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FACULTY OF ARTS LETTERS
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UNIVERSITE DE YAOUNDE I

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FACULTE DES ARTS LETTRES ET
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DEPARTEMENT DE LANGUES
AFRICAINES ET LINGUISTIQUE

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Topic:

THE LEFT EDGE OF THE CLAUSE IN DUALA

A Dissertation Submitted to the Department of African Languages and Linguistics in Partial Fulfillment of the Requirements for the Award of a Master's Degree in Theoretical Linguistics

By

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DEDICATION

THIS WORK IS DEDICATED TO:

GOD ALMIGHTY

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ABSTRACT

This dissertation studies the left edge of the clause in Dùálá, a Bantu language spoken in the littoral region of Cameroon. The study is driven within the theoretical framework of the Minimalist Program, a theory initiated and developed by Noam Chomsky (1993, 1995, 1998, 1999 and 2001) and subsequent works. The main objective of this research is to offer a detailed account of the structural maps of the left edge of the clause in the language. The study takes into consideration the structures of interrogatives, focus constructions, topicalization and relative clauses. The study of interrogatives reveals that Dùálá is an optional wh-in situ language where wh operators are interpreted either in their canonical positions or in preposed positions. In the first case, wh operators are not analyzed as echo questions, but as genuine questions that require true answers. Such constructions exhibit move α at LF and obey the Wh-criterion. In the second case, wh-operators are displaced from their canonical positions in overt syntax. This movement of the wh operator is dictated by the need to satisfy the morphological requirements of the F feature on F^0. Yes/No questions are obtained in the language through the intonation and can co-occur with the focus particle *ndé*. Dùálá also appeals to indirect questions by the use of the lexical complementizer *ŋgá* "whether". Alternative questions are derived by the use of the conjunct *ŋgá* "or" that appears between two phrases or clauses. In the language, the particle (nɔ́) that occurs when an element crosses over the verb has been analyzed differently from previous studies. It is argued here that the particle is neither a marker of evidentiality nor an affixal resumption. The particle occurs as the result of the non valuation of the [uOp] features on T. The particle is therefore base-generated in T where it forms a complex head with the verb. The study of constraints reveals that NP and IP are bounding nodes and that wh-movement obeys subjacency. However, Dùálá is a null subject language and therefore immune to the Comp-trace filter. Focalization is morphologically marked in the language by the focus particle *ndé*. The discourse-related features in the VP periphery are only for verbs whereas the language resorts to the edge of the clause to mark the other types of foci. The language has a low focus within the vicinity of the verb. The topicalization of arguments shows that the language makes use of Hanging Topic Left Dislocation (HTLD) where the topicalized element is directly merged into Spec-TopP. On the contrary, the topicalization of adjuncts is obtained by the displacement of the topicalized element into Spec-TopP. Relativization is realized by the use of a phonetically realized relative operators. In Dùálá, relative clauses are instantiations of wh-movement. The Matching Analysis is therefore the more reliable approach in the study of relative clauses. The split-CP hypothesis by Rizzi (1997, 2001, 2004b) perfectly accommodates the Dùálá data. Briefly, the study reveals the following configuration for the left edge of the clause in the language:

(1) Force ... Mod ...Int ... Top ... Rel/Foc ... or

(2) Force...Int...Top ... Rel/Foc ...Mod ...

RESUME

Ce travail est une analyse syntaxique de la structure de la périphérie gauche de la proposition en Dùálá, langue Bantoue parlée dans la région du littoral au Cameroun. Cette étude est menée dans le cadre de théorique du Programme Minimaliste initié et développé par Noam Chomsky (1993, 1995, 1998, 1999 et 2001) et les autres. Le but principal est de présenter la cartographie de la périphérie gauche de la langue Dùálá d'une façon détaillée. L'étude prend donc en considération la formation des questions, du focus, de la topicalisation et des propositions relatives. Les résultats obtenus révèlent que le Dùálá est une langue où les syntagmes ‹‹Qu›› sont soient in-situ ou déplacés. Dans le premier cas, les questions obtenues ne sont pas des questions echo. Dans ce genre de construction, les syntagmes ‹‹Qu›› sont déplacés à la Forme Logique dans le but d'obéir au critère wh. Dans le second cas, les syntagmes ‹‹Qu›› sont déplacés à la forme de surface pour occuper le début de la proposition. Ces mouvements sont motivés par les besoins morphologiques de F en F^0 . Les questions indirectes sont obtenues grâce à l'intonation et peuvent être utilisées parallèlement avec le marqueur du focus ***ndé***. Dans le cadre des questions indirectes, la langue fait recours au complementeur lexical ***ŋgá*** ‹‹Si›› . De même, dans les questions alternatives, nous avons ***ŋgá*** utilisé cette fois ci entre deux constituants. La particule -nɔ́ qui apparait chaque fois qu'un élément est déplacé à la gauche du verbe est également analysé. L'étude suggère que la particule n'est ni un marqueur d'evidentialité ni pronom résomptif. La particule résulte du non valuation des critères [uOp] de T. La particule est générée en T. Ou elle forme une tête complexe avec le verbe. L'étude des contraintes révèlent que syntagme nominal et de l'inflexion sont des nœuds branchant et les syntagmes ‹‹Qu›› obéissent à la soujacente. La focalisation est marquée grâce au marqueur ***ndé***. Il peut être réalisé in situ ou ex situ. La langue a par conséquent un ‹‹low focus›› dans le domaine du verbe. Lors de la topicalisation des arguments, on a affaire au ‹‹Hanging Topic Left Dislocation›› ou l'élément topicalisé est directement généré au Spec-TopP. Au contraire, la topicalisation des adjoints est obtenu par le déplacement de l'élément topicalisé au Spec-TopP. La relativisation implique l'usage des pronoms relatifs. Dans cette étude, l'approche du ‹‹Matching›› est la plus pertinente aux données de la langue. L'hypothèse du syntagme du complementeur éclaté proposé par Rizzi (1997, 2001 et 2004b) s'avère adéquate pour rendre compte des computations syntaxiques du Dùálá. En résumé, l'étude révèle que la périphérie gauche de la proposition en Dùálá se présente ainsi qu'il suit :

(1) Force ... Mod ...Int ... Top ... Rel/Foc ... or

(2) Force...Int...Top ... Rel/Foc ...Mod ...

ABBREVIATIONS AND SYMBOLS

ACP	**:**	**Attract Closest Principle**
ADV	**:**	**Adverb**
ADVP	**:**	**Adverbial Phrase**
AGR	**:**	**Agreement**
AgrP	**:**	**Agreement Phrase**
Agr-S	**:**	**Agreement Subject**
APPL	**:**	**Applicative**
AUX	**:**	**Auxiliary**
C^0	**:**	**Head of the Complementizer Phrase**
C	**:**	**Consonant**
CAUS	**:**	**Causative**
C-Command	**:**	**Constituent-Command**
cf.	**:**	**Confer**
Cl	**:**	**Class**
CP	**:**	**Complementiser Phrase**
COM	**:**	**Completive**
Comp/COMP	**:**	**Complementizer**
CV	**:**	**Consonant Vowel**
CNPC	**:**	**Complex Noun Phrase Constraint**
CSC	**:**	**Coordinated Structure Constraint**
D	**:**	**Determiner**
DP	**:**	**Determiner Phrase**
D-S	**:**	**Deep Structure**
ECP	**:**	**Empty Category Principle**
EPP	**:**	**Extended Projection Principle**

Etc	**:**	**And so on**
ExtP	**:**	**Extension Phrase**
F1	**:**	**Future tense one**
F2	**:**	**Future tense 2**
FIP	**:**	**Full Interpretation Principle**
FinP	**:**	**Finititude Phrase**
FocP /FP	**:**	**Focus Phrase**
ForceP	**:**	**Force Phrase**
FV	**:**	**Final Vowel**
GBT	**:**	**Government and Binding theory**
HMC	**:**	**Head Movement Constraint**
HRA	**:**	**Head Raising Analysis**
I^0	**:**	**Head of the Inflectional phrase**
i	**:**	**interpretable**
INCH	**:**	**Inchoative**
Infl	**:**	**Inflection**
IMP	**:**	**Imperative**
Int	**:**	**Interrogative**
IntP	**:**	**Interrogative Phrase**
IP	**:**	**Inflectional Phrase**
i.e.	**:**	**That is**
IRR	**:**	**Irrealis**
LBC	**:**	**Left Branch Constraint**
LF	**:**	**Logical Form**
LOC	**:**	**Locative**
MA	**:**	**Matching Analysis**
MC	**:**	**Minimal Configuration**

MLC	**:**	**Minimal Link Condition**
MP	**:**	**Minimalist Program**
Mod	**:**	**Modifier**
ModP	**:**	**Modifier Phrase**
NEG/Neg	**:**	**Negation**
Nom	**:**	**Nominative**
NP	**:**	**Noun Phrase**
OBJ	**:**	**Object**
Op	**:**	**Operator**
OPT	**:**	**Optative**
PASS	**:**	**Passive**
PERF	**:**	**Perfective**
PF	**:**	**Phonological Form**
PL	**:**	**Plural**
P-Marker	**:**	**Phrase Marker**
PP	**:**	**Prepositional Phrase**
PPT	**:**	**Principle and Parameters theory**
PRES	**:**	**Present**
PRO	**:**	**Subject of Infinitival clause**
Pro	**:**	**Null subject**
PRTCL	**:**	**Particle**
P1	**:**	**Past one**
P2	**:**	**Past two**
Q	**:**	**Question**
REC	**:**	**Reciprocal**
RED	**:**	**Reduplication**
REL	**:**	**Relative**
RELP	**:**	**Relative Phrase**

RM	**:**	**Relativized Minimality**
SG	**:**	**Singular**
SM	**:**	**Subject Marker**
Spec	**:**	**Specifier**
S-S	**:**	**Surface Structure**
SRD	**:**	**Shortest Derivation Principle**
SSC	**:**	**Sentential Subject Constraint**
SUB	**:**	**Subjunctive**
SVO	**:**	**Subject Verb Object**
(t)	**:**	**trace**
TAM	**:**	**Tense Aspect and Mood**
T/Tns/TNS	**:**	**Tense**
TP	**:**	**Tense Phrase**
Top	**:**	**Topic**
TopP	**:**	**Topic Phrase**
u	**:**	**uninterpretable**
UG	**:**	**Universal Grammar**
V	**:**	**Vowel**
V	**:**	**Verb**
VP	**:**	**Verb Phrase**
vP	**:**	**Light vowel**
WCO	**:**	**Weak Cross Over**
X^0	**:**	**Zero level category**
X	**:**	**Any variable**
XP	**:**	**Maximal Projection**
Y	**:**	**Any variable**
YP	**:**	**Any Maximal variable**

+	:	**Plus/ added to**
-	:	**Minus**
/	:	**Or**
*	:	**Ungrammatical**
Ø	:	**Zero morpheme**
/ ˊ /	:	**High tone**
/ ˋ/	:	**Low tone**
/ˆ/	:	**Falling tone**
/ˇ/	:	**Rising tone**

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-GENERAL INTRODUCTION

-OBJECTIVES OF THE STUDY

The primary objective of this dissertation is to experiment the Dùálá language within the field of generative syntax. In fact, Dùálá has been studied extensively. The first descriptive works go back to the colonialists who focused mostly on the grammatical aspects of the language. To date, the only studies in the field of generative syntax are those of Epée (1975, 1976a, 1976b), Biloa (1994, 1995), and Sabel (2000). Epée studies the language within the early generative framework, in particular, the Standard Theory, and argues against Chomsky's strict cyclicity. Biloa studies the landing site of wh-operators and passive constructions. Sabel discusses the displacement of wh-operators in the language. Apart from these three scholars, the syntax of the language has not been addressed anymore in relation to current development in generative syntax, in particular, the Minimalist Program of Chomsky (1995 and subsequent works). This Bantu language is therefore not well known to researchers as far as relevant aspects of its syntax are concerned.

The objective of this work is to study the richly articulated internal structure of Dùálá clauses to provide evidence for the support that discourse-related features such as focus and topic are crucial to determine the grammaticality of the Dùálá sentence. On the one hand, the language shows that each information structure is associated with a particular grammatical property and on the other hand, the word order of the sentence is sensitive to the particular information structure that the sentence vehicles. Thus, unlike English, for example, where the structural status of discourse-related features does not have an overt realization, Dùálá exhibits a focus marker, ***ndé***, that encodes discourse properties. It follows that the discourse-related features of this focus structural marker have both phonological and interpretative effects in the language.

Besides, this work goes to enrich the architectural design of ongoing research in the cartography of the spilt CP (Rizzi 1997, 2001). The functional feature of focus is present in Dùálá and projects its own phrase structure. I follow Cruschina (2009) by assuming that the discourse-related features are present in the lexicon. The fact that focus is encoded in the language by a special marker ***ndé*** is evidence that functional categories are present in the Dùálá lexicon.

(1) ɲàmà ndé m-bɔ́ í mà-dắ-nɔ̄

CL10.meat FOC CL9.dogs CL10.SM PRES-eat-PRTCL

"It is the meat that dogs eat"

As the above example illustrates, ***ndé***, the focus marker, is morphologically realized and is present in the lexicon. This assumption meets Chomsky's (1995:228) Inclusiveness Condition:

(2) **Inclusiveness Condition**

"*Any structure formed by the computation (in particular π are λ) is constituted of elements already present in the lexical items selected for N [i.e. the numeration - SC]; no new objects are added in the course of computation apart from rearrangements of lexical properties"*

Thus, the assumption that discourse-related features are present in the Dùálá lexicon rather than being introduced in the derivation prevents the violation of the Inclusiveness Condition.

Finally, this work is intended to make the language well known to other linguists. In fact, the contributions of other scholars who carried out research on the language have been very helpful in the realization of this project. This dissertation will complement as well as upgrade the previous studies of Dùálá within the generative perspective. By so doing, it will provide enough material that could help other linguists for further research.

SIGNIFICANCE OF THE STUDY

The study of the Dùálá language started with the advent of colonization in Cameroon and was furthered later on by Cameroonian researchers as well as other linguists. The language was widely studied in the areas of phonology and morphology to develop a thorough writing system. The structure of its basic syntax served to define the word order of the language in terms of assessing and distinguishing the properties of grammatical sentences from their ungrammatical counterparts. The syntax of Dùálá was never subjected to the rubrics of any theoretical frameworks in syntax. This, in consequence, explains the lack of substantial literature in the syntax of the language. From a minimalist perspective, the present study is designed to lay the foundation for further research in the Dùálá language in general, and its syntax, in particular. Considering the assumption of the Government and Binding Theory (GB theory), which stipulates that a large portion of the grammar of any particular language is common to all

languages, the aim of this study is to observe how the Dùálá language matches with the level of representation and system of constraints imposed by the GB theory. By so doing, it will bring its modest contribution to UG. To conclude, this thesis will lay the foundation of the syntax of the Dùálá language as far as Minimalism is concerned in order to study the language faculty of native Dùálá speakers and to observe the language-particular aspects of the grammar.

MOTIVATIONS

It has always been very interesting to observe the sameness of the language faculty from one native speaker to another and to discover the language-particular variation of these native speakers. Thus, one of the reasons that accounts for the choice of this topic is my affective commitment to observe how the language faculty of a native Dùálá speaker incorporates the principles of Universal Grammar in the analysis of his language. In addition, there is the need to find out whether the phenomena comprising questions, topic, focus in Dùálá can be described within the recent theoretical and empirical developments in generative grammar and more precisely, the Minimalist Program. In fact, the syntax of Dùálá language has not hitherto undergone any thorough study as far as minimalism is concerned. Thus, it is expected that this work will make the language well known in the field of generative grammar in such a way that other linguists will be interested in the study of its syntax .This study is therefore intended to add onto the existing literature in Dùálá syntax the current views of linguistic analysis within the generative procedure and to contribute to the theory of Universal Grammar.

Unlike Europeans languages that possess the written form a long time ago, African languages have been for a long time limited to the oral form. Thus, orality rather played a dominant role in African languages in general and Bantu languages in particular. Nowadays, many Bantu languages are still in the oral form. The result of this is that the reflexive attention is limited. Recently, African languages were the subject of advanced research. This thesis is thus intended to contribute to the development of educational materials in the alphabetization of our indigenous languages. In fact, standardization of a language contributes to the elaboration of common cultural characteristics that unify a nation. It would be good for African countries in general and Cameroon in particular to adopt a language that better expresses national unity. Countries like Tanzania followed this model by adopting Swahili, another Bantu language, as a national language. In fact, Swahili is not used only in Africa, but it is also studied in three other

continents (America, Europe and Asia). In order to follow the model of Tanzania, Dùálá could be the language of choice to adopt in Cameroon. In fact, this language was one of the first to be used by colonialists to communicate with Cameroonians. Later on, it was adopted by some ethnic groups using different languages as a language of communication. In addition to this, camfranglais[1] derives the majority of its vocabulary from the language under study. To conclude, this thesis is also justified by the need to promote our national languages.

THE LANGUAGE

The aim of this section is to identify and classify the language geographically and linguistically. The section closes off by presenting an overview of the relevant literature that exists in the language.

-Geographical situation

The Sáwá primarily inhabits the Littoral region to the coast or just inland. It covers this region in the Moungo, Nkam, Wouri, Sanaga Maritime divisions and the Southwest region in the Fako division. Within these divisions, different varieties of the language are spoken. These ethnic tribes are related to each other by a common origin, culture and language. These include the Ewodi, the Bodiman, the Pongo, the Bakole, the Kwe or Bakweri, the Bakoko, the Isubu, the Limba or Malimba, the Mungo and the Wovea. Dùálá language has been widely spread by the early missionaries. Thus, the language is spoken by a great part of the Basa'a and Bakoko population. Some ethnic tribes also consider themselves part of the Dùálá people. These include the Batanga of the region of Kribi. Besides, many other coastal ethnic groups such as Bakossi, Balong are more or less related to the Dùálá.

[1] Camfranglais or francanglais is a language used in Cameroon with a simplified grammar that reflects a marked plurality of languages. The language marks the identity and the originality of Cameroonians; it is a composite of (pidgin) English, French and local languages. Hence, the name given to the language is a clear indication of its composition. Cam= Cameroonian languages, Fran= Francais (French), Glais= Anglais (English).

-Dialectal situation

Also known as Dìwálá, Dòùálá, Dùállá, Dwálá, Dwélá, and Sáwá, the Dùálá language is the most widely spoken in the Dùálá region. Dùálá is a language of an estimated 2,000,000 speakers spread over two regions in Cameroon (Littoral and South West regions).

As far as the Littoral region is concerned, the language covers three (3) divisions where different dialects are used.

→ The Nkam division

In this division, the users of the language live in Yabassi town along the Wouri River. The varieties spoken here are Oli and Bodiman.

→ The Moungo division

Users of the Dùálá language of the Moungo division are encountered in the Dibombari area. In this division, Pongo is the variety used.

→ The Wouri division

The speakers of this division are found in the Cameroon estuary area. The dialect spoken here is Dùálá proper, a dialect considered standard.

→ The Sanaga Maritime divison

Users of the Dùálá language of the Sanaga Maritime are encountered around Edéa and Mouanko areas. They speak the variety known as Malimba.

Besides, speakers of the Dùálá language are also encountered in the South West region. In this part of the country, the users are found in the Fako division on both sides of the Moungo River. The varieties of Dùálá spoken in this division are Mungo and Bakweri.

-Linguistic classification

Dùálá belongs to the Bantu language family in a subgroup called Sáwá Bantu. This language is identified by Guthrie (1967) in zone A. According to him, it is a language of group A. 20 and is classified as A.24. Later on, Bastin, Coupez and Mann (1999) obtained a similar classification

with some divergence. In the same vein, the Ethnologies/SIL (1996) obtained a very similar classification. In this study, the work of Guthrie (1967), who classified Dùálá alongside other similar languages, will be adopted.

A.20 DUALA

A.21 Mboko, Bomboko

A.22 Baake, Bakweri

A.23 Su, Isubu, Bimbia

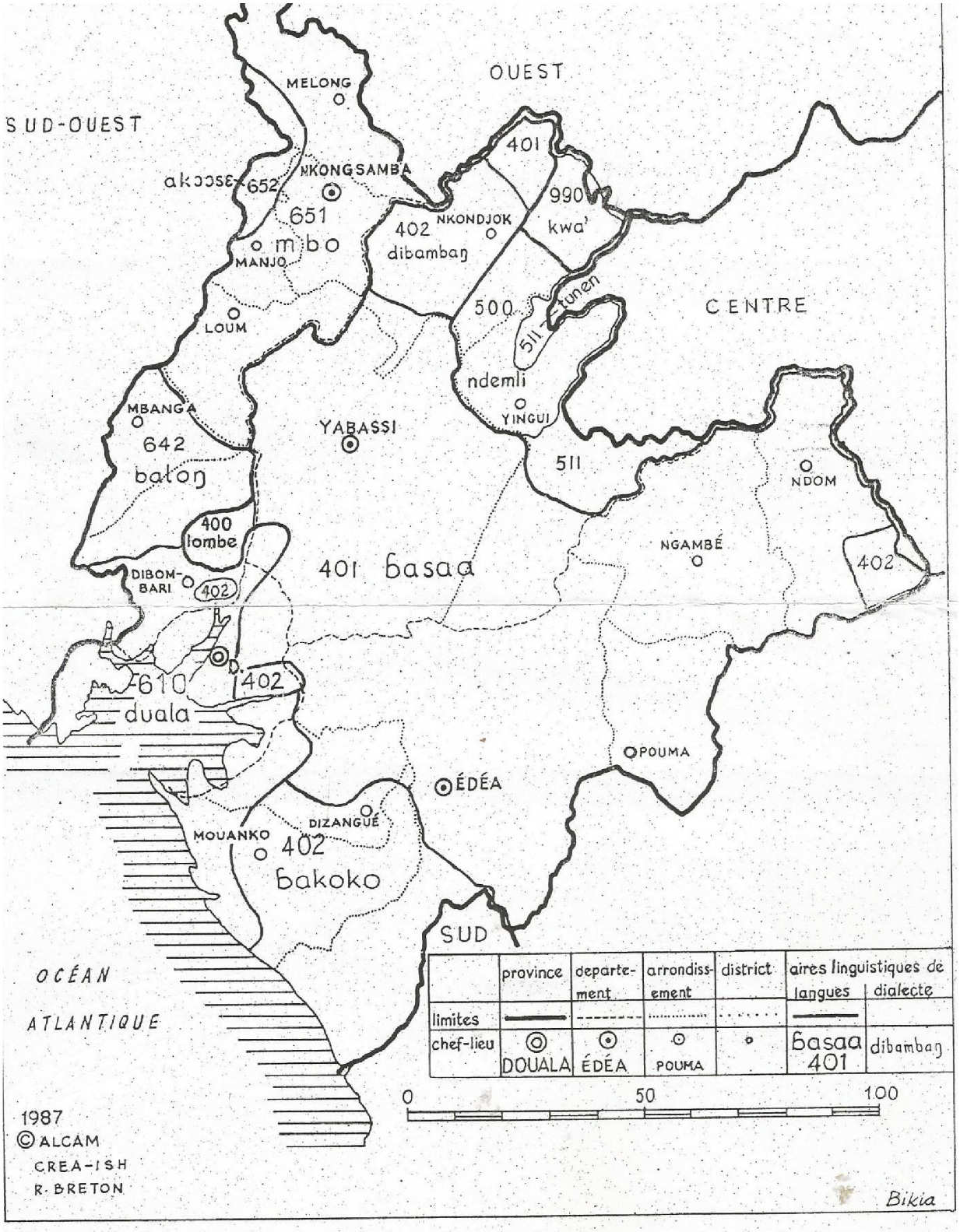
A.24 Dùálá

A.25 Oli, Ewodi, Wuri

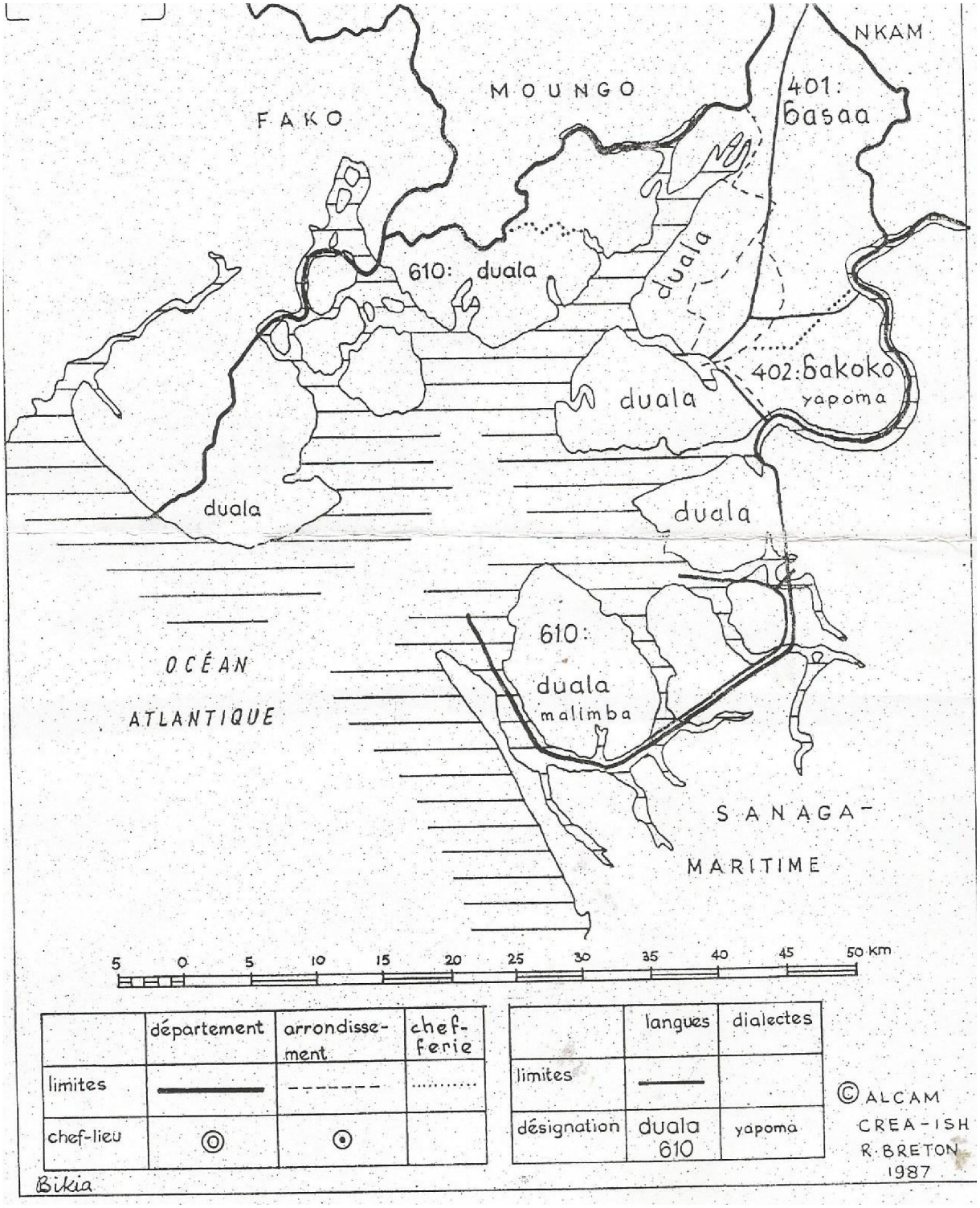
A.26 a Pongo

A.26 b Mungo

A.27 Mulimba, Malimba



Map n° 1: The Linguistic map of the littoral region adapted from Dieu and Renaud (1983).



<u>Map no 2:</u> Standardized languages of the Wouri division adapted from Dieu and Renaud (1983)

STATE OF RESEARCH

Dùálá has been extensively studied in many areas. During colonization, some missionaries learned the language and invented its writing system. This was very important for the Europeans because they wanted to possess the language in order to mold the Sáwá into their own civilization (teaching and evangelization). Certain Cameroonian languages such as Dùálá, Ewondo, Basa'a, etc. were used alongside the colonial languages in schools during that period. Besides, researchers and linguists also studied the language. It is not within the scope of this research work to review in detail the literature of the language. The main works directly relevant to our study can be summarized as follows.

-As far as the Grammar is concerned many linguists have tried to bring out the entire grammar of the language. These include notably :

Saker, A. (1855). Grammatical elements of the Duala language. Buéa: Mission Baptiste.

Ittmann, J. (1978). Grammaire du duala_(traduit de l'allemand par L.Bourmard) Douala : collège Libermann.

Nseme, C. (1979). L'établissement des matrices lexi-costatistiques et leur interprétation à propos de quelques parlés du Littoral (abo, bakoko, bodiman, ewodi, malimba, pongo) mémoire de D.E.S, université de Yaoundé

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

Paulian, Christiane (1972) Esquisse phonologique du Duala (République Fédérale du Cameroun), Paris, SELAF 25.

Moutome (1978). Étude phonologique du bodiman, mémoire de D.E.S, Yaoundé, Université de Yaoundé.

Nseme, C. (1991). Morphologie verbale en Duala: Le cas du Suffixe –nɔ́. *Journal of West African Languages*, 21,1 37-48.

Mutaka, G (1993). The application of tonal rules in the Duala verb, Journal of West African Languages XXIII.2, PP 3-14.

-Other works have been carried out focusing on the vocabulary. For a better understanding of the language we have:

Dinkelacker. (1914). wöterbuch der Duala-Sprache Hamburg.

Meinhof, C. (1912). Die Sprache der Duala. Berlin.

Saker, A. (1862). A vocabulary of the Duala language. Buéa: Mission Baptiste.

Ittmann, J. (1976). edited by E. Kähler –Meyer, wöterbuch der Duala-Sprache, Dictionnaire de la langue duala, dictionary of the Duala language, Dietrich reimer, Berlin, 1976. The preface eva.

-As far generative syntax is concerned we have:

Epée, Roger. (1976a). Generative Syntactic Studies in Duala. Ithaca, NY: Cornell University Dissertation.

Epée, Roger. (1976b). On some rules that are not successive cyclic in Duala Linguistic Inquiry 7(1) – 193-198

Biloa, Edmond. (1994). Passive incorporation and clause structure, Journal of West African Languages XXIV.1, PP.101-1o7.

Sabel, J. (2000). Partial wh- movement and the typology of wh-questions. In Uli Lutz, Gereon Müller, & Armin von Stechow (eds.), wh-scope marking (Linguistik, Aktuell/Linguistik Today 37), 409-446. Amsterdam: John Benjamins.

-Summary of previous works

The first works on the language were dictated by the need of facilitating the understanding between Europeans and Sáwá. Saker (1855) carried out a research on some grammatical elements on the language, however, the aim of his work was mainly to facilitate a better understanding of the language. Ittmann (1978) carried out the descriptive grammar of the language. Ittmann produces a much more detailed study of the language than his predecessor, Saker, by analyzing the different aspects of the grammar of the language. He also addresses the context of occurrence of the particle ***-nɔ́***. One year later, Nseme (1979) wrote a Master thesis (Mémoire présenté pour l'obtention du Diplôme d'Etudes Supérieures de lettres) at the University of Yaoundé. His work focusses mostly on the discourse analysis of Dùálá and the neighbouring languages of Littoral such as Abo, Bakoko, Bodiman, Ewodi, Malimba and Pongo.

Christian Paulian (1972) published a paper on “Esquisse phonologique ...” Paulian’s paper presents a phonological analysis which allows us to distinguish 22 consonants, 7 vowels, and 5 tones (3 level tones and 2 melodic ones). In 1978, Moutome wrote a Master thesis ((Mémoire présenté pour l’obtention du Diplôme d’Etudes Supérieures de lettres) at the University of Yaoundé. Moutome’s work is a phonological analysis of Bodiman, one of the dialects of Dùálá. Mutaka (1993) published a paper on “The application of tonal...” in Journal of West African languages XXIII.2 . Mutaka’s article focuses on the tonal processes in the past tense. He also proposes that the final vowel together with the verbal extension constitute a phonological domain.

In 1862, Saker built up a vocabulary based on the simple sentences in the language. Meinhof (1912) carried out a similar research on the vocabulary of the language. In (1914), Dinkelacker also worked on the vocabulary of the language.

Epée (1976a) studied the syntax of Dùálá in a generative perspective. In his work, he discusses the displacement of wh-questions and the context of occurrence of the particle ***-nɔ́.*** He points out that the particle appears when an XP is extracted from below the scopal clause verb in order to be focalized. The same year, he published a paper on “On some rules …” In this paper, Epée (1976b) uses the particle ***-nɔ́*** to show that rules of topicalization, wh-movement and relativization are applied in a non-successive fashion. In (1994), Biloa published a paper on “Passive incorporation…” He uses several arguments to show that the passive morpheme in Dùálá should head its own maximal projection known as Extension Phrase (ExtP). Sabel (2000) published a paper on “Partial Wh-movement and …” In the article, he analyzed the aspects of wh-questions formation in different languages such as German, Dùálá and Kikuyu. He argued that Dùálá is an optional wh-in situ language where partial movement is banned unlike Kikuyu. His work also shows that the language has long movement of subjects, objects and adjuncts.

Nseme (1991) published a paper on the verb morphology. The paper focuses on the particle ***-nɔ́.*** He argued that the apparition of ***-nɔ́*** is not only triggered by the displacement of an XP from below the scopal clause verb as Epée proposed. He revealed many other contexts of apparition of the particle ***-nɔ́*** without any visible displacement of an element.

The brief summary of these previous works on the language shows that the language has been well studied compared to other Bantu languages in Cameroon. However, the syntax of the language has not been subjected to a detailed study in relation to current development in generative syntax. In fact, most of the researchers focused on the particle ***-nɔ́*** and its contexts of occurrence. The ambition of this work is therefore to fill the gap and to provide a new syntactic model to the language. The hope is to make the language well known in the field of generative grammar.

RESEARCH METHODS

Not being a native speaker of the language under study, the data was collected from native speakers who have the intuition of their language. The informants were asked to translate relevant sentences (both simple and complex) from French into Dùálá. The aim was to identify structures in Dùálá that pattern with the Minimalism Program as well as those that do not, and to show how the latter can be accommodated within MP. One of the informant is also a researcher who has already carried out much work on this language. The table below gives information on the informants.

Table n°1: Presentation of informants

Names	Age	Sex	Profession	Location
Clédor Nseme	62	Masculine	Lecturer	Yaoundé
Alain Lobe	42	Masculine	Farmer	Yaoundé
Elame Yves	25	Masculine	Student	Yaoundé
Ndongue Lobe	65	Feminine	Teacher	Yaoundé

Furthermore, previous works done on the language were consulted in order to have an overview of the language on the one hand and to take it as a starting point for this research work on the other hand. The documentation includes grammar books, article, dictionaries, vocabulary books, and other works carried out by scholars.

As I mentioned earlier, since Epée (1976a, 1976b), Biloa (1994, 1995) and Sabel (2000), the syntax of the Dùálá language has been completely ignored by scholars. Thus, the scope of this research work is not to present all the aspects of the grammar but the syntax only. Therefore, the reader is encouraged to track down the relevant sources found at the end of this thesis for more

information concerning other areas of studies in the language. In order to capture the specificity of the language and to correctly analyze the data, programs such as speech tools and audacity will be used.

DELIMITATION OF WORK

As I indicated above, the main objective of this work is to determine the morphological requirements that trigger movement. By so doing, the study is based on some principles of minimalism in order to analyze the syntactic features of the left edge of the clause in Dùálá. To attain this goal, some of the elements or expressions that type the clause in the language will be presented, including notably interrogatives, relatives, focus, topic, etc**.** This research work is divided into five (5) chapters. The study begins with the ongoing general introduction that presents the situation of the language, the motivation for studying Dùálá as well as a brief summary of previous works. The first chapter presents the theoretical framework within which this thesis is driven. It tries to present the essential features of the Minimalist Program and discusses aspects of this program that are relevant to the analysis of this dissertation. The second chapter is an overview of the grammatical sketch of the language. It familiarizes the reader with the sound system, verb morphology and the noun class system of the language. Chapter three examines questions formation strategies in Dùálá. Chapter four handles two discourse related mechanisms encountered in the left edge of the clause. This chapter which is devoted to focalization and topicalization explores the relationship existing between information structure and clause structure. The last chapter has two main parts. The first part handles relativization in Dùálá. The second part examines how Dùálá data accommodate to Rizzi's (1995, 1997, 2004b) split CP hypothesis. More precisely, this part tries to bring together the different functional projections discussed in the thesis in order to come out with the fine structure of the left edge of the clause in Dùálá. The dissertation wraps up with the general conclusion that brings out the results of the study.

CHAPTER I

THEORETICAL FRAMEWORK

1.0. INTRODUCTION

The aim of this chapter is to present the framework adopted for the analysis of this dissertation. The chapter starts by presenting the Government and Binding Theory, which is the foundation of the Minimalist Program (MP).Then, the MP proper is presented with its characteristics. The minimalist tools will be complemented with relevant literature on the cartography of functional projections necessary in analyzing the structures of the left periphery.

1.1. THE GOVERNMENT AND BINDING (GB)/ PRINCIPLE AND PARAMETER (P$P) THEORIES

The theoretical framework adopted in this research is Generative Grammar, a theory developed by Noam Chomsky (1957) where language is considered as an innate system. More precisely, this work is driven within the most recent strand of the generative framework, the Minimalist Program (Chomsky 1995, 2001, 2005). Chomsky's Minimalist Program (MP) represents one prominent aspect of the theory of Principles and parameters (P&P). This explains why the Government and Binding theory set the foundation of the Minimalist Program. Therefore, a preliminary overview on this theory is necessary before getting into MP proper.

The Government and Binding Theory/P&P is the foundation of the Minimalist Program. This theory, which followed from an Extended Standard theory in transformational grammar, refers to a specific approach to linguistic theory. The Government and Binding Theory (GBT) assumes that a large portion of the grammar of any particular language is common to all languages and part of the Universal Grammar (UG). Thus, UG is a theory about the nature of possible grammars of human languages. This theory is made up of different modules (Chomsky 1982): X-bar Theory, Theata Theory, Case Theory, Binding Theory, Bounding Theory, Control Theory, Government Theory, etc.

The Government and Binding Theory 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. It goes without saying that principles and parameters work in tandem. Thus,

principles that are common to all languages may include parameters. The Universal Grammar (Chomsky 1957, 1981, 1986) assumes that all human beings are innately endowed with a system of richly structured linguistic knowledge. To quote Chomsky himself:

"Universal Grammar may be thought of as some system of principles common to the species and available to each individual prior to experience" (1981b:7)

Human beings are all equipped with rich innate principles and therefore, principles do not need to be learned since they are part of the human genetic endowment whereas variations, aspects of a language, need to be learned.

GBT assumes that there are four main levels of grammatical representations: Deep-Structure (underlying structure), S-Structure (S-S), Phonological Form (PF), and Logical Form (LF). 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.

1.2. THE MINIMALIST PROGRAM

The Minimalist program (Chomsky, 1993, 1995, 1999) is built on the principle of economy. Economy must be mirrored at all the levels of the computational procedure. These comprise the levels of both derivation and representation of syntactic structures. The economy of derivation states that transformations (movements) only occur in order to match interpretable features with uninterpretable features. Economy of representations is the principle that states that grammatical structures must exist for a purpose. Thus, only elements in the numeration should appear in overt syntax. The Minimalist Program assumes there is a cognitive system internalised within the brain of native speakers, which makes them proficient in their languages. Chomsky refers to it as the I-language. The computational system within the brain of the language user is opposed to the rules of specific natural language. In this respect, the main objective of the Minimalist Program is to define the best rules that can capture the native speaker's linguistic competence without bias to the levels of descriptive and explanatory adequacies. In the different frameworks preceding the MP, the rules *are too powerful* and they do not only define human language but other forms of

communication, which are non-human. In the GBT, for instance, theories that were developed (Chomsky 1970, Jackendoff 1977) proposed many notions such as the X-bar Theory, Relativized Minimality, ECP, etc. The role of the MP is to reduce the rules to a small set of basic principles on the one hand, and to improve on the levels of explanatory and descriptive adequacies that its predecessors failed to capture on the other hand.

