

INTERROGATIVE PRONOUNS IN DAGBANI AND LIKPAKPAANL

Abstract

This paper provides an analysis of the properties of interrogative pronouns of Mabia languages drawing data from Dagbani and Likpakpaanl. We focus on the inventory, internal structure, and key grammatical characterisation of the interrogative pronouns. We contend that interrogative pronouns are salient syntactic elements in the content question systems of these languages. In addition, we demonstrate that number marking, distinction between human/non-human and lexical ambiguity are salient grammatical properties of these interrogative pronouns. We further show that the inflection for number employs both suppletive and nonsuppletive patterns. We also contend that the interrogative pronouns that specify for the semantic domains of [+human], [-human] and [+thing] are sensitive to number, since they alternate for plurality (*ɲuni ~ banima* (who.sg ~ who-pl), *bo ~ bonima* (what.sg ~ what-pl), *dini ~ dinnima* (what.sg.thing ~ what.thing-pl) for Dagbani and (*ɲma ~ bilabi* (who.sg ~ who-pl), *nilan ~ bilabi* (what.sg ~ what-pl), *ba ~ ba* (what.sg.thing ~ what.thing-pl) for Likpakpaanl. Because the root may differ or be the same from that of the plural as evident in both languages, we propose that number marking in these interrogative words exhibit both suppletive and nonsuppletive patterns. The data are based on native introspection of the authors who are native speakers of these languages. This paper is important because of its empirical and theoretical contribution to the study of the Mabia languages.

Key words: interrogative pronouns, Mabia, inventory, grammatical properties, number marking

1. Introduction

The availability of overtly expressed pronominal elements in the derivation of content questions have been attested in many Mabia (Gur) languages: Dagaare (Bodomo 1997), Buli (Ferreira and Ko 2003, Sulemana 2019), Kusaal (Abubakari 2018, Musah 2018), Safaliba (Schaefer 2009), Gurene (Dakubu, 2003, Atintono 2013) among others. The focus of this current paper is to provide a description of the key characteristics of these interrogative pronouns drawing data from two Mabia (Gur) languages, Dagbani and Likpakpaanl. Genetically, Dagbani belongs to the South-Western Oti-Volta subgroup of the (Gur) Mabia, group of languages (Bendor-Samuel 1971 and Naden 1988, 1989). Dagbani has three major dialects, namely Tomosili (Western Dialect), Nanunli, and Nayahali (Eastern dialect) are spoken in and around Tamale (the political capital of the Northern Region), Bimbilla and Yendi respectively (Olawsky 1999, Hudu 2010 et seq.). Likpakpaanl is a Mabia (Gur) language belonging to the Gurma subgroup of the Oti-Volta branch of the North Central Mabia (Gur) languages (Manessy 1971; Naden 1989). Likpakpaanl has close linguistic affinity with Bimoba and Bassare and is spoken predominantly in the Eastern corridors of the Northern region of Ghana and parts of Northern Volta. Some speakers of the language are also found in the Republic of Togo (Schwarz, 2007:116). Both languages are tonal languages since the pitch with which vocalic segments are produced is phonemic in these two languages. Although tone is an important of the grammar of these languages, it is not marked in the data used here since it does not affect the grammar of the issues under investigation. According to Siemund (2001), the requirement for pronoun elements as indicators of the semantic notion of interrogativisation is established to be a key morphosyntactic characterisation of content/wh-questions natural languages. Siemund (2001) therefore, contends that all natural languages do have

a set of interrogative pronouns, which are salient in the morphosyntactic characterisation of constituent questions. Siemund (2001:1023) further contends that although languages differ regarding the inventory of interrogative words, there are mainly those that substitute for the core arguments of a predication (English *who*, *what*), and those that inquire about the central participants of the situations denoted by the relevant clauses. He also posits that there are also the interrogative pronouns that substitute for adjuncts. The semantic distinctions that languages typically draw in the domain of interrogative words are person, ‘who’, object ‘what’, location, ‘where’ time, ‘where’, manner ‘how’ and reason ‘why’. We shall show later that the semantic distinctions available in Dagbani and Likpakpaanl are indeed more than that suggested by Siemund (2001).

