituent is a semantic argument, it is automatically a syntactic argument. This observation does not hold in some languages such as English where a non-semantic but syntactic argument is attested with expletive constructions like: *there are believed to have*

occurred several riots where there is not semantically required but syntactically in order to satisfy the EPP requirement.

Theta grids, apart from showing semantic roles, also illustrate the grammatical relation between arguments by indicating which argument should be the subject. To indicate that one of the arguments may become the grammatical subject, Williams (1981) underlines that argument and refers to it as the external argument as shown below:

```
(25)
      a. yó "be sick":
                        < Experiencer >
                        __ DP]
                            "Tala is sick"
      Tâlǎ yó
      Tala PRS1.be sick
    Expriencer
 b. kớm "scratch" : < Agent; Theme >
                     [DP___DP]
     Símŏ
               kám
                       ηka?tè e
                                           "Simo has scratched his back"
     Simo PRS1.scratch back 3SG.1.POSS
                    #
   Agent
                   Theme
 c. jà "see" : < Experiencer, Theme >
                 [DP DP]
                               "Bakam sees the children"
    Bâkǎm jó
                     рó
    Bakam PRS1.see PL.child
                   #
  Experiencer
                  Theme
 d. há "give"
                  < Agent, Theme, Goal >
                 [DP DP PP]
       Τĵ
                  kà há
                            ηkáp bí Tâlá
                                            "Your father gave money to Tala"
  Father<sub>.2SG.1.POSS</sub> PST2 give money to Tala
     #
                              #
   Agent
                     Theme
                              Goal
```

Apart from indicating the structural position of arguments, the examples in (25) above suggest that an argument structure analysis relates to the categorization of verbs based on transitivity.

3.2. Ghəmálá' verbs and transitivity

Naess (2003) defines transitivity as a type of grammatical relationship encoding the distinctness of participants in a situation described by the clause. It refers to the number and type of objects which appear in the clause and which are selected by the predicate's head. In terms of classification of verbs based on transitivity, three classes of verbs are attested in Ghomálá': those

that select one participant, those which selects two participants and the other that allow three participants. From this observation, Ghɔmálá' verbs can be grouped into intransitive, transitive and ditransitive verbs. This subsection aims at examining certain aspects of the syntax of the verbs involved.

3.2.1 Intransitive verbs

These verbs in Ghomálá' select one argument which is the subject. They occur without an object as in the examples below:

```
(26)a. Tâlă tí

Tala PRS1.sleep

"Tala sleeps"

b. Símŏ pfú

simo PRS1.die

"Simo dies"
```

The arguments are $T\hat{a}l\check{a}$ in (26a) and $s\acute{i}m\check{o}$ in (26b). The theta-role of the only argument of intransitive verbs is determined by the semantics of the verb. In (26) above, the verbs assign the Theme theta-role to their only argument since they involve a meaning of a state of affairs in which the semantics of cause or control is not asserted. In (26) for example, Simo has no apparent control over $pf\acute{u}$ "die". Verbs that fall under the group of intransitive verbs in Ghəmálá' belong to the following semantic classes.

3.2.1.1 A semantic classification of Ghəmálá' intransitive verbs

> Stative verbs

They designate states or conditions of particular entities. Ghomálá' stative verbs tend to be translated as adjectives in English as shown in the examples below:

(27)a

ná ŋĉ	"to be thin"	ná lô	"to be full"
INF- be thin		INF- be full	
ná pâm	"to be drunk"	ná kák	"to be small"
INF- be drunk		INF- be small	
ná twà	"to be beautiful"	ná fàm	"to be mouldy"
INF-beatiful		INF-be mouldy	

b. bîjé jěŋ zè Groundnut this bitter

"This groundnut is bitter"

The $z \ge in$ (27b) describes the taste of the entity $b \hat{i} \neq i$ "groundnut".

> Change of state verbs

Verbs of this kind show a change in the physical condition of an entity to another condition. The following are examples:

(28)a.

ná mwà	" to swell"	ná pwâ	"to be soft"
INF-swell		INF-be soft	
ná kxâ	"to burn"	ná pâk	"to spoil"
INF-burn		INF-spoil	
ná vô	"to get old"	ná pè	" to ripe"
INF-get old		INF-ripe	

b. wétsú jěn pák

Food this PRS1.spoil

"This food has spoiled"

The sentence in (28b) presupposes that the food was in an eatable state, but now it has become uneatable. There has been a change in the condition of the edibility.

> Verbs of weather condition

Such verbs describe various conditions of the weather e.g raining, shining etc. These include $l\dot{u}$ "rain", $tj\dot{\sigma}$ "shine", $t/\hat{u}\partial$ "shake" (used for wind).

> Verbs for involuntary bodily processes

These verbs designate some inherent body experiences of which such entities have very little or no control over. They include $n\dot{\sigma}$ $tf\hat{a}kp\dot{\sigma}$ "to sneeze", $n\dot{\sigma}$ $\eta kw\hat{e}$ "to cough", $n\dot{\sigma}$ $s\hat{\sigma}\eta$ "to shiver", $n\dot{\sigma}$ $3w\hat{e}p\hat{\sigma}$ "to breathe".

"The child is coughing"

b. Tâlá kè wó-t(ákpá

Tala PST2 PROG-sneeze

"Tala was sneezing"

> Verbs of sound

They refer to the certain sound made by some entities. For example: $n \hat{\sigma} l \hat{\sigma}$ "to cry", $n \hat{\sigma} w \hat{\iota}$ "to laugh" $n \hat{\sigma} t \hat{u} \eta$ "to whistle", $n \hat{\sigma} k \hat{\sigma} t \hat{\sigma}$ "to make noise" $n \hat{\sigma} \tau t \hat{\sigma} t \hat{\sigma} t \hat{\sigma}$ "to make noise" etc.

(31) a. gšp wé-ŋkśtè

hen PRS4-make noise

"The hen is making noise."

b. pó səkù kə wə-zwjanə

PL.child school PST2 PROG-make noise

"Students were making noise".

> Verbs of appearance and disappearance

They describe the coming or bringing into existence and the disappearance of some entities. Some examples are $n\dot{\delta}$ ts $\hat{\delta}$ "to give birth", $n\dot{\delta}$ s \hat{a} 2 "to geminate" (used for gramineous plants), $n\dot{\delta}$ tw $\hat{\delta}$ p "to germinate" (used for tubers), $n\dot{\delta}$ lù2 "to bloom" (used for banana and plantain), $n\dot{\delta}$ s $\dot{\delta}$ m "to bloom"...etc.

(33) a. bvú jôn gotí tsá

Dog this FUT2 give birth

"This dog will litter"

b. mkŏ sá?

PL.bean PRS1.germinate

"Beans have germinated"

> Verbs of motion

These are verbs that show the movement of an entity from one point or location to another. They include $n\dot{\delta} s\dot{\delta}$? "to come", $n\dot{\delta} y\dot{\delta}$ "to go", $n\dot{\delta} l\dot{u}$ "to leave", $n\dot{\delta} k\hat{u}\eta$ "to crawl" etc.

(33)a. Tâlǎ sò? djě

Tala PRS1.come home

"Tala has come home."

b. Băkâm kò γò gŏBakam PST2 go farm"Bakam went to farm".

In (33), Tala and Bakam moved respectively from an undisclosed location to $dj\delta$ "home" and $g\delta$ "farm". They have volition and could be said to have control over what the verbs express.

Intransitive verbs do not have internal arguments and they have either a theme or an agent theta role to assign and therefore require only one argument. Building on work by Hale and Keyser (1993), Chomsky (1995) argues that the external argument is hosted by Spec-vP, more precisely, the vP-VP configuration expresses the agentive or causative role of the external argument. This implies that intransitive verbs lacking agents are simple VP structures meanwhile those having agents are complex ones.

3.2.1.2 Unergative- Unaccusative distinction in Ghəmálá'

The split of intransitive verbs into unaccusatives and unergatives roots from Perlmutter (1978). He has promulgated the unaccusative hypothesis within the Relational Grammar framework as follows "certain intransitive clauses have an initial 2 but no initial 1". This means that the only one argument of some intransitive verbs appears in the same underlying structural position as the object of transitive verbs. According to Essegbey (2010), it is the advancement of the single argument from 2 to 1 that Perlmutter calls unaccusative. Unergatives, as opposed to unaccusatives, only possess an initial 1 stratum. This implies that the argument of this class of intransitive verbs belong to the same level as arguments that appear in the subject position of transitive verbs.

Within the Government and Binding theory, it is assumed that the only one argument of unaccusative verbs occurs as deep structure object whereas that of unergatives occurs as deep structure subject. Following Burzio (1986), it is argued that unaccusatives are not able to assign structural case (accusative case) to their single arguments so the latter are forced to move to subject position in order to receive case. This means that the subjects of unaccusative verbs do not originate as the subjects of their associated verbs but rather as their complements.

The unergative/unaccusative distinction between intransitive clauses can also be determined by the semantics of the verbs that occur in them. In this vein, Perlmutter (1978) proposed that predicates describing willed or volitional acts as well as those describing certain involuntary bodily processes like 'cough', 'sneeze' and 'weep', belong to the unergative class. On

the other hand, predicates expressed by adjectives in English, predicates whose initial argument is a semantic patient, predicates of existing and happening and predicates of non-voluntary emission of stimuli that impinge on the senses will be unaccusatives.

Chomsky (1995:316) distinguishes unaccusatives from unergatives by claiming that unaccusatives are devoid of agents and, therefore, are simple VP structures meanwhile unergatives have agents and their external arguments are hosted by the specifier position of the light verb phrase within the Larsonian shell. This view is adopted by Radford (2006) when he argues that unergative verbs differ from unaccusatives in that the subject of an unergative verb has the thetarole of an Agent argument, whereas the subject of an unaccusative verb has the thematic property of being a Theme argument.

To discuss the implications of the Unaccusativity Hypothesis for Ghomálá', let us consider the following examples:

(34) a. Jwéts<u>ě</u> pópté food PRS.spoil

"The food is spoiled"

b. Bâkǎm póptó jwótsú

Bakam PRS.spoil food

"Bakam spoils the food

(35) a. mú wá ŋkúŋ

child PROG crawl

"The child is crawling"

b.* Bǎkâm wá ŋkúŋ mú

Bakam PROG crawl child

c. Jwétsň pák
food PRS.spoil
"The food is spoiled"
d. *Bâkǎm pák jwétsń
Bakam PRS.spoil food

It can be observed in (34) "spoil" is expressed by two verbs namely, $p\acute{o}pt\acute{o}$ and $p\acute{a}k$. It is relevant to note that $p\acute{a}k$ only selects "food" as argument whereas $p\acute{o}pt\acute{o}$ can go with anything which can be spoiled. In (34a), the verb $p\acute{o}pt\acute{o}$ "spoil" is intransitive with $jw\acute{o}ts\check{u}$ "food", the only argument functioning as subject but in (34b) where $p\acute{o}pt\acute{o}$ is used with two arguments ($B\^{a}k\check{a}m$ and $jw\acute{o}ts\acute{u}$), the hitherto subject argument $jw\acute{o}ts\acute{u}$ "food", acts as an object. Unlike $p\acute{o}pt\acute{o}$ "spoil", $p\acute{a}k$ "spoil" fails to be transitivized (34d) as well as $gk\acute{u}g$ "crawl" in (35b). This is an indication that $p\acute{a}k$ and $gk\acute{u}g$ belong to the same class of verbs which is different from the one that $p\acute{o}pt\acute{o}$ belongs to. Verbs that behave like $p\acute{o}pt\acute{o}$, i.e verbs that can undergo transitivization, are said to be unaccusatives. In

(34a), the subject of $p\acute{o}pt\acute{o}$ has a Theme theta-role and (34b) strengthens the Burzio's idea, according to which, the subjects of unaccusative verbs do not originate as the subjects of their associated verbs but rather as their complement. Verbs that function like $p\acute{a}k$ and $\eta k\acute{u}\eta$ are referred to as unergatives. They cannot occur within a transitive clause as their unaccusative colleagues. Using pre-minimalist terms, the single argument of an unergative is a subject at both D-structure and S-structure. The subject of the verb $\eta k\acute{u}\eta$ "crawl" in (35a) has an Agent thematic role and its classification as unergative verb is also motivated by the fact that it is a motion verb that implies volitional act using Perlmutter semantic criterion. Let us observe the following data:

(36) a. Bǎkâm tsớ b.

Bakam PRS.give birth

"Bakam gives birth"

(37)a. mú wớ gwǐ b. mú

child PRS4 laugh chi

"The child is laughing" "*T

b. Bǎkâm tsớ mú mbê
Bakam PRS.give birth child boy
"Bakam gives birth to a boy baby"
mú wớ gwì Bǎkâm
child PRS4 laugh Bakam
"*The child is laughing Bakam"

In the data above, the intransitive verbs nó tsô "to give birth" and nó wì "to laugh" undergo transitivization. They become two-place predicates, that is, they select two arguments (36b and 37a) instead of one argument as required by their c-selection properties. This strengthens the idea according to which, both the lexical information about the verb in the lexicon and the structure around the verb determine the argument structure of a clause. Considering Perlmutter and Burzio's criteria, tså and wì would neither be unergative nor unaccusative. Although they can be used in a two-place predicate clause, the subjects of these verbs do not originate as their complements. This means that a two-way distinction of verbs that occur in intransitive clause cannot hold in Ghomálá'. On the basis of their structural patterns, intransitive verbs can be split into three groups. The first group is made up of verbs that fail to be transitivized and therefore, are strictly intransitive such as $\eta k \dot{u} \eta$ "crawl" in (35). The second group comprises verbs which can be transitivized but their subject argument in the intransitive clause become the object in the transitive construction e.g. póptó "spoil" (34). The third group gathers together verbs that also can be transitivized but their subject arguments remain subjects in both clauses such as tså "give birth" and gwì "laugh" in (37). This three-way distinction is attested in other African languages such as Ewe (Essegbey 1999:93) and Ga (Korsah 2011:47).

3.2.2 Transitive verbs

There are some verbs in Ghomálá' that cannot be used within intransitive clause. They are two-place predicates or bivalents. To put things in another way, they select two arguments to which they should assign two theta-roles. Structurally, one argument occupies the subject position within the clause whereas the other argument is the object as in the examples below:

(38)a. Tâlá kè- tò bap
Tala PST2- roast meat
"Tala roasted meat"
b. Băkâm kè-wé nwé ∫je
Bakam PST2-PROG drink water
"Bakam was drinking water"

In the examples above, $T\hat{a}l\hat{a}$ and bap are the arguments of the verb $t\hat{o}$ "roast" in (38a) meanwhile in (38b) the verb $nw\hat{o}$ selects $B\check{a}k\hat{a}m$ and $f\hat{j}\hat{o}$ as arguments. The thematic roles of these arguments are determined by the semantics of the verb. In (38) above, the verbs assign Agent theta-role to their external arguments and Theme theta-role to their internal argument. The verb involve a meaning of a state of affairs in which the semantics of cause or control is asserted as well as the semantics of affect. Transitive verbs in Ghəmálá fall within the following semantic groups:

3.2.2.1 Semantic classification of Ghəmálá' transitive verbs

> Verbs of consumption

These are verbs that designate the ingestion of something into an entity. The consumed entity may not be a physical substance. Ghomálá' verbs of consumption include $n\delta$ $m\hat{\imath}$ "to swallow", $n\delta$ $ts\hat{\varepsilon}$ "to lick", $n\delta$ $ts\hat{u}$ "to eat", $n\delta$ $nw\delta$ "to drink", $n\delta$ $3\hat{\imath}$? "to learn"...etc.

(39) a. pó kỳ -wý- dzú kùmkùm

PL.child PST2- PROG- eat fufu

"The children were eating fufu"

b. Bǎkâm lờ -zí? Ghəmálà'

Bakam PST3-learn Ghəmálá'

"Bakam learned the Ghəmálá language"

> Verbs of affect

These verbs designate an action that causes some sort of effect between the entities involved, one participant inflicting the effect on the other. They include $n\dot{\delta}$ $t\hat{u}m$ "to hurt", $n\dot{\delta}$ 3 $w\dot{\delta}$ "to kill", $n\dot{\delta}$ 1 $t\hat{b}$ "to beat", $n\dot{\delta}$ $n\hat{\epsilon}$ "to cook", $n\dot{\delta}$ $t\hat{o}$ "to burn", $n\dot{\delta}$ $k\hat{\epsilon}$ "to fry"…etc.

