

SYNTACTIC STRUCTURE AND PRAGMATIC INTERPRETATION OF EMBEDDED QUESTIONS IN MUYANG

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Abstract

The present article tackles the structure and semantics of embedded questions in Muyang. The main question is how this syntactic element is structured and interpreted within a complex and populated map of the clause left periphery exhibited by Muyang language (Bebey, 2015). The article aims to highlight the syntactic and pragmatic characteristics of embedded questions. Data are collected from Muyang native speakers. It uses the cartographic theory and a descriptive-analytical approach. This article demonstrates that the complementizer *kado* 'that' which expresses illocutionary force cross linguistically co-construes with embedding markers *bi* (whether) and *tamala* (if) also analyzed as illocutionary force indicators, a remark that leads to the assumption that there may be a distinct projection of the Embedded-Question Phrase (EmQP). It also reveals that the syntactic configuration of the embedded question (EmQ)'s head is made up of a number of constituents that interpolate between the complementizer *kado* 'that' and the embedding markers *bi* 'whether' and *tamala* 'if', the selection of which depends on syntactic properties and pragmatic requirements. It provides evidence that contrary to Biloa (2013 and 2019), Bebey (2015) and subsequent works, that Wh-questions cannot be analyzed as types of focusing in Chadic languages. Given the complexity of that position, this article suggests following Jean-Yves Pollock (1989), Rizzi (1997, 2001) and subsequent works that it may split up into distinct maximal projections ranged as follows: ForceP > FocP > WhP > TopP > EmQ > AgrP.

Key words: Muyang, embedded questions, embedding markers, syntactic selection, pragmatic requirements, cartographic approach.

1. Introduction

The syntactic and pragmatic characteristics of clausal phrases have consistently attracted interest in the cartographic project started in 1990s. The study of embedded questions was among the initial topics developed in Indo-European languages before being extended to other families of languages many years later. According to Radford (1997: 55), embedded questions are expressions of a specific category of clauses that are introduced by words as "if", "whether" and "that" in English characterized as follows:

Firstly, they mark the fact that the clause they introduce is the complement of some other work (think, doubt/anxious); secondly, they serve to indicate whether the clause they introduce is finite ...or infinitival; they mark the illocutionary

force of the clause they introduce.

As far as African languages are concerned, this topic of embedded question remains both relevant and largely unexplored. Given its specificity with complex syntactic constituents set in the C-domain and both grammatical and semantic requirements that regulate their order, it deserves a particular attention. The aim of this paper is to describe mechanisms that obtain embedded questions in Muyang. The first section deals with embedding verbs, section two is dedicated to syntactic constituents that head clausal arguments which I call Embedded-Question Marker (EmQM). In the third section, one describes the various possibilities that obtain embedded questions in Muyang. Section four analyses the Embedded-Question position.

2. The background of the language and word order

Muyang is an Afro-asiatic language of the Chadic family, central Chadic branch and Biu-Mandara group. The language is spoken in Northern Cameroon by kirdi people called Muyang. It has about 30 000 native speakers. The Muyang word order is SVO.

3. Embedding verbs

Bilola (2013) argues that embedded questions are complements of verbs such as “to say”, “to see”, “to think”, “to ask” and “to know”. Muyang language resorts to a restricted list of verbs contained in the table below:

Infinitive	Gloss	Example
<i>modumani</i>	To say	<i>Leli mò dūm bi bay é shí zum</i> We SM.1pl say whether chief SM3sg drink wine ‘We said whether the chief drinks some wine’.
<i>Mehendeni</i>	To ask	<i>Leli mè hendì bi bay é shí zum</i> We SM.1pl ask whether chief SM3sg drink wine ‘We asked whether the chief drinks some wine’.
<i>Mawayani+mesirani</i>	To want to know	<i>Mà wày mà sīr tamal ká rá ni má dzegáy kur</i> SM want SM know if SM come NI SM wait you ‘We wanted to know if you come, we wait you’.
<i>Mawayani+mepeni</i>	To want to see	<i>Mà wày mè pì tamal ká rá ni má dzegáy kur</i> SM want SM see if SM come NI SM wait you ‘We wanted to see if you come, we wait you’.

