The Ā-Quadrangle: From Ewe Dialects to UG

by

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Dedication

In memory of my maternal uncle Gabriel Homenyi. Nyinɛ, you were my rock.

I will never forget you.

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Abstract

This dissertation argues for an Ā-quadrangle, which unifies the treatment of *wh*-questions and relative clauses, following extant proposals for the cross-linguistic analysis of *wh*-questions (Cable 2007, 2010). The Ā-quadrangle makes a case for a subsystem of Universal Grammar. Exploring some Ā-phenomena in Ewe through the lens of micro-comparative syntax (Kayne 1996, 2005), the dissertation argues that the core elements in the syntax of *wh*-questions and relative clauses in three dialects of Ewe are related to one another in a principled way, where elements relatively farther away from *wh*-words and relativized DPs, i.e. focus markers and the relative particle, are outer elements and those closer to them, i.e. the *wh*-particle *ka* and relative pronouns, are inner elements of the Ā-quadrangle. It is demonstrated that the relation between the inner and outer elements of the quadrangle and *wh*-words and relativized DPs in the derivation of *wh*-questions and relative clauses is mediated by the Agree and EPP feature mechanisms (Chomsky 1995, 2000, 2001), where the outer elements are goals attracted by C heads to the left periphery. It is argued that focus movement, which is integral to *wh*-questions, and relativization involve a FocP and a RelP respectively, within the extended projection of focused categories and relativized DPs, where the focus and relative heads form a constituent with the focused categories and the relativized elements. The resulting larger constituent is attracted to the specifier of CP. The current proposal allows for interposition of focus markers and relative particles internal to the moved constituent. The current proposal

is empirically superior to the existing analysis of argument focus in Ewe (Badan & Buell 2012), which adopts Aboh's (2004) account for focus movement in Gungbe, a sister Gbe language. Crucially, the dissertation postulates a principle of UG according to which Ā-movement entails an outer element, like FOC and REL, which is the goal for agreement with C. This outer element determines pied-piping. The aforesaid principle holds for all I-languages. Languages that lack an overt outer element like FOC and REL have null outer elements.

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List of Abbreviations

1/2/3	1st/2nd/3rd person
COMP	complementizer
DEF	definite
DEM.DIST	distal demonstrative
EXPL	expletive
FOC	focus
INDEF	indefinite
LOG	logophoric pronoun
NEG	negation
PRT	particle
PL	plural
POSS	possessive
POT	potential marker
PROG	progressive
Q	question
REL	relative
REL.P	relative pronoun
SG	singular
SPEC	specific

1 Introduction

In deepening our understanding of Universal Grammar and strengthening its core claims, exploring empirical data from varieties of languages is crucial. Ewe logophoricity and serial verb constructions have played significant roles in linguistic theory. However, there seems to be only a handful of contributions from the various dialects of Ewe to the field. This is partly due to the prominence accorded the barely-spoken standardized variety in linguistic research. Much of the early works on the language dwell mainly on the standard variety, leading to a crater in research on the linguistically rich spoken dialects of the Ewe language. Despite the existence of some research on the spoken dialects, comparative work remains sparse, if not non-existent.

This dissertation seeks to explore Ā-phenomena in the Ewe language through a micro-comparative syntactic lens (Kayne 1996, 2005), paying close attention to how three dialects: Hogbe, Pekigbe, and Tɔŋugbe compare with respect to focus constructions, *wh*-questions, and relative clauses. Each of these Ā-phenomena involves particles and markers whose syntactic properties present interesting puzzles in Ewe syntax. These particles and markers are the focus markers: *(y)é/yá* in Pekigbe, *yá* and *(y)ɛ́* in Hogbe and *nyɔ́* in Tɔŋugbe; the sentence-final particles: a floating low tone in Hogbe and Pekigbe and *o/ɔ* in Tɔŋugbe; and the relative particle: *xé* in Hogbe and Pekigbe and a null relative particle in Tɔŋugbe. The focus marker in Tɔŋugbe exhibit morpho-syntactic properties that distinguish it from the focus marker in Hogbe and Pekigbe. The morpho-syntactic issues

the aforementioned particles and markers present have not received the attention they deserve.

In this dissertation, I lay out the details of the aforesaid markers and particles and the morpho-syntactic issues that arise, providing a description of each phenomenon and proposing analyses for the phenomena. I start by providing an overview of the Ewe language and its dialects within which the core empirical domain of the dissertation is situated, discussing the Ā-phenomena of concern here. I then move on to highlight some prominent morpho-syntactic works on the Ewe language, especially those related to the subject of the dissertation. In the subsequent sections, I describe the phenomena under investigation and their theoretical implications.

1.1 Theoretical framework

I adopt the minimalist framework for syntactic analysis. In particular, I follow standard assumptions of Merge, where syntactic objects in the numeration combine to form larger syntactic objects. These objects are displaced, when necessary, for syntactic reasons.

1.1.1 Minimalist syntax

The Agree and EPP feature mechanisms for feature checking and movement under the minimalist framework are adopted here (Chomsky 1995, 2000, 2001). Functional heads bearing uninterpretable features are probes that get their uninterpretable features deleted upon agreeing with goals bearing corresponding interpretable features. These heads also possess EPP features that require their specifier to be filled for convergence, hence the goals undergo movement to the specifier position of the heads. The system I propose in this dissertation follows mechanisms employed in the treatment of *wh*-questions in Tlingit (Cable 2007, 2010) and Dhoulo (Cable 2012). In Cable's treatment of *wh*-questions

in Tlingit, the C head in the clausal left periphery bears an uninterpretable feature which gets deleted upon agreeing with a matching interpretable feature of a QP that comprises a Q head and a *wh*-phrase. In his analysis of Dhoulo *wh*-questions, Cable makes reference to the presence of an EPP feature for driving movement of *wh*-phrases to the left periphery.

1.1.1.1 Comparative syntax

Languages of the world possess properties that are not universal. The characterization of these properties in syntactic theory is the crux of comparative syntax. According to Kayne (1996), comparative syntax demonstrates that clusterings of syntactic properties can be linked to one abstract parameter setting. He illustrates this in his discussion of differences between French and English with respect to Exceptional Case Marking, where he argues for the absence of ECM in French to be related to other differences between French and English in the domain of prepositions and prepositional complementizers.

1.1.1.2 Micro-comparative syntax

Languages of the same family exhibit syntactic differences and similarities. For example, Kayne (1996) discusses some of the differences and similarities between languages in the Romance family. In the same vein, dialects of specific languages exhibit syntactic differences and similarities. An exploration of these differences and similarities is fundamental to the principles and parameters framework of the Minimalist Program. Dialects of Ewe exhibit syntactic differences and similarities, studies of which are important to theoretical assumptions in the field. Kayne (1996) underscores the importance of micro-comparative syntactic work in understanding the principles of Universal Grammar. Given the limited amount of micro-comparative syntactic work in the Gbe cluster of languages, an exploration of phenomena in the Ā-domain, which is central to the objective of this dissertation, is of great relevance.

1.2 Main claims and assumptions

The syntactic and distributional properties of markers and particles in Ewe focus constructions, *Wh*-questions, and relative clauses exhibit an intricate interconnectedness, an exploration of which goes to make a case for a subsystem of Universal Grammar. I frame this interconnectedness in a quadrangle fashion, in which there are inner and outer elements in *wh*-questions and relative clauses, shown in table 1.1 below. A prediction the Ā-quadrangle makes is that all Ā-movement involve an outer element, like FocP and RelP, analogues of which may be overt or null in other languages. This outer element serves as a goal in a probe-goal relation with C and determines what material is pied-piped.

Table 1.1: The Ā-quadrangle

	***Wh*-Questions**	**Relative Clauses**
Inner	ka	ke, mí, yɛ
Outer	yá, (y)ɛ́, (y)é, nyɔ́	xé, ∅

The basic idea is that *wh*-questions involve *wh*-feature-bearing particles, represented in the quadrangle as *ka*, and focus markers, which are heads of a focus functional projection. The *wh*-particle is described as an inner particle, given its proximity to the *wh*-word, and the focus marker is described as the outer element. (1) illustrates this. Here, the *wh*-phrase *nuka* comprises the form *nu* 'thing' and the *wh*-particle *ka*. The *wh*-phrase is followed by a focus marker *nyɔ́*. Since the *wh*-particle is closer to the form *nu*, which is the *wh*-word, it is an inner element of the Ā-quadrangle system, and since the focus marker *nyɔ́*, compared to the *wh*-particle, is farther away from the *wh*-word, it is the outer element of the quadrangle.

(1) a. Nu-ka nyɔ́ dzrã Kofi le ɔ? (Tɔŋugbe)
thing-WH FOC sell.PROG Kofi be PRT

'What is Kofi selling?'

b. Ame-ka nyɔ́ le ʊu-ɔ́ ɸo-m o?
person-WH FOC be drum-DEF play-PROG PRT?
'Who is playing the drum?'

In relative clauses, the relative pronouns, which, I assume, are closely related to demonstratives, are described as the an inner elements while the particle *xé* in (2) is the outer element in Hogbe and related dialects. For dialects like Tɔŋugbe in which *xé* is not overtly realized, I posit a null relative particle, shown in (3).

(2) awu ke xé dzrá Kofi le (Hogbe)
shirt REL.P REL sell.PROG Kofi be
'the shirt that Kofi is selling'

(3) awu yɛ ∅ dzrã Kofi le (Tɔŋugbe)
shirt REL.P REL sell.PROG Kofi be
'the shirt that Kofi is selling'

The outer elements of the quadrangle are heads of functional projections, FocP and RelP, endowed with interpretable features [foc] and [rel] respectively. The associated categories, namely, the focused category and the relativized DP, together with the inner elements are within the domain of the functional projections, which form an extended projection of the associated categories. These functional projections are probed by the C head, bearing an EPP feature and uninterpretable features [*u*Foc] and [*u*Rel], attracting them to Spec, CP. The idea developed here is neatly in line with Cable's (2007, 2010) and Sulemana's (2019) analysis of the Q-particle in Tlingit and Buli, in which the Q-particle heads a functional projection containing *wh*-elements. The C head in the left periphery probes and attracts the Q projection, pied-piping the *wh*-elements to Spec, CP. My proposal extends the Q-particle architecture to additional Ā-domains, relative clauses and factive constructions in particular, making a strong case for a particular subsystem of Universal Grammar. Unlike alternative analyses like Aboh (2004) and Badan & Buell (2012), the

proposal I put forward in this dissertation allows for the interposition of focus markers and relative particles within moved constituents. The proposal is, therefore, empirically superior to the aforementioned existing proposals.

1.3 Language background

Ewe is the westernmost member of the Gbe cluster of languages spoken in Ghana, Togo, and Benin. Dialects of Ewe in Ghana have been classified into northern, central, and coastal or southern varieties (Ameka 2001). The northern dialects include: Pekigbe, Kpandogbe, among others. The central varieties include: Hogbe, Kpedze, etc., and the coastal dialects include Aŋlɔ̃gbe and Tɔŋugbe. Kpoglu (2019) suggests a categorization in which the Tɔŋugbe dialect is considered a riverine variety and not a coastal variety, a suggestion to which I am sympathetic. Danyigbe, Kpelegbe, Agu, Waci, among others, are examples of varieties of Ewe spoken in Togo and Benin. Ewe also has a standardized variety that is used in religious, especially religious texts, textbooks, novels, and poems, among others.

In this dissertation, a central dialect; Hogbe, a northern dialect, Pekigbe, and the riverine dialect; Tɔŋugbe will be in focus. Hogbe is spoken in and around Ho in the central part of the Volta region of Ghana. Ho has an estimated population of about 100,000 people. Pekigbe is spoken in Peki townships in the west of the central part of the Volta region of Ghana. Tɔŋugbe is spoken in the Southwestern part of the Volta region. It has sub-varieties, which, differ insignificantly in some linguistic properties. The primary subvariety from which data are drawn for the dissertation is the Mafi variety of which I am a native speaker. I follow the Standard Ewe orthographic conventions in my examples. Only high tones are marked.

Ewe is an SVO (4) language which allows SAuxOV orders in such constructions as the progressive. In (4a), the object *sanku* 'keyboard' follows the verb. In the progressive,

however, the object *sanku* 'keyboard' precedes the verb, as (4b) shows.

(4) a. Kɔmla ɸo sanku.
Kɔmla play keyboard
'Kɔmla played the keyboard.'

b. Kɔmla le sanku ɸõ.
Kɔmla be keyboard play.PROG
'Kɔmla is playing the keyboard.'

1.3.1 Previous syntactic work on Ewe

Syntactic phenomena in Ewe have received some attention within different theoretical and analytical frameworks over the years. Mullen (1966) is the first generative work on Ewe. Mullen provides analyses for a range of phenomena in Ewe, employing a generative-transformational framework. The empirical data for her work seem to be from Standard Ewe. Subsequent research investigates a wide range of issues in Standard Ewe (eg. Ameka 1991, 1992, etc.) and some of the individual dialects (eg. Aŋlɔgbe- Clements 1972, 1975; Lewis 1985; Kpelegbe- Collins, 1993, 1997; Tɔŋugbe-Kpoglu 2019, Gotah & Lee 2024, Gotah 2024).

In this dissertation, I take a step further by investigating some Ā-phenomena in the three dialects of the Ewe mentioned earlier, within the framework of micro-comparative syntax. I will provide a description of these phenomena, pointing out similarities and crucial differences between the dialects of concern here and ultimately, developing theories that account for the descriptive facts.

1.4 Overview of the dissertation

1.4.1 Chapter 2

In this chapter, I discuss focus constructions in Hogbe, Pekigbe, and Tɔŋugbe, arguing for a focus projection in the spine of focused categories. My argument receives support from VP pied-piping focus construction in Tɔŋugbe, a phenomenon that poses a challenge to the existing analysis of focus constructions in Ewe.

1.4.2 Chapter 3

In this chapter, I explore *wh*-questions in the three dialects. I provide an account for Ewe *wh*-questions, taking into consideration the final question particle in the dialects, especially the Tɔŋugbe *o*/ɔ. I show that *wh*-phrases undergo focus movement to the left periphery and that there is an extra step of movement for clause-typing, to which the final question particle is central. Relatedly, I discuss the Ewe facts in the context of the Final-Over-Final constraint, noting that even though the final particles in Ewe *wh*-questions are not adverbs, the Final-Over-Final constraint is not violated since my proposal for *wh*-questions involves pied-piping and not feature percolation. I also introduce, in this chapter, the Ā-quadrangle subsystem of Universal Grammar, positing that the *wh*-morpheme *ka*, overt and covert, and focus markers constitute the inner and outer elements of the first column of the quadrangle.

1.4.3 Chapter 4

In this chapter, I consider relative clauses in the three dialects. I discuss their structure and derivation, employing the raising analysis. I show that the derivation of relative clauses is strikingly similar to the derivation of *wh*-questions. I provide a solution to the variability

in the position of the relative particle *xé* in Hogbe and Pekigbe, where I propose a constraint on possessor extraction and postposition stranding in Ewe. I introduce the second column of the Ā-quadrangle, in which the relative pronouns and the relative particle *xé* form the inner and outer elements. Further, I discuss the syntax of factive constructions in the three dialects following Collins (1994).

1.4.4 Chapter 5

In chapter this, I provide a discussion of the Ā-quadrangle theory, demonstrating how it unites *wh*-questions, focus constructions, and relative clauses in the three dialects. I also point out the cross-linguistic implications of the Ā-quadrangle.

1.4.5 Chapter 6

In this chapter I summarize the main points of the dissertation and the main contributions it makes to the field and the study of Ewe in general. I also discuss future work that could be done in relation to the subject matter of this dissertation.

2 | Focus Constructions

2.1 Introduction

Research on the complementizer system involve discussions surrounding the interactions between *wh*-elements and focus (Rizzi 1999, 2001a; Aboh 2004, among others). The empirical facts in Ewe bear on the dialogue on this subject in the literature, as *wh*-phrases may precede a focus marker (Ameka 1992, Badan & Buell 2012). Before delving into *wh*-questions and their interaction with focus movement, I will discuss non-*wh*-related argument focus markers in the three dialects, pointing out and addressing interesting issues that arise from the empirical facts. In particular, I provide an account for argument focus in Ewe, taking into consideration the peculiar behavior of the Tɔŋugbe focus marker *nyɔ́*. I argue that focus markers form a constituent with focused categories, yielding a focus projection which agrees with C and moves to Spec, CP. The movement is driven by an EPP feature on C. My proposal departs significantly from existing accounts on focus movement in Ewe and related Gbe languages.

2.2 On focus constructions

Argument focus and predicate focus are attested in Ewe. Some adverbials can also be focused (see Ameka 1992). While argument focus has received some attention in the Ewe

literature, little attention is given to dialectal differences. In this section, I present the basic argument focus facts in the three dialects under study. Most importantly, I introduce novel data from the Tɔŋugbe dialect of Ewe, showing a peculiar behavior of the focus marker.

In Ewe, argument focus entails the displacement of elements in focus. A focused category may precede a focus marker. It is important to note here that Ewe does not allow multiple foci. This fact is illustrated later in this section. Also, focused local subjects require an overt realization of the focus marker while it is optional for non-subjects (Ansre 1966; Ameka 1992, 2010; Badan & Buell 2012). This observation holds true for the three dialects. Since focus markers follow *wh*-phrases, the question that arises is whether the subject-non-subject asymmetry noted here obtains in *wh*-questions and whether there are implications for our understanding of the left periphery. It will also be interesting to know how the micro-comparative facts bear on these.

In what follows, I provide examples of argument focus constructions in the three dialects under study, showing some similarities and differences in the morpho-syntactic behavior of the focus markers and the constructions.

2.2.0.1 Focus constructions in Hogbe, Pekigbe, and Tɔŋugbe

The focus markers in Hogbe are *yá* and *(y)ɛ́*. In Pekigbe, they are *yá* and *(y)é*. In Hogbe, *(y)ɛ́* is used in subject focus constructions while *yá* is used in non-subject focus constructions. In Pekigbe, *(y)é* is used in subject focus constructions while *yá* is used in non-subject focus constructions. The following examples illustrate focus marking in Hogbe and Pekigbe. The (b) examples show local subject focus, where the focus marker is obligatory. In Hogbe, the focus marker is optional in non-subject focus. This is illustrated in (5c). Similarly, in Pekigbe, the focus marker is optional in non-subject focus, as shown in (6c).

(5) **Hogbe**

a. Kofi kpɔ́ ɖeví-ɛ́.
Kofi see child-DEF
'Kofi saw the child.'

b. Kofi *(é) kpɔ́ ɖeví-ɛ́.
Kofi FOC see child-DEF
'KOFI saw the child.'

c. Đeví-ɛ́ (yá) Kofi kpɔ́.
Kofi FOC see child-DEF
'Kofi saw THE CHILD.'

(6) **Pekigbe**

a. Kofi kpɔ́ ɖeví-ɛ́.
Kofi see child-DEF
'Kofi saw the child.'

b. Kofi-*(é) kpɔ́ ɖeví-ɛ́.
Kofi-FOC see child-DEF
'KOFI saw the child.'

c. Đeví-ɛ́ *(yá) Kofi kpɔ́.
child-DEF FOC Kofi see
'Kofi saw THE CHILD.'

In Tɔŋugbe, the argument focus marker is *nyɔ́*, as shown below. The focus marker is obligatory in subject focus, as shown in (7b) and optional in non-subject focus, as shown in (7c).

(7) **Tɔŋugbe**

a. Kofí kpɔ́ ɖevi-ɛ.
Kofi see child-DEF
'Kofi saw the child.'

b. Kofí *(nyɔ́) kpɔ́ ɖevi-ɛ.
Kofi FOC see child-DEF
'KOFI saw the child.'

c. Đevi-ɛ (nyɔ́) Kofi kpɔ́ .
child-DEF FOC Kofi see
'Kofi saw THE CHILD.'

Also, the final vowel of foci can be lengthened, in which case the vowel length becomes the focus marker. This is illustrated in (8). The colon indicates vowel lengthening. *Kofi* is the focused category in the examples, hence the final vowel *i* in Kofi is lengthened.

(8) a. Kofi: nu aha-a. (Tɔŋugbe)
Kofi.FOC drink drink-DEF
'KOFI drank the drink.'

b. Kofi: wo-ɸo.
Kofi.FOC 3SG-hit
'He hit KOFI.'

It should be noted that the vowel-lengthening focus-marking strategy is not as widespread in the Mafi variety of Tɔŋugbe as the *nyɔ́* focus-marking strategy. Also, the *nyɔ́* and the vowel-lengthening strategy cannot co-occur, as illustrated below.

(9) a. *Kofi: nyɔ́ nu aha-a.
Kofi.FOC FOC drink drink-DEF
Intended: 'KOFI drank the drink.'

b. *Kofi: nyɔ́ wo-ɸo.
Kofi.FOC FOC 3SG-hit
Intended: 'He hit KOFI.'

2.2.0.2 Distribution of focus markers

Nyɔ́ does not only differ morphologically from *yá*, *(y)é*, and *(y)ɛ́*. It also differs with respect to distributional properties. The uniqueness of *nyɔ́* raises questions about its diachronic development and syntactic properties. A key property that distinguishes *nyɔ́* from *yá*, *(y)é*, and *(y)ɛ́* is its occurrence within a fronted VP in Tɔŋugbe progressive constructions. Specifically, it follows the direct object, indicating that the direct object is in focus, as (10b) illustrates. Note that the construction is an instance of VP-pied-piping and not a case of plain DP fronting, given the fact that the main verb and the object are displaced as a result of object focus movement.

(10) a. Me-le mɔlu ɖũ.
1SG-be rice eat.PROG
'I am eating rice.'

b. Mɔlu nyɔ́ ɖũ me-le.
rice FOC eat.PROG 1SG-be
'I am eating RICE.'

As (11) shows, *nyɔ́* cannot occur at the edge of the VP regardless of what is focused in the construction.

(11) a. *mɔlu ɖũ nyɔ́ me-le.
rice eat.PROG FOC 1SG-be
Intended 'I am EATING RICE.'

b. *mɔlu ɖũ nyɔ́ me-le.
rice eat.PROG FOC 1SG-be
Intended 'I am eating RICE.'

In Pekigbe and Hogbe, as (12) and (13) show, the focus marker is completely disallowed when a VP is pied-piped. Focus readings obtain upon VP pied-piping, where either the entire VP or the direct object of the VP is focused.

(12) **Hogbe**

a. Mɔlu (*yá) ɖu me-le.
rice FOC eat.PROG 1SG-be
'I am EATING RICE.'

b. Mɔlu ɖu (*yá) me-le.
rice eat.PROG FOC 1SG-be
'I am eating RICE.'

(13) **Pekigbe**

a. Mɔlu-(*yá) ɖu me-le.
riceFOC eat.PROG 1SG-be
'I am eating RICE.'

b. Mɔlu ɖu (*yá) me-le.
rice eat.PROG FOC 1SG-be
'I am EATING RICE.'

While the Tɔŋugbe focus marker occurs within pied-piped VPs, it does not occur within constituents like fronted postpositional phrases and fronted possessed DPs that are similar to the fronted VP. In the Tɔŋugbe example (14c), the fronted postpositional phrase disallows the intervention of the focus marker between the DP *ekplɔ̃ɔ* and the postposition *dzi*. (14b) shows that the focus marker must follow the postpositional phrase.

(14) **Fronted PostPositional Phrase (Tɔŋugbe)**

a. Agbalẽ-ã le kplɔ̃ dzí.
book-DEF be table POSTP
'The book is on the table.'

b. Ekplɔ̃-ɔ̃ dzí nyɔ́ agbalẽ-ã le.
table-DEF POSTP FOC book-DEF be
'The book is on the TABLE.'

c. *Ekplɔ̃-ɔ̃ nyɔ́ dzí agbalẽ-ã le.
table-DEF FOC POSTP book-DEF be
Intended: 'The book is on the TABLE.'

As (15b) shows, the only position available for the focus marker is the right edge of the fronted possessed DP. (15c) shows that the focus marker cannot intervene between the possessor and the possessive head. Similarly, (15d) shows that the focus marker cannot intervene between the possessive head and the possessee. It is important to note here that the focus marker occupies the same position regardless of the focused element in the possessed DP; it occurs in the same position when the possessor or the possessee is the focused category.

(15) **Fronted Possessed DP** (**Tɔŋugbe**)

a. Me-fi Kofi wó awu.
1SG-steal Kofi POSS.SG shirt
'I stole Kofi's shirt.'

b. Kofi wó awu nyɔ́ me-fi.
Kofi POSS.SG shirt FOC 1SG-steal
'I stole KOFI'S SHIRT.'

c. *Kofi nyɔ́ wó awu me-fi.
Kofi FOC POSS.SG shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

d. *Kofi wó nyɔ́ awu me-fi.
Kofi POSS.SG FOC shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

Also, when the focused category is a possessor inside a PP, *nyɔ́* occurs at the same position. (16b) shows that the focus marker must occur at the right edge of the postpositional phrase. (16c) and (16d), in which the focus marker occurs in different positions, are unacceptable.

(16) a. Agbalẽ-ã le Kofi wó kplɔ̃ gɔme
book-DEF be Kofi POSS.SG table POSTP
'The book is under Kofi's table.'

b. Kofi wó kplɔ̃ gɔme nyɔ́ agbalẽ-ã le.
Kofi POSS.SG table POSTP FOC book-DEF be

'The book is under KOFI's table.'

c. *Kofi nyɔ́ wó kplɔ̃ gɔme agbalẽ-ã le.
Kofi FOC POSS.SG table POSTP book-DEF be
Intended: 'The book is under KOFI's table.'

d. *Kofi wó kplɔ̃ nyɔ́ gɔme agbalẽ-ã le.
Kofi POSS.SG table FOC POSTP book-DEF be
Intended: 'The book is under KOFI's table.'

The focus markers in Hogbe and Pekigbe behave like Tɔŋugbe focus marker with respect to the phenomenon discussed above. The focus markers occur to the right edge of the fronted postpositional phrase and the fronted possessed DP. They do not occur within the fronted constituents. The Hogbe example in (17c) shows that the focus marker cannot occur between the DP and the postposition of a fronted postpositional phrase. The focus marker occurs only at the right edge of the postpositional phrase, as (17b) illustrates.

(17) **Fronted PostPositional Phrase (Hogbe)**

a. Agbalẽ-ɛ le kplɔ̃ ɖome.
book-DEF be table POSTP
'The book is under the table.'

b. Kplɔ̃-ɔ̃ ɖome yá agbalẽ-ɛ le.
table-DEF POSTP FOC book-DEF be
'The book is under the TABLE.'

c. *Kplɔ̃-ɔ̃ yá ɖome agbalẽ-ɛ le.
table-DEF FOC POSTP book-DEF be
Intended: 'The book is under the TABLE.'

As (18) shows, the focus marker can only follow the entire possessed DP; no position internal to the possessed DP is available for the focus marker.

(18) **Fronted Possessor DP (Hogbe)**

a. Me-fi Kofi ɸé awu.
1SG-steal Kofi POSS shirt
'I stole Kofi's shirt.'

b. Kofi ɸé awu yá me-fi.
Kofi POSS shirt FOC 1SG-steal
'I stole KOFI'S SHIRT.'

c. *Kofi yá ɸé awu me-fi.
Kofi FOC POSS shirt 1SG-steal
Intended: 'I stole KOFI'S SHIRT.'

d. *Kofi ɸé yá awu me-fi.
Kofi POSS FOC shirt 1SG-steal
Intended: 'I stole KOFI'S SHIRT.'

The examples below show that distributional facts of the focus marker in relation to fronted postpositional phrases and possessed DPs in Pekigbe align with the observations made for Tɔŋugbe and Hogbe.

(19) **Fronted PostPositional Phrase** (**Pekigbe**)

a. Agbalẽ-ɛ le kplɔ̃ ɖome.
book-DEF be table POSTP
'The book is under the table.'

b. Kplɔ̃-ɔ̃ ɖome yá agbalẽ-ɛ le.
table-DEF POSTP FOC book-DEF be
'The book is under the TABLE.'

c. *Kplɔ̃-ɔ̃ yá ɖome agbalẽ-ɛ le.
table-DEF FOC POSTP book-DEF be
Intended: 'The book is under the TABLE.'

(20) a. **Fronted Possessor DP** (**Pekigbe**)

Kofi wó awu yá me-fi.
Kofi POSS shirt FOC 1SG-steal
'I stole KOFI'S SHIRT.'

b. *Kofi yá wó awu me-fi.
Kofi FOC POSS shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

c. *Kofi wó yá awu me-fi.
Kofi POSS FOC shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

The patterns described above warrant explanation. Why does the focus marker in Tɔŋugbe occur within fronted VPs but does not occur within fronted postpositional phrases and possessed DPs? Why do the focus marker in Hogbe and Pekigbe not occur when the VP is fronted in a progressive construction? What do these facts tell us about the syntax of focus markers cross-linguistically?

2.2.0.3 Multiple foci

The three dialects disallow multiple foci. The following sentences are ungrammatical because there are two focused categories in each of them.

