

FOCUS AND CONSTITUENT QUESTION FORMATION IN DAGBANI

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Abstract

This paper explores how constituent interrogativization and focus play out in Dagbani, a Gur (Niger-Congo) language. I show that in the formation of constituent interrogatives, the interrogative word enters into a syntactic configuration with the focus markers **kà** or **n** depending on the grammatical role of the argument that an interrogative word substitutes for. This involves putting the interrogative word clause initially, and immediately following it with the appropriate focus marker. This distributional property of interrogative words serves as evidence in favour of my argument that focused interrogative words and focused elements share morphosyntactic parallelism. The data used in the analysis are drawn from text-based sources and some are constructed by me as a native speaker. The data are examined in line with the proposal that the variation in the positioning of interrogative words in languages can be explained by assuming that movement of interrogative words is universally triggered by [+wh] and [+focus] features, both of which are [+interpretable] and can be specified as [±strong]. I conclude that interrogative words occur in in-situ when no strong [+focus] features are introduced in the syntax, suggesting that Dagbani has both focused and non-focused interrogative words.

Key words: SpecFoc, focus marker, clause initial, constituent interrogatives, information profile.

1. Introduction

In this article, I investigate the morphosyntactic process for the formation of constituent interrogatives and the parallelism it shares with focus constructions¹ in

¹Throughout this work, I use the phrase interrogative words in a general way to refer to the family of words used in information-seeking in Dagbani and constituent interrogatives for what has traditionally been referred to as wh-questions in English-centric terms. Interrogative words and wh-phrases are therefore synonymous in this article. The abbreviations used are as follows: 1, 2, 3 for first person, second person and third person respectively C=complementizer, CP=complementizer DEF=definite, FM=focus marker, IMPERF=imperfective, I=interrogative, IW=interrogative word, NEG=negative marker, PERF=perfective, PLU=plural marker, SG=singular, PART=particle. I would like to thank the Editor-in-chief of the *Ghana Journal of Linguistics* (GJL), Professor Mary Esther Kropp Dakubu and the two anonymous reviewers of GJL for their valuable comments that have improved the arguments put forward in this paper. I am greatly indebted to Dr. Samuel Atintono who revealed to me several

Dagbani. Dagbani belongs to the Western Oti-Volta Branch of the Central Gur languages, a group within the Niger-Congo language family of Africa. It is predominantly spoken in Ghana's Northern Region. Dagbani is basically an SVO language. The data used in this article are from two sources: constructed data based on my native speaker intuitions and natural-texts examples. Where I constructed the examples as a native speaker, their grammatical and semantic appropriateness were checked with other native speakers of Dagbani.

The main objectives of this article are to: (1) provide a description of constituent interrogatives in Dagbani, (2) demonstrate that syntactically, Dagbani interrogative words are located in the specifier position of the focus phrase (SpecFoc) in the formation of constituent interrogatives, (3) demonstrate that the focus morphemes **kà** or **n** are obligatory in the formation of constituent interrogatives, (4) suggest that **kà** occurs with interrogatives that question non-subject arguments, while **n** occurs with arguments that question subject constituents, (5) establish that in terms of syntactic distribution, interrogative words in the formation of constituent interrogatives share parallelism with contrastively focused arguments. The subject focus particle **n** is homorganic and assimilates to the place of articulation of the following consonantal sound. It has phonologically conditioned allomorphs such as **m** and **ŋ** which occur before bilabial and velar sounds respectively. The choice of this topic is motivated by the fact that the syntax and semantics of interrogative words in information processing has been of interest in linguistic theory. However, though current investigations in linguistic theory are aimed at discovering language universals, that is, those characteristics that are common to all languages, this objective cannot be achieved if conclusions about language universals are solely based on a few privileged languages that have been well-researched. The findings from this under-described language have the potential of contributing data to the typology on this phenomenon, the parallelism between focused constituents and constituent interrogatives.

The article is structured as follows: section 2 looks at what constituent interrogatives are. Section 3 discusses the various approaches to the study of constituent interrogatives and suggests a working approach for the Dagbani data. An overview of the marking of contrastive focus is given in section 4. Section 5 discusses the formation of constituent interrogatives, heightening the correlation between focused constituents and constituent interrogatives. A formalization of the data analysis within the theoretical framework of the feature checking mechanism of the Minimalist Program as in Chomsky (2000, 1995) and the analysis of constituent interrogatives

lapses in an earlier draft of this paper. However, all errors that may still exist in this paper are of course mine.

proposed in Sabel (2003, 2002, 2000, 1998) is discussed in section 6. In section 7, conclusions are drawn.

2. Defining Constituent Interrogatives

Cross-linguistically, interrogatives constitute one of the three clause types identified. The other clause types are imperatives and declaratives. Each of these clause types has been argued to be associated with particular speech acts in natural languages. For instance, declaratives are cross-linguistically associated with asserting, making claims, making statements, accusing, criticizing, promising and guaranteeing. Imperatives on the other hand are largely employed in issuing commands for certain actions to be taken by the addressee (König & Siemund 2007; Siemund 2001). According to König & Siemund (2007: 291) interrogatives are “conventionally associated with the speech act of requesting information”. It is based on the syntactic and semantic properties of interrogatives that König & Siemund classify them into two broad categories: polar interrogatives and constituent interrogatives. I focus on the latter type of interrogatives in this article, highlighting their correlation with focus constructions in Dagbani.