Table 1: the list of embedding verbs

The list of four verbs in the table above supposes that not all verbs can introduce embedded questions in Muyang. The language uses two single verbs: *modumani* ‘to say, to declare’ and *mehendeni* ‘to ask’; and two complex verbs *mawayani+mesirani* ‘to want to know’ *mawayani+mepeni* ‘to want to see’ before the clausal argument that conveys an interrogative meaning. The semantic content of these verbs reveals that there is a search of information, an intention of discovery by the speaker which is expressed by the following embedded question. In order, the above verbs require answers even if they do not select overt interrogative construction. This argumentation supposes that it is a pragmatic selection that motivates the restricted list of embedding verbs in Muyang-type languages.

4. The Embedded-Questions Markers (EmQM)

All like embedding verbs, a semantic selection restricts the list and the use of embedded-questions markers in Muyang. Let us consider examples that follow:

- Leli má wayáy má sīr bi beza tá gráy tewi*
We SM1pl like SM.1pl know whether children SM.3pl do work
Leli má wayáy mé sīr bi beza tá gráy tewi
‘We want to know whether the children work’
- Nday tà dūm bi ká slokumá*
They SM.3pl say.P2 whether SM.2pl go
Nday tò dūm bi kó slokumá
‘They said whether you go.’
- Echi à hendì bi ata bengani tà shi-à zum-à*
Achi SM.3sg ask.P2 whether PL parent SM.3pl drink-TNS.P2 wine-Asp.Perf
Echi è hendì bi ata bengani tè shè zumà
Achi wanted to know whether her parents drank some wine.

4. *Devalay á wayáy á pí bi nekuli ká blúm do*
Devalay SM.3sg like SM.3sg see whether you SM.2pl please Neg
Devalay á wayáy é pí bi nekuli kó blúm do
'Devalay wants to see whether you are not handsome.'
5. *Nday tà dũm tamalaká slokumá ni tá đebá kuli*
They SM.3pl say.P2 if SM.2pl go NI SM.3pl search you
Nday tò dũm tamalakó slokumá ni tá đebá kuli
'They said if you go, they follow you.'
6. *Leli má wayáy mé sir way á gráy tewi way*
We SM1pl like SM1pl know who SM.3sg do work who
'We want to know who works.'

One realizes from the above paradigm that three lexical words: *bi* 'whether', *tamala* 'if' and the wh-constituent, head embedded questions in Muyaŋ. They are located just after the introductory verbs called embedding verbs in our terminology.

However, although these elements head the clausal arguments, they do not convey the same pragmatic interpretation as argued in Bebey (2015): *bi* 'whether' expresses an implicit doubt. In (1) for instance, the speaker intends that something may happen if the children do not work. Such a syntactic construction generally requires its contrastive form in a complete ordinary discourse. The complementizer *tamala* 'if' expresses an implicit condition. It can be used at the beginning of a sentence without embedding verbs. In example (5), the speakers pose a condition; they will follow if and only if you go. The embedded-question marker Wh-element marks an explicit question. In contrast to many languages (Biloa 2013, Radford 1997, Adger & Quer 2001, etc); this type of embedded question is achieved by an overt interrogative phrase.

From the analysis above, one assumes that it is the semantic need of explanation/information that motivates the use of embedded-question markers in Muyaŋ.

5. Possibilities of embedded questions

This section enumerates the types of embedded questions and gives a brief account of their syntactic and pragmatic roles. Muyaŋ language permits two major categories of embedded questions: simple-head or single-head embedded questions and complex-head embedded questions.