According to Chomsky (1999, 2001, 2008), derivations should be done by phases to avoid computational burden on the learning process. A simple sentence is often decomposed into two phases namely CP and vP.

The MP aims at simplifying levels of representation in the grammatical model. By eliminating the D-S and the S-S, we are left with the PF and the LF, so-called the interfaces. Chomsky eliminated these two levels of representations because he realized that some were operating in a similar fashion and were not forced by interface conditions. Thus, any sentence produced (no matter the language) will achieve these two levels of representation namely sound and meaning. Also, it appears to have developed a universal linguistic program capable of describing and explaining the linguistic competence of a native speaker.

1.2.1. DERIVATION OF A SENTENCE WITHIN MP

This sub-section focuses on the different steps required to obtain an interpretable sentence within the Minimalist Program.

The derivation of a sentence starts within the MP with the consultation of the lexicon. It is the warehouse containing all the lexical items of the language. The lexical items extracted from the lexicon form the numeration. The items extracted carry morpho-syntactic features, which are either interpretable or uninterpretable. The structure-building operation merge, in particular, external merge builds the sentence from a bottom-top fashion. External merge is used to expand the sentence. Internal merge, the other reflex of the merge operation, applies only after external merge must have exhausted the numeration. Internal merge focuses basically on movement.

In the MP, a movement operation is characterized by the displacement of constituents from their base generated positions to a higher position. According to Radford (2009), this operation is a composite operation involving two sub-operations of copying and deletion. Within MP, There is

a close relationship between the moved constituent and the null copy at the extraction site. The null copy left behind has a null spell out. The displacement of constituents is not done at random within the framework. In fact, movement operations must always be motivated by *last resort.* This principle requires that movement applies when necessary in order to avoid superfluous steps.

As it was said earlier, The MP focuses on two levels of representations: LF and PF. These two levels of representations play an important role for the convergence of sentences. Thus, if the sentence produced fails to achieve one of these two levels, it automatically crashes. PF is the interface with the phonology where sounds, shapes and segmental properties are represented whereas LF is the interface that deals with semantics. It takes into consideration all variables that contribute to the semantic interpretation of the sentence. Thus, the derivation is spelled out to the PF and LF for interpretation. If uninterpretable features remain unchecked and unvalued at the interfaces, the derivation crashes otherwise, it converges. Within the MP, when a derivation converges, the Principle of Full Interpretation (PFI) is satisfied. This principle requires that each element at the PF or LF representation be licensed as interpretable. Accordingly, a representation meets Full Interpretation if it consists of legitimate objects that can be interpreted at LF and PF. The PFI is satisfied when all the uninterpretable features have been checked and valued at the interfaces.

1.2.2. THE CHECKING THEORY (CHOMSKY 1995)

In the MP, syntactic movements are motivated by the need to check the uninterpretable features carried by lexical and functional categories. A lexical category drawn from the lexicon carries a bundle of genetic features which have the +value (interpretable). However, the case-feature on NPPs and phi-features on verbs and adjectives have the – value (uninterpretable). Let us consider how feature matching between the probe and the goal functions in Minimalism.

(1)	Bá	mà-lá	ó	èsúkúlù
	They	$_{\text{PRES}}$-go	to	$_{\text{CL7.}}$school
	"They go to school"			

The phi-features of *bá* "they" (+Number, +Person, +Class, +Gender) are interpretable because they have a role to play in the semantics of this pronoun, which represents it. These phi-features

are uninterpretable for functional elements such as tense (a grammatical feature inherent to the verb). We say that tense has the –value (uninterpretable) of phi-features. Thus, *Bá* "they" enters the syntax with its phi-features already valued, but its case is unvalued. *Bá* (they) carries the following features [φ-features, Ucase]. On the other hand, T enters the derivation with its tense already valued but with the φ-features unvalued. It carries the features [EPP, +Tense, - φ-features]. By virtue of being associated with many unvalued features, T is the probe and *bá* "they"is the goal by virtue of being associated with few uuninterpretable features. After the matching procedure, the probe and the goal enter into the Agree relation (Chomsky 2000) :

(2) agree operates between a probe α and a goal β iff

(a) α has an uninterpretable φ-features

(b) β has identical interpretable φ-features

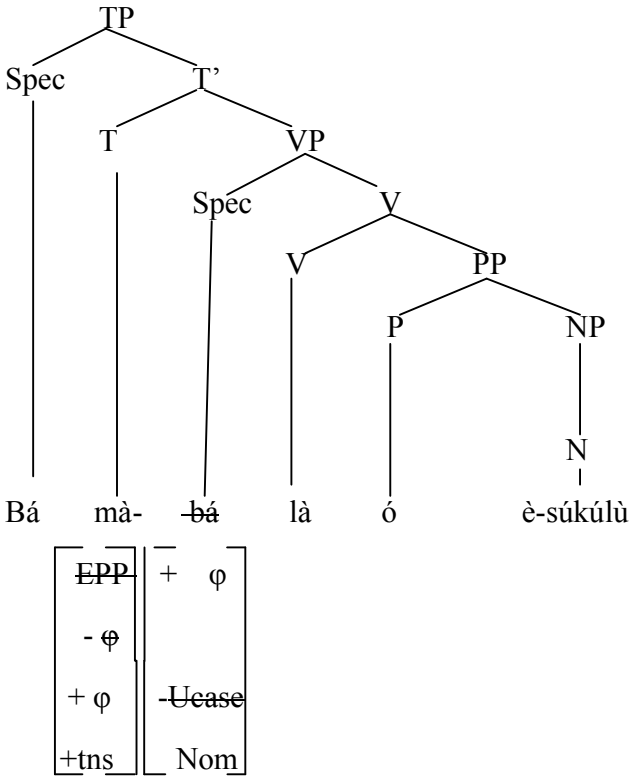
(c) β has an unchecked feature of structural case

(d) α c-commands β

(e) There is no potential ultimate goal ϒ such that Match (α, β) and c-commands ϒand c-commands β

Since the goal and the probe of the sentence in (1) comply with the agree operation, the uninterpretable features of both probe and goal are deleted and they are simultaneously valued for phonological and semantic purposes at the interfaces. Sentence (1) has the following derivation:

(3)



From the bottom top fashion, the above structure is derived as follows: the noun *èsúkúlù* "school" merges with the preposition *ó* "to" to form the PP *ó èsúkúlù* "to school". This in turn merges with the verb *tà* "go" to give the V-bar *tà ó èsúkùlú* "go to school". Subsequently, the V-bar merges with the subject *bá* "they" to form the VP *bá mà-tà ó èsúkúlù* "they go to school". At this level, T (*mà-)* will probe and search for a goal. Since *bá* "they" is in its c-command domain, T will value its phi-features and at the same time, the unvalued case feature on the goal is valued by the probe. Thus, *bá* "they" will be assigned the nominative case. Then the EPP on T will subsequently trigger the movement of *bá* "they" to Spec-TP. At this level of the derivations, all the uninterpretable features of both probe and goal have become positive through the operation Agree. Under appropriate local conditions where α (the probe T) and ß (the goal *bá*) have identical matching features, agree operates, deleting the uninterpretable features of both probe and goal and simultaneously valuing them for phonological and semantic purposes at the interfaces (Chomsky 2000).

The aim of this section was to present MP, the framework within which this thesis is driven. It was said that Minimalism came up as a result of the preceding frameworks not being able to capture the levels of descriptive and explanatory adequacies. The use of powerful rules and many

levels of representations used by its predecessors could describe both human and non-human forms of communication (Chomsky's interest in the generative framework has been to describe the structure of natural human language). MP aims at simplifying these rules to attain the levels of adequacies optimally. It was also said that sentences produced within MP from a bottom-top fashion must be interpretable at the interfaces (PFand LF). Finally, since the framework aims at simplifying operations, it was said that movements are neither free nor optional; they are all motivated by the need to check features.

1.3. THE LEFT EDGE OF THE CLAUSE

Focus here is on some trends in the cartographic approach and the similarities that exit between Minimalism and cartography.

1.3.1 An overview of the cartographic approach

Pollock's (1989) split IP assumes that a single I(nflection) did not provide enough space to account for the different morphological forms of the verb found in languages such as French. Thus, the Inflectional node was split into a number of distinct functional heads expressing tense, agreement, negation and various others. This was the outset of a research path focusing on the nature of structural configurations. In the same token, Rizzi (1997) proposed a paper titled: The Fine structure of the left periphery. This paper looks at the fine gained structure of the syntactic categories. Rizzi points out that the complementizer domain is delimitated by Force, an illocutionary force that types the clause as declarative, interrogative, exclamative, etc. and finiteness, which distinguishes between verbs, which are inflected for tense from those that are not. His study of discourse-related features (topic and focus) in Italian enabled him to define the following ordering of functional categories at the left periphery of the clause in (4).

(4) [Force [Top* [Foci [Top* [Fin [IP

The preceding representation shows that the two functional categories Force and Fin respectively close off the sentence upward and downward. It also shows that topics can be recursive unlike focus. After coming up with the cartography in (4), Rizzi (2001b) analyzed the position of Interrogative phrases in Italian. He proposed that *se* "if" particle that introduces embedded yes/no questions occupies the functional head Int (Interrogative). In fact, *se* "if" occupies a

position distinct from and lower than the one occupied by *che* "that". Thus, we have the following order:

(5) FORCE (TOP*) INT (TOP*) FOC (TOP*) FIN IP

The preceding structure shows that the interrogative phrase is lower than force phrase and higher than focus and finiteness. It also shows that when topic phrases are recursive, they always appear after and before the interrogative phrase.

Rizzi's analysis was later on followed by a wide range of studies, including books and papers in various zones of the sentence. In the light of African languages, the research on cartography provides strong empirical evidence for Rizzi's work. Most of these languages show the morphological realization of the head of these discourse-related functional projections. This was primarily revealed by Aboh's (2004) cartographic analysis of Gungbe with the topic marker ***yà*** and the focus marker ***wè***. In other words, discourse-related features (focus, topic) can be morphologically realized or not, depending on the specificities of the language.

1.3.2 Cartography and minimalism

The preceding discussion on cartography can appear in contradiction with minimalism. The difference between minimalism and cartography is that MP aims at simplifying linguistic operations. Globally, MP is economy-driven whereas cartography focuses on the proliferation of functional categories that map the structure of phrases and sentences. Although there exits apparent divergences to these two approaches, they are not in contradiction. Aboh cited by Biloa (2013:5) observes that:

"*Cartography is embedded within general principles of Minimalism such as Relativized Minimality, Probe-goal relations, the form of chains, … cartography assumes too many projections, while minimalism tries to reduce the number of projections … whether a computation involves billions of projections is not a problem provided these projections accelerate processing and respect principles such as Minimality, etc."*

Cartography and minimalism are not two conflicting approaches, but approaches that complement each other. Besides, they are both conducted within the framework of Principles and Parameters. In fact, Cartography is a research program within the framework of Principles and

Parameters and it sets the foundation of MP. Cartography is embedded within the general principles of the Minimalist Program. In fact, within the cartographic approach, the displacement of any constituent is subject to economy condition. There is no free and optional operation. The displacement of constituents to the edge of the clause is neither free, nor optional and is subject to economy principle. All the operations to the edge of the clause are motivated as last resort (Chomsky 1993, Rizzi 1995) stipulates:

(6) **Last Resort**

Syntactic movement (or, more neutrally, the formation of non-trivial chains in syntax) is "last resort" in the precise sense that it must be triggered by the satisfaction of certain quasi morphological requirements of heads.

Based on this principle, there are different morphological requirements that trigger the movement of a constituent from one layer into another. This means that all the constituents of the edge of the clause (Force Phrase, Topic Phrase, Focus Phrase, Interrogative Phrase, Relative Phrase, Evidential Phrase, Modifier phrase, and the finiteness Phrase) exist for a specific purpose.

This section aimed at presenting various starting points on the edge of the clause. It was said that Rizzi's (1997) seminal paper was followed by various works on the different layers of the sentence. On the other hand, it was said that the proliferation of functional projections in the cartography approach is not in contradiction with minimalism since cartography is embedded within the principles of minimalism.

1.3.3. The Focus –Topic system

Focus is known as the stressed element in the sentence that carries new information as the following example shows:

(7) Dika à déd-ì-nɔ́ DÌKÚBÉ

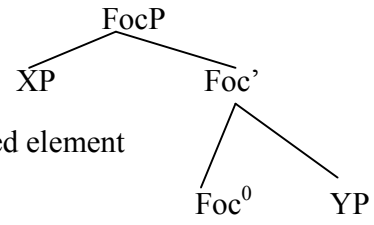
CL1.Dika CL1.SM buy-P1-PRTCL CL5.BANANA

"Dika bought a BANANA"

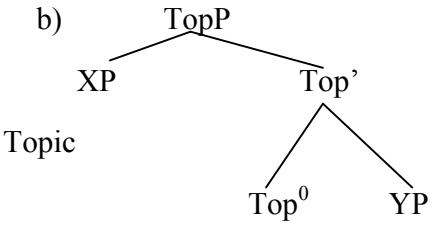
The preceding example is a construction where the element DÌKÚBÉ "banana" bears a focal stress and introduces new information. Generally, focus elements can either stay in their

base-generated position, that is, at the right of the edge of the clause, or move to the left of the edge of the clause. Bearing in mind that all movements are motivated within the MP, movement of focus to the edge of the clause is motivated by syntactic features in I^0. Besides, Rizzi (1997) argues that focus and topic are driven by a semantic/pragmatic feature yielding the following structure.

(8) a)



b)



As the structure in (8a) shows, the functional head Foc^0 takes the focal element as its specifier and the presupposition as its complement. The presupposition here is the knowledge the speaker already shared with the listener. In (8b), the head is for the focus marker which can be phonetically realized or not. In the language under study, focus marker is present in the lexicon and is marked by ***ndé***.

As far as topic is concerned, Rizzi (1997) defines it as *"a preposed element characteristically set off from the rest of the clause by a "comma intonation" and normally expressing old information somehow available and salient in previous discourse"*. From Rizzi's definition, topic is generally defined as a process that moves an element to the front of the sentence in order to be interpreted as a topic. However, topics are not always elements preposed to the sentence initial position. In some languages like Chinese, topics are based generated when they are linked to a *pro*, a resumptive pronoun or an epithet. Topic can either be obtained by movement or not. Topic is generally separated from the rest of the clause by a comma intonation. As (8b) illustrates, topic occupies the specifier position of TopP where YP is the complement or the comment of this topic.

On the basis of syntactic tests, Rizzi (1997) made a distinction between topics and foci in the following way: topics are non-quantificational elements that can involve a resumptive clitic

wthin the comment whereas foci cannot be resumed by a clitic; topics never give rise to Weak Cross Over (WCO) effects whereas foci do; topics are recursive and are compatible with wh-questions in main clauses whereas foci are not recursive and are incompatible with wh-questions.

SUMMARY

The aim of this chapter was to present the theoretical framework adopted for the analysis of this thesis. The chapter was not intended to go into details, but to present general facts relevant for this research work. Thus, different steps introducing the MP were presented as well as the characteristics of the MP proper. After presenting the MP, it was shown that all movements to the edge of the clause are motivated by the satisfaction of some morphological requirements. A quick survey was given concerning the edge of the clause. By so doing, the discussion was complemented by works of Pollock (1989), and Rizzi (1997, 2001, and 2004).

CHAPTER II

GRAMMATICAL SKETCH OF THE LANGUAGE

2.0. INTRODUCTION

The main goal of this chapter is to provide an overview of some grammatical aspects of the Dùálá language in order to familiarize the reader with its internal structure. For an in-depth account of the Dùálá grammar, the reader is referred to previous works such as (Saker 1855, Ittmann 1978, and Nseme 1979, 1982). The chapter is structured into five (5) sections. The first presents the phonological sketch comprising the consonant system, the vowel system and the tonal system. The second section presents the verb morphology. Section 3 presents the nominal system. Section 4 completes the preceding section by presenting how the notion of gender functions in the language. The last section presents the syntax of the language. At the end of these sections, there is a brief summary presenting what has been discussed in the chapter.

2.1. THE PHONOLOGICAL SYSTEM

This section focuses on consonants, vowels and the tonal systems.

2.1.1. The consonant system

Previous works by Nseme (1982:12) reveal that there are seventeen (17) consonants in Dùálá. However, taking into consideration mid-nasalized consonants, it will be argued that the language has nineteen (19) consonants. The following table presents the consonants attested in the language

Table n° 2: Duálá consonant chart

	Bilabial	Alveolar	palatal	Velar
explosive	p b	t d	c j	k
Nasalized	m	n	ɲ	ŋ
Mid-nasalized	mb	nd		ŋg
Fricative	f	s		

Lateral		l		
Semi-vowels	w		y	

2.1.2. The vowel system

Seven vowels sound are attested in the language as the following chart presents:

Table n° 3: Duálá vowel chart

	Front unrounded	Central back rounded	Back rounded
High	i		u
Mid-high	e		o
Mid-low	ɛ		ɔ
Low		a	

2.1.3. The tonal system

Dùálá is a language where all the vowels are tone-marked. There are three simple/level tones and two contour tones.

2.1.3a. Level tones

- High tone / ˊ/ examples 1: ná "that" ; mbá "me" ; láŋg-à "to read"

- mid tone /¯/ example 2: nɛ́nī "how"

- Low tone / ˋ/ example 3: nà " and, with";

2.1.3b. Melodic tones

- The falling tone /ˆ/ examples 4: sâ "to dance"; dɛ̂ "to plant"

- The rising tone /ˇ/ examples 5: jǐb-à "to steal"; jěk-à "to stop, to prevent"

The above tones are presented in the following table:

Table n° 4: Dùálá tones chart.

Level tones	/ ˊ/	/¯/	/ ˋ/
Melodic tones	/ˆ/	/ˇ/	

2.2. VERB MORPHOLOGY

This section is concerned with the various mechanisms that contribute to the building up of the Tense, Aspect and Mood (TAM) and verbal systems of the language. It is demonstrated here how different conjugations fit together to form a morphosyntactic unit. The first sub-section presents the structure of the verb. The derivation is analyzed in the second sub-section. Finally, the last sub-section presents the tripartite division TAM system.

2.2.1. The structure of the verb

The minimal verbal form in Dùálá contains only a stem that consists of the root and a final vowel (FV). The different types of final vowels found in the language are **a, ɔ,** and **ɛ**.

(6) a) tìl-à "to write" b) nyɔ́ŋg-ɔ̀ "to disappear" c) lɔ̀kɔ̀mɛ̀y-ɛ̀ "to calm down"
root-$_{FV}$ disappear-$_{FV}$ calm down-$_{FV}$

Verbs in Dùálá can be classified depending on the syllabic and tone structure as illustrated below:

2.2.1.1. Monosyllabic high tone verbs

(7) a) ɓɛ́ " to be"; b) wɔ́ "to died"; c) ɗǎ "to eat"; d) kɔ́ "to fall"

2.2.1.2. Monosyllabic low tone verbs

(8) a) ɓà "to cut up"; b) jà "to sit"; c) kwɛ̀ "to saize"; d) sɔ̀ "to find"

2.2.1.3. Monosyllabic falling tone verbs

(9) a) sâ "to dance"; b) dɛ̂ "to plant"

2.2.1.4. Disyllabic low tone verbs

(10) a) àl-à "to go"; b) tìl-à "to write"; c) nàŋg-à "to lie"

2.2.1.5. Disyllabic low and high tone verbs

(11) a) bús-à "to go out"; b) bɔ́t-ɔ̀ "to carry"; c) nyɔ́ŋg-ɔ̀ "to disappear"

2.2.1.6. Disyllabic rising tone's verbs:

(12) a) ěk-à "to stop, to prevent"; b) ǐb-à "to steal"

2.2.1.7. Polysyllabic verbs

These are verbs made up of many syllables

(13) a) lɔ̀kɔ̀mɛ̀y-ɛ̀ "to calm down"

2.2.2. Derivation of verbs in Dùálá

Verbal extensions are generally suffixed to the verb root giving new verbs with different meanings from the original verb roots. Sometimes, they participate in the verb valency; some intransitive verbs can become transitive (valency increasing) or ditransitives can become monotransitives or intransitives (valency decreasing). Dùálá verbs display tremendous flexibility by the use of rather many derivational suffixes. Derivation in the language depends mostly on the FV, the root and the morphological structure of the verb. The different forms of derivation attested in the language comprise the following:

2.2.2.1. Applicative

This extension indicates that the action is applied on behalf of, towards or with regard to some object. The formation of applicative in the language depends on the FV and the root. When the FV is ***-a***, or ***-ɔ*** the suffix added to the verb root is ***–ea***. When the suffix ***–ea*** is added to a verb root ending with ***-a*** or ***-ɔ***, it conveys to this new verb the meaning of the applicative.

(14) a)Tɔ̀p-ɔ̀ "speak" ⟶ Tɔ̀p-èà

Speak-$_{FV}$ speak-$_{APPL}$

b) ɲàŋgó ám̀ à mà-tɔ̀p-èà Dika

$_{CL1}$.mother my $_{CL1\cdot SM}$ $_{PRES}$-speak-$_{APPL}$ $_{CL1}$.Dika

"My mother speaks for Dika"

(15) a) Tìl-à "write" ⟶ tìl-èà

Write-$_{FV}$ write-$_{APPL}$

b) ɲàŋgó ám̀ à mà-tìl-èà Dika

$_{CL1}$.mother my $_{CL1.SM}$ $_{PRES}$-write-$_{APPL}$ $_{CL1}$.Dika

" My mother writes for Dika"

On the contrary, when the FV is ***-ɛ,*** the suffix ***-ɛyɛ*** is added to the verb root in order to form applicative.

(16) a) kw(è)-è "to saize" ⟶ kw-èyè

Saize-$_{FV}$ saize-$_{APPL}$

b) ɲàŋgó ám̀ à kw-èyè Dika jɔ̀mbè

$_{CL1}$.mother my $_{CL1.SM}$ saize-$_{APPL}$ $_{CL1}$.Dika $_{CL5}$.door

"My mother saize the door to Dika"

Finally, applicative can be triggered by the suffix **-ɛlɛ.** This is when the root is CVC.

(17) a) bál-è "to borrow" ⟶ bál-èlè

borrow-$_{FV}$ borrow-$_{CAUS}$

b) Dika à bál-èlè Elame mbolo

$_{CL1}$.Dika $_{CL1.SM}$ borrow-$_{APPL}$ Elame $_{CL9}$.money

"Dika borrowed money for Elame"

2.2.2.2. Causative

The language also exhibits suffixes that convey a causative meaning to a verb. Generally, these suffixes indicate, "cause to do", or "cause to be". Causative formations depend on the FV and the structure of the verb root. When the FV is ***–a*** or ***-ɔ***, the causative suffix is ***–isɛ***.

(18) a) Tìl-à "to write" ⟶ tìl-ìsè

Write-$_{FV}$ write-$_{CAUS}$

b) ɲàŋgó ám̀ à tìl-ísè Dika létà

$_{CL1}$.mother my $_{CL1.SM}$ write-$_{P1}$-$_{CAUS}$ $_{CL1}$.Dika $_{CL5}$.letter

"My mother made/caused Dika write a letter"

(19) a) Tɔ̀p-ɔ̀ "to speak" ⟶ tɔ̀p-ìsè

Speak-$_{FV}$ speak-$_{CAUS}$

b) ɲàŋgó ám̀ à tɔ̀p-ìsɛ̀ Dika

CL1.mother my CL1-SM speak-P1-CAUS CL1.Dika

"My mother caused/made Dika to speak"

The suffix –ésɛ̀ can also trigger causative formation when the root has the structure CV́.

(20) a) ɗá "to eat" ⟶ ɗ-ésɛ̀

eat eat-CAUS

b) Dika à ɗ-ésɛ̀ ɲàŋgó àḿ

CL1-Dika CL1-SM eat-CAUS CL1-mother my

"Dika made my mother to eat"

2.2.2.3. Reciprocal

In a reciprocal structure, the participants are the agent and patient. There are two suffixes expressing this type of construction in Dùálá. Their used depends on the structure of the verb and the FV. Thus, ***-nɛlɛ́*** is adjoined to verbs which generally have CV.

(21) a) pɔ̀ ⟶ pɔ̀-nɛ̀lɛ́ "to keep in touch"

CV CV-REC

b) Bánà bá mà-pɔ̀-nɛ̀lɛ́

CL2-children CL2-SM PRES-keep in touch-REC

"Children keep in touch with one another"

2.2.2.4. Instrumental

Instrumental is when an object is used to perform an action. In the language under study, this is expressed through the suffix **-anɛ.** When the suffix ***–anɛ*** is added to a certain verb in Dùálá, it conveys the meaning "with something".

(22) a) tìl-à ⟶ tìl-áné

Write-FV write-APPL

b)Nà mà-tìl-áné diwíndí

1SG PRES-write-INST CL5.pen

"I write with a pen."

2.2.2.5. Passive

This extension indicates that the subject is acted upon by an agent. The passive form is indicated in Dùálá by the suffix ***–bɛ.*** In this type of construction, there is no deletion of the FV. The passive suffix is just adjoined to the verb root and its FV.

(23) a) tìl-à "to write" ⟶ tìl-àbɛ̀

write-$_{FV}$ write-$_{PASS}$

b) Létà dí tíl-àbɛ̀ nà ɲàŋgó ám̀

$_{CL5}$letter $_{CL5SM}$ write-$_{PASS}$ by $_{CL1}$-mother my

"A letter has been written by my mother"

(24) a) kw-ɛ̀ "to saize" ⟶ kw-ɛ̀-bɛ̀

Saize-$_{FV}$ saize-$_{FV}$-$_{PASS}$

b) Létà dí kw-ɛ̀-bɛ̀ nà Dika

$_{CL5.}$letter $_{CL5SM}$ saize-$_{FV}$-$_{PASS}$ by $_{CL1}$Dika

"The letter has been saized by Dika"

2.2.2.6. Reduplication

As the name indicates, this form is used to denote that the action is done repeatedly. Reduplication is formed in the language by the reduplication of the original verb (root +FV) and the adjunction of the suffix ***–nɛ*** to the last verb.

(25) a) tìl-à "to write" ⟶ tìl- à- til- á- nɛ́ "to rewrite"

Write.$_{FV}$ write-$_{FV}$-write-$_{FV}$-nɛ

b) ɲ-àŋgó ám̀ à tìl-à-til-á-nɛ́ l-étà

$_{CL1.}$mother my $_{CL1SM}$ write-$_{RED}$ $_{CL5.}$letter

"My mother rewrites the letter

2.2.3. Tense, Mood and Aspect in Dùálá

In this sub-section, focus is on Tense, Aspect and Mood (TAM) and the way they are encoded in the language. This tripartite division is tightly linked in most African languages. Fleisch (2000) argues that there is a well-known lack of distinct boundaries between aspect and tense,

characteristics of most families of African languages. Dùálá is not an exception to this. In fact, it is very difficult to determine the exact boundaries between aspect and tense in the language. Thus, previous works (Ittmann (1978); Nseme (1982) and Mutaka (1993:1)) argue that the language has a "perfective tense". According to those linguists, this tense expresses at the same time an idea of location in time and the completive aspect. Recall that tense is the relationship between the form of the verb and the time of the action whereas aspect denotes whether an activity is completed or ongoing. Bearing in mind these two definitions, it will be argued in this work that Dùálá does not have a "perfective tense" but a perfective aspect tightly connected with the past tense. The sub-section starts by presenting tense, then aspect and finally mood.

2.2.3.1. Tense

Tense provides a temporal reference point for an utterance. As already mentioned, previous works argue that, the language has a "perfective tense". They argue that the language has four tenses namely present, future, past and perfective tenses. In this work, it will be argued that the language has three tenses (present, future and past). Each of those tenses establishes a clear relationship between the form of the verb and the time of action. The different tenses encountered in the language are the following:

2.2.3.1.1. The Present tense

The language has one present tense, which expresses an action that takes place at the moment of speaking. This tense is marked by the morpheme ***mà-*** added to the stem of the verb.

(26) a) Òmbw-à múnà à mòmé bá **mà-** bòl- à- nɔ́ mù-tóà mùndɛ́nɛ̀
Look-$_{FV}$ $_{CL1.}$child of man 3$_{PL}$ $_{PRES}$-give-$_{FV\text{-}PRTCL}$ $_{CL3.}$car $_{CL3.}$big
"This is the boy to whom they give the big car"

b) Elame à sí **mà**-láŋg-á kálàtì à Dika
$_{CL1.}$Elame $_{CL1.SM}$ $_{NEG}$ $_{PRES}$-read-$_{FV}$ $_{CL9.}$book of $_{CL1.}$Dika
"Elame does not read Dika's book"

c) Níka Ndómɛ̀ à sí tɔ́ndì-nɔ́ mbɔnjí e **mà**-bwésɛ́ Dika mùɲɛ̀ŋgɛ̀
As $_{CL1.}$Ndome $_{CL1.SM}$ $_{NEG}$ like-$_{PRES\text{-}PRTCL}$ $_{CL9.}$flowers $_{PRES\text{-}}$please $_{CL1.}$Dika $_{CL3.}$joy
"The fact that Ndome does not like flowers pleases Dika"

2.2.3.1.2. The past tense

The past tense expresses actions that have already taken place at the moment of speaking. In Dùálá, there are two forms of past tenses: the immediate past (P1) and the distant past (P2).

2.2.3.1.2.1. The immediate past (P1)

This particular tense is tightly linked to the perfective aspect. In fact, it always goes with this aspect and denotes a whole situation that has been complete. The immediate past is marked morphologically by the same suffix used to mark "perfective tense" in previous works ***–í/-ì***.

(27) a) À bòl-**í** Dika létà

3_{SG} give-$_{P1}$ $_{CL1.}$Dika $_{CL5.}$letter

"He gave the letter to Dika"

b) Nà sí seŋg-**ì** ngòsò nà ɲàŋgó ám̀

1_{SG} $_{NEG}$ listen-$_{PERF}$ $_{CL9.}$music with $_{CL1.}$mother my

"I did not listen to music with my mother"

2.2.3.1.2.2. The distant past (P2)

The distant past is used for narrations. It is morphologically marked by the auxiliary ***tá* + *the subject***. In fact, ***tá*** is the past tense of *bɛ* "to be".

(28) a) Nà **tá** **nā** tìl-à léta

1_{SG} P2 1SG write-$_{FV}$ $_{CL5.}$letter

"I have written a letter"

b) Dì **sí** **tá** **dì** dàŋgw-à

2_{SG} NEG P2 1SG walk-$_{FV}$

"You have not walked"

2.2.3.1.3. The Future tense

The future tense is used to express actions that are to come. There are two types of future in the language under study. These are the immediate future (F1) and the near future (F2).

2.2.3.1.3.1. The immediate future (F1)

The immediate future expresses actions that are about to happen. This tense is realized by the tense marker ***níyā*.**

(29) a) Bánà bá **níyā** dâ mwɛ̀lɛ́

CL2.Children CL2.SM F1 eat CL3.plantains

"Children are not going to eat plantains"

b) Bítò bá sí **níyā** tìl-à létà

CL2.women CL2.SM NEG F1 write-FV CL5.letter

"Women are not going to write a letter"

2.2.3.1.3.2. The near future. **(F2)**

The near feature expresses actions that will take place very soon. The morphological marker ***mɛ̀ndɛ̀*** of this tense has been subject to two grammaticalization processes. This marker derives from the verb ***èndɛ̀*** (to go) and the present marker –***mà*.** However, the verb ***èndɛ̀*** "to go" is no more used in the language under study. Nseme (1997) recalls that this verb is still used in some variants like Oli and Pongo. Thus, the marker is in reality ***mà-èndɛ̀*** "PRES-go". However, after semantic bleaching and fusion, the marker became ***mɛ̀ndɛ̀*.**

(30) a) Bánà bá **mɛ̀ndɛ́** tìl-à

CL2.children CL2.SM FUT write-FV

"Children will write"

b) Nà **mɛ̀ndɛ̀** tìl-èà Dika léta

1SG F2 write-FV CL1.Dika CL5.letter

"I will write a letter to Dika"

2.2.3.2. Mood

Mood is the use of verbal inflections that allow the speaker to express an attitude toward what he is saying which could be perceived as a statement of fact, of desire or commands, etc. The following moods are encountered in the Dùálá language.

2.2.3.2.1. The infinitive

The infinitive in Dùálá has no specific morpheme. Generally, it is the root of the verb and a final vowel (a, ɔ, ɛ). The infinitive mood plays the role of a substantive in the language. It is used to express actions.

(31) a) tìlà
"The writing"

b) Jɛ́nɛ̀
"The sight"

2.2.3.2.2. The indicative

The indicative is used to denote factual statements and positive beliefs. This mood is introduced by a subject marker that precedes the verb.

(32)a) mbɔ́ è mà-dóm-à
CL9.dog CL9.SM PRES.bark-FV
"The dog barks"

b) Bítò bá mà-tìl-à màlétà
CL2.women CL2.SM PRES-write-FV CL6.letter
"Women write letters"

2.2.3.2.3. The subjunctive

This mood is used in Dùálá to express wishes. It was said at the beginning of this chapter that the verb is made up of a root and a final vowel. The subjective is therefore formed by suffixing the vowel **"e"** to the verb root.

(33) a) á tìl-è létà
3_{SG} write-SUB CL5.letter
"That he should write a letter"

b) á pɔ̀nd-è mwɛ̀lɛ́
3_{SG} gather-SUB CL3.plantains
"That he should gather plantains"

2.2.3.2.4. The imperative

The imperative mood expresses orders, requests and prohibitions. This mood distinguishes itself from the root in Dùálá by the tone. Thus, it is marked by a falling tone on the FV.

(34) a) tìlâ! tìl-à "to write"
Write-IMP
"Write!"

b) Pɔ̀ndɔ̂! pɔ̀nd-ɔ̀ "to gather"
gather-IMP
"gather!"

2.2.3.2.5. The conditional

The conditional is used to speak of an event whose realization depends on another. Two types of conditional are identified in the language: the real conditional and the irrealis one.

2.2.3.2.5.a. The real conditional

The real conditional indicates that it is possible to realize the action if the condition is fulfilled. This conditional is encoded by ***té***, ***yèténà,*** or ***ké*** "if".

(35) Yètɛ́nà lò bɔ̀l-ɛ́, lò jà

if 2_{SG} finish-$_{FV}$ 2_{SG} sit

"If you have finished, you can sit"

2.2.3.2.5.b. The irrealis conditional

This mood indicates that the speaker knows that what he is expressing has not been realized. This conditional is marked by "***té*****"** or "***ebɛtèna***" "if".

(36) a) Ébɛ́téná Dika à pɔ̀, à wusá ɗã̀

If $_{CL1.}$Dika $_{CL1.SM}$ venir $_{3SG}$ $_{CON}$ eat

"If Dika had come, He would have eaten."

b) O til-í té létà, nà mà-láŋg-à mɔ́

$_{2SG}$ write-$_{P1}$ if $_{CL5}$l.etter $_{1SG}$ $_{PRES}$-read-$_{FV}$ it

"If you had written the letter, I would have read it."

2.2.3.2.6. The potential

The potential mood indicates that in the opinion of the speaker, the utterance is likely considered. Dùálá distinguishes between the real potential and the irrealis one.

2.2.3.2.6.a. The real potential

The real potential indicates that an action is actually the case, or expresses the capability of the speaker to perform the action. This potential is formed as follows: ***subject + ènà + subject + the stem***

(37) a) Nà ènà ná til-èà oá

	1_{SG}	can	1_{SG}	write-$_{APPL}$	you
	"I can write to you"				
b)	Nà	ènáá	ná	lóŋg-à	bòlóŋgì
	1_{SG}	can	1_{SG}	build-$_{FV}$	$_{CL14.}$house
	"I can build a house"				

2.2.3.2.6.b. **The irrealis potential**

The irrealis indicates that an action is not actually realized. This mood is generally expressed through a series of expressions of possibility. It is formed as follows:

Wùsá + the stem

(38) a)	Nà	wùsá	til-èà	oá
	1_{SG}	$_{IRR}$	write-$_{APPL}$	you
	"I could write to you/ I could have written to you"			
b)	Nà	wùsá	lóng-à	bòlóŋgì
	1_{SG}	$_{IRR}$	build-$_{FV}$	$_{CL14.}$house
	"I could build a house/ I could have built a house"			

2.2.3.2.7. The consecutive mood

This mood is used to denote simultaneous actions.

(39) a)	a ta a tìlà, a láŋgà	b)	a mɛ̀ndɛ́ pɔ̀, a tìlà pɛ́ létà
	"He wrote, and realized"		"He will come, and write a letter"

2.2.3.3. Aspect

The Cambridge Advanced Learner's Dictionary (2005) defines aspect as "*The form of a verb which shows how the meaning of a verb is considered in relation to time, typically expressing whether an action is complete, habitual or continuous"*

To sum up, aspect is a grammatical category that expresses how an event denoted by the verb relates to the flow of time. In Dùálá, we can distinguish between the perfective aspect and the imperfective aspect.

2.2.3.3.1. The perfective aspect

The perfective aspect in the language includes punctive actions in the past as well as completive. This aspect is marked in different ways in the language. To start, it was argued above that the past tense (P1 particularly) is tightly linked to the perfective aspect and that they go hand in hand. Besides, the perfective aspect is morphologically marked by the same marker used to mark the P1 namely ***–ì/-í***.

2.2.3.3.1.a. Verbs ending with a final vowel "a" or "ɔ"

If we are dealing with a disyllabic verb with two low tones, the perfective is formed by shifting the final vowel ***"a"*** or ***"ɔ"*** into ***"i"*** + a high tone.

(40) Nà sèŋg-**í** ngòsò nà màkɔ́m máǹ

1_{SG} listen-$_{PERF}$ $_{CL9}$.music with $_{CL6}$.friend my

"I listened to music with my friends"

In contrast, if it is a disyllabic verb with the first tone being high (bearing in mind that the second is always low in the root), the perfective is formed by changing the final vowel **"a"** or **"ɔ"** into **"i"** + a low tone.

(41) a) Nà tát-**ì**

1_{SG} look after-$_{PERF}$

"I looked after"

b) Nà pɔ́t-**ì** tébedì

1_{SG} move-$_{PERF}$ $_{CL9}$table

"I moved the table"

2.2.3.3.1.b.Verbs with the last syllable ending with a nasal

If the last syllable of the stem of a verb ends with a nasal, the vowel of this nasal will be deleted, and then its low tone will spread to the nasal in the perfective tense.

(42) a) kíɛ̀lɛ̀ ní tómbí nà tɛ́**m̀** pɔ́ndá múnà ɲàŋgó ám̀ à iŋgéd-í-nɔ́

tomorrow that past 1_{SG} stand-$_{PERF}$ time $_{CL1}$.child $_{CL1}$mother my $_{CL1SM}$ enter-$_{P1}$-$_{PRTCL}$

"I stood up yesterday when my sister came"

b) N-é**ǹ** léta kiɛ̀lɛ̀

I-see-$_{PERF}$ $_{cl5}$letter yesterday

"I saw the letter yesterday"

2.2.3.3.1.c. Verbs ending in -lɛ̀

When the last syllable of a verb ends with ***-lɛ̀***, the perfective is marked by a falling tone on this syllable.

(43) a) Nà bélɛ̂ màkɔ́m ám̀

1_{SG} call-$_{PERF}$ $_{CL6}$friend my

"I called my friends"

b) Nà wɛ́lɛ̂ kálatì ám̀ o mɔ́n á tébèdì

1_{SG} put-$_{PERF}$ book my on up of $_{CL9}$table

"I put my book on the table"

2.2.3.3.1.d.The completive aspect

It expresses actions that are complete at the moment of speaking. It is an aspect that expresses actions that ended in the past but have an impact in the future. The completive aspect is either marked grammatically or lexically. The aspect is marked grammatically by a high tone like in (44a-b) and lexically by the word ***bɔ́l-ɛ́*** "to finish" like (45).

