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Relativization and Functional Heads in Fe'efe'e: A Derivation via Heavy Pied Piping

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ABSTRACT: *This paper accounts for relativization and functional heads in Fe'efe'e, a Grassfields language spoken in the West Region of Cameroon. The discussion carried out within the Cartographic framework, following, Rizzi (1997), unveils the position of relativization and functional heads in the Fe'efe'e language. Furthermore, the study highlights the derivation of relativization at the inflectional area (IP) where the tense phrase is heavily pied-piped. Three data collection strategies were used to gather the primary material of this work:* data collection methods, data collection instruments and sampling technique for informants. *A large quantity of the data was collected from ten (10) randomly selected elderly informants. At the same time, our discussions with 15 learners also helped to shed light on some of our questions. The analysis leads to the conclusion that relativization is marked in this language by either a single morpheme or a discontinuous marker, unlike in what has been captured in many world languages so far, where relative markers are not attested to be discontinuous. The article proposes that for the bipartite markers, the first particle belongs to the complementizer phrase (CP), whereas the second particle belongs to the inflectional phrase (IP). During derivation, there is recursion with the relativized constituent occupying the specifier of the relative phrase (RELP) while the discontinuous relative markers ji---lá and/or kā---lá occupy their respective heads (Rel°). The article further demonstrates that tense phrase undergoes a heavy pied-piping into the specifier of the RelP.*

KEYWORDS: *relativization, functional heads, complementizer phrase, inflectional phrase, derivation, heavy pied-piping*

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1. Introduction

Following Andrew (2007: 206), a relative clause is "a subordinate clause which delimits the reference of a noun phrase (NP) by specifying the role of the referent of that NP in the situation described by the relative clause (RC)". A relative clause can trigger relativization known as a process in which languages use different strategies to encode relative constructions (Comrie & Kuteva 2013a&b; Comrie & Keenan 1977; Kayne 1994; Aoun & Li 2003; Shlonsky & Soare 2011). This syntactic operation has been studied in world languages in general and in Cameroonian ones in particular, respectively, by some scholars such as Rizzi (1995, 2001, 2013 & 2015), Kayne (1994) and Atindogbé & Grollemund, eds (2017). Similar studies have been extended to functional heads that Bruge et al (2012) define as an attempt to map aspects of syntactic structures according to the cartographic approach. Though pieces of research have been carried out on functional heads in Bantu languages (Tala 2015; Biloa 1992, 1995, 2013 & 2020) and adverbs and functional heads in Romance languages (Cinque 1999 & Neto 2022), relativization and functional heads as syntactic operations are still to be examined in natural languages.

Two types of analyses have been proposed concerning relativization: the matching and the promotion analysis. According to the matching analysis, which has been proposed by Lees (1960, 1961), Kuroda (1968) and Chomsky (1977), among others, nominal expressions which head relative clauses are base-generated in the head position, and WH-phrases or invisible operators move to the specifier of the relative clauses to match themselves with the nominal expressions. As for the promotion analysis, which has been suggested by Brame (1968), Schachter (1973), Vergnaud (1974), Kayne (1994) and Biloa (2013; 2020), among others, the head of a relative clause is moved from within the relative clause, such that no WH-phrase or operator movement is involved. Carlson (1977), Afarli (1994), Aoun & Li (2003) show that both the matching and the promotion analysis are necessary to account for all types of relative constructions in English. They claim that the head of the relative clause can be moved from inside the relative clause, that is, the promotion analysis is available in the case of that relative construction. In the same vein, relative clauses are also said to involve an adjunction structure, as in Chomsky (1977) or a complementation structure, as in Kayne (1994). The present study looks into this latter phenomenon in the Fe'efe'e language. Therefore, this article examines Relativization and Functional heads in Fe'efe'e, looking at how derivation proceeds via heavy pied-piping. Based on the above, the following questions could be raised: How is relativization formed in the language? Which structure is pertinent in the Fe'efe'e language? How does it behave with functional heads? Therefore, to attempt some answers to these questions, the paper is organised as follows: An introduction is provided in (1). The second section (2) discusses the experimental section by presenting the number and types of data and most importantly, the data collection and analysis techniques. The third section (3) presents the results provided by the analysis. Then, highlights and nails with an in-depth discussion. The essential findings of the work and the conclusion are provided in the fourth section (4). Toneless words in this paper should be considered as bearing a low tone. At this point in the discussion, we can move to the experimental section.