5.1 Simple-head or single-head embedded questions

A simple-head embedded question consists of an introductory predicate followed by one complementizer that heads the embedded question. Let us look at examples that follow:

7. *Lawan à dũm bi beza tà zum-à đaf ahay-vu-à*
Lawan SM.3sg say.P2 whether children SM.3pl eat-TNS.P2 food house-Loc-Asp.Perf
Lawan ò dũm bi beza tò zumà đaf ahayvà
'Lawan said whether the children ate food inside.'
8. *Baba à hendì tamala Galu á rá*
Father SM.3sg ask.P2 if Galu SM.3sg come
Baba è hendì tamala Galu á rá
'My father asked if Galu comes.'
9. *Má wayáy má sir way ó zúm đaf way*
SM.1pl like SM.1pl know who SM.3sg eat food who
Má wayáy má sir way ó zúm đaf way
'We want to know who eats food.'

In sentences of the paradigm above, the use of the complementizer *bi* 'whether', *tamala* 'if' and the wh-element that head the clausal argument, requires an answer. This requirement assumes that there is a need to adjoin an additional argument as better illustrated in examples (10), (11) and (12):

10. *Lawan à dūm bi beza tà zum-à dāf, tà dī a tay*
Lawan SM.3sg say.P2 whether children SM.3pl eat-TNS.P2 food SM.3pl cook.P2 to them
Lawan ò dūm bi beza tò zumà dāf tè dī a tay
 ‘Lawan said whether the children ate food, let prepare it for them.’

11. *Baba à hendì tamala Galu á rá (ni), nang á sleká*
Father SM.3sg ask.P2 if Galu SM.3sg come NI, he SM.3sg leave
Baba è hendì tamala Galu á rá (ni), nang á sleká
 ‘My father asked if Galu does not come, he leaves.’

12. *Má wayáy má sir way ó zúm dāf way, ti má garay-ki-á*
SM.1pl like SM.1pl know who SM.3sg eat food who that SM.1pl chase-on-Asp.Imp
Má wayáy má sir way ó zúm dāf way, ti má garakiyá
 ‘We want to know who eats food so that we chase him away.’

Here, one notices that in the semantic level, the second argument fulfills the worry of the speaker; it is an answer to the embedded question formulated in the argument adjacent to the predicate. The co-construction of embedded questions and their answers leads to the postulation that embedded questions in Muyang-type languages are rather rhetorical questions. The speaker who asks questions such as the ones in sentences (7), (8) and (9) knows their answers as illustrated in (10), (11) and (12). In fact, it is a rhetorical process that enables the speaker to resort to embedded question in order to captivate the attention of listeners to the answer provided or intended actions in the second argument.

Such a configuration allows me to argue that in the syntactic level, the selection of second arguments after embedded questions supposes that all embedding verbs are at least divalent in Muyang.

5.2 Complex-head embedded questions

Muyang permits embedded questions with multiple complementizers in the C-domain positions. Let us consider the following data:

13. *Lawan à dūm kado bi beza tá shí yam*
Lawan SM.3sg say.P2 That Whether children SM.3pl drink water
Lawan ò dūm kado bi beza té shí yam
 ‘*Lawan said that whether the children drink some water.’

14. *Lawan à dūm kado bi tamala beza tá shí yam*
Lawan SM.3sg say.P2 that whether if children SM.3pl drink water
Lawan ò dūm kado bi tamala beza té shí yam
 ‘*Lawan said that whether if the children drink some water.’

15. *Lawan à dūm kado ndam-mam tá shí yam mam*
Lawan SM.3sg say.P2 that PL-what SM.3pl drink water what
Lawan ò dūm kado ndam-mam té shí yam mam
 ‘Lawan said that who drinks some water.’

The language permits up to three Complementizers in the C-domain such as in sentence (14). In effect, the co-occurrence of the complementizers *kado* ‘that’ and “embedded-question markers” constitutes neither a grammatical nor a semantic violation in Muyang. The fact that *bi* ‘whether’ and *tamala* ‘if’ appear in adjacency supposes that such a clausal argument achieves a notification more than simple doubt and condition: a prominent embedded question. Let us examine the structure of the following sentences for further analyses:

16. *Lawan à dūm kado bi wal á zúm dāf watsawatsi*
Lawan SM.3sg say.P2 that whether woman SM.3sg eat food quickly
Lawan ò dūm kado bi wal ó zúm dāf watsawatsi
 ‘Lawan said that whether the woman eats food quickly.’