(40) a. Tâlá wá-ntó m-γê
Tala PRS4-burn PL-grass
"Tala is burning grasses"
b.Băkâm kà-nέ kùmkùm
Bakam PST2-cook fufu
"Bakam cooked fufu"

> Verbs of contact

These verbs refer to the physical contact between two concrete entities. Ghomálá' verbs of contact include *nó tſàm* "to hit", *nó sî?* "to crush", *nó kôm* "to squeeze"...etc.

(41) a. Băkâm kỳ- kóm dʒàp

Bakam PST2-squeeze vegetables

"Bakam squeezed vegetables"

b. Mỳtwâ lỳ t∫ám Tâlá

car PST3-hit Tala

"The car hit Tala"

> Verbs of change of position

They describe the action that leads a situation where one participant causes the other participant to be relocated. They include $n\dot{\partial}$ "to take", $n\dot{\partial}$ $p\hat{u}$? "to lift", $n\dot{\partial}$ $tf\hat{\varepsilon}$ "to drag"...etc.

(42) Tâlá kỳ- là ŋkáp

Tala PST2- take money

"Tala took the money"

3.2.2.2 Theta role assignment within transitive clause

Transitive verbs in Ghomálá' may denote an action, a feeling or a perception. When they denote action, they usually establish a relationship of cause and effect between their two participants. In this case, the two arguments receive Agent-Theme theta-role, with the Agent

argument (i.e. subject) producing some sort of effect on the Theme argument (i.e. object). Let us observe the following data:

(43) a. Tâlá kờ t∫ớ kế

Tala PST2 break dish

"Tala broke the dish"

b.*Kế kờ t∫ớ Tâlá

dish PST2 break Tala

In (43a), $T\hat{a}l\acute{a}$ causes some sort of effect on $k\acute{e}$ "dish" through the action of breaking. The illegibility of (43b) is due to the fact that the semantic requirements of the verb is not satisfied. The verb cannot assign the Agent theta-role to $k\acute{e}$ since it is inanimate and cannot cause the breaking of an object. The object, $T\hat{a}l\acute{a}$ cannot receive the theta-role of Theme since the verb t/\acute{a} "break" requires a Theme which is breakable. However, this observation does not lead to a conclusion, according to which, the Agent theta-role is only assigned to animate DP arguments since there are some transitive verbs that inanimate arguments seem to be Agent as in the following examples:

(44) a. múnə jən kó? pû Tâlá
knife this PRS1.cut hand Tala
"This knife has cut Tala's hand"
b. fəfă kwà thə pa?
wind PRS 1.carry head house
"The wind has removed the roof"

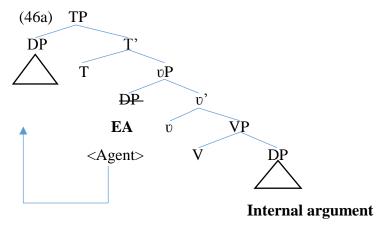
The sentence in (44a) may be uttered in a situation where $T\hat{a}l\dot{a}$ is working with a knife and it cut him accidentally. In (44b), the inanimate $f\partial f\ddot{a}$ "the wind" causes the removing of the roof. Korsah (2011:51) refers to the theta-role assigned to such arguments as Agent-like. I believe this is due to the fact that these arguments are not causer of the action described by the verb in a stricto sensu. In (44a) for instance, the knife itself is unable to cut something unless there is an external force that pushes the knife to realize the act of cutting. In this vein, the knife is an instrument use to accomplish the act of cutting and therefore should receive the theta-role of Instrument (Fillmore 1968:10).

A transitive verb denoting perception or feeling may assign Experiencer-Theme theta roles to its arguments. The following data illustrate this:

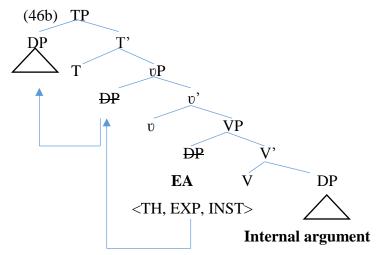
(45)a. Tâlá lə jó m-ŋwa?ŋə mjó
Tala PST3 see PL-book 3SG.4.POSS
"Tala saw his books"
b. fípă yèm Tâlá
fever PRS 1.catch Tala
"Tala has suffered from fever"

In (45a), the Experiencer theta-role is assigned to $T\hat{a}l\acute{a}$, the entity that perceives while $m\eta wa 2\eta a mj\acute{a}$ "his books" which is the perceived objects receive the Theme theta-role. In (45b), the verb evokes a kind of feeling in its Experiencer argument $T\hat{a}l\acute{a}$.

Adopting Chomsky (1995)'s proposal, according to which the vP-VP configuration expresses the agentive or causative role of the external argument, I argue that external argument (EA) bearing the Agent theta-role is base-generated under Spec-vP meanwhile the one that has been assigned other thematic roles such as Theme, Experiencer or Instrument is purely merged in Spec-VP as illustrated below:



In (46a), the external argument is pure merged under the specifier position of the light verb phrase. It is within this position that the Agent theta-role and it later moves to the specifier position of TP to satisfy the EPP requirement of the tense phrase.



In (46b), the external argument is base-generated in the specifier position of VP in accordance with the VP internal subject hypothesis as formulated in Koopman and Sportiche (1991). It raises later to the specifier position of vP in order to be in the domain of Probe for holding of the operation Agree. It is in this position that the uninterpretable features of the external argument will be checked and valued. After this, it moves to Spec-TP to satisfy the EPP requirement of TP.

3.2.2.3 verb-complement semantic relation

Looking at their semantics, it seems that the kind of complement that transitive verb in Ghomálá' selects is affected by the conceptual semantic specificity that is attributed to the verb by the speakers. Most of the transitive verbs in Ghomálá' can select a generic-meaning DP as object. They can occur with semantically vague complements such as $jw\delta$ "thing" and $m\delta$ "person", and still keep their core meaning as shown in the examples below:

(47) a. Tâlá kỳ- pfά mkŏlêsì (48)a. Bǎkâm kà-tſó pó Tala PST2-eat rice Bakam PST2-beat PL.child "Tala ate rice" "Bakam beat the children" b. Tâlá kè-pfά bîjέ b. Bǎkâm kà- t(á pǔsì Tala PST2-eat groundnut Bakam PST2-beat cat "Tala ate groundnut" "Bakam beat the cat" c. Tâlá kè-pfά jwá c. Bǎkâm kò-t(ś mò Tala PST2-eat thing Bakam PST2-beat person "Tala ate something" "Bakam beat somebody" d. *Tâlá kỳ-pfά d. *Bǎkâm kò-tſó

Tala PST2-eat

Bakam PST2-beat

In (47 and 48), the verbs have a less variable meaning even when they occur with different objects. This shows how much these verbs are meaningfully independent. When the verb is used with the generic objects $jw\dot{\delta}$ (47c) and $m\dot{\delta}$ (48c), speakers subconsciously understand what the verb selects as complement. Moreover, (47d and 48d) show that such verbs cannot occur without their complements. This is an indication that the verbs involved are strictly transitive.

There are some verbs which do not take generic objects. They rather select particular objects. Accordingly, Essegbey (1999:191) argues that verbs with more specific meaning occur with complements that have more general meaning while verbs which have less specific meaning occur with complements that have more specific meaning. Verbs requiring more specific complement are referred to as Inherent Complement verbs. These are some examples:

(49) a. Bǎkâm kè-wé dʒɔ́ gó?

Bakam PST2-PROG see pain

"Bakam was suffering"

b. Bǎkâm kè- wé dʒɔ́ ŋwé

Bakam PST2-PROG see moon

"Bakam was menstruating"

In (49), the verb has a variable meaning when they occur with different objects. There is a semantic asymmetry between constructions in (47 and 48) and those in (49). Verbs in (47 and 48) have their meaning specified in them whereas those in (49) have their meaning specified outside them. These verbs will be deeply discussed in the following chapter.

Moreover, some transitive verbs have several forms, that is, different words are used to express the same reality. They are synonymous and are in complementary distribution. For instance, the act of eating in Ghomálá' is expressed by two words $ts\acute{u}$ and $pf\acute{a}$. The latter is used for chewable and dry food while the first is used for wet and soft food that can be directly swallowed as shown below:

(50)a. Tâlá kò-tsú kùmkùm

Tala PST2-eat fufu

"Tala ate fufu"

c. Tâlá kờ-pfά bîjéTala PST2-eat groundnut"Tala ate groundnut"

b.*Tâlá kò-tsú bîjé
 d. *Tâlá kò-pfά kùmkùm
 Tala PST2-eat groundnut
 "Tala ate groundnut"
 "Tala ate fufu"

We observe that, in (50), each word selects a specific type of food. In the same vein, the act of harvesting is expressed by several words namely tfwa, kap, kap, kap and tfwa. tfwa is used for plants such as maize, banana tree, palm tree...etc, kap goes with fruit trees and vegetables, kap is used for groundnut and tfwa for bean and soya as illustrated in the following examples:

(51)a. Tâlá c. Tâlá kà-tſwà ηkàdé kà-káp pùmá Tala PST2-harvest banana Tala PST2-harvest orange "Tala harvested banana". "Tala harvested orange" b. *Tâlá k∂-t∫wà d. *Tâlá kà-káp pja bîjέ Tala PST2-harvest pear Tala PST2-harvest groundnut "Tala harvested pear" "Tala harvested groundnut".

After having discuss intransitive and transitive verbs, the following section tackles ditransitive verbs in Ghomálá'.

3.2.3 Ditransitive verbs

Ditransitives can be defined in terms of theta-roles, namely as verbs that assign three semantic roles, usually one external (Agent) and two internal (Theme, Goal or Recipient). The grammatical functions of these arguments are subject, direct and indirect object. Such verbs are basically verbs of transfer as exemplified in (52) and may be used as in (53):

"to send" "to teach" (52) n\u00e9 t\u00e9i\u00e8 ná lâná "to give" "to show" ná hâ ná lâ?tà "to sav" "to buy" ná sîŋ ná iô "to write" "to put" ná và ná nîŋ (53) a. Tâlá lə-və nwa?nə bî táp Tala PST3-write letter to father 3SG.1.POSS "Tala wrote a letter to his father" b. Bǎkâm kà-t∫jà ŋkáp bî pô pjá Bakam PST2-send money to PL.child 3SG.2.POSS "Bakam sent money to her children"

c. Tâlá wá-dáná yəmálá? bî pô páp

Tala PROG-teach ghəmálá' to PL.child 3PL.2POSS

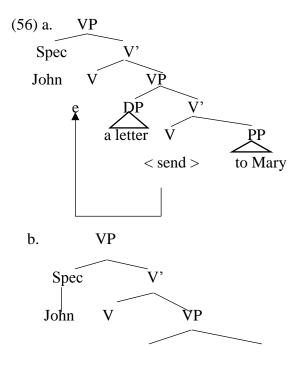
"Tala is teaching their children Ghəmálá'"

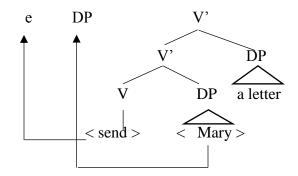
As it is shown in the data above, most of the ditransitive verbs in Ghomálá' imply transfer but the kind of transfer involved may not obligatorily be a handing over of a tangible entity from one participant to another. In (53c) for instance, $\gamma o m al a 2$, an abstract DP is transferred from Tala to po pap "their children". Furthermore, the third argument to which verbs assign the Goal or Recipient theta-role is introduced by the preposition ba "to" in these examples. One can therefore infers that Ghomálá' ditransitive clauses are instances of dative complementation since one of the two required by the verbs as complements is introduced by a preposition. In this vein, the Thematic Hierarchy is Agent >Theme > Goal/Recipient. This morphosyntactic feature distinguishes Ghomálá' from other Bantu languages such as Tuki (Biloa 2013) wherein ditransitive clauses are cases of double object constructions; there is no element that occurs between the two complements since the language itself is devoid of prepositions but an applicative morpheme to mark applicative construction is attested in this language. Let us observe the data below:

- (54)a. Tâlá kè-síŋ é nwə Tala PST2-tell 3SG._{ACC} affair "Tala told her something".
- b. Tâlá kờ-lá?tờ wáp m-ŋwa?nə Tala PST2-show 3PL._{ACC} PL-book "Tala showed them books"
- c. Tâlá kà-láná Băkâm yəmálá' Tala PST2-teach Bakam Ghəmálá' "Tala taught Bakam Ghəmálá'"
- d.*Tâlá lə-və táp e ŋwa?ɲə Tala PST3-write father 3SG.1_{.POSS} letter "Tala wrote his father a letter"
- e. *Bǎkâm kè-tʃjà pô pjè ŋkáp BakamPST2-send PL.child3_{SG}.2._{POSS} money "Bakam sent her children money"

The examples in (54) above suggest that there are two groups of ditransitive verbs in Ghomálá'. The first group is made up of verbs that their third arguments are obligatorily introduced by a preposition, namely t/ja "send", va "write", ja "buy"...etc. Verbs that their second objects may not necessarily be introduced by a preposition as in (54a-c) above constitute the second group. This distinction can be captured as follows:

The structure in (55) has received several attentions in the literature since Larson (1988). Larson proposes a double VP structure that accommodates the two internal arguments of the verb. Within this structure, the higher VP head is empty (e) and the lower VP is head by the verb. The specifier position of the lower VP being filled by the direct object, the external argument occupies the specifier position of the higher VP. The lower V selects the PP and later moves to the higher V position. From this rationale, he proposes a derivation of double object constructions in English which is represented below:



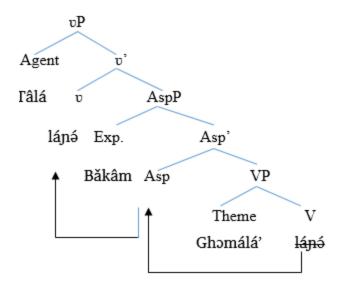


Larson argues that (56b) is derived from (56a). The case of the indirect object is absorbed (hence no to) as well as the theta-role of the direct object a letter (hence its adjunct status). Mary moves to the higher DP position and the verb send to the higher V in order to assign case to Mary. Case assignment to a letter is done by the reanalysis of the lower V' as a V which can then assign case to a letter. Baker (1997) provides an alternative analysis for (56b). He agrees with Larson that the indirect object moves to a higher position. However, For Baker, this higher position is the specifier of an inner Aspect Phrase which is projected between the two VP and the preposition incorporates into the verb. The incorporation of the preposition is not clearly justified as well as the case marking of the indirect object. Elly Van Gelderen (2013) building her analysis on Oehrle (1976), provides a minimalist analysis that accounts for the alternation in (57) below:

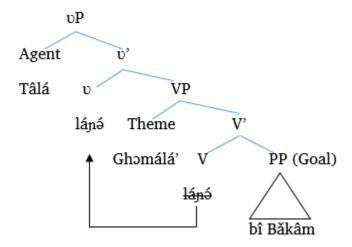
(57) a. Tâlá kỳ-láŋý Băkâm γɔmálá'
Tala PST2-teach Bakam Ghɔmálá'
"Tala taught Bakam Ghɔmálá'"
b. Tâlá kỳ-láŋý γɔmálá' bî Băkâm
Tala PST2-teach Ghɔmálá' to Bakam
"Tala taught Ghɔmálá' to Bakam"

In (57), there is a meaning difference between the DP _DP (57a) and DP_ PP (57b) constructions. In (57a), *Băkâm* actually learns some Ghəmálá' but she probably did not in (57b). This difference is in terms of the affectedness of the Goal. In (57a), *Băkâm* is affected by the action denoted by the verb and therefore is an Experiencer. In terms of Thematic Hierarchy, the Experiencer is higher than the Theme whereas the Theme is higher than the Goal (Pesetsky 1995). The two structures are represented as follows:

(58) a.



b.