In a language such as English, interrogatives begin primarily with *wh*: *who*, *what*, *when*, *where*, *why*, and *how* and so have been referred to as *wh*-words. Considering the fact that these interrogatives are not signalled by *wh* in Dagbani, I do not use the English-centric terms, *wh*-questions / *wh*-phrases. I therefore use interrogative words to refer to what have been traditionally called *wh*-phrases and constituent interrogatives for what has traditionally been called *wh*-questions. Boadi (1990) working on Akan interrogatives refers to them as “question words/question phrases”.

Interrogative words (IW's) occupy different positions in different languages. In some languages, the interrogative words are put obligatorily in the clause-initial positions of sentences, other languages allow their interrogative words to be put in clause final positions while in other languages they may occupy either of these two positions, in which case the language accepts both the clause final and clause initial positions as syntactic slots that can be occupied by constituent interrogatives. Siemund (2001) refers to these languages as *fronting*, *in-situ* and *optional fronting* languages respectively. I propose in this work that Dagbani constituent interrogatives occur in clause initial positions accompanied by the morphological manifestation of the focus markers **kà** or **n**. The presence of the focus markers in constituent interrogatives will later be argued to be indicating that constituent interrogatives are focused just like focused constituents.

Before I proceed to establish the link between focused constituents and interrogative words in the formation of constituent questions, there is the need to distinguish between focused and non-focused interrogatives words. In line with the proposal of

Aboh (2007: 279) on the distinction between focused and non-focused interrogatives, I define focused interrogative words as interrogative words that occupy certain designated focus positions and will invariably occur with focus markers, while non-focused interrogative words are the question words that occur in positions other than focused positions. Thus, while the former kind of interrogative words occur with focus markers, the latter kind of interrogative words do not. Accordingly, the proposal is made that interrogative words in Dagbani target different syntactic positions within the clause depending on whether they are focused or non-focused.

3. Formal Approaches to the Study of Constituent Interrogatives

Different approaches² have been used in the study of constituent interrogatives in the literature. The main questions that these various approaches usually attempt to address are what triggers the movement of interrogatives in languages, and what syntactic positions interrogatives occupy when they move from the deep structure positions. For instance, Lasnik & Saito (1992) argue that there is a *wh*-feature that is responsible for attracting *wh*-phrases to clause-initial position in languages. They claim that this feature exists in all languages and must be checked via movement of the *wh*-phrase or interrogative word to the specifier position of the complementizer phrase, which is Spec CP. Stockwell (1977) also postulates that *wh*-phrases are captured by auxiliary verbs. He demonstrates that when the *wh*-phrase undergoes transformation from its deep-structure position to the sentence initial position in English, it tends to attract the auxiliary to its immediate right position, and so he proposed *wh*-aux-attraction as in the English example *when did Martin buy a book t?*, where we see that the *wh* word *when* attracts the auxiliary *did* to itself when it is moved from the right periphery to the (left periphery) of the clause. We will see later in this work that this proposal cannot account for constituent interrogatives in Dagbani, since they do not enter into any relationship with auxiliaries when they are dislocated to the sentence initial positions.

Another approach that has been used in the study of constituent interrogatives is the proposal of Sabel (2000). Sabel develops a formal account of the correlation between focus marking and movement of interrogative words on the basis of the feature checking approach of the Minimalist program. In this approach to the study of constituent interrogatives, Sabel addresses mainly the nature of the feature that triggers movement of interrogative and also the locus of these features. It is suggested in this approach that movement of interrogatives is universally triggered by [+*wh*] and [+*focus*] features, and that both of these features are [+interpretable] and can be

² For details of other approaches to the study of constituent interrogatives, see such works as Bresnan (1970), Simpson (2000) and references cited therein.

specified as [$\pm$ strong]. Consequently, it has been demonstrated for instance, in languages such as Kitharaka, Gbe and Akan, by Muriungi (2004) Aboh (2004) and Marfo and Bodomo (2004) respectively, that constituent interrogative words and focused constituents target the same syntactic position as landing site, a position which has been assumed in the literature to be specifier position of the focus phrase SpecFoc (Rizzi 1997). It is this that has brought into consideration what some scholars have called the focus criterion, as against the wh-criterion which holds that a focus or wh-element (interrogative word) will always have to be licensed in a specifier-head relationship with the appropriate licensing head. Focused constituents and wh-phrases have therefore been seen to be incompatible in the sense that they compete for the same syntactic positions (Horvath 1986, Brody 1995, Rizzi 1997). Consequently, Rizzi (1997) proposes that the licensing head should not be seen as an Inflection (Inflec) or Complementizer (C), but as a head, hence the proposal of the Focus-head in literature of generative linguistics. In syntactic terms, the focus phrase has been analysed as one category that can be hosted in the left periphery of the clausal structure within the C-split system of Rizzi (1991, 1997). In this article, I discuss constituent interrogatives of Dagbani within the view that movement of constituent interrogatives is triggered by the need to check [+focus] associated with the interrogative words. I will demonstrate that the fact that movement of interrogatives is triggered by the need to check [+focus] associated with the interrogative words is what calls for the obligatory manifestation of the focus markers **kà** or **n** in the formation of constituent interrogatives. I will further indicate as pointed out earlier, that though we have focused interrogative words in Dagbani, there are equally non-focused interrogatives in echo questions and greetings, since those interrogatives have no morphosyntactic configuration with focus markers.