This aspect is marked by the tone in Dùálá.

(44) a) À má- tìl- èà Dika léta

3_{SG} $_{COM-}$ write- $_{APPL}$ $_{CL1.}$Dika $_{CL5.}$letter

"He has already written the letter to Dika"

b) Nà má- wɛ́l- ɛ̀ mwɛ̀lɛ́

1_{SG} $_{COM-}$ put - $_{FV}$ $_{CL3.}$plantain

"I have already put plantains"

The completeness aspect is also marked in Dùálá by the lexical verb "ból-ɛ̀" which means, "to finish"

(45) À ból-ɛ̀ tìl-à léta

3_{SG} finish-$_{FV}$ write-$_{FV}$ $_{CL5.}$letter

"He has finished writing the letter"

2.2.3.3.2. The imperfective aspect

This aspect describes a situation viewed with internal structure such as habitual, repeated, etc. The actions described by this aspect are perceived in their details. The perfective aspect is subdivided into two different aspects in Dùálá:

2.2.3.3.2.1. The inchoative aspect

The inchoative aspect expresses actions that are about to start or at their beginning. This aspect can be marked grammatically or lexically: Grammatical inchoative aspect is marked by the morpheme marked ***ní-*** as in (46a-b) and lexicalized inchoative aspect marking is like (47).

. (46) a) À ní- tìl-à létà b) Nà ní-wɛ́l-ɛ̀ mwɛ̀lɛ́

$_{3SG}$ $_{INCH}$- write-$_{FV}$ $_{CL5.}$letter 1_{SG} $_{INCH}$-put-$_{FV}$ $_{CL3.}$plantain

"He starts to write a letter" "I start to put plantains"

The inchoative aspect can also be expressed through the lexical verb as the following construction shows.

(47) À mà-bòt-èà tìl-à Dika létà

3_{SG} $_{PRES}$-begin-$_{APPL}$ write-$_{FV}$ $_{CL1}$.Dika $_{CL5}$.letter

"He begins to write a letter to Dika"

2.2.3.3.2.2. The continuative aspect

This aspect denotes an action that started in the past, and which is still going on. It is encoded by ***díá*****,** which can be translated roughly as "to stay".

(48) a) Nà díá nà mà-tìl-à létà

1_{SG} $_{CON}$ 1_{SG} $_{PRES}$-write-$_{FV}$ $_{CL5}$.letter

"I am still writing the letter"

b) Nà díá nà mà-wɛ́l-ɛ̀ kálàtì ám̀ o mɔ́ŋ á tébèdì

1SG CON 1SG PRES-put-FV CL9.book my to up of CL9.table

"I am still putting the book on the table"

2.3. THE NOUN SYSTEM

The noun class system is probably the characteristic most widely found in Niger-Congo languages. Generally, these languages group their substantives into different classes. Each of the nouns of these classes is morphologically marked either by a prefix (Dùálá) or by a suffix (Fulfulde). Thus, when two or three substantives share the same affix, it is said that they are part of the same class. A number on a word indicates the different classes. Previous works such as Nseme (1982) use 1, 3, 5, 7, 9, 11, 13 to mark singular while the even numbers 2, 4, 6, 8, 10, 12, mark plural nouns. Dùálá is a Bantu language and therefore, makes use of noun class systems. All the nouns in this language comprise a stem and one of a set of singular and plural prefixes and are grouped into classes.

2.3.1. Noun classes in Dùálá

A preliminary word on the characterization of the Bantu noun class systems is necessary here. An argument borrowed from Katherine Demuth (2000) stipulates that the Bantu noun class system functions *"as part of a lager 'concordial' agreement systems, where nominal modifiers, pronominal and verbs are all morphologically marked with the same noun class (gender) feature"*. The class feature of a head noun always dictates the agreement of its nominal modifiers, pronouns, verbs, ect. The following example demonstrates how this agreement system works in Dùálá:

(49) Yé é-lèlà é-sàdi é- mà-ɗǎ

Cl7.this Cl7.duck Cl7.small Cl7 -PRES-eat

"This small duck eats"

The example in (49) shows what Demuth refers to as 'concordial' agreement. It is clear that all the categories in this example share the same concordial prefix ***"é"*** belonging to class 7**.** The following table from Nseme (1982) summarizes the noun class system of the Dùálá language:

Table n° 5: Noun prefixes in Dùálá

Classes	Nouns prefixes C	Nouns prefixes V	Adjectival prefixes C	Adjectival prefixes V	Verbal prefixes C	Verbal prefixes V
1	mo mu	mw- m-	nù	ɲ	a	Ø
2	ba	b-	ba	b-	ba	b-
3	mu	mw- mu	mu	mw	mu	mw- n-
4	mi	my- m-	mi	my-	mi	my- m-
5	di	l- j-	di	l-	di	l- j-
6	ma	m-	ma	m-	ma	m-
7	e	y-	é	y-	é	y-
8	be	by- b-	bé	b-	bé	ɲ-
9	Ø	y-	m-	ɲ-	e	y-
10	Ø	ɲ-	I	y-	I	y-
11	i	y-	I	y-	I	y-
13	lo	lo l-	lo	lo l-	Lo	Lo l-
14	bo	bw- b-	bo	bw- b-	bo	bw- b-

2.4. THE GENDER

According to Dubois et Al (1999:247), " *Le genre est une catégorie grammaticale réposant sur la répartition des noms dans les classes nominales, en fonction d'un certain nombre de propriétés formelles qui se manifestent par la référence pronominale, par l'accord de l'adjectif (ou du verbe) et par des affixes nominaux"*. This definition clearly shows that the notion of gender in Bantu languages is not the same as the one of Indo-European languages. The following genders are attested in the Dùálá language.

GENDER I: (class 1 and class 2)

This gender is made up of two classes. Class 1 is the singular and class 2 the plural.

(50) Mú-nà / bá-nà "Child/ children"

Mu-ɛ̌n/ bá-ɛ̌n "stranger/ strangers"

GENDER II (class 3 and class 4)

(51) Mu-làmbà/ mi-làmbà "single/ single"

Mu-kómá/mi-kómá "slavery/slaveries"

GENDER III (class 5 and class 6)

(52) Dì-bɔ́/ mà-bɔ́ "beach/beaches"

Dì-pìtá / mà-pìtá "hope/hopes"

GENDER IV (class 7/ and class 8)

(53) È-bòló / bè-bòló "work/works"

È-yìà/ bè-yìà "taboo/ taboos"

GENDER V (class 9/and class10)

(54) Ø-síŋgì/Ø-síŋgì "cat/cats"

Ø-nyɔ̌/Ø-nyɔ̌ "hair/hairs"

GENDER VI (class11 and 13)

(55) Ì-dìbà/lò-dìbà "morning/mornings"

Ì-nɔ̌n/ lò-nɔ̌n "bird/birds"

GENDER VII (class 14 and class 4)

(56) Bòsó/myòsó "face/faces"

Búnyá/mínyá "day/days"

GENDER VIII (class 9 and class 6)

(57) Mbéndá/ màmbéndá "law/laws"

Ŋgèá/ maŋgèá "road/roads"

2.5. SYNTAX OF DÙÁLÁ

The unmark word order of the Dùálá language is SVO as illustrated bellow.

(58) Dika nà Elame bá tɔ́ndì Ndómɛ̀

CL1.Dika and CL1.Elame CL2-SM PRES-love CL1.Ndome

"Dika and Elame love Ndome"

As (58) shows, the subject is in the preverbal position and the compelement occurs directly after the verb. As in most Bantu languages, there is an agreement marker that copies the noun class of the subject. However, this unmark word order can change in the contexts of contrast, emphasis, focalization and topicalization. Dùálá also licences null subject constructions as the following construction shows:

(59) pro bá tɔ́ndì Ndómɛ̀

they love-PRES CL1.Ndómɛ̀

"They love Ndome"

The preceding example shows that Dùálá is a pro-drop language. More descriptive data will be provided later in a subsequent chapter. The word order of the language changes when expressing contrast between two situations, or is determined by discourse properties such as focalization or topicalisation. A closer look will be given to these later constructions in a subsequent chapter.

2.5.1. Contrast

Contrast is expressed in the language by some kind of movement of the predicate follow by an optional object

(60) Bá bélɛ oá, ndé pɔ, o si pɔ̌ [Ittmann 1978:276]

they call you but come you $_{NEG}$ come

"They call you, but (as for coming) you did not come"

2.5.2. Emphasis

We observe another change of structure when there is a need to lay emphasis on one element of the sentence.

(61) Njé Dika à déd-ì-nɔ́ ?

What $_{CL1}$Dika $_{CL1SM}$ eat-$_{P1-PRTCl}$

"What did Dika eat?"

In the preceding example, the emphasis is on the object. In fact, the speaker wants to know exactly what Dika has eaten. Notice that the unmark word order in (61) has changed. In fact, the sentence in (61) has the order OSV. The word order of a sentence can also change in Dùálá in the case of verb movement. Let us reconsider the example in (61) restated here as (62).

(62) Njé Dika à déd-í-nɔ́ ?

What $_{CL1.}$Dika $_{CL1\cdot SM}$ eat-$_{PAST-PRTCl}$

"What did Dika eat?"

In the preceding construction, there is verb movement. The verb moves out of the V-domain in order to check the (past) tense feature of T. The initial word order in *déd-í-nɔ́ "*ate" is *í- nɔ́- déd.* The word *déd-í-nɔ́* "ate" is therefore obtained via successive head movement, which is an instance of word order change.

SUMMARY

To sum up, the aim of this chapter was to present an overview of the grammatical sketch of the Dùálá language in order to familiarize the reader with some basic elements of the language. Based on previous works such as Nseme (1979, 1982) Itmann (1978) and my own investigation, I have briefly presented some relevant features concerning phonetics, morphology and the syntax of the language. In the following chapters, some of the features, which are directly relevant for this work, presented in this chapter will be developed in details.

CHAPTER III

INTERROGATIVES

3.0. INTRODUCTION

In this chapter, focus is on the question formation. Questions may be realized morphophonologically or syntactically. Syntactically, it involves the displacement of a phrase from an argument position into a non-argument position. This chapter aims at analyzing the requirement that triggers movement of a wh-word from its base-generated position. There is also a need to analyze the relationship that the moved constituent shares with its canonical position. There is a cross-linguistic variation as far as the syntax of wh-phrases is concerned. In English for instance, wh-questions are either fronted to the sentence initial position or remain in situ (in the case of echo questions, quiz questions and multiple wh-questions). However, in certain languages like Chinese and Japanese, wh-phrase are not displaced in overt syntax, they only involve covert movement at LF. Dùálá is an optional in-situ language where wh-phrase are either ex-situ (extracted from their base generated position) or in situ (in their canonical position). This chapter has three (3) sections. The first section examines the formation of questions: wh-in situ, Yes/No questions, alternative questions, indirect questions, subject questions as well as fronted questions. The second section tackles the requirement that triggers movement in the language. The third section examines constraints on movement.

3.0.1. Basic assumptions

Adger (2003) proposes that question formation involves a C with the feature [Q] and a 'strong' uninterpretable feature [u Wh*]. Concerning the derivation of Yes/No Questions (YNQ), Adger claims that they have the same C as Wh-questions , with [u Wh*] being satisfied by merger of an expletive wh-operator into the specifier of the complemtizer phrase. In Wh-questions, the feature [u Wh] triggers the movement of a wh-phrase to the edge of the clause. If the [u Wh*] feature really triggers the movement of wh-phrase, a question arises: where does the wh-phrase move to? In the literature, it is argued that wh-movement targets the edge of CP (Spec, CP position); other scholars argue that fronted wh-expressions in some languages are: adjoined to IP, substituted to a position inside VP, or moved to the specifier of the focus phrase.

3.1. FORMATION OF QUESTIONS

Like many other Bantu languages, Dùálá does not have real wh-expressions like English language, for example. The language expresses such information by the use of some other equivalents. One finds expressions such as *njá* "who", *súníŋgá* "when", *ówɛ* "where", *ónólá njé* "why", *né nī* "how" *njé* "what" in the language. Dùálá wh-phrases can be classified into three (3) main categories: arguments, referential adjuncts and non-referential adjuncts as illustrated in the following table.

Table n° 6: arguments, referential and non-referential wh-expressions in Dùálá

Arguments	njá	"who"	njé	"what"
Referential adjuncts	wɛ (nī)	"where"	Súníŋgá	"when"
Non referential adjuncts	Né (nī)	"how"	Ónólá njé	"why"

The preceding table presents wh-words used to form questions in the language. The typology of questions in Dùálá differs from the one of English in the sense that all the preceding wh-words can either stay in their canonical position or move to the sentence initial position. In fact, English allows only arguments "who", "what" and referential adjuncts "where", "when" to stay in situ, while non-referential adjuncts have to move. In this section, the formation of questions is analyzed. Throughout the discussion, wh-in-situ, Yes or No questions, alternative questions, indirect questions, subject questions as well as fronted questions will be analyzed.

3.1.1. Wh-in-situ questions.

As indicated earlier, Dùálá is an optional wh-in-situ language where wh-words are either in-situ or preposed at the left edge of the clause. This sub-section tackles wh-in situ questions in the language. Consider the following sentences.

(1) a) Dika à déd-ì díkùbè kíɛ̀lɛ̀

CL1.Dika CL1.SM eat-P1 CL5.banana yesterday

"Dika ate banana yesterday"

b) Dika à déd-ì njé kíɛ̀lɛ̀?

CL1.Dika CL1-SM eat-P1 what yesterday

"What did Dika eat yesterday?"

c) njé$_i$ Dika à déd-ì-nɔ́ t_i kíɛ̀lɛ̀?

W hat CL1 Dika CL1SM eat-P1-PRTCL yesterday

"What did Dika eat yesterday?"

d) Dika à sí dédì ndé dikúbé ǒŋólá njé?

CL1.Dika CL1-SM NEG eat-P1 FOC CL5.banana why

"Why did Dika not eat banana?"

e) Nɛ́nī Dika à bolì-nɔ́ Elame dikúbé?

How CL1.Dika CL1.SM give-PRTCL CL1.Elame CL5.banana

"How did Elame give banana to Dika?"

The example in (1a) is a basic SVO sentence in Dùálá. From that input, it is shown that a wh-word can either be preposed as in (1c) or stay in-situ in the base-generated position (1b). The examples in (1d and e) are sentences where non-referential adjuncts are preposed or stay in-situ. The constructions in (1) show that it is possible to front all wh-words (arguments, referential and non-referential adjuncts) in the language. Contrary to what one might think, (1b) is not interpreted as an echo question. It is a genuine question that requires new information. The question has nothing to do with pragmatics and it does not ask for a confirmation. The construction in (1b) contrasts with its English counterpart in (2) below:

(2) a. John eats banana yesterday.

b. John eats WHAT?

The example in (2b) does not ask for new information but rather, the speaker is surprised or in doubt and asks for a confirmation. Thus, wh-in-situ in English is not well formed compared to wh-in situ questions in Dùálá. Adger (2003) argues that one of the characteristics of Echo Questions (EQ) is that the C on an EQ does not bear Q therefore, they are not interrogative. This will be taken as a starting point for the following analysis. Since Dùálá wh-in situ constructions are genuine questions, it is expected that C bears Q. Biloa (1995) points out that Dùálá and Tuki have the Feature F under the head of the Focus Phrase (FP), which is very similar to the English

Q feature. In the language, wh-in situ can co-occur with the focus marker ***ndé***. Let us consider the following constructions:

(3) a) Mútò à ànd-éyè ndé múnà njé kíɛ̀lɛ̀ ní tòmbí

CL1.woman CL1.SM buy-APPL FOC CL1.child what tomorrow that past

"What did the woman buy for the child yesterday?"

b) À ànd-éyè ndé múnà kálàti

3_{SG} buy-APPL FOC CL1.child CL9.book

"She bought A BOOK to the child."

c) Elame à ànd-éyè ndé múnà kálàtì súníŋgá ?

CL1.Elame CL1-SM buy-APPL FOC CL1.child CL5.book when

"When did Elame buy a book for the child?"

d) Elame à and-éyè ndé múnà kálàtì kíɛ̀lɛ̀ ní tombí

CL1.Elame CL1SM buy-APPL FOC CL1child CL9book tomorrow that past

"Elame bought a book for the child YESTERDAY."

The above examples are wh-in situ constructions. Notice that in all the constructions above (3a-d) the focus particle *ndé* occurs directly after the verb. In (3b) which is the answer to (3a), the focus particle occurs directly after the verb *ànd-éyè* "buy for" whereas it is the direct object, which is being focused. The same thing happens in (3d). Instead of occurring after the adverbial *kíɛ̀lɛ̀ ní tombí* "yesterday", which is being focused, it occurs rather after the verb. The particle only occurs when the wh-word is in-situ. It is not possible to front a wh-word and get the focus marker *ndé* sentence initially. In the same vein, it is not possible to get the particle in subject questions. I propose that the incompatibility of wh-words and the focus marker in sentence initial position is accounted for in the following ways: first the fronting of the wh-word already types the clause as interrogative and satisfies the F feature of the language, and second, the presence of the focus marker in wh-in situ construtions implies that the question is genuine and requires a new information. Dùálá resembles Chinese, an Asian language where wh-words always remain in situ and are interpreted as genuine questions. Thus, Chinese exhibits move α at LF (Huang 1982). Biloa (2013) argues that languages like Tuki and Dùálá obey the Wh-criterion (May 1985; Wahba 1984) which would apply at LF:

(4) The Wh-Criterion (Biloa 2013:255)

a. Every [+wh] Comp must contain a Wh-phrase.

b. Every wh-phrase must move to a [+wh] Comp.

When a verb subcategorizes for an interrogative complement clause with the feature [+wh], the wh-element has a narrow scope and is unable to move to the higher comp, since it has to satisfy the selectional requirement of the verb. However, if the verb subcategorizes for a declarative complement clause, the wh-phrase can be moved at LF. Biloa points that (4b) holds only at S-Structure in Tuki. Let us apply this criterion.

(5) Elame à tɔ́nd-ì tìl-à njé?

CL1.Elame CL1-SM prefer-P1 write what

"What did Elame prefer to write?"

(6) Dika à báísɛ̀ Elame njé$_i$ Bile à til-i-nɔ́ t_i

CL1.Dika CL1-SM ask-P1 CL1.Elame What CL1.Bile CL1.SM write-P1-PRTCL

"Dika asked Elame what Bile wrote."

(7) Elame à báísɛ̀ Dika wɛ́nī à mà-là-nɔ́

CL1.Elame CL1.SM ask CL1.Dika where CL1-SM PRES-go-PRTCL

"Elame asked Dika where he was going

In (5) the verb *tɔ́nd-ɔ́* "to prefer" selects a non-interrogative complement, the result is that there is no selectional requirement to satisfy and so the argument ***njé*** is free to move to (Spec, CP). The sentence in (5) therefore has the LF representation:

(8) [**njé$_i$** Elame à tɔ́ndì-nɔ́ [–wh [létà ***X$_i$***]]].

The structure in (8) is the LF representation of (5). Since (8) is a grammatical sentence in Dùálá, the wh-criterion has to be satisfied at one level of representation. Now let us consider when a verb subcategorizes for an interrogative complement. In (6) the particle ***-nɔ́*** shows that ***njé*** "what" has been extracted from its base-generated position. The matrix verb ***baís-ɛ̀*** "to ask" subcategorises for an interrogative complement and has the representation in (9a).

(9)a) [-Wh [Dika à báísɛ̀ Elame [njé$_i$ +wh [Bile à tìl-ì-nɔ́ X$_i$]]]]

b) Putá a-mu-sésá Mbárá éé ĭsa wáá a-m(u)-énda tané

Puta $_{SM}$-$_{P1}$-ask Mbara that father his $_{SM}$-$_{P}$1-go where

'Puta asked Mbara his father went where/Puta asked Mbara where his father went'

c) [-wh [Putá a-mu-sésá Mbárá [tané$_i$ + wh [ĭsa wáá a-m(u)-énda X_i]]]]

(Tuki, Biloa 2013:254)

The representation in (9a) corresponds to the Dùálá sentence in (6) whereas the representation in (9c) corresponds to the Tuki construction in (9b). In (9a and c) ***njé*** "what" and ***tané*** "where" respectively have a narrow scope over their embedded clauses, they cannot move to the matrix Comp at LF since they have to satisfy the selectional requirement of the verb ***báís-è*** "to ask" and ***sésá*** "to ask" respectively. Thus, ***njé*** "what" and ***tané*** "where" are therefore obliged to move to the next Spec-CP. However, these wh-words cannot move to the higher Comp, since they have to satisfy the selectional requirement of their respective matrix verbs. The above observations show that the wh-criterion applies in Dùálá and in Tuki. The only difference being that Dùálá is an optional wh-in situ language where wh-phrases are obliged to move out of their base position in embedded questions. The example in (7) shows that (4b) has to be fulfilled in the overt syntax, since it does not allow wh-in situ in embeddded clauses (unlike Tuki).

3.1.2. Yes/No Questions

Yes/No Questions (YNQ) are questions which might normally elicit a "yes" or "no" answer. These types of questions are formed in English by subject-verb inversion. Here the auxiliaries move from the T position in TP into the head C position in CP. Unlike the English language, YNQs do not involve Head movement in the language under study; therefore, the structure SVO is preserved. Dùálá resembles French when formulating an YNQ. In Fact, one way to obtain YNQ in French is by intonation, as in (10).

(10) Tu viens samedi? (French, Strik 2008:19)

Dùálá has the same phenomenon. An YNQ is formed only with the intonation and without any distinctive interrogative marker. Consider the following:

(11) a- O é múŋèngɛ́

2_{SG} be $_{CL3}$.joy

"You are happy"

b- O é mú̱ɲɛ̀ngɛ́?
2_{SG} be $_{CL3}$.joy
"Are you happy?"

c- Múnà à sa-í ngandò?
$_{CL1}$.child $_{CL1.SM}$ dance-$_{P1}$ $_{CL9}$.dance
"Did the child dance?"

The sentence in (11a) is a declarative sentence whereas the one in (11b) is a YNQ. The only way to distinguish between these two sentences is through the intonation. When collecting data, I noticed that certain native speakers pronounce YNQ in such a way to obtain a final low tone vowel "e" at the end of the sentence as in (12) below.

(12) O é mú̱ɲɛ̀ngɛ́ è?
2_{SG} be $_{CL3}$.joy

In the previous sentence 'e' is a default vowel that usually occurs after the last word of the sentence in YNQ. Even though this vowel is not morphologically realized, it is represented syntactically.

Another way to obtain YNQ in Dùálá is through the focus marker ***ndé*.** This type of construction is less attested in the language. Here again, as (13) below shows, there is no occurrence of a specific question marker that can distinguish a declarative sentence from an interrogative construction.

(13) O mɛ̀ndɛ́ ndé pɔ̀ èsàbàsú?
$2_{SG\ F2}$ $_{FOC}$ come Saturday
"Are you coming on Saturday?"

Briefly, YNQs are mostly obtained in the language through the intonation. Thus, a declarative sentence is distinguished from a YNQ through the intonation of the speaker. That notwithstanding, the default vowel 'è' found at the end of the utterance can also help the hearer to distinguish whether the sentence is declarative or interrogative.

3.1.3. Alternative questions

This sub-section tackles alternative questions. It is the type of interrogative that offers the interlocutor a choice between two or more answers. A set of answers is therefore enumerated and the addressee is supposed to choose among them. These proposed answers are conjoined with the coordinator ***ŋga*** "or"**.**

(14)a- Ó mɛ̀ndɛ̀ púl-à jómbw-èà oénɛ̀nɛ̀ **ŋgà** ó mɛ́ndɛ́ ndé jèà mbémbé?

2_{SG} $_{F2}$ want$_{-FV}$ look-$_{APPL}$ yourself or $2_{SG\ F2}$ $_{FOC}$ cry $_{CL10.}$cries

"Would you like to take care of yourself or sit and cry?"

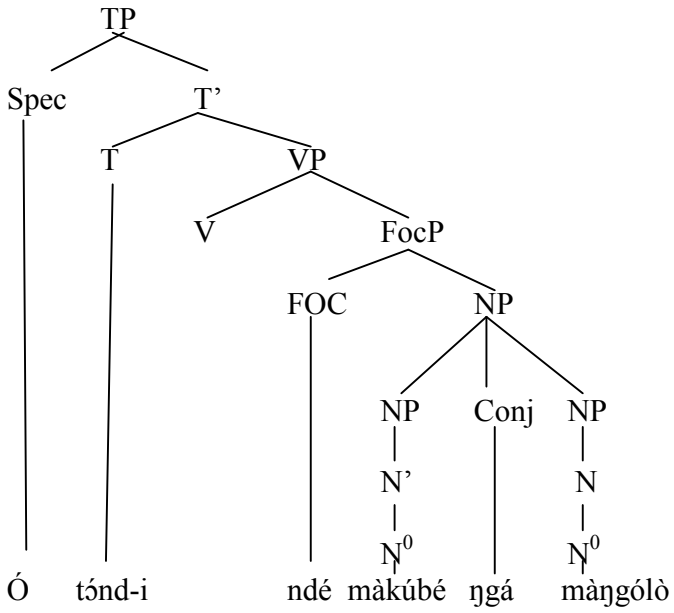
b- Ó tɔ́nd-ì ndé màkúbé **ŋgá** màŋgólò?

2_{SG} prefer-P1 $_{FOC}$ $_{CL6.}$banana or $_{CL6.}$mangoes

"Did you prefer bananas or mangoes?"

(14 a-b) are instances of alternative questions. In both cases, the word order SVO is maintained and there is the presence of the invariable focus marker ***ndé*****.** In (14a), the speaker is asking the interlocutor to choose between crying and taking care of himself and in (14b), the interlocutor is asked to choose between two types of fruits. Sentence (14b) has the following representation.

(15)



The representation on (15) shows us that both *màkúbé and màŋgólò* “bananas or mangoes” are in equality. The focus marker is used in the above example (14a-b) just to lay emphasis on the enumerated answers. *Ndé* in the example does not mean ‘only’ since it is expressed in the language through the word ‘*bukate*’.

3.1.4. Indirect questions

Indirect questions are questions that are formed from direct questions. Virtually, any direct question can become indirect if a corresponding verb is placed in the matrix clause preceding them. Indirect questions are introduced by epistemic verbs (verbs of knowledge) such as *kwál-à* “say”, *báís-è* “ask”, *ɲák-à* “wonder”. These verbs are followed by a lexical complementizer. In Dùálá, indirect questions are distinguished from wh-indirect questions. Total indirect questions are initiated by the complementizer ***ŋgá*** “whether”.

(16)	Nà	sì-bí	**ŋgá**	ó	é	èlèmáá	kà	póndá	kwáŋ
	$1_{SG\ NEG}$	know	whether	2_{SG}	be	$_{CL7.}$at ease	as	$_{CL9.}$time	before
	“I wonder if you have always been so lazy”								

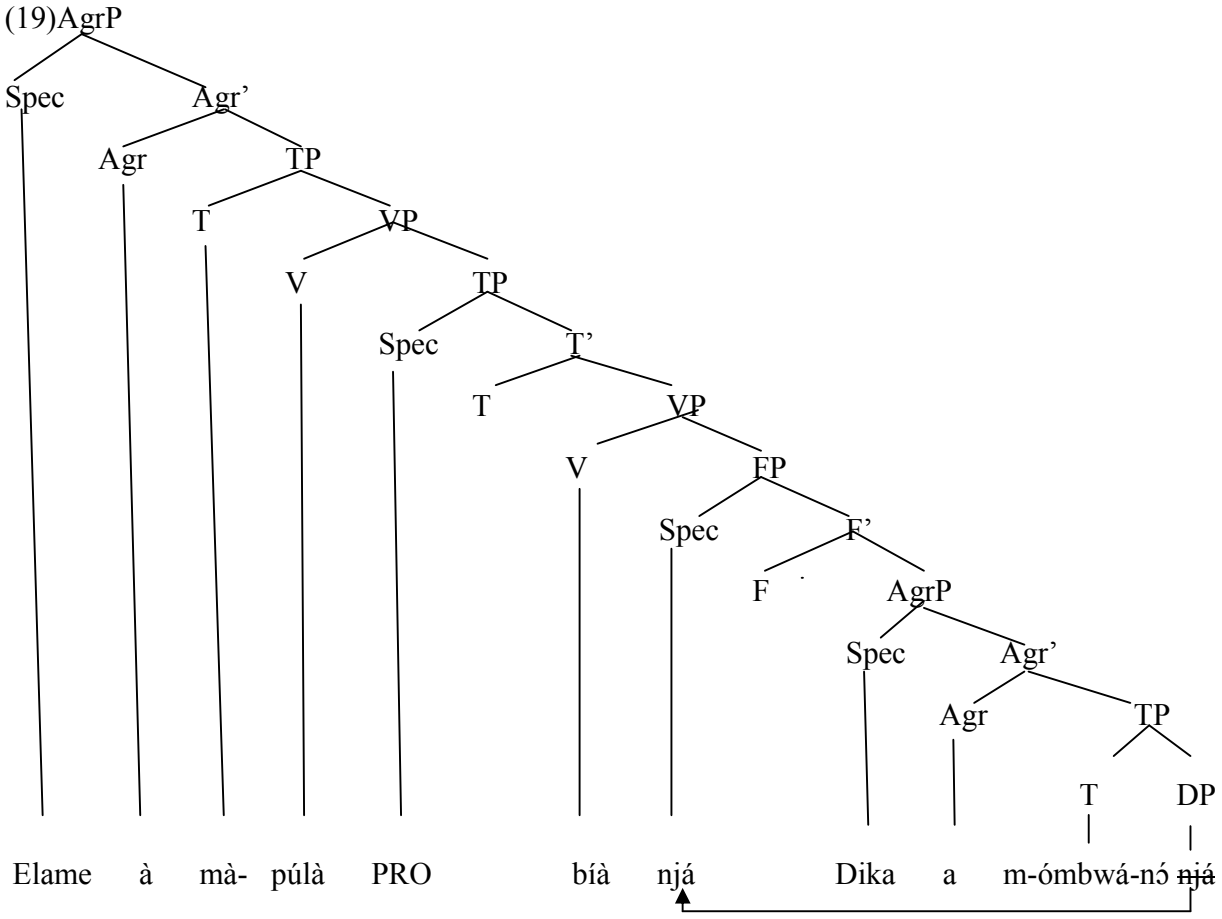
I have preferred to refer to (16) as total indirect question because it has the structure of total question (YNQ). In fact, in this question, there is no wh-word and the subordinate clause of (16) restated here as (17) could either be answered by yes or no.

(17)	Ò	é	èlèmáá	kà	póndá	kwáŋ ?
	2_{SG}	be	$_{CL7.}$at your ease	as	$_{CL9.}$time	before
	“Have you always been so lazy?”					

Wh-indirect questions are also attested in the language. Unlike indirect total questions, there is the interrogative marker as (18) shows.

(18)	Elame	à	mà-púl-à	bíà	njá	Dika	à	m-ómbwà-nɔ́?	
	$_{CL1.}$Elame	$_{CL1\cdot SM}$	$_{PRES}$-want-$_{FV}$	know	who	$_{CL1.}$Dika	$_{CL1\cdot SM}$	$_{PRES}$-look-$_{PRTCL}$	
	“Elame wants to know who Dika is looking at.”								

The preceding sentence (18) has the following representation.



To conclude, total indirect questions differ from wh-indirect questions in Dùálá. Total indirect questions differ from wh-indirect questions in that the wh-word in Spec-FP is obtained by movement.

3.1.5. Subject questions

So far, it has been argued that wh-elements in Dùálá can be preposed or remain in-situ. The syntax of subject questions is not so clear-cut in the literature. Two schools of thought have been developed on this matter. Under the first of this approach, the wh-subject remains in its ordinary position, the specifier of the Inflectional phrase (Grimshaw 1995, Chung and McCloskey 1983 among others). Under the second approach, a wh-subject is moved out of their ordinary position to a position above IP (Cheng 1991, Rizzi 1991 among others). It is the reason why I have decided to have two separate analyses of wh-movement in this thesis: one for wh non-subjects and the other for wh-subjects. Let us consider the following examples:

(20) a) Dika à ànd-í dìkúbé

$_{CL1}$.Dika $_{CL1\cdot SM}$ buy-$_{P1}$ $_{CL5}$.banana

"Dika bought a banana"

b) Njé$_i$ Dika à ànd-í-nɔ̀ ***t***$_i$?

what $_{CL1}$.Dika $_{CL1\cdot SM}$ buy-$_{P1\text{-}PRTCL}$

"What did Dika buy?"

c) Njá nú *(t)* à ànd-í dìkúbé?

who $_{REL}$ $_{SM}$ buy-$_{P1}$ $_{CL5}$.banana

"Who bought a banana?"

Sentence (20b) shows that ***njé*** "what" the complement of the verb "to buy" has been moved to the front of the sentence. Recall that Dùálá has the word order SVO. In (20b), the object ***njé*** "what" is in a displaced position, this is why the word order is OSV. Besides, the morphology of the verb (the occurrence of *-nɔ́* at the end of the verb) tells us that a constituent has crossed over the verb. In (20c) however, there is no change in the morphology of the verb. However, it is obvious that in (20c), the argument *njá* "who" does not occupy the canonical subject position which is the position immediately before the SM. As it is, there is a relative pronoun *nú* in between the question word and the SM.This relative pronoun always occurs when the subject wh-word is being questioned. Following Chomsky (2000), A' dependencies such as wh-constructions have the following features:

(21) C (probe) wh-phrase (goal)

[uQ] **[iQ]**

[EPP] **[uWh]**

The uninterpretable feature [Q] of the probe (C) agrees with the interpretable feature [Q] of the goal. The EPP feature of the probe requires something to be merged with the category that C heads (Spec-CP). The representation in (21) shows that the EPP property of the probe has to be satisfied. Question (20c) shows the satisfaction of this property because the subject wh-expression ***njá*** "who" has been extracted from its canonical position (immediately before the SM) to a higher position. This is visible through the relative pronoun *nú* in between the argument and the SM. Following Rizzi's (1991), the Wh-operator ***njá*** "who" is in Spec-Head configuration

with the head endowed with this Wh-features in (20c), thus, the Wh-criterion is respected. These Dùálá facts strongly strengthen the view that there is movement of the subject wh-word to the edge of the clause. Unlike Dùálá, certain Bantu languages like Basa'a do not show overt movement of the question word in subject questions. In these languages, the feature [+Q] is checked at LF. This type of movement is known as **Vacuous Subject Movement** (Chomsky 1986:48-9).

3.1.6. Fronted wh-phrases

The aim of this sub-section is to analyze the movement of fronted wh-phrases. On the one hand, we shall be looking at the type of relationship that a fronted wh-phrase shares with its trace. On the other hand, the landing site of the displaced wh-phrase will be analyzed with respect to the structure-preserving principle. In Dùálá, fronted wh-phrases cannot be studied without the analysis of the particle ***-nɔ́.*** In this sub-section, I will first present various standpoints on the particle before getting into fronted wh-phrases proper.

3.1.6.1. Various Standpoints on the -nɔ́ particle

Wh-phrases can be fronted in sentence initial position when formulating a question in Dùálá. As it has been observed from the beginning of this section, when wh-expressions are extracted, the particle ***-nɔ́*** occurs immediately after the verb. Unlike wh in-situ questions, this particle is compulsory when a wh-phrase is being extrated from its base-generated position. Let us consider its occurrence in the following examples.

(22) b) Súníŋgá Elame à mà-là-***(nɔ́)** ó èsùkúlù?
When $_{CL1}$.Elame $_{CL1.SM}$ $_{PRES}$-go-$_{PRTCL}$ to $_{CL7}$.school
"When does Elame go to school?"

b) Ójɔ́lá njé Elame à mà-là-***(nɔ́)** ó èsùkúlù?
why $_{CL1}$.Elame $_{CL1.SM}$ $_{PRES}$-go-$_{PRTCL}$ to $_{CL7}$.school
"Why does Elame go to school?

c) Njé Dika à ànd-i-***(nɔ́)?**
what $_{CL1}$.Dika $_{CL1.SM}$ buy-P_{1}-$_{PRTCL}$

"What did Dika buy?"

As the above examples show, the particle ***-nɔ́*** is compulsory when wh-phrases are fronted to the sentence initial position. A number of researches (Helminger 1972; Ittmann 1978; Epée 1976; Nseme 1991; Biloa 1994 and Sabel 2000 among others) discussed this phenomenon in their works. In fact, this particle is an inevitable task for any analysis of focus, relativization and wh-construction in Dùálá. In this thesis, the particle ***-nɔ́*** will be analyzed along the general lines of Epée (1976); Nseme (1991); Biloa (1994), Sabel (2000) and Zentz (2014).

Epée suggests that the particle ***-nɔ́*** appears in wh-question, in focus construction except when the subject is being focalized, and in relative clause. First, ***-nɔ́*** appears when wh-phrases are fronted. Epée (1976:92) cited by Nseme writes *"l'insertion de –nɔ́ résulte du déplacement en tête de phrase d'un element qui se situe à droite du verbe en structure profonde. Cette règle est générale en Duala."* Thus, when the subject of the clause is questioned the particle is absent as the following sentence shows.

(23) a) ɲàŋgó ám̀ à tìl-édì Dika létà

CL1.mother my CL1·SM write-APPL CL1.Dika CL5.letter

"My mother made Dika to write a letter"

b) Njá nú à tìl-édì Dika létà?

CL1.who REL CL1·SM write-APPL CL1.Dika CL5.letter

"Who made Dika to write a letter"

The construction in (23b) shows that when the subject is questioned, the particle is absent. Besides, Epée also points out that the particle appears when an XP is extracted from below the scopal verb clause in order to be focalized; this will be thoroughly analyzed later on within the chapter on Focalization. However, if the focalized element is the scopal subject, the particle will be absent in the same way as in wh-construction.

(24) Kuɔ nde _____ a-boli-i (*nɔ) nu moto kalati kiɛlɛ

1.Kuɔ FOC 1.SM-give-PAST nɔ 1.that 1.man 9.book yesterday

(Epée 1976b:194 (1b))

"It is Kuo who gave that man a book yesterday."

Finally, Epée argues that the particle ***-nɔ́*** also appears in relativized constructions as the following example shows:

(25) Mùtó ɲéná ó mà-kwál-à-nɔ́ à mà-pɔ̀

$_{CL1}$.woman $_{CL1}$.that $2_{SG\ PRES}$-speak-$_{FV\text{-}PRTCL}$ $_{CL1.SM}$ $_{PRES}$-come

"The woman that you are talking about is coming."

According to Epée, the particle ***-nɔ́*** only appears when the extracted element is below the scopal verb clause. This particle is therefore the result of the displacement of an XP.

Nseme (1991), attempts to show the limits of Epée's analysis. He argues that the occurrence of ***-nɔ́*** is not only triggered by the displacement of an XP from below the scopal verb clause as Epée proposed. He revealed many other contexts of occurrence of the particle ***-nɔ́*** without any visible displacement of an element.

(26)a- Kàná á til-í-nɔ̄ léta a wɔl-í

since 3sg write.Past1-$_{PRTCL}$ cl5letter 3sg tired-past

"Since he has written a letter, he is tired."

b- Wɔl-í kaná a til-í-nɔ́ léta

3sg tire-Past since 3sg write-Past-$_{PRTCL}$ cl5.letter

"He is tired since he has written a letter" (Nseme 1991:41)

In (26a) the sentence starts with a subordinate clause and there is the occurrence of the particle ***-nɔ́***. This is normal since the subordinate clause has been displaced. In (26b) however, the subordinate clause is in its normal position, but the particle is still attached to the verb of the lowest clause. Nseme therefore concludes that the displacement of an element alone is not sufficient to account for the apparition of ***-nɔ́***. For him, there are many other factors that condition its appearance (for further details see Nseme 1991). He concludes that the particle appears when the clause is the result of a process that started in the past. This is the reason why there is no particle when the mode of the clause is irrealis.