(21) a. *Ama-ɛ́ detsi-yá ɸo. (Hogbe)
Ama-FOC soup-FOC make
Intended: 'AMA made SOUP.'

b. *Ama-é futsi-yá ɸo. (Pekigbe)
Ama-FOC soup-FOC make
Intended: 'AMA made SOUP.'

c. *Ama nyɔ́ detsí nyɔ́ ɸo. (Tɔŋugbe)
Ama FOC soup FOC make
Intended: 'AMA made SOUP.'

The absence of multiple foci in the three dialects can be explained in terms of Stoyanova (2008). Stoyanova proposes a hypothesis (22) that accounts for the absence of multiple *wh*-questions in languages, according to which there is a unique focusing device in a unique structural position. Following the assumption that *wh*-phrases bear a focus feature, Stoyanova contends that the absence of multiple *wh*-questions finds explanation in the fact that the phenomenon of multiple foci is disallowed in those languages. The characteristics of focus marking in the three dialects are in line with the three parameters of

Stoyanova's Uniqueness Hypothesis; focus in-situ, multiple specifiers of FocP, and FocP recursion are impossible, hence the absence of multiple foci.

(22) The Uniqueness Hypothesis

Languages that license wh-phrases only in a unique structural focus position are languages without multiple wh-questions. The notion of uniqueness has to be understood as the interaction of the following three parameters:

a. no focus in-situ

b. no multiple specifiers of a FocP or alternatively no clustering of focused constituents

c. no FocP-recursion

Stoyanova (2008: 5)

This state of affairs has consequences for *wh*-questions in the three dialects. As we will see in the chapter 3, multiple *wh*-questions are disallowed in the three dialects.

In what follows, I address these issues. I start by reviewing existing accounts for argument focus in Ewe and highlighting their problems.

2.2.1 Proposals

I discuss syntactic approaches to the derivation of focus constructions and similar phenomena. Crucially, I consider Aboh's (2004) and Badan & Buell's (2012) analysis of focus constructions in Gungbe and Ewe respectively. I highlight the challenge that Tɔŋugbe argument focus facts pose to the aforementioned analyses. In light of this, I propose a novel analysis that satisfactorily accounts for the Tɔŋugbe problem, pointing to a variation in focus syntax within Ewe and Gbe, by extension.

2.2.1.1 Aboh's (2004) analysis

According to Aboh (2004), focused elements in the grammar of Gungbe must precede the focus marker *wɛ̀*, as in (23). *wh*-phrases also precede the focus marker, as shown in (24).

(23) a. Séná xìá wémà.
Sena read book
'Sena read a book.'

b. Séná *(wɛ̀) xìá wémà.
Sena FOC read book
'SENA read a book'

c. Wémà *(wɛ̀) Séná xia.
book FOC Sɛna read
'Sena read A BOOK.'

(Aboh 2004:237)

(24) étɛ́ wɛ̀ Séná xìá?
what FOC Sena read
'What did Sena read?'

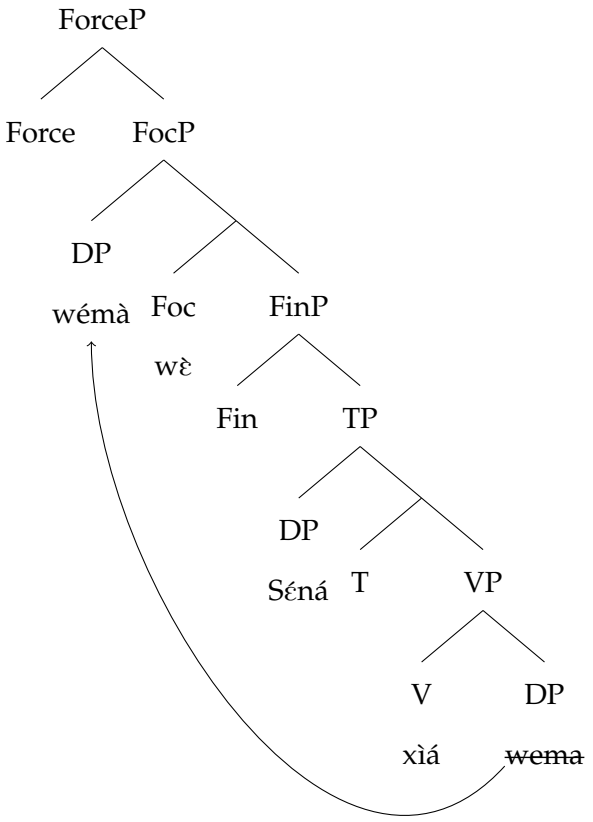
(Aboh 2004:236)

It is worth pointing out that most of the patterns observed here are reminiscent of the general patterns of focus in the three dialects of Ewe being considered in this dissertation. Specifically, focused elements precede the focus marker.

Following Rizzi's (1997) articulated CP structure according to which the CP domain is made up of functional projections like Topic Phrase, Focus Phrase, among others, Aboh (2004) proposes that the Gungbe focus marker *wɛ̀* heads the FocP in the left periphery of the clause. Under this analysis, the focus head attracts the DPs bearing a focus feature to its specifier. As (26) shows, the direct object of the construction is in focus.

(25) wémà *(wɛ̀) Sɛ́naá xìá
book FOC Sena read
'Sena read A BOOK.'

(26) Gungbe focus derivation



On the surface, Aboh's analysis looks attractive for both Gungbe and Ewe, given the striking similarities in the behavior of the focus markers in these languages; they occur to the right of focused categories and surface in the same position for questioned *wh*-elements. An important difference to mention here is that the Gungbe focus marker is obligatory in *wh*-questions (see Aboh 2004, Badan & Buell 2012) unlike in Ewe, where the focus marker is optional for non-subjects. I assume that the optionality does not preclude the syntactic activity of the focus marker in Ewe.

While the focus and VP pied-piping phenomenon of the Tɔŋugbe type is not discussed in Aboh (2004), cases in which an entire VP is focused are discussed. In this context, the VP moves to the left of the subject and the auxiliary. As Aboh reports, for speakers who accept the occurrence of the focus marker, it appears at the right edge of the VP. Some speakers do not accept the occurrence of the focus marker. Aboh indicates this difference with the percent sign, shown in (27).

(27) [Xwe lɔ gba]$_i$ %wɛ Sɛna te t_i. (Gungbe)
house SPF$_{[+def]}$ build-$_{NR}$ FOC Sena IMPERF
'Sena is BUILDING THE SPECIFIC HOUSE.'

2.2.1.2 Badan & Buell's (2012) analysis

Badan & Buell (2012) investigate focus constructions in Ewe. They examine the focus marker *(y)é*, focusing on its pragmatic properties. They note that the focus marker *(y)é* follows preposed constituents. Badan & Buell highlight the difference between foci and topics. In particular, they note that resumption is required in topicalization while it is not available in focalization at all. They also mention Collins' (1993, 1994) observation that the 3rd person singular subject pronoun changes its form when the object in its predicate is focused, but it remains the same when the object is topicalized. According to Collins, the change in the form of the 3rd person singular subject pronoun is indicative of a filled Spec, CP. In particular, he points out that the phenomenon is a reflex of successive-cyclic movement, as the change is obligatory when the Spec, CP of an embedded clause is filled. He notes that the topic construction does not involve movement, hence the form of the pronoun does not change.

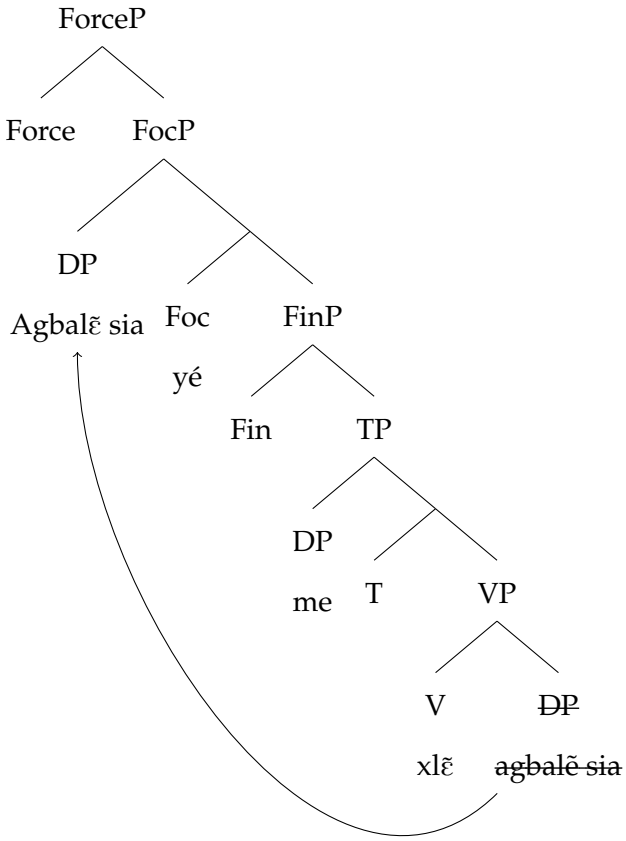
The analysis Badan & Buell propose for argument focus in Ewe relies on Aboh's (2004) analysis for Gungbe. Like Aboh, they propose that a FocP projection, headed by the focus marker in the articulated complementizer system, hosts foci in its specifier, as shown in

(29). The focus marker must follow the focused element.

(28) a. Me-xlẽ agbalẽ sia. (Standard Ewe)
1SG-read book DEM
'I read this book.'

b. Agbalẽ sia yé me-xlẽ.
book DEM FOC 1SG-read
'I read THIS BOOK.'

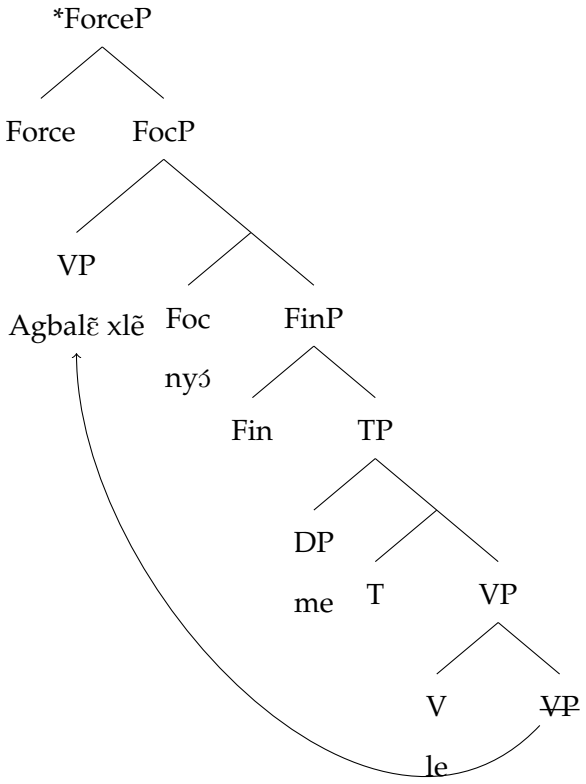
(29) Ewe focus derivation



In its present state, the derivation in (29) captures focus movement of the sort exemplified above. The prediction of this analysis is that any focused element will raise to Spec, FocP in the left periphery. Now, recall that in the empirical domain of focus-related VP-pied-piping (10b), the focus marker *nyɔ́* follows the internal argument within the VP

in Tɔŋugbe. Since the locus of the focus marker is not the CP domain here, but a position internal to the VP constituent, one wonders how Badan & Buell's proposal accounts for this phenomenon. We would expect (30) to be acceptable if we followed Badan & Buell's proposal for Tɔŋugbe, in which case the entire VP would be focused. As is clear from preceding examples, this structure does not capture the Tɔŋugbe facts. The focus marker is internal to the VP.

(30) Ewe Focus Derivation



An attempt to salvage the proposal so as to circumvent the Tɔŋugbe problem could be the postulation of a low focus projection analogous to the empirical observation in some Bantu languages (Ndayiragije 1999) and Italian (Belletti 2004). Under this view, dialects like Hogbe and Pekigbe have a high focus position for both argument focus without VP-

pied-piping and argument focus with VP-pied-piping. Tɔŋugbe on the hand has a high focus projection for argument focus without VP pied-piping and a low focus projection for argument focus with VP-pied-piping. Ndayiragije (1999) argues convincingly, citing the scope of negation relative to foci and the behavior of the antifocus marker *ra* with respect to focus and the distribution of arguments, that the position of foci is lower in the clause in Kirundi, specifically between VP and TP. Similarly, Belletti demonstrates that postverbal subjects in Italian occupy a low focus position. Positing a low focus position in Ewe should be grounded in empirical similarities between Kirundi and Italian with respect to foci. Foci in Ewe, however, move to a higher position. Unlike Italian and Kirundi, there is no postverbal subject. Thus, positing a low focus postion in the structure is untenable. More so, it is not clear how Badan & Buell's (2012) analysis explains the variation between the Ewe dialects, where Hogbe and Pekigbe do not allow VP-internal focus markers. A far-reaching consequence of the Tɔŋugbe VP-pied-piping case concerns the true syntactic status of focus markers; do they deserve a dedicated position in the left periphery?

In what, follows, I propose a new account that satisfactorily derives argument focus in Ewe dialects, with a possible extension to other Gbe languages. It is important to note that the proposal I argue for does not disprove the cartographic system developed in Rizzi (1997). Rather, like Abels (2020), it calls into question the evidential value of the focus marker in Gungbe for Rizzi's theory.

An analytical alternative is to assume that the focus marker right adjoins to foci (Abels 2020). Under this view, there is no focus projection. Rather, the focus marker, like the English adnominal *only* (Kotek & Erlewine 2016, among others) is adjoined to DPs in focus. The question that arises is whether the properties of the focus marker reflect adjunction. As is clear from the empirical facts discussed, the focus marker in Tɔŋugbe must be in a position adjacent to the focused category. A potential exception to this adjacency re-

quirement is the distribution of the focus marker in relation to possessors. Recall that the focus marker occurs at the right edge of the entire possessive projection even when the possessor is the focused category. I suggested that this restriction on the position of the focus marker follows from a PossP-pied-piping-only requirement for possessor movement. Therefore, the lack of strict adjacency between possessors and the focus marker is due to an independent reason. After all, the focus marker is close enough to the possessor.

Crucially, the empirical facts discussed in relation to the position of focus markers in fronted postpositional phrases and possessed DPs in the three dialects demonstrate that the focus markers are positionally restricted, hence they are not adjoined as adjuncts to focused categories. If they were, they would exhibit some flexibility as regards their position of occurrence. This is reminiscent of Cable's (2010) distinction between Q-projection and Q-adjunction languages, where Q-projection languages like Tlingit disallow the occurrence of the Q-particle matrix-finally, but Q-adjunction languages allow such occurrences. The focus marker *nyɔ́* in Tɔŋugbe is, therefore, a head, which projects.

2.2.2 A new account

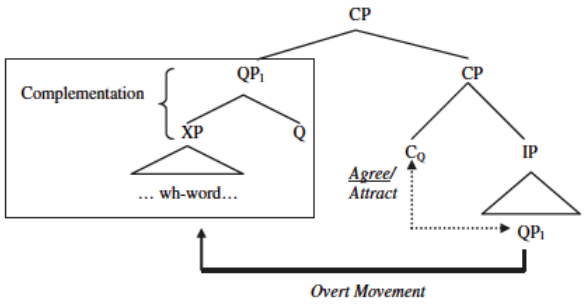
The Tɔŋugbe VP-pied-piping facts lead us to reconsider the position of focus markers in clausal syntax. We now turn to its syntax. In what follows, I will argue that the focus marker cannot head a functional projection in the left periphery. I adopt Cable's (2007, 2010) and Sulemana's (2019) Q-particle analysis in accounting for focus movement in Ewe.

2.2.2.1 Q-particles in Tlingit and Buli

Cable (2010) argues for a treatment of *wh*-operators in which *wh*-phrases are contained within a QP projection headed by a Q-particle. According to him, the QP is attracted to the left periphery via a probe-goal relation between the interrogative C head and the QP, and

since the *wh*-phrase is within the c-command domain of the Q head, specifically its sister, it is fronted together with the QP. Under Cable's analysis, *wh*-fronting is epiphenomenal, as it is contingent on the movement of the QP. (31) illustrates Cable's analysis.

(31) Structure of Tlingit *Wh*-questions



An important claim Cable makes is that the Q-particle can combine with focus markers in Tlingit, the language upon which much of his arguments are based. The conclusion that is drawn from this is that the Q-particle in Tlingit is different from the focus particles in the language.

Sulemana's (2019) analysis of *wh*-questions and Q-particles in Buli follows Cable's treatment of *wh*-operators. In Buli, a Mabia language spoken in Northern Ghana, Sulemana (2019) reports that the Buli focus marker *ka* occurs in *wh*-questions as well. He treats *ka* as a Q-particle, as shown below, arguing that *ka* is central to (non)movement. In particular, the absence of *ka* bleeds covert movement. Recall that the focus marker in Ewe surfaces in *wh*-questions as well, pointing to a striking similarity between Buli and Ewe, in spite of their difference in position relative to focused categories or *wh*-phrases. The particle precedes the related element in Buli but follows it in Ewe.

(32) Bi:ka te *(ka) wana lammu:?
child.DEF give Q who meat.DEF
'Who did the child give the meat?

(Sulemana 2019: 3)

The core insight of Cable and Sulemana's analyis that is crucial to my analysis is the probe-goal mechanism and the assumption that the Q-particle takes its related phrase as complement. I discuss this further in the following chapter.

2.2.2.2 Deriving focus fronting in Ewe

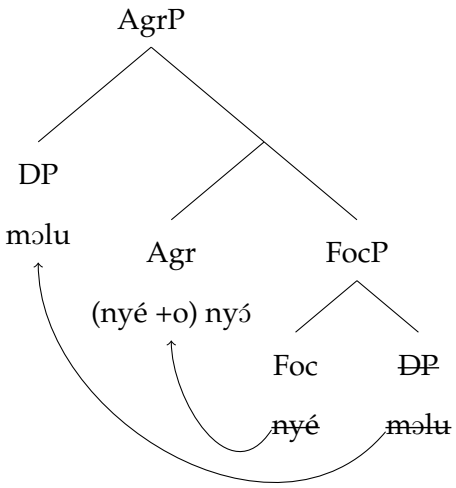
Drawing inspiration from Cable (2007, 2010) and Sulemana (2019), I postulate that the focus marker *nyɔ́* forms a constituent with the focused category, yielding a focus projection. This focus projection has an interpretable focus feature licenses an agreeing C, bearing an uninterpretable focus feature. Focused elements move to the specifier of *nyɔ́*. In cases where the focused category is a DP, I assume that an Agr projection occurs in the extended projection of the DP. This assumption stems from the fact that the copula *nyé* becomes *nyɔ́* when its predicate DP is extracted, as (33) illustrates, suggesting that the focus marker *nyɔ́* developed from the copula. I return to this subject in the next subsection.

(33) a. E-nyé agbledela. (Tɔŋugbe)
3SG-COP farmer
'He is a farmer.'

b. Agbledela wo nyɔ́.
farmer 3SG COP
'He is a FARMER.'

The AgrP projection provides the extra structure needed to derive the focus marker *nyɔ́* (34). Here, the focused DP moves to the specifier of AgrP and *nyé* undergoes head movement to Agr, yielding *nyɔ́*.

(34) Deriving *nyɔ́*

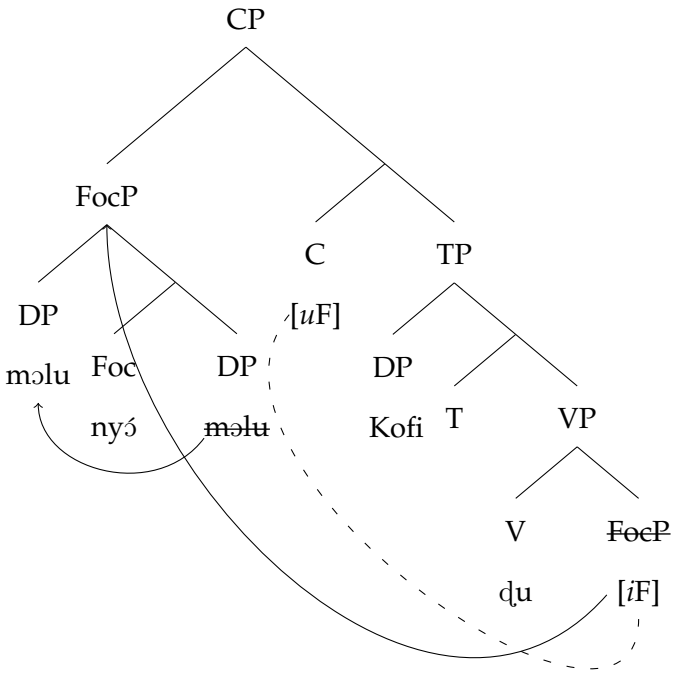


2.2.2.3 The derivation

As indicated earlier, the focus marker, bearing an interpretable *i*Foc feature, forms a constituent with focused categories. The derivation proceeds such that the C head, endowed with an uninterpretable focus feature and an EPP feature probes and attracts the *i*FocP to Spec CP, resulting in the fronting of the focused category, as shown in (36). This derivation accounts for the simplest case of focus movement. For the sake of brevity, I leave out the Agr projection. (36) illustrates the derivation of a non-subject focus construction in which the direct object is the focused category.

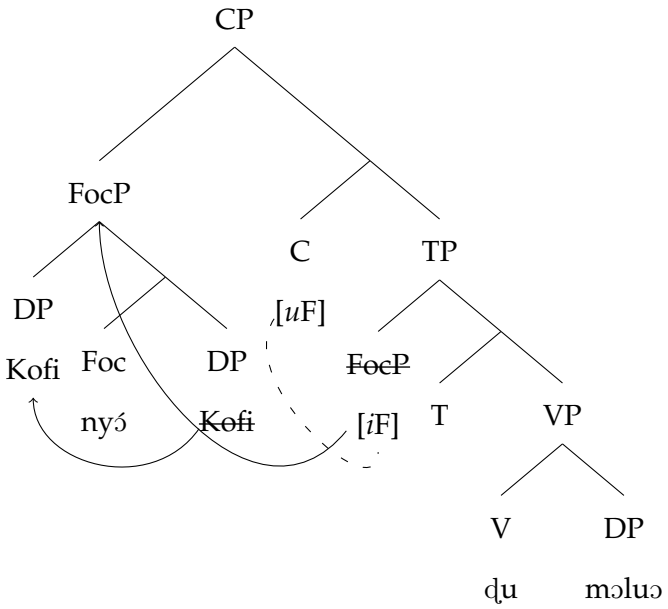
(35) Mɔlu nyɔ́ Kofi ɖu. (Tɔŋugbe)
rice FOC Kofi eat
'Kofi ate RICE.'

(36) Deriving object focus fronting



(37) illustrates the derivation of subject focus. The derivation proceeds in the same way as we saw for object focus. The difference here is that in deriving subject focus, the focus projection starts out in Spec, TP, the locus of the subject, while it starts out as the complement of V in the derivation of direct object focus. The movement of the focused category to Spec, FocP is the same in both subject and direct object focus movement. Also, the C head agrees with FocP and deletes its uninterpretable focus feature, and its EPP feature drives the movement of FocP to its specifier in both subject and non-subject focus movement.

(37) Deriving direct object focus fronting



As shown above, the C head in the derivation has only one specifier. I suggest that the absence of multiple foci, as mentioned earlier, is due to the fact that the C head does not have multiple specifiers.

2.2.2.4 The progressive

The syntax of the progressive is crucial to the choice of theoretical alternatives in the discussion of the syntax of Tɔŋugbe focus marker. I present here a brief overview of the progressive in the three dialects, showing the elements involved and the word order patterns. (38) is a regular transitive construction, which has an SVO order.

(38) Kofi dó awu. (Tɔŋugbe)
Kofi wear shirt
'Kofi wore a shirt.'

The progressive involves the *be* verb *le* or *nɔ*, the occurrence of a progressive morpheme, and object shift if the main verb is transitive (Clements 1975, Fabb 1992, among others). The progressive morpheme is the bilabial nasal *m* in Standard Ewe. In Tɔŋugbe,

the bilabial nasal is realized as nasalization on the final vowel of the main verb, as shown in (39).

(39) a. Kofi le awu dõ. (Tɔŋugbe)
Kofi be shirt wear.PROG
'Kofi is wearing a shirt.'

b. Kofi nɔ awu dõ.
Kofi be.PST shirt wear.PROG
'Kofi was wearing a shirt.'

Intransitive verbs are reduplicated in the progressive. The intransitive verb *dzo* 'jump' in (40) is reduplicated in the progressive.

(40) a. Kofi dzo.
Kofi jump
'Kofi jumped.'

b. Kofi le dzo-dzõ.
Kofi be RED-jump.PROG
'Kofi is jumping.'

As (41) shows, the progressive marker is a high tone in Hogbe and Pekigbe. The low tone of the verb *tɔ̀* 'sew' and the progressive high tone yielded the rising tone observed here.

(41) Kofi le awu tɔ̌. (Hogbe and Pekigbe)
Kofi be shirt sew.PROG
'Kofi is sewing a shirt.'

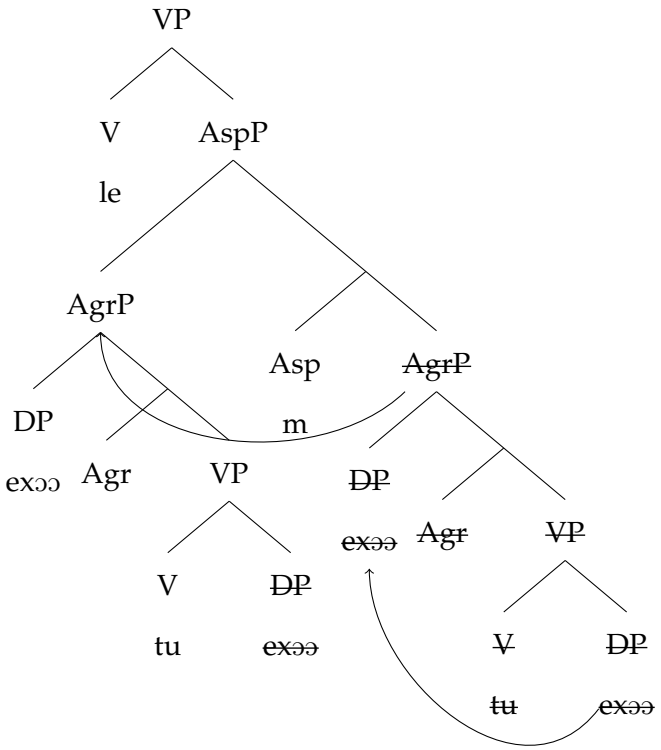
In deriving the object shift exemplified here, I provide an analysis in which the main verb takes the direct object as its complement, forming a VP. The direct object moves to the specifier position of an Agr projection in the extended projection of the VP. This derivation gives us object shift. Given that the progressive marker is the final element in the progressive though structurally higher in the construction, I assume that it heads an

Asp(ect) projection. I posit that the VP and its extended projection move to the specifier of the progressive marker, checking their progressive feature.

(42) Deriving object shift

le exɔ tũ (Tɔŋugbe)
be house build.PROG

'building a house'



Now that object shift in the progressive is derived, the focus marker can now form a constituent with the derived structure.

2.2.2.5 Deriving focus and VP pied-piping

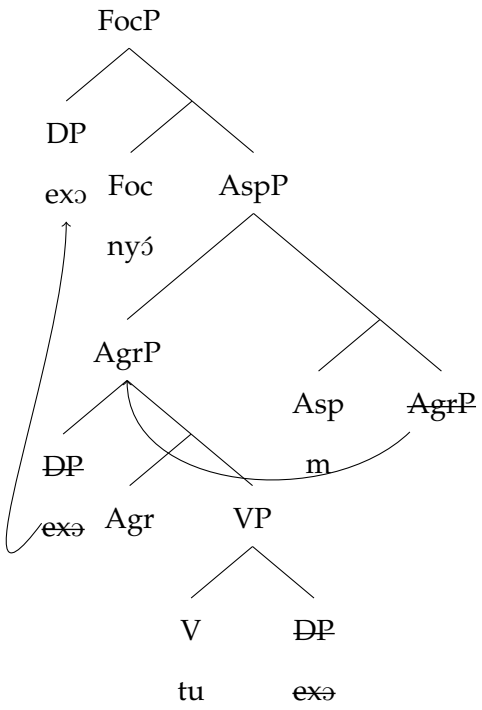
In the VP pied-piping cases, I posit that movement operations take place within FocP prior to its attraction to Spec, CP, as shown in (43). The direct object moves to a position on the left of the focus marker. Before this, the direct object moves to the specifier of

a functional projection, AgrP, above the VP. These movement operations are posited for word order reasons.