Van Gelderen analysis of DP DP complement seems to be more straightforward and economic than early analysis (Larson 1988 and Baker 1997).

Conclusion

In this chapter, I have discussed the morphosyntactic properties of Ghomálá' verbs. In doing so, verbs have been classified following three criteria, namely the tone pattern, the syllable structure and the morphology of the verb. Looking at the verb structure, two derivative morphemes are attested in the language. These morphemes encode different semantic interpretations (reflexivity, reciprocity, attenuative...etc) and may affect the valency of the verb. The infinitive form, being

the nominalized form of the verb, can occupy different grammatical positions. As far as transitivity is concerned, one place predicates, two-place predicates as well as three place predicates are attested in the language. Some verbs can undergo transitive alternation. The work has argued for a three way distinction of intransitive verbs in Ghəmálá'. The chapter also addressed the issue of theta role assignment within transitive and the semantic relationship between the verb and its complements. It has been argued that most of the transitive verbs in Ghəmálá' can select a generic-meaning DP as object. However, there are some verbs which do not take generic objects and require a more specific object. These ones have been referred to as Inherent Complement Verbs. The following chapter is devoted to the analysis of these verbs in Ghəmálá'.

Chapter 4: Inherent Complement Verbs (ICVs)

Introduction

The previous chapter has discussed the categorization of Ghomálá' verbs based both on their structural properties and their argument structure. It has been argued that argument structure depends both on the idiosyncratic properties of the verb as specified in the lexicon and the environment surrounding the verb. It has been shown that for some verbs, only specific DPs are required in order to give a particular meaning of the verb. These are Inherent Complement Verbs (ICVs), the raison d'être of the present chapter. Their specific complements are referred to as Inherent Complements (ICs) in the literature. This chapter aims at investigating their structural as well as morphosyntactic properties in order to see whether they are syntactically different from regular verbs or otherwise. In doing so, section one tackles the nature of ICVs and ICs by characterizing them. Their morphosyntactic properties are addressed in section two by looking at their behavior when they are used within some constructions in order to distinguish them from regular verbs. Section three tackles the derivation of ICV by laying emphasis on their argument structure.

4.1. Describing Inherent Complement Verbs and Inherent Complement

This section aims at answering to the following question what is an ICV and IC? Although this issue has been briefly discussed in chapter one, some formal characteristics which help in identifying a verb as an ICV or a complement as an IC are addressed here. This is relevant in discussing some issues namely, whether the verb has any meaning contribution in the [verb_ noun] complex, whether the inherent complement is an argument of the verb and what is the right argument structure analysis of ICV constructions given the syntax-semantics mismatches they exhibit.

4.1.1. The Inherent Complement Verb

Nwachukwu (1987:22) defines an inherent complement verb as a verb "whose citation form is obligatorily followed by a meaning-specifying noun complement." Thus, as claimed by Korsah (2011), an ICV is a verb whose function as predicate mostly depends on its complement.

The meaning of these verbs is tied to their complement as shown below, I gloss the verb as "Vx" in which x encodes an approximate meaning:

(1)a. Bâkǎm (2) a. Bâkǎm wá há bî mú jź gó? pwá Bakam.PRS4 V_{give} breast to child Bakam.PRS1 V_{see} pain "Bakam has suffered" "Bakam is breast-feeding the baby" há mku? fálà b. Bâkǎm jó zům b. Bâkăm Bakam.PRS1 V_{see} dream Bakam.PRS1 V_{give} respect priest "Bakam has dreamt" "Bakam has honoured the priest"

It can be observed in (1) and (2) that the meaning of the verbs vary depending on the following element. For example, $j\dot{5}$ is interpreted as "suffer" in (1a) whereas in (1b) it has an interpretation of "dream". We also noticed that the Inherent complement occupies the structural position of an internal argument and the verbs are either translated as intransitive verbs (1) or as transitive verbs (2) in English. For this reason, some scholars regard constructions with similar syntactic and semantic structures as (1) and (2) in other languages like e.g. Igbo (Nwachukwu 1985, 1987) and Fon (Avolonto 1995) as intransitive and transitive constructions respectively.

The verbhood of the ICV itself based on its morphological properties is not dubious. The ICV inflects for tense, negation and aspect as it is illustrated in the following examples:

- (3) a. Bǎkâm kà-tá-wá dʒá ʒùm pá
 Bakam PST2-NEG-PROG V_{see} dream NEG
 "Bakam was not dreaming"
 b. Bǎkâm gɔγá kxù dǔ bája ě já nák àà
 Bakam FUT1 V_{run} race COND 3SG_{NOM} see snake DEF
 "Bakam will run if she sees a snake"
 c. Ná-iô gó? pùŋ
 - c. Ná-**jô gó?** pùŋ

 INF-V_{see} pain be good

 "To suffer is good"

We can observe in (3) that ICV inflects for both aspect and negation (3a) as well as future tense (3b). It can also be nominalized as in (3c).

4.1.1.1. Classification of ICVs

Looking at ICVs in Ghomálá', one may observe that some verbs can select variable complement to yield different meanings as shown in (1) above. This kind are referred to as *regular ICVs* (Korsah 2011) in the literature. Some ICVs are used with particular complements only. They are referred to as *irregular ICVs*. In this vein, Ghomálá' ICVs can be grouped into regular and irregular ICVs based on their ability to take variable ICs to yield different meanings.

4.1.1.1. Regular Ghəmálá' ICVs

This kind of ICV is attested in the literature (Nwachukwu (1985 and 1987), Essegbey (1999), Korsah (2011 and 2013)). These ICVs select, in most cases, different complements to yield different semantics as shown in (1) and (2) above. The following are some examples from Igbo and Ewe:

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(4) Igbo (Nwachukwu 1987:22)
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- a. tu **ujo** (fear) "to be afraid"
 - b. tu **ntu** (lie) "to tell a lie"
- (5) Ewe (Essegbey 1999:2)
 - a. fú tsi (water) "to swim"
 - b. fú ko (fist) " to knock"
 - c. fú du (race) "to run"
- (6) Ga (Korsah 2011: 82)
 - a. bò **wóń** (deity) "to curse"
 - b. bò kòkò (warning) "to warn"

Regular Ghomálá' ICVs may have homophonous non-ICV counterparts in the language as shown in the following examples:

(7) a. Bǎkâm **jó gó?**

Bakam.PRS1 V_{see} pain

- " Bakam has suffered "
- b. Bǎkâm **jó** pô pjá

Bakam.PRS1 see PL.child 3SG.2.POSS

"Bakam sees her children"

(8) a. Tâlá kỳ jú? ∫wə máp e Tala PST2 V_{listen} mouth mother 3SG.1.POSS "Tala obeyed his mother" b. Tâlá kỳ jú? ʒwòp∫jỳ t∫ósì Tala PST2 listen song church "Tala listened religious song"

As outlined by the data in (7 and 8) above, most of the verbs occurring in ICVs constructions also function independently as lexical verbs. No surface difference immediately sets the ICV in (7a) apart from the lexical usage in (7b). In both situations, the verbs combine with a noun phrase complement. What distinguishes non-ICV verbs from ICV ones is their ability to select different complements and maintain same meaning. They can take generic-complement, something which is impossible for ICVs.

According to Uchukwu (2004), ICVs that select different ICs to derive variant meanings form a cluster. Within the cluster, the verb roots possess a systematic meaning which is derivable from the meanings of all [ICV+IC] that have the same verb. The following clusters have been identified in the language under study:

(9) a. jó cluster	d. há cluster
Ná jô ʒǔm (dream) "to dream"	Ná hâ pwá (breast) " to breast-feed
Ná jô gó? (pain) "to suffer"	Ná hâ mku? (respects) "to respect"
Ná jô ŋwá (moon) "to menstruate"	Ná hâ ŋkàm (fist) "to fist"
b. tám cluster	e. jé cluster
Ná tâm pé (out) "to exit"	Ná jê lúŋ (anger) "to be angry"
Ná tâm ʒùm (behind) "to follow"	Nớ jê nó (body) "to be agile"
Ná tâm dzà (front) "to forward"	f. t u ò cluster
	Nớ tuờ t ^h ớ (head) "to be pigheaded
c. ŋkù cluster	Ná t u ò pú (hand) "to try"
Nə́ŋkù sô (shame)"to be shameful"	
Ná ŋkù fák (cold) "to get cold"	

It is possible to associate each ICV+IC in each of the above cluster with some underlying meaning. For example, the *jó cluster* seem to have the meaning of "see" underlying in the various

combinations (see data in (1) above). The same situation is observable in the *há cluster* wherein ICVs commonly have the meaning of "give" as shown in (2). Those in the *tám cluster* seem to encode "move".

4.1.1.1.2. Irregular Ghəmálá' ICVs

According to Korsah (2011), this kind of ICVs behave differently from regular ICVs in the sense that such verbs seem to depend on their complements in terms of meaning. In fact, irregular ICVs are used only with particular complements. They do not co-occur with other complements to yield different predicate meanings. The following ICVs have been identified as being part of this group:

The irregular ICVs may also have full lexical counterparts in the language. In this vein, they can co-occur with a generic-meaning complement as shown in (11) below:

4.1.1.2. A semantic analysis of ICVs

As far as the semantics of ICVs is concerned, there are divergent point of views, in the literature, on whether the verb itself possesses a semantic content that contributes to the interpretation of the sequence or not. These disagreements are due to the fact that the regular word-for-word translation/ interpretation of ICVs constructions into other languages may break down. This breakdown stems from the fact that the ICV must occur with the inherent complement in

order to give a particular meaning. Thus, an ICV and its IC seem to be semantically bound such that if the verb is cited without its IC in the same construction, its meaning might be difficult to determine.

For some authors such as Avolonto (1995), reported by Essegbey (1999), the verb root in Fon ICV constructions is a verbalizer since the semantic content of the predicate is supplied by the inherent complement. This entails that the verbal part of the ICV construction in Fon has the function of turning the inherent complement into a verb. This rationale cannot hold in Ghəmálá' because this language has three class-changing processes which are reduplication, compounding and deverbatives (Moguo 2016). Furthermore, there is no suffix such as English ones -ise /-ize that changes words from other classes into verbs. The sole morpheme that occurs in front of the verb root in Ghəmálá' is the infinitive particle $n\dot{\phi}$.

The idea that ICVs are verbalizers is not plausible in Ghomálá'. ICVs are always morphosyntactically free. Furthermore, an ICV always precedes the IC and class-changing derivational morphemes are not attested in the language.

According to Nwachukwu (1987:40), the verb root lacks meaning without the inherent complement. As reported by Korsah (2011), this opinion is motivated by the fact that the regular one-to-one glossing which singles out a verb in the meaning of a construction becomes les dependable when it comes to ICV constructions. ICVs and their ICs tend to have a closer [verb +complement (s)] collocational and semantic association and thus seem to form a syntax-semantic unit in the lexicon than what obtains with [non-ICVs + complement(s)]. The following examples handle this situation:

(12)a. Bǎkâm kè-kxǔ táp e

Bakam PST2-shun father 3SG.1.POSS

"Bakam shunned her father"

b. Bǎkâm kè-kxǔ

Bakam PST2-run away

"Bakam ran away"

c. Bǎkâm kè-kxû dǔ

Bakam PST2-V_{run} race

"Bakam ran"

In (12a and b), the verb $kx \vec{u}$ has a non-ICV use and it has two meanings. In (12a), it selects two arguments and it is interpreted as shun meanwhile in (12b) it is understood as run away. However, in (12c), while in English, the verb is intransitive i.e having no complement, in Ghomálá', there is a DP at the complement position. Moreover, by contrasting (12b) against (12c) one may notice that the interpretation of $kx\hat{u}$ as "run" seems to totally depend on the following nominal element d¾ "race". This is the reason why Nwachukwu (1987), building his analysis on Igbo's data, argues that the verbal part does not contribute to the interpretation of the syntax-semantic unit by claiming that the verb root is meaningless. This semantic conception of ICVs and their ICs by Nwachukwu has an implication on his syntactic analysis of ICVs which will be discussed later in this chapter. Unlike Nwachukwu (1987), some scholars such as Essegbey (1999), Korsah (2011 and 2013) and Aboh (2015), adopting the well-known compositional semantics principle according to which, the meaning of a sentence is distributed among constituents of the clause, of which the verb is one, argue that ICVs have some consistent meaning which is traceable to the meaning of the entire clause. More precisely, using Essegbey (1999:252)'s terms, since the meanings of ICVs are underdetermined, their complement appear to further specify their meaning. Thus, it is clear that, for these scholars, both the verb root and the inherent complement contribute at some extent to the meaning of the complex although it is not obvious which part of the complex contributes most to the meaning. This rationale is also adopted in this work. This adoption is sustained by two empirical arguments/facts put forwarded by Essegbey (1999). First of all, if the verb root was meaningless and the meaning of the complex came from the ICs as suggested by Nwachukwu, we would expect ICVs having the same ICs to have same meaning. However, this is not often the case with ICVs having the same IC as shown below:

- (13) a. Bǎkâm kò- wó **sé nwò**Bakam PST2-PROG V_{count} matter

 "Bakam was thinking"
 - b. Bǎkâm kè- wớ **t∫wà nwè**Bakam PST2-PROG V_{cut} matter

 "Bakam was lying"
 - c. Bǎkâm kà-wá $3\acute{a}$ $nw\grave{a}$ Bakam PST2-PROG V_{know} matter "Bakam was being smart"

Data in (13) above clearly show that, although, the ICVs have a common complement $nw\dot{\partial}$ "matter" their meanings change depending on the verb root.

Another empirical fact that one may notice by observing the behavior of so-called regular ICVs, is that it is possible to capture the underlying meaning of ICVs which form a cluster. As I claimed earlier on the basis of data in (9) above, ICVs forming a cluster contribute at some extent to the meaning of the complex, each verb meaning is traceable to its non-ICV homophonous forms as illustrated in (7) and (8) above. So, considering what have been briefly explained above, it is plausible to assume that the verbs in Ghomálá' ICV constructions have some meaning which is not as specific as non-ICVs in the language. Their meanings are generic and their complement appear to specify them as claimed by Essegbey. Accordingly, Aboh and Essegbey (2010:58) make a cross-linguistic observation according to which, languages that have ICVs also tend to have verbs that obligatorily take "semantically light" complements. This is the case for Ghomálá' as shown in the following examples:

(14)a. Bǎkâm kè-tsú jwé
Bakam PST2-eat thing
"Bakam ate"
b. Bǎkâm kè-tsú msê
Bakam PST2-eat fufu corn
"Bakam ate fufu corn"
c.*Bǎkâm kè-tsú
Bakam PST2-eat

Following Korsah (2011:106), ICVs cannot occur with generic-meaning complements like non-ICVs (see (14) above). Their meanings are derived either metaphorically or compositionally. Although it does not seem to be fully compositional (Aboh 2015), the meaning of some ICVs and their inherent complements can be traced to the literal meaning of at least one of the two syntax-semantic units. Korsah refers to these as Compositional ICVs. As for those whose meaning cannot be literally traced to any of the two constituents, he refers to them as Metaphorical ICVs. These are exemplified below:

(15) a. Compositional ICVs

Complex	Verb meaning	IC meaning	Complex meaning	
nákx ù d ě	run away	race	"to run"	
nétsè mtǐ	released	saliva	"to spit"	
náhâ ŋkèm	give	fist	" to fist"	
nápwâ gy ě ?	be tired	strength	"to weaken"	
náŋkù sô	smell	shame	"to be shameful"	

b. Metaphorical ICVs

Complex	Verb meaning	IC meaning	Complex meaning
nájû? ∫wə	listen	mouth	"to obey"
nájô ŋwá	see	moon	"to menstruate"
nát u ò pú	harden	hand	"to try"
nát∫wó? fà?	open	work	"to reward"

In (15a) the meaning of the verb and the IC when put together may come from any of the two constituents. This is the case for $n\dot{\delta}kx\dot{t}dt$ whose interpretation as "to run" mostly come from the meaning of the nominal constituent dt "race". The situation is slightly different in (15b) wherein the relationship between the verb and its IC does not suggest the meaning of the two together. For instance, $n\dot{\delta}j\dot{\delta}$ "to see" and $\eta w\dot{\delta}$ "moon" put together does not suggest the meaning "to menstruate". Menstruations occur at the end of a cycle and announce the beginning of another cycle. Similarly, the moon appears at the end of a month and also announce the beginning of another month. This is the reason why, in Ghomálá' and in most of the Bantu grassfield languages, speakers use the term moon to refer to menstruations. To menstruate metaphorically means to see moon in these languages.