(27) Yétɛ̄ná o mà-púl-à, di mɛndɛ́ ɗã

If 2_{SG} $_{PRES}$-want-$_{FV}$ 1_{PL} $_{F2}$ eat

"If you want, we can eat"

Sabel (2000) also analyzes ***-nɔ́*** based on the work of Epée (1975; 1976a; 1976b) and Biloa (1993). He points out that Dùálá resembles Kikuyu in that the morphology on the verb occurs with wh-movement. In Kikuyu, the tonal form of the verb changes with wh-extraction. Clements (1984) cited by Sabel argues that the non-occurrence of a downstep morpheme goes hand in hand with wh-movement. (See Clements et al. (1983); Clements (1984) and Sabel (2000)). In line with Epée, he observes that the particle occurs after the first verbal element in the sentence.

(28) Leta [na-mɛndɛ *(nɔ) lom-ea (*nɔ) wa _____]

5letter 1SG.SM-FUT nɔ send-APPL nɔ 2SG

"The letter I will send you" (Epée 1976a:257)

Since the particle is neither a place holder nor a resumptive pronoun (it is invariable), it was concluded that the particle is base-generated in Infl where it builds a complex head with the verb.

3.1.6.2. My Proposal

Considering Nseme's view, which states that it is the result of a process that started in the past, one might think that *-nɔ́* is a marker of evidentiality. However, this is not actually the case since the particle can co-occur with negation in a sentence.

(29) **Sétɔ̀** mùtóà ndé Elame à ànd-édì-**nɔ́** mùnjá áō kíɛ̀lɛ̀ ní tɔ́mbì

NEG $_{CL3}$car FOC $_{CL1}$.Elame $_{CL1.SM}$ buy-P1-$_{APPL\text{-}PRTCL}$ $_{CL1}$.wife his tomorrow that past

"It is not a car that Elame bought for his wife yesterday"

The sentence in (29) is a focalized construction where the particle *–nɔ́* co-occurs with negation. It is clear that the particle cannot be a marker of evidentiality since it freely co-occurs with negation. If the particle occurs every time an XP crosses over the verb in order to land in a position above AgrP, then there is a strong relationship between C and T in Dùálá. In fact, the particle occurs every time there is movement to the edge of the clause and when it happens, it is always attached to the highest verbal element in the clause. In the course of this study, I was tempted to conclude that *-nɔ́* is a kind of affixal resumption attached to the verb. This idea is not relevant since this particle is invariable. In the language, resumptive pronouns agree in noun class with their antecedents, however, *-nɔ́* stays invariable. Besides, as pointed out in previous works (Epée 1976b; Biloa 1993), the particle does not occupy the exact position previously held

by the displaced constituent. If we consider the case of do-support in English, there are some similarities with the particle. Like do-support, *-nɔ́* is assumed to be a language specific operation since they are not operations specified to be part of UG. In Dùálá, *-nɔ́* only appears when the derivation would otherwise lead to ungrammaticality. It is therefore a Last Resort. Recall that there is a tight connection between the heads C and T in the language in such a way that the features [uOp] end up in both C and T (Zentz 2014). Before getting into the analysis, it is important to recall that the language does neither allow the fronting of multiple wh-words, nor multiple foci. Both heads have the features [uOp] that they need to value independently in order to ensure convergence. However, in every Dùálá clause, there is only one feature [iOp] contained either by the subject DP or the object DP. The presence of only one subject or object DP in the clause with the feature [iOp] is justified by the fact that there are no multiple wh-words fronting or multiple foci in the language. In the case of subject extraction, both C and T have the features [uOp] and they have the same goal (subject). Since the subject has the features [iOp], it values the features of C and T and there is no occurrence of the particle *-nɔ́*. On the contrary, in the case of object extraction, the features [uOp] on C probe the features [iOp] on the DP object in order to be focalized, questioned or relativized (the case of topicalization is different as it will be illustrated later). The features [iOp] of the goal C value the [uOp] of the probe (DP object). At the same time, T targets the subject since it has to value its case. Thus, C and T probe independently the object and the subject respectively. Since the subject does not have [iOp], the [uOp] features on T remain unvalued. At this level, the derivation is likely to crash since there are uninterpretable features. The particle *–nɔ́* therefore occurs as Last Resort in order to salvage the derivation. The same thing happens in English when the do-support occurs in order to host the stranded affix.

In this work, I will follow Sabel (2000) and assume that the particle is base-generated in T where it forms a complex head with the verb. In fact, it cannot be argued that the particle heads its own maximal projection between TP and VP. As it will be shown later in a subsequent chapter, there is V-to-T movement in Dùálá. Consider the following sentence.

(30) Dika à báísɛ̀ Elame njé$_i$ Bile à tìl-ì-nɔ́ t_i

CL1.Dika CL1.SM ask-P1 CL1.Elame What CL1.Bile CL1.SM write-P1-PRTCL

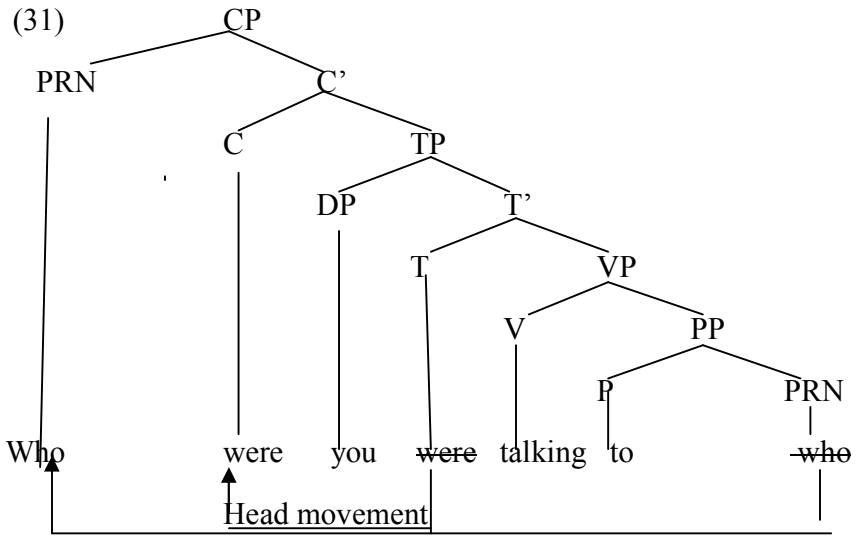
"Dika asked Elame what Bila wrote."

The verb in the embedded clause in (30) has moved to T/Infl to check its (past) tense features. If the particle *–nɔ́* headed a maximal projection between TP and VP, we would not have obtained the order *tìl-ì-nɔ́* but *tìl-nɔ́-ì.* Since this is not actually the case, it is obvious that the particle is merged into a higher position. The position available for this could therefore be T. The C and T are both related to the occurrence of the particle. It can be said that C 'triggers' the occurrence of the particle and T hosts it.

3.1.6.3. Wh-questions in main clauses

In the preceding sub-section, various standpoints on the ***-nɔ́*** particle were discussed. Here, I focus on examining the way wh-questions occur in main clauses. In some languages like English, wh-questions in main clauses are obtained by two kinds of movement operations. The first is known as head movement where the auxiliary moves from the head T to the head of a higher position (C^0). In fact, the head C of CP is a strong head in English and needs to be lexicalized; this is what motivates the movement of the auxiliary to C. The second movement is the wh-movement proper where the wh-word or expression is extracted from its canonical position to the Spec-CP. Let us consider the derivation of the following sentence in English. "Who were you talking to"

(31)



As (31) shows, the first arrow represents head movement where the auxiliary "were" moves from T to C^0. The second arrow shows the displacement of the wh-expression "who" from its

canonical position to the sentence initial position. The formation of wh-main clause questions in Dùálá does not obey these two movements operations.

(32) *njé déd-ì-nɔ́ Elame?
What eat-$_{P1\text{-}PRTCL}$ $_{CL1}$.Elame

Sentence (32) is ungrammatical because unlike English, Dùálá does not allow subject verb (auxiliary) inversion in general. This does not mean that there is no V-to-T movement in Dùálá. Evidence in support of the assumption that the verb raises in Dùálá comes from our famous particle ***-nɔ́***. If Sabel (2000) is right, when he proposes that ***-nɔ́*** is merged in Infl, it follows logically that the main verb has to raise in order to be adjoined to the particle. Thus, V-to-T is allowed in Dùálá, but the verb cannot move further to the left periphery because of the particle that block the movement. The formation of wh-main clause questions only obeys the second movement operation stated above. Like Nguni and French, Dùálá is an optional wh-in situ language (i.e. both in-situ and ex-situ is possible).

(33) a) Dika à déd-ì njé?
$_{CL1}$.Dika $_{CL1.SM}$ eat-$_{P1}$ what
b) Njé$_i$ Dika à déd-ì-nɔ́ t_i ?
What $_{CL1.}$Dika $_{CL1.SM}$ eat-$_{P1\text{-}PRTCl}$
"What did Dika eat?"

The example in (33b) shows that the argument ***njé*** "what" has been extracted from its canonical position to the sentence initial position. The most important property of this construction is the chain that links the wh-phrase and its trace. Chomsky's Trace Theory (1981) stipulates that when a constituent is displaced, there is a trace, and this trace must agree with the displaced constituent since the trace is the full copy of the moved constituent. Under the copy theory of trace, the full representation of the above example is illustrated as:

(34) **Njé$_i$** Dika à déd-ì-nɔ́ **<njé>**
What $_{CL1.}$Dika $_{CL1.SM}$ eat-$_{P1\text{-}PRTCl}$ what
"What did Dika eat what?

Radford (2009:188) argues that '*wh-movement is a composite operation involving two sub-operations of* ***copying*** *and* ***deletion'***. Sentence (34) Shows that the head (the fronted ***njé*** "what") has been moved to the left edge of the clause (first sub-operation). The tail, the silent copy within the angle brackets, has to be deleted since the head is already in the sentence initial position. Sentence (34) does not only converge because of these two sub-operations but the moved constituent has been displaced into a position of the same type. Every movement has to respect the Structure-Preserving Principle (Radford 1988).

(35) The Structure-preserving principle

A substitution is structure-preserving if and only if it results in a constituent X^n *being substituted for another constituent* X^n *of the same type.*

If we agree with Radford that the moved constituent must be displaced into a similar position, the crucial question is: what is the exact position in Dùálá?

As it was said earlier, wh-operators in languages like English target the specifier of the Complemetizer Phrase. However, this is a parameterized variation because wh-operators in all languages do not target Spec-CP. Rizzi (1997) argues that in Italian, wh-operators in main questions end up in Spec-FP. Question operators and focalized elements compete for the same position in Italian. They are therefore mutually exclusive; this explains the illicitness of the following Italian question.

(36) *A chi IL PREMIO NOBEL dovrebbero dare? (Rizzi 1995:16)

'To whom THE NOBEL PRIZE should they give?'

In the above example, the wh-operator *'A chi'* "to whom" competes for the same position with the focus constituent *'IL PREMIO NOBEL'* "the Nobel price". The assumption that a wh-operator targets Spec-FP is not impossible. Many studies have been carried out concerning the semantic connection between wh-questions and focus constructions. Very often, they are seeking for new information. It is not therefore impossible that they compete for the same position.

Before Rizzi, Biloa (1992, 1995) argues that wh-operators in Tuki end up in Spec-FP. He argues that matrix wh-questions in Tuki exhibit a structure very similar to focused constructions. Thus, when formulating a question in this language, one can use the focus marker, which enters into a

Spec-Head agreement with the wh-element. Biloa argues that Dùálá language is similar to Tuki in that its wh-operators also end up in Spec-FP. Unlike Tuki however, the focus assigner is not phonetically realized in Dùálá.

(37) a) Njé Dika á déd-ì-nɔ́ ?

What $_{CL1}$.Dika $_{CL1.SM}$ eat-$_{P1\text{-}PRTCL}$

"What did Dika eat what?

b) Áné$_i$ (ódzú) Mbárá a-dingán x_i

who FOC Mbara SM-loves (Tuki, Biloa 2013:413)

"Who does Mbara love"

The sentence (37a) above shows that the focus assigner is not realized phonetically in Dùálá when the wh-word is fronted. In Tuki, the focus assigner is optionally realized (37b). As I had mentioned in wh-in situ questions, the focus assigner can appear when the wh-phrase is in its canonical position.

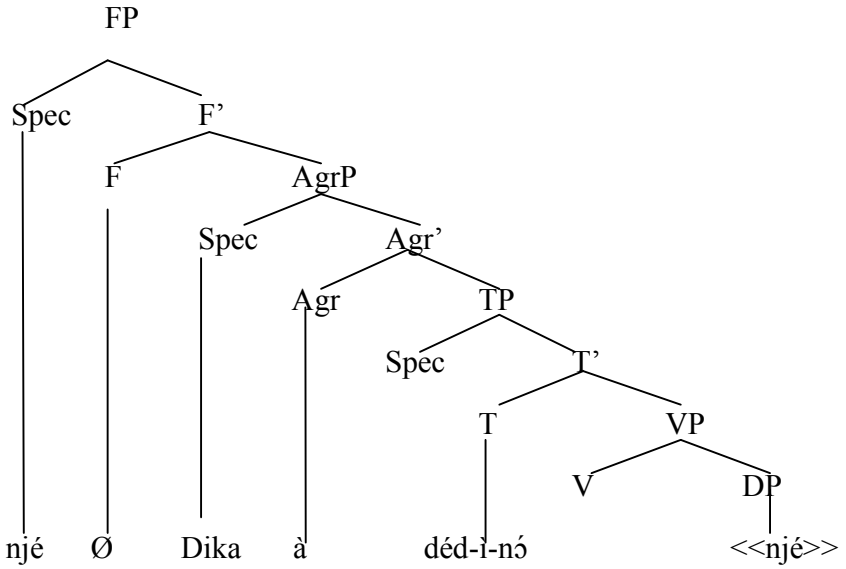
(38) Bá mà-bòl-à ndé njá mùtóà múndɛ́nɛ̀?

3_{SG} $_{PRES}$-give-$_{FV}$ $_{FOC}$ Who $_{CL3}$.car $_{CL3}$.big

"To whom did they give the big car?"

Biloa (1995/2013) argues that the focus word is the overt realization of the F morpheme which is similar to the Q morpheme (Chomsky 1988/1991) found in English. Thus, Tuki and Dùálá behave alike concerning the landing sites of wh-elements. In both languages, there is a strong similarity between wh-constructions and focus constructions. These two languages therefore move their wh-elements into Spec-FP in the syntax at LF (see Biloa 1995, 2013 for details). Sentence (37a) is represented as follows.

(39)



The preceding representation shows that the landing sites of arguments like *njé "*what" in Dùálá is Spec-FP. However, let us consider the following Dùálá sentences.

(40) a) Ǫ́nɔ́lá njé dì dìkúbé ndé bánà bá mɛ̀ndɛ́-nɔ̄ dă?
why CL5.this CL5.banana FOC CL2.children CL2-SM F2-PRTCL eat
"Why, THIS BANANA children will eat?"

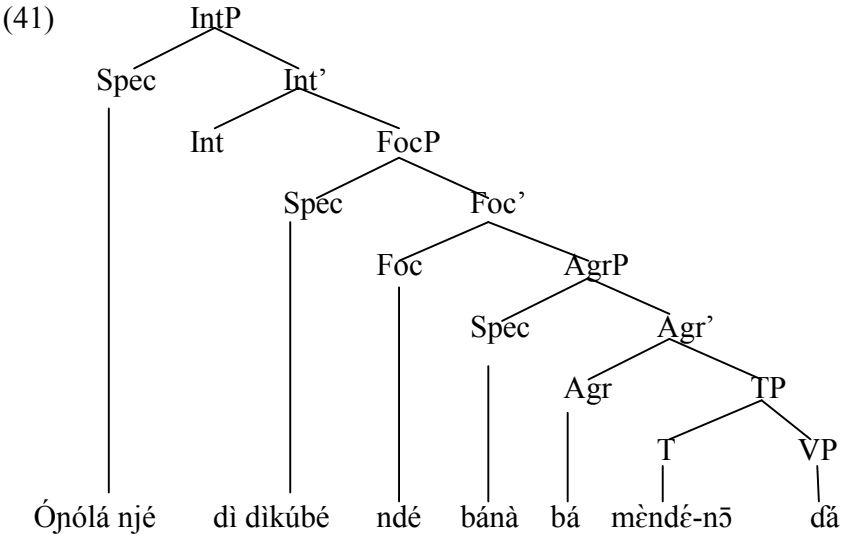
b) Nɛ́nī nú mùnà mùtò, ó nɔ̀ŋg-ì-nɔ́ mɔ́ kà mùto?
how this CL1.child woman 2SG take-P1-PRTCL her as CL1.wife
"How, this woman, you took her as your wife?"

c) Nɛ́nī dì dìkúbé ndé nà mɛ̀ndɛ́-nɔ́ bòl-à mɔ́ mɔ́
how CL5.this CL5.banana FOC 1SG F2-PRTCL give-FV him it
"How THIS BANANA I will give it to him."

In the sentences above, the wh-elements are co-occurring with topics and foci. In (40a), the non-referential adjunct *ǫ́nɔ́lá njé* "why" is co-occurring with the focalized element *dì dìkúbé* "this banana". In (40b, and c) the non-referential adjunct *nɛ́nī* "how" co-occurs with the topicalized element *nú mùnà mùtò* "this woman" in (40b) and the focalized constituent *dì dìkúbé* "this banana" in (40c). Notice that these sentences would not have been possible if they landed in Spec-FP. The non-referential adjuncts in Dùálá are higher than FP. Based on this data, it will be

postulated that they land in a position that will be called Int(errogative). The sentence in (40a) therefore has the following representation.

(41)



To conclude, arguments *njá* "who", *njé* "what" and referential wh-elements *ówɛ̀* "where" and *súníŋgá* "when" land into Spec-FP whereas non-referential adjuncts *ónólá njé* "why"and *nénī* "how" substitute for the Specifier position of the Int(errogative) Phrase.

3.1.6.4. Wh-questions in embedded clauses

The preceding sub-section examined wh-questions in main clauses on the one hand, and the landing sites of wh-phrases on the other hand. Wh-movement frequently appears in subordinate clauses in the language under study. Embedded questions are introduced in Dùálá with the same epistemic verbs found in indirect questions: *kwál-à* "say" *báís-ɛ̀* "ask", *ɲák-à* "wonder".

(42) Dikà à mà-báís-ɛ̀ njá Elame á m-ómbwá-nɔ̄

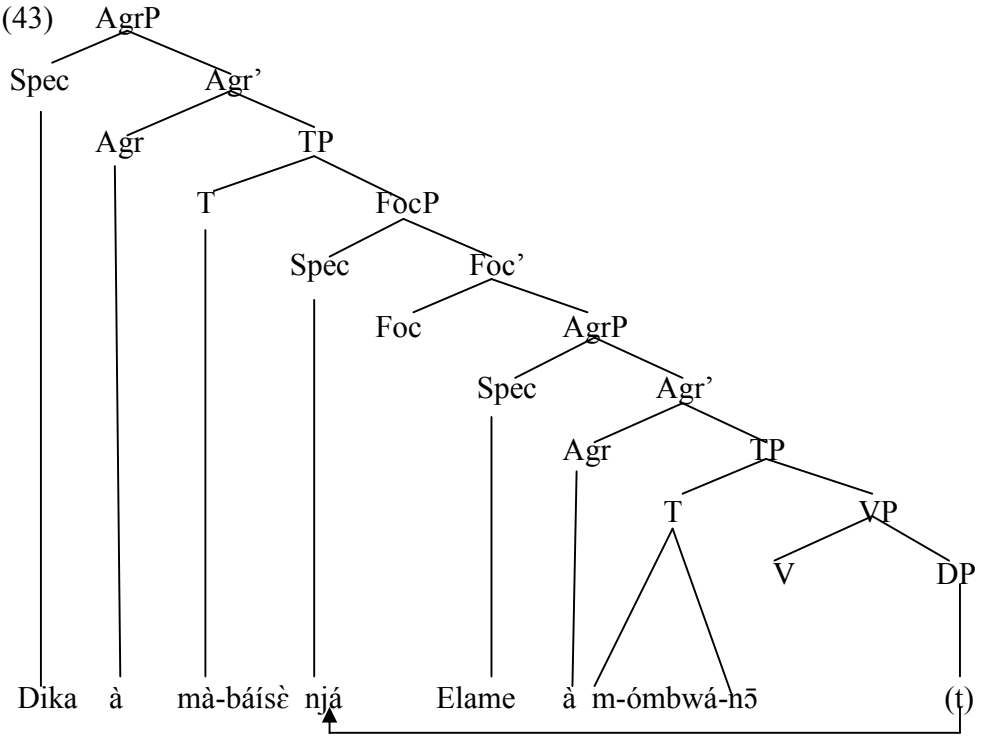
CL1.Dika CL1.SM PRES-ask-FV who CL1.Elame CL1-SM PRES-look-PRTCL

"Dika wonders who Elame is looking at."

The above example is an instance of embedded questions in Dùálá. Before getting into the derivation of this sentence, it is good to have a look again at ***-nɔ́***. As indicated earlier, the presence of wh-words and the occurrence of the particle ***-nɔ́*** are intimately connected. The wh-word in (42) cannot move further because it has to satisfy the [+wh]-feature of the verb *báís-ɛ̀* "to ask/to wonder". Since the argument *njá* "who" has crossed over the verb in the embedded

clause, there is the occurrence of the particle. Since I follow Sabel by assuming that the particle is directly merged in TP, (42) has the following P-marker.

(43)



It was argued above that an embedded clause in Dùálá is subject to selectional restrictions. Thus, the X^0 [+wh] must be in a Spec-Head configuration with a wh-operator.

(44) *[$_{CP1}$ O ta o pula [$_{CP2}$ na nje$_i$ Kuo a keke no [$_{CP3}$ wanea muna-o t$_i$]]]

You $_{AUX-PAST}$ You want that what K. he try bring child-his
(Sabel 2000:427)

The preceding example shows that X^0 [+wh] violates the Spec-Head configuration of the wh-operator. In fact, the matrix verb in (44) selects a complement with a [-wh]-C^0. The example in (44) is illicit because ***njé*** **"**what" is in Spec-Head relation with a [-wh]-head. Besides, the preceding example shows that unlike other optional wh-in situ languages like Kikuyu, Dùálá does not allow for partial movement. The wh-operator cannot stop half way; it has to move to CP_1.

3.1.6.5. Multiple Wh-questions

Natural languages display a cross-linguistic variation with respect to wh-questions. It was said at the beginning of the chapter that certain languages like Chinese display covert movement at LF, while others like Tuki and Dùálá exhibit both overt syntactic wh-movement and covert movement at LF for questions of a single wh-expression. This sub-section focusses on multiple wh-questions. These are questions containing more than one interrogative wh-expression. Here again, there is a cross-linguistic variation between languages. There are languages like Bulgarian, Romanian, Serbo-Croatian and Polish that move all their wh-words overtly and others like Chinese, Korean, Japanese and Tibetan where all the wh-words remain in situ. Finally, we have a third class of language such as English that mix these two strategies. For the latter, one wh-word is fronted and the others remain in situ. Dùálá resembles English in the sense that only one wh-word is permitted to move overtly to Spec-FP (Spec-CP for English); others have to stay in situ. Let us consider the following examples:

(45) a) **Njé njá** á ànd-í-nɔ̄?

what who SM buy-P1-PRTCL

"What who bought?"

b) ***Njá nú njé** *(t_i)* á ànd-í-nɔ̄ *(t)*

who REL what SM buy-P1-PRTCL

"Who what bought."

c) ***Súníŋgá nɛ́nī njá** á ànd-í-nɔ̄ **njé** (*t) (t)*

when how who SM buy-P1-PRTCL what

"When how who bought what?"

d) ***Súníŋgá** Elame á ànd-ì-nɔ́ **njé**?

When Elame SM buy-P1-PRTCL what

*"When did Elame buy what?"

The above examples are instances of multiple wh-questions. The wh-words have moved. The argument ***njé*** "what" has been fronted as the particle attached to the verb shows. In contrast, the argument ***njá*** "who" has undergone a vacuous movement. In the section on subject questions, it

was argued that a subject word moves overtly. However, in (45a), it has not moved overtly since ***njé*** "what" has already been fronted. The sentences in (45b-c) are questions where either two or three questions words are fronted. In (45d) one question word is preposed whereas the other is in-situ. From the examples above, two questions arise: how is it that only one question word is preposed in Dùálá? Why is it that the preposed question word should be X instead of Y?

Concerning the first question, Huang (1982), Lasnik and Saito (1984) propose an answer to the question. They argue that the differences between the three strategies used by the above mentioned languages (languages of the Bulgarian type, languages of the Japanese type and languages of the English type) have to do with the point in the derivation at which these wh-words take place. Thus, in the Bulgarian type languages, all the wh-words take place in the overt syntax and the Phonological Form of the sentence is therefore affected. In languages such as Japanese, all wh-words perform a covert movement. Finally, in languages such as English and Dùálá, one wh-word performs an overt movement and the rest of the movement is covert.

Besides, Sabel (2000) argues that Dùálá has strong and weak [+wh]-feature. It will therefore be assumed that in multiple questions, only one wh-expression carries a strong [+wh]-feature and the others carry weak [+wh]-features. This strong [+wh] feature is therefore responsible for the movement of the wh-expression to the front of the clause. However, wh-expressions with weak features need also to be interpreted via covert movement as mentioned by Huang (1982) and Lasnik and Saito (1984). When these covert movements are done, the timing Principle of Procrastinate (Chomsky 1993), which stipulates that overt operations are less costly than covert ones, is applied. According to this principle, overt movement is not allowed unless the derivation would crash. The overt movement of a wh-expression in Dùálá is subject to a kind of last resort since the language has strong and weak [+wh]-features. The strong [+wh]-feature is visible at PF whereas the weak [+wh]-features are not. The strong [+wh]-feature must therefore be checked if not, the derivation would crash. It has to be fronted in order to ensure convergence, and the others have to stay in-situ by procrastinate. Besides, in (47c) the **Relativized Minimality** (Rizzi 1990) is not respected. Bassong (2010), in analyzing the same facts in Basa'a argues that the object ***njé*** "what" is an intervener between the moved subject ***njá*** "who" and its trace, and that it is a subject marker ***–à*** ***'****so that the antecedent relation in this chain between the moved constituent and the SM fails'***.** Thus, the local relation is not satisfied in the smallest environment.

Turning now to the second question: why is it that the preposed question word should be X instead of Y?

(45d) is ungrammatical because the wh-word ***Súníŋgá*** "when" has been fronted to the sentence initial position instead of ***njé*** "what". This question is an evidence that in multiple questions, we cannot just move any wh-word to the front of the sentence. The ordering of wh-words is subject to a rigid ordering. In Minimalism, nothing happens if nothing needs to happen. Every movement has a purpose. This principle is known as **"last resort**" (Chomsky 1993, Rizzi 1995):

(46) **Last Resort**

Syntactic movement (or, more neutrally, the formation of non-trivial chains in syntax) is "last resort" in the precise sense that it must be triggered by the satisfaction of certain quasimorphological requirements of heads.

In order to prevent the ungrammaticality of (45d), ***njé*** "what" has to move instead of ***Súníŋgá*** "when" in order to satisfy certain quasimorphological requirements. Thus, ***njé*** "what" is preposed in order to satisfy the F feature on FP. This feature is immediately deleted when F has attracted the wh-word, preventing multiple fronting. (45d) has the following structure at PF:

(47)	Elame	à	ànd-ì-nɔ́	**njé**	s**úníŋgá**?
	$_{CL1}$.Elame	$_{CL1\text{-}SM}$	buy-P1-$_{PRTCL}$	what	when
	"Elame bought what when"				

The structure in (47) is subject to the so-called **superiority effect.** The F has to attract the highest wh-word in the structure in order to ensure the grammaticality of the sentence. The C has to attract the closest wh-expression that it c-commands because a moved category cannot cross over another c-commanding category of the same type (Chomsky 1993). This is what Radford (2009:216) calls **Attract Closest Principle (ACP)**.

3.1.7. Pied-Piping in Dùálá

So far, it was said that Dùálá is an optional in-situ language that has the choice to prepose or leave its wh-elements in-situ. From the preceding assumption, it is expected to obtain a grammatical question every time a wh-element is moved or left in-situ.

(48) a)* Njíkà Elame à mà-láŋg-á-nɔ̄ *(t)* kàlátì?

which $_{CL1}$.Elame $_{CL1\cdot SM}$ $_{PRES}$-read-$_{FV\text{-}PRTCL}$ $_{CL9}$.book

"*Which did Elame read book?"

b) Elame à mà-láŋg-á-nɔ̄ njíkà kàlátì?

$_{CL1}$.Elame $_{CL1.SM}$ $_{PRES}$-read-$_{FV\text{-}PRTCL}$ which $_{CL9}$.book

"Which book did Elame read?"

In (48a), the wh-quantifier *njíkà*, "which" has been extracted as the trace and the morphology of the verb *láŋg-à* "read" show. In (48b), the quantifier is in its canonical form. The question now is why (48a) is illicit. May be (51a) must leave its wh-element in-situ in order to obtain a grammatical sentence as (48b). This assumption is wrong since Dùálá is an optional in-situ language. In fact, there is no reason to move all other wh-phrases and leave only the QP in (48b) in situ. Radford (2009) argues that (48a) is ungrammatical because it violates the Chain Uniformity Condition.

(49) Chain Uniformity Condition

'A chain is uniform with regard to phrase structure status' (Chomsky 1995, P.253)

It was said earlier in this chapter that A-bar movement involves the displacement of a maximal projection (specifier and complement). Thus, following Radford, in (48a) *njíkà* "which" in Spec-FP has the status of maximal projection whereas its null copy ***~~njíkà~~*** "which" left behind has the status of minimal projection since it represents the head of the QP ***~~njíkà~~ kalati*** "which book". As it is visible, Q instead of QP has moved, violating (49).

(50) Njíkà kàlátì Elame á mà-láŋg-à-nɔ́ (t) ?

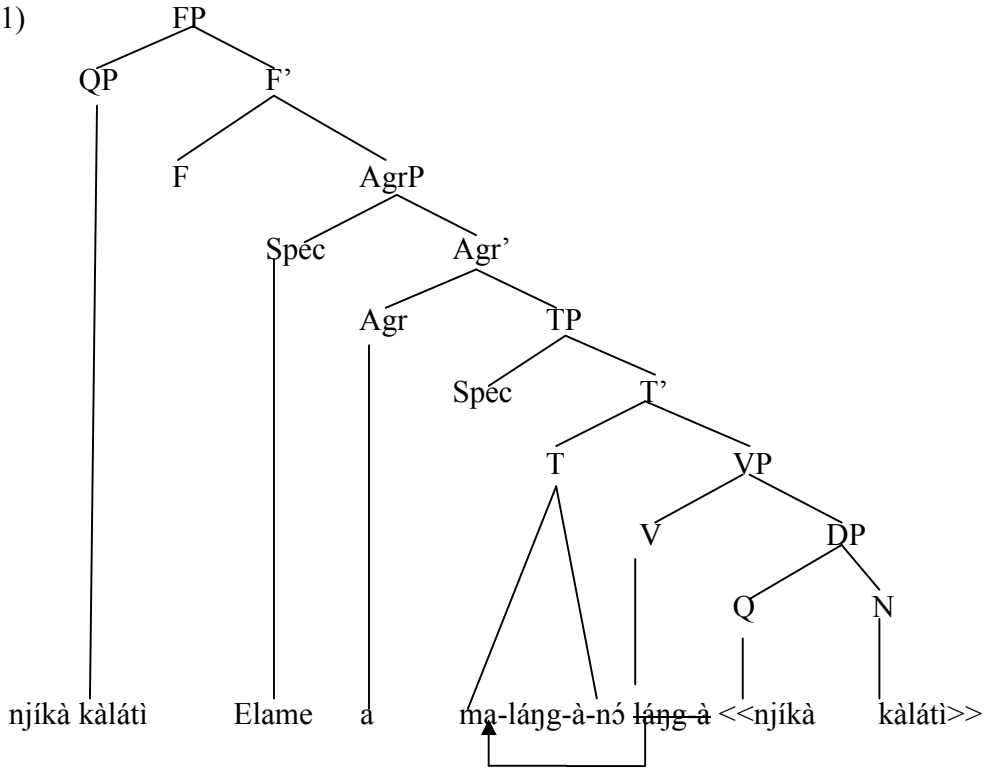
which $_{CL9}$.book $_{CL1}$.Elame $_{CL1\cdot SM}$ $_{PRES}$-read-$_{FV\text{-}PRTCL}$

"Which book did Elame read?"

The above example is grammatical because the wh-quantifier *njíkà* "which" has been moved to the Spec-FP dragging *kàlátì* "book", which was in its c-comand domain. The result of this movement is that we obtain a maximal projection (QP) at the head and a maximal projection (QP) at its foot. The Chain Uniformity Principle is preserved and the sentence is

grammatical.This type of movement is known as **pied-piping** (Ross 1967).Sentence (50) is derived as follow

(51)



The fact that pied-piping requires one to move maximal projections does not mean that any maximal projection can be moved. If this were the case, the following sentence would have been grammatical.

(52)	* mà-láŋg-á-nɔ̄	njíkà	kàlátì	Elame	à	(t) ?
	PRES-read-FV-PRTCL	which	CL9.book	CL1.Elame	CL1-SM	

*"did Which book Elame read?"

The preceding example shows that pied-pining does not move maximal projections anyhow. In fact, the maximal projection moved must ensure the grammaticality of the sentence. Pied-piping must respect Chomsky's (1995:262) Convergence principle:

(53) Convergence principle

When an item moves, it carries along with it just enough material.

The wh-quantifiers carry along with them just enough material to ensure the convergence of the sentence. This is the main goal of MP, to minimize derivations and representations for convergence. It is therefore prohibited to add superfluous steps in a derivation as (52) shows.

Briefly, pied-piping in Dùálá requires us to move maximal projections in such a way that the head QP is identical to the foot QP. By so doing, the wh-quantifier must carry along with it just enough material in order to ensure the convergence of the sentence. Pied-piping therefore obeys the Chain Uniformity Condition and the Convergence principle.

3.2. DRIVING WH-MOVEMENT

In the preceding section, focus was on the different positions in which a wh-phrase appears in Dùálá. The aim of this section is to examine what triggers the movement of a wh-word in this language. As the principle of last resort stipulates, a movement is always motivated. The aim of this section is to determine the reasons that motivate wh-expressions to move in the language. More precisely, this section examines the checking theory in relation to displaced wh-operators, multiple wh-operators and in situ. Let us consider the following sentence.

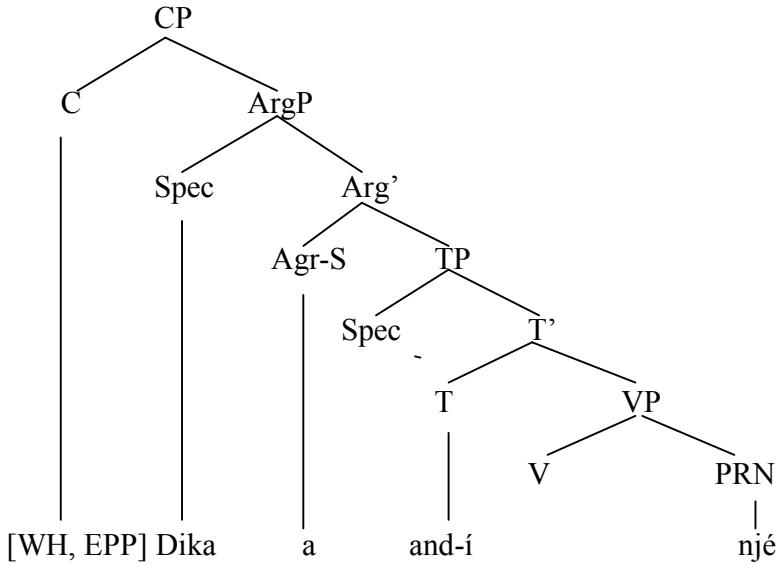
(54) Njé Dika á ànd-í-nɔ̄

What $_{CL1}$.Dika $_{CL1\text{-}SM}$ buy-$_{P1\text{-}PRTCL}$

"What did Dika buy?"

The example above is a question formation where one wh-element is preposed. In order to continue the analysis, let us consider the derivation of this clause. The verb *àndà* "to buy" is merged with its complement ***njé*** "what" to form the VP *àndà njé* "buy what" the past tense marker ***-ì*** is then merged with the VP to form the Agr-bar *àndì njé* "bought what"**.** The subject marker *à* "he" is in turn merged with the Agr-bar to form the Agr-bar *à àndi njé* "he bought what". The subject Dika is finally merged with the Arg-bar to form the AgrP *Dika à àndi njé* "Dika he bought what". This resulting ArgP is merged with a null complementizer C^0 that has all its features (Wh, EPP)

(55)



Following Cheng (1997), the complement of the clause ***njé*** "what" has to move in order to type the clause as interrogative. Recall that Dùálá is a language where (arguments and referential adjuncts) wh-phrases land in Spec-FP. The F feature on F^0 attracts the complement of ***andi.*** Since the EPP requires a specifier, ***njé*** "what" is therefore moved to the specifier of the Focus Phrase (FP). The features on F being satisfied, they are inactive. This predicts the absence of multiple fronting in Dùálá. However, the derivation of (54) is not complete. The displacement of ***njé*** "what" to the sentence initial position subsequently triggers the occurrence of the particle ***-nɔ́***; hence, ***-nɔ́*** marks A'-movement (Chomsky 2008). At this level of the derivation, another question arises: what motivates the occurence of the particle?

Zentz (2014) based on Oualli (2008) assumes that [uOp] features in Dùálá are SHARED. Both C and T have the [uOp] (they are independent) whereas [uφ] features are DONATED. Hence, T inherits its phi-features from C[2]. In (58) above, the [uOp] on C establishes a relationship with the variable ***njé*** "what" that has [iOp]. The valuation of [uOp] on C triggers the movement of ***njé*** "what "to Spec-CP. T in its turn establishes a relationship with the subject ***Dika*** still in Spec vP. However, the subject has only its [iφ]; the phi-features on T are valued, but the [uOp] remains unvalued. At this level of the derivation, Zentz proposes what he calls **vocabulary insertion:**

[2] In his analysis, Zentz (2014) assumes that the landing site of wh-phrases in Dùálá is Spec-CP. In order to explain his analysis, I have decided to project the wh-word in (56) in spec-CP, since LF movement can also be movement into the Complementizer in Dùálá (Biloa 2013).

(56) *Features that remain unvalued do not cause a crash as long as there is a vocabulary item that can be inserted.*

The particle ***-nɔ́*** is therefore inserted in order to predict the ungrammaticality of the clause. In multiple wh-operators, the closest wh-opeartor moved to Spec-FP obeying ACP. When F has attracted the closest wh-operator, the edge feature on F is immediately erased and the probe is inactivated. At this point, no more wh-operators can be attracted to the front of the clause.

Now, let us turn to wh-in situ questions. It was argued above that Dùálá is an optional language where wh-operators are either preposed or remain in situ.

(57) a: Dika à déd-ì njé?
CL1.Dika CL1-SM eat-P1 what

b: Njé$_i$ Dika á dédí-nɔ̄ t_i ?
what CL1.Dika CL1-SM eat-P1-PRTCl

"What did Dika eat?"

(57a) shows a clause where the wh-operator ***njé*** **"**what" is in its base-generated position. In (57b) the operator is displaced to the front of the clause. If these two clauses have the same interpretation, the conditions of Last resort and Shortest derivation requirement are violated.

(58) Shortest Derivation Requirement (SDR)

Minimize the number of steps of operations for convergence.