4. An Overview of the Marking of Contrastive Focus in Dagbani

Focus has been identified as an essential component of information structure. It is seen as a universal feature of languages, as all languages have various mechanisms that they employ to show that a given constituent is in focus (Aboh 2004, Jackendoff 1972). However, languages differ in the ways (strategies) that they employ for the coding of focus. Some of the strategies employed by languages for the coding of focus are prosody, word order and the use of special morphemes (Drubig and Schaffer 2001). Similar to Akan and Ewe (Boadi, 1974, 1990, Saah 1988, Marfo and Bodomo 2004, Amfo 2010, Ameka 1992) and for Kitharaka, (Muriungi 2004, Abels & Muriungi 2007) it has been proposed (Issah 2008, 2012, Fusheini 2012, Olawsky 1999) that focus in Dagbani is indicated by the syntactic strategy of fronting. The syntactic strategy is then combined with a morphological/lexical strategy which is the presence of a special morpheme labeled as a focus marker. This is because a

constituent that is marked for contrastive focus must invariably be located within the clause initial position of the sentence and there is also an obligatory introduction of special morphemes called focus markers. When this happens, the canonical word order of SVO is distorted. This is exemplified in the examples in (1).

- (1a) **O kù-rí wòhú**
s/he kill.IMPERF snake
'S/he is killing a snake'
- (1b) **Wòhú kà ó kù-rá.**
snake FM 3SG kill.IMPERF
'It is a snake (that) s/he is killing'
- (1c) ***Wòhú n ó kù-rá.**
snake FM 3SG kill.IMPERF
- (1d) **Chéntiwúni tú-∅ biá máá**
Chentiwuni insult.PERF child DEF
'Chentiwuni has insulted the child'
- (1e) **Chéntiwúni n tú-∅ biá máá**
Chentiwuni FM insult.PERF child DEF
'It is Chentiwuni who has insulted the child'
- (1f) ***Chéntiwúni kà tú-∅ biá máá**
Chentiwuni FM insult.PERF child DEF
- (1g) **Bε bù-rí bì-hí kpè**
3SG kill.IMPERF child.PLU here
'They beat children here'
- (1h) **Kpè kà bε bù-rí bì-hí**
Here FM 3SG kill.IMPERF child.PLU
'It is here that they beat children'
- (1i) ***Kpè m bε bù-rí bì-hí**
Here FM 3SG kill.IMPERF child.PLU

In the sentences that are found in (1), we see that sentences (1a), (1d) and (1g) have the canonical (undistorted) word order of Dagbani which is SVO while (1b), (1e) and (1h) have distorted sentences in which certain constituents as objects (1b) and (1d), and an adjunct (1h) have been fronted for the purpose of focussing. For instance in (1b) and (1e), we observe that the contrastively focused constituents **wòhú** 'snake' and **Chéntiwúni** respectively, have been placed in the sentence initial positions and are immediately followed by focus markers **kà** and **n**. We further observe that when

the focused constituent is an NP object as in (1b) or adjunct as in (1h), then, **kà** is selected. The ungrammaticality of (1c) indicates that **n** cannot focus NP objects, while the ungrammatical sentence in (1f) also shows that NP subjects cannot be focused by **kà**. In the same way, the ungrammaticality of sentence (1i) illustrates that adjuncts just like NP objects cannot be focused using the **n** focus marker. In terms of interpretation, the sentence in (1b) will have the reading, “it is a snake (and not any other thing) that s/he is killing”. In the same way, the structure in (1e) will have the semantic interpretation “it is **Chéntiwúni** and not any other person who has insulted the child”. In the two sentences therefore, **wòhú** ‘snake’ and **Chéntiwúni** are contrastively focused as they are contrasted with any other possibilities. Similar semantic interpretation holds for (1h) where in (1f), the adjunct **kpè** ‘here’ has been fronted and focus marked. Thus, focus in Dagbani involves a reordering of some sentence constituents and an introduction of special morphemes into the clausal structure with a view to bringing certain constituents into prominence.

We observe in the different aspectual affixation in (1a) and (1b) that movement in Dagbani seems to interact with the aspectual suffixes in the language. In (1a) for instance, the ‘transitive’ aspectual marker **-ri** is selected when the sentence has **wòhú** ‘snake’ as its object within the canonical structure of the language. This is because that aspectual marker **-ri** cannot occur sentence finally as it requires an obligatory object or adjunct. However, when the object **wòhú** ‘snake’ is dislocated to the sentence initial position as in (1b), and the verb **kù** ‘kill’ now occurs in the sentence final position, an allomorph of **-ri** which is **-ra** described as the ‘intransitive’ aspectual marker is selected.³

It is to be noted that it is not only sentences with positive polarity that can be focused since negative polarity sentences can be focused as well. Dagbani codes verbal negation using preverbal negative markers, **kù** and **bí** for the future and non-future tenses respectively. The realization of focus in negative sentences is demonstrated in the sentences in (2) and (3).

- (2a) **O bí kù-rí wòhú**
 S/he NEG kill.IMPERF snake
 ‘S/he does not kill a snake’
- (2b) **Wòhú kà ó bí kù-rá**
 Snake FM 3SG NEG kill.IMPERF
 ‘It is a snake (that) s/he does not kill’.

³ For details of the interaction between aspectual markers and sentence structure of Dagbani, see Issah (2011) and references cited therein.

- (3a) **Chéntìwúnì kú tú- Ø bìá máá**
 Chentiwuni NEG insult.IMPERF child DEF
 ‘Chentiwuni will not insult the child’
- (3b) **Chéntìwúnì ŋ kú tú- Ø bìá máá**
 Chentiwuni FM NEG insult.IMPERF child DEF
 ‘It is Chentiwuni who will not insult the child’
- (4a) **Bɛ bí bù-rí bì-hí kpè**
 3SG NEG kill-IMPERF child.PLU here
 ‘They beat children here’
- (4b) **Kpè kà bɛ bí bù-rí bì-hí**
 Here FM 3SG NEG kill.IMPERF child.PLU
 ‘It is here that they do not beat children’

We see from the data above that, focusing of negative constructions is the same as what has been observed of positive polarity sentences above. Just as demonstrated of the positive polarity sentences, the negative polarity sentences also make use of **kà** for non-subject constituents as in (2b), (4b) and **n** or its phonologically conditioned allomorphs for subject constituents as in (3b).