4.1.2. The Inherent Complement

It has been argued that verbs involve in ICV constructions are meaningful except that they are vague and less specific. Their inherent complements are required in order for them to be more specific in term of meaning. The inherent complement is thus the verb's meaning specifying part in an ICV construction. In Ghomálá', most of the ICs are nominals, however, we can find a few number that are adpositionals (see the *tám cluster* in (9) above). Accordingly, Aboh (2015) argues

that ICVs complements are structurally bare and therefore non-referential NPs. The inherent complement lacks a D-layer. In other words, the IC does not usually occur with determiners as shown in (16 and 17) below:

```
(16)a. Bâkǎm
                     jó gó?
      Bakam.PRS1 V<sub>see</sub> pain
     "Bakam is painful"
  b.* Bâkǎm
                    jź
                          m-gó?
     Bakam.PRS1 V<sub>see</sub> PL-pain
  c. Bâkǎm jó m-gó?
                          pŏtſjá
     Bakam see PL-pain orphans
    "Bakam sees the pains of orphans"
(17)a. Tâlá kà- kxù dǔ
     Tala PST2-V<sub>run</sub> race
       "Tala ran"
      b. *Tâlá kỳ- kxù m-dǔ
        Tala PST2-V<sub>run</sub> PL- race
```

It can be noticed that when the ICs in (16b and17b) are construed as plural in an ICV construction, it results in ungrammaticality as compared to when they occur with a non-ICV as in (16c). I agree with Aboh that ICs lack the D-layer but will we observe that these NPs are referential in some context when I will address others morphosyntactic properties of ICs in the following section. In some languages namely Igbo and Fon, the inherent complement has been described as a cognate complement. This means that the complement and the verb have the same form. In the aforementioned languages, some inherent complements are cognate with their verb roots as illustrated in the examples below:

```
ma-mmā
(18)a. Igbo
                 i.
                     be beautiful.IC
                     "be beautiful"
                      vù-îvù
                 ii.
                   get.fat-fat.IC
                     "be fat"
                                             (Anyanwu 2012:1563)
                iii.
                      fú
                           ufu
                      ICV pain
                      "be painful"
                                             (Nwachukwu 1985:62)
```

b. Fon **kpé** è**kpé**ICV cough.IC
"to cough"

(Essegbey 1999:197)

This does not imply that only cognate ICs are attested; they are rather the exception. ICVs with non-cognate ICs are found in these languages (see Anyanwu (2012) and Essegbey (1999) for more details).

As for Ghəmálá', considering the examples cited so far (see data in (9), (10), (13), (15) and (16) above), there is no evidence that an ICV and its IC have the same form. However, the fact that Ghəmálá' is devoid of cognate complements does not necessarily mean that cognate object constructions are not attested in this language. The following example constitutes a proof that this type of construction can be found in Ghəmálá':

(19) a. Bâkăm **fà? fá?** tsjá

Bakam.PRS1work work 3SG.5.POSS

"Bakam does her work"

b. Bâkăm fà?

Bakam.PRS1 work

"Bakam works"

We can observe in (20a) that the verb fa^2 and its complement fa^2 are alike. The verb root can occur alone (without its complement); this is not the case for ICVs that obligatorily select a complement. After having described ICVs and ICs, the following section handles their morphosyntactic properties.

4.2. Morphosyntactic properties of ICV constructions

This section aims at bringing out morphosyntactic processes that either the verb or the complement can undergo. This is relevant not only in distinguishing ICVs from regular verb but also in discussing on whether the inherent complement is an argument of its verb or otherwise. In doing so, three morphosyntactic processes are addressed below namely pronominalization, focalization and question formation.

4.2.1. Pronominalization of the Inherent Complement

Pronominalization is syntactic process by which a noun is replaced by a pronoun. As a noun substitute, the pronoun carries the phi-features of the noun which it replaces. It is also the most evident and well known constituency test in the syntactic literature. An ambivalent

pronominal property with respect to the IC has been observed cross-linguistically. In some languages namely Ga, Akan (Korsah 2014), Gungbe (Aboh 2015) and Igbo (Anyanwu 2012), the inherent complement cannot be replaced by a pronoun. This operation leads to the production of ungrammatical structures as shown in the following examples from Igbo:

(20) a. Ézè (21) a. Ézè ntùrù nturù máí bóólu Eze pr.libate.past drink.IC Eze pr.throw.past ball.IC "Eze poured a libation" "Eze threw a ball" b. *Ézè ntùrù b. Ézè ntùrù yá Eze pr.libate.past it Eze pr.throw.past it "Eze threw it" "Eze libated it" (Anyanwu 2012:1563)

As Anyanwu (2012) reports, in Ngwa Igbo, the lexical NP of an affected object can be replaced by the pro-NP constituent, $y\acute{a}$ "him/her/it', while the inherent complement cannot. This is the reason why the structure in (20b) is ungrammatical.

Data from Ewe in (22 and 23) below show that, in this language, the inherent complement can have a pronominal, just like nominal complement of non-ICVs. It is clear that Ewe is different from Igbo, Ga, Akan and Gungbe on this point.

(22) a. Kofi **fú du**Kofi ICV course

"Kofi ran" (Essegbey 2002:71)

b. Kofi **fú-i**Kofi ICV-3SG

"Kofi ran it (i.e the course) (Essegbey 2002:79)

(23) a.?? Núfíá lá **nɔ anyí** háfí suku-ví-á-wó **nɔ anyí**.

teacher DEF sit ground before school-child-DEF-PL ICV ground.IC

"The teacher sat down before the students did"

b. Núfíá lá no anyí, háfí suku-ví-á-wó no-e, teacher DEF sit ground before school-child –DEF-PL sit-3SG "The teacher sat down before the student did" (Essegbey 2002:79)

Essegbey argues that the pronominalized form of the inherent complement is the preferred option when an ICV is repeated in subordinate clause such as in (23) above. Accordingly, he claims that the pronominalization of the IC is an indication that it is an argument of its verb.

As far as Ghomálá' is concerned, the pronominalization of the inherent complement not seems to be evident to handle. When we observe the following data, we can deduce that the inherent complements cannot be replaced by the inanimate object pronoun $j\acute{a}$ meanwhile the pronominalization of others complement is possible.

(24) a. Bâkǎm há pwá*e bî mú

Bakam V_{give} breast to child

"Bakam breast-feeds the baby"
b. Bâkǎm há jáe bî mú

Bakam V_{give} 3SG.ACC to child

"Bakam gives it to the baby"
(25) a. Tâlá kà- kxù dǔ*k

Tala PST2-V_{run} race

"Tala ran"
b. Tâlá kà-kxù ják

Tala PST2-V_{run} 3SG.ACC

"Tala avoided it"

c. Bâkăm há ŋkáp; bî mú

Bakam give money to child

"Bakam gives money to the child"

d. Bâkăm há já; bî mú

Bakam give 3SG.ACC to child

"Bakam gives it to the child"

c. Tâlá kò-kxù tʃwákwò;

Tala PST2-avoid mouse

"Tala avoided mouse"

d. Tâlá kò-kxù já;

Tala PST2-avoid 3SG.ACC

"Tala avoided it"

As shown in (24a-b) and (25a-b), when the inherent complement is substituted by the inanimate object pronoun $j\acute{a}$, the construction has a non-ICV interpretation. This suggests that the pronoun does not refer to the inherent complement. At this level, one can argue that IC cannot be pronominalized in Ghomálá' and agree with Aboh (2015) that ICs are non-referential NPs.

Another fact about the language is that when a verb is repeated in a subordinate clause, the complement is either spelt out or deleted. This implies that the inherent complement cannot be pronominalized in this context like in Ewe. The following data are an illustration:

(26) a. Tâlá kỳ-pfά bǐjέ tə Bǎkâm pfὰ
Tala PST2-eat groundnut before Bakam eat
"Tala ate groundnut before Bakam did"

- b. Tâlá kè-pfά bǐjé*i tə Băkâm pfα jái
 Tala PST2-eat ground. before Bakam eat 3SG.ACC
 "Tala ate groundnut before Bakam did it"
- c. ? Tâlá kỳ-pfά bǐjέ tə Băkâm pfά bǐjé
 Tala PST2-eat ground. before Bakam eat groundnut
 "Tala ate groundnut before Bakam did"
- (27)a. Tâlá kờ-t \int w**ó** s**î** tə Bǎkâm t \int w**ð**Tala PST2- V_{sit} ground before Bakam V_{sit} "Tala sat down before Bakam did"
 - b. *Tâlá k**è-t∫wá sî** tə Bǎkâm t∫wð **já**Tala PST2-V_{sit} ground before Bakam V_{sit} 3SG.ACC

 "Tala sat down before Bakam did it"
 - c. ? Tâlá kà-tʃwá sî tə Băkâm tʃwǎ sî

 Tala PST2-V_{sit} ground before Bakam V_{sit} ground
 "Tala sat down before Bakam did"

The above data show that it is impossible to pronominalize the inherent complement when the verb is repeated within a subordinate clause (27b). Moreover, the deletion of the complement seems to be the preferred option when the verb is repeated in an embedded clause (26a and 27a). In addition, (26b) suggests that when the complement of the embedded clause is replaced by a pronoun, the latter refers to another entity which is not the complement of the main clause.

While observing two native speakers of Ghomálá' interacting about the performance of an athlete, I gather the following data which suggest that the inherent complement can be pronominalized.

(28) **Speaker A**: Jăl \dot{a} t mbáng \dot{a} **kxù dǔ**! E lə-təm dənz \dot{a} nə \dot{a} 0 olempik Charlotte Mbango V_{run} race! _{3SG,NOM} PST3-come first on game Olympic "Charlotte Mbango runs! She was first during the Olympic games"

Speaker B: Mèsâ! É ă kxù já!

Int! 3SG.NOM ? Vrun 3SG.ACC

"She runs!"

 $J\dot{a}$ in the speaker B's utterance refers to $d\check{u}$ "race". This pronoun carries both the phi-features and the semantic features of the inherent complement $d\tilde{u}$. If the IC is substituted by the third person singular animate object pronoun \acute{e} , the sentence will be interpreted as she avoids him. The data in (28) reveal that it is possible to pronominalize the inherent complement in Ghomálá'. The pronoun is required in certain discourse contexts. The difference between the data in (25) and those in (28) is that the first ones have been collected through elicitation meanwhile those in (28) have been gathered within a natural setting. This is not a tentative to argue that data in (25) are wrong. As a native speaker of the language, I can claim that these constructions are attested in the language. In my opinion, the mixed pronominal property of ICs in Ghomálá' can be justified by the fact these complements tend to lose their nominal properties. This is the reason why it fails to be pronominalized in (25). Although the IC can be pronominalized in certain contexts, we cannot straightforwardly argue that it is an argument of its verb. Indeed, given the fact that there is not a one-to-one mapping between case features and semantic roles, theta role assignment cannot been tied to case features. Expletive constructions in English strengthen this observation. Accordingly, the structural position of subject filled by the expletive it in those constructions enables this latter to bear nominative case. However, it is a shared knowledge that the expletive it bears no semantic role.

4.2.2. Focus in ICV construction

Previous studies on Ghomálá' (Tala 2015) reveal that both arguments and adjuncts can be focalized in this language. Two focus positions have been identified in the language: the C-domain and the v-domain. Left-peripheral focus encodes new information whereas post-verbal focus deals with contrastive focus. The examples below are instances of focalization.

(29) a. Fôtsŏ kè-jó bǐjé
Fotso PST2-buy groundnut
"Fotso bought groundnut"
b. (A bə) Fôtsŏ né kè-jó bǐjé
It is Fotso FOC PST2-buy groundnut
"It is Fotso who bought groundnut"

c. *(A bə) bǐjɛ́ tá Fôtsŏ kà-jô
It is groundnut FOC Fotsob PST2-buy
"It is groundnut that Fotso bought"

- d. Fôtsŏ kà-jó **pá** bǐjɛ́ Fotso PST2-buy **FOC** groundnut "Fotso bought GROUNDNUT (as opposed to say, *maize*)"
- e. Fôtsŏ kà-há bǐjɛ́ **á** bî mú
 Fotso PST2-give groundnut **FOC** to child
 "Fotso gave groundnut TO THE CHILD (as opposed to say, *to the father*)"

As shown in the above data, left-peripheral focus is marked by two particles namely $n\acute{e}$ and $t\acute{o}$ which structurally follow the focused constituent. $N\acute{e}$ is used for subject meanwhile $t\acute{o}$ is used for non-subject focus. Data in (29b) and (29c) are instances of information focus whereas those in (29d) and (29e) are cases of contrastive focus. Low focus is either marked by $p\acute{o}$ or \acute{a} that precede the focused item. The following table presents in a sketchy fashion non-verbal constituent focalization in Ghəmálá':

Table 12: Non-verbal constituent focalization in Ghəmálá'

Focus	Focus Strategies	Domains	Fonctions	Constituents
markers				
né /lé	Ex-situ	C-domain	Informative	Subject
tớ (with clefts)	Ex-situ	C-domain	Informative	Non-subject
				(objects and adjuncts)
á/pá	"In-situ" ⁸	v-domain	contrastive	Non-subject
				(objects and adjuncts)

As far as verb focalization is concerned, Ghomálá' verb focus constructions have a null operator and involve predicate doubling structures. Unlike Gungbe (Aboh and Dyakonova 2009) and Ga (Korsah 2014) wherein the focused copy is fronted sentence-initially and the other copy is found in the extraction site within the IP; the two copies occur IP-internally in Ghomálá' as shown in the examples below:

-

⁸ In fact, this position is a derived position (see Tala 2015:135)

(30) a. Fôtsŏ kà-jó bǐjɛ́ Fotso PST2-buy groundnut "Fotso bought groundnut"

b. Fôtsŏ kà-**dʒó** bǐjé **jó** Fotso PST2-buy groundnut buy

"Fotso BOUGHT groundnut" (as opposed to say, he stole)

As for the focalization of the verbs in constructions involving ICVs, both the verb and the inherent complement can be focused in Ghomálá'. Just like non-ICVs, inherent complement verb focus constructions involve verb doubling structures in which the two copies of the verb appear within the I-domain. These structures have a contrastive reading. Let us consider the data in (31) below:

(31)a. Tâlă **kxù** d**ǔ kxù**Tala.PRS1 V_{run} race V_{run}

"Tala RUNS" (as opposed to, *he walks*)

b. Bâkăm **há** pw
ớ **há** bî mú tə gɔ tʃɔ̂sì Bakam. PRS1 $V_{\rm give}$ breast $V_{\rm give}$ to child before go church

"Bakam BREAST-FEEDS the baby before going to church" (as opposed to say, she rocks the baby)

Data in (31) show that ICVs can be focalized in Ghomálá' just like in Basaa (Bassong 2014: 286). This focus property of ICVs distinguishes Ghomálá' from Kwa languages. Indeed, studies of ICVs constructions in these languages reveal that inherent complement verbs can neither be fronted nor doubled in verb focus as shown in the following data:

(32) a. ***Tún** (%**w**è) Félé **tún** tán.

Release FOC Fele release saliva

"Fele released saliva" (Gungbe, Aboh 2015:14)

b.*/? **Je-e ni** Kwei **jo** foi

ICV-NOM FOC Kwei ICV race.IC

"Kwei ran (as opposed to say, he sat)" (Ga, Korsah 2014:410)

It can be observed in (32) that the focalization of ICVs is infelicitous in these languages.