(43) Focus and AspP

exɔ nyɔ́ tũ
house FOC build.PROG

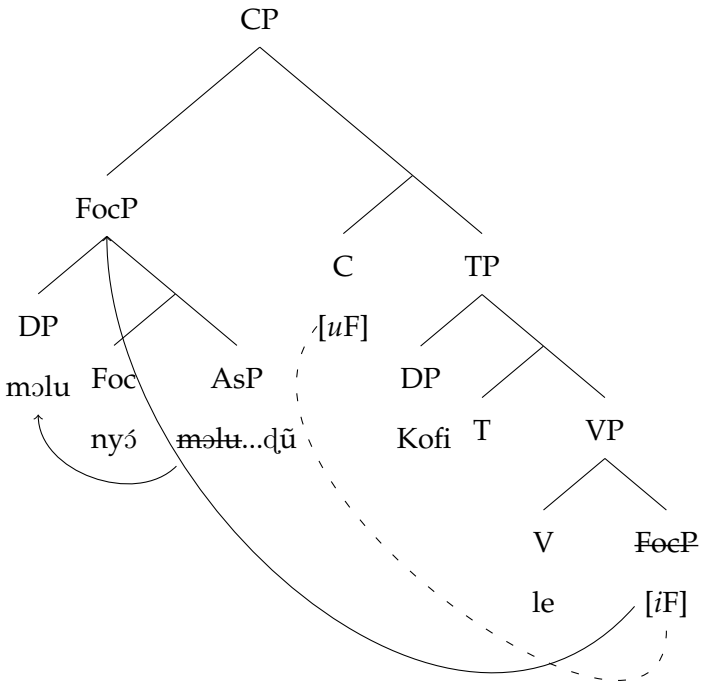
'building A HOUSE'



Once movement operations take place to derive object shift and the displacement of the direct object to Spec, FocP, FocP can now be attracted to Spec, CP, as illustrated in (45). The VP preposing observed in the derivation is a consequence of focus movement even though the focused category is the direct object. The VP preposing is necessary to derive the right word order, as stranding the VP yields an unacceptable construction.

(44) Mɔlu nyɔ́ ɖũ Kofi le. (Tɔŋugbe)
rice FOC eat.PROG Kofi be
'Kofi is eating RICE.'

(45) Deriving VP-pied-piping



In embedded sentences like (46), the derivation remains the same for the displacement of the direct object and the VP and the movement of the focus projection to Spec, CP. FocP, with the internal argument in its specifier, pied-pipes the VP to Spec, CP. The derived structure merges with an extra CP that is headed by the complementizer *bé*.

(46) Me-bu bé mɔlu nyɔ́ ɖũ Kofi le. (Tɔŋugbe)
1SG-think that rice FOC eat.PROG Kofi be
'I think that Kofi is eating RICE'

2.2.2.6 Double object constructions and VP pied-piping

One wonders what the state of affairs is when Double Object Constructions are involved. As illustrated in (47), Goals and Themes in Double Object Constructions in Ewe exhibit a surface symmetry in which either the goal or theme can precede the other (Essegbey 2010, Dorgbetor 2016). Based on evidence from quantifier scope facts, binding, and the Ewe

nyá-construction (see Collins 1993, Duthie 1996, Ameka 2005, Gotah 2024 for discussions), Dorgbetor argues that the Verb-Goal-Theme order is the basic one, and that the Verb-Theme-Goal order is derived via movement of the Theme over the Goal, contra Essegbey (2010).

(47) a. Me-ná Kofi ga (Tɔŋugbe)
1SG-give Kofi money
'I gave Kofi money.'

b. Me-ná ga Kofi.
1SG-give money Kofi
'I gave Kofi money.'

The c-command asymmetry indicative of the fact that the V-Goal-Theme order is the basic order is depicted here. The binding facts in (48) demonstrate that the R-expression *Delanyo*, which is the Goal in the DOC, must c-command the reflexive Theme *eɖokoe*. The reverse order results in the ungrammaticality of (48b).

(48) a. Me-fiɛ Delanyo$_i$ e-ɖokoe$_i$ le foto-ɔ me. (Tɔŋugbe)
1SG-show Delanyo 3SG-self be photo POSTP
'I showed Delanyo herself in the photo.'

b. *Me-fiɛ e-ɖokoe$_i$ Delanyo$_i$ le foto-ɔ me.
1SG-show 3SG-self Delanyo be photo POSTP
'*I showed herself Delanyo in the photo.'

Bound variable anaphora requires that quantifiers c-command bound variables (Lasnik 1986). Since the c-command requirements are met in (49), where the quantificational DP ɖ*evi* ɖ*esia*ɖ*e* 'every child', which is the Goal, c-commands the variable *wo* 'his', the Theme, the construction is grammatical. In (49b), however, the goal does not c-commands the variable, hence the ungrammaticality.

(49) a. Me-fiɛ ɖesiaɖe wó nanɛ. (Tɔŋugbe)
1SG-show child every POSS.SG mother
'I showed every child his mother.'

b. *Me-fiɛ wó nanɛ ɖesiaɖe.
1SG-show POSS.SG mother child every
'*I showed his mother every child.'

In progressive constructions, where object shift is obligatory, the Theme is the only candidate for movement, as (50) shows.

(50) a. Me-le ga nã Kofi.
1SG-be money give.PROG Kofi
'I am giving Kofi money.'

b. *Me-le Kofi nã ga.
1SG-be Kofi give.PROG money
Intended: 'I am giving Kofi money.'

As regards progressive VP pied-piping in focus constructions where the Theme is the focused category, the Theme, together with the main verb and the progressive marker, raises to the left of the subject and the auxiliary, stranding the Goal (51a). When the Goal is the focused category, it raises to the left of the subject without pied-piping, as in (51b).

(51) a. Ega nyɔ́ nã me-le Kofi
money FOC give.PROG 1SG-be Kofi
'I am giving Kofi MONEY.'

b. Kofi nyɔ́ me-le ga nã.
Kofi FOC 1SG-be money give.PROG
'I am giving KOFI money.'

As shown below, the goal cannot participate in VP pied-piping.

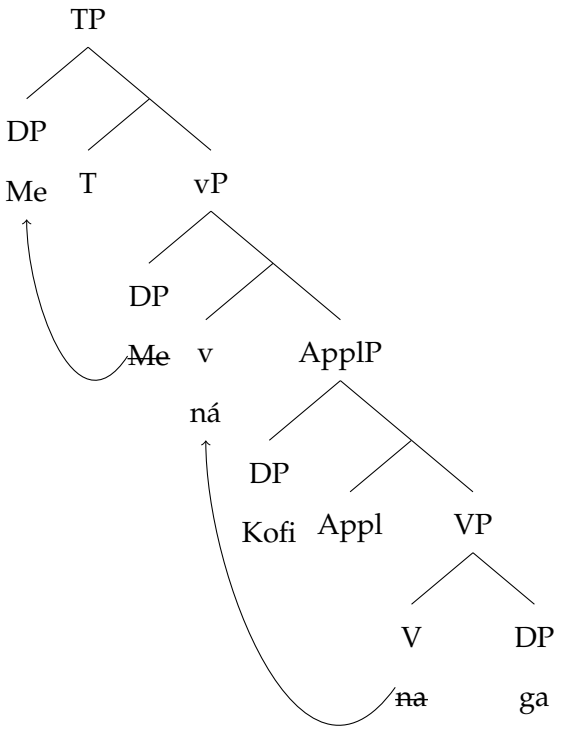
(52) *Kofi nyɔ́ ga nã me-le.
Kofi FOC money give.PROG 1SG-be
Intended:'I am giving KOFI money.'

(53) *Kofi nyɔ́ nã me-le ga.
Kofi FOC give.PROG 1SG-be money
Intended: 'I am giving KOFI money.'

The question that arises is whether the phenomenon described above is truly a case of VP pied-piping. If it is, why is the Goal stranded? Recall Dorgbetor's claim that the basic

order of Ewe double object constructions involves the Goal preceding the Theme. Recall also that only the Theme undergoes object shift. I adopt the basic V-Goal-Theme order and extant proposals in which double object constructions possess a VP shell (Larson 1988) including an applicative (Marantz 1993, Pylkkänen 2008) , which may be phonologically null depending on the language. I assume that, like English, as Marantz suggests, Ewe possesses a phonologically null applicative. Following Collins (2021), I assume that little v takes ApplP as its complement and that the Goal merges in the specifier of ApplP, as shown in (54).

(54) Basic DOC in Ewe



To derive the V-Theme-Goal order, I adopt Collins' proposal for the dative alternation in English, where the prepositional dative (55a) is derived from the double object construction (55b) using the smuggling mechanism (Collins 2005 and subsequent work) according to which the lower VP moves with the Theme to the specifier of a Voice projec-

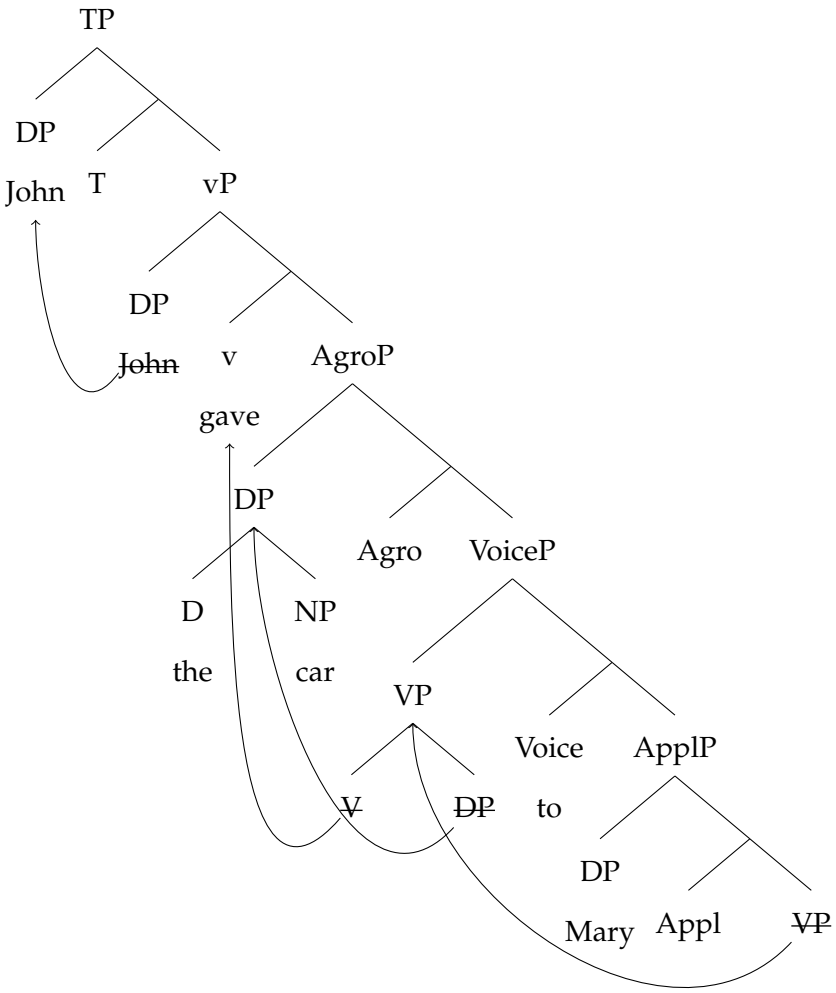
tion above ApplP, as shown in (56). Collins notes that the Voice projection in the dative alternation is an *inner voice* while that of the passive, project above little vP is an *outer voice*.

(55) a. John gave Mary the car. (Double Object Construction)

b. John gave the car to Mary. (Prepositional Dative)

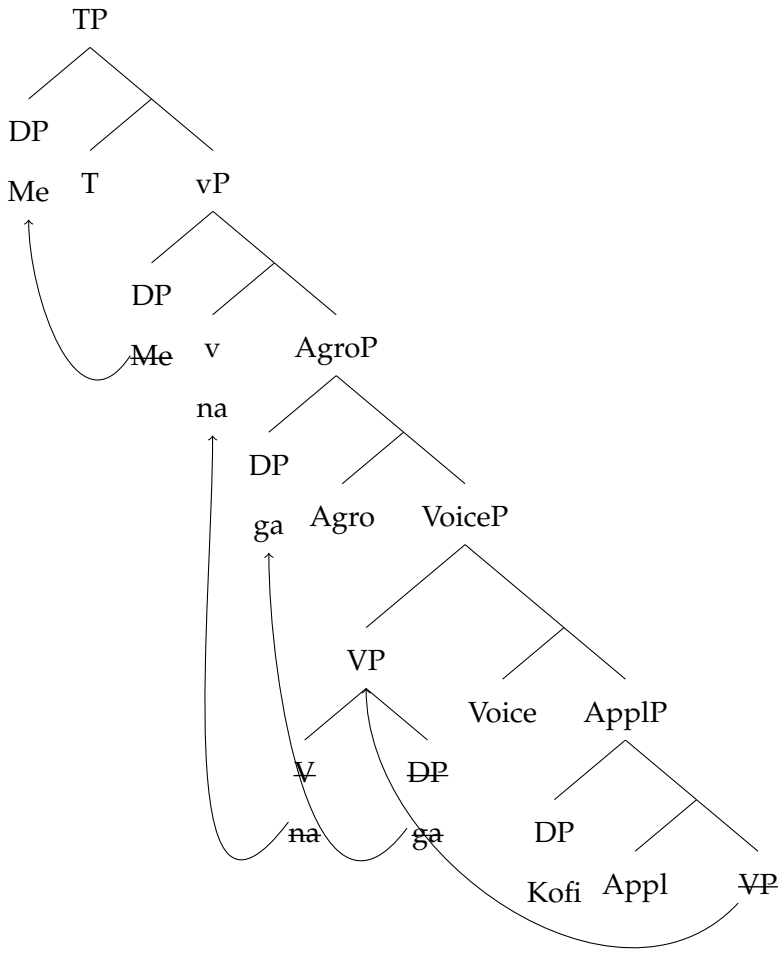
(Collins 2021: 96)

(56) Dative Alternation



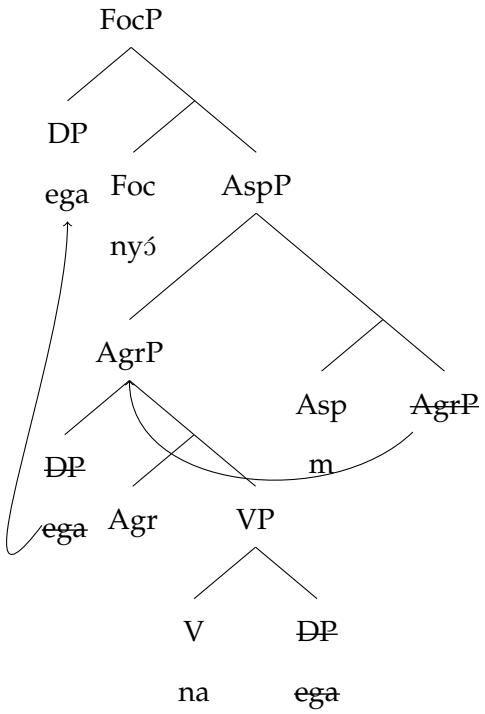
As (57) shows, the VP, containing the main verb and the direct object, raises to the specifier of a voice projection, which is endowed with an EPP feature. Since the orders in which the Goal c-commands the Theme and the Theme c-commands the Goal obtain in Ewe, the c-command configuration must be established in the structures. If the final landing site of the Theme is the complement of V in Spec, VoiceP, the required c-command relation between the Theme and Goal would not be realized, hence the Theme subextracts to the specifier of an object agreement projection (AgroP), yielding the correct configuration in which the Theme c-commands the Goal. The verb undergoes head movement to little v.

(57) Derived DOC in Ewe



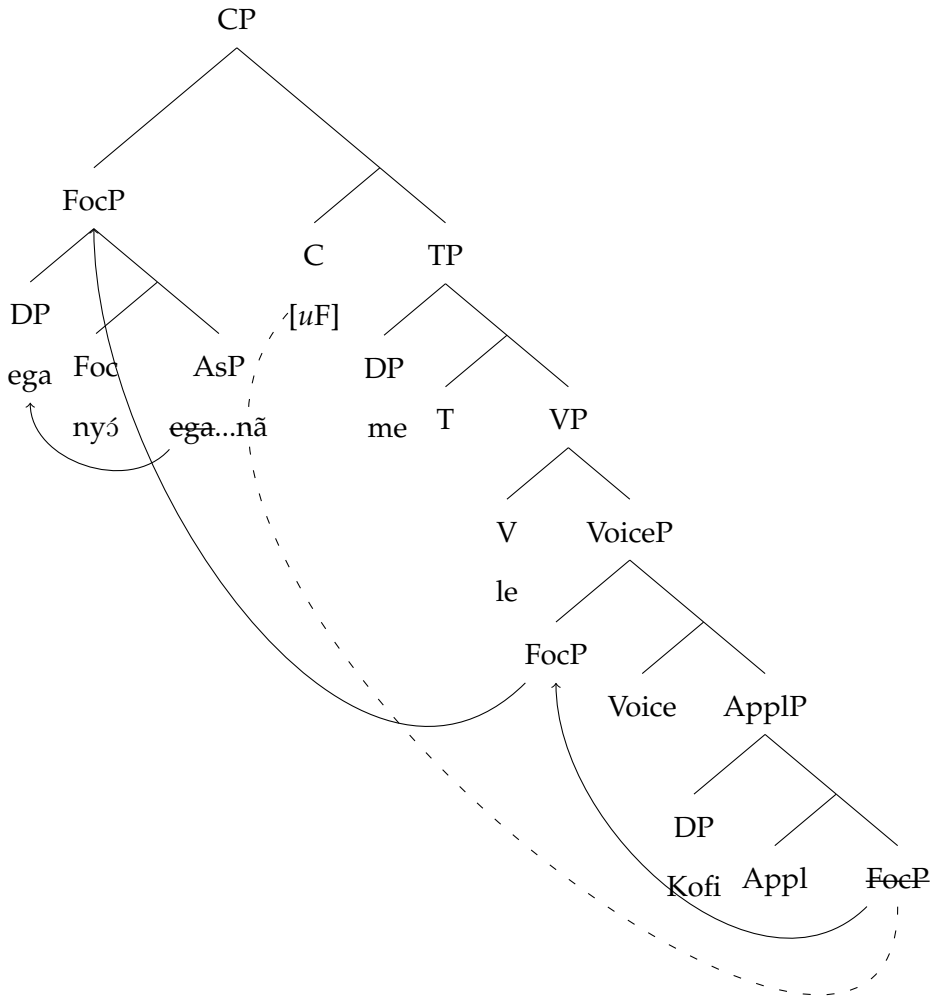
The locus of the indirect object in the basic and derived structures of the double object construction is Spec, ApplP. The fact that the indirect object gets stranded when the direct object moves, pied-piping the VP, for focus reasons, demonstrates clearly that its structural position is outside the VP domain. It is established, therefore, that the phenomenon under discussion in this section is a case of VP pied-piping. In deriving double object cases of focus and VP pied-piping, my proposal for focus and VP pied-piping is implemented such that the direct object undergoes movement to the specifier of the focus projection, as illustrated in (58).

(58) Focus and AspP



The focus projection agrees with C. The EPP feature on C attracts the focus projection to Spec, CP. To satisfy the EPP requirement of the voice projection, the focus projection makes a stop in Spec, VoiceP and moves to its landing site, Spec, CP. The indirect object remains in Spec, ApplP. The derivation is shown in (59).

(59) Stranded indirect object



2.2.3 On VP pied-piping and reduplication

My proposal for focus movement posits extraction of the direct object without reduplication of the main verb being triggered. This view appears to be in stark contrast to the empirical observation that extraction from a nominalized VP triggers reduplication in

Ewe (Clements 1975, Ameka & Kropp Dakubu 2008 etc.). The Standard Ewe examples provided in (Ameka & Kropp Dakubu 2008) illustrate this fact. In (60c), the direct object of the verb is extracted for focus reasons. Similarly, the VP in (60b) is preposed for focus reasons. The extraction of the direct object in (60c) triggers the reduplication of the verb.

(60) a. Ama le mɔlu ɖa-m.
Ama be rice cook-PROG
'Ama is cooking rice.'

b. Mɔlu ɖa-m ye Ama le.
rice cook-PROG FOC Ama be
'Ama is COOKING RICE.'

c. Mɔlu ye Ama le ɖa-ɖa-m.
rice FOC Ama be cook-cook-PROG
'Ama is cooking RICE.'

(Ameka & Kropp Dakubu 2008)

Note that (60c) can occur without reduplication. Here, the VP pied-piping takes place, as illustrated below. This is exactly the case in Tɔŋugbe.

(61) Mɔlu ye ɖa-m Ama le.
rice FOC cook-PROGRESSIVE Ama be
'Ama is cooking RICE.'

If indeed the direct object is extracted in the account I am proposing, an immediate question is why it does not trigger reduplication. To address this question, a plausible account is to assume that reduplication obtains when the direct object is extracted from the extended projection of the VP. Otherwise, reduplication does not take place. This explains the difference between (60b) and (60c). In (60c), the direct object is extracted from the external projection of the VP. Therefore, reduplication takes place. The direct object is not extracted from the extended projection of the VP in (60b) and (61), hence reduplication does not obtain. In chapter 5, I adopt the extraction domain account again in defense of some kind of possessor extraction and postposition stranding. Ultimately,

we arrive at a unified account for handling different phenomena within the Ā-domain, an analytical choice that aligns with the kernel of this dissertation.

2.2.4 *Nyɔ* and possessed DPs

Having proposed an analysis for the VP-pied-piping case, it is worthwhile to address the issue as to why the Tɔŋugbe focus marker does not occur within pied-piped possessed DPs. This state of affairs follows straightforwardly from a constraint on possessor extraction in Ewe; possessor extraction is disallowed, as depicted in (62c), hence there is no way the focus marker can surface within pied-piped possessed DPs, as (63) demonstrates. Regardless of the target of extraction from possessed DPs, the entire DP must be pied-piped.

(62) a. Me-nya Kɔsi wó awu.
1SG-wash Kɔsi POSS shirt
'I washed Kɔsi's shirt.'

b. Me-ka wó awu nyɔ́ e-nya ɔ?
person-WH POSS shirt FOC 3SG-wash PRT
'Whose shirt did you wash?'

c. *Me-ka nyɔ́ e-nya wó awu o?
person-WH FOC 3SG-wash POSS shirt PRT
Intended:'Whose shirt did you wash?'

(63) a. *Kofi nyɔ́ wó awu me-fi.
Kofi FOC POSS.SG shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

b. *Kofi wó nyɔ́ awu me-fi.
Kofi POSS.SG FOC shirt 1SG-steal
Intended: I stole KOFI'S SHIRT.'

Following Gavruseva (2000), I assume that the absence of possessor extraction stems from the fact that Ewe has an impoverished nominal possession agreement system, hence

it patterns with Germanic languages, which generally disallow possessor extraction, as Gavruseva notes. I give a more detailed account of Gavruseva's proposal on possessor extraction in chapter 4.

2.2.5 Why *nyɔ* behaves differently

An obvious question that arises from the preceding sections is why the Tɔŋugbe focus marker *nyɔ́* differs from the focus marker in Hogbe and Pekigbe with respect to morphology and distributional properties. Might the difference in morphology mirror the difference in their distributional properties? In this section, I consider the syntactic profile of the Tɔŋugbe focus marker *nyɔ́*. I show that the relatedness of *nyɔ́* to the copula *nyé* bears on these differences.

2.2.5.1 The copula *nye*

As (64) shows, the stative copula verb *nyé* can take lexical and expletive subjects. Also, it can select nominal objects but not adjectives (64c).

(64) a. Kɔdzo bé ye tatɛ nyé nufíɛ́la.
Kɔdzo COMP.say LOG.GEN father COP teacher
'Kɔdzo said his father is a teacher.'

b. É-nyé dzidzɔ ne mí bé wó-wu dɔ-ɔ nu.
3SG-COP happiness to 1PL COMP 3PL-kill work mouth
'It's a pleasure to us that they completed the work.'

c. *Ami nyé kɔkɔ.
Ami COP tall
Intended: 'Ami is tall.'

In cleft constructions, the copula is preceded by a 3rd person singular *wo*, as shown below.

(65) ke wo-nyé dɔ ma tututu nyɔ́ di-m wo-le ta-e...
since 3SG-COP work DEM exact FOC search-PROG 3SG-be head-TOP

'since it is the exact he is looking for...'

As (66) shows, *nyɔ́* bears a close resemblance to the copula *nyé* in that they differ with respect to their final vowels.

(66) Kɔsi nyé sukuvi.
Kɔsi COP student
'Kɔsi is a student.'

A more striking observation is that the copula and the focus marker share the same morphology when the predicate DP in the copula construction is extracted.

(67) Sukuvi wo nyɔ́.
student 3SG COP
'He is a STUDENT.'

The morphological reflex of extraction seen here is an observable pattern in Ewe. For instance, the form of the 3rd person singular nominative pronoun changes from *é* to *wo*, as shown in the relative clause (68), as a result of extraction.

(68) a. É-dzrá awu-ɔ.
3SG-sell shirt-DEF
'He sold the shirt.'

b. awu yɛ wo/*é-dzrá
shirt REL 3SG-sell
'the shirt that he sold'

Collins (1993, 1994) observes that the alternation of the 3rd person pronoun shown above takes place when the extraction targets Spec, CP.

The facts above seem to suggest that the Tɔŋugbe focus construction is actually a cleft construction like (69). Note that the initial negation morpheme contains the expletive subject of the copula. The cleft construction requires a subject for the copula. As (70) shows, *é* is the expletive subject in Tɔŋugbe. Given its morphological resemblance to the vowel *é* in the initial negative morpheme, it is not morphologically salient in the construction.

(69) Mé-nyé Kofi wo-kpɔ́ ɔ.
NEG.EXPL-COP Kofi 3SG-see NEG
'It is not Kofi he saw.'

(70) É-nyé dzidzɔ ne mí bé é-va.
EXPL.SUBJ-COP happiness for us COMP 3SG-come
'It pleases us that you came.'

While we can conclude that the focus marker is derived diachronically from the copula, given their morphological resemblance, its synchronic syntactic status seems to be far from a copula. A copula analysis faces a challenge. The *nyɔ́* can co-occur with the canonical copula *nyé* in the formation of a double cleft. The co-occurrence of both the copula *nyé* in a single construction points to a double cleft construction if *nyɔ́* is to be considered a cleft particle instead of a focus marker. Consider (71). If *nyɔ́* were a copula, (71) would involve two copulas, resulting in a biclausal structure involving a double cleft. The question that arises then is why only one of the copulas has a subject. Now, consider (72), a cleft construction in which there are two copulas with their respective subjects. If constructions like (71) were a double cleft, each of the copulas would have its own subject. The Tɔŋugbe focus marker *nyɔ́* therefore, cannot be a cleft particle. Recall that *nyɔ́* cannot co-occur with the vowel length focus-marking strategy I mentioned in earlier in the chapter.

(71) Mé-nyé Kofi nyɔ́ wo-kpɔ ɔ.
NEG.EXPL-COP Kofi FOC 3SG-see NEG
'It is not KOFI he saw.'

(72) Mé-nyé Kofi wo nyé wo-kpɔ ɔ.
NEG.EXPL-COP Kofi 3SG COP 3SG-see NEG
'It is not Kofi he saw.'

It seems to be the case that the morphological difference between *nyɔ́* and the focus markers in Hogbe and Pekigbe mirrors their distributional properties. A plausible explanation for the difference in the behavior of *nyɔ́* and the focus markers in Hogbe and

Pekigbe is that Tɔŋugbe has a relatively richer agreement system in its syntax, allowing heads to probe deeper into structures in a fashion that allows successive cyclic movement as opposed to roll-up movement. That way, *nyɔ́* is able to probe into its complements. The focus markers in Hogbe and Pekigbe on the other hand, cannot probe into their complements, hence they must attract the entire complement.

The occurrence of a final segment, as opposed to a tone, in Tɔŋugbe *wh*-questions, to an extent, points to the relative richness of its agreement system. Furthermore, Tɔŋugbe nominal possession exhibits a richer agreement system, where singular and plural possessors take different possessive morphemes, as illustrated below.

(73) a. Ama wó/*be xɔ (Tɔŋugbe)
Ama POSS.SG house
'Ama's house'

b. Nufiɛ́lá-ɔ *wó/be xɔ
teacher-PL POSS.PL house
'Teachers' house'

(74) a. Ama ɸé xɔ (Hogbe)
Ama POSS.SG house
'Ama's house'

b. Núf́ialá-o ɸe xɔ
teacher-PL POSS.PL house
'Teachers' house'

(75) a. Ama wó xɔ (Pekigbe)
Ama POSS.SG house
'Ama's house'

b. Núfíalá-ó wó xɔ
teacher-PL POSS.PL house
'Teachers' house'

As I will show in the next chapter, Tɔŋugbe differs again from the Hogbe and Pekigbe as regards the final particle in *wh*-questions and even some *wh*-phrases.

