

WH-QUESTION FORMATION MÀRGÍ: A GOVERNMENT AND BINDING APPROACH

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Abstract

This study examines questions in M̀argí using Chomsky (1981) Government and Binding theory. The study is essential in view of the role that questions play in the language. The data which were collected using interview, checklist, and M̀argí language books were analyzed descriptively. Government and Binding method of analysis was adopted in analyzing the collected data. The analysis reveals two types of wh-questions in M̀argí language, the simple and the complex wh-questions. Wh-questions are formed in M̀argí through the use of transformational processes. The wh-question markers such as ẁa 'who', m̀i 'what', úm̀ari 'where', látú-m̀ari 'when', àb̀ari 'how', m̀ari 'which' and ẁan 'whom' are used in the language. In the formation of the simple wh-question, the question markers can be moved from the object position in an echo question to the spec position or before the auxiliary verb. In the formation of the complex wh question, the M̀argí language exhibits pied-piping as its features as the wh-operator always moves with the head of the phrase. This kind of movement is only permitted in the language within the embedded clause, but not outside the clause. The study discovers that in the analysis of M̀argí wh-questions, the theories and principles of the model of GB are attested with more preference to move-alpha, trace; the wh-operator moves out of its extraction site (IP) into spec to interrogate a statement. This paper is a documentary contribution to the on-going research towards strengthening endangered languages such as M̀argí

Keywords: Government & Binding theory, language, Margi, movement, *wh-operator*, wh-question

Introduction

M̀argí (Chadic: Nigeria) belongs to the minority language group spoken by approximately 303,000 speakers, (Ethnologue 2016) and is critically endangered. The language is also highly under-described. The geographical scope of the study is limited to Babal, a standard variety of the language spoken within Askira/Uba Local Government Area. The study seeks to ascertain whether wh-questions in M̀argí are formed in-situ or exitu?

1.0 Theoretical studies

Wh-questions, according to Radford (1988:26), are so called because they typically involve the use of an interrogative word beginning with *wh-*. They include *who, when, what, why, where and so on*. In syntax, movement operations are some of the transformations used to derive syntactic structures. 'Movement' is a term used within the framework of Government and Binding theory to refer to a basic kind of transformational operation. Movement transformations have the effect of moving constituents from one part of a phrase-marker (extraction site) to another (the landing site). Following the Government and Binding (GB) theory, all specific movement rules have been collapsed into a single universal rule called move- α . This rule permits the movement of a

constituent from one part of a sentence to another. The move- α operation is instantiated by different types of movement transformations which include operator movement of which wh-movement is an aspect. Semantically, wh, to Carnie (2007:318) is so called because it takes its name from the fact that it is formed by words that begin with **wh** in English, for example: who/whom, what, why, which and how. How is also classified as a **wh**-word because it exhibits the same syntactic characteristic as other members of the class. Radford (1997) equates transformation to movement. This means that there can be no transformation without movement. According to him, for the D-structure to be transformed into S-structure, there must be movement of constituent using transformational rules. Carnie (2001) states that the D-structure is subjected to the transformational rule and these rules can move words around in the sentence.

2.0 Theoretical Framework

The theoretical framework adopted for this research work is that of Government and Binding (henceforth GB) theory of grammar as propounded by Chomsky (1981, 1982, 1986a and 1986b) and corroborated by other scholars like Radford (1988, 1997 and 1998) and Haegeman (1998). The choice of the GB theory is for its suitability in analyzing the wh-movement in the language under study. It is explicit in the syntactic and lexical analysis. In the following paragraphs, an attempt is made to present an overview of the theory.

GB theory is a modular deductive theory of grammar which posits multiple levels of representation related to by the transformational rule (Crocker, 1991). In the words of Brown (1991:492), Government and Binding theory is “more modular than any of the previous versions, a sentence being assigned a description simultaneously at four levels of description and according to a set of principles that regulate the different levels and the relationship between them.” The GB grammatical model exhibits a modular character in the sense that it is a continuous interaction between components and sub-theories embodying different principles and parameters. Associated with the Principles and Parameters which account for variation across languages, the grammar for a particular language is specified by the appropriate parameter settings and a lexicon (Crocker 1991). The aim of GB according to Cook (1988:34) “is never to deal with isolated phenomena but always with a continuous interaction of principle and parameter”.

GB theory is made up of many sub-theories, otherwise referred to as modules (Cook & Newson, 1988). These sub-systems include: Government Theory, X-bar theory, and Theta theory. Others include: Binding theory, bounding theory, Control theory, as well as Case theory. Within GB framework, there are principles such as incorporation, Move alpha, Empty Category Principle, Projection principles, Theta criterion and so on. The Government and Binding theory modules or principles interact with one another, as if in a relationship of ‘mutual conspiracy’, to ensure the well formedness of structures. The principles have some variations which explain the variations found from one language to another (Obiamalu, 2015). Generally, each of these sub-theories discusses the relation between lexical items in sentences and phrases in different uses and construction.