2. Experimental Section

This qualitative research makes use of fieldwork to explore the relativization and functional heads through a heavy pied-piping in Fe'efe'e. It unveils the position of relativization and functional heads in the Fe'efe'e language, then highlights relativization at the inflectional area (IP) in Fe'efe'e. During fieldwork, data collection was processed through some strategies that required the use of specific instruments.

2.1. Data collection methods

During fieldwork, primary material for the present study was collected by listening to peers and other native speakers. Classroom settings during literacy classes allowed us to learn the language in a formal environment. In fact, to get better insights from peers and other native speakers, we spent some months in the native area where the language is spoken, namely in Bafang and its vicinities where we attended literacy classes focused on how to learn to write and read. Listening to people who speak the language in its natural milieu was a necessity. It helped us to get the right pronunciation and to be able to proceed with the right transcription of words in clauses and sentences. Based on our target, we asked the informant a well-known data collection question in field linguistics, "How do we say/How do we call…". During classroom learning sessions, discussions with fifteen (15) learners also helped us to shed light on some questions.

2.2. Data collection instrument

The main instrument used to collect the data for this work was a linguistic questionnaire built based on its goal. The questionnaire was made up of clauses and sentences attempting to obtain from the informants basic and derived constructions, aiming at examining relativization processes and functional heads in the language.

To complement research information, this data collection instrument was accompanied by a documentary search based on some accessible Fe'efe'e books.

2.3. Sampling techniques for informants

Ten (10) randomly selected elderly consultants provided us with a large portion of the data. These participants were chosen based on their assumed native speakers' knowledge and fluency of/in the language. These informants helped to clear doubts on functional heads constructions based on the questions they were asked. Another advantage of working with this group of informants was their ability to speak and write the language.

Based on the above mentioned, classroom literacy, personal knowledge of the language and fieldwork informants were used to gather the data used in this paper.

3. Results and Discussion

This section, addresses the findings, interprets them and discusses the results arrived at after analysis.

3.1. Nature, function and characteristics of lά

This sub-section analyses the nature, function and characteristics of lά. It aims to clarify the nature of the morpheme lά as it can play many roles in the language: discontinuous marker, topic or reinforcer. According to Jaehoon (2013), reinforcers are morphemes that are used along with a demonstrative, to strengthen the deictic properties of demonstratives. This is true and verified in some romance languages Bernstein (1997 & 2001). However, is it the case in Bantu languages? In Fe'efe'e, for instance, reinforcers are post-nominal particles (except in topic constructions) that support and add more force to the word, phrase or clause they are related to (not only demonstratives) but also locatives, possessives, adverbs and relative clauses. The issue here is not to describe different types of reinforcers in the language but to focus on lά as a discontinuous marker in relative construction.

This particle *lά* is considered as a 'deictic person feature' following Terenghi (2018), helping the demonstrative *báá*, the topic constituent and the locative adverb *sáá* to be strengthened in a phrase or clause. It also co-occurs with the relative markers ji and kᾱ. The absence of the reinforcer in a construction does yield ungrammaticality. However, *lά* indicates an object near the listener, even though it is visible, but most

often not specified. Interestingly, this particle *lá* can occur after nouns, determiners or only after the moved constituent in topic constructions. When it correlates with demonstratives, nominals, locatives and possessives, it functions as a reinforcer because it imposes a kind of insistence and force on the reinforced constituent. Some examples include:

(1) m-ūū bàá lɑ́
Cl1-child that REINF
'that child'

(2) bàá m-ūū lɑ́ (NL)
that Cl1-child REINF
'that child'

(3) ø-khu ō lɑ́
Cl3-foot your REINF
'your foot'

(4) jò ø-khu lɑ́
your Cl3-foot REINF
'your foot'

(5) m-ūū lɑ́
Cl1-child REINF
'The child there'