It is asserted in Ultan (1978: 228-229) that: “interrogative phrases are characteristic of all languages, that is, all languages have interrogative substitutes for nouns and a number of adverb-like words or phrases expressive of locative, temporal, enumerative, manner, purpose and other functions.” These interrogative words typically substitute for both arguments and non-arguments within the clause structure of languages. According to Siemund (2001:1018), interrogative pronouns are “analyzed as placeholders or variables in a proposition to be filled or assigned a value by an answer.” Some scholars also refer to interrogative pronouns as interrogative/wh-phrases (Dryer 2013). In this work therefore, we use interrogative pronouns to refer to these items which are also known as wh-phrases or interrogative phrases. Although these interrogative pronouns constitute a salient morphosyntactic property of the constituent interrogatives of the Mabia (Gur) languages, little attention has been paid to their grammatical characterisation. It is worthy of mention that it is not within the Mabia (Gur) languages that words have not received attention from linguists and particularly within the Mabia (Gur), but the Ghanaian languages in general. This current paper therefore, intends to fill this research gap by providing a comparative study of these class of words drawing data from Dagbani and Likpakpaanl. Beyond this section, this article proceeds as follows. In section 2, we provide an account of the inventory of the pronoun system of Dagbani and Likpakpaanl. After establishing the inventory of the interrogative pronouns, section 3 focuses on a discussion on the grammatical characteristics of these interrogative pronouns. We focus on the distinction between human/non-human, lexical ambiguity and the inflection for number by some of these interrogatives. Section 4 sums up the paper with a conclusion and areas for further investigation on this topic of interrogative pronouns.

2. The inventory and morphology of Dagbani and Likpakpaanl interrogative pronouns

As mentioned in the preceding section, interrogative pronouns are instrumental in the derivation of constituent questions, Aboh (2004) for Gungbe, (Saah, 1988, Boadi, 1990) for Akan, Gichuka, (Muriungi & Karuri 2014) among many others. This section focuses on outlining the inventory and internal structure of the interrogative pronouns of the two languages under study. Despite the fact that Siemund (2001) posits that interrogative pronouns constitute a key characteristic of every language, he also notes that natural languages display variation based on the inventory of these interrogatives. We discuss the internal structure of these interrogative pronouns based on the typological claims of Heine et. al (1991) who attempt to establish the possible correlations between the semantic domains of interrogatives and their phonological and morphological properties. Tables 1 and 2 outline the list of interrogative pronouns in Dagbani and Likpakpaanl, respectively based on the semantic categorization of these items proposed by Cysouw (2004).

Table 1: List of interrogative pronouns in Dagbani

Interrogative pronoun	semantic category	Gloss
<i>ɲuni</i>	person	who
<i>bozuyu</i>	reason	why
<i>ya</i>	place	where
<i>dini</i>	selection	which
<i>ala</i>	amount	how much
<i>bondali/saha dini</i>	time	when
<i>wula</i>	manner	how
<i>bo</i>	thing	what

Table 2: List of interrogative pronouns in Likpakpaanl

Interrogative pronoun	Semantic category	Gloss
<i>ɲma</i>	person	who
<i>baŋa</i>	reason	why
<i>la</i>	place	where
<i>nilan</i>	selection	which
<i>iŋa</i>	amount	how much
<i>badaal</i>	time	when
<i>kinye</i>	manner	how
<i>ba</i>	thing	what

From a cursory account that is provided in (Issah 2020), we propose that these interrogative pronouns outlined in Table 1 and 2 have different morphological compositions. It is worth noting that the interrogative words are made up of both morphologically complex and simplex words in both languages. For instance, the interrogative words for ‘who’ **ɲuni** and **ɲma** for Dagbani and Likpakpaanl respectively, are morphologically simplex in that they are monomorphemic. Similar morphological claims are made of **baŋa** and **bo** ‘what’ for Likpakpaanl and Dagbani respectively as well as **nilan** and **dini** for Likpakpaanl and Dagbani respectively. It is not only the above interrogative words, but also, we make the same morphological assumptions for **wula** and **kinye** ‘how’ respectively for Dagbani and Likpakpaanl. However, there are also a set of these interrogative words in these languages that are morphologically complex. For instance, the interrogative pronouns within the domains of time, temporal setting, **bondali** ‘what day’ and **saha dini** ‘which time’ for Dagbani and **badaal**¹ ‘what day’ for Likpakpaanl are compound expressions in both languages. Interestingly, while the interrogative pronoun for reason **bozuyu** ‘why’ is a complex item in Dagbani and is made up of **bo** ‘what’ and **zuyu** ‘head’, that of Likpakpaanl is a simplex word **baŋa**. By compounding here, we mean the formation of new words via the process of joining two or more already existing bases. The characterization of the interrogative word of time as being morphologically complex is not analyzed as a peculiar property of the Mabia

