

## THE MORPHO-SYNTACTIC CHARACTERIZATION OF LIKPAKPAANL REFLEXIVE PRONOUNS

Samuel Owoahene Acheampong  
Languages Department  
St Vincent College of Education, Ghana  
[samuelowoahene1@gmail.com](mailto:samuelowoahene1@gmail.com)

Samuel Awinkene Atintono  
Accra College of Education, Ghana.  
[satintono@gmail.com](mailto:satintono@gmail.com)

Samuel Alhassan Issah  
Department of Gur-Gonja Education  
University of Education, Winneba, Ghana  
[samuel\\_issah@yahoo.com](mailto:samuel_issah@yahoo.com)

### Abstract

This paper examines the morpho-syntactic and semantic characteristics of reflexives in Likpakpaanl, a Mabia (Gur) language spoken in Northern Ghana. The analysis is cast within the theoretical tenets of the Government and Binding (GB) Theory of Chomsky (1981, 1986). Data for the study were drawn from four different sources including: natural text, elicitations, recording of speeches as well as native speaker intuitions. We show that Likpakpaanl reflexives are bi-morphemic comprising the personal pronominal and the suffix *-bà*. The pronoun differs depending on the plurality or singularity of the antecedent, a motivation for our argument that the suffix *-bà* does not inflect for number. We further show that Likpakpaanl reflexives are clause-bound since they take their interpretation from a local antecedent DP. We interpret this to mean that they match the behavior of anaphors as outlined by Principle A of the GB theory and typological assumption that bi-morphemic reflexives are strictly local and cannot pick up their reference from an antecedent that is not within the same clause. Finally, we investigate the nature of *self*-intensifiers arguing that they have same morphological identity as reflexives. However, whereas the intensifiers obligatorily require the morphological presence of the focus marker *lé*, reflexives require no focus marker in the syntactic characterization. This paper brings data from a lesser known language and adds to our typological knowledge of reflexives.

*Keywords:* Likpakpaanl, morpho-syntax, reflexives, antecedent, binding, Mabia.

### Résumé

Ce travail examine les caractéristiques morphosyntaxiques et sémantiques des réflexifs dans Likpakpaanl, une langue Mabia (Gur) parlée dans le nord du Ghana. L'analyse s'inscrit dans les principes théoriques de la théorie de Government and Binding (GB) (Chomsky 1981, 1986). Les données de l'étude ont été tirées de quatre sources différentes : texte naturel, élicitations, enregistrement de discours ainsi que des intuitions du locuteur natif. Nous montrons que les réflexives de Likpakpaanl sont bi-morphémiques et comprennent le pronominal personnel et le suffixe *-bà*. Le pronom diffère selon la pluralité ou la singularité de l'antécédent, ce qui motive notre argument que le suffixe *-bà* n'inflecte pas pour le nombre. Nous montrons en outre que les réflexives de Likpakpaanl sont liées à une proposition puisqu'elles sont interprétées à partir d'un DP antécédent local. Nous interprétons cela comme signifiant qu'ils correspondent au comportement des anaphores, comme indiqué par le principe A de la théorie GB et l'hypothèse typologique selon laquelle les réflexives bi-morphémiques sont strictement locaux et ne peuvent pas prendre leur référence d'un antécédent qui ne se trouve pas dans la même proposition. Enfin, nous étudions la nature des auto-intensificateurs en affirmant qu'ils ont la même identité morphologique que les réflexives. Cependant, alors que les intensificateurs exigent obligatoirement la présence morphologique du marqueur de focalisation *lé*, les réflexifs ne nécessitent aucun marqueur de focalisation dans la caractérisation syntaxique. Cet article est important car il apporte des données d'un langage moins connu et ajoute à notre connaissance typologique des réflexifs.

### 1. Introduction

Although studies on reflexives have received extensive attention in various languages, especially English, there is no known literature (at least to the best of the authors' knowledge) that has attempted any investigation into reflexives in Likpakpaanl. The main focus of this paper, therefore, is to examine the morpho-syntactic and semantic properties of reflexives in

Likpakpaanl. Genetically, 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). Previously referred to Gur languages or *langues Voltaïques*, the term Mabia (Bodomo 1993, 1994, 2005) has in recent times been used to replace Gur given that it is considered to reflect the social and cultural affinities shared by speakers of these languages.<sup>1</sup>