(6) ø-sɛ̄n lɑ́
Cl1-friend REINF
'The friend there'

(7) mʉ-nʒwiɛ̄ sáá lɑ́
Cl2-woman there REINF
'a woman there' (NL)

(8) sáá mʉ-nʒwiɛ̄ lɑ́
there Cl2-woman REINF

The examples above (1-7) show the co-occurrence of demonstratives, possessives, locatives and reinforcers. The head noun may occur between the demonstrative or the possessive and the reinforcer (2&4). In (5&6), when the noun co-occurs with the reinforcer, the reinforcer can only appear post-nominally. A similar case is relevant in (7). The example in (8) demonstrates that the locative can never co-relate with the reinforcer when placed in a pre-nominal position. Related examples will further be discussed in subsequent sections.

In the same vein, it is plausible to note that lɑ́, when functioning, for instance, as a topic particle, can appear in the left periphery of the clause. This point is illustrated in the examples below.

(9) Maria lɑ́, n kɑ - yíí ní ntám ndʉ̄ɑ̄
Mary TOP, I PST3-see her inside room

'Mary, I found her in the bedroom.'

(10) Mbαα lά, Siāni ñná' jāā
meat TOP Siani cook it
'The meat, Siani cooked it'

From the example above, it is clear that when a constituent in the IP layer - that is, the lower domain- moves to the CP layer - the higher domain or the left edge of the sentence- in topic constructions, lά is adjoined to it and is considered as the head of the entire clause. We should note that the position and the obligatory presence of the morpheme *lά* in a clause tell us if we are dealing with a topic sentence. This is why example (9&10) is presented above to help distinguish the difference between the topic marker and the second relative marker lά with which it is homonymous.
Let us provide below some of the key characteristics of *lά*, in the language.

- the morpheme always bears a high tone as a relative marker, a topic marker or as a reinforcer;
- it is not subject to movement from the lower domain to the highest domain, but can occur directly after the moved constituent in topic construction;
- This morpheme appears only in the IP layer of the internal clause, except in topic constructions;
- it helps to introduce an embedded relative clause;
- its meaning and function cannot be identified in isolation;
- it plays the role of a reinforcer when it correlates with demonstrative and possessive determiners, locatives and nominals.

After the analysis of the double-functionality of lά - It can work either as a reinforcer or a topic marker-, the construction strategy of relative in the language can now be examined.

3.2. Formation of relativization in Fe'efe'e

Natural languages exhibit a wide range of relative clauses. Fe'efe'e offers morphological particles used to express relative constructions. These morphological patterns are not Fe'efe'e specific. This section demonstrates that relativization is morphologically marked in this language through the following morphemes: ji---lά, kᾱ---lᾱ and mα.

In Fe'efe'e, the relative clause is introduced by either (a) two distinct bipartite relative markers or discontinuous morphemes (b) a single relative marker - less attention will be paid on this relative marker in this paper-. These relative markers are examined below.

(11) Bipartite relative markers
ji---lά " that, who, whose , whom"
kᾱ---lά "who, which"

(12) Single relative marker
mα "who, whom"

The examples in (11&12) show that the language distinguishes three forms of relative markers, namely ji or ji---lά 'that, who, whose', and kᾱ or kᾱ---lά 'who, which' and mα 'whom, who'. The co-relative marker or the 'particle' lά occurs only in IP- position (after the verb) in relative clause constructions. As we proceed with the analysis, examples like those in (13) below will be provided to illustrate this issue.

In (13), the relative clause formation is discussed, and the above-mentioned relative markers are materialised.

ji or ji ---lɑ́

(13)
m-ūū ji ngɑ̌ yíí lá
Cl1-child RM I see RM
'The child that I saw'

The obligatory kɑ̄---lɑ́

(14)
p-ʉ kɑ̄ sí ndūɑ̄ lá
Cl2-people RM seat house RM
'those who are seated inside the house'

(15)
ø-ŋguu kɑ̄ nsɑ' lá mɑ́ ndāk
Cl1-girl RM come RM is white person
'The girl who came is a white person'