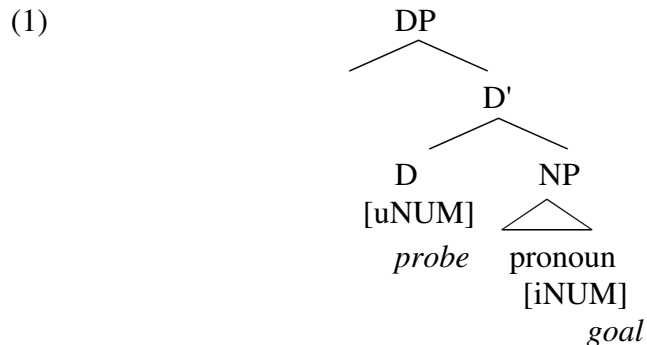
¹This interrogative word is made up of **ba** ‘what’ and **daal** ‘day’ where the Dagbani **bondali** is also made up of **bo** ‘what’ and **dali** ‘day’. We notice an epenthetic nasal segment being /n/ inserted which we see as a confirmation of the claim by (Fabb, 1998:66) that compounding might give rise to certain phonological and morphological processes.

languages since similar conclusions are drawn for two Kwa languages: Akan (Saah 2000) and Ga (Kotey 2002).

Now, we turn to the typological claims that are made in the literature concerning the phono-morphological characterizations of interrogative words and their semantic domains. The aim is to establish a correlation between the findings on the morphological properties of these interrogative pronouns of Dagbani and Likpakpaanl and the typological claims of Heine et. al (1991:55-59). In their attempt to establish correlations between the semantic domain expressed by interrogative pronouns and their phonological and morphological characteristics, Heine et. al (1991:55-59) employ a ‘small-scale’ language sample. They concluded that the interrogative pronouns for person, object and location are the ones that exhibit the least phonological and morphological complexity in languages of the world. They therefore, concluded that in the majority of the world’s languages in their sampled languages, these concepts are expressed using monomorphemic and monosyllabic interrogative pronoun forms. From the interrogative pronouns presented in Tables 1 and 2, it is observable that this typological claim of Heine et. al (1991) concerning the monomorphemic characterisation of the interrogative pronouns person, object and location are valid in both languages since they are simplex interrogative items.² They further note that the interrogative words for time and manner are generally more complex in natural languages and that the most complex pronouns in terms of morphological composition are interrogative words coding reason or cause (and purpose). It is argued by Heine et. al (1991) that these interrogative words usually consist of more than a single morpheme. They further conclude that in the light of this typological claim, the English *why* is an exception. Thus, a similar conclusion is drawn that whereas Dagbani interrogative word for the expression of reason uses a morphologically complex expression, that of Likpakpaanl patterns with the claim of exceptionality for a language like English since it also employs a morphologically simplex morpheme.

Regarding the syntactic structure of these interrogative pronouns that are so far discussed, we propose that they are questions operators in both languages. Following a proposal in Issah (2020), we contend that the interrogative pronouns project an interrogative Determiner Phrase (DP), which is headed by D as schematised in (1).

² We admit that whereas the interrogatives for place *ya* and *la* for Dagbani and Likpakpaanl respectively, could be complex being made up of *ya polo* ‘where’ and *polo* ‘place’ and *la che* ‘where’ and *che* ‘place’, native speakers mostly employ ‘*la*’ and ‘*ya*’. For now, we assume that this is attributable to economy reasons.



From the structural account in (1), we contend that the head of the DP is D, which bears a strong uninterpretable feature [+question operator] that undergoes feature checking operation with an interpretable NP (a pronominal element for that matter). In summary, we have so far provided an overview of the inventory of the interrogative pronouns in Dagbani and Likpakpaanl. In addition, we have discussed their morphological composition, and concluded based on the empirical material available that interrogative pronouns comprise of both simplex and complex items in both languages. In the section that follows, we provide a systematic study of the key characteristics of the interrogative pronouns.

3. The characteristics of the interrogative pronouns

In the preceding section, we focused on discussing the inventory and internal structure of Dagbani and Likpakpaanl interrogatives. This discussion was in the light of typological claims that have been made in the literature regarding these words. In this section, we examine the key characteristics of the interrogative pronouns. We argue that in Dagbani and Likpakpaanl, the properties of the interrogative words include the distinction between human/nonhuman in section 3.1, section 3.2 on lexical ambiguity in and finally section 3.3 on marking for number,