In fact, with the advent of economy principle, no movement is optional. Based on minimalism, (57a) is preferable to (57b) because the wh-expression is in-situ and SDR is respected. Sabel (2000) assumes that Dùálá has strong and weak [+wh]-features. When the strong [+wh]-feature is realized, the wh-operator is displaced to the front of the clause, but when the weak [+wh]-feature is realized, the wh-operator remains in situ. In the latter case, the wh-element is coindexed and c-commanded by the [+wh] scopal position. It is also interesting to note that in Dùálá in situ questions, the feature on F is [iOp: wh]. There is no need for movement since a given goal must have an uninterpretable feature to be visible for movement (Chomsky 2000).

To conclude, Dùálá is a language where movements occur in order to satisfy specific requirements. In the case of displaced wh-operators, it was argued that the operator is displaced in order to satisfy the F feature on FP. Since it is a language where C (especially F) and T probe independently, the displacement of this wh-word subsequently triggers the apparition of the particle *–nɔ́* obeying the vocabulary insertion (Zentz 2014). It was also argued that the language licenses wh-in situ because in this type of construction, the features on F are interpretable.

3.3. SUBJACENCY AND THE EMPTY CATEGORY PRINCIPLE

This last section handles subjacency and the empty category in Dùálá. The first attempt to set general principles to control wh-movements comes from Chomsky (1965). Later on, Ross (1967) proposed a set of islands in place of Chomsky's constraint. Chomsky (1973, 1977) subsequently proposes a more general principle in order to give a uniform account known as Subjacency.

(59) Subjacency condition

No rule may move an element from the position Y to the position X

….X……. [α……[ß…….....Y…….]……..X…….

where α and ß are bounding nodes.

Generally, the derivation of questions is done in two ways. On the one hand, the wh-element moves from its base-generated position into the sentence initial position in Spec-FP (or Spec-CP) in one fell swoop. On the other hand, wh-movement might respect the strict cyclicity, which stipulates that wh-movement should operate in a stepwise fashion. The subjacency condition is based on this latter view where the movement of a wh-phrase is successive and step-by-step. In English, for instance, NP, IP and DP are bounding nodes and they constitute islands. The movement of the wh-word must therefore be cyclic in order to preserve the grammaticality of the sentence.

(60) [CP_1 súníŋgá [IP_1 Elame a kwál-ì-nɔ́ [CP_2 *(t_2)* ná [IP_2 à tìl-í kàlátì *(t_1)*]]]]

when .Elame said that he wrote a book

The above representation shows that the derivation has been done step-by-step, obeying subjacency. However, Epée (1976) argues against Chomsky's (1973) strict cyclicity. He based his hypothesis on the famous particle ***-nɔ́.*** Recall that the particle is inserted after the first verbal element of the clause. Epée points out that if the wh-movement were done in a step-wise fashion, the particle must have normally been stranded in any intermediate cycle. He therefore concludes that wh-movement is done in one fell swoop. In this connection, the above representation is derived as follows:

(61) [CP_1 súníŋgá [IP_1 Elame á kwál-ì-nɔ́ [CP_2 ná [IP_2 à tìl-í kàlátì *(t)*]]]]

when Elame $_{SM}$ said that he wrote a book

The traces left by long distance wh-movement must satisfy a condition distinct from subjacency, the Empty Category Principle (Huang 1982; Lasnik and Saito 1984). This principle is set in order to account for the asymmetry between the extraction of complements and non-complements in some languages like English where subjects are not lexically governed:

(62) **Empty Category Principle (ECP)**

a) A trace of movement must be properly governed

b) A trace of movement is properly governed if and only if

i. it is antecedent-governed, or

ii. it is lexically governed

Here, the focus is to study the constraints on movement in Dùálá. It will be shown on the one hand that Dùálá is a ***pro*** drop language where Agr-S is a proper governor and therefore, allows free subject extraction across interrogative and declarative complementisers. On the other hand, it will also be shown that unlike some Bantu languages like Tuki, Dùálá completely obeys subjacency.

3.3.1 Comp-trace filter

Dùálá, like Tuki (Biloa 1991a, 2013) and Basa'a (Bassong 2010), is a language that licenses *pro* in subject position. Let us consider the following sentences.

(63) a) Mbɔ́ í mà-ɗǎ ɲàmà

CL10.dogs CL10·SM PRES.eat CL9.meat

"Dogs eat meat"

b) **pro** í mà-ɗǎ ɲàmà

they CL10·SM PRES-eat CL9.meat

"They eat meat"

c) Bánà bá mà-tá ó èsúkúlù

CL2.children CL2·SM PRES-go to CL7.school

"The students go to school"

d) **pro** bá mà-tá ó èsúkúlù

they CL2·SM PRES-go to CL7.school

"They go to school"

The above examples are all tensed clauses. (63a and 63c) are sentences with their thematic subjects *mbɔ́* "dogs" and *bánà* "children' respectively. In (63b and 63d), the thematic subjects have been dropped but the sentences are still grammatical. Dùálá is therefore a pro-drop language as some other Bantu languages. This property of the language has been discussed in the literature by Chomsky (1981/1982), Jaeggli (1982), Rizzi (1982), and Biloa (2013) among others. As (63a) and (63c) show, there is agreement between the subject market (SM) and their respective thematic subjects. These SMs are not interchangeable as the following example shows.

(64) a) *Bánà í mà-tá ó èsúkúlù

CL2.Children CL10·SM PRES-go 2SG CL7.school

"Children go to school"

b) *Mbɔ́ bá mà-ɗǎ nàmà

CL10.dogs CL2·SM PRES-eat CL9.meat

"Dogs eat meat"

The above examples are ungrammatical because the SMs do not agree in noun class with their respective thematic subjects. The SM must agree with its subject in order to ensure the grammaticality of the sentence. This agreement is important since the SM captures the intuition of the thematic subject in order to stand on its own in a null subject construction. The pro-drop sentences in (63) are grammatical because their respective subject markers are proper governors.

Rizzi (1982) cited by Biloa (2013) argues that the INFL node containing AGR can function as a lexical proper governor in null subject languages thereby licensing the occurrence of empty categories in a null subject position. Since Agr-S is a proper governor in Dùálá, the extraction of subjects across declarative and interrogative complementisers in the language is grammatical as the following examples show:

(65) a. Njá$_i$[$_{IP}$ Elame á kwál-í-nɔ̄ [$_{CP}$ X$_i$ ná [$_{IP}$ X$_i$ à wèk-í mùdi nwá wàsé]]]?

Who $_{CL1}$.Elame $_{CL1\text{-}SM}$ say-$_{P1\text{-}PRTCL}$ that $_{CL1\text{-}SM}$ create-$_{P1}$ $_{CL3}$.world

"Who did Elame said that created the world?"

b. Njé [$_{IP}$ Elame á kwál-í-nɔ̄ [$_{CP}$ X$_i$ ná [$_{IP}$ Lóba à wèk-í X$_i$]]]

what $_{CL1}$.Elame $_{CL1\text{-}SM}$ say-$_{P1\text{-}PTRCL}$ that $_{CL1}$.God $_{CL1\text{-}SM}$ create-$_{P1}$

"What did Elame say that God created?"

In (65a), the subject has been extracted from its canonical position to Spec-FP. In (65b), the object has moved to the left periphery. These two constructions are grammatical in Dùálá. The language under study is immune to the Comp-trace filter. It is commonly known that the comp-trace filter is subject to a kind of asymmetry that only applies in the case of subject extraction, but never in the case of object extraction. However, the preceding example clearly shows that there is no such kind of asymmetry in Dùálá. (65a) is grammatical because the variable created by the extraction of *njá* "who" is properly governed by the Agr-S ***a.***

To conclude, Dùálá is a null subject language and as expected allows free extraction of subject across declarative and interrogative complementizers (Perlmutter1971). Comp-trace effects are therefore nonexistent in the language, thus, there is no violation of ECP.

3.3.2. The Complex Noun Phrase Constraint (CNPC)

(66) The Complex Noun Phrase Constraint

No element contained in an S dominated by an NP with a lexical head noun may be moved out of that NP by transformation

This constraint briefly states that movement out of a CNP, a relative clause, is strictly prohibited. Let us observe the following sentences:

(67) a) Dika à ên [mòtò nú and-ì dìkúbé kíɛ̀lɛ́]

CL1.Dika CL1·SM see-P1 CL1.man CL1.that buy-P1 CL5.banana yesterday

"Dika saw the man who bought a banana yesterday".

b) Súníŋgá Dika á ên-nɔ́ mòtò nú ànd-í dìkúbé _____?

When CL1.Dika CL1·SM see-P1-PRTCL CL1.man CL1.who buy-P1 CL5.banana

"When did Dika see the man who bought a banana?"

c) * Njé Dika á ên-nɔ́ mòtò nú ànd-í kiɛ̀lɛ́ _____?

What CL1.Dika CL1·SM see-P1-PRTCL CL1.man CL1.who buy-P1 yesterday

"*What did Dika see the man that bought yesterday?"

(67a) presents a sentence with the complex noun phrase within the angle bracket, this complex noun phrase is in fact a relative clause. In (67b), the referential adjunct *Súníŋgá* "when" has been extracted in order to be questioned. Notice that the construction in (67b) is grammatical. In this case, the wh-word *súníŋgá* "when" is interpreted in the matrix clause. This sentence is grammatical because the question word *Súníŋgá* "when" modifies the matrix verb *énɛ̀* "to see" instead of *àndà* "to buy". In (67c), the argument *njé* "what" has also been extracted by in order to be questioned. The latter sentence is ungrammatical because the wh-element *njé* "what", which is an NP, has been moved from the complex noun phrase *moto ɲa and-ì dìkúbé kíɛ̀lɛ́* "The man who bought a banana yesterday" by transformation. The sentence therefore crashes because it violates the constraint on (66).

3.3.3. The Coordinate Structure Constraint (CSC)

(68) **Coordinate Structure Constraint**

In a coordinate structure, no conjunct may be moved, nor may any element contained in a conjunct be moved out of that conjunct.

This constraint stipulates that movement cannot be applied out of a coordinate structure. The following sentences are instances of coordinate structures in Dùálá.

(69) a) Dika nà Elame bá tɔ́ndi Ndòmɛ́

$_{CL1}$.Dika and $_{CL1}$.Elane $_{CL2\cdot SM}$ love $_{CL1}$.Ndome

"Dika and Elame love Ndome"

b)*Njá Dika nà _____ bá tɔ́nd-i Ndòmɛ́?

Who $_{CL1}$.Dika and $_{CL1.SM}$ love-$_{P1}$ $_{CL1}$.Ndome

"*Who did Dika and love Ndome?"

c) Dika à tɔ́nd-ì dìkúbé ndé Elame à sìŋgɛ́è dikúbé

$_{CL1}$.Dika $_{CL1\cdot SM}$ like-$_{PRES}$ $_{CL5}$.banana and $_{CL1}$.Elame $_{CL1.SM}$ hate $_{CL5}$.banana

"Dika likes banana and Elame hates banana"

d) Njíka ɛ́ɲèŋgɛ́n Dika à tɔ́nd-í-nɔ̄_____ ndé Elame à sìŋgɛ́è-nɔ́ _____

Which $_{CL7}$.fruit $_{CL1}$.Dika $_{CL1\cdot SM}$ love-$_{P1\text{-}PRTCL}$ but $_{CL1}$.Elame $_{CL1\cdot SM}$ hate-$_{PRTCL}$

"Which fruit did Dika like and Elame hates?"

(69a-b) are NP coordination whereas (69c-d) are clausal coordination[3]. (69b) is illicit because we have moved the NP "Elame" out of the conjunct containing it. In fact, the coordinate structure *Dika na Elame* "Dika and Elame" forms a single constituent and the fact that only a subpart of this constituent is extracted in order to be questioned leads to the ungrammaticality of the sentence. (69c) is a clausal coordination where two clauses have been coordinated with the conjunction ***ndé*** "but". Here, the extraction of an element does not lead to the illicitness of the sentence. This is known as Across-the-Board extraction; Williams (1978, 36, (31)) cited by Biloa (2013) argues that Across-the-Board extraction allows extraction from both conjuncts, if the affected elements in each conjunct is "identical". In (69c) above, the problem matter is *banana.* While Dika likes banana, Elame hates it. In (69d) therefore, the element *banana* contained in the two clauses can be extracted without a problem.

[3] Biloa (2013) refers to the coordination of two NP in Tuki as NP coordination. Unlike Dùálá, Tuki is a language that violates certain islands constraints in constructions containing resumptive pronoun. Thus, when the CNPC, the Wh-island, and the CED contain reumptive pronouns in Tuki, they violate subjacency. However, though CSC contains reumptive pronouns in Tuki, it does not violate the constraint. Georgopoulos (1985) cited by Biloa having observe the same phenomenon in Paluan, concludes that CSC is a constraint different in kind from other constraints subsuming subjacency.

3.3.4. The Wh-island constraint

This constraint stipulates that the movement across a wh-element is prohibited.

(70) a) Elame à ànd-ì motoa kiɛ̀lɛ́

$_{CL1}$.Elame $_{CL1\cdot SM}$ buy-P1 $_{CL3}$.car yesterday

"Elame bought a car yesterday."

b) Njé Elame á ànd-ì-nɔ́ súníŋgá?

What $_{CL1}$.Elame $_{CL1\cdot SM}$ buy-P1-$_{PRTCL}$ when

"What did Elame buy when?"

c) *Súníŋgá Elame á ànd-ì-nɔ́ njé?

when $_{CL1}$.Elame $_{CL1\cdot SM}$ buy-P1-$_{PRTCL}$ what

*"When did Elame buy what?"

(70c) is ungrammatical because the wh-element *súníŋgá* "when" has moved across the wh-element *njé* "what". The ungrammaticality of (c) can also be accounted for by assimilating it to the economy principle. Thus, the above wh-island emerges as a consequence of Minimal Link Condition (Chomsky, 1995)

(71) Minimal Link Condition (MLC)

K attracts α only if there is no ß, ß closer to K than α, such that K attracts ß

The above condition states that (70c) is ungrammatical because F (equivalent of the Q feature in English) cannot attract *Súníŋgá* "when" since there is *njé* "what" closer to F than *súníŋgá* "when"**.** The sentence in (70c) is therefore ungrammatical because it violates on the one hand wh-island and on the other hand the MLC.

3.3.5. The Left Branch Constraint (LBC)

(72) Left Branch Constraint

No NP which is the leftmost constituent of a larger NP can be reordered out of this NP by a transformation rule.

This condition states that it is not allowed to extract an element which is located at the left of a given constituent if the extracted material and the element in-situ form a whole.

(73) a) Bítò bá é [mbonjí índɛ́nɛ̀ ndɛ́nɛ̀]

CL2.women CL2.SM be CL9.flowers CL9.big CL9.big

"Women are very big flowers"

b) *Nɛ́ nī bítò bá é mbonjí____ ndɛ́nɛ̀?

how CL2.women CL2.SM be CL9.flowers CL9.big

"*How women are very flowers?"

The element contained in square bracket in (73a) constitutes an island. The adverb *very* is expressed in this sentence by the reduplication of the adjective *big*. (73b) is ungrammatical because the adjective *ndénè* "big" has been extracted from an island in order to be questioned. The sentence is therefore illicit because it violates the LBC.

3.3.6. The Sentential Subject Constraint (SSC)

(74) The Sentential Subject Constraint (SSC)

No element dominated by an S may be moved out of that S if that node S is dominated by an NP which itself is immediately dominated by S.

This constraint suggests those subjects are NPs in such a way that sentential subjects are dominated by NP.

(75) a) [Nà Elame à tɔ́ndì-nɔ́ mbonjí e] mà-bwésɛ́ Dika mùɲɛ̀ŋgɛ̀]

that CL1.Elame CL1·SM likes-PRTCL CL9.flowers 3SG PRES-please Dika CL3.joy

"That Elame likes flowers pleases Dika."

b)* Njé [nà Elame à tɔ́ndì-nɔ́ _____e [mà-bwésɛ́ Dika mùɲɛ̀ŋgɛ̀]]?

What that CL1.Elame CL1·SM likes-PRTCL 3SG PRES-please Dika CL3.joy

*"What that Elame like pleases Dika?"

The ungrammaticality of (75b) above results from the fact that an element has been extracted from a SSC, violating one constraint of subjacency.

-SUMMARY

To conclude, this chapter focus on questions formation. Dùálá is an optional wh-in situ where wh-operators are either preposed or left in their canonical position. It has been argued that wh-in-situ constructions are genuine questions that require true answers. Besides, in the case of YNQs, it was argued that they are distinguished from the declarative sentences only through the intonation of the speaker. Concerning alternative questions, they are conjoined by the use of ***ŋgá*** "or". The syntax of indirect questions revealed that they could be divided into two types of constructions: total indirect questions and wh-indirect questions. In the first type of construction, the question is initiated by the complementizer ***ŋgá*** "wheter", while in the latter type of questions, there is a wh-word obtained by movement. The syntax of subject questions revealed that the movement of subject questions is visible since the wh-word is separated from the SM by a relative *nú*. After, exploring the syntax of subject questions, the discussion on the particle *-nɔ́* was presented. The different points of view on this particle were presented and it was concluded that the particle is merged in Infl. Under the main clause wh-phrases, it was said that they are formed by the movement of the wh-word to the sentence initial position; these elements leave a trace in their initial position and therefore form a chain in accordance with the Chain Uniformity Principle.

Following Biloa (1995), it was argued that arguments and referential adjuncts move to Spec-FP in Dùálá and Tuki. However, non-referential adjuncts by virtue of occurring with focus constituents move to Spec-Int. After studying the syntax of wh-elements in main clauses, the syntax of embedded clause was tackled. It was said that embedded questions in Dùálá are subject to selectional restrictions. In multiple questions, more than one wh-element cannot be preposed in the language because when an element is fronted, the features are satisfied and the probe is no more active. Thus, there is one movement in overt syntax, and the other movements are covert. It was shown that multiple questions are subject to superiority effects. Then requirements that trigger movements of wh-phrases in the language was explored. Thus, wh-operators are displaced in order to satisfy the F feature on FP. Finally, constraints that govern question formation were analyzed. It was shown that Dùálá is a null subject language and therefore immuned to the Comp-trace filter. The language also respects subjacency conditions such as CNPC, SSC, CCS, LBC and the WH-island.

CHAPTER IV

FOCALIZATION AND TOPICALIZATION

4.0 INTRODUCTION

The previous chapter analyzed the movement of wh-elements into a position above AgrP. This chapter analyzes two other types of movement to the edge of the clause. These are: topicalization and focalization. More precisely, the aim of this chapter is to offer an in-depth description of the different mechanisms used in Dùálá to express focus and topic. By so doing, it will be shown on the one hand that by virtue of having the discourse-related features in the VP periphery, focus can be expressed in the language either within the vicinity of the verb or can resort to such interpretation at the left edge of the clause. On the other hand, topicalization is obtained through the displacement of the topicalized element in the case of adjuncts or directly by merging the topicalized element in Spec-TopP in the case of arguments. The chapter is divided into two sections. In section one, focalization is addressed. It explores focalization of arguments and adjuncts. It also reveals that the language exhibits a kind of subject versus non-subject asymmetry as far as their focalization is concerned. The section also analyzes the different strategies used to focalize the verb. The section closes off by analyzing focus and negation. Section two is devoted to the analysis of topicalization. The discussion suggests that topicalized arguments are directly merged above AgrP whereas adjuncts are obtained by the displacement of the topicalized element. The section closes by exploring multiple topics and topicalization in embedded clauses.

4.1. FOCALIZATION

Focus is the information at the center of the interest of a proposition. In this line, the discourse function of the focus is opposed to presupposition, an element that occurred earlier in the discourse. Let us consider how focus is encoded in Dùálá.

(1) **Létà** ndé nà mɛ̀ndɛ́-nɔ̄ til-èà oá
$_{CL5}$.letter $_{FOC}$ 1_{SG} $_{F2\text{-}PRTCL}$ write-$_{APPL}$ 2_{SG}
" It is the letter that I will write to you"

Sentence (1) is a construction where ***Létà*** "letter" has been brought into syntactic prominence through the clefting of the object. In fact, ***létà*** "letter" is the new information in (1) and the rest of the clause is the presupposition. This new information is contrasted with the other elements that occur in the previous discourse. Thus, (1) is a possible answer to the question *njé nà mèndè-nɔ́ til-èà wa?* "What would I write to you?" and not *njíka létà nà mèndé-nɔ́ til-èà wa?* "Which letter would I write to you?". The preceding questions clearly show that focus is the information that is not shared by the listener and the hearer. Kiss (1998) refers to this specific type of focus as "information focus". This section is divided into five sub-sections. The first sub-section tackles focalization of arguments and adjuncts; the second sub-section illustrates the asymmetry encountered when focusing a subject and a non-subject. Sub-section three deals with verb focusing. In the fourth sub-section, it is argued that Dùálá has a low focus within the vicinity of the verb. Finally, in the fifth sub-section, negation and focused is analyzed.

4.1.1. Focalization of arguments and adjuncts

Any element within the Dùálá sentence can be focused. This sub-section tackles the way an XP category such as arguments and adjuncts is focused in the language. To illustrate this, let us consider the following examples:

(2) a) Bítò bá mèndé jìpè fufú kíèlè

CL2.women CL2-SM F2 cook CL9.fufu tomorrow

"Women will cook fufu tomorrow"

b) Bítò ndé *(t)* bá mèndéɛ̄ jìpè fufú kíɛ̄lè

CL2.women FOC CL2.SM F2 cook CL9.fufu tomorrow

"It is women who will cook fufu tomorrow"

c) Fufú ndé bítò bá mèndè-nɔ́ jìpè *(t)* kíèlè

CL9.fufu FOC CL2.women CL2-SM F2-PRTCL cook tomorrow

"It is fufu that women will cook tomorrow"

d) Kíèlè ndé bítò bá mèndè-nɔ́ jìpè fufú *(t)*

tomorrow FOC CL2.women CL2-SM F2-PRTCL cook CL9.fufu

"It is tomorrow that women will cook fufu"

e) Ó mwɛ̀bɛ́ ndé bítò bá mɛ̀ndɛ̀-nɔ́ jìpɛ̀ fufú *(t)* kíɛ̀lɛ̀
in $_{CL3}$.kitchen $_{FOC\ CL2}$.women $_{CL2\cdot SM\ F2\text{-}PRTCL}$ cook $_{CL9}$.fufu tomorrow
"It is in the kitchen that women will cook fufu tomorrow"

The above constructions show that a focus construction is characterized in Dùálá by the fronting of an XP category to the left of the focus marker ***ndé.*** In (2b), the subject argument *bítò* "women" has been clefted, in (2c), a bare noun has been clefted, in (2d), an adverbial phrase has been clefted and in (2e), it is the locative phrase that has been clefted. From these data, it is clear that any XP category can be focused in the language as far as arguments and adjuncts are concerned. The occurrence of the particle ***-nɔ́*** from (2c-e) shows that the XPs have been moved from their base-generated positions to some positions above IP. In addition, notice the morphology of the future marker in (2b). The marker is normally written *mɛ̀ndɛ́*, however, when the subject is being focused, the final vowel *"ɛ́"* is doubled. Notice that when a constituent to the right of the verb is being focused, there is no doubling of the final "ɛ́". This can be explained by the occurrence of the particle *-nɔ́* at the end of this very marker (2c-e).

The focus marker *ndé* in the language is invariable unlike other Bantu languages. The examples in (2a-e) show that the focus marker *ndé* is used both for [-human] and [+human]. In some languages, there is a specific focus marker for [-human] and another for [+human]. In Tuki, for instance, there is agreement between the specifier and the head. Let us consider the following Tuki constructions from Biloa (2013).

(3) a) Abongo ódzú a- má- kós- én- a agée wáá yěndze ĭdzó
Abongo FOC SM-P2-buy-appl (for)-FV wife his house yesterday
"It is Abongo who bought his wife a house yesterday"

b) yěndze aye Abongo a- má- kós- én- a agée wáá ĭdzó
house FOC Abongo SM-SM-P2-buy-appl(for)-FV wife his yesterday
"It is a house that Abongo bought for his wife yesterday"

c) ĭdzó ówú Abongo a- má-kós én- a agée wáá yěndze
yesterday FOC Abongo SM-P2-buy-appl(for)-FV wife his wife
"It is yesterday that Abongo bought his wife a house"

(Tuki, Biloa 2013:408)

In the preceding examples, the focus marker *ódzú* is [+human] whereas *aye* and *ówú* are [-human]. The fact that Dùálá has only one focus marker *ndé* for [-human] and [+human] does not mean that there is no agreement between the focused constituent and the focus marker. In fact, this idea is supported by the agreement between the subject marker and its subject. Consider the following constructions:

(4) a) Elame à ànd-í mùtóà kíɛ̀lɛ́.
CL1.Elame CL1·SM buy-P1 CL3.car yesterday
"Elame bought a car yesterday"

b) Fufú nì é ó wóŋgɔ́
CL9.fufu CL9·SM be in CL11.pot
"Fufu is in a pot"

c) Kíɛ̀lɛ́ pɛ́ nì è ndé búŋá
tomorrow also SM be FOC CL14.day
"Tomorrow is another day"

d) Ó mwɛ̀bɛ́ ndé dằ lɔ́ŋgɔ̄ dí è-nɔ̄
In kitchen FOC CL5.meal CL5.your CL5·SM be-PRTCL
"In the kitchen is your food"

The data in (4) show that there is a specific marker *a* for [+human] and others for [-human]. Thus, Agr-S is marked according to the humanity of the subject whereas the focus marker *ndé* marks both [-human] and [+human]. Things are a little bit different in Basa'a. Bassong (2010) reveals that the focus marker *nyén* is also used for [-human] and [+human]. He explained this regularity of the focus marker in terms of noun classification. In fact, in Bassa'a, adverbials bear nominal features and they even share the same focus marker with nouns as the following constructions illustrate.

(5) a) Malět a ye lɔ́ŋgɛ́
teacher SM be good
"The teacher is good"

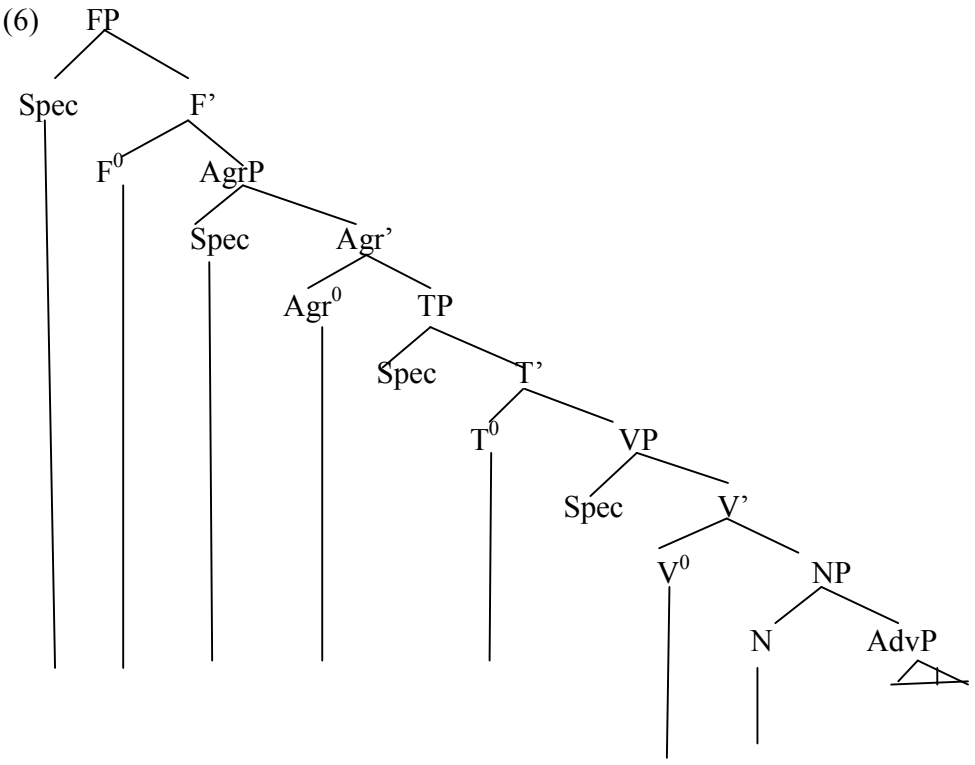
b) Yàání a ye lɔ́ŋgɛ́
"tomorrow SM be nice"

c) í kètè ndap a-ye lɔ́ŋgɛ́
inside house SM-be nice
"Inside the house is better"
(Basa'a, Bassong 2010)

In the preceding examples, the adverbials and the nouns share the same subject marker which is ***a*** and they are even classified in class one like real nouns. The Dùálá facts (4a-d) behave differently since adverbials have their specific SM on the one hand and on the other hand, they cannot be classified in the same class like real nouns.

It was argued above that focus constructions are obtained by the displacement of the focused constituent to a position above AgrP. Since focus constructions are quantificational, there is no need for a resumptive pronoun inside the presupposition unlike topic constructions. On the contrary, focus constructions, by virtue of being quantificational, can license a variable inside IP bound by the focused element. Examples (2b-e) show that the focused elements have a phonological spell out whereas their traces left behind have a null spell out. Each of this focus constituent binds its trace IP-internally. Thus, (2b) has the following representation.

(6)



Bítò$_i$ ndé t_i bá mɛ̀ndéɛ̄ jìpɛ̀ fufú kíɛ̀lɛ̀

The above representation shows that the focus element moves from its base-generated position in Spec-AgrP to Spec-FP. The extracted constituent *Bítò* "women" c-commands its trace and forms with it a chaim as the coindexation shows. The extracted element *bítò* "women" also binds its trace IP-internally.These Dùálá facts are similar to those of Nweh (Nkemnji 1995), Tuki (Biloa 1997, 2013), and Basa'a (Bassong 2010) where focused constituents bind an empty category. Biloa argues that an empty category is licensed in Tuki when the extraction occurs from a properly governed position. In order to illustrate this phenomenon in the language under study, let us reconsider example (2b) restated here as (7a) and also the construction in (7b).

(7) a) Bítò ndé *(t)* bá mɛ̀ndéɛ̄ jìpɛ̀ fufú kìɛ̄lɛ́

CL2.women FOC cL2.SM F2 cook CL9.fufu tomorrow

"It is women who will cook fufu tomorrow"

b) Lóba ndé Elame à kwál-í-nɔ̄ ná *(t)* à wèk-í mùndi nwá wàsé

CL1.God FOC CL1.Elame CL1·SM say-P1-PRTCL that CL1·SM create-P1 CL3.world

"It is God that Elame said has created the world**"**

In (7a), we have an instance of local extraction where a subject argument is extracted in order to be focused. This construction is grammatical because the Agr-S *bá* properly governs the trace in subject position. In the same vein, (7b) is a construction whereby a constituent is extracted over a complementizer in order to be focused. This construction is grammatical because the Agr-S ***à*** also properly governs its trace.

4.1.2. Subject versus non-subject asymmetry

In Dùálá, there is a kind of asymmetry between the focalization of subjects versus objects. In fact, in focus constructions, the subject is always required to move to the left edge of the clause as the following constructions show.

(8) a) Njá nú til-í létà?

who REL write-P1 CL5.letter

"Who wrote the letter?"

b) Dika *(ndé) à til-ì léta

CL1.Dika FOC CL1.SM write-P1 CL5.letter

"It is Dika who wrote the letter"

The preceding question-answer pair shows that the answer to a question like (8a) is only felicitous if it is a cleft construction. Thus, the construction requires an ex-situ strategy that obliges the focused constituent to occur at the left of the focus marker. In the case of a non-subject focusing however, this specification is not required.

(9) a) Njé Dika á til-í-nɔ̄?

what CL1.Dika CL1·SM write-P1-PRTCL

"What did Dika write?"

b) Dika à til-ì ndé létà

CL1.Dika CL1·SM write-P1 FOC CL5.letter

"Dika wrote a LETTER"

c) Létà ndé Dika á til-í-nɔ̄

CL5.letter FOC CL1.Dika CL1·SM write-P1-PRTCL

"It is a letter that Dika wrote (not a book)"

d) * Dika à tìl-í létà

CL1.Dika CL1·SM write-P1 CL5.letter

"Dika wrote a letter"

In non-subject focusing, the focused constituent is either IP-internally (9b) or ex-situ (9c). The construction in (9d) is not ungrammatical as an independent sentence, but it is ungrammatical as far as it is considered a possible answer to (9a). This ungrammaticality is explained by the absence of the focus marker in the construction. The above facts show that non-subjects focusing and wh-constructions have a very similar syntactic process. As pointed out in the preceding chapter, wh-constructions in the language can also have the focus marker inside IP.

(10) Dika à tìl-í ndé njé?

CL1.Dika CL1-SM write-P1 FOC what

"What did Dika Write?"

Things are very similar in Gungbe as the following construction shows.

(11) a. Ménù wɛ̀ à yrɔ́?

Who Foc 2sg call

'Who did you call?'

b. Ùn yrɔ́ Kòfí

1sg call Kofi

'I called Kofi'

c. Kòfí wɛ̀ ùn yrɔ́

Kofi Foc 2sg call

'I called Kofi'

(Gungbe, Aboh 2007:85)

The data above show that Dùálá and Gungbe are very similar as far their syntax of non-subjects is concerned.These languages exhibit two different information structures as (9b) and (9c) for Dùálá versus (11b) and (11c) for Gungbe illustrate. The difference between these two languages resides in the (non) absence of the focus marker as far as the in-situ strategy is concerned. In Dùálá, unlike Gungbe, there must be a focus marker when the focused constituent stays inside IP. Thus, (9d) is not appropriate as an answer to (9a) unlike its Gungbe counterpart (11c). Apart from this difference, this type of construction in both languages shows a similar or same syntactic process with their wh-questions. Aboh (2007) mentioned that (11b) and (11c) correspond to Kiss'(1998) identificational focus and new information respectively. In the same vein, the data in (9b and 9c) correspond respectively to new information focus and identificational focus. In (9b), the object ***létà*** "letter" represents the new information and the structure SVO is unchanged. The same object ***létà*** "letter" is also the new information in (9c), however, it bears a contrastive stress and the word order is OSV. In fact, in (9c), the speaker is implicitly contrasting the focus constituent to another element. This later type of focus is known as identification focus (Kiss 1998). The data above provide additional support to the view that there are great similarities between wh-words and focus constituents in Dùálá.

In the preceding chapter, it was illustrated that wh-words can either stay in their base-generated position or move to the edge of the clause. It was argued that when the wh-word is in-situ, it is interpreted as a genuine question and sometimes, this wh-word co-occurs with the focus marker ***ndé.*** On the other hand, when the wh-element moves to the left edge of the clause, it lands in Spec-FP and cannot co-occur with a focus marker. The syntax of non-subject focus shows that a focus constituent can either stay inside IP, where it expresses new information, or move to the edge of the clause where it bears a contrastive stress. Another important point to note is that wh-words as well as (contrastive) focus constituents are attracted by the same feature [+F] in F^0. Thus, contrastive focus and ex-situ wh-words are associated with the feature [+F] since they are displaced above AgrP more precisely whereas new information focus and in-situ wh-words are associated with the feature [-F].

4.1.3.3. Verb focusing in Dùálá

This sub-section tackles verb focusing, an X^0 category. Verb focusing in many Bantu languages involves reduplication of the verbal word, while others even involve verb fronting. In some languages, like Ghɔmala' and Nweh, verb focusing only involves the reduplication of the verb and its displacement to the right edge of the clause whereas ohers, like Kongo, Tuki, Gungbe, ect. involve the reduplication and the fronting of the focused verb in the C-domain. Dùálá exhibits two strategies of marking verb focusing: On the one hand, the verb is simultaneously realized in clause initial position and IP-internally, and on the other hand, the verb is only realized IP-internally. The following question/answer pair illustrates the two strategies of verb focusing in the language under study:

(12) a) Ò mà-bòl-à ndé njé nà dí dikúbé?

2_{SG} $_{PRES}$-do-$_{FV}$ $_{FOC}$ what with $_{CL5.}$this $_{CL5.}$banana

"What do you do with this banana?"

b) Nà mà-ɗă ndé mɔ́

1_{SG} $_{PRES-}$eat $_{FOC}$ it

"I EAT it"

c) Dá ndé nà mà-ɗă-nɔ̄ mɔ́

eat FOC 1_{SG} $_{PRES}$-eat-$_{PRTCL}$ it

"I EAT eat (not sell) it"

The preceding data show the two ways of expressing focus in the language. In (12b), we have a post verbal focus whereas in (12c), one verb is fronted whereas the other is doubled IP-internally.

4.1.3.1. Predicate cleft construcion

Predicate cleft construction in Dùálá is characterized by the fronting of the focused verb to the sentence initial position, while the other one is doubled IP-internally. Here, a cleft construction is analyzed along the lines of Aboh and Dyakonova (2009). This analysis is divided into three sub-sections. The first tackles verb movement and predicate doubling, the second sub-section discusses parallel chains and predicate fronting, and finally, the last sub-section shows that predicate doubling in Dùálá is the result of two probes targeting the same goal.

4.1.3.1.1. Verb movement and predicate doubling in Dùálá

This sub-section is devoted to verb movement and predicate doubling. The movement of the verb is obvious in Dùálá. In fact, V moves out of vP to check the features associated with verbal morphology such as tense and aspect (Pollock 1989). Consider the following sentences

(13) a) Dika à til-í létà?

$_{CL1}$. Dika $_{CL1}$-SM write-$_{P1}$ $_{CL5}$.letter

"Dika wrote a letter"

b) N-é**ǹ** léta kièlè

I-see-$_{PERF}$ $_{CL5}$.letter yesterday

"I saw the letter yesterday"

In the above constructions, verb movement to the INFL domain is obvious. The example in (13a) involves the movement of the verb *tìl-à* "to write" past the (past) tense affix. In fact, the verb *tìl-à* "to write" must raise in order to check the (past) tense feature *–ì* on T^0 as the following representation illustrates.

(14) a.[AgrP Dika [Agr^0 a [TP [T^0 til-í [VP [V^0 ~~til-à~~ [NP [N^0 léta]]]]

The representation in (14) shows that the verb raises in order to check its features on T. Similarly, the verb in (13b) has to move into the INFL domain in order to check the perfective aspect. Based on these facts, it can be concluded that Dùálá has overt V-to-T movement. Also notice the construction in (14a) is grammatical because the verb *tìl-à* "to write" is raised into a position that properly governs it in such a way that Travis's (1984) Head Movement Constraint (HMC) is respected. Having determined that Dùálá shows overt V-to-T movement, let us turn now to predicate doubling in the language.

Verb focusing can be expressed in Dùálá by the fronting of a lexical verb into clause-initial position and IP-internally. Let us consider the following examples:

(15) a) Elame: O mà-bòl-á ndé njé nà kálàtì?

2_{SG} $_{PRES}$-do-$_{FV}$ $_{FOC}$ what with $_{CL9}$.book

"What do you do with the book?"

Dika: Tìl-à ndé ná mà-tìl-à-nɔ́ mɔ́

Write-$_{FV}$ $_{FOC}$ 1_{SG} $_{PRES}$-wrire-$_{FV\text{-}PRTCL}$ it

"I WRITE (not read) it "

b) Elame: Lò mà-bòl-á ndé njé?

2_{PL} $_{PRES}$-do-$_{FV}$ $_{FOC}$ what

"What are you doing?"