(16)
ø-ndhī ji ø-ŋguu jwén lɑ́ mɑ́ sīsī
Cl3-cloth RM Cl1-girl buy RM is black
'The cloth that the girl bought is black'

(17)
ø-ŋguu ji ă há mbɑɑ̄ mbú í lá má m-ên ø-fʉ
Cl1-girl RM you give meat to him RM is Cl1-child Cl3-chief
'The girl to whom you gave meat is the chief's daughter'

The examples above in (13-17) with the bipartite relative markers show that the relative marker introduces the relative clause. These particles ji and kɑ̄ belong to the CP domain that is above the tense phrase. As for the second particle lɑ́, it belongs to the IP layer. In the IP domain, this second particle can occur in the final position (13&14), the immediate position after the verb (15&16) and directly after the indirect object (17), as illustrated above. Keenan and Comrie (1977) propose a cross-linguistic hierarchy for relativization: subject, direct object, the indirect object of pre or post-position, and possessor. It was earlier stated above that in the adjunction structure, the relative clause is adjoined to the Head. The following exemplifies the situation in Fe'efe'e.

(18) Subject
ø-ŋguu kɑ̄ nsɑ' lá mɑ́ ndāk
Cl1-girl RM come RM is white person
'The girl who came is a white person'

(19) Object
ø-ndhī ji ø-ŋguū jwén lɑ́ mɑ́ sīsī
Cl3-cloth RM girl buy RM is black
'The cloth that the girl bought is black'

(20) Indirect object
ø-ŋguu ji ă há mbɑɑ̄ mbú í lá má m-ên ø-fʉ

Cl1-girl RM you give meat to him RM is Cl1-child Cl3-chief
'The girl to whom you gave meat is the chief's daughter'

(21) Possessor
m-ūū mɑ mā ā ʄō síɛ́ mɑ ŋ̄gɛ́'
Cl1-child RM mother his fall down be cry
'The child whose mother fell is crying'

Examples (18-21) go in line with Keenan and Comrie's (1977) postulation above and advocate the Accessibility Hierarchy to relativization in Fe'efe'e. In this language, just like in Mə̀dû̀mbɑ̀ (Kouankem, 2012) and Musgum (Biloa, 2020), all positions can be relativized in the sentence. As such, Fe'efe'e data goes in a straight line with the Accessibility Hierarchy proposed by Keenan & Comrie (op cit). However, an exceptionally interesting phenomenon is visible in the language. When the subject and the direct object are relativized, the relative marker visible in clause-final position is visible in the immediate position after the verb (18&19) whereas in (20) this same relative marker is directly placed the indirect object. In example (21) above, the relative marker is mɑ with a low tone. The relative clause is adjoined either to the subject, the object, the indirect object, or the possessor. The next sub-section proposes the derivation of the relative clause in Fe'efe'e.

3.3 The pertinent relative clause structure in the Fe'efe'e language

As already pointed out, Fe'efe'e relative markers might function like in English. However, Fe'efe'e ones exhibit syntactic differences. Now, the question is to know whether it is the matching analysis, the promotion analysis or both that can suit the Fe'fe'e data. In an attempt to answer this question, the following examples help us to expose how relative clauses are made in Fe'efe'e.

(22) Maríá mɑ́ nsiɛsi mɑ ă kwɛ̌' ɣă'ŋwɑ'ni
Mary PRS-be teacher RM she love students
'Mary is a teacher who loves students'

(23) Fā' mɑ́ zʉ' ji mɑ̄ ā ko-mfɑ́' nā lɑ́
Bafang PRS-be place RM mother his PROG-work on RM
'Bafang is the place where his mother works'

(24) ø-ndhī ji ø-ŋguū jwɛ́n lɑ́ mɑ́ sīsī
Cl3-cloth RM Cl1-girl buy RM is black
'The cloth that the girl bought is black'

(25) ø-ŋguu ji ă hɑ́ mbɑɑ̄ mbú ī lɑ́ mɑ́ m-ê̂n ø-fʉ
Cl1-girl RM you give meat to him RM is Cl1-child Cl3-chief
'The girl to whom you gave meat is the chief's daughter'

The examples above might account for both the matching and promotion analyses, like in English, in spite of the syntactic differences they exhibit. In furthering the analysis, like in the examples below, a different schema from what is obtained in English at the level of derivation will be captured. Based on promotion and matching analyses Aoun & Li (2003) view it as necessary to come up with a summary of both as follows:
a) complementation structure: the relative clause is a complement to D;
b) adjunction structure: the relative clause is adjoined to the Head XP "Head".