2.1 Method of Data Collection

This research adopts the Government and Binding approach for data analysis. The researchers’ preferred theory, (Government and Binding) of linguistic analysis, conforms to the principle of

descriptive grammar. This theory is used to show the movement transformations of Màrgíwh-questions through move-alpha as well as co-indexing the moved elements using the trace theory of GB.

The primary sources came from the field, which include those that were derived directly from the native speakers through interviews and observations. These involved writing out complex sentences translated into Màrgí by educated respondents. More data for this study were collected using interview, checklist and Màrgí language books such as the Màrgí native Bible, Hoffman (1963), Dlibugunaya (1989, 1999, 2004) and Tranel (1992:94) and one of the researchers' native intuition. One of the researchers' native speaker competence in the language was also very useful in the collection, collation, and elicitation of the data. The respondents were selected based on age, bilingual status, and length of time they had lived in the areas. Secondary data are textual materials such as theses, dissertations and undergraduate long essay, journal articles, chapters in books, encyclopedia, textbooks, internet, and so on. This also helped to give direction to the work.

The researchers made use of five techniques for data collection, they are: the oral interviews, which involved one - on - one interaction between the researchers and the respondents, tape recording of interactions between the researchers.

2.2 Method of Data Presentation and Analysis

The study adopts a descriptive approach to linguistic analysis using the Leipzig glossing rules as the format for data presentation of the syntactic structures that express wh-movement. The data as presented in bold in Màrgí language followed by a word – for – word interlinear gloss and English translation the grammatical processes in the data are discussed in detail and solicit features that are characteristic of wh-question formation involving movement of certain constituents are pointed out.

3.0 Data Presentation and Analysis

3.1 Wh-question markers in Màrgí

Wh-question sentences in Màrgí are formed by involving the interrogative wh-words in the language. As attested in English, the sentence type simply proposes the WH-NP at sentence initially; *who* for a person, *what* for a thing, *when* for time, *why* for some reason, *how* for manner, so it is in Màrgí. The wh-words of Màrgí are:

- | | | |
|--------|-----------|---------------------|
| (1) i. | mì | 'what' |
| ii. | wà | 'who' |
| iii. | úmárí | 'where' |
| iv. | látú-màrì | 'time-which /'when' |
| v. | àbárí | 'how' |
| vi. | mì-yána | 'what-happen' 'why' |
| vii. | màrì | 'which' |
| viii. | wàn | 'whom/whose' |

In Màrgí, there are two different types of interrogative sentences, which are called sentence questions. For a sentence question, the whole content of a statement (or a request) is questioned, and an answer yes/no is required. A word question in Màrgí always contains an interrogative such

as **wà** ‘who’, **mì** ‘what’, **màri** ‘which’, **látú-màri** ‘when’, **úmári** ‘where’, **àbàri** ‘how’. Both types of interrogative sentences may end in various particles such as which must be distinguished from interrogative pronouns and adverbs.

3.1.1 The interrogative operator *wà*

Wà ‘who’ is an interrogative pronoun asking for + human nouns. The same form may be used both in nominative or accusative or as a qualifying noun in a genitive construction or after a qualifying noun or after prepositions. It may be pluralized by inserting **yàr** (**wà-yàr**) when interrogating a plural number. This is exemplified in the following examples (2) below.

- (2) a. Wàndu **wà**?
say who
‘Who said so?’
b. **Wà** yàr ngú?
who be 3PL?
‘Who are they?’

From the data above (2), it is evident that **wà** in Mǎrgí can come before and after the verb positions as seen in (2b) **Wà** yàr ngú? ‘Who are they?’

- (3) a. Nàjà lár **Gàdzámá**
3SG see -PST Gàdzámá
‘S/He saw Gàdzámá’.
b. **Wà** lár Nàjà?
who see-PST 3SG
‘Who did s/he see?’

The process in (2) can further be illustrated in fig (1) below.