2.3 Summary

I have discussed the syntax of argument focus constructions in this chapter. I have shown that the subject-non-subject asymmetry in Ewe focus constructions reported in the literature manifests in the three dialects under study as well. Most importantly, I have argued for a new analysis of focus movement in Ewe, citing novel data from VP pied-piping in Tɔŋugbe. I have demonstrated that postulating a focus projection that forms a constituent with focused categories allows us to derive both basic argument focus constructions and VP pied-piping cases adequately. The proposal draws inspiration from Cabel's (2007, 2010) analysis for *wh*-questions, according to which a Q head forms a constituent with *wh*-phrases and raises to Spec, CP, pied-piping the *wh*-phrases. For focus constructions, I have argued that the focus head forms a constituent with focused categories, pied-piping them to Spec, CP.

3 | *Wh*-Questions

3.1 Introduction

The proposal I argued for in the previous chapter has consequences for the syntax of *wh*-questions in Ewe, given the occurrence of focus markers in *wh*-questions. In addition to this, Ewe *wh*-questions involve the displacement of *wh*-phrases and the occurrence of sentence-final particles of various forms. With Ewe being a predominantly VO language, the occurrence of sentence-final particles seems to characterize Ewe as exhibiting a disharmonic system. This observation contravenes the Final-Over-Final Constraint (FOFC) according to which head-initial structures cannot be dominated by head-final structures (Biberauer et al. 2008, 2014; Sheehan et al. 2017). The questions that arise from the interactions between the focus markers, the *wh*-phrases, and the sentence-final particles are the following; (a) how does the focus fronting analysis proposed dovetail with the derivation of *wh*-questions? (b) what are the implications, if any, of the analysis I postulate here for existing analysis of *wh*-questions cross-linguistically? (c) is the proposed derivation for *wh*-questions FOFC compliant?

In this chapter, I introduce elements of the Ā-quadrangle that are involved in *wh*-question formation. I provide an analysis for Ewe *wh*-questions, showing that the new analysis for focus constructions in Ewe carries over straightforwardly to the derivation of *wh*-questions. Further, I adopt the assumption that *wh*-fronting is a reflex of focus

movement. I assume that sentence-final particles in Ewe *wh*-questions are question particles that type constructions as questions. I extend the derivational architecture for focus movement to the derivation of the question particle. I propose that the question particle heads a Q projection (QP) and that the Q head is endowed with an uninterpretable focus feature and an EPP feature. The Q head agrees with the focus projection, which bears interpretable focus features. The uninterpretable focus feature of the Q head deletes under the agree relation between the Q head and the focus projection. The EPP feature on the Q head drives the leftward movement of the focus projection, pied-piping the entire CP to the specifier of QP. I note that the mechanism I adopt for deriving *wh*-questions does not violate the Final-Over-Final Constraint.

3.2 On *Wh*-questions

3.2.1 *Wh*-phrases

The *wh*-words vary in morphology across dialects of Ewe. For instance, Hogbe has *tsiɛ* and *nuka* for 'what' and *meka* and *me* for 'who'. Pekigbe has *me* for 'who' and *tsiɛ* for 'what'. Tɔŋugbe has *(a)meka* for 'who' and *nuka* for 'what'. For *where*-questions, Hogbe and Pekigbe have *fika* and *finɛ* respectively while Tɔŋugbe has *ga(ne)*. A final-particle strategy is also used for *where*-questions, as shown in (76). Table 3.1 shows various *wh*-words in the dialects.

(76) Kofi ɖé?
Kofi PRT
'Where is Kofi?'

The assumption can be made that there is a null *where*-question word in the structure and that *ɖé* is final-particle like those in other *wh*-questions. As (77) illustrates, dialects like Kpelegbe have an overt *where*-question word in analogues of (76).

(77) Gane Kofi ɖé?
where Kofi PRT
'Where is Kofi?'

.

Table 3.1: *Wh*-words

***Wh*-word**	**Hogbe**	**Pekigbe**	**Tɔŋugbe**
Who	meka, mē	mē	(a)meka
What	tsiɛ, nuka	tsiɛ	nuka
When	gbɛnɛ(gbe), ekaɣi	tsiɛɔ̃lĩ̃	wokawoe, gakame
Where	finɛ, fika	finɛ	gane
Why	tsiɛ(h)aɸe, nukata	tsiɛta	nukata
How	lɛ, lɛkɛ	lɛma	ale

An observable pattern in the morphology of the *wh*-words is the recurrence of the morphemes *ka*, *ne/ɛ*, *fi*, *(a)me)* and *nu*. I assume the *ka* and *ne/ɛ* are *wh* morphemes, which combine with nominals to yield *wh*-words. Take *ame-ka* 'who' and fi-nɛ 'where' for example. *Ame* refers to a person, as the examples below illustrate. Combining it with *ka* yields the *wh*-word *ameka* 'who' in (78b). *Fi* refers to a place. The *wh*-word *finɛ* 'where' obtains when *fi* combines with *nɛ*, as in (78c).

(78) a. Ame-ɖe le fí-mí. (Hogbe)
person-SPEC.INDEF be.LOC place-DEM.DIST
'There is someone there.'

b. Me-ka-ɛ le fí-mî?
person-WH-FOC be.LOC place-DEM.DIST.PRT
'Who is there?'

c. Fi-nɛ ame-ɛ lè?
place-WH person-DEF be.LOC.PRT
'Where is the person?'

Ka also combines with time morphemes and 'sun' to yield *when wh*-words. In the Hogbe example is (79a), *ka* combines with 'sun' and the time morpheme indicating the period for an event or state. In Tɔŋugbe, as (79b) and (79c) show, *ka* can combine with 'sun' and time morphemes 'time' to form *when wh*-words. *Gakame* asks about a specific time of the day while *wokawoe* is more general.

(79) a. e-ka-*γ* Kofi dzô? (Hogbe)
sun-WH-time Kofi leave.PRT
'What time did Kofi leave?

b. Wó-ka-wóé Kofi dzó ó? (Tɔŋugbe)
sun-WH-time Kofi leave PRT
'What time did Kofi leave?'

c. Ga-ka-me Kofi dzó ó?
time-WH-in Kofi leave PRT
'What time did Kofi leave?'

Reason questions involve the object *wh*-phrase *nuka/tsiɛ* and the morpheme *ta* 'head'. The Pekigbe example (80) illustrates this (see Buell 2021 for discussions on reason questions in Standard Ewe).

(80) Tsié-ta Ama gbé va-vâ? (Pekigbe)
what-head Ama refuse RED-come.PRT
'Why did Ama refuse to come?'

ka, which is the inner element of the Ā-quadrant in *wh*-question, seems to correspond to *which* in English. The English *which* in *wh*-questions forces a Discourse-linking effect, where an individual is drawn from a set of individuals known to both the speaker and

the hearer (Pesetsky 1987). In (81), there is a set of individual pieces from which one piece is drawn.

(81) Which piece did the pianist play?

Ka can be employed for D-linking effects, as in (82). Note that for D-linking to be realized, the *wh*-phrase within the scope of the *ka* must be definite. In this context, *ka* aligns with the English *which*.

(82) Eʋu-ɔ ka wó-ɸo o? (Tɔŋugbe)
drum-DEF which 3SG-bit PRT
'Which drum did he bit?'

Considering (83) and (84), D-linking does not obtain since the *wh*-phrases lack the definite article. In (85), however, D-linking obtains. There are specific books known to the interlocutors. The specific book that Foli read is the focus of the question.

(83) Nu-ka Adzo ɸle ɔ? (Tɔŋugbe)
thing-WH Adzo buy PRT
'What did Adzo buy?'

(84) Agbalẽ ka Foli xlẽ ɔ? (Tɔugbe)
book which Foli read PRT
'What book did Foli read?'

(85) Agbalẽ-ɛ ka Foli xlẽ ɔ? (Tɔŋugbe)
book-DEF which Foli read PRT
'Which of the books did Foli read?'

3.2.1.1 Subject-non-subject asymmetry

As indicated earlier, *wh*-questions interact with focus markers in Ewe and many other languages. The focus markers are the outer elements of the Ā-quadrant as they occur to the right of the inner element *ka*, as shown in (86a). The subject-non-subject asymmetry characteristic of focus construction reported in the literature also manifests in *wh*-questions in

the three dialects. Local subject *wh*-questions require the focus marker while it is option for non-subjects, as shown below.

(86) a. Me-ka-*(ɛ́) dzô? (Hogbe)
person-WH-FOC leave.PRT
'Who left?'

b. Nu-ka (yá) Kofi kpɔ̂?
thing-WH FOC Kofi see.PRT
'What did Kofi see?'

(87) a. Me-ka *(nyɔ́) dzó ó? (Tɔŋugbe)
person-WH FOC leave PRT
'Who left'?

b. Nu-ka (nyɔ́) Kɔsi kpɔ́ ɔ́?
thing-WH (FOC) Kɔsi see PRT
'What did Kofi see?'

(88) Me-*(é) vâ? (Pekigbe)
person-FOC come.PRT
'Who came'?

It is noteworthy that the focus marker is disallowed in object *wh*-questions in Pekigbe. The occurrence of the focus marker renders object *wh*-questions illicit, as (89) shows.

(89) Tsiɛ-(*ya) Kofi ɸlè?
what-FOC Kofi buy.PRT
'What did Kofi buy?'

This empirical fact seems to suggest that the displacement of the *wh*-phrase might not be focus driven in Pekigbe. The assumption can be made that there is, in fact, focus movement involving a null focus marker. A phonology-based explanation for the phenomenon could be that the overt occurrence of the focus marker is blocked due to a phonological constraint, namely, haplology. The final vowel of the *wh*-phrase ɛ and the focus markers are both high-toned front and unrounded vowels that are similar with respect to tongue

height- mid and low respectively. This explanation, however, does not go through given examples like (86a) in which the final vowel of the *wh*-phrase is, apart from tones, the same as the focus marker. If indeed haplology accounts for the surface absence of the focus marker in object *wh*-questions, why is it not at play in subject *wh*-questions? It is independently established in the Ewe literature that subject focus requires the focus marker while non-subject focus does not (Ansre 1966). I assume that the obligatory occurrence of the focus marker in suject focus is an indicator of movement, as its absence renders the construction a plain declarative on the surface. For object focus, the visible distortion of the canonical SVO order is sufficient to demonstrate movement. The syntactic activity of a null focus marker then is palpable. The reason Pekigbe idiosyncratically disallows the occurrences of an overt focus marker in object *wh*-question is not immediately clear. As I will note in Chapter 4, Tɔŋugbe disallows the overt relative particle *xé*, an outer element like the focus marker.

3.2.2 Multiple *wh*-questions

Multiple *wh*-questions are not allowed in the three dialects. They are only accepted as echo questions.

(90) a. *Me-ka wɔ nu-ka ɔ (Tɔŋugbe)?
person-WH do thing-WH PRT
Intended:'Who did what?'

b. *Me-wɔ nu-kâ (Hogbe)?
who-do thing-WH?
Intended:'Who did what?'

c. *Me-wɔ tsiɛ̂ (Hogbe)?
who-do thing-WH?
' Intended: 'Who did what?'

As I have already indicated, the dialects understudy do not allow multiple foci. I invoked the Uniqueness Hypothesis (Stoyanova 2008) in explaining the phenomenon. Here, I show parallels between the Ewe dialects and Italian, drawing on Calabrese's (1984) assumption that the absence of multiple *wh* questions in Italian is contingent on the absence of multiple foci. Calabrese (1984) observes that in Italian, like in the Ewe dialects, multiple *wh*-questions are disallowed, except as echo question. The examples in (91) illustrate the absence of multiple foci in Italian. The constructions are ungrammatical because there are two focused categories per sentence.

(91) a. *MARIO ha scritto una LETTERA (Italian)
Marion has write a letter
Intended: 'MARIO has written a LETTER.'

b. *FRANCO è partito alle CINQUE.
Franco has leave at fiveo'clock
Intended: 'FRANCO has left at FIVEO'CLOCK.'

c. *SANDRA ha dato un bacio a CARLO.
Sandra has give a kiss to Carlo
Intended: 'SANDRA gave a kiss to CARLO.'

The *wh*-question counterparts of the constructions in (91) in which there are multiple *wh*-phrases are equally ungrammatical.

(92) a. *Chi a scritto che cosa?
who has write what
Intended: 'Who has written what?'

b. *Chi è partito quando?
who has leave when
Intended: 'Who left when?'

c. *Quale ragazza ha dato un bacio a quale ragazzo?
which girl has give a kiss to which boy
Intended: 'Which girl gave a kiss to which boy?'

(Calabrese 1984: 67)

The similarity in the behavior of Italian and the Ewe dialects lends further support to the Uniqueness Hypothesis, adding the Ewe dialects to the existing typology of languages; Somali, Berber, Italian, and Irish (Stoyanova 2008), among others that exhibit similar traits.

3.2.2.1 Question particles

In addition to the interactions with focus markers, *wh*-questions in the dialects have an obligatory final particle. This particle manifests in Tɔŋugbe *wh*-questions as an *o*/ɔ. In Hogbe and Pekigbe, a vowel is not realized. Rather, a low tone is realized, as shown below. The (c) examples lack the low tone, hence the ungrammaticality.

(93) **Hogbe**

a. Kofi kpɔ́ ɖeví-ɛ́.
Kofi see child-DEF
'Kofi saw the child.'

b. Me-ka-ɛ́ kpɔ́ ɖevi-í-ɛ̂?
person-WH-FOC see child-DEF.PRT
'Who saw the child?'

c. *Me-ka-ɛ́ kpɔ́ ɖevi-í-ɛ́?
person-WH-FOC see child-DEF
Intended: 'Who saw the child?'

(94) **Pekigbe**

a. Kofi kpɔ́ ɖeví-ɛ́.
Kofi see child-DEF
'Kofi saw the child.'

b. Me-é kpɔ ɖevi-í-ɛ̂?
person-FOC see child-DEF.PRT
'Who saw the child?'

c. *Me-é kpɔ ɖevi-í-ɛ́?
person-FOC see child-DEF
Intended: 'Who saw the child?'

The following are representative examples from Tɔŋugbe *wh*-questions showing that the final particle is obligatory.

(95) a. Kofi ɖu bli.
Kofi eat corn
'Kofi ate corn.'

b. Nu-ka Kofi ɖu *(o)?
thing-WH Kofi eat PRT
'What did Kofi eat?'

c. Ame-ka nyɔ́ ɖu bli *(o)?
person-WH FOC eat corn PRT
'Who ate corn?'

(96) Gáne Kofi le *(ɔ)?
where Kofi be PRT
'Where is Kofi?'

(97) Nu-ka-ta Kɔdzo dzrá gasɔ *(ɔ)?
thing-WH-head Kɔdzo sell bicycle PRT
'Why did Kɔ sell the bicycle?'

(98) Wókawóé Afi vá *(ɔ́)?
when Afi come PRT
'When did Afi come?

According to Bole-Richard (1983), Gen/Mina, also a member of the Gbe-cluster of languages, employs the final *o wh*-questions.

(99) a. Avɔ kɛ e-ple o?
cloth which 3SG-buy PRT
'Which cloth did he buy?'

b. Avɔ kɛ-o e-ple o?
cloth which-PL 3SG-buy PRT
'Which clothes did he buy?'

Additional empirical data (100) confirm Bole-Richard's report. To my knowledge, only Gen/Mina and Tongugbe have the final particle in Gbe varieties. We do not compare the systems in this dissertation.

(100) a. Nu-kɛ Kofi ɸle *(o)?
thing-WH Kofi buy PRT
'What did Kofi buy?'

b. Ame-kɛ kpɔ Kofi *(o)?
person-WH see Kofi PRT
'Who saw Kofi?'

It should be noted that Ewe yes/no questions also involve a final particle *a*. However, this particle differs from the final particle in *wh*-questions. The yes/no question final particle *a* cannot be substituted for the *wh*-questions final particle *o*. Consider the following examples.

(101) a. Ayi-ɛ bi.
beans-DEF cooked
'The beans are cooked.'

b. Ayi-ɛ bi a?
beans-DEF cook PRT
'Are the beans cooked?'

c. *Ayi-ɛ bi o?
beans-DEF cook PRT
Intended: 'Are the beans cooked?'

In addition to the above-listed contexts, the *wh*-questions final particle can occur in some other grammatical contexts.

(102) is an echo question with an obligatory final particle.

(102) E-bé nu-ka *(ɔ)?
2SG-say thing-WH PRT
'You said what?'

The examples in (103) below demonstrate that the final particle co-occurs with the NEG head. It cannot be omitted in these contexts either.

(103) a. Me-ka nyɔ́ be ye-ma-yi o *(o)?
person-WH FOC said.COMP LOG-POT.NEG-go NEG PRT
'Who said s/he wouldn't go?

b. Nu-ka wo-bé ye-ma-ɖu o *(o)?
thing-WH 3SG-said.COMP LOG-NEG-eat NEG PRT
'What did s/he say s/he won't eat?'

c. Gane Ama me-de kpɔ o *(o)?
where Ama NEG-reach before NEG PRT
'Where has Ama not been before?'

The sluicing examples here also require the final particle.

(104) a. Speaker A

Mana la kɔ́ amele.
Mana POT pick someone
'Mana will pick someone up.'

b. Speaker B

Me-ka (nyɔ́) *(ɔ)?
person-WH PRT
'who?'

(105) a. Speaker A

Mana di be ye-a ɸle nané.
Mana want COMP LOG-FUT buy something
'Mana wants to buy something'

b. Speaker B

Nu-ka (nyɔ́) *(ɔ)?
thing-WH PRT
'what?'

Note that the focus marker is optional in the above.

(106) a. Ame-le dzra agbalẽ-ɛ gake nye-me-nya ame-ka yo o
person-SPEC.INDEF sell book-DEF but 1SG-NEG-know person-WH FOC NEG
o.
PRT
'Someone sold the book, but I don't know who.'

b. Ame-le dzra agbalẽ-ɛ gake nye-me-nya ame-ka nyɔ́ ɔ
person-SPEC.INDEF sell book-DEF but 1SG-NEG-know person-WH FOC NEG
ɔ.
PRT
'Someone sold the book, but I don't know who.'

The final particle occurs in negative sluices even though the neg head is morphologically similar to the final particle. The length of the vowels in the clause final position is indicative of its presence. As illustrated in the examples below, both the neg head and the final particle take two forms depending on the preceding segment.

(107) a. Kofi mé-yi o (Tɔŋugbe)
Kofi NEG-go NEG
'Kofi didn't go.'

b. Kofi mé-kpɔ́-ɛ ɔ
Kofi NEG-see-3SG NEG
'Kofi didn't see it.'

(108) a. Nu-ka Kofi ɖu o? (Tɔŋugbe)
thing-WH Kofi eat PRT
'What did Kofi eat.'

b. Nu-ka Kofi kpɔ́ ɔ́?
thing-WH Kofi see PRT
'What did Kofi see.'

Furthermore, one wonders what the distribution of the final particle will be in Across-The-Board (ATB) contexts, where *wh*-phrases are extracted out of coordinated clauses simultaneously (Williams 1978, de Vries 2017). In this context, the final particle obligatorily

terminates the entire clause. It cannot be the final element in the first conjunct, as shown below.

(109) a. Nu-ka Kɔsi ɸle (*o) yɛ̂ Kɔdzɔ mé-ɖu o o?
thing-WH Kɔsi buy PRT and Kɔdzɔ NEG-eat NEG PRT
'What did Kɔsi buy and Kɔdzo didn't eat?

b. ŋutsu ka nyɔ́ ɸle ʊu (*o) yɛ̂ *(wo)-dzra wó gasɔ ɔ? (Tɔŋugbe)
man which FOC buy car PRT and 3SG.RP-sell POSS.SG bicycle PRT
'Which man bought a car and sold his bicycle?

It is important to note here that subject extraction in an ATB fashion requires resumption in the second conjunct. An empty trace in the second conjunct renders the construction ungrammatical.

The final particle does not occur in all types of embedded *wh*-questions. This hinges on the fact that some embedded *wh*-questions are disallowed in Ewe, as (110) shows.

(110) a. *Me-dí bé má-nyá ame-ka gblɔ nya-á ɔ.
1SG-want COMP 1SG.pot-know person-WH say matter-DEF PRT
Intended: 'I want to know who told the story.'

b. *Me-dí bé má-nyá nu-ka wo-ɸle ɔ.
1SG-want COMP 1SG.pot-know thing-WH 3SG-buy PRT
Intended: 'I want to know what he/she bought.'

Even the absence of the final particle in the embedded *wh*-questions does not ameliorate the ill-formedness observed here. A relative-clause, equivalent to "the person who/that" or "the thing that", is employed in rendering English embedded *wh*-questions in Ewe. (111) illustrates this. In these examples, there is no final particle.

(111) a. Me-dí bé má-nyá ame yɛ gblɔ nya-á.
1SG-want COMP 1SG.pot-know person REL say matter-DEF PRT
Intended: 'I want to know who told the story.'

b. Me-dí bé má-nyá nu yɛ wo-ɸle.
1SG-want COMP 1SG.pot-know thing REL 3SG-buy
Intended: 'I want to know what he/she bought.'

Embedded *wh*-questions involving the matrix verb *biɛ* 'ask' are attested. They require the final particle.

(112) a. Kofi bíɛ́ bé ame-ka nyɔ́ xɔ ga *(ɔ)? (Tɔŋugbe)
Kofi ask COMP person-WH FOC receive money PRT?
'Kofi asked who received money.'

b. Kofi bíɛ bé nu-ka Ama xɔ *(ɔ)?
Kofi ask COMP thing-WH Ama receive PRT
'Kofi asked what did Ama receive?'

How do we account for the final particles in Ewe *wh*-questions? How do the final particles interact with *wh*-phrases and the focus markers? What are the theoretical implications of these for the analyses of questions cross-linguistically? In what follows, I provide an account for deriving Ewe *wh*-questions.

3.2.2.2 Deriving Ewe *wh*-questions: an analysis

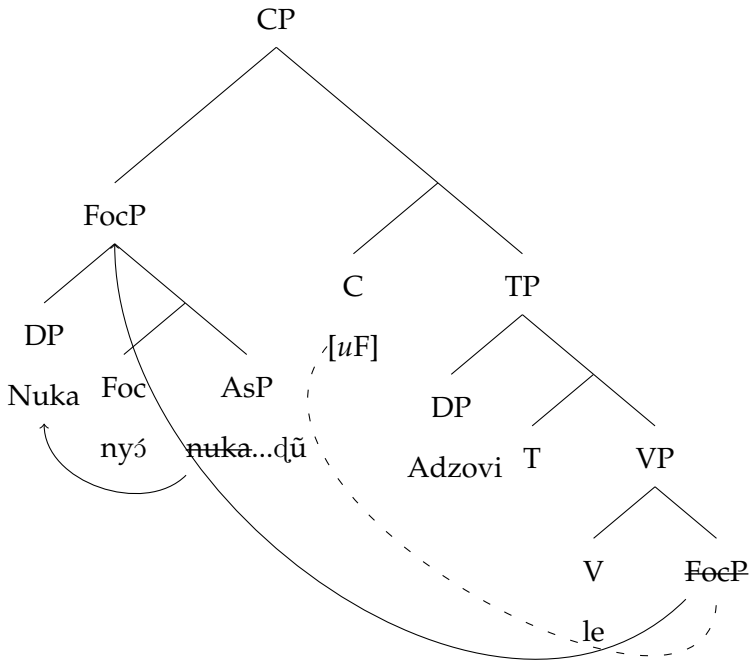
In accounting for argument focus in Ewe, I argued for a focus projection that forms a constituent with focused categories. I posited that the C head attracts the focus projection together with the focused categories to the left periphery. This analysis, as I indicated, hinges on the occurrence of the Tɔŋugbe focus marker *nyɔ́* within pied-piped nominalized VPs. It is necessary to extend the analysis to Ewe *wh*-questions as well. The reason being that *wh*-questions involve focus fronting (Horvath 1986, Stepanov 1998), and the nominalized VP-internal focus marker does occur in *wh*-questions as well, as illustrated in (113).

(113) Nu-ka nyɔ́ ɖũ Adzovi le ɔ?
thing-WH FOC eat.PROG Adzovi be PRT
'What is Adzovi eating?'

In accounting for Ewe *wh*-questions then, the focus movement of *wh*-phrases is derived by moving the focus projection and its associated elements to the specifier of CP.

This movement is triggered by the uninterpretable focus feature and the EPP feature on the C head.

(114) Question internal focus movement

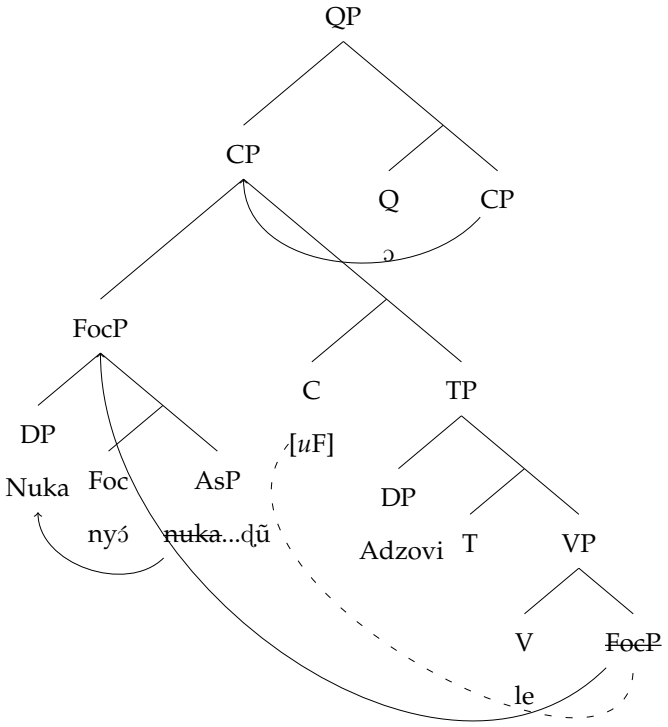


The derivation in (114) is incomplete since the obligatory sentence-final particle is not included in the structure. We must, first, establish its status in the clause so as to determine its structural position. Given that the sentence-final particle is obligatory in *wh*-questions, it types these clauses as interrogatives Cheng 1991). Following Cheng (1991), I refer to the sentence-final particle as a Q-particle, abstracting away from Cable's (2007, 2010) system. I analyze the Q-particle as a head endowed with a Q(uestion) feature. Since it types the clause as an interrogative, the entire clause must internally merge in its specifier, as depicted in (116). This movement involves the *wh*-phrase pied-piping the entire CP to the specifier of the QP. Further, the fact that Q-particle works in tandem with focus movement leads to the necessary conclusion that there is an agree relation between

the focus projection and the Q-projection, where the Q head is a probe that bears, in addition to the Q feature, an uninterpretable focus feature and an EPP feature. The focus projection, as a goal, bears an interpretable focus feature. Just as the C head deletes its uninterpretable features by agreeing with the focus projection, the Q head also agrees with the focus head and deletes its uninterpretable feature. The EPP feature on the Q head requires its specifier to be filled. Ordinarily, the goal, FocP in this case, should merge internally in the specifier of the QP. However, it is frozen in a criterial position (Rizzi 2017), hence it cannot move out of the specifier of the CP. Rather, it pied-pipes the CP to the specifier of the Question projection.

(115) Nu-ka nyɔ́ ɖũ Adzovi le ɔ?
thing-WH FOC eat.PROG Adzovi be PRT
'What is Adzovi eating?'

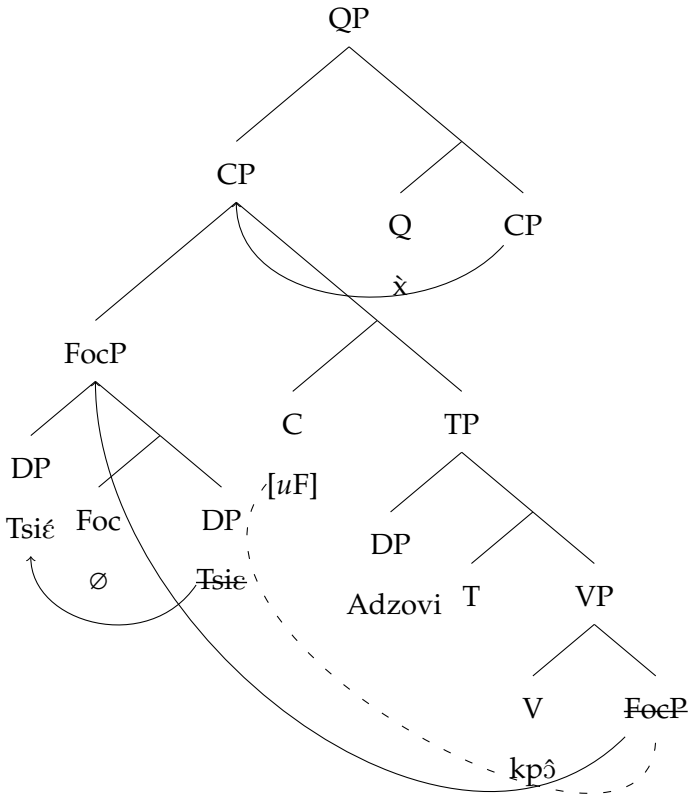
(116) Tɔŋugbe object *wh*-questions



While the analysis remains the same for Hogbe and Pekigbe, note that the head of the QP is a low tone and not a segment like the Q head in Tɔŋugbe. Note also that the focus head is null in Pekigbe object *wh*-questions, as (118) shows.