The summary of these two analyses presented by Aoun & Li (2003) matches the Fe'efe'e examples in the sense that the relative clause is either a complement to D or is adjoined to the head, like in the examples below.

(26)
pūū ji ă hɑ̄ ŋkɑ́ɑ́ mbí pō lɑ́
children RM 3SG-PRON give money to them RM
'The children to whom he gave money'
(27)
ŋgă jíí wɛn kɑ̄ zop ī lɑ́
I see person RM beat him RM
'I saw the person who beat him'

The structures depicted in (26&27) portray two realities: The first relative marker occupies the head of RelP, meaning, Rel° and the second relative marker is also positioned under Rel°. There is a massive tense phrase (TP) pied-piping into the Spec, RelP position. The sentences shall be derived in the following section. For now, let us consider the data below:

(28)
Mŭmɑ̄ni lá, ŋwɑ'ni ji a kɑ-jwɛ̄n lɑ́ jɑ́ɑ́ mɑ hā?
Mumani TOP book RM he PST3-buy RM lie FOC where
'Mumani, where is the book that he bought?'

(29)

Mŭmɑ̄ni lá, mbā' kɑ̄ zɛ̄nnʃì lá mʉ-ndūū nī mɑ́ kɑ́?
Mumani TOP Man RM dance RM PROG-beg PRON FOC what
'What is the man who danced begin from Mumani?'

(30)
Mŭmɑ̄ni lá, ŋwɑ'ni ji Maríá ʒʉɑ̄ mbí í lɑ́ pīɛ̄ mɑ́ sɛ̄nā?
Mumani TOP book RM Maria steal to PRON RM lose FOC when
'When did the book that Mary stole disappear?'
(31)
Sīɛ̄wen lá, wū ji a kɑ-jwɛ̄n lá jɑ́ɑ́ mɑ hā?
Siewen TOP thing RM he PST3-buy RM lie FOC where
'Where is the thing that Siewen Bought'

It can be observed that constructions in (28-31) are pertinent in the Fe'efe'e language because of their ability to combine at once three functional heads, namely the topic phrase, the relative phrase and the wh/XP in situ (leaving the wh/XP in situ).

3.4. Relativization at the inflectional area (IP) in Fe'efe'e

Rizzi (1997: 289) posits that "relative operators occupy the highest specifier position, the Spec of Force". If this is true of English, Italian and some other languages, can it also be true of Cameroonian languages and specifically of Fe'efe'e? What will be the landing sites of relative markers in this language since the language is endowed with bipartite relative markers?

Provided that both bipartite particles that make up the relative clause in Fe'efe'e also known as discontinuous relative markers occupy each a specific position in the clause, it can be proposed that the first particle belongs to the upper domain (CP) (see *ji* in 32) whereas the second particle belongs to the lower domain (IP) (see *lá* in 32). Therefore, in the following structure, the relativised constituent occupies the specifier of the Relative Phrase (RELP) in the CP layer. While there is a massive pied-piping into Spec, RelP position, the discontinuous relative markers occupy the head of their relative phrases. The following examples (32&33) present the discontinuous relative phrase in Fe'efe'e.

(32)
p-ūū ji ă hɑ̄ ŋkáá mbí pō lá
Cl2-children RM 3SG-PRON give money to them RM
'The children to whom he gave money'

(33)
ŋgă jíí wɛn kɑ̄ zop ī lá
I see person RM beat him RM
'I saw the person who beat him'

The derivation depicted in (32&33) portrays two realities: The first relative marker occupies the head of RelP, meaning, Rel° and the second relative marker is also positioned under Rel°. The diagrams present a recursive relative phrase with a massive TP pied-piping into Spec, RelP position.