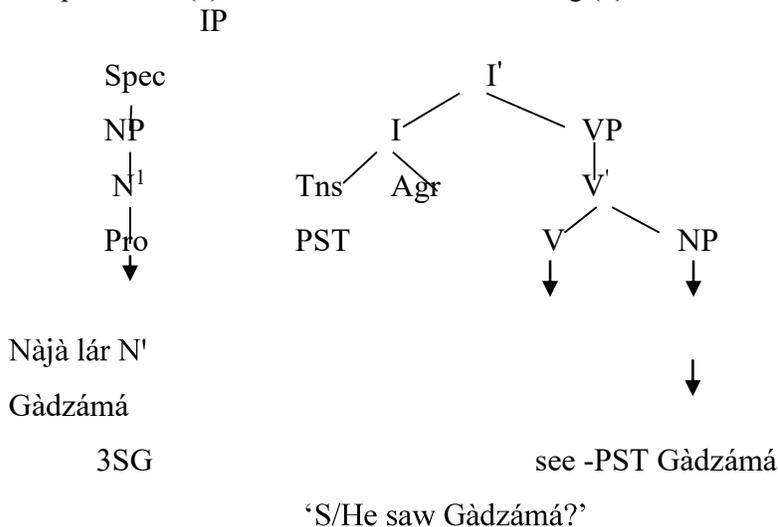
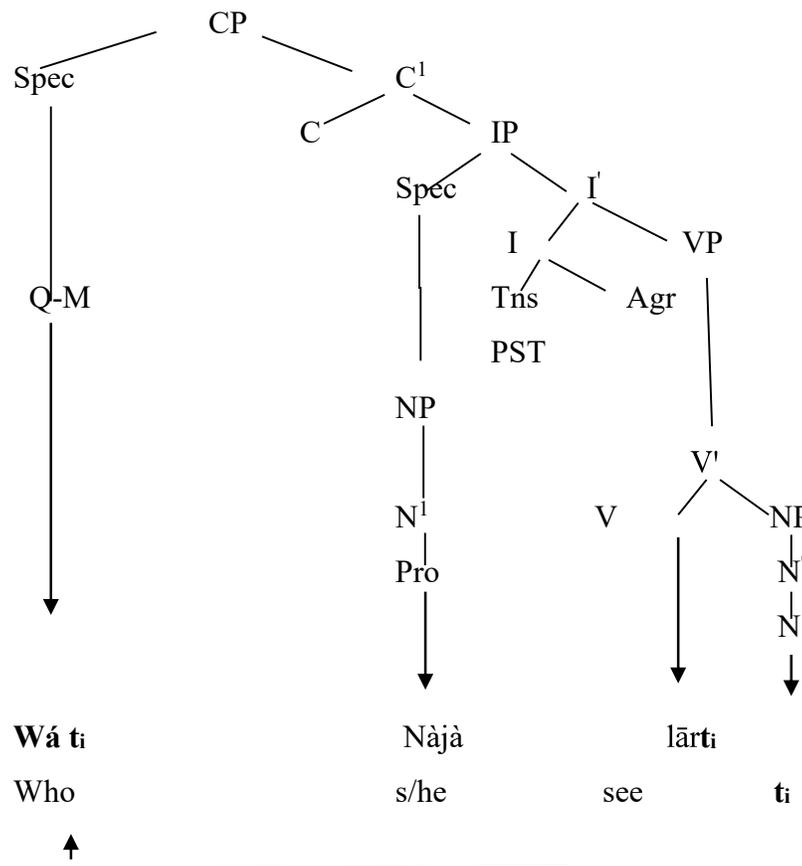


Fig. 2 ‘S/He saw Gàdzámá?’



‘Who did he see?’

Fig. 2 ‘Who did he see?’

Figure (2) *Nàjà lár Gàdzámá* ‘S/He saw Gàdzámá?’ and (2) *Wá lár Nàjà?* ‘Who did he see?’ above show that there is movement of wh-element **Wá** ‘who’ from the NP position within IP to outside spec. In figure (2), **Wá** ‘who’ which is positioned within the NP under the IP has been moved to the SPEC Position under CP. The moved wh-word **Wá** ‘who’ leaves a trace (*t_i*) as shown in figure (2) above.

3.1.2 The interrogative marker *mì*?

Mì in Mǎrgí is an interrogative pronoun, asking for a thing (- animate noun). It may be used as a subject or object, as a qualifying noun in a genitive construction or after prepositions. Examples:

- (2). a. **Mì** ndùr gùr?
 what say-PST 2SG
 ‘What did you say?’
 b. Nàjà gùr mì **rá**?
 2SG look-PST INTERROG
 ‘What are you looking for?’

- c. Nàjà à ír mì rá?
3SG do-PST INTERROG
'What did he do?'
- (3) a. Ápágú dílbá **múntsù**
Ápágú buy-PST hoes
'Ápágú bought hoes'
- b. **Mì** Ápágú dílbá?
what Apagu buy-PST
'What did Apagu buy?'

To show the presence of wh-movement in the language, it can be further illustratively represented in fig.3 below.