3.1 Distinction between human and non-human interrogative pronouns

This section examines the distinction between human and nonhuman referents as a grammatical property of Dagbani and Likpakpaanl interrogative pronouns *wh*-phrases. In the literature on the typological study of interrogative pronouns as in the works of (cf. Lindström 1995, Ultan 1978 among others), it is generally attested that most languages make this distinction in the characterization of their interrogative pronouns. Siemund (2001: 1023) claims that ‘one of the distinctions that virtually all languages make, and which seems almost universal, is the one between interrogative words used to inquire about human referents and those used for non-human referents, i.e. between *who* and *what*’. This is evident in the distinction between ‘what/who’ in English. In his typological studies, Ultan (1978: 229) also contends that: “the number and kind of distinctions which QWs [Question Words, MC] may or may not reflect in terms of those existing elsewhere in a given language vary considerably from language to language, but at least one contrast appears to be nearly universal: Q-pronouns show a human/nonhuman or, in a few cases, an

animate/inanimate dichotomy”. For instance, (Givón 1984) demonstrates that a language like Ute distinguishes between animate/inanimate semantic domains as illustrated in (2).

- (2) a. **‘áa** **wúuka-xa?**
 IW.SG.ANIMATE work.ANT
 ‘Who worked?’ / ‘Which one worked?’
 b. **‘agá-ru** **qorúc’ay-kya?**
 IW.INANIMATE break.ANT
 ‘Which thing broke?’ (Givón 1984:226)

The evidence available in Likpakpaanl and Dagbani indicate that the distinction operational in these languages is the distinction between [+/-human]. This is illustrated in (3) and (4) for Dagbani and Likpakpaanl respectively.

- (3) a. **ɲuni n sa ku bua maa sohala?** ³
 who FOC PST kill goat DEF yesterday
 ‘Who killed the goat yesterday?’
 b. **Bo n sa ku bua maa sohala?**
 what FOC PST kill goat DEF yesterday
 ‘What killed the goat yesterday?’
 (4) a. **ɲma le fu ku uŋoo gbaan fen na?**
 who FOC PST dig goat DEF yesterday
 ‘Who killed the goat yesterday?’
 b. **Ba le fu ku uŋoo gbaan fen na?**
 who FOC PST kill goat DEF yesterday
 ‘What killed the goat yesterday?’

From the data presented in (3) and (4), it is evident that whereas in Likpakpaanl **ɲma** is specified for [+human], **ba** is specified for [-human] whereas in the case of Dagbani we have **ɲuni** ‘who’ and **bo** ‘what’ for [+human] [-human] referents respectively. The selection of these pronominal referents is conditioned by the [+/-human] features of the referent in questions. This means that Dagbani and Likpakpaanl are not different from what pertains in English where the interrogative pronouns are specified for [+/-human] by employing the interrogative pronouns ‘who’ and ‘what.’

³List of Abbreviations used in this paper are: 1st, 2nd, 3rd for first, second, and third person respectively, ANT=Inanimate, D’=Determiner-bar, DEF=Definite Article, DP=Determiner Phrase, FOC=Focus Marker, iNUM=interpretable number feature, IPFV=Imperfective Tense, IW=Interrogative Word, NEG=Negative marker, NP=Noun Phrase, NumP=Number Phrase Projection, Num=Number, PFV=Perfective Tense, PL=Plural, PST=Past Tense, SG=Singular, uNUM= uninterpretable number feature.

The next question that arises from the above discussion is the availability of any language internal evidence to motivate the claim of [+/-human] distinction in these interrogative words rather than [+/-animate] characterization. One piece of evidence that support of the [+/-human] distinction is the fact that neither **ɲma** nor **ɲuni**, for Dagbani and Likpakpaanl respectively occurs in context where referents are expected to be animate. If it were the case that the distinction were based on [+/-animate] dichotomy, one would have expected these interrogatives to occur with animal referents. This is however, contrary to the empirical facts on the language showing why the sentences in (5) and (6) are ungrammatical for Dagbani and Likpakpaanl respectively.

- (5) a. **ɲùní/ *bo n kpe-ri duu máá ni?**
 what what FOC enter.IPFV room DEF inside
 ‘Who is entering (inside) the room?’
 b. **Bo /*ɲuni ka paga máá sà dá-rá?**
 what who FOC woman DEF PST buy-IPFV
 ‘What was the woman buying yesterday?’
- (6) a. **ɲma/*ba le bi-koo kidiik gbaan ni**
 what what FOC IPFV.enter room DEF inside
 ‘Who is entering (inside) the room?’
 b. **Ba /*ɲma le upii gbaan fu bi-da?**
 what/ what FOC woman DEF PST IPFV.buy
 ‘What was the woman buying yesterday?’