3.5. The position of relativization and functional heads in the Fe'efe'e language

The nature of the relative marker varies cross-linguistically. In Swiss German, it is the relative marker *won* that indicates the clause type (Martin, 2014). Keenan and Comrie (1977: 22) stipulate that in Basque, it is the suffix –n that corresponds to a relative marker. For McCloskey (1990: 205), the relative marker indicates aL = gap; aN = resumption. Sonja (no date) observes that Swahili has three primary strategies used in the formation of a relative clause. Two of these strategies are expressed within the morphological sequence structure of the verb. The third one involves a*mba*, which has been referred to as a 'relative pronoun'.

In Fe'efe'e, the analysis exhibits that discontinuous relative markers can occur syntactically in clause-initial and clause-final positions in relative constructions. Cinque (1999) argues that there is a systematic one-to-one correspondence of the hierarchies of adverbs and clause functional heads observed in various languages. He concludes that the functional projections in which its specifiers, the adverbs, occur are projections of these functional heads. Shin (2010) presents a novel analysis of aspectual verbs according to which they are heads of functional projections rather than main verbs taking clausal complements. Biloa (2020) discusses functional heads and their positions in the left periphery with Bantu languages and in the right periphery with Chadic languages. Lappi (2021) discusses the study of the Fe'efe'e left periphery and reveals that, contra (Rizzi, 1997), functional heads are independently marked with particles.

The third section of the analysis, under results and discussion, showed that the morpheme lá has a dual function. It can either function as a topic marker (placed directly next to the moved topic constituent) or a reinforcer (placed in clause or sentence final position). We deemed it necessary to discuss this dual function to avoid confusion when presenting the data. As for the position of relativization and functional heads in the Fe'efe'e language, after observation and analysis, we realised that relativization and functional heads are morphologically marked and syntactically represented. Firstly, it was demonstrated that in this language, the relative clause is introduced by two bipartite relative markers, namely ji---lá 'that, who,

whose,' as in (14) and kɑ̄---lɑ́ 'who, which' as in (15). Furthermore, the relative marker ji 'that, who, whose,' helps to distinguish a relative clause from the main clause and its counterpart kɑ̄ 'who, which' is always followed by a verb in the language (see example 15). The single marker mɑ 'whom, who, is used in Fe'efe'e to relativize humans. With the low tone, it bears the semantic feature of a possessor (see example 21).

Biloa (1992&1995) argues that in Hungarian, any topicalised phrase in a relative clause will necessarily follow the relative wh-phrase in linear order. It will be curious to see how relative clauses co-occur with functional heads (topic and focus) in the Fe'efe'e language. The assumption above led us to collect an important amount of data to check how relativization and functional heads work in Fe'efe'e. Firstly, the co-occurrence restriction between the relative clause and the focused wh/XPs was discussed. To be explicit, the occurrence of the relative clause and the in-situ focused wh/XPs in the same sentence is proposed. Secondly, the co-occurrence restriction between the relative clause and the topic phrase within the same sentence is examined. When this happens, the topic phrase dominates the relative phrase. Finally, to show that three different kinds of positions can overtly occur in Fe'efe'e sentences, a structure involving at the same time the three functional heads, namely: the topic phrase, the relative phrase and the focused wh/XPs, was provided.

3.6. Relativization and functional heads through a heavy pied-piping in Fe'efe'e

The pied-piping metaphor was coined by Ross (1967), based on a traditional fairy story in which the pied-piper in the village of Hamelin enticed a group of children to follow him out of a rat-infested village by playing his pipe. The term pied-piping means (dragging along with). Many studies (French, English, Italian and Bantu languages) have been conducted in relation to the aforementioned notion. Syntactically, the pied-piping operation goes in a straight line with Rizzi's (2001b) theory of phrase structure, which argues that to derive the word order attested at PF, the clause is pied-piped into the Spec, IntP position or Chomsky's, (2008) Edge Features, where the clause (TP), to satisfy the EPP requirement, undergoes a heavy pied-piping into the spec, Int.