Dika: sá ndé dí mà-sá-nɔ̄ ngàndò

dance $_{FOC}$ 1_{PL} $_{PRES}$-dance-$_{PRTCL}$ $_{CL6}$.dance

"We are dancing (not eating)"

c) * sá ndé dí ngàndò

dance $_{FOC}$ 1_{PL} $_{CL6}$.dance

"We are dancing"

The examples above are a kind of conversation between Elame and Dika where Elame is asking questions and Dika is responding. It should be noticed that predicate fronting with doubling in Dùálá expresses a kind of contrast with corrective value. The focused verb is always contrasted with an implicit verb. In (15a), for instance, the verb *tìl-à* "write" is being contrasted with other

verbs different from *tìl-à* "to write". Thus, in (15a), the verb "read" was chosen randomly. Similarly, in (15b), the verb *sá* "to dance" is contrasted with any other verb which is not *sá* "to dance". Notice that in all Dika's answers, one verb occupies the sentence initial position, while the other is realized IP-internally. All these fronted verbs occupy the pre-subject position. The construction in (15c) is ungrammatical because there is failure to realize the fronted verb *sá* "to dance" IP-internally. This means that when the verb is fronted in a focus construction, it must be doubled inside IP. The fronted verb is always non-finite and the IP-internal one is always tensed. These facts remind us of Tuki (Biloa 2013) where the fronted verb is also the infinitive of the doubled IP-internally.

(16) O- Suwá ówú Putá a- nú –suwáḿ tsómó ráa

Inf.-wash FOC Puta SM-F1-wash clothes her

"Puta will wash her clothes"

(Tuki, Biloa 2013:498)

The Tuki example in (16) is similar to Dùálá examples in (15). In both languages, the fronted verb is non finite and the IP-internal one is finite. Also notice that their fronted infinitive verbs (the focused verbs) are always followed by their respective focus marker *ndé* (Dùálá) and *ówú* (Tuki). Thus, if the focused verb is inflected (either with tense or aspect) in the language under study, the sentence will crash as the following construction shows.

(17) a) * Mà-ɗă ndé nà mà-ɗă-nɔ́ mɔ́

PRES-eat FOC 1SG PRES-eat-PRTCL it

"I EAT it"

b) * Mà-tìl-à ndé nà mà-tìl-à-nɔ́ mɔ́

PRES-write-FV FOC 1SG PRES-write-FV-PRTCL it

"I WRITE it"

The preceding sentences are illicit because the focused verbs *ɗá* "to eat" and *tìl-à* "to write" in (18a and 18b) exhibit (present) tense morphology. In fact, the fronted verbs carry tense morphology like the IP-internal finite doubled. This means that on its way to the C-domain, the focused verb must not adjoined to the intervening tense and aspectual elements. Another

characteristic of the cleft construction is that the focused verb cannot be displaced with its complement. Thus, in Dùálá, we have V fronting rather than VP fronting.

(18) * sá ngàndò ndé dí mà-sá-nɔ̄

dance $_{CL6.}$dance $_{FOC}$ 1$_{PL\ PRES}$-dance-$_{PRTCL}$

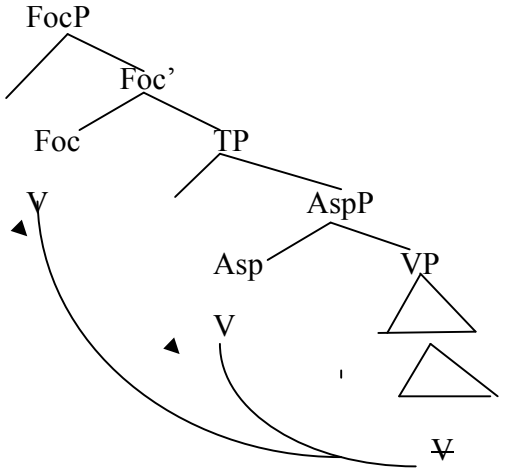
"We are dancing"

Sentence (18) is ungrammatical because the whole VP *sá ngàndò* "to dance the dance" has been displaced. The complement of the verb *ngàndò* "dance" must not be pied-piped with the fronted verb *sá* "to dance". To sum up, cleft constructions have the following characteristics: the fronted verb, which is the focused verb, must always be infinite and must be followed by its focus marker *ndé.* In addition, what must front is the V instead of the VP.

4.1.3.1.2. Parallel chains and predicate fronting

Using data from Russian and Gungbe, Aboh and Dyakonova (2009) argue that predicate fronting with doubling is an instance of parallel chains in the sense of Chomsky (2005). They argue that this phenomenon must not only be regarded as morpho-phonological or morphological operation, but also be extended to head movement as a property of syntax (Aboh, 2004b). In such constructions, the same copy simultaneously checks the feature of two different probes within the INFL and the C-domains as the following representation shows (Aboh & Dyakonova 2009: 1052).

(19)



The above representation illustrates two different probes. One within the INFL domain and the other within the C-domain both of them target the same goal (V). Aboh & Dyakonova argue that the movement of the verb to the INFL domain is dictated by the need to value the Agree-Tense-Aspect-Features inherited from C. On the other hand, the movement of the verb to the edge of the clause is driven by the discourse feature of the phase head C. We have two simultaneous chains anchored to the same foot. Under Chain reduction, the heads are spelled out, while the foot is successfully deleted at PF.

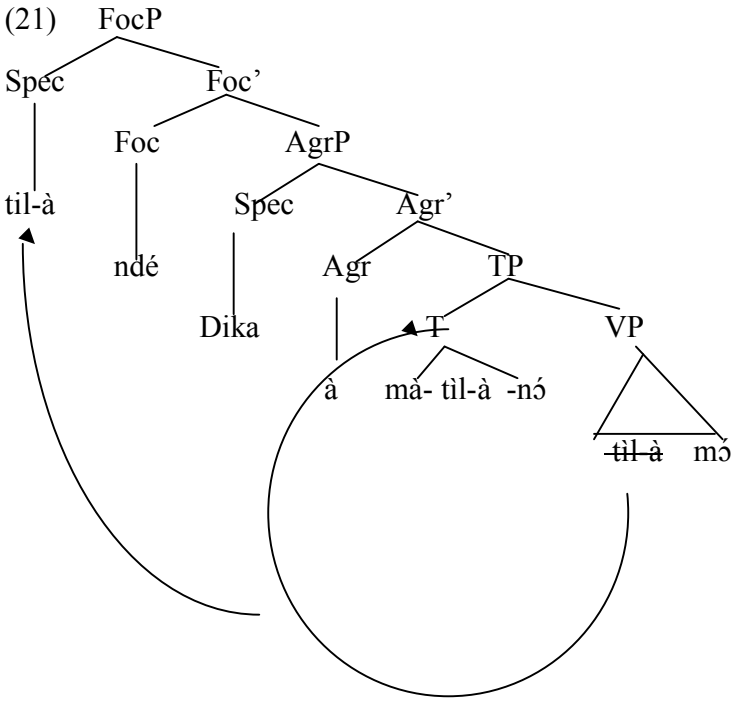
4.1.3.1.3. Two probes one goal

It was argued in the preceding chapter that [uOp] features in Dùálá are SHARED (Zentz 2014). In wh-constructions, it was shown that both C and T probe independently in the language. The same thing happens in verb focusing in the language. Let us consider again the following Dùálá example.

(20) Tìl-à ndé Dika à mà-tìl-à-nɔ́ mɔ́
Write-$_{FV\ FOC}$ $_{CL1}$.Dika $_{CL1\cdot SM}$ $_{PRES}$-wrire-$_{FV\text{-}PRTCL}$ it
"Dika WRITES it (not read)"

As it was said above, the fronted verb is non-finite whereas the doublet IP-internally is finite. Also, the presence of the particle ***-nɔ́*** at the end of the tensed verb shows that the fronted one has been displaced. Thus, the above construction has the following representation:

(21)



In the representation above, we have two probes (Foc and T) targeting the same goal (V). The feature in Foc attracts the verb *tìl-à* "to write" in Spec-FocP. The fronting of the verb forms a chain consisting of the fronted verb and the verb in the base-generated position. We have the chain (V_1 (fronted verb) and V_2 (verb in the second merge position)). The agree-tense features of T attract *tìl-à* "to write" to T forming the second chain (V_1 (tense) and V_2). These different movements of the verb do not lead to ungrammaticality because they satisfy the ECP in that the moved verbs governed their traces. Predicate fronting with doubling in Dùálá initiates parallel chains where the same copy (goal) simultaneously checks the feature of two different probes within the INFL and the C domains (Aboh & Dyakonova 2009). At this level of the derivation, there are three copies: the copy in the C-domain (the focused verb), the copy in the INFL domain (the inflected verb) and the copy in the first merge position. Such a derivation is likely to crash unless *Chain reduction* (Nunes 2004) is applied.

(22) **Chain reduction (Nunes 2004:26)**

Delete the minimal number of constituents of nontrivial chain CH that suffices for CH to be mapped into a linear order in accordance with the LCA.

Thus, as dictated by chain reduction, the heads (the focused verb and the inflected one) are spelled out and the foot (the one in the first merge position) is deleted.

4.1.3.2. Post-verbal focusing

It was argued above that verb focusing in Dùálá involves on the one hand predicate cleft construction and on the other hand post-verbal focusing. Having discussed cleft construction in the preceding sub-section, this sub-section tackles post-verbal focus in Dùálá. Let us consider the following constructions:

(23) a) Elame: Ò mà-bòl-á ndé njé nà kálàtì?
2_{SG} $_{PRES}$-do-$_{FV}$ $_{FOC}$ what with $_{CL9}$.book
"What do you do with the book?"

Dika: Nà mà- tìl-à ndé mɔ́

1_{SG} $_{PRES}$- write-$_{FV}$ $_{FOC}$ it

"I WRITE it"

b) Elame: Lò mà-bòl-á ndé njé?

2_{PL} $_{PRES}$-do-$_{FV}$ $_{FOC}$ what

"What are you doing?"

Dika: Dì mà-sá ndé ngàndò

1_{PL} $_{PRES}$.dance $_{FOC}$ $_{CL9}$.dance

"We are DANCING"

The preceding examples are question-answers pairs where Elame is asking questions and Dika is responding. Notice that Dika's answers are different from the ones analyzed in the preceding sub-section. The verbs here do not involve syntactic fronting and they do not have a doublet IP-internally. Also notice that from a discourse perspective, these focused verbs are not being contrasted with any other verbs. On the contrary, they encode new information, that is, information unfamiliar to the hearer. Contrastive focus is expressed only when the verb is fronted to the sentence initial position in Dùálá. These verbs that occur IP-internally are focalized and followed by their focus marker *ndé.* The latter scope over the verbs *tìl-à* "write" and *sá* "dance" respectively in (23 a and b). All these facts show that the post verbal focus in Dùálá has discourse-related properties. These Dùálá facts strongly resemble Aghem's data illustrated bellow:

(24) a. Tɨ́-bvʉ́ tɨ̀-bɨ̀gahà mɔ̂ zɨ̀ nó bɛ́-kɔ́

dogs two past eat Foc fuf u

'The dogs ATE fufu' [Hyman 2005:1 cited by Aboh 2007:11]

b. Zɨ̀ bɛ́-kɔ́ nó

eat fufu Foc

'eat FUFU'

(Aghem, Aboh 2007:11)

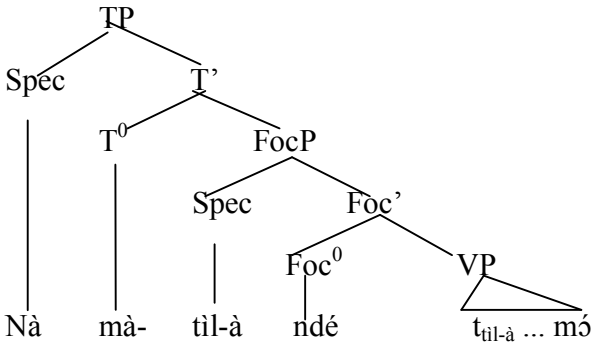
(25) Nà mà-tìl-á ndé mɔ́

1_{SG} $_{PRES}$-write-$_{FV}$ $_{FOC}$ it

"I WRITE it"

The data in (24) above show how verb focusing is rendered possible in Aghem. In (24a), the verb is being focused whereas in (24b), it is the object. In both constructions, the focus marker *nó* scopes over the element at its left. In this sub-section, I am more interested with the construction in (24a). If we compare the Aghem construction in (24a) with the Dùálá construction in (25), things look the same. In both constructions, their respective focus particles which are right adjacent to the verbs scope over these latter. Also notice that the verb in (25) is inflected with (present) tense morphology. This means that in post-verbal focus, there is also a V movement due to tense licensing. Aboh (2007:93) argues that post verbal focusing derives from movement of the verb to a higher position than that occupied by the focused constituent, itself in a derived position. He adds that the focused position is a derived one because it is neither related to case nor is it the sister of V. Let us consider the representation of (25).

(26)



In the preceding representation, the verb *tì-là* "write" moves out of VP in order to check tense features on T^0. The verb also lands in Spec-FocP since it is also attracted in order to be focused. Notice that the focus marker *ndé* does not have a tense feature that can value the uninterpretable tense features on the verb *tìlà* (Aboh 2007:94). The particle *ndé* is not a proper intervener and the verb *tìl-à* "write" can therefore move across it without violating MLC.

It appears from the discussion that the language exhibits two strategies of marking focus: cleft construction and post verbal focusing. Concerning the first strategy, the fronted infinitive verb, also the focused one moves and drags its complement to sentence initial position and it has its doublet IP-internally. This type of construction is always contrasted with an implicit verb.

Concerning the second strategy, the focus is realized post-verbally, in the VP periphery. Unlike in cleft constructions, this focus encodes new information and does not need the reduplication of the verb.

4.1.3.3. Low focus in Dùálá

Aboh (2007) presents several arguments from Bantu and Romance to show that there is a possible low focus in Bantu languages. He took, for instance, Aghem, a Bantu language, where wh-constructions neither allow for ex-situ nor in-situ strategies. Concerning the syntax of multiple questions in Aghem, he argues that one wh-phrase occurs in the immediately post-verbal position, while others remain in-situ. Finally, Aboh cited Hyman who revealed that Aghem has a focus marker *nó* that realises the post-verbal position. These facts lead him to postulate that there is a fixed position immediately after the verb that serves to mark focus. The idea of a 'low' focus goes back to Belleti (2002) after the analysis of Italian data. Belleti points out that the left peripheral focus expresses identification focus whereas the low focus encodes new information. The aim of this sub-section is to provide further evidence from the language under study for the existence of a low focus in Bantu in general, and Dùálá in particular.

(Aboh 2007) uses the following characteristics to postulate the existence of a low focus in Bantu languages: 'free' word order, in-situ wh-questions, locative inversion and the presence of the post-verbal focus *nó* in Agem. In this sub-section, the properties of low focus will be analyzed in the light of various characteristics mentioned by Aboh.

Let us consider the following constructions.

(27) a) Épumá é sí ma-ɗă-bɛ́ na Dikósó

CL7.fruit CL7.SM NEG PRES-eat-PASS by CL1.Dikosso

"The fruit is not eaten by Dikoso"

(Biloa 1994:103)

b) Dika a and-í makúbé

CL1.Dika CL1.SM buy-P1 CL6.banana

"Dika bought banana"

c) Njé Dika a déd-ì-nɔ́ ?

what $_{CL1}$.Dika $_{CL1.SM}$ eat-P1-PRTCL

"What did Dika eat?"

Recall that the unmark word order of Duala is SVO. In the above constructions, this unmark word order has changed. In (27a and b), we have the verb movement. In (27a) the verb *dá* to eat moves in order to incorporate the passive morpheme *bé* whereas in (27b), the verb moves in order to check the features of tense. The initial word order of (27a and b) is respectively the representations in (28a and b).

(28)a) [$_{AgrP}$ épumá[$_{Agr}$ é [$_{NegP}$ [$_{Neg}$ sí [$_{TP}$ [$_{T}$ ma- [$_{ExtP}$ [$_{Ext}$ bé [$_{VP}$ [$_{V}$dă [$_{PP}$ [$_{P}$ na[$_{NP}$ [$_{N}$ Dikósó]]]]]]]

b) [$_{AgrP}$ Dika [$_{Agr}$ a [$_{TP}$ [$_{T}$-í [$_{VP}$ [$_{V}$ anda]]]

In (27c), the unmark word order is also changed since it is a question. In fact, it has the word order OSV. The language also displays wh-in situ questions as the following constructions show.

(29) a: Dika à déd-ì njé?

$_{CL1}$.Dika $_{CL1\cdot SM}$ eat-$_{P1}$ what

"What did Dika eat?"

b: Njé$_i$ Dika à déd-ì-nɔ́ t_i ?

What $_{CL1.}$Dika $_{CL1.SM}$ eat-$_{P1}$-$_{PRTCl}$

"What did Dika eat?"

The constructions in (29a-b) show that Dùálá allows for both in-situ and ex-situ strategies. Let us also consider the following locative construction.

(30) Ó mwɛ̀bé ndé dă lɔ́ŋgɔ̄ dí è-nɔ̄

In $_{CL3}$.kitchen $_{FOC}$ $_{CL5}$.food $_{CL5}$.your $_{CL5.SM}$ be-$_{PRTCL}$

"In the kitchen there is your food"

Finally, let us consider the following constructions.

(31) a) Dì mà-sá ndé ngàndò

1_{PL} $_{PRES}$-dance $_{FOC}$ $_{CL9}$.dance

"We are DANCING"

b) Tí-bvú tì-bìgahà mɔ̂ zì nó bɛ́-kɔ́

dogs two past eat Foc fufu

'The dogs ATE fufu'

[Aghem, Hyman 2005:1 cited by Aboh 2007:11]

In (31a), the focus particle occurs at the right of the focused verb as in Aghem (31b).The preceding facts from Dùálá are strongly compatible with the view adopted by Aboh. Due to the flexibility of Dùálá's word order, the focus constituent is not always forced to move to the edge of the clause. Thus, discourse-related properties can occur leftward (that is the sentence initial position) or rightward (within the vicinity of the verb). It can therefore been proposed that Dùálá language has the following sequences:

Post-verbal focusing **[….[Subject….V+ndé $_{[Focus\ marker]}$]]**

Cleft construction **[V+ndé $_{[Focus\ marker]}$ [Subject….V….]]**

Another important point Aboh uses to illustrate the existence of a 'low' focus is subject versus object asymmetry. Let us reconsider the following question-answers pairs illustrating subject versus non-subject asymmetry.

(32) a) Njá nú til-í létà?

Who $_{REL}$ write-P1 $_{CL5}$.letter

"Who wrote the letter?"

b) *Dika à til-í létà

$_{CL1}$.Dika $_{CL1\text{-}SM}$ write-$_{P1}$ $_{CL5}$.letter

"It is Dika who wrote the letter"

c) Dika ndé à til-í létà

Dika $_{FOC}$ $_{SM}$ write-$_{P1}$ $_{CL5}$.letter

"It is Dika who wrote a letter"

Following Aboh (2007), let us assume that there is a competition between the EPP feature and the focus feature when the subject is focused. Let us also assume that Dùálá has a low focus. Taking into consideration the verb internal subject hypothesis, the subject *Dika* in (32b) has to

move in Spec-FocP and Spec-AgrP in order to be grammatical. However, the satisfaction of one of these criteria terminates the chain (Aboh 2007:98). Also, if the subject *Dika* moves to the specifier of the lower focus phrase, the sentence will crash since the EPP and the case have not been checked. On the other hand, if the subject moves directly to Spec-AgrP passing through the lower focus, the sentence will also crash because the focus feature is not checked. As Aboh proposes, the only solution to salvage the sentence in (32b) is to move its subject to the edge of the clause (Spec-FocP) from where it could c-command an empty category in (Spec-AgrP) which can check its EPP as the sentence in (32c) illustrates.Thus, (32c) will have the representation in (33).

(33) [$_{FocP}$ Dika [$_{Foc}$ ndé [$_{ArgP}$ pro $_{Dika}$[$_{Agr}$ à [$_{TP}$ [$_{T}$ til-í[$_{FocP}$ [$_{Foc}$[$_{VP}$ t $_{Dika\ til\text{-}a}$ léta]]]]]

Subject focus is subject to competition between the EPP and the focus feature as the above representation in (33) illustrates. The asymmetry that exists between subject focus and object focus is due to the fact that the EPP is not applied to object. They therefore have only the focus feature to check and they can either be expressed in the VP-periphery or in the left periphery. It can be concluded that in Dùálá, discourse-related properties can occur leftward, that is ,to the left edge of the clause and rightward within the VP-periphery.

Finally, Aboh (2007) uses data from Nweh to show that Bantu languages can express discourse-related properties within the vicinity of the verb. Let us consider the following constructions:

(34) a) Atem a kɛ́ʔ nčúū akendɔ̀ŋ čúū

Atem Agr P1 boil plantains Ø-boil

'Atem BOILED plantains'

[Nweh, Nkemnji 1995:138 quoted by Aboh 2007:100]

b) ŋ-kə̌ né msɛ́ né

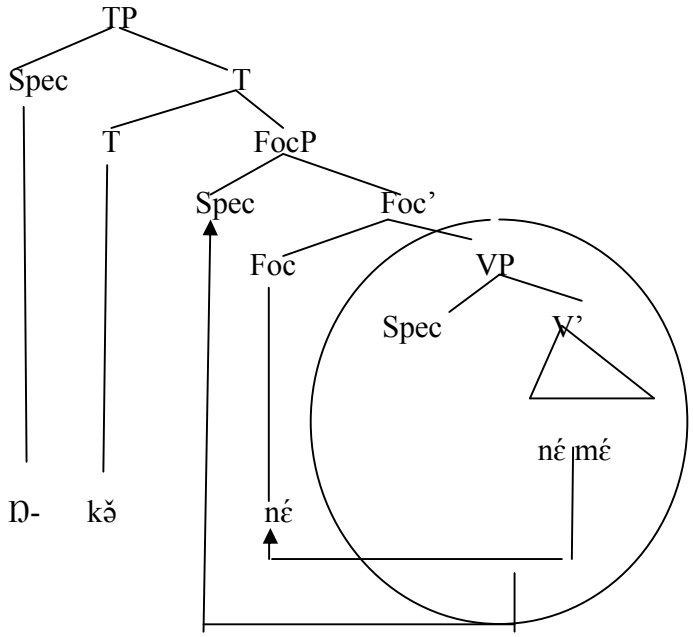
1_{SG}-P3 cook fufu cook

'I COOKED fufu' (Ghɔmálá')

The preceding examples are from languages where verb focusing is marked by the reduplication of the verb. Notice that these constructions are different from Dùálá and Tuki because the focused verb is not fronted. It was proposed (Nkemnji 1995, Aboh 2007) that the focused verb

in these languages moves into the head of a low focus phrase and the VP raises to Spec-FocP. Thus the Ghɔmala' sentence in (34b) will have the following tree diagram.

(35)



The above construction clearly indicates that there is a low focus in Ghɔmala'.

4.1.4 Negation and Focus

The aim of this sub-section is to tackle the way negation and focus interact in Dùálá. Negation is rendered through various morphemes such as *sí, sì, ní, tìtì.* The choice of each of them being dictated by the verbal morphology of the sentence. When it comes to focus constructions, negation is obtained through *sétɔ.* Let us consider the following constructions.

(36) a) Elame a sí and-édì mùnjá aó mùtòà kíɛ̀lɛ̀

Elame $_{SM}$ $_{NEG}$ buy-$_{P1}$-$_{APPL}$ $_{CL1}$.wife $_{CL1}$.his $_{CL3}$.car yesterday

"Elame did not buy a car for his wife yesterday"

b) Sétɔ̀ kíɛ̀lɛ̀ ní tɔ̀mbì ndé Elame à and-édì-nɔ́ munjá aó mùtòà

$_{NEG}$ tomorrow that past $_{FOC}$ $_{CL1}$.Elame $_{CL1.SM}$ buy-$_{P1}$-$_{APPL-PRTCL}$ $_{CL1}$.wife $_{CL1}$.his $_{CL3}$.car

"It is not yesterday that Elame bought a car for his wife"

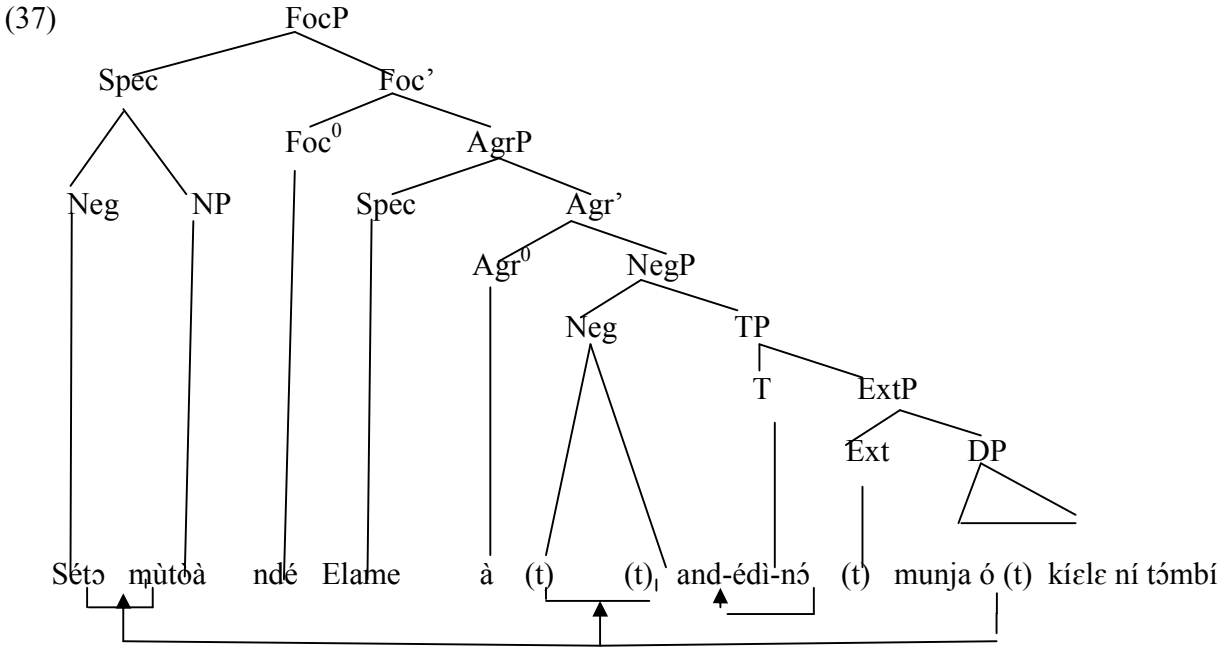
c) Sétɔ̀ mùtòà ndé Elame à ànd-édì-nɔ́ munjá aó kíɛ̀lɛ̀ ní tɔ́mbì

$_{NEG}$ $_{CL3}$.car $_{FOC}$ $_{CL1}$.Elame $_{CL1\cdot SM}$ buy-$_{P1}$-$_{APPL-PRTCL}$ $_{CL1}$.wife $_{CL1}$.his tomorrow that past

"It is not a car that Elame bought for his wife yesterday"

The construction in (36a) is a negative sentence where the particle *sí* precedes the verb. The sentences in (36b) and (36c) are instances of focus negative constructions. Notice that in (36b) and (36c), the negative particle always precedes the negated elements. Let us consider the representation of the sentence in (36c).

(37)



The above tree diagram shows that the object *mùtòà "*car" moves in order to be attached to the negative morpheme *sí* in Neg^0. Thus, they form a complex head *sí mùtòà* "not car". Subsequently, the overall head moves into Spec-FocP. By virtue of being focused, the negative particle *sí* becomes *sétɔ* and the construction in (37) is obtained.

4.2 TOPICALIZATION

The study of topicalization has received increasing interest from researchers such as Lasnik and Saito (1984, 1992); Baltin (1978); Laenzlinger (2002); Biloa (1992, 1995), etc. According to these linguists, topicalisation is an adjunction to IP (TP). Starting from Rizzi (1997) and Haegeman (2000), topicalization involves movement of the topicalized element into the specifier position of a specific functional projection called Topic Phrase (TopP). Just as focalized or focus elements move into the specifier position of the focus phrase, in like manner, topicalized elements should move into Spec-TopP. This idea was supported by the facts that in some

languages like Gungbe, there is the topic morpheme *yà* that requires specific a functional projection. In this thesis, it is also argued that topicalisation is substitution to Spec-TopP. There are two schools of thoughts concerning the derivation of topicalized elements. Some researchers argue that topicalization involves movement of the topicalized element to Spec-TopP, while others are of the view that these elements are merged in Spec-TopP. This section addresses topicalized constructions in Dùálá. It is argued that topicalized arguments are directly merged into Spec-TopP whereas adjuncts are obtained by movement at the left edge of the sentence. The section is organized as follows: the first sub-section tackles topicalization of arguments. The second sub-section examines topicalization of adjuncts and multiple topics. Finally, the last sub-section addresses topicalization in embedded clauses.

4.2.1. Topicalization of arguments

This sub section tackles topicalization of arguments such as subject, objects and indirect objects. Let us consider the following constructions:

(38) a) Bá bítò, bá mɛ̀ndɛ́ bòl-à bánà bábū mbɔ́tí índɛ́nɛ̀
CL2.these CL2.women CL2-SM F2 give-FV CL2.children CL2.their CL9.gown CL9.big
"These women, they will give a big gown to their children"

b) Bá bítò, bá mɛ̀ndɛ́ bòl-à bánà bábū mbɔ́́tí índɛ́nɛ̀
CL2.these CL2.women CL2.they F2 give-FV CL2.children CL2.their CL9.gown CL9.big
"These women, they will give their children a big gown"

c) Bá bánà, bá bítò bá mɛ̀ndɛ́ bòl-à bàbɔ́ mbɔ́tí índɛ́nɛ̀
CL2.these CL2.these CL2.women CL2-SM F2 give-FV them CL9.gown CL9.big
"These children, these women will give them a big gown"

d) mbɔ́tí índɛ́nɛ, bá bítò bá mɛ̀ndɛ́ bòl-à bá bánà mɔ́
CL9.gown CL9.big CL2.these CL2.women CL2-SM F2 give-FV CL2.these CL2.children it
"A big gown, these women will give to these children"

In the preceding examples, NPs have been topicalized. In (38b), the NP *bá bítò* 'these women' generated in the preverbal position as (38a) illustrates has been moved to the left edge of the clause leaving behind a resumptive pronominal *bá,* which agrees with its antecedent in noun

class. The examples in (38c-d) illustrate an NP that has moved from the post verbal position to the edge of the clause. In (38c), the indirect object *Bá bánà* 'these children' has been moved whereas in (38d), it is the direct object *mbɔ́tí índɛ́nɛ* 'big gown' that has been topicalized. Notice that in these two constructions (38c) and (d), the topicalized elements are copied IP-internally by the overt resumptive pronouns *bàbɔ́* and *mɔ́* that agree in number and person with their respective antecedents. The absence of these resumptive pronouns leads obligatorily to ungrammaticality. They appear in order to salvage the clause from an ungrammatical derivation. The above constructions are known as left dislocation. Two proposals emerge concerning the derivation of such constructions. On the one hand, it is assumed that the dislocated (topicalized) element is base-generated in its sentence-initial position. In such cases, there is no movement and therefore, the overt resumptive pronouns are the real objects of the verb. On the other hand, it is argued that these constructions are obtained by the movement of the fronted element which is derived by syntax. The constructions in (38a-d) show that there is a kind of vacuous movement. In this thesis, it is argued that the fronted NP is merged in the clause initial position for the following reasons: first, it was argued in the preceding chapters that the extraction of an XP from below the scopal clause verb in Dùálá involves the occurrence of the particle *-nɔ́*. This fact was first demonstrated in wh- constructions, then in focalized constituents. In the same vein, the next chapter will show that there is also the occurrence of this particle in relativized constructions. However, a closer look at the constructions above shows that there is no change in the morphology of verbs (38b-d). It can be assumed that the dislocated elements have not been displaced in the language, thus, the resumptive pronouns are the real objects of the verbs, while the dislocated elements are hanging topics. These facts strongly suggest that the dislocated phrases are base-generated in the sentence initial position. Following Bassong (2010). Another evidence in support of the view that the topicalized element is base-generated in Spec-TopP comes from Rizzi (2004b) who gives the following definition of chains:

(39) $(A_1,\ldots, A_n)$ is a chain iff, for $1 \leq i < n$

(i) $A_i = A_{i+1}$

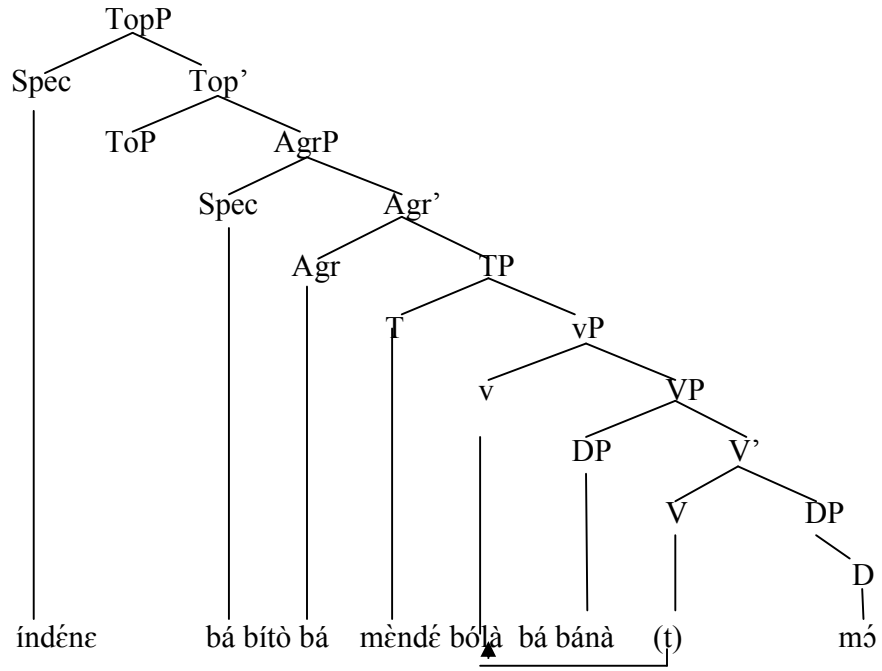
(ii) A_i c-commands A_{i+1}

(iii) A_{i+1} is in a MC with A_i

(Rizzi 2004b:3)

Thus, considering the preceding definition of chain based on identity, prominence and locality, it is clear that the constructions in (38) are not obtained by movement. Thus, concerning Identity, the copy theory of trace is not respected since the gap is always filled by a resumptive pronoun. This fact alone invalidates the idea of an overt movement since Rizzi points out that if one of the conditions (i.e. identity, prominence, and locality) is not met, the chain is not established. Thus, (38d) has the following tree diagram:

(40)



In fact, all these topicalized elements do not leave a gap, instead, they are linked to resumptive pronouns as the preceding tree shows. Topicalization with resumptive pronoun is also found in other languages like Swahili and Lingala (41a) and Fench (41b).

(41) a) Mwasi wana Paul a- -yeb -aki ye Na kelasi
woman that Paul 3PS.ani.SPP know past her and school
'That woman, Paul knew her at school'
(Kabasele, 2012)

b) Ces robes, je ne les aime pas
'These gown, I do not like them'
(French)

The above examples show that the topicalized elements *Mwai wana* ‘that woman’ and *ces robes* ‘these gown’ are respectively copied by the overt resumptive pronouns *ye* ‘her’ and *les* ‘them’. The facts from these languages are very similar to that of Dùálá.

It can be concluded that topicalisation of arguments in Dùálá is a kind of Hanging Topic Left Dislocation (HTLD) where the topicalized element is directly merged in the specifier position of the topic phrase. This fact has been proved by the absence of the particle *-nɔ́* and the Rizzi’s (2004b) definition of chain . Now that argument topicalization has been analyzed, let us turn to the topicalization of adjuncts.

4.2.2.Topicalization of adjuncts and multiple topics

This sub-section examines the way the topicalization of adjuncts is encoded in Dùálá. Let us consider the following constructions.

(42) a) Nà mɛ̀ndɛ́ lom-èà múnà ám̀ létà kíɛ̀lɛ̀
1_{SG} F2 send-$_{APPL}$ $_{CL1}$.child $_{CL1}$.my $_{CL5.}$letter tomorrow
“I will send a letter to my child tomorrow”

b) Kíɛ̀lɛ̀, nà mɛ̀ndɛ́ lom-èà múnà ám̀ létà *(t)*
tomorrow 1_{SG} F2 send-$_{APPL}$ $_{CL1}$.child $_{CL1}$.my $_{CL5}$.letter
“Tomorrow, I will send a letter to my son”

c) Múnà ám̀, kíɛ̀lɛ̀, nà mɛ̀ndɛ́ bòl-à mɔ́ létà *(t)*
$_{CL1}$.child $_{CL1}$.my tomorrow 1_{SG} F2 send-$_{FV}$ him $_{CL5.}$letter
“My child, tomorrow, I will send him a letter”

The sentence in (42b) is a construction where the adjunct *kíɛ̀lɛ̀* “tomorrow” has undergone topicalization. In (42c), both the argument and the adjunct have been topicalized. Notice that in (42c), the topicalized adjunct *kíɛ̀lɛ̀* “tomorrow” is not resumed by a pronoun IP-internally unlike the argument *múnà ám̀* “my child” which is resumed IP-internally by the pronoun *mɔ́*. This is explained by the fact that adjuncts are not nominal expressions as well as arguments. Thus, their fronting without a resumptive pronouns IP-internally does not lead to illicitness unlike arguments.

(43) a) mbɔ́tí índɛ́nɛ, bá bítò bá mɛ̀ndɛ́ bòl-à bá báná *(mɔ́)

$_{CL9}$.gown $_{CL9}$.big $_{CL2}$.these $_{CL2}$.women $_{CL2\text{-}SM}$ $_{F2}$ give-$_{FV}$ $_{CL2}$.these $_{CL2}$.children it

"A big gown, these women will give to these children"

b) *mbɔ́tí índɛ́nɛ, bá bítò bá mɛ̀ndɛ́ bòl-a bá báná babɔ́

$_{CL9}$.gown $_{CL9}$.big $_{CL2}$.these $_{CL2}$.women $_{CL2\text{-}SM\ F2}$ give-$_{FV}$ $_{CL2}$.these $_{CL2}$.children them

"A big gown, these women will give to these children"

The sentence in (43a) is ungrammatical if the reumptive pronoun *mɔ́* is absent in the construction. Since *mbɔ́tí índɛ́nɛ* "big gown" is a nominal expression, it must be resumed IP-internally by a resumptive pronoun. However, the fact that a topicalized constituent is resumed clause-internally is not enough. There must be a c-command condition on binding between the bound constituent and its antecedent. Thus, the sentence in (43b) is not grammatical because the c-command on binding is not met. In this sentence, the topicalized DP *mbɔ́tí índɛ́nɛ* c-commands *babɔ́,* but the sentence is illicit since the antecedent is singular whereas the pronoun is plural. Considering the differences existing between topicalization of arguments and adjuncts in the language, it will be argued that topicalization of adjuncts is obtained by the overt movement of the adjunct to Spec-TopP, whereas arguments are base-generated in Spec-TopP. In fact, if we consider Rizzi's (2004b) definition of chain stated in (39), it will be clear that adjuncts undergo preposing into Spec-TopP. In fact, identity, prominence and locality are respected. Concerning identity, it is logical that only the highest position in the chain is pronounced in (42b) and (42c), while the traces inside IP are silent. As far as the prominence is concerned, the topicalized elements in (42b) and (42c) c-command their respective traces. Finally, the topicalized elements are in MC with their traces since there is no intervener of the same type between them. Besides, the absence of the particle *-nɔ́* is expected since adjuncts are not nominal expressions.Turning now to multiple topics, Dùálá is a language that licenses multiple topics constructions. Let us consider the following examples:

(44) a) Kíɛ̀lɛ̀, ó mùlèmlèm à pòndà, nà mɛ̀ndɛ́ ɗă jáŋgòlò.

tomorrow, at same of $_{CL9}$.time 1_{SG} $_{F2}$ eat $_{CL5}$.mangoes

"Tomorrow, at the same time, I will eat mangoes"

b) Kíɛ̀lɛ̀, mbɔ́tí índɛ́nɛ, bá bánà, nà mɛ̀ndɛ́ bòl-à babɔ́ mɔ́

tomorrow $_{CL10}$.gown $_{CL10}$.big $_{CL2}$.these $_{CL2}$.children 1_{SG} $_{F2}$ give-$_{FV}$ them it

"Tomorrow, these children, I will give them a big gown"

c) Kíɛ̀lɛ̀, oá, o mɛ̀ndɛ́ pómànɛ̀ ɗã̀

tomorrow, you, 2_{SG} $_{F2}$ early eat

"Tomorrow, you, you will eat early."