17. *Lawan à dūm kado wal nahma bi ---- á zúm dāf watsawatsi*
Lawan SM.3sg say.P2 that woman Top whether SM.3sg eat food quickly
Lawan ò dūm kado wal nahma bi ó zúm dāf watsawatsi
 ‘Lawan said that the woman, whether she eats food quickly.’
18. *Lawan à dūm kado watsawatsi, wal nahma bi ---- á zúm dāf ----*
Lawan SM.3sg say.P2 that quickly woman Top whether SM.3sg eat food
Lawan ò dūm kado watsawatsi wal nahma bi ó zúm dāf ----
 ‘Lawan said that the woman, whether she eats food quickly.’

The structure in (18) shows that two syntactic operations have taken place: *wal* ‘woman’ and *watsawatsi* ‘quickly’ are extracted out to positions above the Embedded-Question Marker and lower than the complementizer *kado* ‘that’ leaving non lexical empty categories in their original positions. It is the C-domain position. *Watsawatsi* ‘quickly’ brings new information whereas “*wal*” (woman) expresses old information. Given their semantic value and the appearance of *nahma* analyzed in Bebey (2021) as a topicalizer, *watsawatsi* ‘quickly’ and *wal* ‘woman’ are respectively focalized and topicalized in sentence (18). The same constituents can be subjugated to other operations as illustrated in (19):

19. *Lawan à dūm kado watsawatsi, wal yati á wáy ni --- nahma bi --- á zúm dāf--*
Lawan SM.3sg say.P2 that quickly woman Rel SM.3sg like NI Top whether SM.3sg eat food
Lawan ò dūm kado watsawatsi, wal yati á wáy ni --- nahma bi--- ó zúm dāf--
 ‘Lawan said that quickly, the woman who he loves, whether, she eats food.’
20. *Lawan à dūm kado watsawatsi, wal yati á wáy ni--- nahma bi--á zúm dāf---aw*
Lawan SM.3sg say.P2 that quickl ywoman Rel SM.3sg like NI Top whether SM.3sg eat food Int
Lawan ò dūm kado watsawatsi, wal yati á wáy ni --- nahma bi ---ó zúm dāf ---aw
 ‘Lawan said that the woman, whether she eats food quickly.’
21. *Lawan à dūm ti watsawatsi, way yati á wáy ni---nahma bi---á zúm dāf---aw*
Lawan SM.3sg say.P2 that quickly who Rel SM.3sg like NI Top whether SM.3sg eat food Int
Lawan ò dūm ti watsawatsi, wal yati á wáy ni --- nahma bi ---ó zúm dāf ---aw
 Lawan said that the woman, whether she eats food quickly.’

One notices that in example (19), the noun *wal* ‘woman’, subject of the clausal argument verb undergoes an upwards movement to the COMP position when it is topicalized, then moves again to a position higher than the latter when it is relativized creating a new gap. In (20), the same noun *wal* ‘woman’ is questioned. The above description indicates that the complex-head embedded question allows the occurrence of multiple complementizers in the COMP position which is analyzed in the section that follows.

6 The analysis of the position Complementizer in Muyang embedded questions

The present section demonstrates that position COMP, which is described as a complex domain in the preceding section, should split up into distinct syntactic categories.

6.1 The analysis of *kado* ‘that’

The Muyang lexical constituent *kado* ‘that’, is translated into English in “that” in Bebey (2015). It heads declarative or interrogative clausal arguments. These syntactic and semantic roles supposes that in the sense of literatures of left periphery (Cinque 1990, Cheng 1991, Rizzi 1997, 1999, 2001b and 2004, Radford 1997, Biloa 2013, etc.), the Muyang *kado* ‘that’ expresses illocutionary force, and should occupy the maximal projection of the Force Phrase (ForceP) which is Force°.