This study points out, following Rizzi (2015) that the left periphery is populated by a sequence of functional heads. In this language, the topic phrase could dominate many constituents, including the relative phrase and the focus phrase. This is to say, three different kinds of functional heads can overtly appear in Fe'efe'e sentences. Transformations were further analysed from simple transformations (relative phrase, focus phrase, topic phrase…), to complex ones (heavy pied-piping).

The language differs in recursion and pied piping from Romance languages (Rizzi, 2015) and other Bantu Languages such as Tuki (Biloa, 2020), in the sense that the relative marker can co-occur with functional heads in the same structure. As was stated above, firstly, the discussion about the co-occurrence restrictions between the relative clause and the focused wh/XPs led to the conclusion that there is an occurrence of the relative clause and the in-situ focused wh/XPs in the same sentence. Secondly, the co-occurrence restrictions between the relative clause and the topic phrase can happen within the same sentence. When this happens, the topic phrase dominates the relative phrase. Finally, to show that three different kinds of positions can overtly occur in Fe'efe'e sentences, a structure involving at the same time three functional heads namely: the topic phrase, the relative phrase and the focused wh/XPs was clearly examined and explained.

To be concrete, we move to the co-occurrence between relative clauses and focus wh/XPs in-situ, about their derivation. The following examples illustrate the occurrence of the relative clause and the in-situ focused wh/XPs in the same sentence.

(34)
Mbā' kɑ̄ ñsɑ̄ ñzā wúzā lá ɣɛnɑ mɑ nǔkɑ́ bɑ̄ ɑ̄?
Man RM come Eat Food RM go FOC why be INT
'Why did the man who came to eat the food go?'
(35)
ŋwɑ'n ji n dɑ- jwɛ̄n lɑ́ yáá mɑ hā?
Book RM I PST4- buy RM Post FOC where
'Where is the book that I bought?'

(36)
mbā' kǎ zɛ̄n shi lá mɑ- ndūū mɑ́ kɑ́?
Man RM dance water RM PROG-beg FOC what?
'What is the man who danced begin for?'
(37)
ŋwɑ'ni ji Marīa ʒʉɑ lɑ́ pīɛ̄ mɑ́ sɛ̌nā?
Book RM Maria steal RM lost FOC when
'When did the book that Mary stole disappear?'
38)
Mūūmbā' Siewen ŋ̄kwɛ́' lá mɑ́ wǎ?
Childman Siewen like RM FOC who
'Who is the boy that Siewen loves?'

Having discussed the relationship between the relative clause and the focused Wh/XPs, the examples above would have the following tree representations.

(39)
ŋwɑ'ni ji n dɑ- jwɛ̄n lɑ́ yáá mɑ hā?
book RM I PST4-buy RM put FOC where
'Where is the book that I bought?'

The example in (39) above depicts the co-occurrence between the relative marker and the WH-phrase in-situ. In this example, the relative marker *ji* is hosted by Rel°, the head of RelP. When the other part of it, *lá,* is hosted by Rel°, the head of RelP, the entire TP that is attracted by the specifier of the Relative phrase is pied-piped into it via movement. The WH-phrase is preceded by the focus marker and is base-generated in - situ.

(40)
mbā' kǎ zɛ̄n shi lá mɑ-ndūū mɑ́ kɑ́?
Man RM dance Water RM PROG-beg FOC what?
'What is the man who danced begin for?'

Example (40) looks similar to that in English. The only difference lies in the relative marker. At the same time, the relative marker kǎ is also hosted under Rel°, the head of RelP. The TP is pied-piped to the specifier of the relative phrase, and lá also occupies the head of RelP, Rel°, as illustrated in the tree diagram above.

(41)
mūūmbā' ji Siewen ŋ̄kwɛ̄' lá má wă?
boy RM Siewen like RM FOC who
'Who is the boy that Siewen loves?

In the example above (41), the heads of the recursive RelP, i.e., Rel°, are filled. The TP is pipe-piped in the specifier of the RelP. The focused WH - phrase is base - generated in situ and preceded by the focus marker má.

In this section, the relative clause can co-occur with the topic phrase as indicated in the following example. When this happens, the topic phrase dominates the relative phrase.