Given the evidence in (5) and (6) regarding the distributional restriction of these interrogative pronouns for *person* and *what* respectively, we conclude the selection of one these interrogative pronouns in favor of another is regulated by the semantic features of the referents in context. In a closely related areal language, Dagaare, Bodomo (1997: 72) also makes this semantic distinction between human and nonhuman interrogative pronouns. Siemund (2001: 1021) also points out that the human/non-human distinction is predominant in many languages and are shown to be in languages such as in the Russian **kto** and **to**, **shéi** and **shénme**, in in Mandarin, and in Georgian **vin** vs. **ra**, **kuka** and **mikä** in Finnish and **kina** vs. **sunä** in West Greenlandic.

It is worthy of mention that despite the [+/-human] distinction in Dagbani and Likpakpaanl interrogatives, there are special context in which **ɲuni** ‘who’ and **ɲma** ‘who’ for Dagbani and Likpakpaanl respectively, can occur with nonhuman referents. This is for a context where a nonhuman referent has so much identified with a people to the extent that it is no longer treated as nonhuman, but human. For example, there is a goat at home, which everyone adores and treats as being human. When such an animal is, being referred to, it can be personified and resulting in structures like (7).

- (7) a. **ɲùní n ɲma-ri ɲmana duu máá ni?**
 who FOC break.IPFV calabashes room DEF inside
 ‘Who is breaking bowls (inside) the room?’
 b. **ɲma le bi-wiir tiyir gbaan kidiik ni?**
 who FOC IPFV.break calabashes DEF room inside
 ‘Who is breaking bowls (inside) the room?’

In the context of (7), the animals which is not human has been personified and treated as human, the reason for which the interrogative pronoun for person has been used and accepted as appropriate in both languages. Siemund (2001: 1021) suggests that despite the prevalence the [+/-human] and [+/-animate]

dichotomy in interrogative pronouns, there are some languages in which this distinction is not hold. A language that is proposed not to make this distinction is Latvian which makes no distinction between *who* and *what* as shown in (8).

- (8) **Kas tas ir?**
‘Who/what is that?’ (Siemund 2001: 1021)

In summary, we have demonstrated in the Dagbani and Likpakpaanl interrogative pronouns exhibit a [+/-human] distinction. In the next section, we discuss lexical ambiguity another property of Dagbani and Likpakpaanl interrogative pronouns.

3.2 Ambiguities in Dagbani and Likpakpaanl interrogative pronouns

Another key characterization of the interrogative pronouns in Dagbani and Likpakpaanl is the fact that they exhibit lexical ambiguity. We understand ambiguity here as in the proposal of Crystal (1991: 17) who contends that ambiguity is a phenomenon whereby a word or sentence expresses more than one meaning. We are dealing with lexical items; our concentration shall be on lexical ambiguity, which is triggered by the alternative/multiple meanings of an individual lexical item. Although the typological study of Cysouw (2005) note that ambiguity in interrogative pronouns are uncommon in languages of the world, we show that the interrogative words for the expression of manner: *wula* and *kinye* for Dagbani and Likpakpaanl respectively, exhibit ambiguity. Because these interrogatives have this semantic property, they can be interpreted with either a manner, reason or instrumental reading. Consider the ambiguous interpretation of these lexical items which we exemplify in (9) and (10) for Dagbani and Likpakpaanl respectively.

- (9) Q: **Wula ka be ku kpaŋ maa?**
how FOC 2PL kill.PFV guinea fowl DEF
‘How have they killed the guinea fowl?’
A1: **Sua ka be zaŋ korigi kpaŋ maa?** instrument
knife FOC 2PL use slaughter.PFV guinea fowl DEF
‘They have used a knife to slaughter the guinea fowl.’
A2: **Yomyom ka be korigi kpaŋ máá** manner
quickly FOC 2PL slaughter.PFV guinea fowl DEF
‘They slaughtered the guinea fowl quickly.’
A3: **kpaŋ maa ka la alaafe.** reason
guinea fowl DEF have.NEG FOC health
‘The guinea fowl is not healthy.’
- (10) Q: **Kinye le ni ku ukpaan gbaan?**
how FOC 2PL kill guinea fowl DEF
‘How did you kill the guinea fowl?’
A1: **Kijuuk le bi kər ukpaan gbaan?** instrument
knife FOC 2SG slaughter.PFV guinea fowl DEF
‘We used a knife to slaughter the guinea fowl.’
A2: **Malamala le bi kər ukpaan gbann** manner
quickly FOC 2SG slaughter.PFV guinea fowl DEF
‘They slaughtered the guinea fowl quickly.’

A3: **Ukpaan** **gbaan** **aa** **kpa** **laafee** reason
 Guinea fowl DEF NEG have health
 ‘The guinea fowl is not healthy.’