(117) Tsiɛ́ Adzovi kpɔ̂
what Adzovi see.PRT
'What did Adzovi see?'

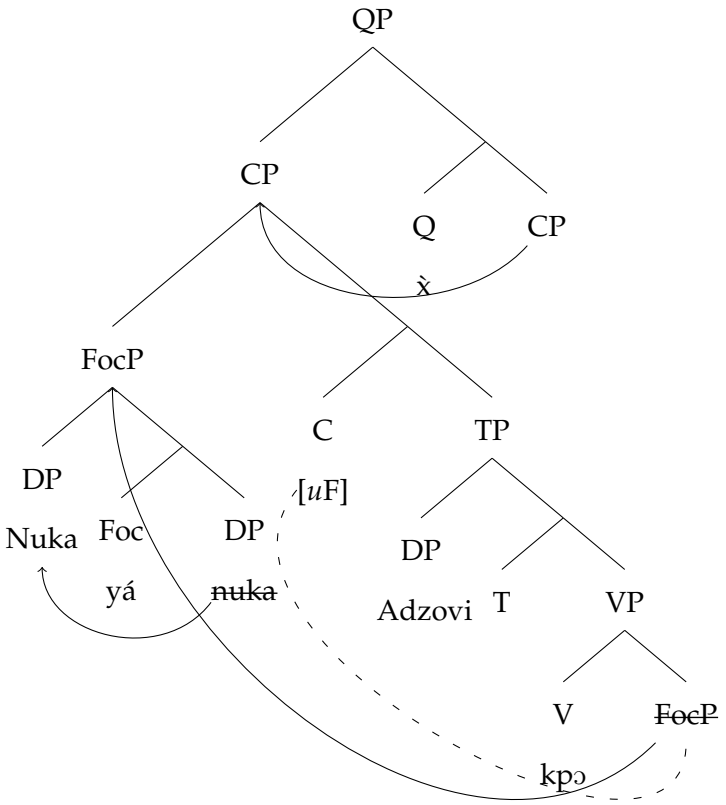
(118) Pekigbe Object *wh*-questions



The focus marker occurs in object *wh*-questions in Hogbe. The Q head is a low tone, as shown below.

(119) Nú-ka yá Adzovi kpɔ̂?
thing-WH FOC Adzovi see
'What did Adzovi see?'

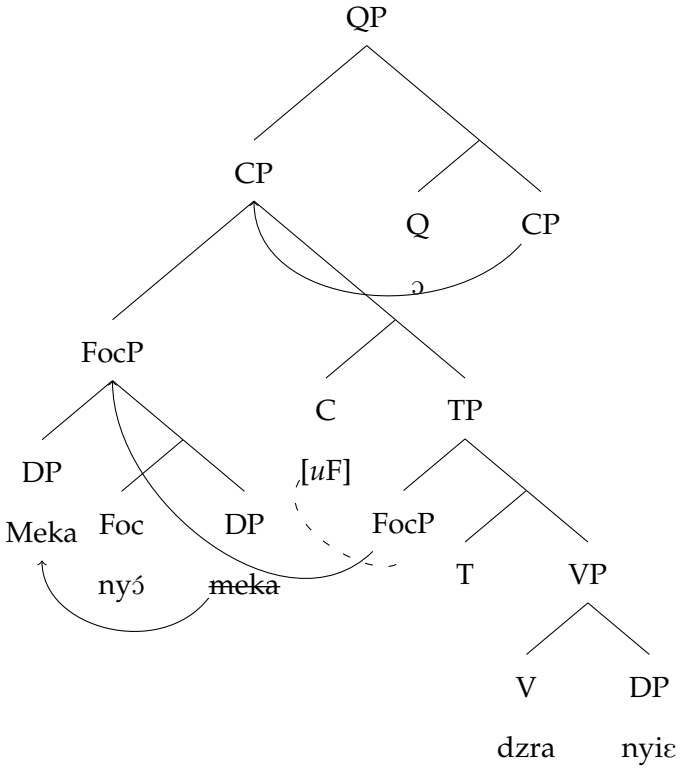
(120) Hogbe object *wh*-questions



In deriving subject *wh*-questions, the focus head forms a constituent with the subject *wh*-phrase in Spec, TP. The subject *wh*-phrase raises to the specifier of FocP to check its focus feature. The C head then probes the focus projection to delete its uninterpretable feature, and the focus projection moves to Spec, CP to satify the EPP-feature requirement of the C head. The entire CP then moves to Spec, QP to check the EPP-feature of the Q head. The derivation is illustrated below.

(121) Me-ka nyɔ̀ dzrá nyi-ɛ ɔ? (Tɔŋugbe)
person-WH FOC sell cow-DEF PRT
'Who sold the cow?'

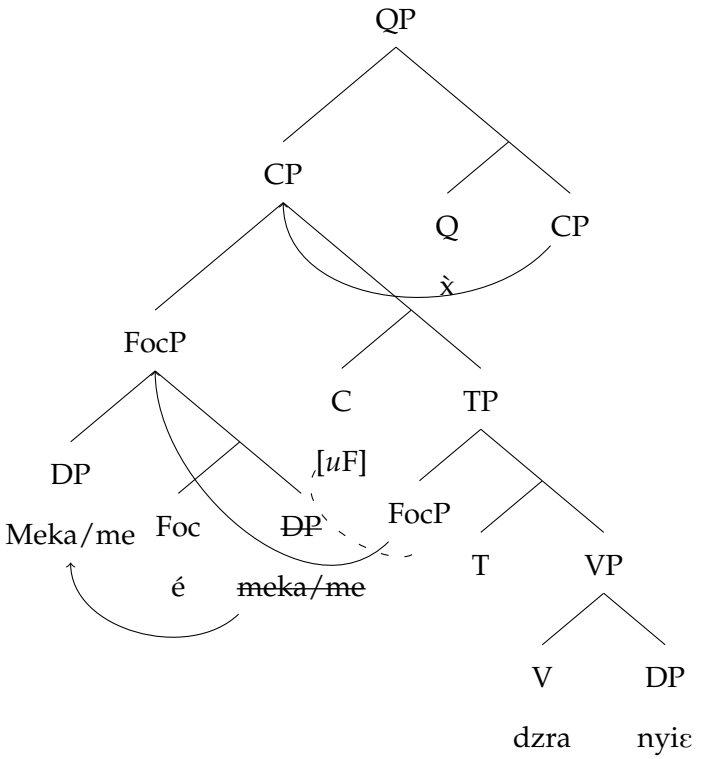
(122) Tɔŋugbe subject *wh*-questions



Again, Hogbe and Pekigbe share the same analysis as Tɔŋugbe. The difference between Hogbe and Pekigbe on one hand and Tɔŋugbe on the other is the fact that the Q head is a low tone.

(123) Me-ka/me é dzra nyi-ɛ̂? (Hogbe/Pekigbe)
person-WH FOC sell cow-DEF.PRT
'Who sold the cow?'

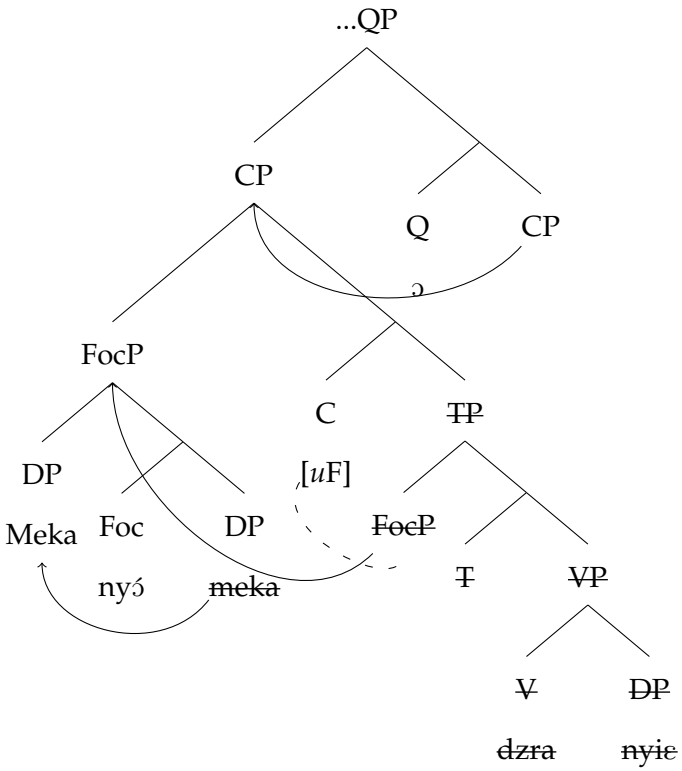
(124) Hogbe and Pekigbe subject *wh*-questions



Returning to the sluicing facts mentioned in the previous section, one wonders how they are treated under my analysis for *wh*-questions. It is established that the focus marker and the final particle survive sluicing. Similar observations have been made for Gungbe (Baltin 2010) and Nupe (Mendes & Kandybowicz 2023), a challenge to Merchant's (2001) Sluicing-COMP Generalization, according to which non-operator materials may not occur in COMP. Baltin's proposal for maintaining the generalization draws on Rizzi's (1997) articulated CP, in which the CP field is populated by such functional projections as FocP, TopP, and FinP. Baltin contends that sluicing entails the deletion of the complement of the focus projection. Mendes & Kandybowicz (2023) adopt the same analysis for the Nupe sluicing facts. Given the fact that focus is projected lower in the structure under my analysis, it appears that the Rizzi-style approach to sluicing is untenable for Ewe. I suggest, instead, that sluicing in Ewe involves TP deletion (Merchant 2001), as shown in (125).

For the sake of brevity, the initial clause and the neg morpheme are omitted in the structure.

(125) Sluicing structure



3.2.3 *Wh*-questions: potential analyses

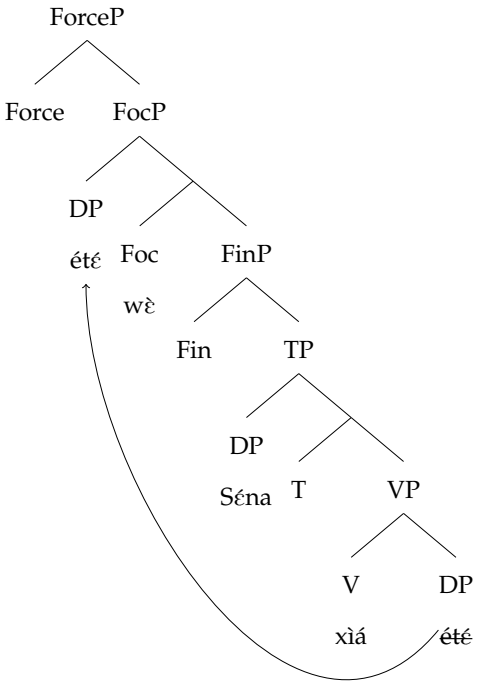
The empirical picture Ewe *wh*-questions present is not entirely novel. There are existing approaches to deriving *wh*-questions whose empirical details are similar to those of Ewe. The closest to home is Aboh's (2004) work on the left periphery in Gungbe. Cable's (2010) analysis also makes predictions for the world's languages, hence the state of affairs in Ewe is relevant to his analysis.

3.2.3.1 Aboh (2004) and Aboh & Pfau (2011)

Aboh's (2004) work on in Gungbe, a closely related language to Ewe, presents interesting empirical facts on the nature of certain left peripheral elements in Gungbe. Following Rizzi's (1997) cartographic framework for the treatment of left peripheral elements, Aboh provides analyses for the Gungbe facts. The key theoretical insight of Aboh's analysis directly related to the issues in this dissertation is that *wh*-phrases and focused categories are attracted to the specifier of the same head since they compete for the same position, Spec, FocP. As shown below, the *wh*-phrase *étɛ́* raises to the specifier of the focus projection in the left periphery.

(126) étɛ́ wɛ́ Sɛ́ná xìá?
what FOC Sena read
'What did Sena read?'

(127) Deriving *wh*-questions in Gungbe

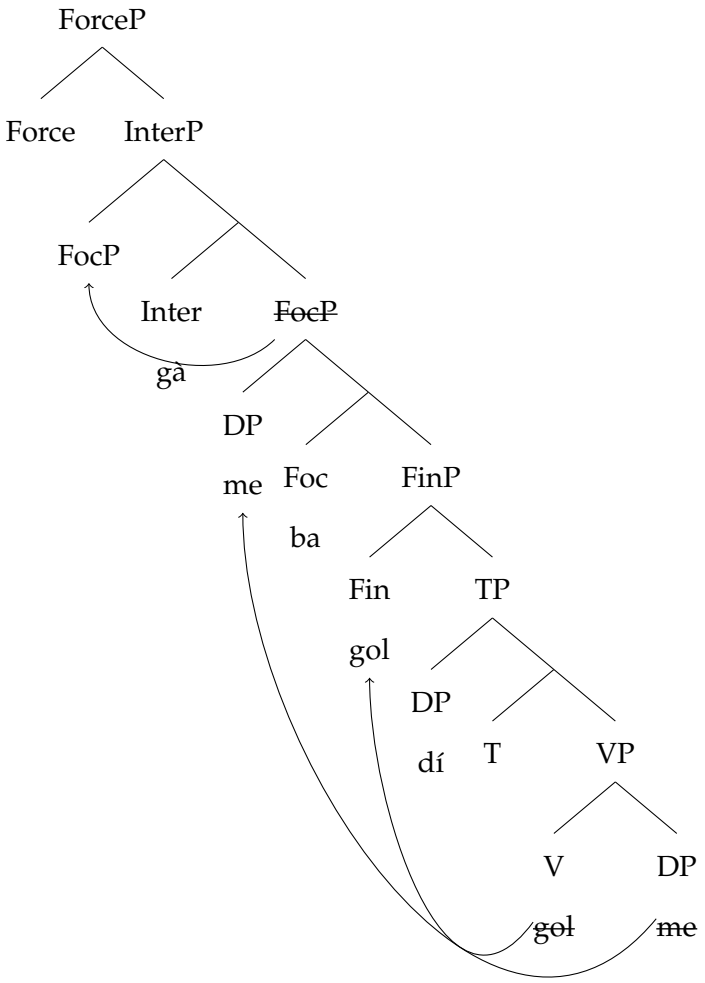


The question that arises is whether his analysis can be extended to a similar phenomenon in Ewe since these languages (Gungbe and Ewe) are closely related and the empirical facts are largely similar. Note that the focus head is obligatory in Gungbe *wh*-questions while it is optional for non-subjects in Ewe. Note also that Tɔŋugbe *wh*-questions have a sentence-final particle, which Gungbe *wh*-questions lack.

Building on Aboh's (2004) work, Aboh & Pfau (2011) investigate *wh*-questions in Lele, a Chadic language, which shares similar properties with Ewe with respect to the presence of a sentence-final particle in *wh*-questions. Aboh & Pfau (2011) argue that while Lele allows both *wh*-in-situ and *wh*-ex-situ, the ex-situ cases, like (128), involve movement of the *wh*-phrase to Spec, FocP in the left periphery, and the FocP, including the FinP, moves to Spec,InterP, as illustrated in (129). Even though Lele is an SVO language, it is not clear why the verb precedes the subject pronoun in (129), as Aboh & Pfau (2011) are silent on it. I assume that the verb undergoes some kind of head movement to Fin.

(128) Me ba gol dí gà?
what FOC see 3.SG INTER
'What did he see?'

(129) *Wh*-movement in Lele



Aboh & Pfau (2011) claim that "the expression of interrogative force in wh-questions must be dissociated from wh-phrases" (p.15). They defend this claim with data from Nweh *wh*-questions, in which a sentence-final particle occurs and *wh*-phrases do not move to Spec FocP, but the whole proposition moves to Spec, InterP.

Two questions arise here: first, is there any link between *wh*-phrases and the sentence-final particles? If yes, what is this link? if not, why not? Second, is there evidence for covert movement of the in-situ *wh*-phrase in Nweh? If yes, the claim that the *wh*-phrases

remain within the TP is untenable.

Given the empirical facts in Tɔŋugbe focus and VP pied-piping cases, Aboh's (2004) analysis for Gungbe *wh*-questions and the analysis for *wh*-questions in Lele in Aboh & Pfau (2011) cannot be extended to Tɔŋugbe.

3.2.3.2 Cable (2007, 2010) and Sulemana (2019)

Given empirical observations in Tlingit, Cable (2007, 2010) argues for a novel analysis for *wh*-questions cross-linguistically. The main empirical detail forming the basis for Cable's argument is the occurrence of Q-particles in Tlingit *wh*-questions. Similarly, Sulemana (2019) discusses covert movement in Buli *wh*-questions. An important element in Sulemana's analysis is a Q-particle, whose presence diagnoses movement. In this chapter, I discuss aspects of these analyses within the context of the empirical patterns the Ewe dialects under study present.

Cable reports that Tlingit *wh*-words are usually clause-initial elements in *wh*-questions. The *wh*-words are followed by the Q-particle *sá*, which could co-occur with focus markers. Cable illustrates these properties with the followiing examples from Dauenhauer & Dauenhauer (2000).

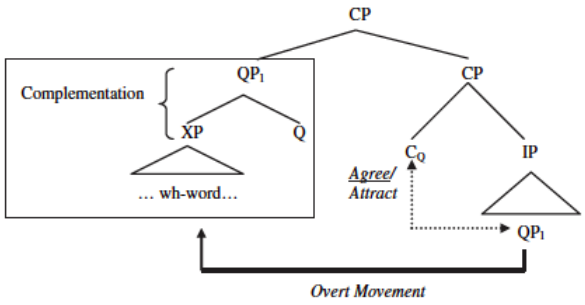
(130) a. Wáa sá shtudinookw i éesh?
how Q he.feels your father
'How is your father feeling? (Dauenhauer & Dauenhauer 2000: 138)

b. Daa sáwé i éesh al'óon?
what Q.FOC your father he.hunts.it
'What is your father hunting?' (Dauenhauer & Dauenhauer 2000: 186)

Cable follows the assumption, as in Beck (2006), that *wh*-words are endowed with only a focus-semantic value, hence they are semantically deficient. Cable (2010) argues for a treatment of *wh*-operators in which *wh*-phrases are contained within QP projection

headed by a Q-particle, which according to him, operates over sets, which is the focus-semantics *wh*-words contribute. According to Cable, the QP is attracted to the left periphery via a probe-goal relation between the interrogative C head and the QP, and since the *wh*-phrase is within the c-command domain of the Q head, specifically its sister, it is fronted together with the QP by pied-piping. Under Cable's analysis, *wh*-fronting is epiphenomenal, as it is contingent on the movement of the QP. (131) illustrates Cable's analysis.

(131) Structure of Tlingit *Wh*-questions



An important point Cable makes is that the Q-particle can form a portmateau with focus particles in Tlingit, as shown in (130). The Q-particle in Tlingit is, therefore, different from the focus markers in the language. Q-particles of the Tlingit type are not attested in Ewe. A closely related particle in Ewe, specifically Tɔŋugbe, is the final particle in *wh*-questions. One may assume that this final particle is a Q-particle in the sense of Cable (2007, 2010), though it differs from the Tlingit Q-particle in terms of structural distribution. In my analysis, the focus markers correspond to Cable's Q-particle, as they share some distribution properties. The Q-particle in my analysis is the final particle that occurs in *wh*-questions.

The mechanism proposed in Cable's analysis Tlingit *wh*-questions, involving the Q-particle, satisfactorily derives argument focus movement in Ewe, leading to the elimination of a focus projection in the CP domain. When we consider the architecture of Ewe

wh-questions, assuming that the final particle is the Q-particle like *sa* in Tlingit, the analysis does not go through. This stems from the fact that the Ewe question particle does not select a *wh*-phrase, a DP. As I have argued earlier, the Ewe question particle selects a CP. To extend Cable's analysis to the Ewe facts, one would have to postulate an external merge configuration in which the question particle takes a *wh*-phrase as its complement. For Object *wh*-phrases, in (132) for instance, this seems plausible, as the *wh*-phrase and the question particle are adjacent to each other at external merge.

(132) Kofi ɸle nu-ka ɔ? (Tɔŋugbe)
Kofi buy thing-WH PRT
'Kofi bought what?'

However, the QP formed cannot raise to the left periphery. Raising the QP to left periphery will result in an ill-formed structure in which the Q head is not at the right edge of the clause. It could be suggested that the Q head is stranded, a postulation that is clearly not on the right track. It is inconceivable for a head that projects and gets attracted to a higher position to be stranded.

It is even more difficult to apply Cable's analysis to subject *wh*-phrases. At external merge, it is implausible to assume that the Q-particle takes the subject *wh*-phrase as its complement.

(133) Ame-ka: dzi ha ɔ? (Tɔŋugbe)
person-WH.FOC sing song PRT
'Who sang the song?'

Perhaps, the question particle undergoes rightward movement. But what will be the motivation for this rightward movement? The problems mentioned here render Cable's analysis in adequate in accounting for the Ewe data if the Q-particles are considered the same.

Sulemana's (2019) analyses of *wh*-questions and Q-particles in Buli follows Cable's (2007, 2010) treatment of *wh*-operators. In Buli, a Mabia language spoken in Northern

Ghana, Sulemana (2019) reports that the Buli focus marker *ka* occurs in *wh*-questions as well, as shown in (134) and (135). He treats *ka* as a Q-particle, arguing that *ka* is central to (non)movement. In particular, the absence of *ka* bleeds covert movement.

(134) Bí:ká dìg *(ká) b^{w}ā:?
child.DEF cook Q what
'What did the child cook?'

(135) (Ká) wānā *(ālì) dìg lāmmú:?
(Q) who ALI cook meat.DEF
'Who cooked the meat?'

It should be noted that *ka* and the Ewe focus markers *yá*, *(y)é*, *(y)ɛ́* and *nyɔ́* share a few distributional properties. They are adjacent to *wh*-phrases. They also combine with only nominals. Importantly, Sulemana reports that *ka* can be used as a focus marker. In addition to these distributional properties, a striking similarity between Buli and Ewe beyond the occurrence of these particles in *wh*-question contexts is the lengthening of the sentence-final vowel in Buli *wh*-questions and the occurrence of a final vowel o/ɔ or a low tone in Ewe.

It is noteworthy, however, that Buli allows both *wh*-ex-situ and *wh*-in-situ while Ewe allows only *wh*-ex-situ. In *wh*-ex-situ contexts, the Buli *ka* is optional. Like *ka*, *ya* and *nyɔ́* can be optional in object *wh*-questions. The picture that is emerging here raises the question as to whether *ka* is a quintessential question particle. Sulemana (2019) did not discuss the syntax of the vowel lengthening that is associated with *wh*-questions in Buli. Might the vowel lengthening be the Q-particle instead of *ka*? Analyzing *ka* as a focus marker and the vowel lengthening as the question particle could predictably allow for Buli focus constructions and *wh*-questions to be derived, with some modifications, under the proposal I put forward for the Ewe case. Alternatively, the assumption can be made that there are different Q-particles with varying treatments, where some are adjacent to *wh*-phrases (Tlingit and Buli) and others occur clause finally (Ewe).

3.3 Ewe question particles and the Final-Over-Final Constraint

Holmberg (2000), Biberauer et al. (2008), Biberauer et al. (2014), and Sheehan et al. (2017) argue that head-initial structures cannot be dominated by head-final structures. Discussing apparent counterexamples to the FOFC, Sheehan et al. (2017) note that Q-particles vary with respect to their formal and interpretive characteristics. They also point out that the patterns observed in these languages indicate that the Q-particles are noncomplementizer elements. Crucially, they note that the Q-particles in these languages tend to be optional, an indication that they may be adverbs, hence the assumption that the Q-particles are necessarily functional heads cannot be made. In this section, I discuss the Ewe *wh*-question facts within the context of the Final-Over-Final-Constraint. I contend that while the derivation I put forth seems to violate the FOFC, a close inspection of the mechanism that derives the *wh*-facts suggests otherwise.

The derivation for Ewe *wh*-questions argued for in this chapter yields a configuration in which a final particle heads a phrase that dominates a head-initial structure. This violates the descriptive statement of the FOFC. In discussing the formal mechanism for deriving the FOFC, Biberauer et al. (2014) propose that the FOFC rests on movement and how it is triggered. They note that the feature that triggers movement, represented by caret, spreads from the base of the extended projection to higher heads in the structure followed by subsequent movement operations.

(136) The Final-over-Final Constraint (formal statement)

If a head α_i in the extended projection EP of a lexical head L, EP(L), has ˆ associated with its [+/-V]-feature, then so does α_{i+1}, where α_{i+1} is selected by α_i in EP(L).

In my analysis however, feature spreading is not at play. Rather, pied-piping, where the *wh*-phrase pied-pipes a CP to the specifier of the QP projection. We are led to the conclusion that the derivation of the Ewe *wh*-question does not incur a violation of the Final-over-Final-Constraint.

Also, the adverbial analysis of Q-particles does not seem to hold in Ewe since the Q-particle in the three dialects under consideration is not an adverb, as it is obligatory and can co-occur with adverbs. In such cases, it follows the adverb. Consider the pattern in (137).

(137) a. Nu-ka nyɔ́ e-bé Kofi né xlɛ blewublewu o? (Tɔŋugbe)
thing-WH FOC 2SG-say.COMP Kofi JUS read slowly PRT
'What did you ask Kofi to read slowly?'

b. *Nu-ka nyɔ́ e-bé Kofi né xlɛ blewublewu? (Tɔŋugbe)
thing-WH FOC 2SG-say.COMP Kofi JUS read slowly
Intended:'What did you ask Kofi to read slowly?'

The adverb *blewublewu* readily occurs with the Q-particle in (137a). If the Q-particle were an adverb, either *blewublewu* or the Q-particle would be an adverbial modifier. There is no modification at play here. Furthermore, the Q-particle cannot be omitted in a *wh*-question. (137b) illustrates this.

3.4 Summary

I have shown in this chapter that my proposal for the derivation of focus constructions in Ewe carries over straightforwardly to Ewe *wh*-questions. Specifically, given that nominalized VP-internal focus marking is available in *Wh*-questions, a nominal spine focus projection is postulated. Foci, here, *wh*-phrases, undergo movement to the specifier of the focus projection in the nominal domain, and the C head bearing a focus feature probes and attracts the FocP to its specifier. Further, I have argued that the final particle in Ewe

wh-questions heads a Q(uestion) Phrase. The Q head agrees with the *wh*-phrase and attracts it to its specifier, pied-piping the entire CP to Spec, QP. I have also pointed out that my proposal employs a formal mechanism that is at variance with the mechanism for deriving the Final-Over-Final Constraint, hence a violation is not incurred.

4 | Relative Clauses

4.1 Introduction

In the preceding chapter, I explored the interactions between *wh*-phrases, focus markers, and question particles in the three dialects of Ewe under study. I showed that *wh*-phrases undergo focus movement and entire clauses, typed as questions, move to the specifier of the question particles. The key components of the Ā-quadrangle proposal from the previous chapter are the *wh*-particle *ka* and the focus markers. In this chapter, I consider relative clauses. I discuss the architecture of relative clauses in the three dialects. I show that the relative pronouns are related to demonstratives given their distribution with respect to relativized DPs and plural markers. I adopt a raising analysis for the derivation of the relative clauses, drawing inspiration from Cable (2007, 2010) and Evile & Pesetsky (2023), both of which appeal to pied-piping in deriving *wh*-related phenomena. I introduce the remaining components, the relative pronouns and the relative clause particle *xé*, of the Ā-quadrangle from the structure of relative clauses. Further, I provide an analysis for the variability in the position of the relative particle *xé* in relative clauses involving PP pied-piping and possessed DP pied-piping. I argue for an analysis which permits postposition stranding and possessor extraction of some kind. I show that the postposition stranding and possessor extraction of the sort permitted here involve a domain restriction on extraction. Finally, I discuss the syntax of the factive construction, which is related to

relative clauses. In particular, I show how it is similar and, at the same time, different from relative clauses.

4.2 The basic relative clause

Ameka (1991) and Dzameshie (1995) provide analytical accounts on Ewe relative clauses. Their focus is on the structure and semantics of Standard Ewe relative clauses illustrated below.

(138) nyɔ́nu si ɸo detsi-a (Standard Ewe)
woman who prepare soup-DEF
'the woman who prepared the soup'

(Dzameshie 1995:31)

(139) Me-kpɔ́ nyɔ́nu si ɸé ga bu la (Standard Ewe)
1SG-see woman REL POSS money lost TP
'I saw the woman whose money was lost'

(Ameka 1991:62)

Lewis (1985) discusses the structure of relative clauses in the Aŋlɔ̃ dialect of Ewe within the context of language universals.