As it has been claimed earlier, the inherent complement can also be focused in Ghomálá'. The IC is thus preceded by the focus marker $p\dot{\delta}$ or \dot{a} . Let us observe the data below:

(33) a. Tâlă tsò **pó** mtǐ

Tala.PRS1 Vrelease **FOC** saliva

"Tala SPIT" (as opposed to say, *he vomits*)

b. Tâlă kx**ù á** d**ǔ**

Tala.PRS1 Vrun FOC race

"Tala RUNS" (as opposed to say, he walks)

When we compare the data in (33) with the one in (29d), it can be noticed that the focused element is the same in both constructions i.e., the object/nominal complement. What fundamentally distinguishes constructions in (33) from the one in (29d) is the semantic interpretation. Indeed, the interpretation conveyed in (33b) is that, apart from spiting, Tala does not know to do something else or has not done something else. We can therefore deduce that in constructions such as those in (33) above where the focused item is the IC, syntactic focusing does not lead to their semantic focusing. More precisely, the focusing of the IC results in a predicate focus. A focused IC has a predicate focus reading, not an argument focus reading. A predicate focus interpretation of the focused IC seems to be a cross-linguistic feature of ICV constructions. Data from Gungbe and Ga show that these languages exhibit this IC focus property as shown in (34) below:

(34)a. Tán wè Félé tún

Saliva FOC Fele Vrelease

"Félé SPAT"

"# Fele released SALIVA"

(Gungbe, Aboh 2015:14)

b. Foi **ni** Kwei je

race.IC FOC Kwei ICV

"Kwei RAN (as opposed to say, he sat). (Ga, Korsah 2014: 410)

As one can observed in the above data, the focusing of the IC results in a predicate focus. This suggests the existence of a closer relationship between the IC and its verb. The fact that ICVs can be focused in Ghomálá' may be an indication that ICV constructions are not so different from regular verb construction. As for focalization, the sole distinction between ICV verbs and non-ICV ones is that object focus has argument focus reading in non-ICV construction whereas it has a predicate focus reading in ICV one.

4.2.3. Question formation and IC

According to Tala (2015), three types of questions are attested in Ghəmálá' namely yes/no question, tag question and wh-question. As for wh-question, the wh-expressions identified in the language comprise $w\acute{a}$ "who", $k\bar{a}$ "what", $s\acute{o}\acute{o}$ "when", $h\acute{a}$ "where", $\bar{m}g\alpha k\grave{a}$ "how" and nəká "why". These wh-operators can either be extracted or left in-situ. When they move instead, they are fronted and therefore generate automatically a focus construction or a relative clause. Wh-question is more adequate here since it lays emphasis on constituents of the clause which will be the inherent complement in this work.

Question feature has been acknowledged by Korsah (2014) as a morphosyntactic feature that sets ICVs apart from lexical verbs. The inherent complement cannot be marked with a question feature. Let us consider the following data:

(35) a. Tâlá kỳ-pfά bǐjế
 Tala PST2-eat groundnut
 "Tala ate groundnut"
 b. Tâlá kỳ-pfά kō
 Tala PST2-eat what
 Tala ate what
 "What did Tala eat?"
 c. A bờ kờ tớ Tala kỳ-pfά
 Cleft COP what FOC Tala PST2-eat
 It is what that Tala ate
 "WHAT did Tala eat"

Unlike the complement of non-ICVs (35), the inherent complement can neither be marked with a question feature in-situ nor be extracted to the left periphery for focus wh-question formation. Compare (35) with (36) where ICVs are involved.

(36) a. Tălá kờ wớ kx**ù dǔ**Tala PST2 PROG V_{run} race

"Tala was running"

b. Tălá kà - wá - kxù ka
Tala PST -PROG- V_{run} what
"*What was Tala running?"
"What was Tala avoiding?"
c. A ba ka tá Tălá kà wá kxù
EXPL COP what FOC Tala PST2 PROG Vrun
"*WHAT was Tala running?"
"WHAT was Tala avoiding?"

The data in (36) show that when the inherent complement $d\tilde{u}$ is substituted by the argument whexpression $k\partial$, the construction itself is legible but what fundamentally changes is its semantic interpretation. Indeed, the structures in (36b and c) are infelicitous if and only if the predicate is interpreted as "to run". When the speaker utters sentence (36b), even if the agent is running meanwhile the conversation holds, the verb root $kx\hat{u}$ is no more understood as "to run"; it is rather interpreted as "to run away" or "to avoid". So, the ICV meaning "to run" is lost in (36b). However, (37a) can be an appropriate answer to an interrogative expression with a more generic-meaning such as (37) below:

(37) Tălá kờ -wớ - gyô kớ Tala PST2-PROG-do what "What was Tala doing?"

This is an indication that ICV verbs are semantically light (Korsah 2014), vague or less specified as reported by Essegbey (1999). Moreover, as claimed by Korsah (2014), the inability of IC to be marked with a question feature may be an indication that it is not an argument of its verb assuming that the question feature is marked on complements of the verb which are arguments.

4.3. Argument structure of ICV constructions

In the previous section, it has been shown that the IC can be realized as an overt pronoun in certain discourse context (see (29) above). It has also been demonstrated that both the ICV and its complement can be focused. However, when the IC is focused, it has a predicate focus reading. Moreover, the IC cannot be marked with a question feature, be in-situ or extracted. These morphosyntactic properties that distinguish ICVs from non-ICVs have an impact on the argument structure and the derivation of ICV construction adopted here.

4.3.1. On the argument structure of ICVs

Earliest proposal on the argument structure of ICVs was done by Nwachukwu (1987) based on data from Igbo. He analyzed the inherent complement as an adjunct. His rationale was motivated by the fact that it is easily displaced when the ICV selects an internal argument as shown in (38) below and this displacement of the inherent complement explains why it does not bear a semantic role just like adjuncts.

(38)a. Ézè mgbàrà àmà

Eze Pr.betray.past betrayal.IC

"Eze betrayed (somebody)"

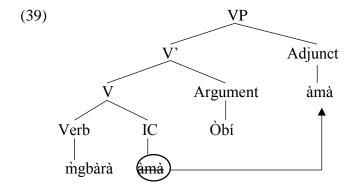
b. Ézè mgbàrà Òbí àmà

Eze Pr.betray.past Obi betrayal.IC

"Eze betrayed Obi"

(Anyanwu 2012:1565)

In (38b), the internally licensed argument is \grave{Obi} . According to Nwachukwu, in (39b), the IC has been displaced and he treated it as *Move IC*. It moves rightward as illustrated in the following tree structure:



Nwachukwu's rationale need to be revisited for two reasons: (i) rightward movement is prohibited by modern approach to syntax, more precisely, by the antisymmetric approach (Kayne 1995); (ii) some adjuncts might have semantic role as it is the case with English passive construction wherein the agent is introduced with a by-phrase. However, Nwachukwu's work has the merit of having raise an essential point in any discussion on argument structure of ICV namely, the status of the

inherent complement. To be more explicit, we want to know whether the inherent complement is a semantic argument of its verb or otherwise.

On this point, two camps of scholars have emerged in the literature. The first one is made up of those who claim that the IC is an argument of its verbs just like any complement of non-ICVs. This view is strongly defended by Essegbey (1999, 2002, 2003 and 2010) who claims that ICs are arguments of ICV and the sole difference between them and complement of non-ICV is that they are obligatory complement; they need to be cited for the unit to be meaningful. So, its obligatoriness is not from syntactic relevance but from semantic relevance. His opinion relies on the fact that IC can be realized as an overt pronoun in Ewe and therefore it bears both case features and phi-features (see (22) above). As it has been said earlier, there is not a one-to-one mapping between case features and semantic roles, theta role assignment cannot been tied to case features. The second camp of scholars gather together those who argue that the IC is a syntactic argument not a semantic argument of its verb since it does not bear a theta role (see Korsah (2014) and Aboh (2015)).

As for Ghomálá', given the morphosyntactic properties that the IC exhibits in this language, it can be infered that the IC is a syntactic argument not a semantic argument of its verb. Two facts support this rationale:

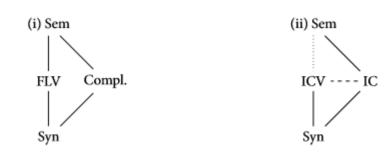
- (i) the IC cannot be marked by a question feature;
- (ii) when it is focused, it has a predicate focus interpretation instead of having an argument focus reading.

On the basis of these facts, it is evident that the IC cannot bear a theta-role since this latter is assigned to argument (see Chomsky (1981)). It does not allow certain syntactic processes that are typical of arguments. The $V_{\rm ICV}$ thus does not have an internal argument. It tends to be functional and shares a common semantic characteristics with light verbs.

Assuming Pesetsky's notions of C(ategorial)-selection and S(emantic)-selection, Korsah (2014) argues that there is a two-level lexical entry for every verb (whether it is a full lexical verb or an ICV): one level deals with syntax (Syn = C-selection) and the other deals with the semantics (Sem = S-selection). There is full match up between the syntax of a construction and its semantics when Syn and Sem are both accessible to the verb and its complement. Accordingly, he claims that what typically happens in ICV constructions is that, there is only a partial match between the

verb and *Sem*. The verb is syntactically represented and morphologically spelled-out but it lacks the needed semantics. This is the reason why the meaning of what the predicate denotes is mostly closest to the IC and the ICV cannot assign theta role to its nominal complement since theta roles are assigned to semantic arguments which would be found in *Sem*. This configuration explains why the IC though might show case and phi-features, is not an argument of its verbs in the same sense as the argument of lexical verbs. The distinction between ICVs and full lexical verbs (FLV) in terms of *Syn* and *Sem* properties has been graphically represented by Korsah (2013: 417) as follows:

(40)



As reported by Korsah, it would be problematic to claim that the verb is totally delinked from *Sem* since not all the meaning of the predicate in an ICV construction might be from the complement. As it has be shown above, the verb root contributes at some extent to the meaning of the predicate (see § 4.1.1.2). This partial link between ICV and *Sem* is represented in (40ii) by a dotted line. The dashed line linking the ICV and the IC in (40ii) is a way for him to indicate the verb phrase reflexes on the IC in certain syntactic operations such as focus construction wherein the focalized ICs have a predicate focus reading. Given the above discussion, it is evident that most of the ICVs in Ghomálá' are intransitive since most of them select only one argument which is the external argument; few are transitive.

4.3.2. Derivation of ICV construction

Each element of the [V-N] complex comes from the lexicon free. The fact that a focus marker can occur between the IC and the ICV (see (33) above) is an evidence that the verb and its complement are not bound in the lexicon. In other words, the ICV and its IC enter into the derivation as two different syntactic units just like any other verb root though semantically bound. Following (Aboh 2015), it can be argued that there are two types of verb roots in the lexicon: those that can directly merge into a functional domain namely under v° and the ones which merge under

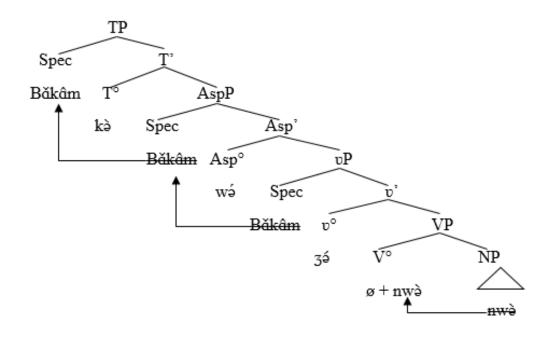
 V° and latter move to v° . ICVs just like light verbs are functional verbs and therefore they can purely merge under v° , the head of light verb phrase (vP).

The occurrence of a focus marker between the verbs and its complement rules out the derivation proposed by Essegbey (2010) in which ICV is merged under V° and it takes a bare NP which latter incorporates to V° wherein the verb and its complement form a compact unit and latter move to v° . Essegbey's proposal also prevents the possibility for an element of the [V-N] complex to be a target of a syntactic operation. As it has been shown above (see section 4.2.2), both the ICV and its complement can be subjected to focus operation as two independent syntactic units in Ghomálá'.

The linear adjacency between the ICV and its complement (see (1 and 2)) in Ghomálá', as opposed to Igbo wherein an argument can appear between the verb and its IC (see (38b)), favours an analysis in which the V selects a structurally bare NP. Moreover, the incorporation of the IC to V is favored by the fact that focused IC has a predicate focus reading. Let us observe the tree diagram in (41b) below which the representation of the construction in (41a).

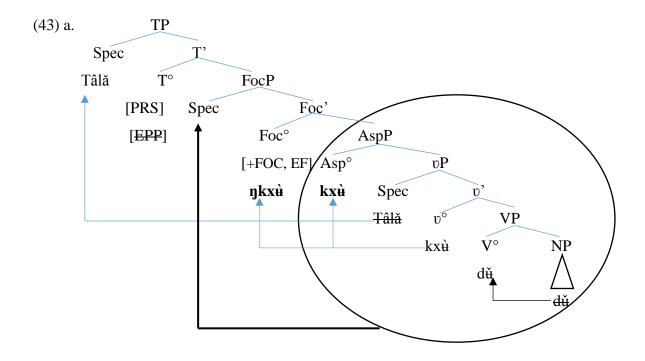
(41) a. Bǎkâm kð-wớ $\mathbf{3}\mathbf{\acute{o}}$ $\mathbf{n}\mathbf{w}\mathbf{\grave{o}}$ Bakam PST2-PROG V_{know} matter "Bakam was being smart"

b.



Following Korsah (2014) and Aboh (2015), merging the verb under v° as opposed to V has a number of conceptual and empirical advantages. In fact, by generating ICV under v° it has no s-selectional requirements on the complement and it introduces the external argument. Although the abstract V c-selects a structurally bare NP as complement, it does not have any theta-role to assign. With this analysis, any element of [V-N] complex can be the target of a syntactic operation as shown in the examples below:

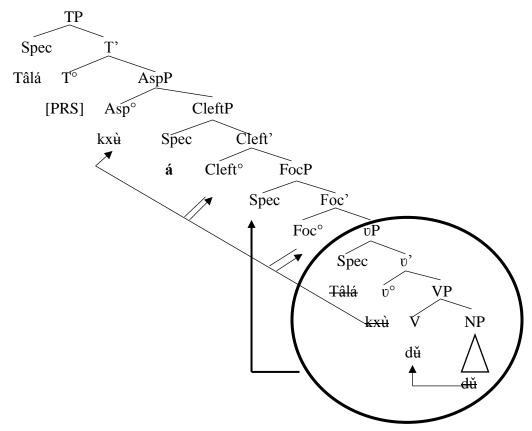
(42) a. Tâlă kxù dǔ ŋkxù
Tala.PRS1 V_{run} race V_{run}
"Tala has RUN" (as opposed to, he has walked)
b. Tâlă kxù á dǔ
Tala.PRS1 Vrun FOC race
"Tala RUNS" (as opposed to say, he has walked)



(43a) is the tree representation of sentence (42a). In (42a), $T\hat{a}l\check{a}$, being the external argument is licensed by v and therefore is merged under the specifier position of the light verb phrase. It latter moves to Spec-TP in order to satisfy the EPP requirement of TP. The Aspect Phrase projected above the small VP represents the aktions of the verb $kx\hat{u}$. Being a lexical property, the right

position of this phrase is immediately above the big VP. The actual position in the diagram is due to the fact that the verb itself is directly merged under v° . Given the copy theory of movement, it would be problematic to argue that Ghəmálá's verb doubling involves two spelt-out copies without theoretical evidence. So, following Aboh and Dyakonova (2009)'s parallel chain analysis of verb doubling, I argue that verb movement in Ghəmálá'verb doubling construction is triggered by two probes namely Foc° and Asp°, the head of the Aspect Phrase which represents the aktionsart of the verb. The two probes have the same goal. This is the reason why Ghəmálá' verb focus involves two identic copies of the verb.

(43)b.



The tree diagram above represents the construction in (42b). In (42b), the sentence has a predicate focus reading though syntactically it is a nominal element that is focused. This is an indication that it is not the bare NP complement which is focused but the entire abstract VP with the incorporated NP to V that undergoes focalization as represented in (43b). There is an asymmetry in Ghɔmálá' focus strategies. In the left peripheral strategy, the focused item precedes the focus marker meanwhile in the v-domain strategy the focused constituent follows the focus marker. Bearing in mind fundamental basics of Rizzi (1997)'s rationale according to which, the focused constituent

should be hosted by the specifier position of FocP, I generate the so called focus marker under the specifier position of CleftP which dominates the FocP. By generating the focus marker under SpecCleftP, the verb can freely merge from v° to Asp° passing through Foc° and Cleft°. The verb movement is followed by the pied-piping of vP to the specifier position of FocP, the position dedicated to focalized constituent, and the right order of constituents is derived.