Likpakpaanl, with the canonical word order of SVO (Schwarz 2007), has close linguistic affinity with Bimoba and Bassare and is spoken predominantly in the Eastern corridors of the Northern region of Ghana and also in some northern parts of the Volta Region. According to Schwarz (2007), some speakers of Likpakpaanl are also found in the Republic of Togo, and Adouna (2009) notes that in Togo, the same language is called Konkomba. The Likpakpaanl spoken in Ghana has five geographical dialects (Manessy, 1971: Hasselbring, 2006), comprising Likoonl (spoken in Gbintiri, Bunbon and around Gushegu), Linafeil (spoken in Wapuli), Ligbenl (spoken in Kujooni), Lichabol (spoken in Saboba, the seat of the traditional capital of Kikpakpaan) and Limonkpeln (spoken in Kpassa, Kpalba and Damonko). There are however, a few noticeable dialectal variations which are mainly at the phonological and lexical levels with great mutual intelligibility among these dialects. The data used in this paper is drawn from the Lichabol dialect of Likpakpaanl. The choice of this dialect stems from the fact that it is the standardised dialect and for that matter has been used for the unified orthography of Likpakpaanl. This explains why all the written texts produced in the language make use of this dialect. Beyond the introduction, the structure of the paper is as follows. Section 2 outlines the methodology that was used to arrive at the data that form the basis of this current study, whereas Section 3 gives a survey of the definition of reflexive pronouns, the object of study in this paper. Here, we focus on the typology of reflexives based on their morphology in the context of GB Theory. In Section 4, we give an overview of the Government and Binding Theory (Chomsky 1981, 1986) which serves as the theoretical framework with which the data were analysed. Section 5 provides an insight into the morphology and syntax of Likpakpaanl reflexives as well as the syntactic distribution on the reflexives within the context of Principle A of the Binding Theory. Here, we also provide an overview of some intensifiers and their formal morphological correlation with reflexives are discussed under Section 6. We show that although the two share same morphological characteristic, they differ in their distribution. Section 7 provides a summary of the issues we discussed and analysed in the paper.

## 2. Sources of data and methodology

Data for the study came from four main sources; natural data, textual data, elicited data and native speaker intuition. The natural data, which were gathered during a two-month field visit, comprised folktales, radio panel discussions in Likpakpaanl, and daily conversations. Spontaneous speeches were recorded and later the consent of the participants sought before using such data. Apart from the recordings of daily conversations of people, the other forms of natural data came from recordings of Likpakpaanl programmes on two local radio stations in the research area. The local radio stations in Saboba are *Radio Kitaakwoln* 'Radio Daybreak' and *Radio Gaaki* 'Radio Faith'. We purposively selected *Zorotolo Hour* (a storytelling and proverbs programme) and *Yikaal Aajom* ('Our Cultural Heritage') both from Radio Kitaakwoln and *Uwumbor Aabiim* ('God's Blessings') and *Ghana Aabɔr* (Panel Discussion) programmes aired on Radio Gaaki. These programmes are aired thirty minutes,

<sup>1</sup>We are very thankful to the two anonymous reviewers of JWAL for their comments and insightful suggestions which have been duly integrated into this final version of the paper. We are also grateful to Tony Naden for checking the entire document for language and to Mary Amaechi for her insightful comments on this paper. All shortcomings however, remain ours. Abbreviations used in this paper include: 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> for first, second, and third person respectively, CP=complementizer phrase, DEM =Demonstrative determiner, DP=determiner phrase, ED=elicited data, FOC=focus marker, FUT=future marker, H=human, IMP=imperfective aspect, NH=non-human, NI=native intuition, NOM =nominaliser, OBJ =object pronoun form, PL=plural, POSS=possessive pronoun, RECI=reciprocal, SG=singular, SUBJ=subject pronoun form, SVO=subject verb object, TD=textual data, TRM=time reference marker.

on each of these radio stations on Sundays and Tuesdays from 7:30pm- 8:00pm (Radio Kitaakwoln) and Tuesdays and Fridays (for Radio Gaaki). The stations did these recordings and we picked up the data after the programme. Each of the programmes was recorded three times, once a week, totaling 90 minutes of recorded data per programme. The recordings were made in the studios of the various radio stations which are fitted with soundproof gadgets. This ensured that the recordings were done in an environment that was free of noise and other obstructions.

The data were transcribed using ELAN after which all reflexive expressions were picked out for analysis. The transcribed data was cross-checked with four (4) language consultants two males aged 63 and 40 years and two females aged 61 and 44 years. These consultants were purposively selected because they have each worked on the Likpakpaanl Literacy Programmes with either the Ghana Institute of Linguistics, Literacy and Bible Translation (GILLBT), School for Life, Ibis Ghana or the Peace Corps for at least four years. The consultants have also worked on the language, written primers and contributed to the translation of the Konkomba Bible and other texts such as the Complementary Basic Education (CBE) materials. These language consultants were used to help us validate the transcribed data by checking for grammaticality and contextual felicity.

Data were also elicited from participants using the schedule-controlled elicitation technique. An elicitation schedule of material to be elicited was prepared and we asked questions to the consultants in the order of the prepared schedule (Chelliah & de Reuse: 2011). Stimuli such as pictures of *a man cutting meat, a woman buying pepper, a bat urinating on itself* were shown to the consultants and they were tasked to individually describe the actions. Later on, all the responses were brought together for discussion and the most appropriate description accepted and recorded. Sentences in English depicting reflexive constructions were also given to consultants and asked to do a target language translation and explain the semantic implications and grammaticality of the sentences in the context of Likpakpaanl. After the translation, some of the sentences were identified as ungrammatical in the target language even though the source language permitted it. Also, given that the lead author is himself a native speaker, some of the data are constructed using native introspection. However, such data were given to other native speakers for grammaticality judgement.