(140) ame si ɸle agbalẽ-a (Aŋlɔ̃)
person REL buy book-DEF
'the person who bought the book'

(Lewis 1985:198)

Also, Huttar, Aboh, & Ameka's (2013) comparative work on relative clauses in Suriname Creoles and Gbe languages also considers Standard Ewe relative clauses, Aŋlɔ̃ relative clauses, and inland Ewe relative clauses. Although the label 'inland' describes several dialects, including Hogbe and Pekigbe, of Ewe spoken in the northern parts of the Volta

region of Ghana (See Ameka 2001), data are drawn from the Anfoegbe dialect. It is important to point out a difference between the (Aŋlɔ̃) data Lewis (1985) and Huttar et al. (2013) provide. The relative pronoun in Lewis 1985 is *si* and *yi* in Huttar et al (2013). Note also that in Standard Ewe, as exemplified above, the relative pronoun is *si*. While it is reported that Standard Ewe is based largely on (Aŋlɔ̃) (Ansre 1974), it is not entirely clear whether there is variation within (Aŋlɔ̃) with respect to relative pronoun. I do not pursue this issue here.

(141) ɖevi yi kpɔ da etsɔ la (Aŋlɔ̃)
child REL see snake yesterday TOP
'a child who saw a snake yesterday'

(Huttar et al. 2013:111)

Of interests to us in this dissertation is the structure of relative clauses in the Hogbe, Pekigbe, and Tɔŋugbe dialects of the Ewe language and how they contribute to deepening our understanding of the Ā-quadrangle subsystem of Universal Grammar.

4.2.1 Ewe DP

In order to get a clear picture of the structure of Ewe relative clauses, it is worthwhile to introduce the DP in Ewe, showing the distribution of its elements. Nominal phrases in Ewe contain a noun, a pronoun, or a numeral. In the literature on Ewe DP, elements such as the adjective, definite and indefinite articles, demonstratives, the plural marker, a classifier, and intensifiers may also occur within the nominal phrase (Ameka 1991, 2011, Duthie 1996). (142) shows the order of the aforesaid elements in the DP.

(142) ati kɔkɔ woame eve ma-ɔ
tree tall CLF two DEM-PL
'those two tall trees'

Adopting Abney's (1987) DP-hypothesis, I assume that Ewe nominal phrases are Determiner Phrases (DP). The D head may be the definite article a/la, which has phonologically-conditioned allomorphs in Tongugbe, as shown in (143). The *la* variant of the standard Ewe definite article does not occur in Tongugbe.

(143) a. agble-a
farm-DEF
'the farm'

b. kotoku-ɔ
sack-DEF
'the sack'

c. aɸe-ɛ
house-DEF
'the house'

4.2.2 Demonstratives

In the three dialects, the proximal demonstratives follow the nouns in the DP. The Tɔŋugbe and Pekigbe proximal demonstratives are more similar to each other than they are to the Hogbe proximal demonstrative, as shown below.

(144) a. zikpe yɛ (Tɔŋugbe)
chair DEM
'this chair'

b. zikpe yɛ-ɔ
chair DEM-PL
'these chairs

(145) a. kpukpo yilɛ (Pekigbe)
chair DEM
'this chair'

b. kpukpo yilɛ-ɔ
chair DEM-PL
'these chairs'

(146) a. zikpi ke (Hogbe)
chair DEM
'this chair'

b. zikpi ke-wɛ
chair DEM-PL
'these chairs'

The distal demonstratives in the three dialects share the form -m-. Like the proximal demonstratives, they follow the noun in the DP. As the (b) examples show, in plural-marked DPs, the demonstratives take the plural marker.

(147) a. zikpe ma (Tɔŋugbe)
chair DEM
'that chair'

b. zikpe ma-ɔ
chair DEM-PL
'those chairs

(148) a. kpukpo emí (Pekigbe)
chair DEM
'that chair'

b. kpukpo emí-o
chair DEM-PL
'those chairs'

(149) a. zikpi mí (Hogbe)
chair DEM
'this chair'

b. zikpi mí-wɛ
chair DEM-PL
'these chairs'

The relative pronouns in the three dialects are homophonous to demonstratives[1]. It is noteworthy that while the basic demonstrative in Hogbe (150) and Tɔŋugbe (151) relative

[1]As to whether it is an actual case of homophony or one is derived from the other, I leave it for further research.

clauses is the proximal demonstrative, Pekigbe uses the distal demonstrative, as illustrated in (152). Two questions arise; (a) why do these dialects select one of two demonstratives in constructing relative clauses? (b) why do Hogbe and Tɔŋugbe select the proximal demonstrative while Pekigbe selects the distal demonstrative? It is not immediately clear what the answers to these questions are.

(150) a. zikpe ke xé Kɔku ɸle (Hogbe)
chair REL.P REL Kɔku buy
'the chair that Kɔku bought'

b. zikpe ke-wɛ xé Kɔku ɸle (Hogbe)
chair REL.P-PL REL Kɔku buy
'the chairs that Kɔku bought'

c. ame ke xé ɸle zikpi
person REL.P REL buy chair
'the person who bought a chair'

(151) a. zikpi yɛ ∅ Kɔku ɸle (Tɔŋugbe)
chair REL.P REL Kɔku buy
'the chair that Kɔku bought'

b. zikpi yɛ-ɔ ∅ Kɔku ɸle (Tɔŋugbe)
chair REL.P-PL REL Kɔku buy
'the chairs that Kɔku bought'

c. ame yɛ ∅ ɸle zikpe
person REL.P REL buy chair
'the person who bought a chair'

(152) a. kpukpo emí xé Kɔku ɸle (Pekigbe)
chair REL.P REL Kɔku buy
'the chair that Kɔku bought'

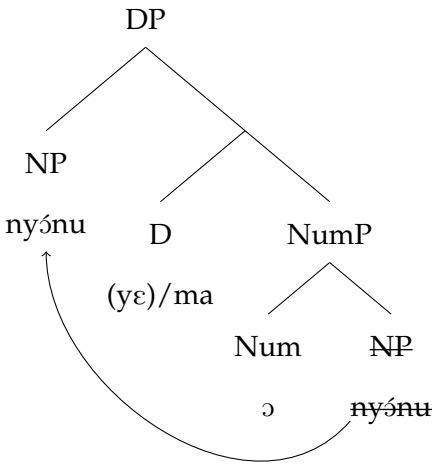
b. kpukpo emí-o xé Kɔku ɸle (Pekigbe)
chair REL.P-PL REL Kɔku buy
'the chairs that Kɔku bought'

c. ame emí xé ɸle kpukpo
person REL.P REL buy chair
'the person who bought a chair'

The observation that the three dialects employ demonstratives in the construction of relative clauses is particularly clear in the (b) examples, where the relativized DPs are plural marked. Just like the demonstratives in non-relative DPs exemplified above, the relative pronouns in the relative clauses take the plural marker.

Following Cinque's (2005) classification of DPs in the world's languages, I assume that the order of elements in the Ewe DP is derived via NP raising and some roll-up movement.

(153) NP Movement in the Ewe DP



4.3 Towards a raising analysis of Ewe relative clauses

A raising analysis has been postulated for the derivation of relative clauses (Vergnaud 1974, Carlson 1977, Kayne 1994, Bianchi 1999, 2000, among others). A matching analysis has also been posited (Lees 1960, 1960; Chomsky 1965, among others). It is also argued that relative clauses are ambiguous between matching and raising structures (Grosu & Landman 1998, Sauerland 1998, 2003, Hulsey & Sauerland, 2006, among others). In this section, I show that there is ample evidence for a raising analysis of Tongugbe relative clauses. In particular, I explore reconstruction effects in reflexive and reciprocal binding,

variable binding, idiom chunks, and scope interactions.

4.3.1 Reconstruction

I draw on binding facts, idiom chunks, and extraposition in Tɔŋugbe to support my choice of the raising analysis in deriving relative clauses in Ewe. Condition C reconstruction facts which force a matching analysis in addition to raising in English do not have the same effect in Tɔŋugbe.

4.3.1.1 Reflexive binding

One source of evidence in support of the raising analysis of relative clauses is the behavior of the head noun in binding phenomena (Bhatt 2002). In particular, the head NP is reconstructed into the relative clause at LF in (154) for example. Assuming that the head NP is external to the relative clause, a Condition A violation will be incurred.

(154) The portrait of himself$_i$ that John$_i$ painted is extremely flattering. (Bhatt 2002)

In what follows, I show that in Tɔŋugbe, binding facts favor the head raising analysis. Drawing on (155) and (156), I begin by demonstrating that Anaphors in Tɔugbe are subject to Condition A of the Binding Theory. The reflexive *eɖokoe* in (155a) is effectively bound by the its c-commanding antecedent *Kofi*. (155b), however, ill-formed because the antecedent *Kofi* does not c-command the reflexive.

(155) a. Kofi$_i$ kpɔ e-ɖokoe$_i$ le ahuhɔɛ̃ me.
Kofi see 3SG-self be mirror POSTP
'Kofi saw himself in a mirror.'

b. *E-ɖokoe$_i$ kpɔ Kofi$_i$ le ahuhɔɛ me.
3SG-self see Kofi be mirror POSTP
Intended: 'Kofi saw himself in a mirror.'

Similarly, the reciprocal *wonɔɛɔ* is bound by its c-commanding antecedent pronoun *wó* in (156a). In (156b), the antecedent pronoun does not c-command the reciprocal, hence the ungrammaticality.

(156) a. Wó$_i$-lɔ̃ wonɔɛɔ$_i$.
3PL-love eachother
'They love each other.'

b. *Wonɔɛɔ$_i$ lɔ̃-wó$_i$.
eachother love-3PL
Intended: 'They love each other.'

In (157), the reflexive *eɖokoé* 'himself' cannot be bound since there is no reconstruction. In (158b), the reconstruction of the reflexive into the relative clause allows it to be bound by the antecedent *Kofi*. This suggests that the reflexive originates from within the relative clause and raises to its external position. Note that if the binder is not a third person, the construction is ungrammatical, as shown in (158c).

(157) *Éɖokoe$_i$ wó foto ma do vɔvɔ̃lĩ Kofi.
3SG-self POSS.SG picture DEM plant fear Kofi
*'That picture of himself frightened Kofi.'

(158) a. Kofi$_i$ kpɔ e-ɖokoe$_i$ wó foto (Tɔŋugbe)
Kofi see 3SG-self POSS picture
'Kofi saw a picture of himself.'

b. É-ɖokoe$_i$ wó foto yɛ Kofi kpɔ dó vɔvɔ̃lĩ-i$_i$.
3SG-self POSS picture REL.P Kofi see plant fear-3SG
'The picture of himself that Kofi saw frightened him.'

c. *é-ɖokoe$_i$ wó foto yɛ me-kpɔ dó vɔvɔ̃lĩ-i$_i$.
3SG-self POSS picture REL.P 1SG-see plant fear-3SG
Intended: 'The picture of himself that I saw frightened him.'

(159) explains the reconstruction, where *é-ɖokoe wó foto* 'picture of himself' leaves a copy in the relative clause. *Kofi* binds the reflexive *é-ɖokoe* in the copy.

(159) É-ɖokoe$_i$ wó foto yɛ Kofi kpɔ (é-ɖokoe$_i$ wó foto) dó vɔvɔ̃lĩ-i$_i$.
3SG-self POSS picture REL Kofi see plant fear-3SG
'The picture of himself that he saw frightened him.'

4.3.1.2 Reciprocal binding

Reconstruction facts in reciprocal binding also provide evidence for the raising analysis in Tongugbe. As (160) shows, reciprocals are reconstructed into the relative clause in Tɔŋugbe. Assuming a matching analysis in which the relativized DP is external to the relative clause will result in a condition A violation. The binder in (160c) cannot antecede the reciprocals, hence the ungrammaticality.

(160) a. Wó-kpɔ wonɔɛo be foto.
3PL-see eachother POSS.PL picture
'They saw each other's photos.'

b. Wónɔɛo$_i$ be foto yɛ wó$_i$-kpɔ (wónɔɛo be foto) do dzidzɔ
eachother POSS.PL picture REL 3PL-see plant happy for-3PL
na-ɔ.

'The photos of each other that they saw made them happy.'

c. *Wónɔɛo$_i$ be foto yɛ me$_i$-kpɔ do dzidzɔ na-ɔ.
eachother POSS.PL picture REL.P 1SG-see plant happy for-3PL
*'The photos of each other that I saw made them happy.'

4.3.1.3 Variable binding

Furthermore, variable binding facts in Tɔŋugbe also support a head raising analysis (Aoun & Li, 2003). In (161b) the variable pronoun is interpreted within the relative clause, indicating that it reconstructs into the relative clause to be bound the quantified DP. The quantified DP cannot bind the variable if it is interpreted in the external position.

(161) a. Đevi$_i$ ɖesiaɖe kpɔ wó$_i$ nanɛ wó foto.
child every see POSS.SG mother POSS.SG picture
'Every child saw his mother's picture.'

b. Wó$_i$ nanɛ wó foto yɛ ɖevi ɖesiaɖe$_i$ kpɔ (wó$_i$ nanɛ wó foto)
POSS.SG mother POSS.SG picture REL child every saw
'the picture of his mother that every child saw'

4.3.1.4 Idiom chunks

Another argument advanced for the raising analysis is the interpretation of idiom chunks. Idiomatic readings can only be obtained if idioms appear as constituents of larger expressions. Bhatt (2002) notes that idiom chunks appear as head NPs of relative clauses where these heads are associated with positions within the relative clauses. A case in point is example (162c).

(162) (attributed to Brame 1968; ex.(35) from Schachter 1973)

a. We made a headway.

b. *(The) headway was satisfactory.

c. The headway that we made was satisfactory.

(Bhatt 2002:47)

Here, the head noun in (162) is not part of the larger expression required for an idiomatic reading to be obtained, hence the ungrammaticality. In (162c) however, the head noun is associated with the larger expression internal to the relative clause.

Tongugbe idioms exhibit a similar behavior. Take for example (163) and (164). We see that in the (b) examples, the core noun constituents of the idiomatic expressions are not part of the larger expressions, hence the idiomatic reading is not available. In the (c) examples, the idiom chunks are associated with the larger expressions within the relative clauses, pointing to the fact that the head nouns raise from within the relative clauses[2].

[2]Even though the examples seem factive, the fact remains that the idiom chunks are associated with the larger expressions. I discuss factives later in this chapter

(163) a. Kofi de asi nu me.
Kofi put hand mouth POSTP
'Kofi has eaten./lit. Kofi has put his hand into mouth.'

b. *Asi-ɛ do dzidzɔ ne wó nanɛ.
hand-DEF plant happy for POSS.SG mother

c. Asi yɛ Kofi de nu me do dzidzɔ ne wó nanɛ.
hand REL Kofi put mouth POSTP plant happy for POSS.SG mother
'The food Kofi ate made his mother happy.'

(164) a. Ama ɖo tsi.
Ama arrange water
'Ama is sick. /lit. Ama has arranged water.'

b. *Etsi-ɛ te le dzi-nye.
water-DEF press PREP POSTP-1SG

c. Etsi yɛ Ama ɖó te le dzi-nye.
water REL Ama arrange press PREP POSTP-1SG
'Ama's sickness makes me sad.'

4.3.1.5 Scope interaction

Scope interaction facts provide another piece of evidence for the raising analysis of relative clauses (Aoun & Li 2003). According to Aoun & Li (2003: 98), the fact that a relativized nominal that is definite can be interpreted as having narrow scope in relation to the subject quantifier phrase in a relative clause shows that the head noun can be interpreted in the direct object position. The Tongugbe examples are consistent with this point. In (165a), the quantified object *agbalẽ wóame eve* 'two books' has narrow scope with respect to the quantified subject. The quantified object has wide scope in (165b) because it is definite. In (165c) a narrow scope interpretation of the quantified object can be obtained, yielding the distributive reading, in which each child will receive two separate books. This shows that the head noun can be interpreted in the direct object position.

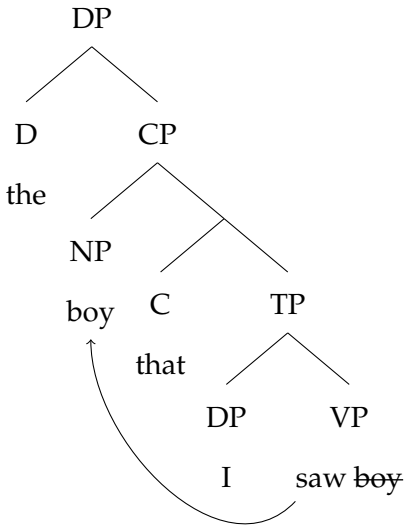
(165) a. Ðevi ɖesiaɖe la xɔ agbalẽ wóame eve.
child every FUT receive book CLF two
'Every child will receive two books.'

b. Ðevi ɖesiaɖe la xɔ agbalẽ wóame eve-ɛ-ɔ
child every FUT receive book CLF two-DEF-PL
'Every child will receive the two books.'

c. Me-ɸle agbalẽ wóame eve yɛ-PL ɖevi ɖesiaɖe la xɔ.
1SG-buy book CLF two REL.P-PL child every FUT receive
'I bought the two books that every child will receive.'

In deriving raising relatives, I adopt the analysis in which D takes a CP complement, and the modified noun moves from within the CP to Spec, DP (Kayne 1994, Bianchi 2000).

(166) Raising structure



However, I argue that the element that originates from the CP is a DP in line with what is proposed by Borsley (1997), Bianchi (1999, 2000) and Aoun & Li (2003) for English. Borsely (1997) notes a number of syntactic phenomena in arguing for DP-trace instead of an NP in the CP of non-wh-relatives. It is necessary to restate here that Tongugbe does not have a wh/non-wh dichotomy of relative clauses. The goal then is to show that it is a DP, not an NP, that moves to Spec, CP in the raising analysis of Tongugbe relative clauses. A

phenomenon Borsley draws on is coindexation of the trace with a pronoun. In a relative clause like (167) in Tongugbe, a logophoric pronoun is co-referential to the trace.

(167) ŋutsu yɛ t_i bu bé ye$_i$-kpɔ dzinuvi (Tɔŋugbe)
man REL.P think COMP LOG-see star
'the man that thought he saw a star'

As cited in Borsley (1997), Stowell (1991) and Longobardi (1994) indicate that NPs are non-referential. Given that the logophoric pronoun in Tongugbe is coindexed with a DP, which is referential, the trace in (167) cannot be an NP. (see Clements 1975, Pearson 2015, Bimpeh 2019 for discussions on logophoricity in Ewe).

The co-referential relationship between a trace and its pronoun is possible in wh-contexts as well. The DP-trace in the wh-questions shown in (168) is coreferential with the logophoric pronoun.

(168) Ame-ka nyɔ́ t_i bu bé ye-kpɔ́ dzinuvi o (Tɔŋugbe)?
person-WH FOC think COMP LOG-see star PRT
'Who *t* thought he saw a star?

Furthermore, like DP-traces, the trace in Tongugbe relative clauses are coindexed with gaps. DP object extraction in the serial verb construction (169) illustrates the coindexation relationship between gaps. Collins (1997) argues that the core cases of Ewe serial verb constructions exhibit internal argument sharing mediated by empty categories. The direct object DP *mɔlu* 'rice' is shared by the verbs ɖa 'cook' and ɖu eat. With *mɔlu* being coindexed with an empty category in the second VP, the internal-object extraction observed here shows that the empty category is coindexed with the trace of the internal object DP.

(169) a. Kofi ɖa mɔlu$_i$ ɖu *ec$_i$*. (Tɔŋugbe)
Kofi cook rice eat
'Kofi cooked rice and ate it.'

b. Nu-ka nyɔ́ Kofi ɖa t_i ɖu ec_i o?
thing-WH FOC Kofi cook eat PRT
'What did Kofi cook and ate?'

Now, consider a similar phenomenon in the relative clause in (170b). The empty category is coindexed with the trace of the DP *mɔlu*.

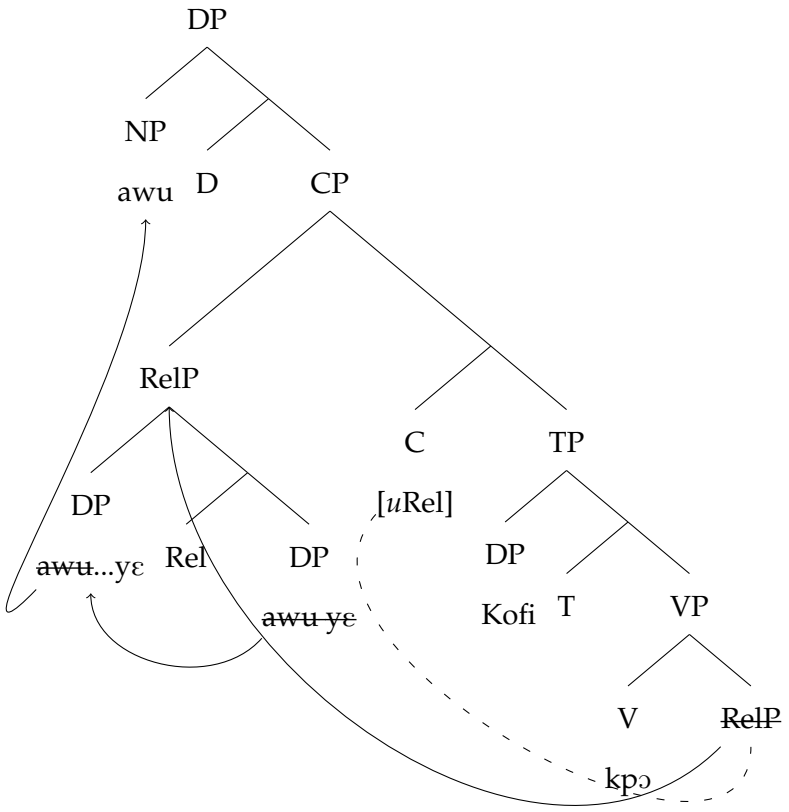
(170) a. Kofi me-ɖa mɔlu-ɔ$_i$ kaɸe ɖu ec_i o. (Tɔŋugbe)
Kofi NEG-cook rice-DEF before eat NEG
'Kofi didn't cook the rice before eating it.'

b. mɔlu yɛ Kofi me-ɖa t_i kaɸe ɖu ec_i o.
rice REL.P Kofi NEG-cook before eat NEG
'the rice that Kofi didn't cook before eating.'

Having shown that a DP-trace analysis is superior to an NP-trace analysis in Tɔŋugbe, I provide the structure of the raising analysis of Tongugbe relative clauses in (172) below. Here, the Rel head, which is null in Tɔŋugbe, forms a constituent with the relativized DP. The resulting RelP is endowed with an interpretable Rel [*i*Rel] feature. The C head bears an uninterpretable Rel [*u*Rel] feature and an EPP feature. It probes and the RelP goal and gets its uninterpretable features deleted. The EPP feature of the C head forces the movement of RelP to its specifier. The relativized NP in the RelP then moves to the specifier of the higher DP.

(171) awu yɛ Kofi kpɔ́ (Tɔŋugbe)
shirt REL.P Kofi see
'the shirt that Kofi saw'

(172) RelP Movement to Spec, CP



The mechanism I adopt here falls in line with Evile & Pesetsky's (2023) proposal for the derivation of the *wh*-WH relative exemplified in (173), where an R_{of}, analogous to Rel under my analysis, probes a constituent bearing [+wh], resulting in the movement of a phrasal category to the specifier of RP_{of}. RP_{of} is then Ā-moved to the specifier of CP.

(173) The snowmen whom (of) which the children loved went on a vacation to Hawaii.

4.4 Pied-piping and the element order problem

The derivational account I propose for the relative clause column of the quadrangle runs into problems when the relative clause involves PP pied-piping and possessed DP pied-

piping, as these pied-piping phenomena in Hogbe and Pekigbe relative clauses exhibit variability in the order of the relative particle *xé* and other elements. *Xé* can precede or follow postpositions. It can also occur in VP pied-piping relative clauses and Possessed DP pied-piping relative clauses.

In this section, I discuss all the cases of pied-piping and proffer a solution to the ordering problem. I show that deriving the right structure for the position of the *xé* rests on what moves to the specifier of the Rel projection. This analytical choice necessitates the assumption that postposition stranding and possessor extraction, albeit generally disallowed in Ewe, address the ordering issue that confronts my analysis. Pursuant to this, I redefine the scope of postposition stranding and possessor extraction, noting that my analysis does not run afoul of the generalization. In particular, the ban on postposition stranding and possessor extraction in Ewe is delimited by the extraction domain of the complement of the postposition and the extraction domain of the possessor such that extraction has to be within the extended projection of the postposition and the extended projection of the possessive head respectively. My proposal does not take into account the anti-locality constraints on movement (Grohmann 2003, Abels 2003, Erlewine 2016).

4.4.0.1 VP pied-piping

Progressive constructions in Ewe involve object shift (175), where the object precedes the verb, yielding an SOV order (Fabb 1992, Collins 1993). When the object is relativized, the entire VP moves to the left of the subject DP and the auxiliary. This is illustrated in (176), (177), and (178).

(174) a. Me-dzrá awu. (Hogbe/Pekigbe/Tɔŋugbe)
1SG-sell shirt
'I sold a shirt.'

(175) a. Me-le awu dzrã. (Tɔŋugbe)
1SG-be shirt sell.PROG

'I am selling a shirt.'

b. Me-le awu dzrá. (Hogbe/Pekigbe)
1SG-be shirt sell.PROG
'I am selling a shirt.'

(176) a. awu yɛ dzrã me-le (Tɔŋugbe)
shirt REL.P sell.PROG 1SG-be
'the shirt I am selling.'

b. *awu yɛ me-le dzrã
shirt REL.P 1SG-be sell.PROG
Intended:'the shirt I am selling.'

(177) a. awu ke xé dzrá me-le (Hogbe)
shirt REL.P REL sell.PROG 1SG-be
'the shirt I am selling.'

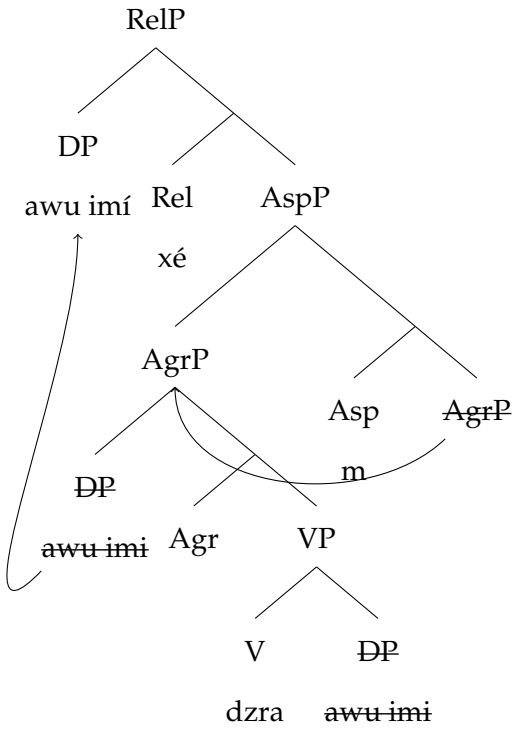
b. *awu ke xé me-le dzrá
shirt REL.P REL 1SG-be sell.PROG
Intended:'the shirt I am selling.'

(178) a. awu imí xé dzrá me-le (Pekigbe)
shirt REL.P REL sell.PROG 1SG-be
'the shirt I am selling.'

b. *awu imí xé me-le dzrá
shirt REL.P REL 1SG-be sell.PROG
Intended:'the shirt I am selling.'

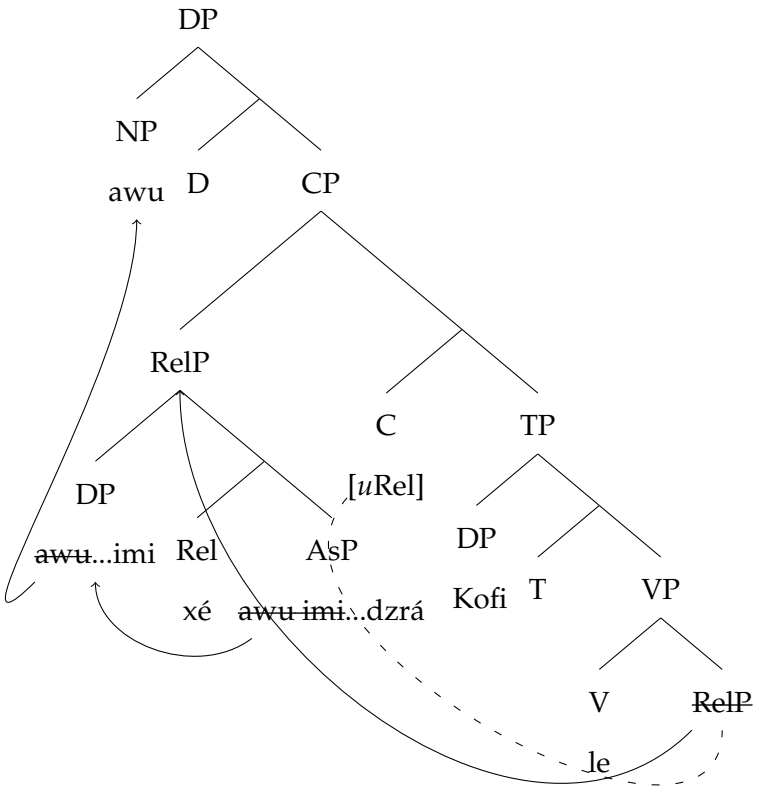
In deriving the VP pied-piping case, I posit object shift to the specifier of the functional projection (AgrP) above VP. Since the progressive marker is present in the construction, an Asp(ect) projection merges with AgrP. To derive the right word order, AgrP moves to Spec, AspP. The relativized nominal now moves to the specifier of RelP, which merges with AspP, as shown in (179). The RelP then moves to the left periphery, pied-piping its substructure. The analysis I proposed for the VP pied-piping phenomenon in focus constructions is the exact analysis I have proposed here for VP pied-piping in relative clauses.