5. Constituent Interrogatives in Dagbani

Constituent interrogatives in Dagbani are primarily identified by any of the interrogative words or pronouns in Table 1. It is also worth pointing out that these interrogative words generally occur in specific functions, mainly subjects, objects and adjuncts. In line with the classification of languages in terms of the syntactic slots that their interrogative words occupy as proposed by (Siemund 2001), I demonstrate in this article that Dagbani prefers the clause-initial position for interrogative words as briefly mentioned in section 2.

It should be noted that the interrogative words **ŋùnì** ‘who’ and **bɔ** ‘what’ are used for both subject and object questions. Out of the seven interrogative words that are shown in table (1), only **ŋùnì** ‘who’ and **dínì** ‘which,’ distinguish between singular and plural forms. The plural forms are **bánì má** ‘which people’ and **dínnì má** ‘which ones’ respectively. We also have seen that the expressions that are used for asking of temporal setting, **bóndàlì** ‘what day’ and **sàhá dínì** ‘which time’ are not just single lexical items but either a compound or a pied piping structure. This might not be a unique feature of Dagbani since in some unrelated Kwa languages such as Akan (Saah 2000) and Ga (Kotey 2002) similar pied piping structures have been identified as interrogative devices that are used for the elicitation of information on temporal

setting. As pointed out earlier, these interrogative words are generally substitutes for arguments that may function as subjects, objects and adjuncts of sentences.

Table 1: Dagbani interrogative words

Concept	Interrogative word	Gloss
Person	ɲùní ⁴	who
Object	bɔ ⁵ / bɔ zúyù	what/for what reason
Enumerative	álà	how much/how many
Location	yà	where
Time	bóndàlí/ sàhá dìní	what day/which time
Reason	wúlà	why
Object	dìní	which

In the study of constituent interrogatives, it has often been argued that these types of questions demand answers that will generally provide the kind of information indicated by the interrogative word. In (5) for instance, the constituent question is enquiring about the one who was seen.

(5) Question: Who₁ did Baako see t₁?

Answer: Baako saw Beninya

It is suggested by Dakubu (2003: 59) that ‘a speaker utters a question to elicit information needed to complete an expression, to an interlocutor who is expected to provide that information’. She further proposes that the choice of what is commonly called "interrogative mood" is generally a pragmatic issue in discourse.

A striking feature of constituent interrogatives has been their morphosyntactic similarity with focus constituents. This similarity has been identified in many African languages, as pointed out earlier. In this article I strive to establish this parallelism between focus constituents and interrogative words drawing data from Dagbani. I propose that the main morphosyntactic parallelism between focus constituents and interrogative words is the obligatory presence of focus markers **ká** and **n** in both focus constituents and constituent interrogatives and the requirement that both focused constituents and constituent interrogatives have the clause initial position as their landing sites. Data used in this article explicate that in the formation of constituent

⁴ The interrogative word **ɲùní** is ambiguous in Dagbani. It can either mean ‘who or whose’ depending on the context. When it means whose, it has the structure **ɲùní** +NP.

⁵ Phonetically, the vowel in this word is really the high-mid vowel /o/. The use of the low-mid vowel /ɔ/ is an orthographic convention.

interrogatives in Dagbani, the interrogative words are placed clause initially followed by an introduction of the focus markers, **n** or **ká** depending on whether the interrogative word is a substitute for a subject or non-subject argument within the sentence structure. By this, the interrogative word occupies a position of prominence, and becomes the focus of the sentence. In terms of feature specification, the interrogative words attain the information profile, [+prominence, +focus, +new]. Focus as used in this article refers to “the highlighting of salient non-derivable information linked to ongoing discourse” (Amfo 2010: 198). If interrogative words obligatorily require that they be placed clause initially, then it implies that the *in situ* strategy is not available in the formation of Dagbani constituent interrogatives.⁶ This is because when an interrogative word is placed clause finally in the formation of constituent interrogative, the resulting structure is ungrammatical as will be seen later in examples (17a, 17b).

I propose that the kind of focus that is coded on the interrogative words of Dagbani is contrastive focus. This claim is not just based on the morphosyntactic property of interrogative words, which share parallelism with focused constituents, but also on the semantic grounds that the information profile shared by the two is similar. We account for the distribution of the interrogative words of Dagbani by assuming that they occupy specific positions in the formation of constituent interrogatives. I further speculate that FOC occupies a designated contiguous set of positions within the functional hierarchy of the clause. This is within the assumption that the functional projections that make up the clause are linearly ordered—a proposal underlying most cartographic work (see for example Cinque 2006, 2002, 1999; Rizzi 2004; Belletti 2004). The formation of constituent interrogatives using **kà** is illustrated in (6-8) below.

(6a) **Bɔ́ kà náá kù-rí chùyù pùhìbú dàlì t₁?**

What FM chief kill.IMPERF festival celebration day

‘What does a chief kill on the day of festival?’

(6b) ***Bɔ́ náá kù-rí chùyù pùhìbú dàlì t?**

What chief kill.IMPERF festival celebration day

(6c) ***Chùyù pùhìbú dàlì náá kù-rí bɔ́?**

festival celebration day chief kill.IMPERF what

(7a) **Bɔ́ zúyù₁ kà kòm màlì ànfááni t₁?** (*Karim kundili* 2 p.31)

What reason FM water has importance

‘For what reason is water relevant (to us)?’

⁶Though some may prefer calling **kà** and **n** movement particles, I opt to analyse them as focus markers as that best fits into the theoretical framework within which the data are examined.