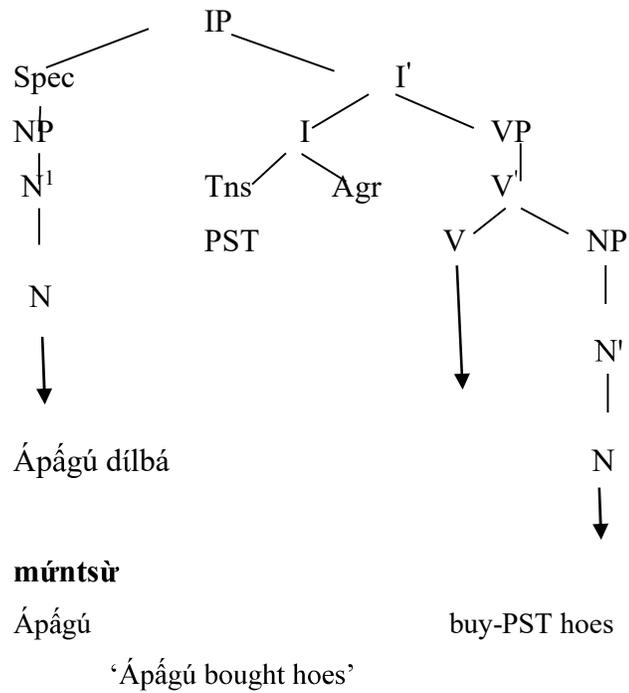
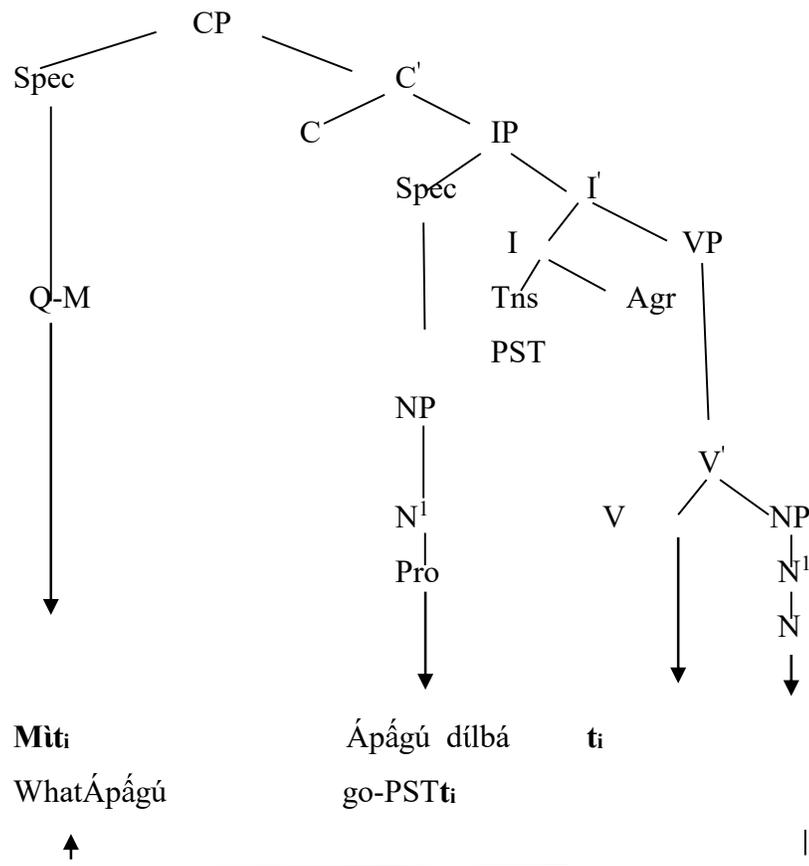


Fig.3 'Ápágú bought hoes'



‘What did Apagu buy?’

Fig.4 ‘What did Apagu buy?’

Figure (1.3) *Ápágú dílbá mún̄tsùr* ‘Ápágú bought hoes’ and (1.4) *MìÁpágú dílbá?* ‘What did Apagu buy?’ above show that there is movement of wh-element **Mì** ‘what’ from the NP position within to outside spec. In figure (4), **Mì** ‘what’ which is positioned within the NP under the IP has been moved to the spec position under CP. The moved wh-word **Mì** ‘what’ leaves a trace (*t_i*) as shown in figure (4) above.

3.1.3 The interrogative marker *màri*? *Which?*

The interrogative **màri** is either used as a pronoun ‘Which one’ or as an adjective after a noun. The non-final form of **màri** is **màr**. Example like **wà** and **mi, màri** requires a relative clause with **dà** if it appears at the beginning of the sentence. Although, normally, it occurs after the predicate, examples are seen in (4a&b) and (5a &b) below.