Conclusion

This chapter was devoted to Inherent Complement Verbs in Ghomálá'. In this chapter, I have addressed their morphosyntactic properties. In doing so, their formal features as well as their semantics have been discussed. Being compositional or metaphorical, ICVs in the language understudy can be classified into regular and irregular. Looking at their morphosyntactic features, Ghomálá' ICs can be pronominalized in certain discourse context. This is an indication that IC bears phi-features in this language as opposed to Ga (Korsah 2011) or Gungbe (Aboh 2015). It has also been shown that IC cannot be marked with a question feature in Ghomálá'. As far as focalization is concerned, it has been argued that both the verb and its complement can be focused though the focused IC has a predicate focus reading. On the basis of these morphosyntactic properties, it have been claimed that Ghomálá' ICVs are either intransitive or transitive. They purely merge under a functional position namely v° that selects an abstract VP which licenses a bare NP. This NP incorporates to the abstract V. This functional behavior of verbs can also be mirrored in Serial Verb Constructions, the topic of the next chapter.

Chapter 5: Serial Verb Constructions (SVCs)

Introduction

The preceding chapter has addressed a type of verb construction wherein the verb and its complement are semantically tied such that it is difficult to state on whether the nominal constituent is an argument of the verb or otherwise. The present chapter deals with another type of verbal construction wherein there is more than one verb that function as a single predicate. This latter has been referred to as serial verb constructions, verbs series or verbal serialization in the literature. Their typology as well as their morphosyntactic properties in Ghɔmálá' are investigated herein. In doing so, the chapter is structured as follows: section 1 distinguishes serial verb constructions from other types of multiverb constructions. Section 2 classifies serial verb constructions following their semantic functions. Section 3 tackles their morphosyntactic features and section 4 has to do with their derivation.

5.1. Serial Verb Constructions vs other multiverb constructions

This section aims at distinguishing serial verb constructions from other multiverb constructions that can be attested in Ghomálá'. In this vein, formal properties that characterize serial verb constructions are addressed as well as diagnostics that differentiate SVCs from other multiverb structures.

5.1.1. General characteristics of SVCs

Aikhenvald (2006:1) defines a serial verb construction as a sequence of verbs which act together as a single predicate, without any overt marker of coordination, subordination, or syntactic dependency of any other sort. She proposes the following properties that are cross-linguistically useful in the recognition of a serial verb construction.

- ✓ SVCs encode a single predicate reading. In other words, verbs which made up SVC function as a syntactic whole such that, most of the time, SVCs are translatable as single or coordinated predicates into non-serializing languages like English.
- ✓ SVCs are monoclausal and do not allow makers of syntactic dependency on their components. More precisely, they are devoid of formal linking device such as one can argue that they are coordinate or subordinate structures. This property is a criterion that distinguishes SVC from coordination or subordination.

- ✓ SVC has the intonational properties of monoverbal clause, and not of a sequence of clauses.
- ✓ Verbs which form a SVC share tense, aspect, mood, modality, illocutionary force and polarity values. This implies that no independent choice or contrast in any of these categories is possible for the individual components of an SVC. They cannot be separately negated or focused.
- ✓ SVCs encode one event. All verbs in an SVC form a close-knit structure perceived as a conceptual unit. As Lord (1974:196) points out, the verbs in SVC all refer to sub-parts or aspects of a single overall event.
- ✓ SVCs share at least one argument. They do not allow duplicate roles, that is, they tend not to have two different agents, two themes or two instruments.

To see how these properties work in Ghomálá', let us consider the following data:

(1)

- a. Tâlá kờ sò? <u>là?tə</u> á

 Tala PST2 <u>come show</u> 1SG.ACC

 "Tala came and showed me"
- b. Tâlá kà <u>và</u> ŋwà?ɲà <u>ŋké</u>

 Tala PST2 <u>write</u> letter <u>read</u>

 "Tala wrote a letter and read it"
- c. Tâlá kờ <u>là</u> lùŋgá <u>sò?</u>

 Tala PST2 <u>take</u> bucket <u>come</u>

 "Tala bring a bucket"

In the data above, the verbs follow one another within the same clause as in (1a). There is no overt connector that links these verbs such that one can argue that they are instances of coordination or subordination. They represent a single predicate (1c); they form the core of a single clause. They share tense / aspect values as the past tense is marked once per SVC. They also share at least one argument, mostly the subject $(T\hat{a}l\hat{a})$.

5.1.2. Serial verb construction vs. coordinate structure

Coordinate structures are distinct from serial verb constructions by the presence of a coordinative marker that rules out a monoclausal interpretation. This suggests that, in coordinate

clauses, both subject and temporal feature can be overtly expressed and that core arguments need not be shared.

Moguo (2016: 271) does an inventory of Ghomálá's coordinative markers. Accordingly, the following coordinators are attested in the language:

(2)

pú "and/with" kà "or" bíŋ "and" dà?gà "but" náŋ "then"

 $P\acute{u}$ "and/with" is exclusively used only for NP coordination whereas others are used for VP coordination as well as sentence coordination. $P\acute{u}$, $n\acute{o}\eta$ and $b\acute{u}\eta$ are cumulative coordinators; $d\grave{a} ?g \gt{o}$ is a restrictive one meanwhile $k\grave{o}$ coordinates alternative clauses as shown in the examples below:

(3)

- a. Tâlá pú Băkâm kə tsú msé
 Tala COORD Bakam PST2 eat fufu corn
 "Tala and Bakam ate fufu corn"
 - b. Tâlá kà sòk m-táp náŋ tíTala PST2 wash PL-shoe COORD sleep"Tala washed shoes and slept"
 - c. Tâlá gɔtí və ŋwàʔnə biŋ ŋké yɔmsí

 Tala FUT2 write letter COORD read gospel

 "Tala will write the letter and will read the gospel"

(4)

- a. Tâlá kờ sòk m-táp dà?gə e kàtə jɔ̃nɔ́

 Tala PST2 wash PL-shoe COORD 3SG PST2.NEG dry

 "Tala washed the shoes but he didn't dry them"
- b. Tâlá gotí né mkó kè e gotí tʃú? pò
 Tala FUT2 cook beans COORD 3SG FUT2 pound cocoyam
 "Tala will cook beans or he will pound cocoyam".

In the examples above, the presence of the coordinative particles $n \acute{a} \eta$, $b \acute{i} \eta$, $k \grave{a}$ and $d \grave{a} ?g \imath$ rules out a monoclausal reading of these structures. Moreover, temporal features are expressed once in

cumulative structures (3) whereas in (4), each conjunct has its own tense marker. In (3c), the subject of the first conjunct controls that of the second. Given Baker (1989)'s generalization according to which covert coordination does exist in serializing languages, it can be argued that Ghəmálá' object sharing SVCs are not instances of covert coordination. The main evidence of this fact is that the object of an SVC structure can be extracted as shown in (5) below. This operation is impossible in coordinate structure given the coordinate structure constraint (Ross 1967).

(5)

a. Tâlá kờ <u>vờ</u> ŋwà?ɲờ <u>ŋké</u>

Tala PST2 <u>write</u> letter <u>read</u>

"Tala wrote a letter and read it"

b. A bə ŋwàʔnə jə Tâlá kə və ___ nke aá

It be letter REL Tala PST2 write read REL

"It is the letter that Tala wrote and read"

5.1.3. Serial verb construction vs. Consecutivization

The main distinction between serial verb constructions and consecutive constructions relies on their intonational properties in Ghomálá'. SVCs have a single intonation contour, while consecutive constructions have phonological break which corroborate with their interpretation as multi-clausal unit. Moreover, subject argument of each verb occurring in a consecutive structure can be overtly expressed as shown below:

(6)

a. Tâlá gɔtí lǔ si sòk sídjð khím gɨnòm
Tala FUT2 wake up wash floor feed pig
"Tala will wake up, sweep the floor and feed the pig."
b. Nɔňô kð tú? ʃjð pjð kwð
Nono PST2 draw water 1PL.NOM carry
"Nono drew water and we carried it"

5.1.4. Serial verb construction vs. subordinate structure

A subordinate clause is different from SVC by the presence of a subordinative particle which rules out a monoclausal interpretation. This indicates that in subordinate structures, the

subject and the temporal setting might be overtly expressed. Temporal features, aspectual value, negation as well as core arguments are not shared.

Ghəmálá' uses different strategies to encode subordination. It can be indicated either by nominalization within an infinitival clause with $n\dot{\delta}$ "to (in order)" or by various subordinative particles such as $d_3j\dot{\delta}g\dot{\delta}$ "so that", $g\dot{\delta}$ "that", $t\dot{\delta}$ "until", $p\dot{\alpha}$? "as" as highlighted in the following data:

(7)

- a. Tâlá gɔtí yɔ gó dʒjə́gə́ é gɔtí káp pjà

 Tala FUT2 go farm SUB 3SG.NOM FUT2 pick avocado

 "Tala will go to farm so that he will pick avocado"
- b. Bǎkàm kè wə ŋkwέ gó é gɔtí γɔ gŏ Bakam PST2 PROG think COMP 3SG FUT2 go farm

"Bakam was thinking that she will go to farm"

As shown in the data above, the presence of the subordinators $d\vec{z}j\dot{z}g\dot{z}$ (7a) and $g\dot{z}$ (7b) eliminate a monoclausal interpretation of these sentences. Moreover, core arguments, temporal setting as well as aspectual feature are overtly expressed in each conjunct.

Let us consider the examples below that distinguish SVCs from subordination by infinitival construction.

(8)

- a. Tâlá kờ <u>sò? là?tə</u> á

 Tala PST2 <u>come show</u> 1SG.ACC

 "Tala came and showed me."
- b. Tâlá kờ sò? nó là?tə á

 Tala PST2 come INF show 1SG.ACC

 " Tala came to show me."
- (9)a. Tâlá gɔtí <u>yɔ tʃə́ŋ</u> m-táp

 Tala FUT2 <u>go search</u> PL-shoe

 "Tala will go and look for shoes."
- b. Tâlá gɔtí γɔ nɨ tʃəŋ m-táp Tala FUT2 go INF search PL-shoe

"Tala will go to look shoes."

In (9) above, the same proposition is casted in a serial verb construction (8a and 9a) as opposed to subordination by infinitival construction (8b and 9b). Morphologically, the subordinate forms are reduced in that they do not inflect for tense. Besides, the significant distinction between these sentences is that the subordinate construction semantically indicates intentionality, meanwhile the serial verb construction expresses the idea of sequentiality.

5.2. Types of serial verb constructions

According to Aikhenvald (2006:21) and Kiebling (2011:30), in terms of their composition, serial verb constructions fall into two broad classes: symmetrical and asymmetrical SVCs. This opposition corresponds to Osam (2003)'s distinction between clause chaining serialization and integrated serial verb construction in Akan. It also matches with Foley and Olson (1985)'s dichotomy of core layer serialization vs. nuclear layer serialization. This section aims at classifying Ghomálá' verb series on the basis of their composition following Aikhenvald (2006)'s repartition. In addition to their composition, SVCs are also classified following their semantic functions. In fact, SVCs are cross-linguistically used to express a wide range of functions amongst which direction and orientation, benefactive, comparative, modality, instrumental...etc.

5.2.1. Asymmetrical serial verb constructions

This class of SVCs may be made up of one verb from a large, open or unrestricted class and another from a semantically or grammatically restricted or closed class. As Aikhenvald (1999) claims, they denote a single event described by the verb from an unrestricted class. Following Durie (1997), the verb from an open class is referred to as a major verb whereas the term minor verb or coverb (Kiebling 2011:90) is used for the verb selected from a grammatically restricted class. The latter tends to get grammaticalized as it is the case of the Ewe verb *na* "give" which becomes a functional particle, namely a benefactive marker in this Kwa language (Ameka 2002:2). The minor verb provides a modificational specification to the whole construction. Semantic subclasses of asymmetrical SVCs in Ghomálá' are addressed below.

5.2.1.1. Direction and orientation

As claimed by Aikhenvald (2006:22), this type of serial verb construction is extremely attested in serializing languages. Also referred to as deictic SVC (Givon 1991:139), this kind of serial verb construction is made up of a minor verb which is typically a verb of motion or

movement with the semantics of orientation. The following Ghəmálá' SVCs encode the idea of orientation.

(10)

a. Tâlá gɔtí <u>là</u> dzó <u>sò?</u>

Tala FUT2 <u>take</u> clothe <u>come</u>

"Tala will bring clothe."

b. Tâlá gɔtí <u>là</u> lùŋgá <u>gɔ́</u>

Tala FUT2 <u>take</u> bucket <u>go</u>

"Tala will take away the bucket."

In the data above, the minor verbs are $s\partial 2$ "come" and $g\delta$ "go" whereas the major verb is $l\partial$ "take". The motion verbs $s\partial 2$ "come" and $g\delta$ "go" provide directional specification to the serial verb construction. $L\partial s\partial 2$ "take-come" means "bring" meanwhile $l\partial g\delta$ "take-go" encodes "take away". Moreover, the motion verb $g\delta$ ($g\delta$) has been grammaticalized in the language. In addition to its lexical status as in (10b) above, this verb is widely used as the root marker of future tenses. Indeed, when we observe the form of future tense markers in Ghomálá', one may notice that the particle $g\delta$ is common to all these future morphemes. What fundamentally changes is the particle that refers to the time frame as shown below:

Table 13 : Ghəmálá' future tense markers

Markers	Segmentation	Time frame	Type of future
дэүә	дэ-үә	few minutes or hours	Immediate future (FUT1)
gɔtí	gɔ-tí	a day or several days	Near future (FUT2)
gɔt∫wə́	gɔ- t∫w ớ	some months or few years	Distant future (FUT3)
gɔlá?	gɔ- lá?	undetermined time	Hypothetic future (FUT4)

5.2.1.2. Aspect and tense

Some asymmetrical serial verb constructions often encode aspectual meanings. Cross-linguistically, the minor verbs used in this type of verb series impart the semantics of progressive, habitual, continuative, or iterative meanings (see Aikhenvald 2006:185). Aikhenvald (2006:23) acknowledges that aspectual meanings expressed with SVCs may correlate with tense, but she have not found an example of an SVC used just for encoding tense. As it will be illustrated below,

Ghomálá' used SVCs for imparting both aspect and tense. More precisely, Ghomálá' native speakers use a serial verb construction to encode iterative meaning and to express future tense especially within imperative structures.

(11)

- a. Tâlá kỳ kwì? dəŋ ŋkápə

 Tala PST2 increase amount money

 "Tala increased the amount of money."
 - b. Tâlá kờ <u>kwì? há</u> ŋkáp bî pú

 Tala PST2 <u>increase give</u> money to 3PL.DAT

 "Tala again gave them money"

(12)

- a. Tâlá kờ ló?ɲə tí

 Tala PST2 quickly sleep

 "Tala slept early."
- b. Po <u>tí</u> <u>sòk</u> mtáp!

 2PL.NOM <u>sleep wash</u> shoes

 "Wash the shoes tomorrow!"

 (13)
- a. Tâlá kờ t∫wó sim

 Tala PST2 stay market

 "Tala spent time in the market
- b. tʃwɨ kwɨ pa?stay build house"Build the house next year"

In (11a, 12a, 13a), the verbs kwi? "increase", ti "sleep" and tfwó "stay" are respectively used in a non-SVC structures. When they co-occur with another verb in the same clause, they encode new semantic function. In (11b), kwi? is an aspectual marker; it is used to express the semantics of iterative. In (12b and 13b), ti and tfwó are respectively used as tense markers. They indicate the moment at which the action denoted by the following verbs will be done. As one may notice, the

verbs ti "sleep" and $tfw\dot{a}$ "stay" have been grammaticalized into future time frame particles (see the table in § 5.2.1 above).