- (7b) ***Bɔ** zúyù_i kòm málí ànfááni_i t?
 What reason_i water has importance_i
- (7c) ***Kòm** málí ànfááni bɔ zúyù?
 Water has importance what reason
- (8a) **Wúlà** kà bɛ kpé-Ø yílí máá ní t?
 How_i FM 3SG enter house DEF LOC_i
 ‘How have they entered the house?’
- (8b) ***Wúlà** bɛ kpé-Ø yílí máá ní t?
 How_i 3SG enter.PERF house DEF LOC_i
- (8c) ***Bɛ** kpé-Ø yílí máá ní wúlà
 3SG enter.PERF house DEF LOC how

We observe from the data in (6a, 7a, and 8a) that in the formation of constituent interrogatives in Dagbani, the interrogative word is placed at the sentence initial position (the left periphery) of the clausal structure, and is immediately followed by the focus marker **kà** when the interrogative word substitutes for a non-subject argument. It can also be recalled from an earlier assertion that question words are generally substitutes of certain syntactic categories that have traditional argument functions as objects, subjects and adjuncts. In the data in (6) through (8), we observe that the question words **bɔ** ‘what’, **bɔ zúyù** ‘for what reason’ and **wúlà** ‘how’ substitute for an object, an adverb of reason and an adverb of manner respectively. These adverbs, i.e. the latter two, i.e. adverb of reason and adverb of manner will fit into the category of adjunct arguments in the language. It is also realized in the data that the interrogative word appears within a specific syntactic slot. The interrogative words are placed clause initially and are immediately followed by the appropriate focus marker. I propose that this syntactic position occupied by interrogative words be analysed as Spec-Foc, that is, specifier position of the focus phrase. The data used in this article seem to suggest that no pro-copy or resumptive pronoun occurs after movement of the interrogative word from its base position. Thus, Dagbani is unlike Akan (Saah 1988, 2000) which makes use of resumptive pronouns when movement takes place for purposes of focusing.

It has so far been argued that when interrogative words are put in sentence initial position, the appropriate focus marker should be introduced, **kà** or **n**. In line with this proposal, the ungrammaticality of sentences (6b), (7b) and (8b) is not surprising. I argue that their ungrammaticality arises from the fact that the particles **kà** and **n** are absent in those sentences, when I have argued that they are very salient in the formation of constituent interrogatives. The ungrammaticality of (6c), (7c) and (8c) indicate that Dagbani does not allow constituent interrogatives to be hosted in the right periphery in the formation of constituent questions as pointed out earlier. Once

there is an obligatory movement of the interrogative words to the clause initial position, I propose that the focus features associated with Dagbani question words are strong and so need to be checked. The checking of the strong focus features is however, only made possible by the movement of the interrogative word clause initially and then an introduction of the focus markers.

It is also possible in Dagbani to have a constituent interrogative in which the interrogative word is combined with another NP in the sentence initial position. In this case, we have NP+I-word placed in the sentence initial position. It must also be pointed out that in such a situation, we do not have the interrogative word in the clause initial position, since the NP precedes the interrogative phrase. This is exemplified in (9) and (10).

(9a) **Sàhá dínì_i kà bóliṃmeribá ḡmɛ-rá t₁?** (*Karim kundili* 2 p. 25)

Time which FM footballers play.IMPERF

‘Which time do footballers play (football)?’

(9b) ***Sàhá dínì_i bóliṃmeribá ḡmɛ-rá t?**

Time which footballers play.IMPERF

(9c) ***Bóliṃmeribá ḡmɛ-rí sàhá dínì?**

Footballers play.IMPERF time which

(10a) **Nèèn bɔ₁ kà bóliṃmeribá yɛ-rá t₁?** (*Karim kundili* 2 p. 25)

Clothing what FM footballers wear.IMPERF

‘What (kind of) clothing do footballers wear?’

(10b) ***Nèèn bɔ₁ bóliṃmeribá yɛ-rá t₁?**

clothing what footballers wear.IMPERF

(10c) ***Bóliṃmeribá yɛ-rí nèèn bɔ?**

footballers wear.IMPERF clothing what

In (9) and (10), we see that the interrogative words **dínì** ‘which’ and **bɔ** ‘what’ co-occur with **sàhá** ‘time’ and **nèèn** ‘clothing’ respectively. Yet, the focus marker **kà** is required for the sentences to be grammatical as shown in the ungrammaticality of sentences (9b) and (10b). This suggests that the focus markers are essential syntactic ingredients in the formation of constituent interrogatives. The sentences in (9c) and (10c) are also ungrammatical because the interrogative words are not hosted clause initially. To account for this NP+IW co-occurrence, I propose that it could be analysed as an instance of pied-piping. Ross (1967) describes pied-piping as the situation where a phrase larger than a single interrogative word occurs in the fronted position in the formation of a constituent interrogative. The alternation between the

aspectual markers **-rá** and **-rí** as in (9a, 9b) versus (9c) and (10a, 10b) versus (10c) was earlier explained in section 4.

We see from the data so far presented that the claim of Rizzi (1997) that the left periphery which hosts extracted/moved elements is located above the Inflectional Phrase (IP) is valid for Dagbani. This conclusion is borne out by the observation that the interrogative **bo** ‘what’ takes a position above the IP and so can be argued to have taken scope of the rest of the sentence.