Nevertheless, if “*kado*” occurs above the complex complementizers that populate the COMP position in Muyang, the syntactic positions of Muyang *bi* (whether) and *tamala* (if) seem to be a challenge given their up-to-now cross linguistic analysis as Force markers.

6.2 *Bi* ‘whether’ and *tamala* ‘if’ are not force markers in Muyaŋ.

Let us look at data that follow:

22. *Nday tà dũm KADO TAMALA nu ná rá*
They SM.3pl say.P2 THAT if I SM.1sg come
Nday tò dũm kado tamala nu ná rá
‘*They said that if I come.’

23. *Nday tà dũm KADO BI nu ná rá*
They SM.3pl say.P2 THAT WHETHER I SM.1sg come
Nday tò dũm kado bi nu ná rá
‘*They said that whether I come’

One notices that *kado* ‘that’ and *tamala/bi* ‘if/whether’ do not compete within the same sentences in Muyaŋ as illustrated in (22) and (23) of the above paradigm.

24. *Nday tà dũm KADO BI TAMALA nu ná rá*
They SM.3pl say.P2 THAT WHETHER IF I SM.1sg come
Nday tò dũm kado bi tamala nu ná rá
‘*They said that whether if I come.’

The three constituents *kado* ‘that’, *bi* ‘whether’ and *tamala* ‘if’ appear in sentence (24) without ungrammaticality. If the analysis of *kado* ‘that’ in the preceding section is plausible, then *bi* ‘whether’ and *tamala* ‘if’ occupy a distinct projection, which cannot be the Force Phrase given the head principle conditions (Chomsky 1995). In my previous work, I proposed that these constituents should occupy a position different from Force and Focus: the Interrogative Phrase Position.

6.3 Are *bi* ‘whether’ and *tamala* ‘if’ Interrogative Phrase positions?

Let us remind that Muyaŋ is a type of languages that place CP, notably the interrogative markers, in the clause final position in surface form (Bilola 2013 and Bebey 2015). This linear order led to the analysis that it is rather the FinP (the Agreement Phrase in our terminology) which should be pied-piped to land in Spec,Int in the sense of Kayne (1994)’s LCA approach. According to Bebey (2015), such a description indicates that IntP is a phase in Muyaŋ. A such argumentation leads to assume that *bi* ‘whether’ and *tamala* ‘if’ may convey interrogative interpretations but may not be Interrogative Phrase position in Muyaŋ-type languages. Let us consider the following sentences for further analyses:

25. *Má wayáy má sir bi má gráy tewi lala.*
SM.1pl like SM.1pl know whether SM.1pl do work well
Má wayáy mé sir bi má gráy tewi lala.
‘We want to know whether we work well.’
26. *Má wayáy má sir ti tamala bi leli má gráy tewi lala.*
SM.1pl like SM.1pl know that if whether we SM.1pl do work well
Má wayáy mé sirti tamala bileli má gráy tewi lala.
‘*We want to know that if whether we work well.’
27. *Má wayáy má sir ti lala, leli nahma tamala bi ---- má gráy tewi ---*
SM.1pl like SM.1pl know that well we TOP if whether SM.1pl do work
Má wayáy mé sir ti lala leli nahma tamala bi má gráy tewi.
‘*We want to know that well, we, if whether we work.’

The focusing and topicalization of *lala* ‘well’ and *leli* ‘we’ which move to the COMP position do not affect the grammaticality of sentence (27) as demonstrated in the preceding sections. Rather, those operations increase the number of complementizers. As mentioned above, the topicalized constituents can be targeted by WhP whereas the whole sentence can be subject of interrogation as better illustrated in (28):

28. *Má wayáy má sir ti lala, leli nahma tamala bi ---- má gráy tewi --- yaw*

SM.1pl like SM.1pl know that well we TOP if whether SM.1pl do work Int
Má wayáy mé sir ti lala leli nahma tamala bi má gráy tewi yaw.