5.2.1.3. Increasing valency

Certain kinds of asymmetrical serial verb construction are used as valency-increasing strategies. They are used to introduce various arguments as well as obliques. By doing so, they expand the argument structure of a given construction. Cross-linguistically, causatives, benefactives, instrumentals, and comitatives are encoded by serial verb constructions in serializing languages. As for Ghomálá', causation and instrumentation are typically expressed by verb series. The verb of causation is generally the first verb just like the verb introducing instrument in instrumental series as shown below:

(14)

a. Tâlá kỳ yà múnə já? ŋkədé
Tala PST2 make knife cut banana
"Tala made the knife cuts banana"
b. Tâlá kỳ là dʒɔm kó? thápjà
Tala PST2 take axe cut avocado tree
"Tala used an axe to cut avocado tree"

In the data above, the minor verbs are $y \hat{\sigma}$ "make" and $l \hat{\sigma}$ "take". Typical causative SVCs in Ghomálá' involve the coverb $y \hat{\sigma}$ "make"; thereby they are different from cause-effect serial verb constructions which are symmetrical series. The instrumental SVC in (14b) includes the verb $l \hat{\sigma}$ "take". Besides, the instrument of V2 is the theme of V1. The verb "take" is also used to derive associative or comitative (Aikhenvald 2006:26) SVCs. In these structures, it gets the meaning "be with" and introduces the associative argument as shown in the example below:

(15)

a. Tâlá kỳ <u>là</u> mû fò <u>sò?</u>
Tala PST2 <u>take</u> child chief <u>come</u>
"Tala came with the prince."
b. Băkám gɔtí <u>là</u> Nônă <u>ya</u> gŏ
Bakam FUT2 take Nono go farm
"Bakam will go to farm with Nono"

In some instrumental SVCs, the verb introducing the instrument describe the way in which the action of the other verb is performed as demonstrated below:

(16)

a. Tâlá kò <u>lò gyu</u> <u>pfá</u> bap

Tala PST2 <u>take strength</u> <u>eat</u> meat

"Tala quickly ate the meat"

b.Tâlá kò <u>lò kwè</u> <u>yòm</u>

Tala PST2 <u>take joke</u> <u>speak</u>

"Tala jokingly spoke"

Other types of valence increasing serial verb constructions are benefactive ones. In the language under study, benefactive SVCs include a verb of transfer and a preposition that introduces the beneficiary or recipient argument as illustrated by the data below:

(17)

a. Tâlá kỳ jó bẽ há bî Nônö
Tala PST2 buy pot give to Nono
"Tala bought Nono a pot"
b. Nônǒ kỳ vỳ ŋwà?nỳ tʃjà bî máp e
Nono PST2 write letter send to mother 3SG.1.POSS

"Nono send her mother a letter"

The minor verbs in (17) above are the verbs of transfer $tfj\grave{a}$ "send" and $h\acute{a}$ "give". The preposition $b\^{i}$ "to" indicates that the following DPs, namely $N\^{o}n\~{o}$ and $m\acute{a}p~e$ "her mother", are the beneficiaries of the action described by the first verbs.

5.2.1.4. Comparison

Asymmetrical serial verb constructions are also used to encode comparative and superlative meanings. This kind of verb series always involve verbs with a meaning of "exceed" as minor verb. In a West Chadic language spoken in Nigeria like Goemai, the verb imparting the comparative meaning to the whole construction is translated as "surpass". This is illustrated in (18) below:

(18) kuma <u>f yer</u> <u>ma</u> ni
also <u>become.big (SG)</u> <u>surpass</u> 3SG

"And (he) has grown bigger than him" (Hellwig 2006:101)

As far as Ghomálá' is concerned, serial verb constructions are used to mark comparison. As a matter of fact, verb series with comparative meaning in the language under study include the verb $tfj\dot{\rho}$ "surpass" as V₂. Moreover, this verb has been grammaticalized into a comparative marker. The following data (19) are instances of comparative SVCs whereas those in (19) show that the minor verb $tfj\dot{\rho}$ serves as a comparative maker elsewhere.

(19)

- a. Nônǒ kờ tí t∫jờ Tâlá Nono PST2 <u>sleep surpass</u> Tala "Nono slept more than Tala"
- b. Băkâm <u>twà</u> <u>tʃjà</u> Nônð

 Bakam.PRS <u>be beautiful surpass</u> Nono

 "Bakam is more beautiful than Nono".

(20)

- a. Tâlá kờ fòŋ mờtwâ tʃjờ táp e

 Tala PST2 drive car COM father 3SG.1.POSS

 "Tala drove car more than his father"
- b. Nônô gotí tsú msč tʃjò pó
 Nono FUT2 eat fufu corn COM pounded cocoyam
 "Nono will eat more fufu corn than pounded cocoyam"

As it has been shown in this subsection, Ghomálá' has enriched his functional particles stock with the grammaticalization of minor verbs that occur in serial verb constructions. Some TAM particles as well as the comparative marker in Ghomálá' are the outcomes of the grammaticalization process that targets some verbs.

5.2.2. Symmetrical serial verb constructions

Unlike asymmetrical serial verb constructions, this class of SVCs is made up of verbs selected from unrestricted classes. According to Kiebling (2011:37), symmetrical SVCs indicate an immediate succession of events or actions in a sequence which is characterized by tight logical

and temporal coherence. In this vein, the order of components tend to be iconic, mirroring the temporal sequence of subevents. Following Aikhenvald (2006:22), all the components of symmetrical SVCs have equal status since none of them determines the semantic or syntactic properties as a whole. Semantic subclasses of symmetrical SVCs in Ghomálá' are discussed in the following lines.

5.2.2.1. Sequential serial verb constructions

Also referred to as consecutive serial verb constructions (Stewart 2001), the order of components follows the temporal sequence of subevents described by each verb of the series as illustrated below:

(21)

a. Tâlá kò <u>né</u> bap <u>pfá</u>

Tala PST2 <u>cook</u> meat <u>eat</u>

"Tala cooked meat and ate it"

b. Nônǒ gotí <u>yèm</u> Bǎkâm <u>pú?</u>

Nono FUT2 <u>catch</u> Bakam <u>beat</u>

"Nono will catch Bakam and beat her"

In the above examples, the verbs are linked by a temporal sequence in which the event encoded by the first verb is performed before the one of the second verb. Accordingly, V1 and V2 express consecutive events. In other words, the action described by the second verb closely follows the one that is expressed by the first verb. Data in (21) also show that there are two transitive verbs that have one shared object sandwiched between them. Moreover, no overt pronoun appears after the second verb. It is relevant to note that this type of sharing has been a very popular object of generative inquiry in serializing languages (Baker 1989, Collins 1997, Hale 1991, Hiraiwa & Bodomo 2008, and Aboh 2009).

5.2.2.2. Cause-effect or resultative serial verb constructions

This kind of symmetrical SVCs have an iconic component order. Indeed, the verb of causation always precedes the verb that refers to the effect or the result. The following constructions are instances of cause-effect SVCs in Ghomálá'.

(22)

a. Tâlá kà t∫ò mú lò
Tala PST2 beat child cry
"Tala made child cry by beating him"
b. Nônǒ ka t∫ám ké sò
Nono PST2 hit plate split
"Nono shattered the plate"

As it is shown in the data above, the action expressed by the second verb is caused by that of first verb. In (22a) for example, the child cried as Tala beat him as well as the plate is shattered because Nono hits it. Furthermore, the object of the first verb is the subject of V2. The verbs involved in the series have a relation of causality, thereby are similar to causative SVCs. As Aikhenvald (2006:16) pointed out, causative SVCs are asymmetrical since the verb that refers to causation in the series comes from a closed set of transitive verbs; while cause-effect SVCs tend to be symmetrical. They are switch-function SVCs. As for Ghəmálá', the two types of SVCs are iconic, that is the verbs encoding causation always precedes the verbs referring to the consequence. Causative SVCs involve the verb ya "make", while cause-effect SVCs include any transitive verb.

5.2.2.3. Manner serial verb constructions

In this kind of symmetrical SVCs, the first verb describes the way in which the action expressed by the second is performed. The first verb functions as a modifier of the action encoded by the second verb. So, the first verb is the modifying verb whereas the second verb is the main verb. As far as Ghomálá' is concerned, the language uses two strategies to convey manner serialization, namely increasing valency strategy and simple strategy. Increasing valency refers to the fact that some instrumental series in the language are also used to impart manner serialization as it has been shown in (14) above (see § 5.2.1.3). The other strategy is the raison d'être of the data in (23) below:

(23)

a. Tâlá kə <u>jómnó</u> <u>fa?á</u>

Tala PST2 <u>be slow work</u>

"Tala worked slowly"

b. Tâlá gɔtí <u>loʔnə</u> <u>pfá</u> bap
 Tala FUT2 be quick eat meat
 "Tala will quickly eat the meat".

Most of the first verbs appearing in manner serialization in Ghomálá' have been identified as adverbs elsewhere (Foba 2015:94).

5.3. Morphosyntactic properties of Ghəmálá' SVCs

This section aims at discussing the morphosyntactic features of serial verb constructions in Ghomálá'. In doing so, the expression and marking of grammatical categories within SVCs as well as their interaction with question formation and focalization are also addressed.

5.3.1. Marking of grammatical categories

The monoclausality of serial verb constructions in Ghomálá' can be mirrored through the single marking of verbal categories such as tense, aspect and negation. It can also be captured through some morphosyntactic operations, namely nominalization and subordination.

5.3.1.1. Tense

These functional categories are marked once per serial verb construction in Ghomálá' as it can be noticed in the following data:

(24)a. Nônǒ gɔtí là jwátsú sò?

Nono FUT2 take food come

"Nono will bring food."

b.*Nônǒ là jwátsú gɔtí sò?

Nono take food FUT2 come

"Nono will bring food."

c. *Tâlá kà jó mtáp kà fin

Tala PST2 buy shoes PST2 sell

"Tala bought shoes and sold them

As it is shown in (24) above, single marking of tense is attested in the language under study. In (24a), the two verbs, $l \hat{\sigma}$ "take" and $s \hat{\sigma} \hat{\sigma}$ "come", share the same tense marker "gotí", though this latter appears just before the first verb. This tense particle has scope over the two verbs of the construction. Data in (24b andc) rule out the possibility for the tense marker to be marked either on the second verb or on each components of the series.

5.3.1.2. Aspect

This verbal category is expressed diversely within Ghomálá' verb series. Single and concordant markings of aspect are both attested in the language. This property can be mirrored in the data below:

- (25) a. Tâlá kỳ jó mtáp wý fin Tala PST2 buy shoes PROG sell "Tala was buying shoes and was selling them" b. Bǎkâm kỳ wý lỳ nkáp gǐ Bakam PST2 PROG take money go "Bakam was taking away the money"
 - c. Bǎkâm kà **w**á <u>n</u>ɛ́ msɛ́ **w**á <u>dź́</u>

 Bakam PST2 **PROG** <u>cook</u> fufu corn **PROG** <u>eat</u>

 "Bakam was cooking fufu corn and was eating it."
 - d. * Bǎkâm kà **w**á <u>là</u> ŋkáp **w**á <u>gǎ</u>

 Bakam PST2 **PROG** <u>take</u> money **PROG** <u>go</u>

 "Bakam was taking away the money"

Data in (25a and b) show that aspect can be marked once per serial verb construction. The aspect particle can appear either on the first verb or on the second one and has the scope over the two verbs. The construction in (25c) demonstrates that each verb in Ghɔmálá' SVCs can have its own aspect marker. However, this property is restricted to consecutive SVCs as (25d) implies. Moreover, (25a) indicates that functional elements can occur between V1 and V2. This will be significant when the issue of derivation of SVCs will be addressed.

5.3.1.3. Negation

Just like tense, negation receives a single marking per serial verb construction in Ghomálá'. As claimed by Kari (2003), verbs in series are not independently negated such that any attempt to negate serial verbs independently, like when the verbs appear in simple constructions from which SVC derives, renders them illegible. Let us observe the following data:

b. Tâlá kàtə jó mtáp fin (pé)
 Tala PST2.NEG buy shoes sell NEG
 "Tala did not buy shoes and sell them."

(27) a. *Nônǒ gotí là jwátsú tâ sò? pá

Nono FUT2 take food NEG come NEG

"Nono will not bring food."

b. *Tâlá kàtə jó mtáp **pó** kàtə fìŋ **pó**Tala PST2.**NEG** buy shoes **NEG** PST2.**NEG** sell **NEG**"Tala did not buy shoes and sell them."

The data in (26) above reveal that negation is marked once in the serial verb construction by the discontinuous morphemes $t\hat{\partial}...p\hat{\partial}$. The first particle appears immediately before the verb while the second occurs at the sentence final position. Data in (27) show that it is impossible for each verb of the series to have its own negative morpheme (27b) just like the negative particle cannot appear on the second verb (27a). Even though the first particle is placed before the first verb, it has scope over the other verb of the series.

5.3.1.4. Nominalization

Nominalization is a word class changing derivation process which generally turns verbs into nouns. It was been argued in chapter 3 that the infinitive particle also acts as a nominalizer in Ghəmálá' since the infinitive form is a nominalized form of the verb (see § 3.2.1 above). It is important to note that, in the language under study, verbs are also turned into nouns via reduplication. However, this process is restricted to the derivation of agents. As for serial verb constructions, they receive a single marking of nominalizer per construction as it can be mirrored in the data below.

(28)a. Tâlá kò <u>vò</u> ŋwà?nò <u>nké</u>

Tala PST2 write letter read

"Tala wrote a letter and read it"

b. Jú **nó**-vò ŋwà?nò ké kò tʃjò Bǎkâm 2SG.3.POSS **INF**-write letter read PST2 surpass Bakam

"YOUR writing and reading of the letter surpassed Bakam"

- c. *Jú **nó**-vò ŋwàʔnò **nó** kê kò tʃjò Bǎkam 2SG.3.POSS **INF**-write letter **INF**-read PST2 surpass Bakam "YOUR writing and reading of the letter surpassed Bakam"
- d. *Jú và ŋwà?ɲà **nó-**kê kà tʃjà Bǎkâm 2SG.3.POSS write letter **INF**-read PST2 surpass Bakam

"YOUR writing and reading of the letter surpassed Bakam"

As shown in the above data, serial verb constructions are nominalized the way monoverbal constructions are. The nominative morpheme appears on the first component and has scope over the second component. As example (28c) implies, each verb cannot have its own nominalizer. Similarly, it is impossible to see the nominalizer occurs on the second verb (28d). This nominalization process for SVCs is another evidence of their monoclausal status.

5.3.1.5. Subordination

The monoclausal status of serial verb constructions can also be captured in their syntactic behavior especially within subordination. As Rose (2009) observed, serial verb constructions can form a unique predicate of a subordinate clause introduced by a single relativizer or subordinator, just like any single verb. The following examples are instances of subordinate clauses including SVCs.

- (29) a Mtáp **mjə** Tâlá kỳ <u>jó fìn</u> **á** kátə pun shoes **4REL** Tala PST2 <u>buy sell</u> **REL** PST2.NEG be good "Shoes that Tala bought and sold were not good."
 - b. Nônǒ kwè **gó** Bǎkâm gotí <u>lò</u> jwótsú <u>sò?</u>

 Nono think **COMP** Bakam FUT2 <u>take</u> food <u>come</u>

 "Nono thinks that Bakam will bring food."
 - c. Nó-jômnó fá? jo Tâlá kùŋ á tô gɔlá? kwîtə pó

 INF-be slow work 3REL Tala like REL NEG FUT4 help NEG

 working slowly that Tala likes will not be helpful

 "The fact that Tala likes to work slowly will never be helpful."

The examples above show that subordinative particles are marked once per construction involving verb series. In (29a), the sandwiched object of the SVC is relativized, a further evidence that Ghomálá' SVCs are not instances of covert coordination. In (29b), an SVC is part of the

subordinate clause introduced by the complementizer $g\dot{\delta}$, while in (29c) it is the verb series which is relativized via nominalization.

5.3.2. Question and Focus marking

In Ghomálá' just like in Ewe (Ameka 2006:140), components of serial verb constructions can be questioned and focused separately. As for question marking, yes/no questions are signaled by the utterance of final particles a or b (Tala 2015: 68). Even though these interrogative particles are marked once per SVC and they appear at the sentence final position, they can have scope over all the components of the series. Their scope could also be restricted on only one verb of the series. Let us observe the data in (30) below:

(30)a. Tâlá kỳ jó mtáp fiṇ

Tala PST2 buy shoes sell

"Tala bought shoes and sold them"
b. Tâlá kỳ jó mtáp fiṇ a?