From the answers provided in the data in (9) and (10), we observe that (9Q) and (10Q) have several answers. We interpret the availability of the varied, yet right answers as in (9A1, A2, A3) and (10A1, A2, A3) to be attributable to the multiple/ambiguous interpretation of **wula** and **kinye** as either substituting for syntactic elements, which are within the semantic domains of [+manner], [+reason], and [+instrument]. This explains why in (9A1) and (10A1), **wula** and **kinye** provide answers with focus on the instrument of the action ‘knife’, which is the instrument of the action ‘slaughter’, whereas in (9A2, 9A3) and (10A2, 10A3), they substitute for manner and reason respectively.

In summary, this subsection has been devoted to the examination of ambiguity as a property of interrogative pronouns in Dagbani and Likpakpaanl. We established that notwithstanding the typological rarity of lexical ambiguity in interrogative pronouns, there is language internal evidence to propose that **wula** and **kinye** exhibit ambiguity. In the next subsection, we pay attention to number marking, another key characteristic of these interrogative pronouns.

3.3 Number marking in interrogative pronouns

Another characteristic of interrogatives in Dagbani and Likpakpaanl is the fact that they inflect for number marking, thus distinguishing between interrogative words in the singular or plural. It worthy of mention that not all interrogative pronouns inflect for number in these languages. According to (Dalrymple 2012: 2), ‘number marking can appear on pronouns or nouns, indicating the number of members in the group referred to, or as agreement marking on determiners, adjectives, verbs, prepositions, and other categories.’ The interrogative words that mark for number are those within the semantic domains of [+THING], [+SELECTION] and [+PERSON]. This explains why they distinguish between plural and singular referents within the grammar of these languages. This observation that the interrogative pronouns for [+THING], [+SELECTION] and [+PERSON] inflect for number tallies with the conclusion of (Cysouw 2004: 7) languages mostly inflect their interrogative pronouns specified for person, thing and for such grammatical properties as number, case, and gender. The number-marking paradigm is shown in tables 3 and 4 for Dagbani and Likpakpaanl respectively.

Table 3: Number marking in Dagbani interrogative pronouns

semantic category	singular	plural	Gloss
[+PERSON]	<i>ɲuni</i>	<i>banima</i>	who/whom
[+SELECTION]	<i>dini</i>	<i>dinnima</i>	which
[+THING]	<i>bo</i>	<i>bonima</i>	what

Table 4: Number marking in Likpakpaanl interrogative pronouns

semantic category	singular	plural	Gloss
[+PERSON]	<i>ɲma</i>	<i>bilabi</i>	who
[+SELECTION]	<i>nilan</i>	<i>tilan</i>	which
[+THING]	<i>ba</i>	<i>bamam</i>	what

Based on the data presented in tables 3 and 4 for Dagbani and Likpakpaanl respectively, we make the generalization that is outlined in (11) regarding the inflection for number. The interrogative pronouns that are specified for [+HUMAN], [+THING] and [-HUMAN] are sensitive to number marking in Dagbani and Likpakpaanl. It must be noted that the number displayed by the interrogatives is dual, in the sense that they simply contrast between singular and plural.

Having shown that some of the interrogative words are sensitive to number, we now turn to an examination of the patterns of number marking available in the two languages under investigation. From the empirical material presented in tables, 3 and 4, one observation is that in the marking of number in these interrogative pronouns, the roots of interrogative pronouns in the singular and plural forms either differ phonologically or are the same. This empirical material on the characterization of the number markings leads to the conclusion that inflecting for number in the interrogative pronouns exhibits both nonsuppletive and suppletive patterns. Whereas in the former, there is morphological sameness in the root of the singular and plural as in *dini*_[singular], **din-nima** _[plural], and **bo**_[singular], **bonima** _[plural], and **nilan** _[singular], *ti-lan* _[plural], and **ba**_[singular], **baman**_[plural], for Likpakpaanl, in the latter, the root of the singular is different from that of the plural as evident in **ɲuni** _[singular] and **banima** _[plural] not ***ɲuninima**_[plural] and **ɲma** _[singular], **bilabi** _[plural], not ***bi-ɲma** _[plural] for Dagbani and Likpakpaanl respectively. In suppletion, there is generally a phonological disparity in stems, resulting in different roots for different contexts. This suppletive patterns in the pronouns is not something surprising since in the study of suppletion, pronouns are established to exhibit suppletion regularly in the marking of number compared to their lexical noun counterparts (Corbett 2005, 2007, 2009). The phenomenon is widely studied especially in lexical nouns and pronouns (Corbett 2005, 2007, 2009, Moskal 2013, 2015). According to Moskal (2015: 363) “suppletion refers to the situation where a single lexical item is associated with two phonologically unrelated forms, and the choice of form depends on the morphosyntactic context.”