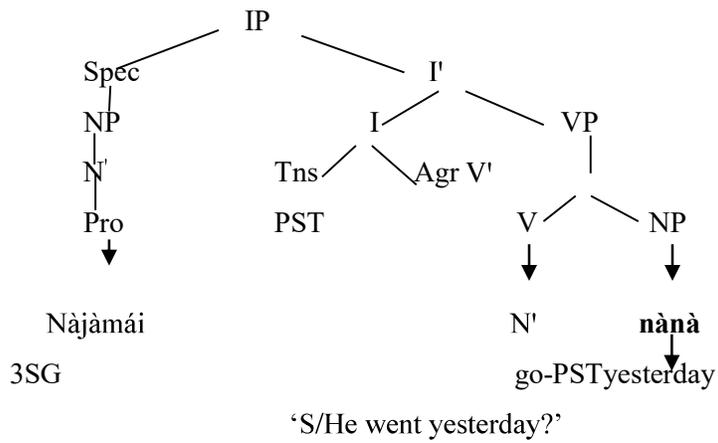


Fig.7 ‘S/He went yesterday?’

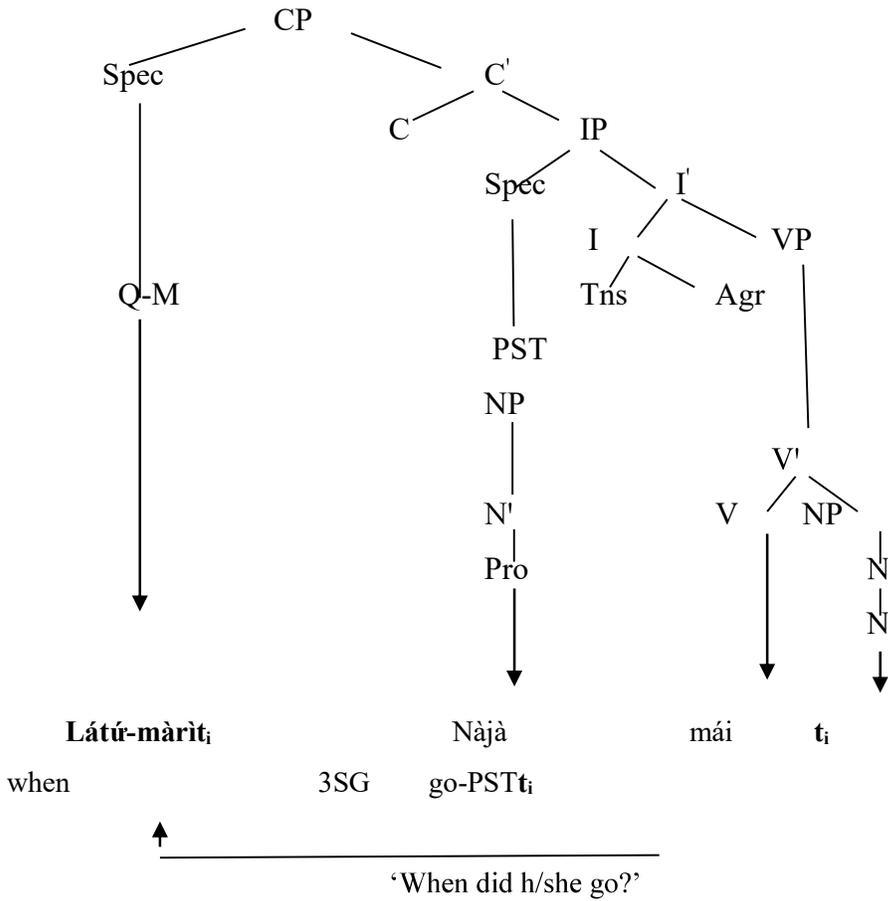


Fig. 8 ‘When did she go?’

Figure (7) *Nàjà máì nà̀nà* ‘S/He went yesterday?’ and (8) *Látù-mà̀rì Nà̀jàmáì* ‘When did h/she go?’ above show that there is movement of wh-element *Látù-mà̀rì* ‘when’ from the NP position within to outside spec. In figure (8), *Látù-mà̀rì* ‘when’ which is positioned within the NP under the IP has been moved to the spec position under CP. The moved wh-word *Látù-mà̀rì* ‘when’ leaves a trace (*t_i*) as shown in figure (8) above.

3.1.5 The interrogative marker *ú má(w) rí*?

Úmá rí is an interrogative adverb meaning ‘Where’ (position or destination) or from where? Its non-final form is *umwà̀r*. Consider the following example (7a & b)

- (7) a. *Úmá rí ?*
 where
 ‘Where?’
 b. *Úmá rí m̀jì yà̀r rá?*
 where 3PL DEM INTERROG
- (8) a. *Jà̀kráì à máì d̀r m̀kàràntà*
Jà̀kráì s/he go-PST to school
 ‘*Jà̀kráì* went to school’
 b. *Úmá rí Jà̀kráì à máì?*
 where *Jà̀kráì* s/he go
 where did *Jà̀kráì* go?