*Do we want to know that well, we, if whether work?

The co-construction of the interrogative marker *yaw/waw* and embedded-question markers *bi* ‘whether’ and *tamala* ‘if’ in example (28) are indicative that, in syntactic level, the latter cannot be interpreted as Interrogative Position. Since they interpolate between a number of complementizers and the Agreement Phrase, they should occupy a position the syntactic and semantic interpretive property of which convey embedded questions (anxiety, doubt, condition). This reasoning suggests that Embedded-Question Markers in Muyaŋ occupy a special position: The Embedded-Question Phrase (EmQP) whose maximal projection is filled with embedded-question markers.

6.4 Focus and Wh-operators

According to literatures on the cartographic syntax of Wh-operators in Chadic languages, (Biloa 2013 and 2019, Bebey 2015), they should be analyzed as focusing. This argumentation seems to fall short when sentences such as (29) are permitted.

29. *Má wayáy má sir ti lala, way nahma tamala bi ---- á gráy tewi --- way*

SM.1pl like SM.1pl know that well who TOP if whether SM.3sg do work who
Má wayáy mé sir ti lala way nahma, tamala bi á gráy tewi way.

*‘We want to know that well, who if whether works?’

In fact, example (29) offers a possibility of compatibility of both focusing and wh-operators within the same sentence. Here, *lala* ‘well’ is focused, it occupies Spec,Foc after the Force Phrase the head of which is filled with the illocutionary forcer marker *kado* or *ti* ‘that’, whereas the topicalized pronoun *leli* ‘we’ which has moved to Spec,Top is subjugated to question the marker (one copula) of which occurs in situ, in a position higher than the TopP but lower than the Focus phrase. The question which arises from this remark is what the position of Muyaŋ-type languages’ Wh-operators is.

Given the pragmatic and grammatical roles of focalized elements and wh-operators in sentence (29), their compatibility supposes that the Head Condition Principle (Chomsky 1995) is respected, thus, FocusP and WhP should be analyzed as two distinct syntactic constituents the specifiers of which are respectively filled with focalized constituents and questioned constituents in Muyaŋ. As far as WhP is concerned which is marked by two identical elements: one in situ and the second in the clause ending position, the final wh-operator occupies Wh° when the in situ element is pied-piped with the rest of the clause to Spec,Wh as illustrated in the familiar fashion.

30. *Lawan à dūm kado bi nak ká shí zum ahay-vu*

Lawan SM.3sg say.P2 that whether you SM.2sg drink wine house-in

Lawan ò dūm kado bi nak ké shí zum ahayvu

‘Lawan said whether you drink some inside.’