In (44a-c), we have multiple topics constructions. In (44a), two adjuncts have been topicalized, hence, the absence of resumptive pronouns clause-internally. In (44b), the adjunct *kíɛ̀lɛ̀* "tomorrow", the direct object *mbɔ́tí índénɛ* "big gown" and the indirect object *bá bánà* "these children" have been topicalized, which accounts for the presence of the two resumptive pronouns *babɔ́* "them" and *mɔ́* "it" clause-internally. In (44c), the adverbial *kíɛ̀lɛ̀* "tomorrow" and the pronoun *oá* "you" have been topicalized. Notice that the resumptive pronoun in (44c) is not the same as its antecedent *óa* "you". This phenomenon is equally observed in another Bantu language as the following example illustrates.

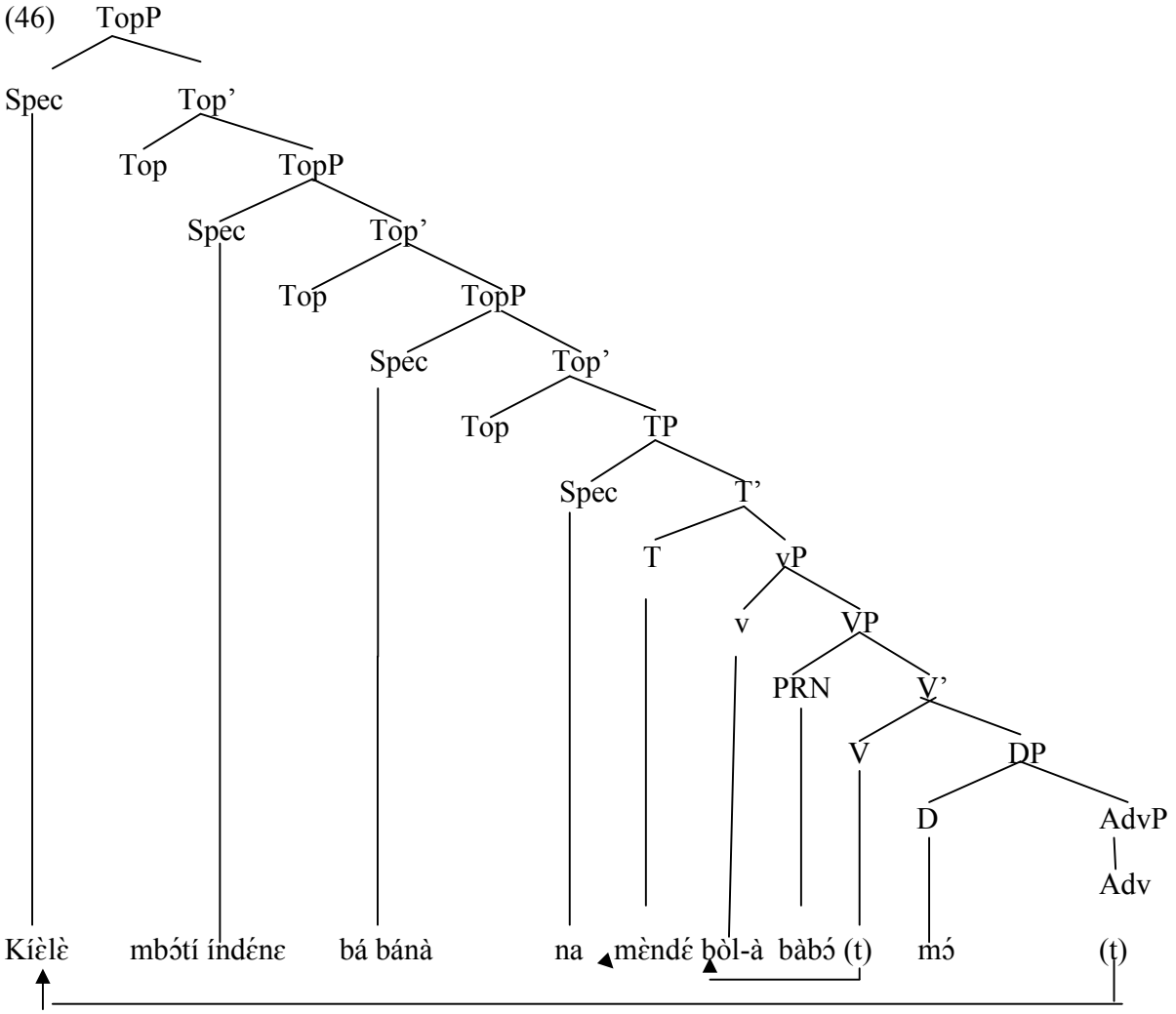
(45) Wɛ, máná makeɓla u n-tí mɔ́ kɨŋɛ

You these presents you F1-give them king

"You, these gifts you will give them to the king' (Basa'a ,Bassong 2010)

It is shown in (45) that the topicalized pronoun *wɛ* "you" is different from its counterpart that appears clause-internally. The Basa'a example in (45) is similar to the Dùálá structure in (44c). Going back to multiple topics, (44b) will have the following tree diagram:

(46)



The above tree diagram illustrates that the resumptive pronouns *bàbɔ́* "them' and *mɔ́* "it" are the true objects of the verb *bòl-à* "to give". Thus, according to this diagram, the only element that moves is the adverbial *kíɛ̀lɛ̀* "tomorrow' whereas the arguments *mbɔ́tí índɛ́nɛ* "big gown" and *bá bánà* "these chlidren" are directly merged in Spec-TopP. Notice that the head of Top of the topic phrase does not carry any visible marker unlike in focus constructions analyzed previously. This is because topics unlike foci are not morphologycally marked in Dùálá. However, there are some languages like Muyang and Gungbe that exhibit a topic marker. Let us consider the following examples.

(47) a) Ergeli degiya, Madva á –zay

Ergeli Top Madva SM take

"Ergeli, Madva marries her"

(Muyang, Biloa 2013:322)

b) Kofi ya, gan kpa me we kponon le su-i do

K. TOP in FM policeman the-PL shut-PERF-him LOC

"As for Kofi, the policeman put him IN PRISON"

(Gungbe, Aboh 1996:87)

The examples in (47a) and (b) show that in Muyang and Gungbe, topics are morphologically marked. In topicalized constructions, topicalized elements are followed rightwards by their topics markers. In a nutshell, the topicalization of adjuncts in Dùálá requires a simple preposing in Spec-TopP without a resumptive pronoun clause-internally. Multiple topics are allowed in the language. Multiple adjuncts can be preposed at the same time and multiple arguments can be topicalized as long as they are resumed clause-internally.

4.2.3.Topicalization in embedded clauses

After analyzing topicalization in main clauses, this sub-section tackles topicalization in embedded clauses.

(48) a) Nà m-ɔ̀ŋgɛ́lɛ́ ná nú mùtò, ó áŋgáménɛ̀ bâ mɔ́

$1_{SG\ PRES}$-think that $_{CL1}$.this $_{CL1}$.woman 2_{SG} must marry her

"I think that this lady, you must marry her"

b) Bile à m-ɔ̀ŋgɛ́lɛ́ ná yí mbɔ́tí índɛ́nɛ́, bá bánà ndé bá mɛndɛ́ɛ bɔ́tɔ̀ mɔ́

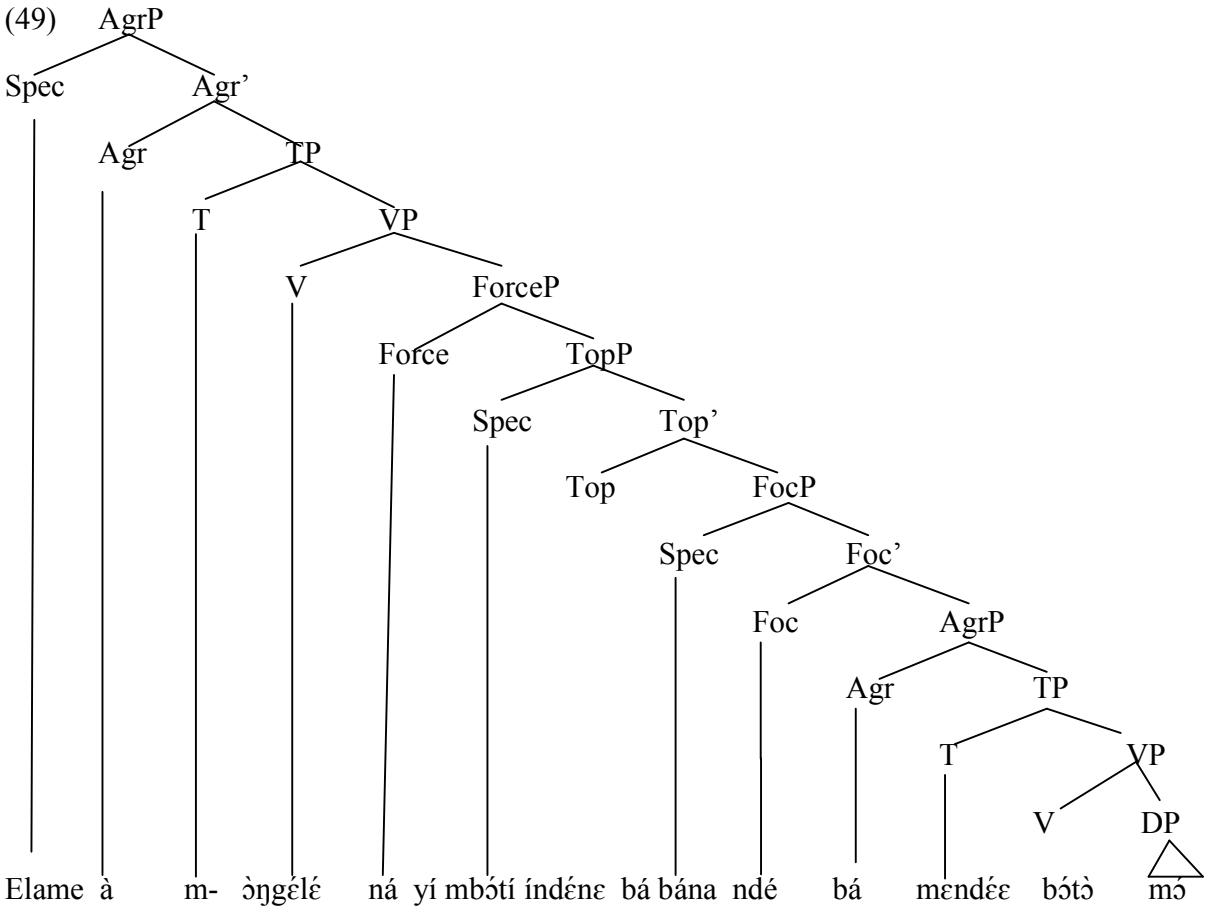
$_{1}$.Bile $1_{.SM\ PRES}$-think that $_{10}$.these $_{10}$.gown $_{10}$.big $_{2}$.these $_{2}$.children $_{FOC}$ $_{2.SM\ F2}$ wear they

"Bile thinks that these big gowns, it is the children who will wear them."

The sentences in (48a and b) are constructions where topicalization occurs in embedded clauses. In (48a), the topicalized constituent, *nú mùtò* 'this woman' occurs after the complementizer *ná* and the finite clause. In the same vein, the topicalized constituent *yí mbɔ́tí índɛ́nɛ́* 'these big

gown' occurs between the topicalized element *yí mbɔ́tí índéné* 'these big gowns' and the cleft (focalized) construction *bá bánà* 'these children'. As argued in the preceding section on focalization, the final 'ɛ' in mɛndɛ́ɛ (48b) is due to the focalization of the subject. Also notice that the two topicalized DPs are resumed clause-internally since they are merged in clause initial position. Considering the hierarchical order of the sentence in (48b), we have the following tree diagram.

(49)



SUMMARY

The aim of this chapter was to address focalization and topicalization. Concerning focus constructions, it was argued that arguments and adjuncts use the left edge of the clause to express focus. By so doing, the focused constituent undergoes overt movement to the left of the focus marker *ndé*. The focused constituent must agree in noun class with its focus marker. Thus, the moved constituent leaves behind a trace with a null spell out. It was also argued that Dùálá exhibits a kind of subject versus object asymmetry as far as focus construction is concerned. In fact, the subject always requires the focus constituent to move to the left edge of the clause whereas in non-subjects, the focused constituent can, on the one hand, move to the edge of the clause. In such a case, it bears a contrastive stress. On the other hand, it can stay in-situ when expressing new information. The syntax of verb focusing was also addressed. It was argued that in Dùálá, the discourse-related features in the VP periphery are only for verbs whereas the language resorts to the edge of the clause to mark the other types of foci. This is mostly because Dùálá has a low focus within the vicinity of the verb. Finally, negation and focus was analyzed. It was said that in focus constructions, the negated participants move in order to be attached to the negative morpheme, subsequently, the complex head moves in Spec-FocP.

Concerning topicalization, it was argued that topicalization of arguments is Hanging Topic Left Dislocation (HTLD) where the topicalized element is directly merged in Spec-TopP. However, the topicalization of adjuncts is obtained by the displacement of the topicalized element to Spec-TopP. The language also exhibits multiple topics. In such constructions, multiple adjuncts can co-occur, or adjunct and argument, or multiple arguments. It follows that arguments must always be resumed clause-internally unlike adjuncts. Finally, it was said that topicalization can also occur in embedded clauses as well.

CHAPTER V

RELATIVIZATION AND THE STRUCTURE OF DÙÁLÁ LEFT PERIPHERY

5.0 INTRODUCTION

In the preceding chapters, the syntax of questions, focus and topicalization was examined. In this chapter, a different kind of A-bar construction traditionally referred to as relativization is analyzed. The chapter has two main objectives. The first is to analyze the construction type relative clauses in the language. By so doing, the study starts by presenting the two lines of research against the background of relative clause analysis. Finally, the section closes off by examining the different kinds of relative constructions used in Dùálá as well as their syntactic realizations. The second section is devoted to provide a unified analysis of the left periphery of the clause in Dùálá. Based on Rizzi's (1997, 2001b, 2004b) split CP hypothesis, it will be shown that a single X-bar projection (CP) originally used in the mid-eighties at the edge of the clause is inappropriate to account for the different A-bar projections that appear at the left periphery of the clause. In fact, the section examines the syntactic co-occurrence of the different free functional morphemes of the CP layer in Dùálá. It defines the linear ordering as well as the effects of violating such ordering.

5.1. RELATIVIZATION

5.1.1. Definition of concept

A relative clause is a clause, which modifies a noun or a noun phrase. Generally, it is introduced by a pronoun known as a relative pronoun. The following sentences illustrate these facts:

(1) a) John is **the man who** is wearing a blue jean.

b) I met **the girl who** loves John.

From the preceding sentences, *the man* and *the girl* are definite nominal antecedents and *who* in (1a and b) is the relative pronoun referring back to these antecedents. These NPs are being modified by the relative clauses. Relative clauses can be left adjoined or right adjoined to the DP cross-linguistically. The nature of the adjunction process has provoked two schools of thoughts on relativization. On the one hand, there is the promotion analysis and on the other hand there is

the matching analysis. The promotion analysis also known as the Head Raising Analysis(HRA) (Kayne 1994, Bianchi 2000a, de Vries 2002 among others) rules out any right adjunction structures in the grammar of natural languages. According to this analysis, the head of a relative clause can be interpreted as if it is in the gap position inside the relative clause (Aoun & Li 2003).Thus, the derivation of a relative clause involves the raising of the head (NP/DP) to its surface position as the following structure shows.

(2) *The Head Raising Analysis*: [DP [CP NP/DP [C [IP ...(t_i) ...]]]] (Kayne 1994)

As the above structure illustrates, the DP has been displaced to a position above CP, leaving behind a trace at its extraction site. It is clear that it is not an instance of adjunction.

In the Matching Analysis (MA) also known as operator movement, it is argued that relative clauses are similar to wh-interrogatives in the sense that they are derived via movement. The Matching Analysis therefore presents the following structure:

(3) *The Matching Analysis (MA):* $[_{\text{NP DP}}[_{\text{head}}$ NP/DP $_i$ ...] $[_{\text{Relative CP}}$ wh $_i$ [...t_i...]]]

(Chomsky 1977b)

The preceding structure presents the way the derivation occurs in MA. As the name indicates, there is a matching relation between the relative pronoun in the peripheral domain and the head NP/DP. Under such analysis, the heads are base generated and the relative pronouns move closer to these heads. Besides, wh-interrogatives and relative clauses share the following properties (Aoun & Li, 2003:99).

(4) - the construction contains a gap
- long distance relations are available
- Islands constraints are relevant.

To conclude, the aim of this sub-section was to present the competing proposals against the background of relative clause analysis. It was shown that the Head Raising Analysis involves the raising of the head to its surface position. On the contrary, the Matching Analysis presents a matching relation between the relative pronoun, which is obtained by displacement, and the heads, which are base-generated in sentence initial position. In the following sub-section, it will

be shown which of the two proposals is (more) relevant by examining two types of relative clauses (dependent and independent relative clauses) in Dùálá.

5.1.2. Dependent and independent relative clauses

This sub-section is devoted to present the different kinds of relative constructions in Dùálá and the restrictions that they exhibit. Throughout the study, it shall be shown that between the two lines of research, the most relevant is the Matching Analysis (MA). As their names indicate, relative clauses contain a relative pronoun that refers back to an antecedent contained in a higher clause. In other words, what distinguishes a relative clause from a non-relative clause is the relative pronoun related to the antecedent. Based on the nature of the antecedent, traditional grammar has made a distinction between dependent relative clauses and independent relative clauses. Dependent relative clauses exhibit an overt antecedent whereas independent clauses do not. The following two sub-sections will be devoted to analyze these types of relative clauses.

5.1.2.1 Dependent relative clauses

As mentioned above, dependent clauses are the ones that exhibit an overt antecedent. Considering the semantics of these types of clauses, they are divided into **restrictive** and **nonrestrictive relative clauses**. First, let us start by analyzing restrictive relative clauses.

5.1.2.1.1. Restrictive Relative clauses

Semantically, a restrictive relative clause is intimately related to the NP which it modifies. The following sentences are instance of restrictive relative clauses in Dùálá.

(5) a) Bánà **bénà** bá til-édì ɲàŋgó ábū málétà mándɛ́nɛ̀ bá é muyaó
$_{2}$.children $_{2\text{-REL}}$ $_{2.SM}$ write-$_{P1\text{-}APPL}$ $_{1}$.mother $_{1}$.their $_{6}$.letter $_{6}$-big $_{2\text{-SM}}$ be $_{3}$.kindness
"The children who wrote big letters to their mother are kind"

b) Málétà mándɛ́nɛ **méná** bánà bá til-édì-nɔ́ ɲàŋgó ábū má é èsúŋgù
$_{6}$.letter $_{6}$.big $_{6\text{-REL}}$ $_{2}$.children $_{2.SM}$ write-$_{APPL\text{-}PRTCL}$ $_{1}$.mother $_{1}$.their $_{6\text{-SM}}$ to be short
"The big letters that the children wrote to their mother are shorts"

c) Baɲàŋgó **bénà** bánà bá til-édi-nɔ́ málétà mándɛ́nɛ bá é muyaó
$_{2}$.mothers $_{2\text{-REL}}$ $_{2}$.children $_{2.SM}$ write-$_{APPL\text{-}PRTCL}$ $_{6}$.letter $_{6}$.big $_{2}$ $_{.SM}$ be $_{3}$.kindness

"The mothers to whom the children wrote big letters are kind."

The previous examples are dependent relative clauses. The sentences show that many constituents of a clause in Dùálá can be relativized. Thus, in (5a), a subject is relativized. In (5b), a direct object is relativized whereas in (5c), it is the indirect object that has undergone relativization. Notice that each sentence contains a relative pronoun (in bold) that refers back to its antecedent. Considering the characteristics of the sentences in (5), it will be argued that they (5a-c) fall within the framework of the Matching Analysis (MA). In fact, in all the constructions above (5a-c), the relative pronoun above IP is in a predication or agreement relation with its head DP. The bold printed relative pronouns ***béna*** and ***ména*** agree in class, number and person with their respective antecedents *bánà "*children" and *má-léta má-ndɛ́nɛ* "big letters". In (5) these relative clauses are initially merged as complements of their verbs but they move to the front of the relative clauses as the following simplified derivation of (5b) illustrates.

(6) [NP [NP málétà mándɛ́nɛ̀$_i$ …] [CP ménà$_i$ [C [AgrP bánà [Agr bá [TP [T til-édì-nɔ́[…t$_i$...]]]]]

In the preceding derivation, the relative clause *ménà* is merged as the complement of the verb *tìl-à* "to write" as the trace shows, but it moves to the front of the clause and agrees in class, number and person with the modified NP. Since we are dealing with the Matching Analysis, the construction in (6) contains a silent gap. In fact, the derivation shows that the head of the relative clause is not associated with a resumptive pronoun clause-internally, but with a variable. As the derivation of (5a) shows, all the other sentences in (5) are the heads associated with an empty category. In the Matching Analysis, it is argued that the heads are directly merged above IP, while the relative pronouns are obtained via movement. The displacement of these pronouns is visible through the morphology of the verb. Let us reconsider the derivation in (6).

(7) [NP [NP málétà mándɛ́nɛ̀$_i$ …] [CP ménà$_i$ [C [AgrP bánà [Agr bá [TP [T tilédìnɔ́[…t$_i$...]]]]]

The morphology of the verb *tìl-à* "to write" is a clear indication that the relative pronoun *ménà* has crossed over it. In (5a), the morphology of the verb remains unchanged since it is the subject that has been relativized. In (5b) and (c) however, the particle ***-nɔ́*** occurs directly after the verb. As mention in the preceding chapters, this particle occurs when a post verbal constituent has been displaced to a higher position. The sentences in (5) are restrictive relative clauses because they are semantically and intimately related to the IP. All the relative pronouns in bold in (5) are

the heads of relative clauses. Having analyzed restrictive relative clauses, let us turn to non-restrictive

5.1.2.1.2. **Non-restrictive relative clauses.**

As mentioned already, non-restrictive clauses only provide additional information, which does not affect the first meaning of the sentence. The following constructions illustrate this phenomenon in the language.

(8) a) Bánà**,** **bénà** bá til-édì ɲàŋgó ábū málétà má-ndɛ́nɛ̀**,** bá é muyaó
$_{2}$.children $_{2\text{·REL}}$ $_{2.\text{SM}}$ write-$_{\text{P1-APPL}}$ $_{1}$.mother $_{1}$.their $_{6}$.letter $_{6}$.big $_{2\text{·SM}}$ be $_{3}$.kindness
"The children, who wrote big letters to their mother, are kind"

b) Málétà má-ndɛ́nɛ**, ménà** bánà bá til-édì-nɔ́ ɲàŋgó ábū**,** má é èsúŋgù
$_{6}$.letter $_{6}$.big $_{6.\text{REL}}$ $_{2}$.children $_{2\text{·SM}}$ write-$_{\text{APPL-PRTCL}}$ $_{1}$.mother $_{1}$.their $_{6\text{·SM}}$ be short
"The big letters, that the children wrote to their mother, are shorts"

At first sight, one could argue that the constructions in (8) and those in (5) seem alike. However, a closer look shows that non-restrictive clauses are marked by a separate intonation contour. Besides, there is a different semantic interpretation between these two constructions (5 and 8). In (5) the field is restricted to the antecedents whereas in (8), the speaker is giving extra information concerning the antecedents; the field is therefore wider than restrictive relative clauses.

5.1.2.1.3. Bare relative clauses

Unlike the relative clauses in (5) and (6) above that exhibit an overt relative clause, it is also possible to find **bare relative clauses** in Dùálá. A bare relative clause is the one that does not have an overt relative pronoun. Let us consider the following constructions.

(9) a) Nà mɛ̀ndɛ́ jìpɛ̀ dã̀ bénà ó tɔ́ndì-nɔ́
$1_{\text{SG F2}}$ cook $_{\text{CL5}}$.food $_{\text{CL5.REL}}$ 2_{SG} like-$_{\text{PRES-PRTCL}}$
"I will cook the food you like"

b) Elame à sɔ̀-í bánà bénà á tá-nɔ̄ á wàsà
$_{\text{CL1}}$.Elame $_{\text{CL1·SM}}$ find-$_{\text{P1}}$ $_{\text{CL2}}$.children $_{\text{CL2·REL}}$ $_{3\text{SG}}$ $_{\text{P2-PRTCL}}$ $_{3\text{SG}}$ look for
"Elame found the children he was looking for"

(10) c) Nà mɛ̀ndɛ́ jìpɛ̀ ɗã ó tɔ́ndì-nɔ́

1_{SG} F2 cook $_{CL5}$.food 2_{SG} like-$_{PRES\text{-}PRTCL}$

"I will cook the food you like"

d) Elame à sɔ̀-í bánà á tá-nɔ̄ á wàsà

$_{CL1}$.Elame $_{CL1\cdot SM}$ find-P1 $_{CL2}$.children 3_{SG} $_{P2}$-$_{PRTCL}$ 3_{SG} look for

"Elame found the children he was looking for"

The examples in (10a and b) are instances of bare relative clauses in Dùálá whereas the clauses in (9c and d) are their respective counterparts containing the relative pronoun *bénà.* The latter refers back to the antecedents *ɗá* "food" in (9a) and *bánà* "children" in (9b). The grammaticality of sentences (9a) and (9b) is accounted for by the presence of their antecedents. In fact, these antecedents share the same semantic content with their relative pronouns. It was argued that they share the same class, number and person. The bare relative clauses in (10c) and (10d) are also grammatical although they lack relative pronouns. Thus, the relative pronoun can be suppressed or covert without affecting the grammaticality of the sentence. This reminds us of the agreement holding between the thematic subject and its SM analyzed in chapter 3. In the same vein, the SM captures the intuition of the thematic subject in order to stand on its own in a null subject construction.

5.1.2.2. Independent relative clauses

Unlike dependent relative clauses, independent relative clauses do not exhibit an overt antecedent. Let us consider the following examples.

(11) a) Nà mɛndɛ́ ɗã njé jɛ́sɛ̄ ná m-ɛ́nɛ̀-nɔ́

1_{SG} F2 eat what everything 1_{SG} $_{PRES}$-see-$_{PRTCL}$

"I will eat whatever I see."

b) Njé jɛ́sɛ̄ Bibɛl é mà-kwal-à-nɔ́ í é mbálɛ̀

what everything $_{CL9}$.Bible $_{CL9\cdot SM}$ $_{PRES}$-say-$_{FV\text{-}PRTCL}$ $_{CL9.SM}$ etre $_{CL9}$.truth

"Whatever the Bible says is true."

c) Nà mɛ̀ndɛ́ wàl-ànɛ̀ oá wúmà ó mà-púl-à-nɔ́

1_{SG} F2 bring-$_{APPL}$ 2_{OBJ} wherever 2_{SG} $_{PRES}$-want-$_{FV\text{-}PRTCL}$

"I will bring you wherever you want."

The preceding examples are instance of independent relative clauses in the language. Wh-clauses contained in the sentences (11a-c) do not refer back to any antecedent in the sentence containing them. More precisely, the previous relative clauses are also known as free relatives.

In a nutshell, this sub-section argued that Dùálá distinguishes between dependent relative clauses that exhibit an overt antecedent and independent relative clauses that do not. Concerning dependent relative clauses, it was argued that there is a distinction between a restrictive dependent relative clause that has a restrictive scope and a nonrestrictive dependent relative clause with a wider scope. Besides, another type of dependent clause termed bare relative clause was analyzed. Finally, independent relative clauses were analyzed. The next sub-section analyzes the position of syntactic operators in Dùálá.

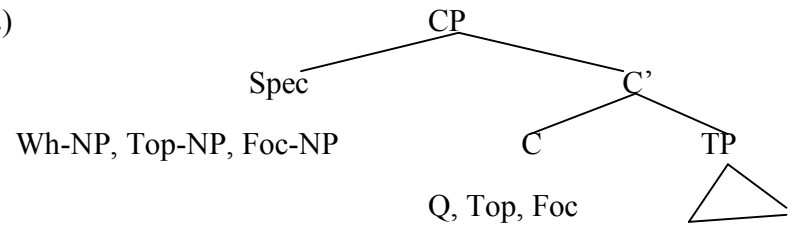
5.2. THE FINE STRUCTURE OF THE LEFT EDGE OF THE CLAUSE IN DÙÁLÁ

So far, different movements to the left edge of the clause have been discussed, including wh-questions, focalization, topicalization and relativization. The aim of this section is to unveil the hierarchical configuration of these different types of projections occurring to the left edge of the clause in Dùálá. Since the left edge of the clause in Dùálá hosts more than one type of projection, they cannot all substitute for the specifier of the complementizer phrase (CP). The analysis developed here is based on the cartographic approach (Cinque 1999; Rizzi 1997, 2001b).

5.2.1. The split-CP hypothesis

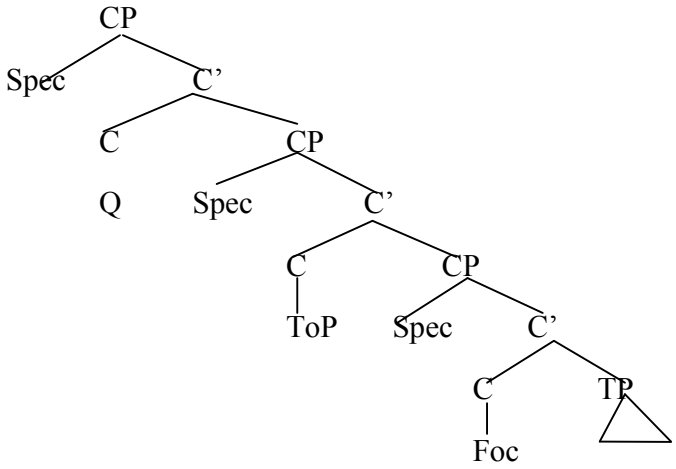
Within the unified CP-system, the functional head C hosts the features of any expression that raises into a non-argument position, including, wh-words, focus, topics, relatives, etc. The analysis of clauses having more than one of such expressions cannot be accounted for straightforwardly. The question of interest is whether C hosts all the features and by so doing determines the relative ordering between them:

(12)



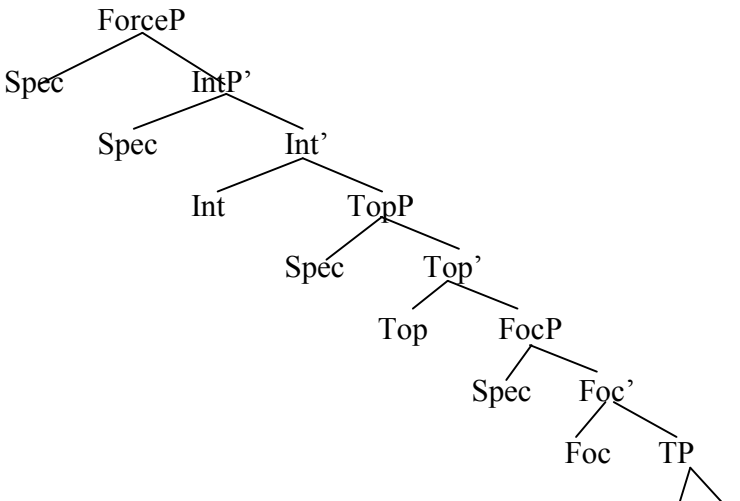
Or CP is recursive as in (13)

(13)



Recursivity of CP allows us to determine the linear ordering of the edge peripheral elements and their co-occurrence restrictions. Recursion in generative grammar has its positive and negative effects. On the positive side, it tells us that human beings can create language and that there is no limit to the exercise of this property. On the negative aspects, it leads to infiniteness and ungrammaticality (For detailed discussion see Chomsky 1965). Since recursion of the CP is less appealing, the suggestion of having each A-bar construction self-project of a head was ultimately welcome. What this means is that the schema in (13) will be represented as (14) showing how the CP is split into a number of functional projections.

(14)



Rizzi (1997, 2001b, 2004b) suggests that CP should be split into a number of different projections. In his analysis, the constituents that are likely to compose the left edge of the clause include the force phrase, the topic phrase, the focus phrase, the interrogative phrase, the relative

phrase, the modifier phrase and the finiteness phrase. He points out that by virtue of specifying whether a given clause is declarative, imperative, exclamative or interrogative in force, the complementizers should be analyzed as Force markers heading a Force P. In Rizzi's analysis, (after the study of Italian data), the clause is closed off upwards by the force phrase and downwards by the finiteness phrase (FinP). In order to analyze the way Dùálá data accommodate the split CP hypothesis, let us consider the following examples:

(15) a) Dika à mà-ɗă dìkúbé ìdìbà tɛ́
CL1.Dika CL1·SM PRES-eat CL5.banana CL13.morning every
"Dika eats banana every morning."

b) Súníŋgá Dika à mà-ɗà-nɔ́ dìkúbé *(t)*?
when CL1.Dika CL1·SM PRES-eat-PRTCL CL5.banana
"When does Dika eat banana?"

c) Ìdìbà tɛ́ ndé Dika à mà-ɗă-nɔ́ dìkúbé
CL13.morning every FOC CL1.Dika CL1·SM PRES-eat-PRTCL CL5.banana
"It is every morning that Dika eats banana."

d) Ìdìbà tɛ́, dìkúbé ndé Dika á mà-ɗă-nɔ̄ *(t)*.
CL13.morning every CL5.banana FOC CL1.Dika CL1·SM PRES-eat-PRTCL
"Every morning, it is banana that Dika eats."

e) Dì dìkúbé, njá ná mɛǹdɛ́-nɔ́ bòl-à mɔ́?
CL5.this CL5.banana who 1SG F2-PRTCL give-FV it
"This banana, to whom will I give it?"

f) Dika à m-ɔ̀ŋgɛ́lɛ́ ná yí tébèdì, bánà ndé bá bàmbɛ́ mɔ́ *(t)*.
1.Dika 1.SM PRES-think that 10.these 10.tables 2.children FOC 2.SM carry-P1 them
"Dika thinks that these tables, it is the children who carried them"

The preceding examples show that Dùálá perfectly accommodates Rizzi's split CP hypothesis. From the input sentence in (15a), different transformations can be obtained (15b-f). Thus in (15b), the wh-word has moved from its base position to Spec-FocP as the trace in the canonical position illustrates. In (15c), the adverbial constituent *Ìdìbà tɛ́* "every morning" has been focused

leaving behind a trace. Considering this sentence alone, it can be argued that the focalized constituent lands in Spec-CP. However, a closer look at (15d) reveals that the focalized constituent cannot land in Spec-CP. In fact, the focalized constituent, which is *dìkúbé* "banana" in (15d), is preceded by a topicalized adverbial. In (15e), a DP is topicalized as the resumptive pronoun *mɔ́* "it" occurring clause-final illustrates. Recall that there is no trace in topicalized constructions with adverbials in Dùálá since they are directly merged in sentence initial position. This topicalized DP is followed by the wh-word *njá nú* "who", the two of them occurring at the edge of the clause. Finally, in (15f) the clause contains a force marker that specifies the clause as declarative. Notice that there is the complemetizer *ná* "that" which occupies a position above the topicalized constituent *yí tébèdì* "these tables" and the focalized constituent *bánà* "children". Taking into consideration the examples from (15a-f), it is clear Dùálá data perfectly accommodate Rizzi's split CP hypothesis.

5.2.1.1.The Force Phrase (ForceP)

Within Rizzi's (1997, 2001b, 2004b) split CP hypothesis, the complementizers are analyzed as Force markers heading a ForceP. This is mostly by virtue of their role of specifying whether a clause is declarative, interrogative, imperative or exclamative in force. This information is also known as the Clausal Typing (Cheng 1991) or the specification of Force (Chomsky 1995). In Dùálá, the complementizer *ná* "that" has an illocutionary force which types the clause as declarative. Let us consider the following examples.

(16) a) Dika à m-ɔ̀ŋgɛ́lɛ́ ná bána ndé bá bàmbɛ́ tébèdì.
CL1.Dika CL1·SM PRES-think that CL2.children FOC CL2·SM carry-P1 CL10.tables
"Dika thinks that the children brought the tables."

b) Dika à m-ɔ̀ŋgɛ́lɛ́ ná yí tébèdí bána ndé bá bàmbɛ́ mɔ́
1.Dika 1.SM PRES-think that 10.these 10.tables 2.children FOC 2.SM carry-P1 them
"Dika thinks that these tables, it is the children who carried them."

c) *Dika à m-ɔ̀ŋgɛ́lɛ́ yí tébèdí ná bána ndé bá bàmbɛ́ mɔ́
1.Dika1.SM PRES-think 10.these 10.tables that 2.children FOC 2.SM carry-P1 them
"*Dika thinks these tables, that it is the children who carried them."

d) *Dika à m-ɔ̀ŋgɛ́lɛ́ yí tébèdí bána ndé ná bá bàmbɛ́ mɔ́

1.Dika 1.$_{SM}$ $_{PRES}$-think 10.these 10.tables 2.children $_{FOC}$ that 2.$_{SM}$ carry-$_{P1}$ them

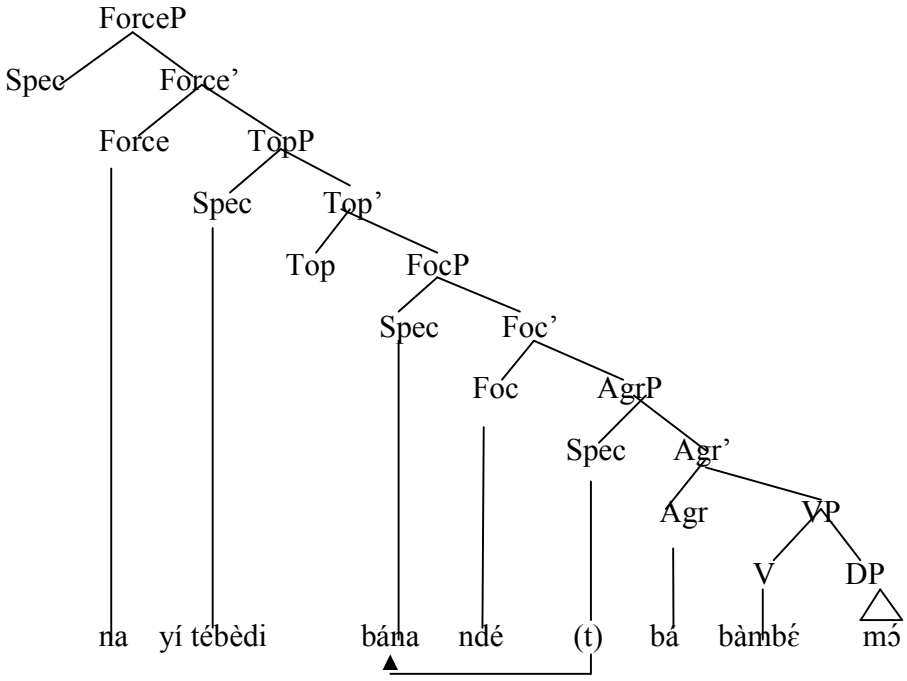
"*Dika thinks these tables, it is the children who that carried them."

Notice the presence of the complementizer *ná* "that" in all the previous examples. In (16a), the complementizer *ná* "that" dominates AgrP as the following labelled brackets shows:

(17) [ArgPDika à mɔ̀ŋgɛ́lɛ́ [ForceP[Force **ná**[**AgrP** bána[Agr bá [TP [T bàmbɛ́ [DP [D tébèdì]]]]].