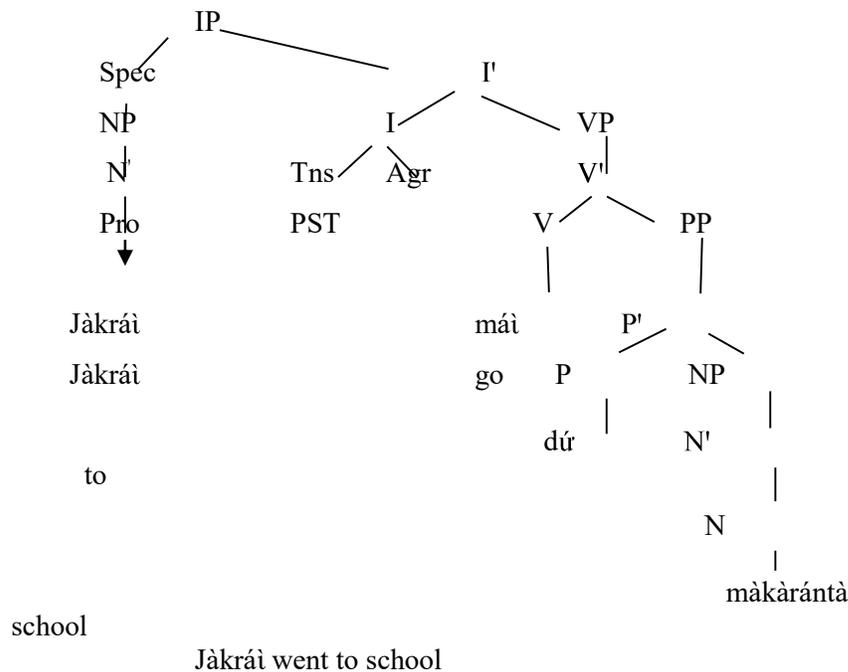


Fig.1.9 *Jà̀kráì* went to school

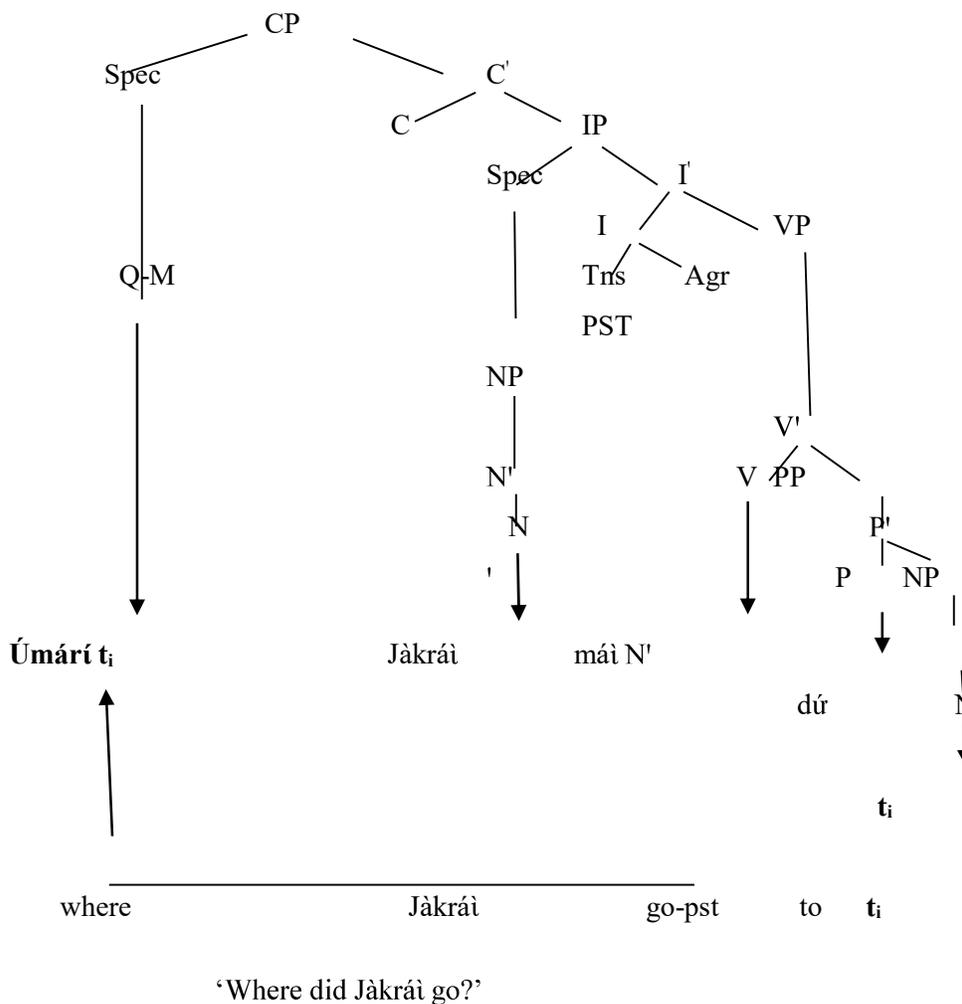


Fig.1.10 ‘Where did Jàkrài go?’