31. *Lawan à dūm kadonak nahma bi ká ----- shí zum ahay-vu*

Lawan SM.3sg say.P2 that you TOP whether SM.2sg drink wine house-in

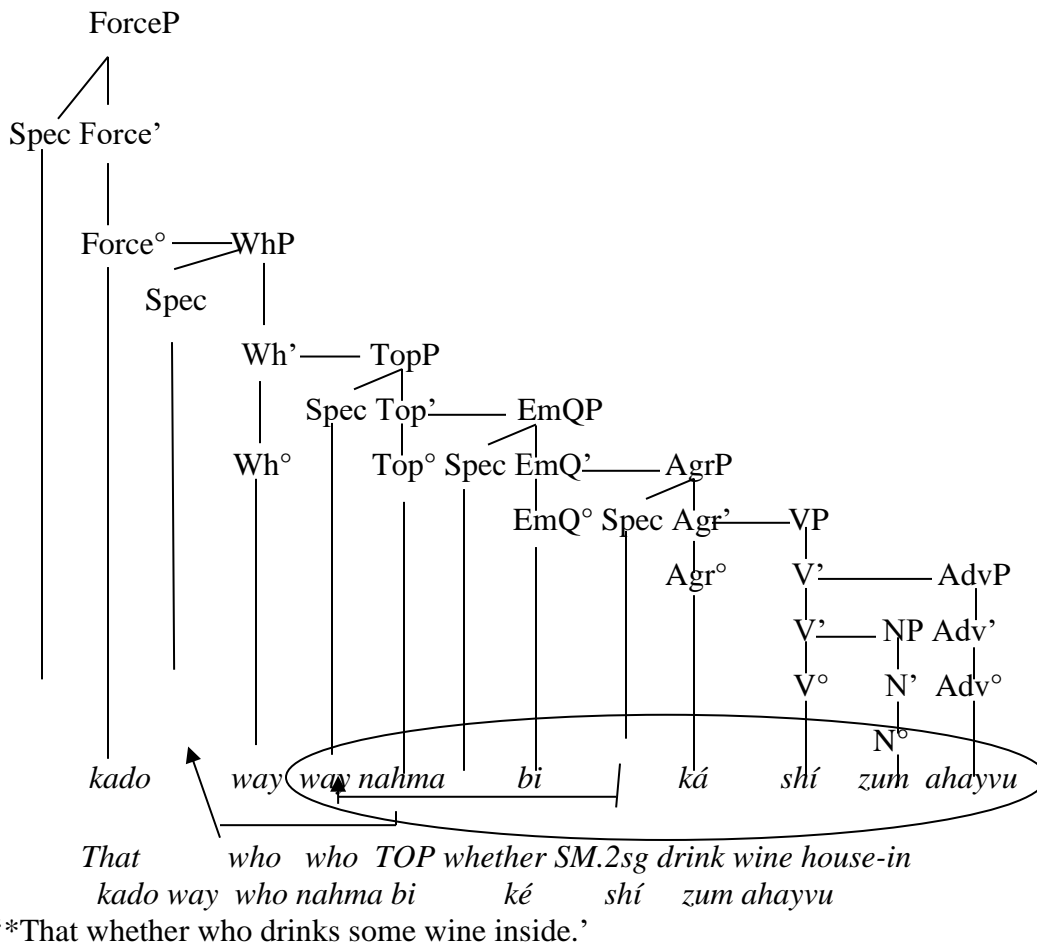
Lawan ò dūm kado nak nahma biké shí zum ahayvu

‘Lawan said you, whether you drink some inside.’

32. Lawan à dūm kado way nahma bi ká ---- shí zum ahay-vu way
Lawan SM.3sg say.P2 that who ^{ForceP} whether SM.2sg drink wine house-in who
Lawan ò dūm kado way nahma bi ké shí zum ahayvu way
‘*Lawan said whether who drinks some wine inside.’

The tree marker which follows makes the above reasoning more visible:

33.