It has so far been demonstrated that **kà** is an obligatory element in the formation of constituent interrogatives. It has also been argued that the interrogative word is placed to the immediate left of the focus marker **kà** where it takes scope over the rest of the sentence. Recall the assertion that there is a structural asymmetry between subject and non-subject constituent interrogatives in Dagbani. In the data above so far, we have seen that when a constituent question demand non-subject arguments, **kà** is selected. In the data in (11-13), we exemplify the use of **n** in the formation of constituent interrogatives. As pointed out earlier, the focus morpheme **n** or its allomorphs are chosen when NP subjects are substituted for in the formation of constituent interrogatives. When an interrogative word questions an NP subject, it never occurs clause finally. The data below explicates the use of **n** in the formation of constituent interrogatives.

- (11a) **ɲùní₁ n t₁ dá-Ø lòòrí?**
 who FM buy.PERF lorry
 ‘Who has bought a lorry?’
- (11b) ***ɲùní₁ t₁ dá-Ø lòòrí?**
 who buy.PERF lorry
- (12a) **Bɔ₁ ɲ t₁ kù-Ø bìá máá?**
 what FM kill.PERF child DEF
 ‘What has killed the child?’
- (12b) ***Bɔ₁ t₁ kù-Ø bìá máá?**
 what kill.PERF child DEF
- (13a) **Bɔ₁ n t₁ dú-Ø bìá máá gbáli?**
 what FM climb.PERF child DEF leg
 ‘What has climbed over the child’s leg?’
- (13b) ***Bɔ₁ t₁ dú-Ø bìá máá gbáli?**
 What climb.PERF child DEF leg

The grammaticality of sentences (11a), (12a) and (13a) versus the ungrammaticality of sentences (11b), (12b) and (13b) show that **n** is also essential in questioning subject

NPs. It further explicates the proposal that placing an interrogative word clause initially does not necessarily make it a focused constituent, since the pre-disposed interrogative word must enter into a syntactic union with the focus markers. The claim that there is structural asymmetry between interrogative words that substitute for subjects and those that substitute for non-subjects is further demonstrated in the ungrammaticality of the sentences in (14).

(14a) ***ɲùní₁ kà t₁ dá-Ø lòòrí?**

who FM buy.PERF lorry

(14b) ***Bɔ zúyù₁ n kòm màlí ànfááni t₁?**

What reason FM water has importance

The constituent interrogatives in (14a) and (14b) are ungrammatical, borne out by the fact that we have used the focus marker **kà** in an instance where we question NP subject as in (14a), and in (14b), we have used the **n** focus marker where we question a non-subject constituent. A similar fact holds for (14b) in which we have an interrogative substituting for a non-subject interrogative word and the **n** focus marker analysed as subject focus marker is selected. (Dakubu 2003) makes a similar observation for Farefare, a close sister language to Dagbani where the focus marker **tí** is also identified as an essential syntactic element in the formation of constituent interrogatives. Dagbani is very strict in terms of the selection of focus markers based on the constituent that an interrogative word substitutes, that is, subject versus predicate arguments. This suggests that there might be a kind of structural asymmetry between subject and non-subject question. A similar conclusion on structural asymmetry is made for subject and non-subject focused constituents in Issah (2012, 2008) and Fusheini (2012). Thus, when an interrogative word that substitutes for a subject argument is focused, it is brought leftward and followed obligatorily by the focus marker **n**.

Just as we have proposed for **kà**, we observe that the use of the **n** focus marker also displaces the interrogative word from its base position within the right periphery of the clause to the clause initial position. When this movement takes place, the interrogative word takes scope over the rest of the sentence and for that matter the IP. Thus, the Dagbani phenomenon falls in line with the proposal of Rizzi (1991) who postulates that an element placed in the sentence initial position must take scope of an IP. We further propose that the subject interrogative word is also base-generated in the focus phrase, just like the non-subject interrogative word.

The focus markers **kà** and **n** are obligatory not only in simple matrix sentences, but also in embedded sentences as in (15) and (16):

- (15a) **Bì-hí máá tíhì-ya ní bɔ́ kà Mbàṅbá kù-yá t₁?**
 child.PLU DEF think.PERF that what FM Mbaṅba kill.PERF
 ‘What have the children thought that Mbaṅba has killed?’
- (15b) ***Bì-hí máá tíhì-ya ní bɔ́ Mbàṅbá kù-yá t₁?**
 child.PLU DEF think.PERF that what Mbaṅba kill.PERF
- (15c) ***Bì-hí máá tíhì-ya ní Mbàṅbá kù-Ø bɔ́?**
 child.PLU DEF think.PERF that Mbaṅba kill.PERF what
- (16a) **Bɛ yɛlí-ya ní ɲùní₁ n t₁ tú-Ø pàyá máá?**
 3SG say.PERF that who FM insult.PERF woman DEF
 ‘They said that who has insulted the woman?’
- (16b) ***Bɛ yɛlí-ya ní ɲùní₁ tú-Ø pàyá máá t₁?**
 3SG say.PERF that who insult.PERF woman DEF
- (16c) ***Bɛ yɛlí-ya ní pàyá máá tú-Ø ɲùní**
 3SG say.PERF that woman DEF insult.PERF who

As was observed of the simple sentences, we see in the complex sentences in (15) and (16) that the interrogative word **bɔ́** is placed in the sentence initial position of the embedded clause where it takes scope over the rest of its clause. It thus precedes the IPs as in (15a) and (16a). Sentences (15c) and (16c) are also ungrammatical because the interrogative words **bɔ́** ‘what’ and **ɲùní** ‘who’ are left in the clause final positions of the embedded clauses.

It seems so far from the discussion that placing the interrogative word in the sentence initial position and following it immediately with focus markers **kà** and **n** is the main strategy in the formation of constituent interrogatives in Dagbani. This is further explicated by the ungrammaticality of the sentences in (17) where the question words **bɔ́** ‘what’ and **yá** ‘where’ are not fronted to the left periphery of the clausal structure. It stands therefore, to reason that in the formation of constituent interrogatives, the interrogative word cannot be located in a position other than the initial position of the left-periphery structure. This explains the ungrammaticality of the sentences in (17).