(42)
Mŭmɑ̄ni lá, ŋwɑ'ni ji a kɑ-jwɛ̄n lá mɑ́ sīsī
Mumani TOP Book RM he PST3-buy RM is black
'Mumani, the book that he bought is black'

(43)
Mŭmɑ̄ni lɑ́, mbā' kă zɛ́nnshi lá mʉ-ndūū wúzɑ̄ i
Mumani TOP man RM dance RM PROG-beg food his
'Mumani, the man who danced, is begging for his food?'

(44)
Mŭmɑni lɑ́ ŋwɑ'ni ji María ʒʉɑ̄ mbú í lɑ́ ø- pīɛ̄
Mumani TOP Book RM Maria steal to him RM PST1-disappear
'Mumani, the book that Mary stole from him disappear'

(45)
Mŭmɑ̄ni lá, ŋwɑ'ni ji a kɑ-jwɛ̄n lá mɑ́ sīsī
Mumani TOP Book RM he PST3-buy RM is black
'Mumani, the book that he bought is black'

In the above phrase marker, the identity of the maximal projections that host the topic marker and the relative markers (Top° and Rel°) is specified, respectively. The tree representation also proposes the pied-piping of the entire tense phrase to the specifier of the relative phrase to accommodate the Fe'efe'e empirical material.

This section proposes a structure involving three functional heads, namely the topic phrase, the relative phrase and the wh/XP in-situ (leaving the wh/XP in place). To show that three different kinds of positions can overtly be covered in Fe'efe'e sentences, let us consider the following:

(46)
Mŭmɑ̄ni lá, ŋwɑ'ni ji a kɑ-jwɛ̄n lɑ́ jɑ́ɑ́ mɑ hɑ̄?
Mumani TOP Book RM he PST3-buy RM lie FOC where
'Mumani, where is the book that he bought?'

(47)
Mŭmɑ̄ni lɑ́, mbā' kă zɛ́nnʃì lá mʉ- ndūū nī mɑ́ kɑ́?
Mumani TOP man RM dance RM PROG-beg him FOC what
'What is the man who danced begin from Mumani?'

(48)
Mŭmɑ̄ni lá ŋwɑ'ni ji Maríá ʒʉɑ̄mbí Mŭmɑ̄ni lɑ́ pīɛ̄ mɑ́ sɛ̄nɑ̄?
Mumani TOP book RM Maria steal to Mumani RM lost FOC when
'When did the book that Mary stole disappear?'

(49)
Sīɛ̄wen lá, wū ji a kɑ-jwɛ̄n lá jáá mɑ hɑ̄?
Siewen TOP thing that he PST3-buy REINF lie FOC where
'Where is the thing that Siewen bought?'

The examples above in (46-49) attest that three criterial heads can occur in the same clause and occupy different positions. The raising processes concern the topic phrase and the relative phrase, whereas the focus wh/XP occupies its base-generated position (in-situ).

The discussion, interpretations and results above show that the morpheme lá plays different roles. It can either work as a discontinuous marker, a topic marker or a reinforcer. Future research could be projected on the syntactic distribution of the lá morpheme in the language.

Conclusions

This paper was devoted to the study of relativization and functional heads in Fe'efe'e with a focus on how heavy pied piping occurs during the derivation. In Fe'efe'e, the matching and the promotion analyses are possible just like in English, since the relative clause can be adjoined to the head or can precede the inflected verb or occupy the internal position. Nevertheless, when it comes to derivation, movement is done via pied piping. In this study, the notion of heavy pied piping is used to portray the fact that the derivation of the relative clause is done via a movement with recursion, the two relative markers occurring under Rel°, imposing a massive pied-piping of the tense phrase under the specifier of the RelP. The co-occurrence of the relative clause and functional heads was also highlighted in the discussion. The analysis proves that two or three functional heads can co-occur in the same sentence. When the relative clause occurs in the same sentence with the focused Wh/XP, the relative clause takes scope over the focused Wh/XP. In a construction expressing the relationship between a topic phrase and the relative clause, the topic phrase will dominate the relative phrase. In case the co-occurrence implies the relative clause, the topic phrase, and the focused wh/XP, the topic phrase occupies a higher position than the relative clause and the focused Wh/XP.

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