(179) Partial Structure for VP Pied-piping



Given the VP pied-piping structure (179), the full derivation, shown here (180), involves the movement of RelP to Spec, CP with a subsequent subextraction of the relativized nominal to Spec, DP.

(180) VP Pied-piping with RelP Movement to Spec, CP



4.4.0.2 Possessor DP pied-piping

When the relativized head noun is a possessor, the possessive head and the possessee move along with the possessor to the left periphery. (181c) shows that the possessee *awu* 'shirt' and the possessive marker *wó* cannot be stranded when the possessor *ame* 'person' is extracted.

(181) a. Me-fi amele wó awu. (Tɔŋugbe)
1SG-steal someone POSS.SG shirt
'I stole someone's shirt.'

b. ame yɛ wó awu me-fi
person REL.P POSS.SG shirt 1SG-steal
'the person whose shirt I stole'

c. *ame yɛ me-fi wó awu
person REL.P 1SG-steal POSS.SG shirt
Intended: 'the person whose shirt I stole'

The same is true for Hogbe. The examples below illustrate this. It is noteworthy that the relative particle *xé* is disallowed within possessed DPs, as (182a) and (182b) show. It can, however, occur to the right of the possessee, as in (182c).

(182) a. ŋutsu ke (*xé) ɸe ga me-fi (Hogbe)
man REL.P REL POSS money 1SG-steal
'the man whose money I stole'

b. ŋutsu ke ɸe (*xé) ga me-fi (Hogbe)
man REL.P POSS REL money 1SG-steal
'the man whose money I stole'

c. ŋutsu ke ɸe ga xé me-fi (Hogbe)
man REL.P POSS money REL 1SG-steal
'the man whose money I stole'

d. *ŋutsu ke me-fi ɸe ga (Hogbe)
man REL.P 1SG-steal POSS money
Intended: 'the man whose money I stole'

While the Hogbe facts are largely true for Pekigbe, Pekigbe allows the relative particle *xé* to immediately follow the relative pronoun, as (183a) shows. The question that arises is why Hogbe and Pekigbe behave differently in this regard. Might the ability of the relative particle to immediately follow the relative pronoun be related to the type of demonstrative to which the relative pronoun is related? The Hogbe relative pronoun is related to a proximal demonstrative while the Pekigbe relative pronoun is related to a distal demonstrative. I leave this issue for further research.

(183) a. ŋutsu imí xé wó ga me-fi (Pekigbe)
man REL.P REL POSS money 1SG-steal
'the man whose money I stole'

b. ŋutsu imí wó (*xé) ga me-fi
man REL.P POSS money 1SG-steal
'the man whose money I stole'

c. ŋutsu imí wó ga xé me-fi
man REL.P POSS money REL1SG-steal
'the man whose money I stole'

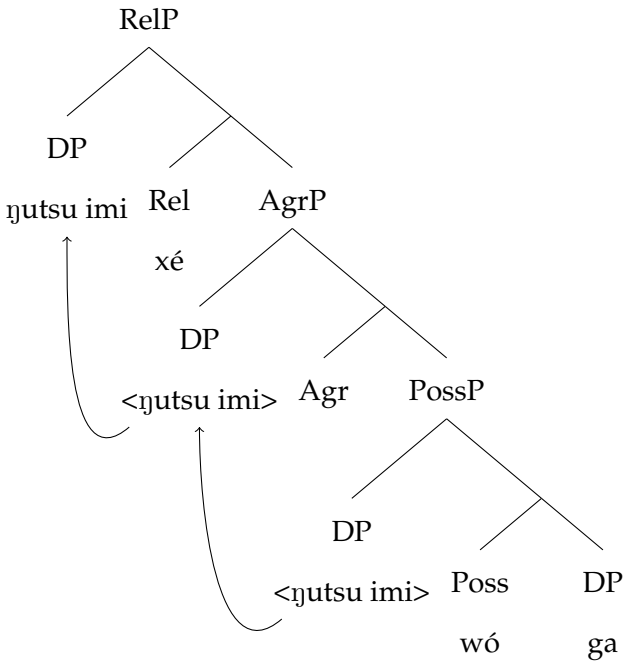
d. *ŋutsu imí me-fi wó ga
man REL.P 1SG-steal POSS money
Intended: 'the man whose money I stole'

The distribution of the relative particle *xé* in relation to elements in the possessed DP presents a conundrum. Are there two different structural positions for the relative particle? Are there two different types of *xé* in the relative clause system? Since there is no interpretational difference with respect to the positions of *xé* and since two instances of *xé* cannot occur in the same relative clause, I assume that there is only one *xé* and only one structural position for *xé* in the relative clause. If my assumption is on the right track, it remains to be seen how the derivation of *xé* relatives proceeds. In what follows, I present analyses in which *xé* heads a Relative projection and elements, of different sizes, in the possessed DP undergo movement to the specifier of the Relative projection.

In deriving the possessed DP pied-piping case, (183a), in which the relative particle *xé* precedes the possessive head, I postulate that the possessor externally merges in Spec, PossP, a theta position, like Spec,vP. The Poss projection is the complement of an Agree projection in the nominal spine. The invocation of the Agr projection is necessitated by the nature of nominal possession in Tɔŋugbe, where possessor-possessive head agreement obtains (Collins & Gotah 2021). The Agr head licenses the possessor in its specifier. In relativizing the possessor, the possessor has to move to Spec, RelP prior to the pied-piping operation. Recall that the possessor obligatorily pied-pipes the possessive head and the

possessee to the left periphery. The structure in (184) shows the derivation of the order in which *xé* precedes the possessive head.

(184) Possessed DP Pied-Piping



A potential problem for the analysis lies in the fact that the possessor extracts from the specifier of PossP, an operation that is generally banned in Ewe (186c) and some other languages of the world. As I already indicated in chapter 2, Tɔŋugbe disallows the occurrence of the focus marker *nyɔ́* within possessed DPs. The Pekigbe possessed DP pied-piping case illustrated above allows the relative particle to precede the possessive head. The question that arises here is why the focus marker *nyɔ́* does not behave like the relative pronoun. I suggested in chapter 2 that Gavruseva's (2000) account for possessor extraction and the lack of it can be extended to Ewe with respect to focus constructions. As I will show here, for relative clauses, a slightly different approach is adopted.

Gavruseva (2000) notes that *wh*-possessor extraction is only grammatical when the extraction proceeds in two steps in overt syntax. The first step involves movement of the possessor to check case and phi-features within the Agr/D domain. The second move-

ment is to an escape hatch position, in this case, Spec DP. Gavruseva proposes that such languages as Hungarian, Tzotzil, and Chamorro which exhibit overt *wh*-movement allow possessor extraction because the D head has a strong Q-feature, allowing the possessor to move to Spec, DP in overt syntax. For Germanic languages however, Gavruseva proposes that the Q-feature on the D is weak, hence there is only extraction to an A-position within the DP for case and phi-feature reasons. The extra movement step to Spec, DP, an Ā-position within the DP, needed for possessor extraction is delayed until LF. A crucial ingredient of Gavruseva's proposal is the point that possessor extraction to Spec, DP corresponds to what she calls 'richness' of Agr, defined as the possession of a set of DP-internally visible case and phi-features (+person/+number/+Nom) that mediates possessor agreement. Nominal possession in Ewe does not generally manifest a 'rich' Agr system. Of the dialects under study here, only Tɔŋugbe exhibits some form of agreement in nominal possession. Consider the pattern in (185). Plural marked DPs require form of the possessive marker different from that of singular DPs.

(185) a. Kofi wó awu (Tɔŋugbe)
Kofi POSS.SG shirt
'Kofi's shirt'

b. *Kofi bé awu
Kofi POSS.PL shirt
Intended:'Kofi's shirt'

c. Nufiɛla-ó bé awu
teacher-PL POSS.PL shirt
'Teachers' shirt'

d. *Nufiɛla-ó wó awu
teacher-PL POSS.SG shirt
Intended:'Teachers' shirt'

Given that the Ewe data falls short of the 'rich' Agr property, as only number agreement is available (in Tɔŋugbe), and the fact that possessor extraction is disallowed, as illustrated

here in (186c), Ewe seems to pattern with Germanic.

(186) a. Me-dzrá Aku ɸé awu. (Hogbe)
1SG-sell Aku POSS dress
'I sold Aku's dress.'

b. Ame-ka ɸé awu me-dzrâ?
person-WH POSS dress 1SG-sell.PRT
'Whose dress did I sell?'

c. *Ame-ka me-dzrá ɸé awù?
person-WH 1SG-sell POSS dress.PRT
Intended: 'Whose dress did I sell?'

In spite of the observation above, the case of possessor extraction evident in the analysis I propose does not result in an ungrammatical construction. This points to the fact that possessor extraction of some sort is allowed in Ewe relative clauses. In particular, possessor extraction is allowed if the extraction is within the same extended projection, which is exactly what (184) shows. The origin and landing site of the possessor are within the same extended projection, which is the extended projection of PossP. Extraction to a position outside the extended projection of the PossP, as (186c) shows, is blocked.

The argument can be made that Rel, headed by *xé*, is not external to the relativized DP, hence it cannot be an outer element like the focus marker. An argument against this view is that if *xé* were internal to the relativized DP, we would expect it to precede the quantifier ɸété 'all'. As (187b) shows, that order is not possible.

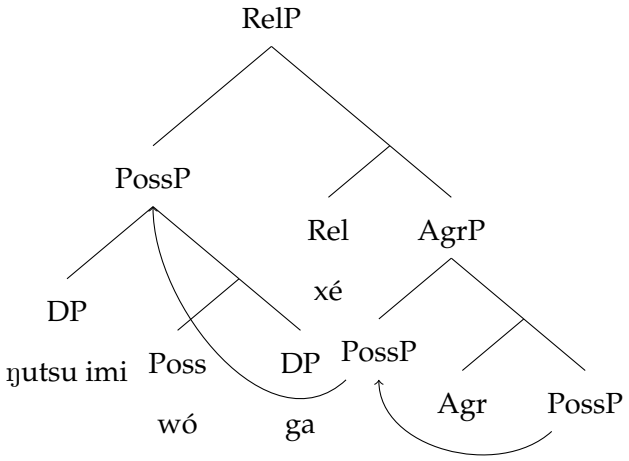
(187) a. ŋutsu imí-o ɸété wó ga xé me-fi (Pekigbe)
man REL.P-PL all POSS money REL 1SG-steal
'all the men whose money I stole'

b. ŋutsu imí-o (*xé) ɸété wó ga me-fi (Pekigbe)
man REL.P-PL REL all POSS money 1SG-steal
'all the men whose money I stole'

Turning to the order in which the relative particle follows the possessee, as in (183c), PossP merges with Agr, projecting an AgrP that merges with the RelP. The possessor, in

the specifier position of PossP, is licensed in the Spec, AgrP prior to its movement to Spec, RelP to derive the right order, as depicted in (194). Here, the entire PossP, not only the possessor, undergoes movement, hence possessor extraction does not obtain.

(188) Possessed DP Pied-Piping



4.4.0.3 PP pied-piping

Relativized nouns that are embedded in postpositional phrases pied-pipe the entire PP to the left periphery. In (189), (190), and (191), the relativized noun *aɸe* 'house' pied-pipes the entire postpositional phrase containing it. A peculiar behavior of *xé* in both Hogbe and Pekigbe in this context is that it can precede or follow the postposition. In (189a) and (190a), *xé* follows the postposition and in (189b) and (190b) *xé* precedes it.

(189) a. aɸe ke me **xé** wó-dzi-m le (Hogbe)
house REL.P POSTP REL 3PL-bear-1SG PREP
'the house in which I was born'

b. aɸe ke **xé** me wó-dzi-m le
house REL.P REL POSTP 3PL-bear-1SG PREP
'the house in which I was born'

(190) a. aɸe mí me **xé** wó-dzi-m le (Pekigbe)
house REL.P POSTP REL 3PL-bear-1SG PREP
'the house in which I was born'

b. aɸe mi **xé** me wó-dzi-m le
house REL.P REL POSTP 3PL-bear-1SG PREP
'the house in which I was born'

(191) a. Wó-dzi-m le aɸe yɛ me. (Tɔŋugbe)
1PL-bear-1SG be house DEM POSTP
'I was born in this house.'

b. aɸe yɛ me wó-dzi-m le
house REL.P POSTP 1PL-bear-1SG be
'the house in which I was born'

The ordering problem here is similar to what is observed in possessed DP pied-piping, hence the analysis I propose carries over straightforwardly to the PP pied-piping case. Like the possessed DP cases, I assume that there is only one *xé* and only one structural position for *xé* in the relative clause. I posit movements of elements of different sizes in deriving the word order. Here, postposition stranding takes place, albeit its ban in Ewe, shown in (192b) below.

(192) a. Ama le exɔ-ɔ ɖeka me. (Tɔŋugbe)
Ama be room-DEF one POSTP
'Ama is in one of the rooms.'

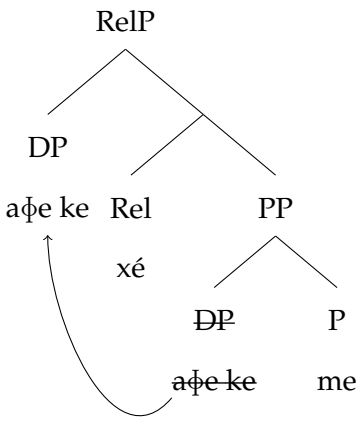
b. *Exɔ-ɔ ka Ama le me ɔ?
room-DEF WH Ama be POSTP PRT
Intended:'In which room is Ama?'

c. Exɔ-ɔ ka me Ama le ɔ?
room-DEF WH POSTP Ama be PRT
'In which room is Ama?'

For the PP pied-piping case in which *xé* precedes the postposition, I propose that the relativized nominal raises from the specifier of the PP to the specifier of the RelP, stranding the postposition, as shown in (193). Just as I did in the possessed DP pied-piping analysis, I invoke an extraction domain constraint, according to which extraction from

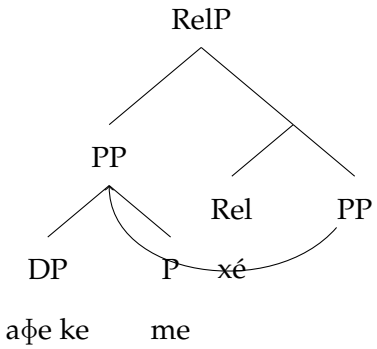
the extended projection of a nominal PP is blocked. This constraint explains the ungrammaticality of (192b) since the DP *exɔɔ* 'room' is extracted from the extended projection of the PP. In the PP pied-piping phenomenon, however, the extraction is within the extended projection of the PostP, hence the possibility of p-stranding.

(193) PP Pied-Piping



For the order in which *xé* follows the postposition, the entire PP moves from the complement position of Rel head to Spec, RelP, as illustrated here.

(194) PP Pied-Piping



The solutions I proffer here for the element ordering problems fit neatly into the overall raising analysis I put forward.

4.5 Factive constructions

Collins explores factive constructions in the Kpelegbe dialect of Ewe as well as Fon, Yoruba, and Igbo. Since the discussion in this chapter revolves around relative clauses, it is worthwhile to include factive constructions, as both constructions fall under the scope of the relative operator constructions (Collins 1994). As I will show in this section, the factive construction is attested in the three dialects. I provide an analysis that is similar to the treatment of relative clauses.

Collins (1994) reports that the following constructions in Kpelegbe are interpreted factively and that they differ from relative clauses.

(195) a. ŋtsu xe Mana ɸo gbɔ tsɔ.
boy which Mana hit returned yesterday
'The boy that Mana hit returned yesterday.'

b. ŋtsu xe wo-ɸo me-dzɔ dzi na-ŋ o.
boy which she-hit NEG please to-me NEG
'The fact that he hit a boy does not please me.'

(Collins 1994: 33)

He notes that while factive constructions and relative clauses are similar, factive constructions are interpreted factively. This explains why (198) does not give rise to a contradiction, as *agbale xe Mana ɸle* is not a relative clause.

(196) Agbale xe Mana ɸle, e-nyo vɔ agbali-ɛ ŋtɔ me-nyo o.
Book which Mana buy it-good but book-DEF itself NEG-good NEG
'The fact that Mana bought a book is good, but the book itself is not good.'

(Collins 1994: 33)

The contrast between (197b) and (197c) illustrates a difference between a relative clause and a factive construction in Tɔŋugbe. In particular, the subject of the verb *víví* cannot be

a concrete element but an abstract element, hence the factive in (197b), which is headed by a null head Fact, is licit in subject position as Collins argues for Kpelegbe.

(197) a. Kofi tútú kplɔ̃-ɔ dzí.
Kofi clean table-DEF POSTP
'Kofi cleaned the surface of the table.'

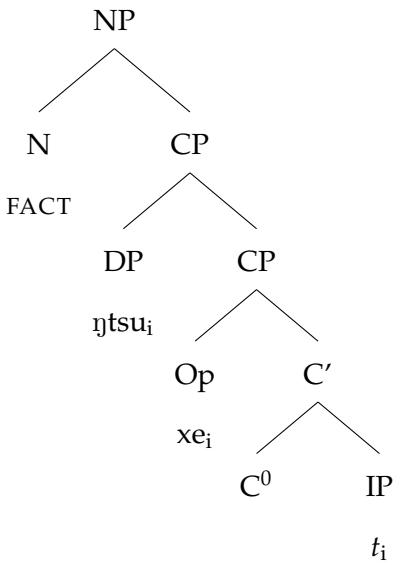
b. Ekplɔ̃-ɔ dzí yɛ Kofi tútú víví né wó nanɛ.
table-DEF POSTP REL.P Kofi clean sweet for POSS mother
'The fact Kofi cleaned the surface of the table pleases his mother.'

c. *Ekplɔ̃ yɛ dzí Kofi tútú víví né wó nanɛ.
table REL.P POSTP Kofi clean sweet for POSS mother
Intended:'The fact Kofi cleaned the surface of the table pleases his mother.'

d. Me-kpɔ́ ekplɔ̃ yɛ dzí ega-a le.
1SG-see table REL.P POSTP money-DEF be
'I saw the table on which the money is.

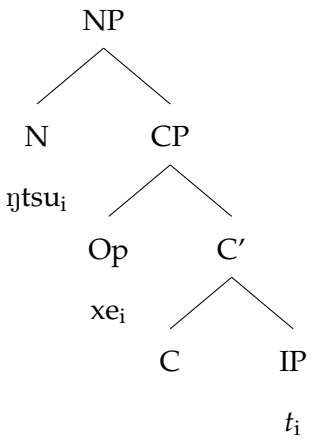
According to Collins, a null Fact head in the structure of factive constructions gives rise to the factive reading. He argues that this Fact head, shown in (198), takes a relative clause CP as its complement, hence the resemblance between factive constructions and relative clauses.

(198) Factive construction in Kpelegbe



His analysis follows the matching analysis of relative clauses (199). According to this analysis, *xe*, a relative operator, moves to the specifier of a CP that is adjoined to a head noun, as illustrated in (199).

(199) Matching relative in Kpelegbe



In Kpelegbe, as Collins reports, the deverbalized nominal in the factive construction is a bare truncated verb, while Hogbe, Pekigbe, and Tɔŋugbe have a reduplicated verb. Deriving nominals by verbal reduplication is a known feature of many Ewe dialects. I as-

sume that the bare truncated verb in Kpelegbe is the analogue of the verbal reduplication seen in (200b) and (200c).

The genitive factive construction is also attested in the three dialects under study, as shown below.

(200) a. Ama wó kpe yɛ wo-lã wó nanɛ me-vivi nu-m
Ama POSS.SG stone REL.P 3SG-throw.at POSS.SG mother NEG-please to-1SG o. (Tɔŋugbe)
NEG
'The fact that Ama stoned her mother doesn't please me.'

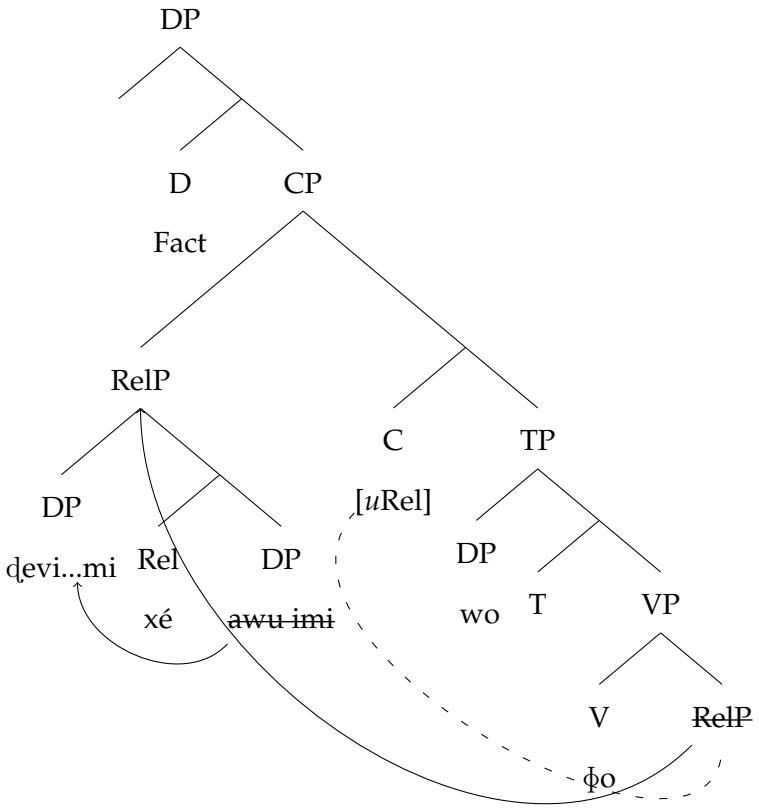
b. Awo wó ɸo-ɸo xé wo-ɸo-m me-vivi nam o. (Pekigbe)
Awo POSS.SG RED-hit REL 3SG-ɸo-1SG NEG-please to-1SG NEG
'The fact that Awo hit me doesn't please me.'

c. Awo ɸe dzó-dzó xé wo-dzó te ɖe dzi-nye. (Hogbe)
Awo POSS RED-leave REL 3SG-leave press PREP on-1SG
'The fact that Awo left worried me.'

I adopt a raising analysis for the factive constructions. This is to conform to the Ā-quadrangle proposal I argue for in this dissertation. In particular, I have argued that *wh*-phrases and relativized DPs raise to the CP domain. Given the affinity between relative clauses and factive constructions, adopting a single core derivational mechanism is the most desirable option. Just as we saw in the derivation of relative clauses, the RelP in factives raises to the specifier of the CP. At this stage of the derivation, a distinction is made between relative clauses and factive constructions, following Collins' (1994) proposal that a null Fact head selects the CP as its complement. Under my analysis, this Fact is a DP whose head selects the relative CP. Therefore, the NP within RelP cannot raise to Spec DP. In a relative clause, the NP raises to Spec DP since the DP is not a null fact, as shown here.

(201) Đevi imí xé wo-ɸo me-dzɔ dzi na-m o. (Pekigbe)
child REL.P REL 3SG-hit NEG-straight heart to-1SG NEG
'The fact that he hit the child does not please me.'

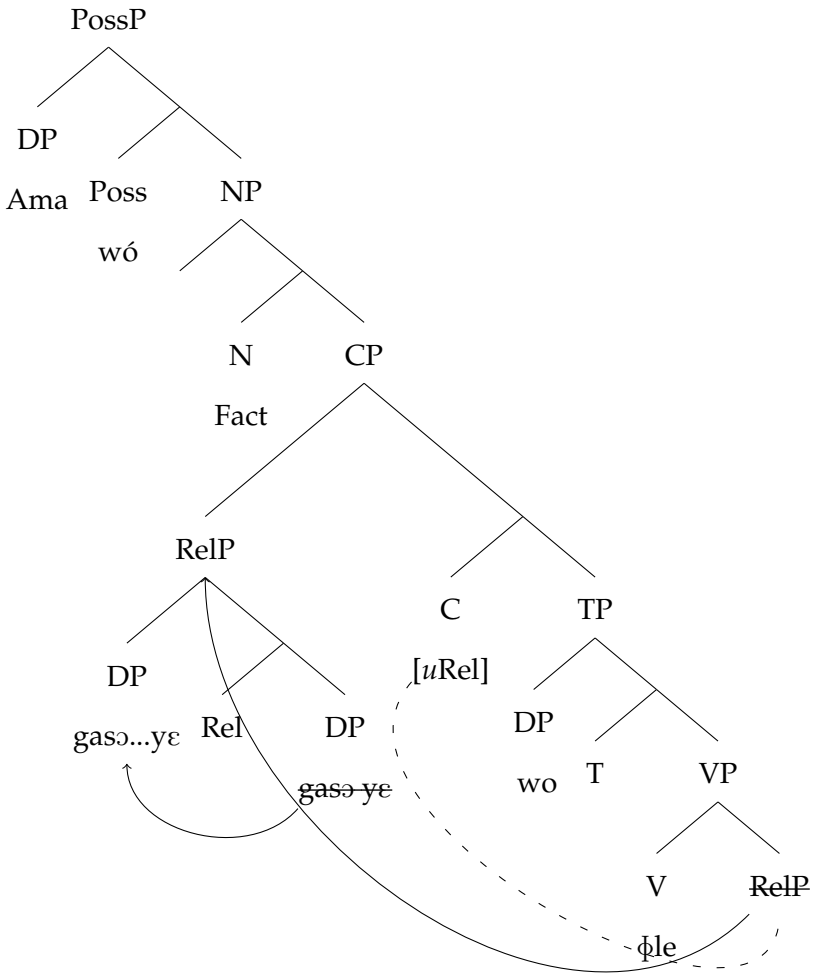
(202) Factive construction



In the genitive factive construction, the factive construction is the possessee, hence the possessive head takes it as its complement, as (204) shows.

(203) Ama wó gasɔ yɛ wo-ɸle me-vivi nu-m o.(Tɔŋugbe)
Ama POSS.SG bike REL.P 3SG-buy NEG-please to-1SG NEG
'The fact that Ama bought a bike doesn't please me.'

(204) Genitive factive construction



4.6 Summary

I have discussed, in this chapter, the syntax of relative clauses in Ewe. Adopting a raising analysis, I have shown that the relative clauses are derived by postulating a Rel head that forms a constituent with relativized DPs and raises to the specifier of CP via attraction by a C head. I have provided accounts for the ordering problem that arises in PP pied-piping and possessed DP pied-piping, arguing for movement operations that allow postposition

stranding and possessor extraction. I have also discussed briefly the factive construction in Ewe, providing an analysis that is analogous to the derivation of relative clauses.

5 | The Ā-Quadrangle

5.1 Introduction

In chapter two of this dissertation, I argued for an analysis of argument focus constructions in which I propose that focus heads form a constituent with focused categories, projecting a FocP. I argued that this focus projection is attracted to the clausal left periphery via Agree and EPP feature mechanisms. This analysis departs from existing approaches to analyzing argument focus in some Gbe languages. The new analysis I developed in this dissertation provides a satisfactory solution to a VP pied-piping problem. Subsequently, in chapter three, I extended the analysis to the derivation of Ewe *wh*-questions, pointing out that focus movement is integral to the syntax of *wh*-questions in Ewe. Importantly, I established a connection between the *wh*-morpheme *ka* and focus markers, where the displacement of the *wh*-morpheme and its associated *wh*-word is dependent on the focus marker. In chapter four, I developed a raising analysis for relative clauses which is an analogue of the analysis I proposed for *wh*-questions. In particular, I proposed that the relative particle forms a constituent with the relativized DP. I showed that the displacement of the relative pronoun and the relativized DP is dependent on the relative particle. It has become clear then that the relative pronoun corresponds to the *wh*-particle *ka* and the relative particle corresponds to the focus marker. Given the pattern outlined here, I develop, in this chapter, a theory I call the Ā-quadrangle. I show the intricate connec-

tion between focus, *wh*-questions, and relative clauses in Ewe. I note that my proposal draws inspiration from Cable (2007, 2010) and Sulemana's (2019) analysis of Q-particles in Ā-syntax.

5.2 Ā-quadrangle: the complete picture

The syntactic and distributional properties of Ewe focus markers, particles in *Wh*-questions, and particles in relative clauses exhibit intricate connections, an exploration of which makes a case for a particular subsystem of Universal Grammar. I classify these particles and grammatical markers into inner elements and outer element of what I call the Ā-quadrangle. Consider the *wh*-questions in (205).