- (17a) ***Náá kù-rí bɔ́ chúyù pùhìbú dàlí?**
 chief kill.IMPERF what festival celebration day
- (17b) ***Bía máá cháng-Ø yà?**
 child DEF go.PERF where

The data that we have so far considered are all from positive sentences. In the examples under (18) that follow, I investigate the interaction between negative

sentences and constituent interrogativization in Dagbani. It was pointed out earlier in section 1 that Dagbani codes negation via the use of the preverbal particles **kù** and **bì** used for the encoding of future and non-future negation respectively. Sentences (2a) and (3a) are repeated here as (18a) and (18b) for the sake of convenience.

(18a) **O bí kù-rí wòhú**
 s/he NEG kill.IMPERF snake
 ‘S/he does not kill a snake’

(18b) **Chéntiwúni kú tú-∅ bía máá**
 Chentiwuni NEG insult.PERF child DEF
 ‘Chentiwuni will not insult the child’

It is the observation that the negative markers occur freely in negative constituent questions, and there does not seem to be any restriction on the co-occurrence between negation and the formation of constituent interrogatives, as shown in (19).

(19a) **ɲùní₁ ɲ t₁ kú dá bùkú máá?**
 who FM NEG buy book DEF
 ‘Who will not buy the book?’

(19b) **Bɔ₁ kà náá bí kù-rí chúyù pùhìbú dàlí t₁?**
 what FM chief NEG kill.IMPERF festival celebration day
 ‘What does a chief not kill on the day of festival?’

(19c) **Sàhá dínì₁ kà bóliɲmɛribá bí ɲmɛ-rá t₁?**
 time which FM footballers NEG play.IMPERF
 ‘Which time don’t footballers play (football)?’

It is observed from the data in (19) that constituent interrogativization is not incompatible with negation in Dagbani. We see that both **kà** and **n** are compatible with the formation of constituent interrogatives as seen in (19a) and (19b). We observe again in (19c) that pied-piping interrogative word **sàhá dínì** ‘which time’ is also compatible with the formation of constituent interrogatives. It is worth pointing out therefore, that negation does not have any striking effect on constituent interrogatives. For instance, it does not change the scopal position that interrogatives take. It also does not change the syntactic requirement that negative markers in Dagbani immediately precede the verb they negate within a sentence; neither does it change the syntactic relationship between the interrogative words and focus markers.

6. Formalizing the Analysis of Dagbani Constituent Interrogatives

This section of the paper is aimed at specifically addressing the theoretical questions in relation to the formation of constituent interrogatives as described in section 5. The

analysis is done within the theoretical framework of the feature checking mechanism of the Minimalist Program proposed by Chomsky (1995, 2000) and the analysis of interrogative constructions proposed in Sabel (2000, 2002, 2003). The central idea of the proposal of Sabel is that the movement of interrogative words can be typologically accounted for by assuming that movement of *wh*- words is not only motivated by the need to check [+*wh*] features, but also the need to check [+*focus*] features. He stipulates that whereas a [+*wh*]-feature is always located in the position where the *wh*-phrase takes its scope (i.e. in C^0), a [+*focus*]-feature may occur in C^0 , but also in Foc^0 , the head of a focus phrase *FocP*, in some languages. Sabel further suggests that the position of *wh*- words can be universally determined by [+*wh*] features and the [+*focus*]. He also opines that typological variation with respect to *wh*-questions in natural languages of the world can be determined by two factors: (i) which of the two features [+*wh*] or [+*focus*] is strong and responsible for movement of an interrogative word in a given language, and (ii) which syntactic slot is being taken by a moved *wh*-phrase/interrogative phrase in a given language (*Spec CP* or *Spec FocP*) to enable the appropriate features to be checked. These two parameters are, however, tightly related since the features responsible for the movement will determine which syntactic slot should be taken by an interrogative phrase. For the case of Dagbani, it is argued that movement is motivated by strong focus feature located at Foc^0 . This focus feature manifests itself through the obligatory morphological manifestation of focus markers **kà** and **n**. If movement of the interrogative word is motivated by strong focus features, then it stands to reason that the interrogative phrase is located at the *SpecFoc* where it enters into a spec-head configuration with the functional head focus phrase to check the focus features. I further suggest that the type of focus that is marked on interrogative words when they are placed clause initially is contrastive focus. In the spirit of the feature checking mechanism of Minimalism, one could then speculate that the ungrammatical sentences (6b), (7b) and (8b) are based on the fact that the specifier positions of the functional projection (FOC) are not filled. Since it is a syntactic requirement that this functional projection is filled with the appropriate functional head which manifest morphologically with **kà** or **n**, defying this syntactic constraint results in the formation of ungrammatical sentences.

In furtherance to the above, Sabel (2003, 2002, 2000) develops a formal analysis of the correlation between focus marking and *wh* movement on the basis of the Minimalist feature checking approach. Focus constructions are closely related to constituent interrogatives in terms of their syntactic distribution. This is because they are both found in the left periphery of the clause structure. Also, they both call for the obligatory presence of FOC in the head position of the projection of the functional phrase *FocP*. This has been demonstrated to be the case of Dagbani, as both focused constituents and interrogative words occur clause initially and also enter into syntactic

configuration with focus markers. Boadi (1974) asserts that focus constructions are answers to an interrogative word fronting construction in a question-answer pair. This is shown in the structure in (20). We observe in (20b) that the subject NP which provides the information requested by the constituent interrogative which is the answer to the constituent interrogative in (24b) corresponds to the constituent in the focus construction.