A classic illustration of suppletion is the English example *good, better, best*, for the positive, comparative and superlative, respectively, where the roots differ based on context. Research into this phenomenon has gained quite an appreciable attention in the field of linguistics and in particular within the domain of morphology and allomorphy. Based on allomorphy, the interrogative word ‘who’ has a context-free exponent, which is *ɲuni* whereas within the context of plural it has a corresponding variant, which is **banima** and **ɲma** as a context-free exponent with a corresponding plural variant, which is **bilabi** for Dagbani and Likpakpaanl respectively. We show the contrast in number marking using the data in (12) through (15) using the contrast in **ɲuni/banima** (12) and **bo/bonima** (14) for Dagbani and **ɲma/bilabi** (13) and **nilan/tilan** (15) for Likpakpaanl.

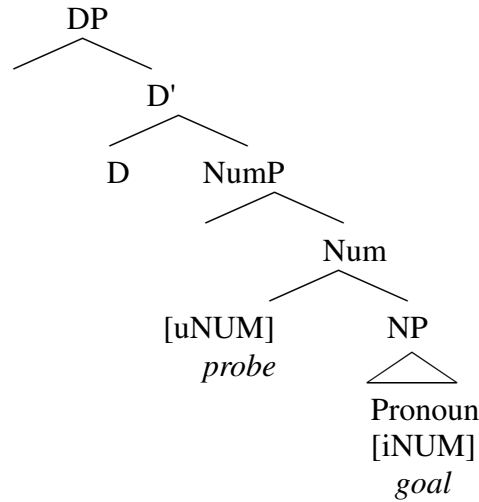
- (12) a. **ɲuni** **n** **bo-ri** **buku** **maa?**
 who.SG FOC want-IPFV book DEF
 ‘Who wants the book?’

- (13) b. **Ba-nima n bo-ri buku maa?**
who-PL FOC want-IPFV book DEF
 ‘Which people want the book?’
- a. **ɲma le ban kigbaŋ gbaan?**
who.SG FOC want-IPFV book DEF
 ‘Who wants the book?’
- b. **Bi-labi le ban kigbaŋ gbaan?**
PL-who FOC want-IPFV book DEF
 ‘Which people want the book?’
- (14) a. **Bo ka Adam da daa maa ni?**
what FOC Adam buy.PFV market DEF inside
 ‘What has Adam bought in the market?’
- b. **Bo-nima ka Adam da daa maa ni?**
what-PL FOC Adam buy.PFV market DEF inside
 ‘What (things) has Adam bought in the market?’
- (15) a. **Ba le Adam daa kinyan gbaan ni?**
what FOC Adam buy.PFV market DEF inside
 ‘What has Adam bought in the market?’
- b. **Ba-mam le Adam daa kinyan gbaan ni?**
what-PL FOC Adam buy.PFV market DEF inside
 ‘What (things) has Adam bought in the market?’

Based on the empirical material presented on the marking of number in Dagbani and Likpakpaanl, we contend that the interrogative that are specified for [+THING], [+SELECTION] and [+PERSON] are sensitive to number since they alternate for plurality. Offering a formal account for the marking of number cast within the theoretical tenets of Minimalism (Chomsky 2000, 2001), we propose that the interrogative pronouns, which inflect for number, are specified to be strong interpretable number feature [Num]. We propose that these interrogatives carry an uninterpretable [iNUM] number feature that undergoes feature checking with an interpretable number head that carry [uNUM] and part of the interrogative DP.

Since we have been able to demonstrate that some of these interrogative pronouns contrast between singular and plural (inflect for number), we attempt to provide a formal account of the syntax of number. Within the theoretical tenets of Minimalist syntax, we contend that there is a functional layer of number phrase projection (NumP) within the DP layer as shown in (16). We do take note that this functional layer is not available within the internal structure of the DP since not all the interrogative require number marking.

(16)



Following Ritter (1991), I assume that NumP as a functional layer is below the DP and above NP as in the structural representation in (16). Having demonstrated that number marking is a characteristic feature of some of these interrogative pronouns in the languages under investigation, it is worthy of mention that similar findings have been made in other languages of the word where pronouns within the same semantic domains as those for Dagbani and Likpakpaanl inflect for number. This singular/plural contrast is illustrated in the sentence (17) and (18) for Dagbani and Likpakpaanl respectively.