In the preceding representation, the lexical complementizer *ná* "that" immediately dominates AgrP. In (16b) however, the lexical complementizer *ná* "that" precedes the topicalized and the focalized constituents. Consider the P-marker of (16b).

(18)



As the P-maker in (18) illustrates, there is no violation of the derivational rules. In fact, there is antecedent government between the displaced subject in Spec-FocP and its trace in Spec-AgrP. On the contrary, the sentences in (16c) and (16d) are illicit because of the lower position of the lexical complementizer *ná* 'that'. These constructions suggest that in Dùálá, the force phrase must always dominate the TopP and the FocP. Recall that in the preceding chapter, it was argued that topicalized arguments are resumed clause internally by a resumptive pronoun. It was also specified that for the sentence to be licit, there must be a c-command condition on binding

between the bound constituent and its antecedent. The ungrammaticality of (16c) is therefore accounted for by the absence of this c-command condition between the topicalized constituent *yí tébèdí* "these tables" and the resumptive pronoun *mɔ́* "them". In fact, the lexical complemtizer *ná* "that" which is an intervener between these two elements blocks any such relationship. In the same vein, the same lexical complementizer *ná* "that" is an intervener between the extracted subject and the trace in (16d). It therefore blocks the relationship between the focalized constituent and its trace.

5.2.1.2. The Topic-Focus system

The occurrence of a topicalized or focalized constituent at the left edge of the clause is not optional. Rizzi (1995:7) argues that *"The topic-focus system is present in a structure only if "needed", i.e. when a constituent bears topic or focus features to be sanctioned by a spec-head configuration"*. Thus, movement of the topicalized or focalized constituent to the edge of the clause is either dictated by the satisfaction of a criterion or feature checking (Chomsky 1993). As already mentioned, there is more than one type of CP projection above AgrP in Dùálá. It can happen that more than two projections interact in a given syntactic configuration. Thus, when the focus and topic interact in the language, one can obtain the following constructions:

(19) a) Dì dìkúbé, Elame ndé *(t)* à bòl-í Dika mɔ́
$_{CL5}$.this $_{CL5}$.banana $_{CL1}$.Elame $_{FOC}$ $_{CL1SM}$ give-P1 $_{CL1}$.Dika it
"This banana, it is Elame who gave it to Dika."

b) *Elame ndé, dì dìkúbé, à bòl-í Dika mɔ́
$_{CL1}$.Elame $_{FOC}$ $_{CL5}$.this $_{CL5}$.banana $_{CL1.SM}$ give-P1 $_{CL1}$.Dika it
"It is Elame who give the banana to Dika."

The preceding examples show that the topic is always higher than a focus in a clause. In (19a), the sentence is grammatical because the topicalized element *dì dìkúbé* "this banana" occupies a higher position than the focalized element *Elame*. The sentence in (19b) is ungrammatical because the focalized constituent is higher than the topicalized one. Thus, this topicalized element in (19b) is a defective intervener between the focalized constituent and its trace in Spec-AgrP whereas in (19a), *Elame* (the focalized constituent) antecedent governs its trace since there is no topic acting as a barrier to this government. Based on Cinque (1999), some differences

between topic and focus can be highlighted. Despite the fact that topic and focus constructions are both A' constructions involving the edge of the clause, they differ in a number of respects. However, this thesis will focus on the following four differences:

First, unlike focus construction, a topic construction can involve a resumptive pronoun. In fact, the resumptive pronoun is mandatory when an argument is topicalized but absent when an adverbial is topicalized (see chapter 4 for details).

(20) a) Nù mútò, nà ɛ́ǹ mɔ́
CL1.this CL1.woman 1_{SG} see-P1 her
"This woman, I saw her"

b) Nù mútò ndé nà ɛ́ǹ
CL1.this CL1.woman FOC 1SG see-P1
"It is this this woman that I saw"

c) *Nù mútò ndé nà ɛ́ǹ mɔ́
CL1.this CL1.woman FOC 1_{SG} see-P1 her
*"It is this woman I saw her"

d) *Nù mútò, nà ɛ́ǹ
CL1.this CL1.woman 1_{SG} see-P1
"This woman, I saw"

Sentence (20a) is licit because the topicalized constituent *nù mútò* "this woman" is clause bound by a phonetically realized bindee *mɔ́* "her". In the same vein, (20b) is grammatical because there is no resumptive pronoun inside the presupposition. Sentences (20c) and (20d) are ruled out for the following reasons: due to their quantificational nature, focalized elements always bind a syntactic variable in Dùálá. In (20c) however, the focalized constituent *nù mútò* "this woman" binds the resumptive pronoun *mɔ́* "her". The sentence is therefore illicit as the star (*) shows because it violates the principle of Full Interpretation that requires that quantifiers bind variables (Cinque 1990:180). Similarly, the sentence in (20d) is ruled out because the topicalized element *nù mútò* "this woman" binds a variable instead of a resumptive pronoun. The empty category

found in the complex predicate in (20d) has no reason to be there since there is no quantifier to bind it.

Second, topics are recursive whereas foci are not. In fact, a construction can contain more than one topic unlike focus. Let us reconsider examples (20a) and (20b) from the previous chapter.

(21) a) Kíɛ̀lɛ̀ (TOP), ó mùlèmlèm à pòndà (TOP), nà mɛ̀ndɛ́ dā́ jáŋgòlò
tomorrow at same of time $1_{SG\ F2}$ eat $_{CL5}$.mangoes
"Tomorrow, at the same time, I will eat mangoes"

b) *Bítò ndé kíɛ̀lɛ̀ ndé bá mɛ̀ndɛ́ɛ̄ jìpɛ̀ fùfú
$_{CL5}$.women $_{FOC}$ tomorrow $_{FOC}$ $_{CL2.SM}$ $_{F2}$ cook $_{CL9}$.fufu

As the above examples illustrate, topics are recursive in Dùálá (21a) unlike foci (21b).

Third, topicalized constituents are only realized at the left edge of the clause whereas focalized constituents can occur either at the left edge or clause-internally.

(22) a) Tìl-à ndé Dika à mà-tìl-à-nɔ́ mɔ́
write-$_{FV}$ $_{FOC}$ $_{CL1}$.Dika $_{CL1\text{-}SM}$ $_{PRES}$-wrire-$_{FV}$-$_{PRTCL}$ it
"Dika WRITES it (not read)"

b) Dì mà-sá ndé ngàndò
1_{PL} $_{PRES}$-dance $_{FOC}$ $_{CL9}$.dance
"We are DANCING"

c) * Kíɛ̀lɛ̀ , nà mɛ̀ndɛ́ dā́ ó mùlèmlèm à pòndà, jáŋgòlò
tomorrow$_{(TOP)}$ $1_{SG\ F2}$ eat at same of time$_{(TOP)}$, $_{CL5}$.mangoes
"Tomorrow, at the same time, I will eat mangoes"

The examples in (22) illustrate that focus in Dùálá is realized either at the edge of the clause (22a) or clause-internally (22b). The sentence in (22c) crashes because a constituent cannot be topicalized clause-internally in the language. Finally, bare quantificational elements cannot be topicalized in the language, while they can be focalized.

(23) a) Bàtò bɛ́sɛ̀ ndé nà mɛ̀ndɛ́-nɔ̄ bélɛ̀ kíɛ̀lɛ̀
CL2.people all FOC 1SG F2-PRTCL call tomorrow
"It is everybody that I will call tomorrow."

b) *Bàtò bɛ́sɛ̀, nà mɛ̀ndɛ́-nɔ̄ bélɛ̀ kíɛ̀lɛ̀ mɔ́
CL2.people all 1SG F2-PRTCL call tomorrow him
"Everybody, I will call him tomorrow"

The constructions above show that the bare quantificational *bàtò bɛ́sɛ̀* "everybody" is not consistent with topicalization (23b), but can be easily clefted (23a).

In a nutshell, the aim of this sub-section was to analyze the interaction between focus and topic. Their similarities as A-bar constructions not withstanding , it was argued that topics are always higher in the clause than foci. Topics and foci differ in many respects. Four main differences directly relevant for this thesis have been studied: first, topics unlike foci involve a resumptive pronoun in clause final position. Second, unlike foci constructions, topic constructions can contain as many topics as possible (topics can be recursive). Finally, it was argued that foci are either used at the edge of the clause or within the vicinity of the verb in Dùálá unlike topic constructions that are limited to the left edge.

5.2.1.3.The position of relative operators in Dùálá.

Based on studies by Biloa (1995/2013) it was argued in chapter three that the landing site of wh-words in Dùálá as well as Tuki content questions is the Specifier position of the focus phrase. This assumption is mostly based on similarities existing between wh-questions and focalized constituents. It was argued that the F feature on F^0 attracts the wh-word to Spec-FP. Additional support to the idea that wh-questions land in Spec-FP comes from the interaction of wh-operators and topics. Let us consider the following constructions.

(24) a) Dí dìkúbé, Elame ndé à bol-í Dika mɔ́
CL5.this CL5.banana(TOP) CL1.Elame FOC CL1-SM give-P1 CL1.Dika it
"This banana, it is Elame who gave it to Dika"

b) Dì dìkúbé, njá nà mɛ̀ndɛ́-nɔ́ bòl-à mɔ́?
CL5.this CL5.banana(TOP) who 1SG F2-PRTCL give-FV it

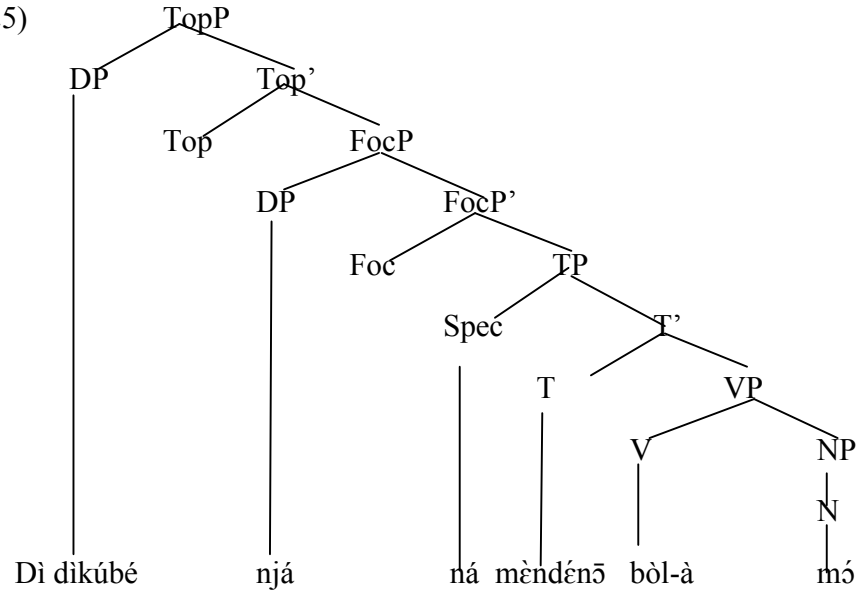
"This banana, whom will I give it to?"

c) *Njá dì dìkúbé, nà mɛ̀ndɛ́-nɔ́ bòl-à mɔ́ *(t)*?
who $_{CL5}$.this $_{CL5}$.banana$_{(TOP)}$ 1$_{SG}$ $_{F2\text{-}PRTCL}$ give-$_{FV}$ it
"This banana, whom will I give it to?"

d) Nɛ́nī, dì dìkúbé, nà mɛ̀ndɛ́-nɔ́ bòl-à Elame mɔ́?
how $_{CL5}$.this $_{CL5}$.banana 1$_{SG}$ $_{F2\text{-}PRTCL}$ give-$_{FV}$ $_{CL1}$.Elame it
"How this banana, will I give it to him"

The above constructions illustrate the real position of wh-words in Dùálá. The sentence in (24a) illustrates the interaction between the focus construction and the topic construction. Notice that the topicalized constituent is higher in the clause than the focalized one. In (24b), the clause contains the topicalized constituent and the wh-word *njá* "who". The wh-word occupies the exact position occupied by the focalized constituent in the previous sentence, that is, Spec-FP. The sentence (24b) has the following P-marker.

(25)



The P-marker above shows that the wh-word *njá* "who" lands in Spec-FP. The illicitness of (24c) is therefore expected since the wh-word *njá* "who" is higher than the topicalized constituent. Besides, in that higher position, the wh-word cannot antecedent govern its trace since the topicalized constituent *dì dìkúbé* "this banana" is an intervener. Finally, the construction in (24d) postulates that non-referential adjuncts occupy a different position than FocP at the edge of the

clause in Dùálá. As it is observable, the non-referential adjunct *nénī* "how" is higher than the topicalized constituent. It therefore occupies a position higher than topic and lower than force. In fact, unlike wh-questions and focalized constituents, relativized constituents exhibit a different syntax. In this section, it will be argued that relative operators have two landing sites in Dùálá. In the first case, the relative operator *nú* that usually occurs in subject questions (See chapter three for details) occurs in order to satisfy a requirement on F^0. Concerning the second case, it is argued that the movement of the relativized constituent is not dictated by the need to satisfy any requirement on F^0 (See Tabe and Adintogbe 2015 for an alternative approach). In such a case, the relative operator has its own projection. As far as the first case is concerned, Consider the following:

(26)a) Dika à m-ɔŋgɛ́lɛ́ ná mùtò nú mà-bòtɛ́ɛ mbɔ̀ti à è mpèsà
1.Dika 1.$_{SM\ PRES}$-think that 1.woman 1.$_{REL\ PRES}$-carry 9.gown $_{3SG}$ be 9.pretty
"Dika thinks that the woman who carries a gown is beautiful"

b) Njá nú à tìl-édì Dika létà?
$_{CL1.}$who $_{REL}$ $_{CL1\cdot SM}$ write-$_{APPL}$ $_{CL1.}$Dika $_{CL5.}$letter
"Who made Dika to write a letter?"

c) *Njá ndé nú à tìl-édì Dika létà?
$_{CL1.}$who $_{FOC}$ $_{REL}$ $_{CL1\cdot SM}$ write-$_{APPL}$ $_{CL1.}$Dika $_{CL5.}$letter
"Who made Dika to write a letter?"

d) Elame à mà-báís-è́ ǫ́nǫ́lá njé mútò ndé à bɔ́tí tàmbá à mpèsà
$_{CL1.}$E. $_{CL1.SM}$ $_{PRES}$-ask-$_{FV}$ why $_{CL1.}$woman $_{FOC}$ $_{CL1.SM}$ carry-$_{P1}$ cap $_{SM}$ beauty
"Elame asks himself why it is the woman having a cap who is beautiful."

e) *Elame à mà-báís-è́ ǫ́nǫ́lá njé mútò ndé nú à bɔ́tí tàmba à mpèsà
$_{CL1.}$E. $_{CL1.SM}$ $_{PRES}$-ask-$_{FV}$ why $_{CL1.}$woman $_{FOC}$ $_{REL}$ $_{CL1.SM}$ carry-$_{P1}$ cap $_{SM}$ beauty
"Elame asks himself why it is the woman having a cap who is beautiful."

The above data are constructions where relative operators co-occur with other operators. The sentence in (26a) clearly shows that the relative operator *nú* does not land in the specifier of the force phrase since it is lower than the Force Phrase *ná* "that". In (26b) and (26c), there are two

constructions. In the first construction, (26b), the sentence is grammatical and in the second construction, the sentence is illicit. The illicitness of this latter construction is due to the focus marker *ndé* that has been added. In (26d) and (26e), we also have two constructions. The first, (26d), being grammatical and the second, (26e), being illicit. Here, the latter construction is illicit because the relative operator *nú* has been added. In Dùálá, *ndé* and *nú* cannot co-occur in the same clause. Besides, it is impossible to find a clause that is relativized and focused at the same time. The incompability of *ndé* and *nú* in the same clause and the fact that a clause cannot be relativized and focused at the same time strongly suggest that the relative operator *nú* occupies the exact position of the focus particle *ndé.* Let us consider the following simplified labelled brackets of sentences (26b) and (26d) respectively:

(27) a) [$_{FocP}$ Njá [$_{Foc}$ nú [$_{AgrP}$ *(t)* [$_{Agr\text{-}S}$ à [$_{TP}$ tìl-édì Dika létà?]]]

b) [$_{IntP}$ ójɲólá njé [$_{FocP}$ mútò [$_{Foc}$ ndé [$_{AgrP}$ à bɔ́tí tàmbá à mpèsà (t)]]]

In (27a), the relative operator *nú* lands in Foc^0 . In the same vein, the focus particle *ndé* in (27b) lands in Foc^0. This explains the illiciteness of sentences (26c) and (26e) where they compete for the same position. Therefore, it will be argued that in Dùálá, referential adjuncts, arguments and relatives substitute for the specifier position of the focus phrase. However there are other types of relative operators in the language that are different from the relative operator *nú*. Consider the following examples.

(28) a) *Njá bénà à tìl-édì Dika létà?

$_{CL1.}$who $_{REL}$ $_{CL1\text{-}SM}$ write-$_{APPL}$ $_{CL1.}$Dika $_{CL5.}$letter

"Who made Dika to write a letter?"

b) Dika à m-ɔŋgɛ́lɛ́ ná málétà mándɛ́nɛ̀ **méná** bánà bá til-édì-nɔ́ ɲàŋgó ábū má é èsúŋgù

1.Dika 1.SM PRES-think that 6.letter 6.big 6.REL 2.children 2.SM write-APPL-PRTCL 1.mother 1.their 6.SM to be short

"Dika thinks that the big letters that the children wrote to their mother are shorts"

c) Dika à m-ɔŋgɛ́lɛ́ ná baɲàŋgó **bénà** bánà bá til-édi-nɔ́ málétà mándɛ́nɛ bá é muyaó

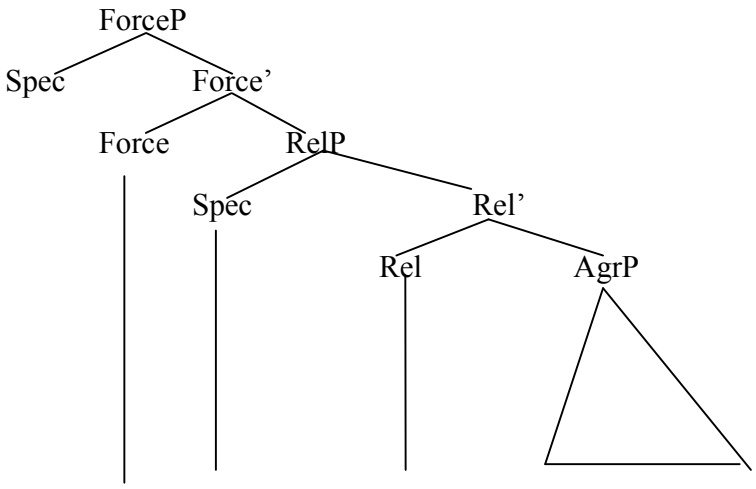
1.Dika 1.SM PRES-think that 2.mothers 2.REL 2.children 2.SM write-APPL-PRTCL 6.letter 6.big 2.SM be 3.kindness

"Dika thinks that the mothers to whom the children wrote big letters are kind."

In (28a), the construction is ungrammatical because of the presence of the relative operator *bénà* instead of *nú.* In (28b) and ((28c), the relative clauses occur directly after the force *ná.* These

preceding sentences suggest that the landing sites of the relative operator *nú* is different from that of the other operators. In (28b) and (28c), the relative operators have their own projections below ForceP. The sentence in (28b) has the following simplified P-marker.

(29)



ná má létà mándɛ́nɛ̀ ménà bánà bá til-édì-nɔ́ ɲàŋgó ábū má é èsúŋgù

In conclusion, Dùálá distinguishes between two types of relative operators. The first type concerns *nú* that lands in F^0 whereas the second type concerns the other types of relative operators. This latter type have their own projection below ForceP.

5.2.1.4.The Modifier Phrase (ModP)

Based on Italian data, Rizzi (2004b) argues that adverbs resemble topics by the fact that they are moved to the edge of the clause. However, they do not share the necessary connection to the background. Thus, he postulates that adverbs occupy a position different from topics. More precisely, they occupy the specifier position of the Modifier Phrase (ModP). Following Rizzi's analysis, it will be argued here that adverbs in Dùálá substitute for the specifier position of ModP. Adverbs can occupy a position either at the edge of the clause or inside the clause. Consider the following constructions.

(30) a) Pɔ́ndá pɔ́, dìkúbé ndé Dika à mà-ɗă-nɔ̄

CL9.probably CL5.banana FOC CL1.Dika CL1.SM PRES-eat-PRTCL

"Probably, it is the banana that Dika eats"

b) Pɔ́ndá pɔ́, di dìkúbé, Dika mà-ɗă-nɔ̄ mɔ́

CL9.probably CL5.this CL5.banana CL1.Dika PRES-eat-PRTCL it

"Probably, this banana, Dika eats it"

c) Dika à m-ɔ̀ŋgɛ́lɛ́ ná pɔ́ndá pɔ́, di dìkúbé, Elame a mà-ɗă mɔ́

1.Dika 1-SM PRES.think that 9.probably 5.this 5.banana 1.Elame 1.SM PRES-eat it

"Dika thinks that probably, this banana, Elame eats it"

The preceding examples show that adverbs interact with focus (30a), topic and focus (30b) and force (30c). All the examples above (30a-c) clearly show that the preposed adverb occupies a position higher than the topicalized and the focalized constituents, but lower that force. However, there is a possibility that the ModP also follows a TopP and a FocP as the following examples illustrate.

(31) a) Dì dìkúbé, póndá pɔ́, Elame à mɛ̀ndɛ́ ɗă mɔ́.

CL5.this CL5.banana CL9.probably CL1.Elame CL1-SM F2 eat it

"This banana, probably Elame will eat it."

b) Dika à m-ɔ̀ŋgɛ́lɛ́ ná dì dìkúbé ndé Elame à mɛ̀ndɛ́-nɔ́ ɗă póndá pɔ́

1.Dika 1.SM PRES-think that 5.this 5.banana FOC 1Elame 1SM F2-PRTCL eat 9probably

"Dika thinks that probably, this banana, Elame eats it"

In (31a), the topicalized constituent *dì dìkúbé* "this banana" is above the ModP. The example in (31b) shows that adverbs can occupy a position inside IP. So far, the C system of Dùálá can be structured as follows.

(32) ForceP>ModP>TopP>FocP>AgrP or,

ForceP>TopP(ModP)>FocP(ModP)>AgrP.

In a nutshell, as topicalized and focalized constituents respectively substitute for the Specifier position of TopP and FocP, in like manner, the modifier constituent also substitutes for the specifier position of ModP.

5.2.1.5.The position of non-referential adjuncts

Biloa (1995/2013) argues that Wh-phrases in Tuki and Dùálá land in Spec-FP. The arguments were based on the structure of focus sentences, matrix wh-questions, embedded wh-questions and finally, wh-questions and clause structure (See Biloa 2013 for details). Let us consider the following constructions.

(33) a) * Njé ndé Dika à déd-ì-nɔ́ *(t)*?
What FOC CL1Dika CL1-SM eat-PAST-PRTCl
"What did Dika eat?"

b) Òŋólá njé, dì dìkúbé nà mɛ̀ndɛ́-nɔ́ bòl-à *(t)* mɔ́ mɔ́?
why CL5.this CL5.banana 1SG F2-PRTCL give-FV him it
"Why is it that, this banana, I will give it to him."

c) Nɛ́nī nú mùnà mùtò, ó nɔ̀ŋg-ì-nɔ́ mɔ́ kà mùto *(t)?*
how this CL1.child CL1.woman 2SG take-P1-PRTCL her as CL1.wife
*"How is it that, this woman, you took her as your wife?"

d) Nɛ́nī dì dìkúbé ndé nà mɛ̀ndɛ́-nɔ́ bòl-à *(t)* mɔ́ mɔ́?
how CL5.this CL5.banana FOC 1SG F2-PRTCL give-FV him it
"How is it that it is this banana that I will give it to him?"

The sentence in (33a) is ungrammatical because the wh-word *njé* "what" firstly merged as the complement of the verb does not land in Spec-FocP. A close look at (33b-d) shows that non-referential adjuncts in Dùálá land in a position different from Spec-FocP. In fact, in (33b), the non-referential adjunct *Òŋólá njé* "why" dominates a TopP. Similarly, in (33c), the non-referential adjunct *Nénī* "how" also dominates a TopP. In (33d), finally, the same non-referential adjunct *Nénī* "how" dominates a FocP. These data lead us to conclude that non-referential adjuncts in Dùálá occupy another position from Spec-FocP. In fact, if they landed in Spec-FocP, all the above sentences (33b-d) would have been illicit. If we only consider the last construction (33d), the sentence would have been ungrammatical because the non-referential adjunct *Nénī* "how" and the focalized constituent *dì dìkúbé* "this banana" would have competed for the same position, Spec-FocP. However, since this is not the case, and since the constructions in (33b-d)

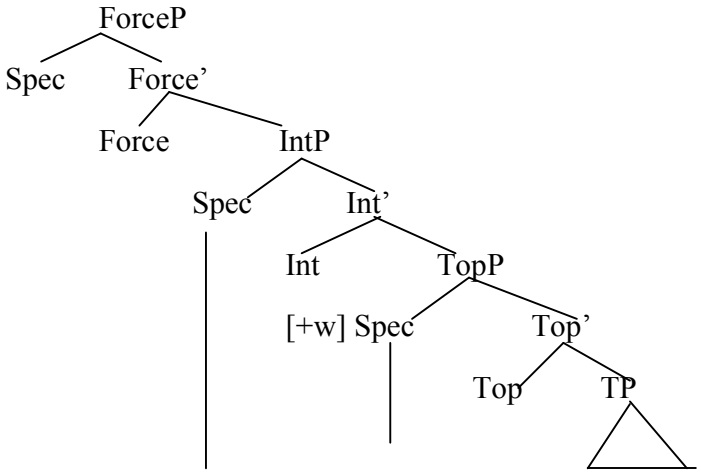
are grammatical, it is plausible to propose that referential adjuncts in Dùálá land in Spec-FocP and non-referential adjuncts project another interrogative phrase higher than FocP and lower than ForceP. In fact, these non-referential adjuncts can occur either before the topicalized constituent (33b-c), or after the topicalized constituent (34), but they are always higher than FocP.

(34) nú mùnà mùtò nɛ́nī , ó nɔ̀ŋg-ì-nɔ́ mɔ́ kà mùto?
CL5.this CL5.child CL5.woman how 2SG take-P1-PRTCL her as CL1.wife
"This woman, how did you take her as your wife?"

Thus, referential adjuncts and non-referential adjuncts in Dùálá land in different positions. Following this order, the indirect question in (35) below will have the simplified P-marker (36).

(35) Dika à báísɛ̀ nɛ́nī nú mùnà mùtò, ó nɔ̀ŋg-ì-nɔ́ mɔ́ kà mùto.
1.Dika 1.SM ask how 1.this 1.child 1.woman 2SG take-P1-PRTCL her as 1.wife
"Dika wonders how it is that this woman, you took her as your wife?"

(36)



nɛ́nī nú mùnà mútò ó nɔ̀ŋg-ì-nɔ́ mɔ́ kà mùto?

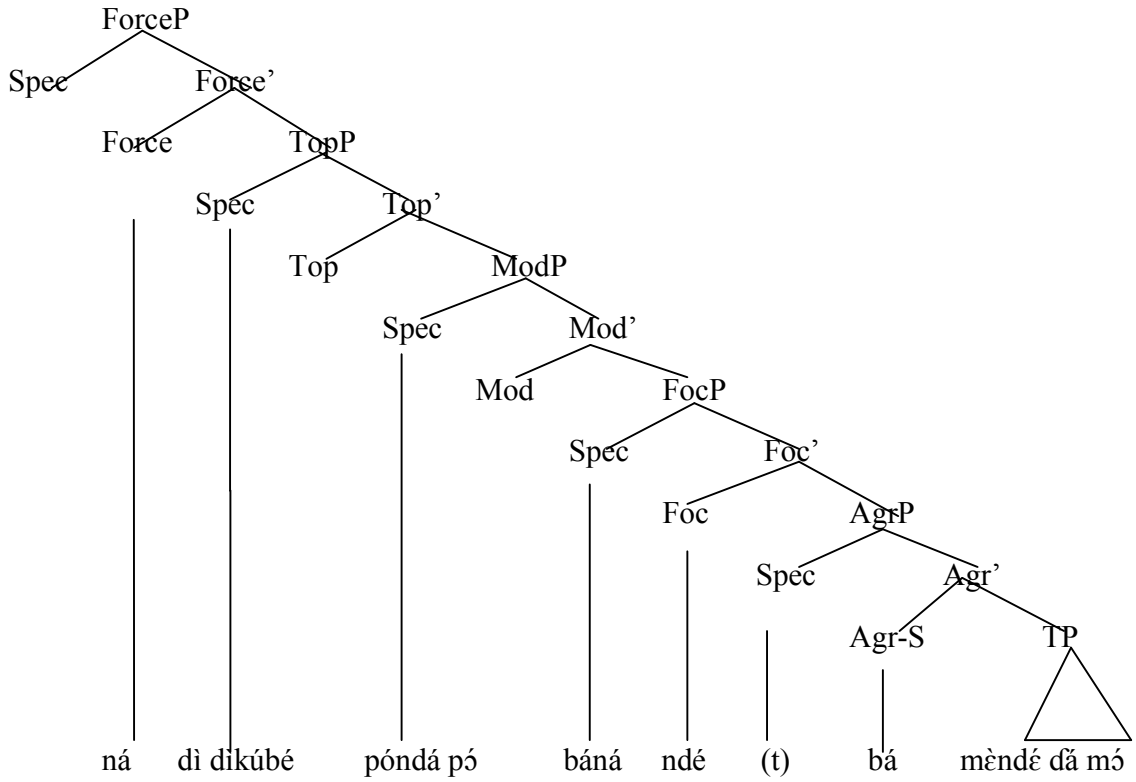
As the P-marker above illustrates, the non-referential adjunct *nɛ́nī* 'how' occurs in a position higher than TopP. As pointed out earlier, the topicalized element occurs either before or after the non-referential adjunct unlike focalized constituents. In fact, if it happens that the focalized constituent moves across these non-referential adjuncts, RM and Wh-constraint will be violated. In a nutshell, the following sentence illustrates the left edge of the clause in Dùálá:

(37) Dika à m-ɔ̀ŋgɛ̀lɛ̀ ná dì dìkúbé, póndá pɔ́, bánà ndé bá mɛ̀ndɛ́ ɗã mɔ́

Dika SM PRES-think that this banana probably children FOC SM F2 eat it

"Dika thinks that this banana, probably, it is these children that will eat it."

(38)



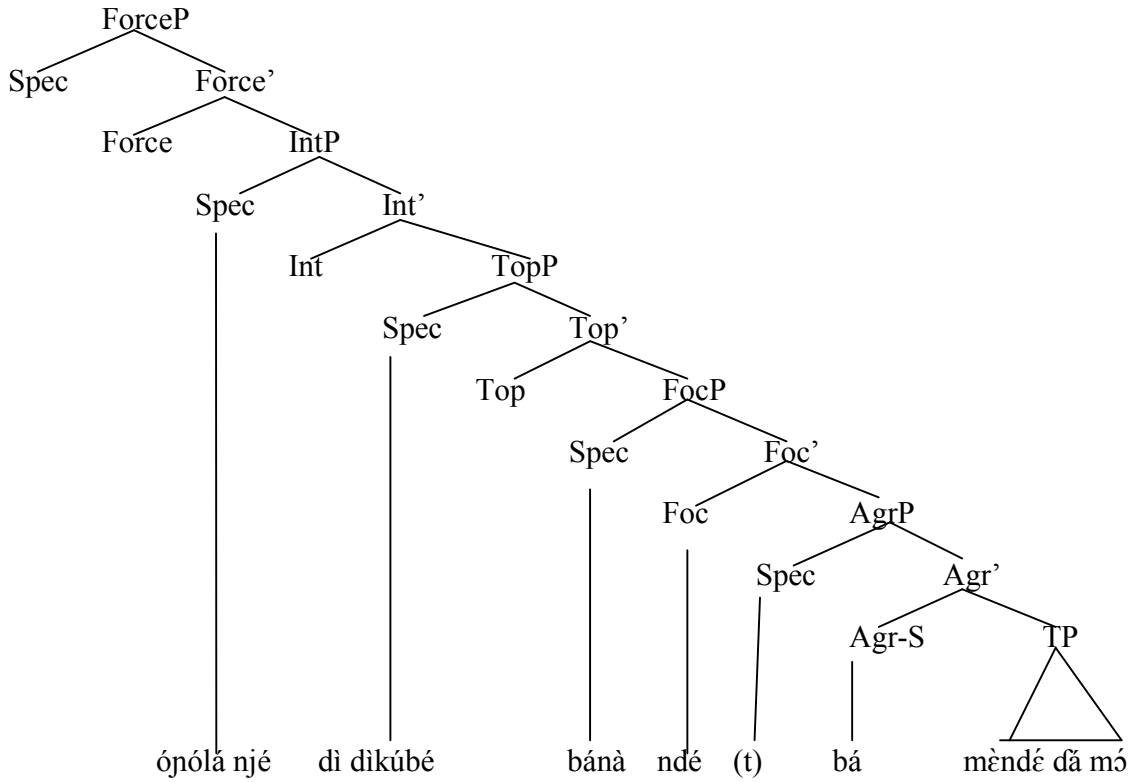
-Force...Top ...Mod ... Foc. ..AgrP

(39) Elame à mà-báís-è ǫ́nólá njé dì dìkúbé bánà ndé bá mèndɛ́ dă mɔ́

CL1.E. CL1.SM PRES-ask-FV why CL5.this CL5.banana CL2. children FOC CL2-SMCL F2 eat it

"Elame asks himself why this banana, it is the woman having a cap who will eat it."

(40)



-Force ...Int ...Top ...Foc ...Agr

Based on what has been discussed in this dissertation, the fine structure of the left periphery of the clause in Dùálá has the following representations.

(41) Force ... Mod ...Int ... Top ... Rel/Foc ... or Force...Int...Top ... Rel/Foc ...Mod ...

SUMMARY

This chapter was devoted to the analysis of relative clauses in Dùálá on the one hand and to provide a unified analysis of the left periphery of the clause in Dùálá based on Rizzi's (1997, 2001b, 2004b) split CP hypothesis on the other hand. Concerning the section on relativization, the work was conducted under the Matching Analysis. It emerged from the study that almost any constituent in the Dùálá clause could be relativized. By so doing, the relative pronoun moves closer to the antecedent and agrees in class, number and person with the latter. It was argued that Dùálá makes a difference between dependent relative clauses that exhibit an overt antecedent and independent relative clauses that are not related in the discourse to an antecedent. Finally, the relative operators land in Spec-FocP or in Spec-RelP. The second section was devoted to provide a unified analysis of the left edge of the clause in the language under study. Throughout the discussion, it was shown that Dùálá data accommodate the Split CP Hypothesis proposed by Rizzi. Thus, it has been shown that the left edge of the Dùálá clause involves the Force Phrase, followed by topic, the focus, the modifier and the interrogative phrases, which project their own phrases.

GENERAL CONCLUSION

The general objective of this dissertation was to examine the morphosyntactic manifestations of an articulate CP in Dùálá. In this vein, the study provided a step by step analysis of the different A-bar projections (including wh-words, topic, focus, relative, interrogative, etc.) occurring in the C domain in the language. Thus, the data analyzed presented the following results:

The study of interrogatives revealed that Dùálá is an optional wh-in situ language where operators are either preposed or left in their canonical positions. As expected in such a language, wh-in situ is not analyzed as echo questions, but as genuine questions that require true answers. In such constructions, there is no movement in the syntax, the movement being covert (LF). Following Biloa (1995/ 2013), it was argued that Wh-movement is substitution to the Spec-FP. However, the data showed that non-referential adjuncts like *ónólá njé* "why" and *nénī* "how" co-occurring with focused constituents land in a higher position that was termed Int. Concerning yes/no questions, it was argued that they do not have a distinctive marker and are distinguished from the declarative sentences only through the intonation of the speaker. Alternative questions

are conjoined by the use of ***ŋgá*** "whether" merged in Spec-CP. After alternative questions, the syntax of indirect questions was also analyzed. It was revealed that they could be divided into two types of constructions: total indirect questions and wh-indirect questions. In the first type of constructions, the question is initiated by the complementizer ***ŋgá*** "whether" while in the latter type of questions, there is a wh-word obtained by movement.

Concerning the syntax of subject questions, it was argued that subjects do not move overtly in Dùálá, the syntax of multiple wh-questions helped to support this view. Since there is no superiority effect, it was argued that movement of subject questions is vacouos. After, exploring the syntax of subject questions, the discussion on the particle *-nɔ́* was presented. The different points of view on this particle were presented and based on Sabel (2000), it was concluded that the particle is merged in Infl. Under the main clause wh-phrases, it was argued that unlike English, they do not involve inversion, but just the movement of the wh-word to the sentence initial position. Thus, it was said that these elements leave a trace in their initial position and therefore form a chain in accordance with the Chain Uniformity Principle.

In multiple questions, it was said that more than one wh-element can be preposed in the language. It was explained that when an element is fronted, the features are satisfied and the probe is no more active. Thus, there is one movement in overt syntax, and the other movements are covert. It was shown that multiple questions, which are subject to superiority effect, are last resort. Therefore, the requirement that triggers movements of wh-phrases in the language is neither optional nor free. Thus, wh-operators were said to be displaced in order to satisfy the F feature on FP.

-Finally, It was shown that Dùálá is a null subject language and therefore immuned to the Comp-trace filter. The study of constraints on movements reveals that NP and IP are bounding nodes and the language respects subjacency compared to Tuki, another Bantu language. Thus, the language is sensitive to subjacency conditions such as CNPC, SSC, CCS, LBC and the WH-island.

-The second movement studied in this work was topicalization and focalization. Concerning the latter syntactic process, it was argued that focus is morphologically marked in clefting. In such constructions, the focused constituent undergoes movement to the left of the focus particle *ndé.*

The focused constituent must agree in noun class with its focus marker. It was also argued that Dùálá exhibits a kind of subject versus object asymmetry. In fact, the subject always requires the focus constituent to move to the edge of the clause whereas in non-subjects, the focused constituent can move to the edge of the clause where it bears a contrastive focus or stays in-situ when expressing new information. The syntax of verb focusing was also addressed. It was argued that in Dùálá, the discourse-related features are expressed either within the vicinity of the verb or in the left periphery. This is mostly because Dùálá has a low focus within the vicinity of the verb. Finally, negation and focus was analyzed. It was shown that in focus constructions, the negated participants move in order to be attached to the negative morpheme, subsequently, the complex head moves into Spec-FocP.

-Concerning topicalization, it was argued that the topicalization of arguments is reminiscent of Hanging Topic Left Dislocation (HTLD) where the topicalized element is directly merged in Spec-TopP. On the contrary, the topicalization of adjuncts is obtained by the displacement of the topicalized element to Spec-TopP. The language also exhibits multiple topics. In such constructions, multiple adjuncts can co-occur, or adjunct and argument, or multiple arguments. The condition is that arguments must always be resumed clause-internally unlike adjuncts. Finally, it was said that topicalization could occur in embedded clauses as well.

-The last chapter of this dissertation was devoted to relativization on the one hand and to provide a unified analysis of the left edge of the clause in Dùálá on the other hand. Using the Matching Analysis, different types of relative clauses were studied in the language. The study of these relative clauses reveals that Dùálá makes a difference between dependent relative clauses that exhibit an overt antecedent and independent relative clauses that are not related in the discourse to an antecedent. Finally, considering their co-occurrence with the Modifier Phrase, it was argued that relative clauses land in the Specifier of the Force Phrase.

-The second section, as indicated, was devoted to provide a unified analysis of the edge of the clause in the language under study. Throughout the study, it was shown that Dùálá data accommodate the Split CP- Hypothesis proposed by Rizzi. Thus, it has been shown that the left edge of the Dùálá clause involves the Force Phrase, followed by topic, the focus, the modifier and the interrogative phrases, which project their own phrases.

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