(20a) Question: **ɲùní₁ ɲ kù-Ø báá máá t₁?**
 who FM kill.PERF dog DEF
 ‘Who has killed the dog?’

(20b) Answer: **Abú₁ ɲ t₁ kù-Ø báá máá**
 Abu FM kill.PERF dog DEF
 ‘It is Abu who has killed the dog’

I postulate in line with the proposal of Boadi (1974) that Dagbani interrogative words hold the core of the information profile of constructions in which they occur. When it is proposed that interrogative words hold the core of the information profile, it means that the interrogatives represent what is unknown within the discourse and so become the focus of the constructions in which they occur. This is why Ameka (1992: 5) also is of the opinion that “a felicitous answer to a content question would be a focused constituent since it would provide information that would be substitute for the interrogative word”.

The interrogative word therefore constitutes a linguistic device for the identification of a piece of information considered to be prominent new information. This is what Kroeger (2004: 139) suggests in his argument that “the question word bears a pragmatic focus, since it specifies the crucial piece of new information which is required; the rest of the question is part of the presupposition”.

If we are to give our analysis within a feature specification approach, then we could hypothesize that the information profile of interrogative words in Dagbani could be as in (21):

(21) Interrogative word [+new, +prominent, +focus].⁷

Though it has been established that interrogative words in Dagbani are found in the clause initial position, that is Spec-Foc, there are exceptions to this observation. It is therefore possible to have interrogative words that are not found in the sentence initial position but are located within the right periphery of the sentence structure. The

⁷ [+new, +prominent] features indicate that question words are specified for prominent new information in the context of constituent interrogatives.

exceptions are (i) in cases of phatic usage of language (greetings) as shown in (22)⁸ and (ii) in echo questions as shown in (23b).

(22a) **Yí bì-hí mǎá bé wúlà?**
 2PLU child.PLU DEF be how
 ‘How are your children?’

(22b) **á bà bé wúlà?**
 1SG father be how
 ‘How is your father?’

We see in (22) that the interrogative word **wúlà** ‘how’ has been hosted in the right periphery of the clausal structure. In such a context, the canonical structure of the language is maintained. Saah (1988) makes a similar observation for Akan, a Kwa language, in which interrogative words can be left in the insitu position in the context of greetings. Aboh (2007) also postulates that though it is argued cross linguistically that interrogative words (wh-phrases) are focused; there is the need to further create a distinction between focused question words and non-focused interrogative words. The findings of Dagbani are thus consistent with this suggestion.

It is also possible for Dagbani interrogative words to be placed in the right periphery in echo questions. In this situation the particle **lá** invariably intervenes between the verb and the interrogative word. Though further investigation is needed into the nature and function of the **lá** that is introduced in the formation of echo questions, I seem to be of the view that it is probably not the presentational focus marker **lá** but a homophonous particle that probably has to do with the formation of echo questions. Dakubu (2000) looks at a phonologically similar particle in Gurenɛ and suggests that the particle has different functions in the language. According to Adger (2003: 352), “echo questions are usually used to express surprise or amazement, or simply request that a part of a sentence should be repeated for clarity”. This is shown in (23).

(23a) **Tí búá sáyìm lá bɔ?**
 1PLU goat destroy.PERF PART what
 ‘Our goat has destroyed what?’

(23b) **Bì-hí mǎá mɛ-rì lá yìlí dínì?**
 child.PLU DEF build.IMPERF PART house which
 ‘The children are building which house?’

⁸ Whether this expression is mainly used in greetings or in other contexts where one may be trying to find out the general condition of another person is yet to be investigated.

- (23c) **Búa máá chán lá yà?**
 goat DEF go.PERF PART where
 ‘The goat has gone to where?’

The sentences in (23) are acceptable only in the context of echo questions, and never as constituent interrogatives. Thus, when a speaker seeks some information about something that he or she wants to confirm (echo questions) or the state of well-being of a nominal constituent (greetings) then, the interrogative word can be non-focused as it can be left in the right periphery and does not also co-occur with the focus markers **kà** and **n**. In the latter interpretation, the question becomes a ‘how-question’.

7. Conclusion

This article describes how interrogativization and focus play out in Dagbani. I established that focusing obligatorily occurs in the formation of a constituent question, a conclusion that is based on the observation that in the formation of constituent question, the interrogative words invariably enters into a kind of relationship with focus markers. The observation on the obligatory presence of focus markers in the formation of constituent interrogatives made me to conclude that focus markers are essential morphosyntactic ingredients in the formation of constituent interrogatives.

Based on data analysed, I have argued that constituent interrogatives and focus constructions in Dagbani essentially share similarities, which include left-peripheral dislocation of a constituent and morphological introduction of focus markers, **n** or **kà**. A moved interrogative must be focus marked giving it the same information profile as a focused constituent.

I further observed that though the interrogative words are located in the left periphery of the clausal structure, in which case they are focused, there are two exceptions: in greetings and in echo questions. In these cases, the interrogative words can be found in the right periphery of the clausal structure and are argued to be non-focused since they do not enter into any relationship with focus markers.

Working within the focus phrase and feature checking theoretical framework, I suggest that movement of Dagbani question words might be motivated by strong focus features which manifest themselves in the morphological realizations of the focus markers **kà** and **n**. If movement is essentially seen to be motivated by the need to check strong interpretable features, then one will be right to suggest that the focus features associated with Dagbani question words are strong, since *in situ* question words strategy is not allowed in Dagbani. I conclude that there is an asymmetry between focused and non-focused interrogative words in Dagbani.

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