(17) a. **ɲuni** **n** **bo-ri** **loori** **palli** **kpe?**
 who FOC want-IMPERF lorry new here
 ‘Who wants a new lorry here?’

b. **Banima** **n** **sa** **bu** **bihi** **maa?**
 who-PL FOC PST beat children DEF
 ‘Which people beat the children yesterday?’

(18) a. **ɲma** **le** **ban** **loor** **puan** **do?**
 Who FOC want lorry new here
 ‘Who wants a new lorry here?’

b. **Bi-labi** **le** **fu** **gbaa** **mbim** **gbaan?**
 PL-who FOC PST beat children DEF
 ‘Which people beat the children yesterday?’

The data in (17) and (18) illustrate the number contrast in the interrogative pronouns using the interrogative pronoun that is specified for person. Whereas (17a) and (18a) represent the singular, in (17b) and (18b), we exemplify the plural forms. The phonological contrast in the items in (17a) versus (17b) on one hand and (18a) versus (18b) on the other, illustrate the claim of suppletion since different roots being specified for singular and plural forms respectively.

In Kusaal, another Mabilia language of Ghana, we have **anoʔɔn** (SG) and **anoʔɔn-nama** (PL) for ‘who’, **bo** (SG) and **bonama** (PL), **dine** (SG), **dina** (PL) for ‘which’. A similar pattern exists in Sisaali where the interrogative pronouns within the same semantic domain as observed of Dagbani

and Kusaal also inflect for number as in **anne** (SG) and **tabeele** (PL) for ‘who’, **bekuŋ** (SG) and **bekina** (PL) for ‘what’ and **kibee** (SG)/ **kibeema** (PL).

It is not only in these Mabia languages that there is evidence for the number contrast in these interrogative pronouns, but same pattern is discovered in other languages of the world. For instance, according to Sadock (1984:200ff), in West Greenlandic, the interrogative word for questioning non-human referents ‘what’ also distinguishes between singular and plural as in *Kina* (SG) and *ki-kkut* (PL). He therefore argues that an English content question like ‘*who is here?*’ corresponds to two different interrogative pronouns in West Greenlandic as exemplified in (19).

- (19) a. **Kina maaniit-pa-Ø?**
 IW.SG be.here-INT-3SG
 ‘What single person is here?’
 b. **Ki-kkut maaniit-pa-t?**
 IW-PL be.here-INT-3PL
 ‘Which people are here?’ (Sadock 1984:200)

A very similar distribution is found in Swedish, which differentiates between singular (*vem*) and plural (*vilka*) in the case of human nouns (20).

- (20) a. **Vem öppnade dörren?**
 ‘Who opened the door?’
 b. **Vilka öppnade fabriksportarna?**
 ‘Who (PL) openend the factory gates?’ (Siemund 2001:1022).

To conclude, this subsection has provided an empirical and theoretical analysis of number marking as a key characteristic of some of the interrogative pronouns in Dagbani and Likpakpaanl. We have demonstrated that number marking is indeed a grammatical property for some of the interrogative pronouns justifying the proposal for a functional NumP within the internal structure of the interrogative DP.

4. Conclusion

This article has investigated the key characteristics of interrogative pronouns of two Mabia (Gur) languages of Ghana. We first outlined an inventory for the interrogative pronouns and examined their internal structure. It was demonstrated that internally, the interrogative pronouns include both morphologically simplex and complex items. We established that the properties of the interrogative words in these languages include the distinction between human/nonhuman referents in the sense that both languages make a distinction between the interrogative pronouns based on whether they inquire about human/non-human referents. Other characteristics established included the marking of number and lexical ambiguity. On the inflection for number in the interrogatives, we further showed that the number marking exhibited both suppletive and non-suppletive patterns in the two languages under investigation. Both languages however, do not seem to be showing any parameter of variation in gender and case. The contribution of this paper is both empirical and theoretical. Empirically, we have offered a comparative study of an aspect of the Mabia languages that have not received any scholarly attention from previous scholars.

In the theoretical landscape, we provided a formal syntactic account of the interrogative pronouns. We claimed that they project a DP layer, headed by D. Based on the empirical evidence of the sensitivity of some of these interrogative pronouns to number marking, we further proposed that Number phrase (NumP) is a functional projection within the DP layer which is headed by the number affixes. Suppletion did not receive a detailed examination in this paper. This is because suppletion in pronominals is currently an interesting domain of study that has attracted the attention of linguists. This area is therefore, a potential topic for further investigation in the interrogative pronouns of Mabia (Gur) languages.

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