Figure (1.10) Jàkrài à mái dúr màkàràntà ‘Jàkrài went to school’ and (1.10) **Úmárí** Jàkrài à mái? ‘where did Jàkrài go?’ above show that there is a movement of wh-element **Úmárí** ‘where’ from the NP position within to outside spec. In figure (1.10), **Úmárí** ‘where’ which is positioned within the NP under the IP has been moved to the SPEC position under CP. The moved wh-word **Úmárí** ‘where’ leaves a trace (t_i) as shown in figure (1.10) above.

1.8 The interrogative adverb Àbárí?

Àbárí? Is an interrogative adverb ‘how’. Its non-final form is *àbár*. It is treated in similar way to the other interrogatives, examples:

- (9) a. Àbár òdà?
 how 3PL
 ‘How are you?’
 b. Àbár kyí?
 how house
 ‘How is the family?’
- (10)a. Jápárisínyá **kàkàdùr**
 Jápárieat-PST quickly
 ‘Jápári ate hurriedly’
 b. **Àbárù**Jápárisínyá?
 how Jápári eat-PST
 ‘How did Jápári eat?’

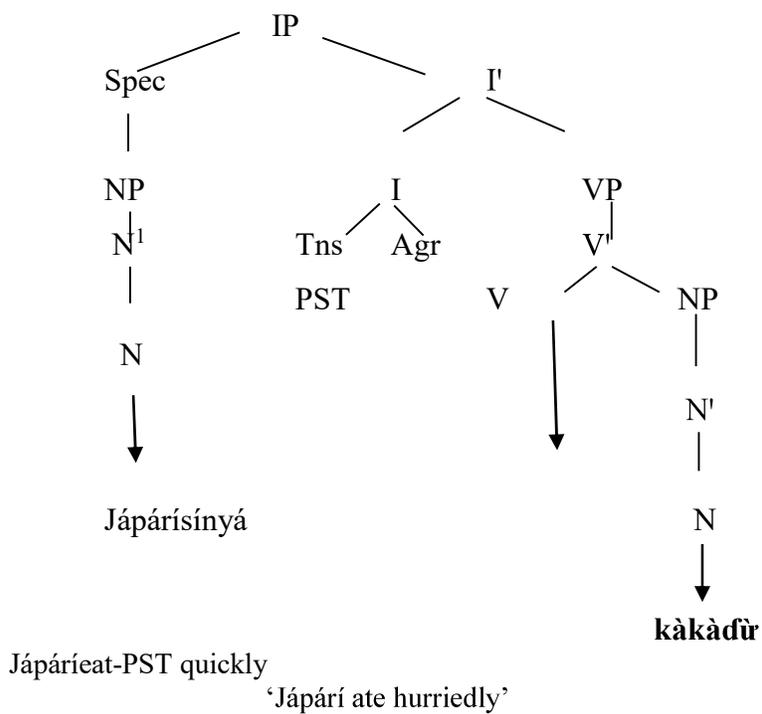


Fig.11Jápári ate hurriedly

- (12) [Látú màrì]_i dí tíl àrà shìlì *t_i*? (NP)
 time what king AUX come
 ‘What time will the King come?’
- (13) [Ánú dú màrì]_i nyùrán òrì *t_i*? (PP)
 to man which 2SG talk
 To which man did you talk?
- (14) [Glàngà àbàrì]_i Pálmátà *t_i*? (Adv. P)
 ill how is Pálmátà
 ‘How ill is Palmata’

From the above data (11-14), wh-movement in wh-questions is linked to the presence of a wh-word. In Màrgí, it is natural that what moves or what triggers the movement is the wh-word. In complex wh-type, when the wh-phrase moves, it moves the whole phrase as seen in the examples above. However, to show clarity in this movement, a trace has been left to show the extraction and the landing sites. The above is similar to what Koopman, Sportiche and Stabler (2011) referred to as *pied-piping* when something bigger than the element triggers the movement. That is, the wh-word alone cannot be moved without the larger phrase moving. This is also common in Màrgí wh-possessive question formation as shown below:

- (15) a. Mádù bilnà **ńtám gúwà**?
 Mádù break-PST pot whose
 ‘Whose pot did Madu break?’
 b. **Ntám gúwà** du Madu bilnà?
 pot whose did Madu break
 ‘Whose pot did Madu break?’