Tala PST2 buy shoes sell QM

"Did Tala buy shoes and sell them?"
c. Tâlá kỳ sòk mtáp fiṇ

Tala PST2 wash shoes sell

"Tala washed shoes and sold them."

d. Tâlá kờ <u>jó</u> mtáp <u>sòk</u>

Tala PST2 <u>buy</u> shoes <u>wash</u>

"Tala bought shoes and washed them."

The question in (30b) above can be answered in several fashions, indicating thereby components on which the question particle has scope. It can be answered by "yes, Tala did buy and sell" or "no, Tala didn't buy and sell" where the scope of the question is over both verbs. However, it can also be answered with either (30c), implying question scope over the second verb, or (30d), implying question scope over the first verb. Moreover, components of SVCs can be individually questioned using the content question strategy as shown below:

(31)a. Tâlá kờ <u>jó</u> mtáp <u>fìŋ</u>

Tala PST2 <u>buy</u> shoes <u>sell</u>

"Tala bought shoes and sold them"

- b. Tâlá kà jó mtáp yà ká?Tala PST2 buy shoes do what?"What did Tala buy shoes and do?"

In the above examples, content questions are marked by the interrogative determiner $k\dot{\phi}$. To question a VP or a happening, the wh-phrase $k\dot{\phi}$ "what" and the functional verb $\gamma\dot{\phi}$ "do" are employed. The verbs forming the SVC in (31a) can each be questioned, as in (31b) and (31c). As far as focus is concerned, each component of a serial verb construction can be focused. In Ghɔmálá', verb focus is realized via predicate doubling. The two copies of the verb occur IP-internally and convey a contrastive reading. The following data are instances of focalization of SVC components.

- (32) a. Bǎkâm kà <u>né</u> msé <u>tsú</u>

 Bakam PST2 <u>cook</u> fufu corn <u>eat</u>

 "Bakam cooked fufu corn and ate it."
 - b. Bǎkâm kà <u>né</u> msé <u>né</u> <u>tsú</u>

 Bakam PST2 <u>cook</u> fufu corn <u>cook</u> <u>eat</u>

 "Bakam COOKED fufu corn and ate (as opposed to *roasted*)"
 - c. Bǎkâm kò <u>né</u> msé <u>tsú tsú</u>

 Bakam PST2 <u>cook</u> fufu corn <u>eat eat</u>

 "Bakam cooked fufu corn and ATE it (as opposed to *sold*)"
 - d. *Bǎkâm kà <u>né</u> <u>tsú</u> msé <u>dzú</u>

 Bakam PST2 <u>cook</u> <u>eat</u> fufu corn <u>eat</u>

 "Bakam cooked fufu and ATE it."

As shown in the examples above, each verb of the series can be focused. Verb focusing in Ghɔmálá' is derived mainly by duplication of the verb IP-internally. The complement of the clause is thereby sandwiched between the two copies of the verb. What particularly happens with an SVC is that the focalization of the first verb exhibits this pattern; the object is effectively sandwiched between the two verb copies as in (32b) above. This is not the case with the second verb focusing

where the two verb copies are contiguous (32c) and any insertion of the object between the copies leads to ungrammaticality (32d). This could be an indication that object sharing in Ghəmálá' SVCs is asymmetrical.

5.3.3. Argument structure

It has been argued that serial verb constructions are monoclausal and represent a single predicate. By being so, they share at least one argument, mostly the external argument. This subsection takles the transitivity properties of SVCs components.

Most of the verbs that occur in a serial verb constructions generally share the same Agent. This is the case of some SVCs in Ghomálá' which generally combines a two-place predicate verb with an intransitive one. This combination does not rend the argument structure of the whole clause more complex than that of one of its component. For example, the verbs occurring in the SVC in (33) below have the following subcategorization frames: $l \hat{\sigma}$ "take" c-selects two XP and $s\hat{\sigma}$ "come" c-selects one XP.

(33) Tâlá gɔtí <u>là</u> dzá <u>sò?</u>

Tala FUT2 <u>take</u> clothe <u>come</u>

"Tala will bring clothe."

As one may notice, the argument structure of this clause is not the sum of the arguments of each component. This SVC is a two-place predicate clause selecting $T\hat{a}l\dot{a}$ as Agent and $dz\dot{a}$ "clothe" as Theme. SVCs combining an intransitive verb with a transitive one are two-place predicate constructions.

Similarly, there are some SVCs which, in addition to the external argument, share an internal argument. These are bona fide serial verb constructions (SVCs) because they obey the Argument-Sharing Hypothesis. Accordingly, the Argument Sharing Hypothesis states that, in a serial verb construction, V1 and V2 must share an internal argument (Collins 1997:463). The following data are instances of SVCs sharing an internal argument.

(34) a. Tâlá kỳ là dʒɔm kó? thápjà
Tala PST2 take axe cut avocado tree
"Tala used an axe to cut avocado tree"
b. Tâlá kỳ γὲ múnə já? ŋkədé
Tala PST2 make knife cut banana

"Tala made the knife cuts banana"

- c. Tâlá kỳ j<u>ó</u> b<u>ě</u> h<u>á</u> bî Nônð

 Tala PST2 <u>buy</u> pot <u>give</u> to Nono

 "Tala bought Nono a pot"

 d. Nônð gɔtí <u>yèm</u> Bǎkâm <u>pú?</u>

 Nono FUT2 <u>catch</u> Bakam <u>beat</u>
 - "Nono will catch Bakam and beat her"

Each SVC above shares an internal argument. In (34a), the theme of V_1 (là "take") is the instrument of V_2 (kó? "cut"). By the same token, the theme of V_1 in (34b) is the agent of V_2 . In (34c), V_1 and V_2 share the same theme whereas in (34d) they share the same patient. Internal argument sharing SVCs have been of particular theoretical interest because of the issue of how to formally represent object sharing (Baker 1989, Hale 1991, Collins 1997 and Aboh 2009).

5.4. Derivation of serial verb constructions

Most of the propositions on how to formally represent serial verb constructions 'structure relies on the argument sharing hypothesis. These proposals posit the argument sharing hypothesis as a necessary condition on serialization and argue for a serializing parameter. This parameter is formulated by Collins (1997:493) as follows: "I (tense) can license multiple Vs".

In this vein, Baker (1989)'s double-headed structure with a ternary-branching structure in which the object is shared by the two verbs (see § 1.3.1 above) cannot account for the structure of object-sharing SVCs in Ghəmálá'. Indeed, apart from being ruled out by modern approaches to phrase structure, the syntactic behavior of Ghəmálá' SVCs when they are focused clearly shows that object sharing is asymmetrical in narrow syntax. More precisely, as highlighted by the data in (32) above, the direct object can only be pied-piped with V₁ in Ghəmálá' under predicate doubling. Baker (1989)'s double-headed structure just like Hale (1991)'s VP-adjunction structure seem to be more appropriate for symmetric object-sharing structures like in Dàgáárè (Hiraiwa and Bodomo 2008).

Similarly, Collins (1997)'s VP-shell structure is based on the mediation of object-sharing by an empty category namely pro, to which the second verb assigns its semantic role and it is coindexed with the object of the first verb. However, there is no evidence of the existence of an empty category within Ghomálá' SVCs. Morever, the serializing parameter as formulated by Collins (1997) stipulates that I (tense) can license multiple Vs not multiple Is. As a matter of fact,

it has been shown that I-type functional elements that expresses aspect specifications can occur between V_1 and V_2 (see example (25) in § 5.3.1.2 above). Just like in Edó, certain middle-field adverbs which Stewart (1998) treats as heads, can appear between the shared object and V_2 in Ghomálá' as shown below:

- (35) a. Bǎkâm kà <u>né</u> msé **tʃəŋtá** <u>dzú</u>

 Bakam PST2 <u>cook</u> fufu corn well <u>eat</u>

 "Bakam cooked fufu corn and ate it well."

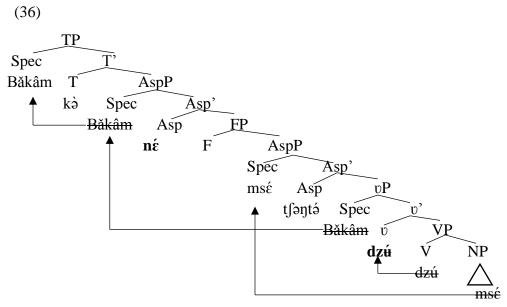
 b. Tâlá gɔtí <u>jó</u> mtáp <u>là gyu</u> <u>fìŋ</u>
 - b. Tâlá gɔtí <u>jó</u> mtáp <u>là gyu</u> <u>fìŋ</u>

 Tala FUT2 <u>buy</u> shoes quickly sell

"Tala will buy shoes and quickly sell them"

These examples show that any derivation based on argument sharing hypothesis cannot account for Ghəmálá' SVCs structures. Thus, Aboh (2009)'s proposal according to which the argument sharing hypothesis is not a necessary condition on serialization will be adopted.

Aboh (2009) proposes an analysis of serial verb construction which is not based on argument sharing hypothesis. Indeed, Aboh argues that the space between V_1 and V_2 involves more syntactic positions than previously assumed because it may involve tense, aspect markers, adverbs and clitic pronoun. He therefore proposes an analysis in which, given the temporal iconicity condition, the first verb merges as a functional (verbal) element within the extended projection of the lexical verb (the second verb) that introduces the arguments. The data in (25) is an evidence that there is an aspect head between V_1 and V_2 . Moreover, the examples in (35) above show that adverbs can occur between V_1 and V_2 . Following Cinque (1999)'s analysis of adverbs as expressions of functional projections namely AspPs, these examples are an evidence of the existence of an aspect position between V_1 and V_2 . On the basis of what has been exposed above, the following tree diagram is the representation of the construction in (35a).

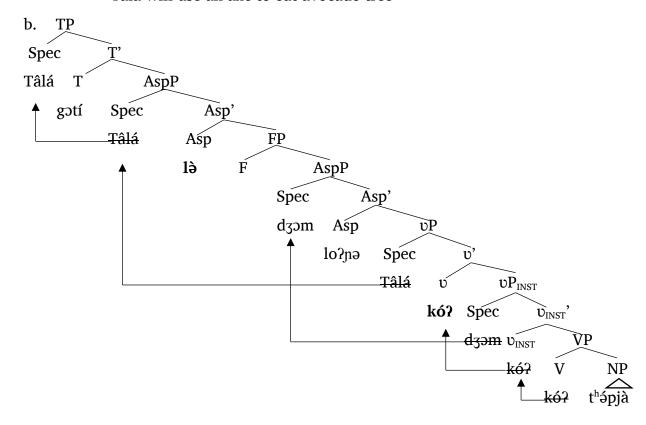


The derivation of the instrumental SVCs in (37a) is represented in (37b) below:

(37) a. Tâlá gɔtí <u>là</u> dʒɔm loʔnə <u>kóʔ</u> tʰə́pjà

Tala FUT2 <u>take</u> axe quickly <u>cut</u> avocado tree

"Tala will use an axe to cut avocado tree"



In the above tree diagrams, V1 is merged in a functional projection, the higher AspP. In this position, it doesn't have an internal theta-role to assign but selects for complement within which the object is being licensed. In (37b), the instrument is introduced by the lower vP and it latter move to the specifier position of the lower AspP. The main issue now is how to account for the structure of focused SVCs. This will be the object of future inquiry.

Conclusion

In this last chapter, the morphosyntactic properties of serial verb constructions in Ghomálá' have been addressed. In this vein, formal properties that characterize serial verb constructions have been addressed as well as diagnostics that differentiate SVCs from other multiverb structures in Ghomálá'. Ghomálá' SVCs are used to impart various semantic functions amongst which, direction, aspect and tense, comparison...etc. Looking at the marking of grammatical categories, tense, negation, nominalizer as well as subordinators are marked once per SVC in the language under study. However, each component of a SVC can have its own aspect marker just like it can be either focused or questioned. On the basis of their morphosyntactic behaviors, it has been argued that any analysis built on the argument sharing hypothesis cannot account for Ghomálá' data. Following Aboh (2009), it has been argued that the first verb is functional and does not theta-mark the apparently shared object. As an indication, most of the semantic functions imparted by SVCs are mostly encoded by the first component in Ghomálá'.

GENERAL CONCLUSION

The general objective of this work was to examine the morphosyntactic properties of two verbal constructions namely inherent complement verbs and serial verb constructions. In doing so, apart from the general introduction, the dissertation has been structured into five chapters.

The general introduction sets the scenery by presenting the objective of the study, its motivations, the methods used in data collection as well as the language under study. It also provides a sketchy review of previous works on the language with a special focus on works related to the topic addressed in this dissertation.

Chapter one presents the theoretical assumptions adopted in this work. The essential features and relevant aspects of the minimalist program have been discussed. This presentation was completed by a brief review of approaches to serial verb constructions as well as major contributions in the analysis of inherent complement verbs.

Chapter two provides background information on the grammatical aspects of Ghəmálá' based on previous studies on the language. Sound system, noun morphology, TAM features and basic clause structure have been addressed. The discussion revealed that Ghəmálá' is a tone and noun class Bantu grassfield language with an SVO order devoid of noun class prefixes. Subject-verb agreement signaled by a subject marker is not attested in the language. Negation is signaled by two particles that occur respectively at the sentence middle and final positions.

Chapter three was devoted to Ghomálá' verbs. Verbs have been classified following three criteria, namely the tone pattern, the syllable structure and the morphology of the verb. Two derivative morphemes are attested in the language. These morphemes encode different semantic interpretations (reflexivity, reciprocity, attenuative...etc.) and may affect the valency of the verb. As far as transitivity is concerned, the work has argued for a three way distinction of intransitive verbs in Ghomálá'. The first group is made up of verbs that fail to be transitivized and therefore, are strictly intransitive; the second group comprises verbs which can be transitivized but their subject argument in the intransitive clause becomes the object in the transitive construction; the third group gathers together verbs that also can be transitivized but their subject arguments remain subjects in both clauses. It has been argued that most of the transitive verbs in Ghomálá' can select

a generic-meaning DP as object. However, there are some verbs which do not take generic objects and require a more specific object.

Inherent Complement Verbs were the raison d'être of chapter four. In this chapter, I have addressed their morphosyntactic properties. In this vein, their formal features as well as their semantics have been discussed. Being compositional or metaphorical, ICVs in the language under study can be classified into regular and irregular. Their morphosyntactic features show that Ghəmálá' ICs can be pronominalized. This is an indication that IC bears phi-features in this language as opposed to Ga (Korsah 2011) or Gungbe (Aboh 2015). It has also been demonstrated that IC cannot be marked with a question feature in Ghəmálá'. As far as focalization is concerned, it has been argued that both the verb and its complement can be focused though the focused IC has a predicate focus reading. On the basis of these morphosyntactic properties, it have been claimed that Ghəmálá' ICVs are either intransitive or transitive. They purely merge under a functional position namely v° that selects an abstract VP which licenses a bare NP. This NP incorporates to the abstract V.

The last chapter tackles the morphosyntactic properties of serial verb constructions in the language under study. In doing so, formal properties of serial verb constructions have been addressed as well as diagnostics that differentiate SVCs from other multiverb structures in Ghomálá'. Ghomálá' SVCs are used to impart various semantic functions amongst which, direction, aspect and tense, comparison...etc. As for marking of grammatical categories, tense, negation, nominalizer as well as subordinators are marked once per SVC in Ghomálá'. Nevertheless, each component of a SVC can have its own aspect marker just like it can be either focused or questioned. On the basis of their morphosyntactic behaviors, it has been argued that any analysis built on the argument sharing hypothesis cannot account for Ghomálá' data. Following Aboh (2009), it has been argued that the first verb is merged under a functional position wherein it fails to theta-mark the apparently shared object.

The study of inherent complement verbs and serial verb constructions in Ghəmálá' reveals that there is a class of verbal roots that can merge in the predicate head or in the functional domain. It has been claimed that some functional items in Ghəmálá' are the results of the grammaticalization process that target minor verbs. However, this issue has not been deeply addressed here and need to be profoundly discussed in future research just like the syntax of idioms.

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