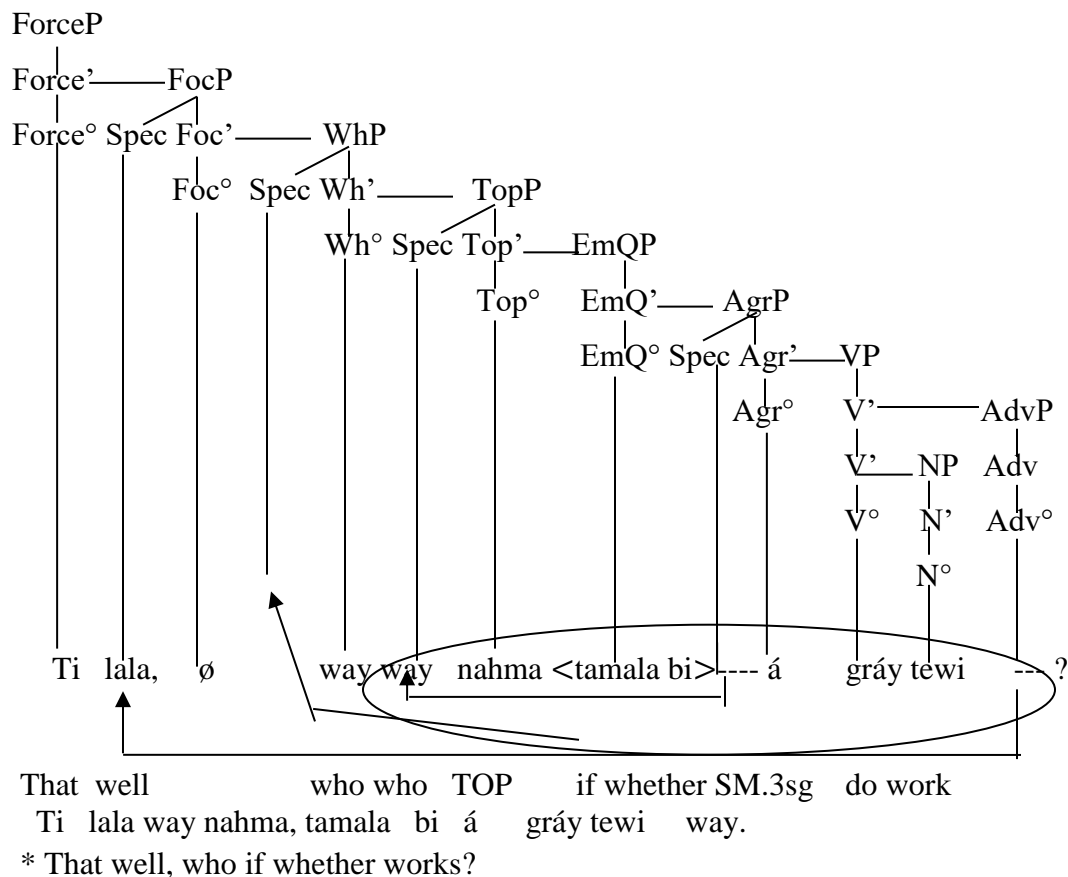
As postulated in the preceding paragraphs, one of the wh-operator fills the maximal projection of the WhP: Wh°; whereas the one in situ is pied-piped with the rest of the clause to the Spec,WhP in order to respect the Muyang word order. In fact, it is the in situ Wh-operator which drags the whole remaining clause to the Spec,WhP located in a position lower than the Force phrase. The grammaticality of the sentence is an indication that this operation which destroys the different gaps occurs after binding and government of traces have properly taken place.

7 The cartography of Muyang embedded question left periphery

Section 5 of this paper shows that the left periphery of Muyang embedded question is a large zone that hosts a number of complementisers that interpolate between the Force Phrase (ForceP) and the FinP (the AgrP in our terminology). Considering the argumentation that focus and wh-operators in Muyang-type languages are distinct syntactic constituents, the position left periphery comprises a number of complementizers the order

of which looks as follows: $\text{ForceP} > \text{FocP} > \text{WhP} > \text{TopP} > \text{EmQ} > \text{AgrP}$ as better illustrated in the tree diagram (34) of sentence (29) below:

34.



The template above is evidence that the Complementizer zone of the Muyang interrogative clausal argument conforms the Rizzi (2004)'s proposals which stipulate that the embedded question is a special position lower than Focus and immediately higher than Fin (Agr in my terminology). Its markers that occupy the final projection of the EmQP directly dominate the Agreement Phrase.

Conclusion

This paper demonstrated, on the basis of empirical data, that embedded questions in Muyang are rhetorical expressions that are marked by morphologically lexical items. Within the phrase, its markers appear in the complex structure of the left periphery that comprise a number of other functional heads such as Force, Wh, Focus, Top and others. Analyses of data revealed that the combinatorial requirements of Muyang obtains a complex map of syntactic heads above the Agreement Phrase ranged as follows: $\text{ForceP} > \text{FocP} > \text{WhP} > \text{TopP} > \text{EmQ} > \text{AgrP}$

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