Also, under this type of wh-question in Màrgí are embedded structures with wh-words known as the embedded wh-questions. Examples of the embedded wh-questions in Màrgí language are shown below:

- (16) a. Nàjà yú kùjà dzání **mì**_i nàgà dílbá *t_i*
 3SG want to know what you buy-PST
 ‘He/she wants to know what you bought’
 b. Nàjà yú kùjà dzání nàgà dílbá **mí**
 3SG want to know 2SGbuy-PST what
 ‘He/she wants to know what you bought.’
- (17) a. Síbíám ájàwì **látú-màrì**_i nàgà máí *t_i*
 Sibiam AUX ask-PRESS when 2SG leave-PST
 ‘Sibiam is asking when you left’
 b. Síbíám ájàwì nàgà máí **látú-màrì**
 Sibiam AUX ask 2SG leave when
 ‘Sibiam is asking when you left’

The above are instances of embedded clauses with wh-structure. The paired sentences have (16)a **Nàjà yú kùjà dzání m̀; nàgà dílbát;** 'He wants to know what you bought?' as the wh-movement and (16)b **Nàjà yú kùjà dzání nàgà dílbá mí** 'He wants to know what you bought' as the in-situ. It is evident from the examples (15-16) above that the M̀rgí language embedded wh-structure exhibits a short distance movement as the wh-word does not move outside the embedded clause; **nàgà dílbám̀** to have **m̀ nàgà dílbá** hence we can say that the wh-word only moves within the embedded clause and cannot move to the initial position of the whole structure to derive **m̀**. Any such movement renders the sentence ungrammatical and unacceptable. To prove this claim, the sentences have been repeated to show that long distance movement is impossible. The launching and the landing positions are shown by traces.

4.0 Discussion of Findings

This paper has presented a Government and Binding approach to analyse the wh-questions in M̀rgí. M̀rgí wh-question markers are introduced by the wh-question markers **wà** 'who', **m̀** 'what', **úmárí** 'where', **látú-m̀r̀** 'when' **àbárí** 'how' and so on. Echo questions in M̀rgí are the basics of which the surface structure is formed through transformational processes. Wh-questions are formed in this language through the use of transformational processes such as the movement of the wh-question markers or operators. It is clear that the wh-question formation in M̀rgí involves transformational movement that leaves a trace. The movement in this case involves the wh-question markers moving to the front (fronting) that is the Spec, CP in the interrogative. The result also reveals that the wh-questions in M̀rgí are of two (2) types; the simple type which are **m̀** 'what', **wà** 'who', **úmárí** 'where', **látú-m̀r̀** 'when', **àbárí** 'how', **m̀r̀** 'which', **wàn** 'whom' and the complex type which involves the combination of the wh-word and other lexical items which serve as the head of the phrase to have what is called the wh-phrase. Also established is the fact that pied-piping which is a feature of the complex wh-type exists in M̀rgí as the wh-operator always moves with the head of the phrase, it has been clearly seen that, if the wh-operator moves without the head, it leads to violation of the chain uniformity principle (a chain must be uniform with regard to phrase structure status).

In wh-questions, two movement principles have been observed in the language for derivation of declarative sentence, these principles are the Aux-N inversion rule and the second is the application of the wh-movement rule that moves an interrogative constituent from its base position to string initial position of a sentence. It has also been seen that every wh-question in M̀rgí must have a wh-question marker irrespective of their positions (in-situ or subject) must occupy the specific position as seen in the diagrams. This research also points to the fact that M̀rgí has two interrogative sentences, the word questions and sentence questions. In word questions **wà** 'who' **m̀** 'what' **m̀r̀** 'which' are interrogative pronouns asking for a + human. They can be used as a subject or object, as a qualifying noun in a genitive construction or after a qualifying noun in genitive constructive, **m̀r̀** 'which' however is used for a pronoun 'which one' or as an adjective after a noun for instance, **Kàkàdú m̀r̀** 'book which' 'which book?' while **úmárí** and **látú-m̀r̀** are adverbs of time and place respectively.

It is noteworthy that in M̀rgí, all the wh-question markers appear in the same position in the question where they are found which has shown how they occupy the after verb and before verb positions respectively. The researchers also attest to the fact that M̀rgí question markers are fronted

because the wh-word moves to the front of the structure in interrogative sentences, it also shows the extraction and the landing sites of wh-question markers in M̀argi. The launching site represents the canonical position of the wh-word before its movement to occupy a designated structural position for question words. The position they move to is Spec, CP in the interrogative.

In M̀argi the rules of insertion and substitution are also used to derive a wh-question. A wh-question marker is either inserted at the end of the sentence or substituted with a noun as it was diagrammatically represented in the previous analysis.

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