(205) a. Awu **ka** **ny**ɔ́ dzrã Kofi le ɔ? (Tɔŋugbe)
shirt WH FOC sell.PROG Kofi be PRT
'What shirt is Kofi selling?'

b. Nu-**ka** **ny**ɔ́ dzrã Kofi le ɔ? (Tɔŋugbe)
thing-WH FOC sell.PROG Kofi be PRT
'What is Kofi selling?'

c. Me-**ka** **é** dzra awu-â? (Hogbe)
person-WH FOC sell shirt-DEF.PRT
'Who sold the shirt?'

d. Me-**é** dzra awu-à? (Pekigbe)
person-FOC sell shirt-DEF.PRT
'Who sold the shirt?'

Apart from (205d), the *wh*-phrases include the *wh*-particle *ka*, the inner element, which is followed by a focus marker, the outer element. For *wh*-questions like (205d) lacking an overt *ka*, I assume that there is a null KA corresponding to *ka*. The aforesaid inner and outer elements form the first column of the Ā-quadrangle, illustrated in table 5.1. Similarly, I assume that the displacement of focused categories without the overt realization

of the focus marker necessarily involves the syntactic activity of the focus marker, hence there is a null focus marker in such instances.

Table 5.1: The Ā-quadrangle (Column 1)

	***Wh*-Questions**
Inner	ka
Outer	yá, (y)ɛ́, (y)é, nyɔ́

The second column of the quadrangle involves elements in relative clauses. Consider the following examples.

(206) a. awu **ke** **xé** dzrá Kofi le (Hogbe)
shirt REL.P REL sell.PROG Kofi be
'the shirt that Kofi is selling'

b. awu **y**ɛ ∅ dzrã Kofi le (Tɔŋugbe)
shirt REL.P REL sell.PROG Kofi be
'the shirt that Kofi is selling'

c. awu **imí** **xé** dzrá Kofi le (Pekigbe)
shirt REL.P REL sell shirt-DEF
'the shirt that Kofi is selling'

Given that the relative pronouns, *ke*, *y*ɛ, and *mí*, in the examples above are close to the relativized noun *awu*, they constitute the inner elements of the column while *xé*, which is relatively distant from the relativized noun, is the outer element. I assume that Ewe relative clauses, like (206b), which lack an overt *xé* possess a null relative particle. Table 5.2 depicts the second column of the quadrangle.

The corresponding elements in each of the columns of the quadrangle have been established on the basis of their distribution, exemplified in (205) and (206). Table 5.1 is the complete Ā-quadrangle. In the next section, I discuss how the columns are derivationally analogous.

Table 5.2: The Ā-quadrangle (Column 2)

	Relative Clauses
Inner	ke, mí, yɛ
Outer	xé, ∅

Table 5.3: The Ā-quadrangle

	***Wh*-Questions**	**Relative Clauses**
Inner	ka	ke, mí, yɛ
Outer	yá, (y)ɛ́ (y)é, nyɔ́	xé, ∅

5.2.1 Deriving the quadrangle

The strength of the connection between the elements of the quadrangle, exemplified by the relative clause (207a) and the *wh*-question (207b), finds expression in their derivational architecture depicted in (208) and (209) .

(207) a. awu imí xé dzrá Adzovi le (Pekigbe)
shirt REL.P REL sell.PROG Adzovi be
'the shirt Adzovi is selling'

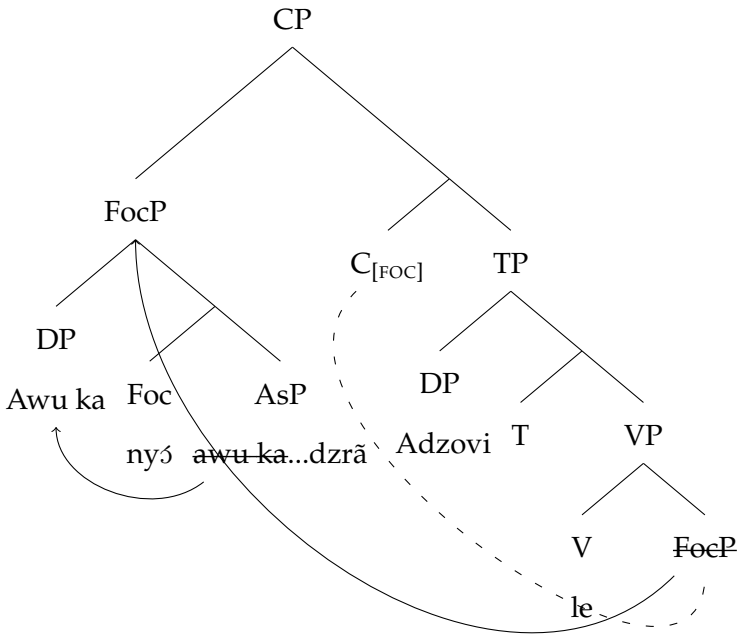
b. awu ka nyɔ́ dzrã Adzovi le ɔ? (Tɔŋugbe)
shirt WH FOC sell.PROG Adzovi be PRT
'What shirt is Adzovi selling?'

Each column of the quadrangle receives a similar treatment. In each case, the heads of the functional projections, namely; the relative particle *xé* and the focus markers start out by merging with their associated elements to project a FocP and RelP respectively. These projections are endowed with interpretable features [Foc] and [Rel] respectively, rendering them active for Agree operations (Chomsky 2000, 2001). The associated DPs, namely, the focalized DP and the relativized DP, together with the inner elements are within the

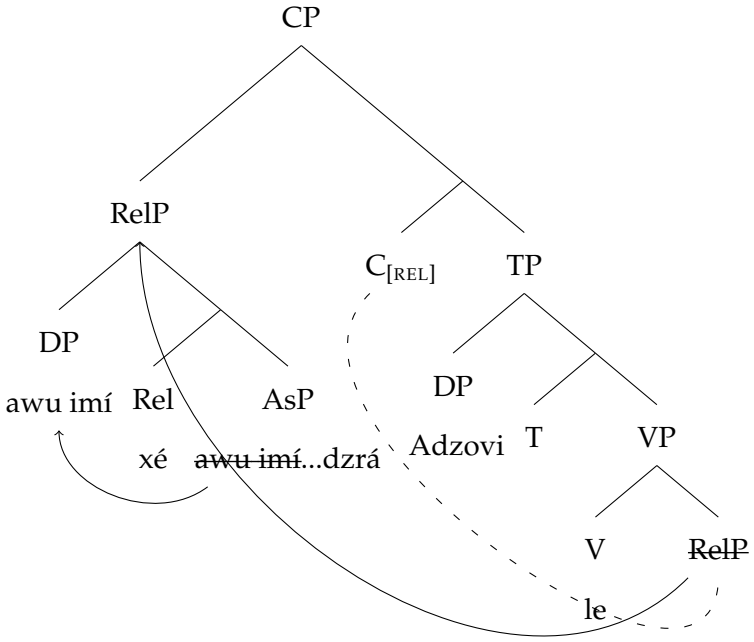
domain of the functional projections (FocP and RelP). The C head, bearing uninterpretable unvalued features [*u*Foc] and [*u*Rel] and an EPP feature, probes and agrees with the FocP and the RelP. The uninterpretable features of the C head are deleted, whereupon the EPP feature, requiring Spec, CP to be filled, drives the movement of the RelP and the FocP to the Spec, CP. Given that in the raising analysis of relative clauses, the relative CP is the complement of a D head (Kayne 1994) whose specifier is filled in Ewe, the NP contained within RelP raises to that position. This additional movement operation in the derivation of relative clauses under the Ā-quadrangle analysis has a counterpart in *wh*-questions. Recall that the dialects possess a final particle in *wh*-questions. This final particle, which heads a QP, forces the movement of a CP to its specifier. These parallels in the derivation of the *wh*-questions and relative clauses lend credence to the unified analysis the Ā-quadrangle underpins.

The cross-linguistic implication of the Ā-quadrangle is that all Ā-movement involves an outer element, corresponding to Foc and Rel, that is in a probe-goal relation with C. This outer element determines pied-piping. In languages that lack overt outer elements like FocP and RelP, I assume that there are null outer elements involved in Ā-movement.

(208) Partial structure for *wh*-Questions



(209) Partial structure for relative clauses



The derivation of the quadrangle developed here is in line with Cable's (2007, 2010) and Sulemana's (2019) analyses of the Q-particle in Tlingit and Buli, in which a Q-particle heads a functional projection containing *wh*-elements. The C head in the left periphery probes and attracts the Q projection, pied-piping the *wh*-elements to Spec, CP. The Ā-quadrangle proposal extends the Q-particle architecture to additional Ā-domains, making a strong case for a subsystem of Universal Grammar.

5.2.2 On the distribution of Foc and Rel

As I have already shown, Foc and Rel are similar in many ways. For example, they both allow interposition in some contexts. They are also related to inner elements. It is noteworthy that in spite of their similarities, there are differences in word order with respect to other elements. These differences should be accounted for. For example, with respect to postpositional phrases, it is not clear why the focus marker cannot intervene between a postposition and its DP (*DP FOC P) in the three dialects, but the relative particle can do so in Hogbe and Pekigbe. It is also not clear why the focus marker cannot occur at the right edge of the nominalized VP (*DP V FOC) in the three dialects, but the relative particle can occur in that position in Hogbe and Pekigbe. Further work should explore these issues.

Despite these surface discrepancies, I have argued that Foc and Rel share analogous structural positions in relative clauses and *wh*-questions, serving as goals for the respective C heads in deriving the aforesaid constructions. Table 5.3 summarizes the (un)attested surface positions of Foc and Rel in the three dialects.

Table 5.4: Distribution of Foc and Rel

		Hogbe	**Pekigbe**	**Tɔŋugbe**
Foc	Single DPs	DP FOC	DP FOC	DP FOC
	Postpositions	*DP FOC P	*DP FOC P	*DP FOC P
		DP P FOC	DP P FOC	DP P FOC
	Possession	*DP FOC POSS NP	*DP FOC POSS NP	*DP FOC POSS NP
		*DP POSS FOC NP	*DP POSS FOC NP	*DP POSS FOC NP
		DP POSS NP FOC	DP POSS NP FOC	DP POSS NP FOC
	VP Fronting	*DP FOC V	*DP FOC V	DP FOC V
		*DP V FOC	*DP V FOC	*DP V FOC
Rel	Single DPs	DP REL	DP REL	DP REL (NA)
	Postpositions	DP REL P	DP REL P	DP REL P (NA)
		DP P REL	DP P REL	DP P REL (NA)
	Possession	*DP REL POSS NP	DP REL POSS NP	DP REL POSS NP (NA)
		*DP POSS REL NP	*DP POSS REL NP	DP POSS REL NP (NA)
		DP POSS NP REL	DP POSS NP REL	DP POSS NP REL (NA)
	VP Fronting	DP REL V	DP REL V	DP REL V (NA)
		DP V REL	DP V REL	DP V REL (NA)

5.3 Summary

In this chapter, I have discussed the central objective of the dissertation, which is the Ā-quadrangle computed from elements in Ewe *wh*-questions and relative clauses. The crux of the proposal is that the elements are linked syntactically in a way that reflects in the structure of *wh*-questions and relative clauses. I have pointed out that DPs within the *wh*-phrases and relativized DPs are followed by inner and outer elements, which are the *wh*-particle and relative pronouns on one hand and focus markers and the relative particle on the other hand. I have argued that the outer elements form a constituent with the inner elements and the DPs, pied-piping them to the clausal left periphery. My analysis draws inspiration from Cable's (2007, 2010) and Sulemana's (2019) analysis of the Q-particle in *wh*-questions, where the Q head takes *wh*-words as complement and projects a Q projection that is attracted to the left periphery. My proposal, therefore, makes a case for a subsystem of Universal Grammar, extending the centrality of Ā-particles to Ā-movement operations.

6 | Conclusion

The overarching objective of this dissertation is to postulate an Ā-quadrangle that relies on the maximization of parallels between focus movement in Ewe *wh*-questions and raising in Ewe relative clauses. In particular, the order of elements, specifically in *wh*-related focus movement and the order of key elements in relative clauses form a quadrangle. The proposal I put forward in this dissertation is similar, in spirit, to Cable's (2007, 2010) Q-particle theory, in which a Q-particle selects *wh*-phrases and pied-pipes these phrases to the clausal left periphery. The QP is a goal probed by C. Under my analysis, the goal of the probing C head in *wh*-questions is not a QP but a focus projection. This idea falls in line with extant proposals that *wh*-phrases are necessarily endowed with focus features (Horvath 1986, Stepanov 1998, Aboh 2004). My proposal extends the purview of the Q-particle theory to an additional Ā-domain, relative clauses, in which a Rel functional projection selects the relativized DP and pied-pipes its content to the clausal left periphery. The displacement of the focus projection and the Rel projection is driven by Agree and EPP, where, in the case of focus movement, the C head bears an EPP feature and uninterpretable unvalued focus [*u*Foc] feature, which requires valuation. Since the focus projection has an interpretatable [*i*Foc] focus feature, it agrees with C and the uninterpretable feature of C is deleted. The EPP feature on C attracts the focus projection to Spec, CP. For the relative clauses, the C head bears an uninterpretable unvalued Rel [*u*Rel] feature and an EPP feature . It agrees with Rel projection, which bears an inter-

pretable feature. The uninterpretable feature on C is deleted via agree. The EPP feature on C attracts the RelP to Spec, CP. Importantly, I postulate a principle of UG according to which Ā-movement entails an outer element, like FOC and REL, which is the goal for agreement with C. This outer element determines pied-piping. This principle holds for all I-languages. Languages that lack an overt outer element like FOC and REL have null outer elements.

In chapter 2, I showed that the locus of focus projections at merge is the spine of focused categories. This assumption is driven by the VP pied-piping facts in Tɔŋugbe, where the focus marker surfaces in VP-internal position. This empirical fact poses a challenge to the previous derivation of focus constructions in Ewe (Badan &Buell 2012). While one may postulate high and low focus positions in the clause structure to handle basic focus constructions and the VP pied-piping case, such a proposal is far from economical. The proposal I advance involves only one focus position, an economical alternative. Crucially, my proposal can be implemented more widely. An important domain future work should consider is the interaction between focus-sensitive particles like *ko* 'only' (210) and the focus markers in the dialects. What ramifications do they hold for the analysis I propose?

(210) a. Awu nyɔ́ wo-ɸle. (Tɔŋugbe)
dress FOC 3SG-buy
'She bought A DRESS'

b. Awu ko wo-ɸle.
dress only 3SG-buy
'She bought only A DRESS.'

c. Awu ko nyɔ́ wo-ɸle.
dress only FOC 3SG-buy
'She bought only A DRESS.'

In the same vein, future work should also consider the various types of predicate focus, namely, the ɖe/*ne* predicate focus (211) and the verb-fronting predicate focus (212), in the

three dialects within the theoretical context of the Ā-quadrangle and existing proposals for related languages like Krachi (Kandybowicz & Torrence 2018).

(211) a. Kofi ɖe wo-dze anyi. (Hogbe)
Kofi PFOC 3SG-land ground
'It is the case that Kofi fell.'

b. Kofi ne (*wo-)zɔ̃.(Tɔŋugbe)
Kofi nè (3SG-)walk
'It is the case that Kofi walked'

(212) a. ɸo-ɸo(-nyɔ́) wo-ɸo ɖevi-ɛ. (Tɔŋugbe)
RED-hit-FOC 3SG-hit child-DEF
'Beating, he beat the child.'

b. ɸo-ɸo(-yá) wo-ɸo ɖeví-ɛ́ (Hogbe).
RED-hit-(FOC) 3SG-hit child-DEF
'Beating, he beat the child.'

The new proposal for focus fronting carries over straightforwardly to the analysis of *wh*-questions, given that focus movement is integral to the structure of *wh*-questions. Here, I showed that *wh*-phrases are focused categories, hence they bear a focus projection in their spine. An additional element in the structure of *wh*-phrases is the question particle. I demonstrated that the question particle types constructions as questions and that the entire construction must move to the specifier of the question particle. On the heels of the proposal that *wh*-phrases are endowed with focus features comes my proposal that languages possess a question particle in the structure of their questions. This particle could be marked by segments as in Tɔŋugbe; suprasegmentals as in Pekigbe, Hogbe, and English, among others; or silent elements as in Russian.

I introduced relative clauses in chapter 4. I showed how the relative particle *xé* forms a constituent with the relativized DP and raises to the left periphery in the same way as focus markers form a constituent with focused categories and raises to the left periphery. I demonstrated that the variability in the occurrence of the *xé* in Hogbe and Pekigbe,

which focus markers do not exhibit, is effectively accounted for by appealing to movement operations within the extended projection of the relativized DP. I argued that the ban on postposition stranding and possessor extraction in Ewe is constrained by domain restriction, where extraction within the extended projection of a head allows postposition stranding and possessor extraction. As an important addition to the discussion of relative clauses, I explored the syntax of factive constructions, pointing out differences and similarities between the Kpelegbe dialect of Ewe and the three dialects under study.

Further work should explore other dialects of Ewe, other Gbe languages, and other languages of the world in the context of the issues I have discussed in this dissertation to ascertain the generalizability of the proposals I have put forward for the sub-components of Ā-Quadrangle and the Ā-quadrangle in its entirety.

References

Abels, Klaus. 2003. Successive cyclicity, anti-locality, and adposition stranding. Doctoral Dissertation. University of Connecticut.

Abels, Klaus. 2020. The absence of Foc in the clausal spine. The 9th Cambridge Comparative Syntax Conference Handout.

Aboh, Enoch O. 2004. The morphosyntax of complement-head sequences: Clause structure and word order patterns in Kwa. Oxford University Press.

Aboh, Enoch O., & Roland Pfau. 2011. What's a wh-word got to do with it. Mapping the left periphery: The cartography of syntactic structures 5: 91-124.

Ameka, Felix K. 1991. Ewe: Its grammatical constructions and illocutionary devices. Doctoral dissertation. Australian National University Canberra.

Ameka, Felix K. 1992. Focus constructions in Ewe and Akan: A comparative perspective.*Proceedings of the Kwa comparative syntax workshop*.

Ameka, Felix K. 2001. Ewe. Facts about the world's languages: An encyclopedia of the world's major languages past and present. HW Wilson Press. 207-213.

Ameka, Felix K. 2010 Information packaging constructions in *Kwa: Micro-variation and typology. Topics in Kwa Syntax.* 141-176. Springer, Dordrecht.

Ansre, Gilbert. 1966. The grammatical units of Ewe: A study of their structure, classes and systems. University of London, School of Oriental and African Studies.

Ansre, Gilbert. 1974. Language standardisation in Sub-Saharan AFRICA. Advances in language planning, ed. by Joshua A. Fishman, Berlin, Boston: De Gruyter Mouton, pp. 369-390.

Aoun, Joseph., & Yen-hui Audrey Li. 2003. *Essays on the representational and derivational nature of grammar: The diversity of wh-constructions*. MIT press.

Badan, Linda, & Leston Buell. 2012. Exploring expressions of focus in Ewe.*Nordic Journal*

of African Studies 21.3 (2012): 23-23.

Barss, Andrew. 2001. Syntactic reconstruction effects. In Baltin and Collins (eds.), Handbook of Contemporary Syntactic Theory, 670-696. Blackwell

Beck, Sigrid. 2006. Intervention effects follow from focus interpretation. *Natural Language Semantics* 14: 1–56.

Belletti, Adriana. 2004. Aspects of the low IP area. The structure of CP and IP. *The cartography of syntactic structures* 2 16-51.

Bhatt, Rajesh. 2002. The raising analysis of relative clauses: Evidence from adjectival modification. *Natural Language Semantics* 10, 43-90.

Bianchi, Valentina. 2000. The raising analysis of relative clauses: A reply to Borsley. *Linguistic Inquiry*, 31(1), 123-140.

Biberauer, Theresa, Anders Holmberg, & Ian Roberts. 2008. Structure and linearization in disharmonic word orders. *Proceedings of the 26th West Coast Conference on Formal Linguistics*.

Biberauer, Theresa, Anders Holmberg, & Ian Roberts. 2014. A syntactic universal and its consequences. *Linguistic Inquiry* 45(2), 169-225.

Bimpeh, Abigail A. 2019. Default de se: The Interpretation of the Ewe Logophor. In M. Ryan Bochnak, Miriam Butt, Erlinde Meertens and Mark-Matthias Zymla (eds.), Proceedings of TripleA 5: *Fieldwork Perspects on the Semantics of African, Asian and Austronesian Languages*. Universitätsbibliothek T̈ubingen, Publikationssystem

Bole-Richards, R. 1983. Systématique phonologique et grammaticale d'un parler éwé: Le Gen-Mina du sud-togo et sud-bénin. Paris: Editions L'Harmattan

Borsley, Robert. D. 1997. Relative clauses and the theory of phrase structure. Linguistic Inquiry, 629-647.

Buell, Leston Chandler. 2021. Reason questions as a complementizer domain phenomenon: Evidence from Ewe. In Soare: Why is 'Why'Unique?: Its Syntactic and Semantic Prop-

erties 142. Berlin, Boston: De Gruyter Mouton,

Cable, Seth. 2007. The grammar of Q: Q-particles and the nature of wh-fronting. Doctoral dissertation, MIT, Cambridge, MA.

Cable, Seth. 2010. The grammar of Q: Q-particles, wh-movement, and pied-piping. Oxford University Press.

Cable, Seth. 2012. The optionality of movement and EPP in Dholuo. *Natural Language & Linguistic Theory* 30 651-697.

Carlson, Greg N. 1977. Amount relatives. *Language* 520-542.

Chomsky, Noam. 1995. The Minimalist Program. MIT Press, Cambridge.

Chomsky, Noam. 2000. Minimalist inquiries: The framework (MITOPL 15). Step by step: Essays on minimalist syntax in honor of Howard Lasnik, 89-155.

Chomsky, Noam. 2001. Derivation by phase. In M. Kenstovicz (ed), Ken Hale: A life in language, 1–54. Cambridge, MA: The MIT Press.

Cinque, Guglielmo.2005. Deriving Greenberg's Universal 20 and its exceptions. *Linguistic inquiry 36.3* 315-332.

Clements, George N. 1972. The verbal syntax of Ewe. Doctoral Dissertation. University of London, School of Oriental and African Studies.

Clements, George N.1975. Analogical reanalysis in syntax: the case of Ewe tree-grafting. *Linguistic Inquiry* 6(1), 3-51.

Collins, Chris. 1993. Topics in Ewe syntax. Doctoral Dissertation. Massachusetts Institute of Technology.

Collins, Chris. 1994. The factive construction in Kwa. Ms. Cornell University.

Collins, Chris. 1994. Economy of derivation and the generalized proper binding condition. *Linguistic Inquiry* 25 (1) 45-61.

Collins, Chris. 1997. Argument sharing in serial verb constructions. *Linguistic Inquiry* 461-497.

Collins, Chris, Paul M. Postal, & Elvis Yevudey. 2017. Negative polarity items in Ewe. *Journal of Linguistics* 54.2 (2018): 331-365.

Collins, Chris. 2005. A smuggling approach to the passive in English. *Syntax* 8. 81-120.

Collins, Chris & Selikem Gotah. 2021. Nominal Possession in Tongugbe. Ms. New York University.

Collins, Chris. 2021. A smuggling approach to the dative alternation. in Belletti, Adriana, and Chris Collins, eds. Smuggling in syntax. Oxford University Press.

De Vries, Mark. 2017. Across-the-board phenomena. The Wiley Blackwell Companion to Syntax, Second Edition 1-31.

Duthie, Alan S. 1996. Introducing Ewe linguistic patterns: A textbook of phonology, grammar, and semantics. Ghana Univ. Press.

Erlewine, Michael Yoshitaka. 2016. Anti-locality and optimality in Kaqchikel agent focus. *Natural Language & Linguistic Theory* 34, 429-479.

Essegbey, James. 2010. Inherent complement verbs and the basic double object construction in Gbe. *Topics in Kwa syntax* 177-193. Springer, Dordrecht.

Evile, Kanoe & David Pesetsky. 2023. Wh-WH relatives and the existence of pied-piping. *Glossa: a journal of general linguistics* 8.1.

Fabb, Nigel.1992. Reduplication and object movement in Ewe and Fon. *Journal of African languages and linguistics* 13(1), 1-40.

Gavruseva, Elena. 2000. On the syntax of possessor extraction. *Lingua* 110.10 743-772.

Gotah, Selikem. 2024. Deriving Ewe (Tongugbe) nyá-constructions. *Linguistic Variation*, 1-24.

Gotah, Selikem and Soo-Hwan Lee. 2024. Syntactic negation in Ewe (Tongugbe) Agent Nominalization. *Syntax*, 1-18.

Grohmann, Kleanthes. 2003. Prolific domains: On the anti-locality of movement dependencies. Amsterdam: John Benjamins.

Holmberg, Anders. 2000. Deriving OV order in Finnish, in Svenonius, P. (ed.) The Derivation of VO and OV. Amsterdam: John Benjamins, pp. 123-152.

Horvath, Julia. 1986. *FOCUS in the theory of grammar and the syntax of Hungarian*. Dordrecht, Foris.

Huttar, George L., Enoch O. Aboh, & Felix K. Ameka. 2013. Relative clauses in Suriname creoles and Gbe languages. Lingua 129. 96-123.

Kandybowicz, Jason, & Harold Torrence. 2016. Predicate focus in Krachi: 2 probes, 1 goal, 3 PFs.*Proceedings of the 33rd West Coast Conference on Formal Linguistics*

Kayne, Richard S. 1994. *The antisymmetry of syntax*. Vol. 25. Cambridge, MIT Press.

Kayne, Richard S. 1996. Microparametric syntax: Some introductory remarks. Microparametric syntax and dialect variation 9.

Kayne, Richard S. 2005. Some notes on comparative syntax, with special reference to English and French. In *The Oxford handbook of comparative syntax*. Oxford University Press.

Kotek, Hadas, & Michael Yoshitaka Erlewine. 2016. Covert pied-piping in English multiple wh-questions. *Linguistic Inquiry* 47.4 (2016): 669-693.

Kpoglu, Promise D. 2019. Possessive constructions in Tongugbe, an Ewe dialect. Doctoral dissertation, Université de Lille; Universiteit Leiden (Leyde, Pays-Bas)).

Larson, Richard K.1988. On the double object construction. *Linguistic inquiry* 19(3),335-391.

Lewis, Marshall.1985. Relative clauses in Aŋlɔ Ewe. *Studies in African Linguistics, Supplement 9* 196-202.

Longobardi, Giuseppe. 1994. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic inquiry*609-665.

Marantz, Alec. 1993. Implications of asymmetries in double object construction. Theoretical aspect of Bantu grammar.

Mendes, Gesoel, & Jason Kandybowicz. Salvation by deletion in Nupe. *Linguistic Inquiry* 54(2), 299-325.

Merchant, Jason. 2001. The syntax of silence: Sluicing, islands, and the theory of ellipsis. Oxford University Press

Mullen, Karen A. 1966. A generative-transformational grammar of Ewe. Master's thesis, University of Iowa.

Ndayiragije, Juvénal. 1999. Checking economy. *Linguistic Inquiry* 30(3), 399-444.

Pearson, Hazel. 2015. The interpretation of the logophoric pronoun in Ewe. *Natural Language Semantics*, 23(2), 77-118.

Pesetsky, David. 1987. Wh-in-Situ: Movement and Unselective Binding. In Eric J. Reuland and Alice G.B. ter Meulen (eds.), The Representation of (In)definiteness, 98-129. MIT Press, Cambridge

Pylkkänen, Liina. 2008. Introducing arguments. Vol. 49. MIT press.

Rizzi, Luigi. 1997. The fine structure of the left periphery.Elements of grammar. Springer, Dordrecht, 1997. 281-337.

Rizzi, Luigi. 2001a. On the position "Int (errogative)" in the left periphery of the clause. *Current studies in Italian syntax*. 287-296.

Rizzi, Luigi. 2017. Types of criterial freezing. Rivista di grammatica generativa 39 (1) 1-21.

Sauerland, Uli. 1998. The meaning of chains. Doctoral dissertation, MIT, Cambridge, MA.

Sauerland, Uli. 2003. Unpronounced heads in relative clauses. The interfaces: Deriving and interpreting omitted structures, 61, 205-226.

Sheehan, Michelle, Theresa Biberauer, Ian Roberts & Anders Holmberg. 2017. T*he final-over-final condition: A syntactic universal*. Vol. 76. MIT Press, 2017. Stepanov, Arthur. 1998. On wh-fronting in Russian. *North East Linguistics Society*. Vol. 28 (1) Stowell,

Tim. Determiners in NP and DP. *Views on phrase structure* 37-56.

Stoyanova, Marina. 2008. *Unique Focus: Languages without multiple wh-questions*. John Benjamins Publishing

Sulemana, Abdul-Razak. 2019. Q-particles and the nature of covert movement: Evidence from Bùlì. *Glossa:a Journal of general linguistics* 4.1.

Williams, Edwin. 1978. Across-the-board rule application. *Linguistic Inquiry* 9(1), 31-43.