Finally, the fourth source of the data used in this study was drawn from existing works in Likpakpaanl. Some of the selected texts were historical narratives while others such as Primers on social and health issues. The written texts are selected literary works in Likpakpaanl. For data from the written texts, we indicate the source by the initials of the author and the page number of the work. The texts from which data have been drawn with their corresponding initials are: Kunji N. J & Tabuimi S. J (KNJ &TSJ) 2006, Kunji, N. J. (KNJ) 1983, Kunji, N. J. (KNJ) 1999, Magbaan, J. B. (MJB) 1998, Mpem, N. (MN) 2001 and Magbaan, B. & Takal, S. (MB &TS) 2000. These supplementary data taken from written texts were very useful as they help to augment the natural and elicited data that have been collected for the study.

### 3. Defining Reflexives

Reflexivisation is a syntactic process that is universally attested in natural languages. Reflexive pronouns have been defined based on certain characteristics. According to (Huddleston et al.: 2002: 1483), a salient characterisation of reflexive pronouns in English is simply their morphological make-up in the sense that they “are inflectional forms of the personal pronouns, formed morphologically by the compounding of *self* with another form: ...”. König & Gast (2002:1), note that in Standard English, there are two forms of such *self*-forms including: (i) one based on the object (originally the dative) forms of the personal pronouns (*himself, herself, itself, and themselves*) and (ii) one based on the possessive (genitive) forms (*myself, yourself, ourselves, and yourselves*). In addition, they further suggest that there is the plain, generic form, *oneself*. Based on this definition which is morphologically-based, the sentences in (1) contain reflexive pronouns.

- (1) a. John was clearly protecting himself.  
 b. Fred fancies himself.  
 c. She poured herself another cup of tea. (König & Gast 2002: 250).

It is suggested by König & Gast (2002) that the distribution (syntax) of the *self*-forms in (1) indicate that they occur in object (argument) positions of transitive verbs. Regarding their semantic interpretation, it is the case that they pick their reference from a preceding DP within the clause, the antecedent.

However, Reinhart & Reuland (1993) also point out that reflexives should not be defined just in terms of their morphological make-up, but also on the basis of syntactic and semantic criteria. Within these criteria, Reinhart & Reuland (1993) have defined reflexives as *self*-forms that are used in order to indicate that a semantic argument of a predicate is co-referent with another argument of the same predicate (a co-argument), typically with the subject. This co-argument is called the antecedent of the reflexive pronoun. In this current paper, we define reflexives using their morphological, syntactic and also semantic characteristics.

### 3. 1 Typology of Reflexives

The categorization of reflexive pronouns has been based on their locality conditions in languages of the world. As shown by Faltz (1977), Pica (1985, 1987) and Dixon (2012), reflexives are categorised typologically into two types labelled long distance anaphors as with the Norwegian **seg** and the Dutch **zich**, and local anaphors such as with the English *himself*. Whereas the former reflexives take antecedents outside their local domain (across clause boundary), in the latter, the reflexives have their antecedents within the same clause, (that is to say that the antecedents that c-command them are in the same local domain). It is argued by Faltz (1977) and Pica (1985, 1987), that when reflexives are complex expressions, then, they are universally local, while the simplex reflexives as with the Norwegian **seg**, are generally the long-distance type of reflexives. Cole et al. (2002) assert that the occurrence of reflexive pronouns in many genetically unrelated and typologically dissimilar languages appear to conform to the same distributional restrictions. Anagnostopoulou and Everaert (1999), also argue that local reflexives or SELF-anaphors (complex anaphors) license reflexive interpretation of a predicate while long distance anaphors or the so-called Simple Expression SE-anaphors, such as the Dutch **zich** and Icelandic **sig**, do not by themselves license a reflexive interpretation of a predicate. These two types of anaphors are also argued to differ from each other regarding their syntactic, semantic characteristics. Reinhart & Reuland (1993:658) note that SE-anaphors are structurally similar to pronouns even though SE-anaphors lack the inherent capacity for specifying the phi-features of gender, number and person. Pica (1987) identifies a number of characteristics which he argues are shared by long distance reflexives across languages. These properties include: (i) long distance reflexives are mono-morphemic; (ii) they take subject antecedent (iii) their distribution can, in many languages, be restricted to environments in which the antecedent and reflexive are found in specific domains. Huang (1984) and Tang (1985, 1989) identify another characteristic of long distance reflexives, claiming that they are subject to a ‘blocking effect.’<sup>2</sup> The data in (2) and (3) illustrate the syntactic restrictions on the local (bi-morphemic) and long distance (mono-morphemic) reflexives respectively

- (2) a. \*Mary<sub>i</sub> complained that [my attitude harmed herself<sub>i</sub>].  
 b. Mary<sub>i</sub> harmed herself<sub>i</sub>.

<sup>2</sup> For details on the typological characteristics of long distance reflexives, the reader may consult (Faltz 1977, Huang 1984, Tang 1985, 1989, Cole & Hermon 1998) and references cited therein.

- (3) a. **Zhangsan<sub>i</sub> renwei Lisi<sub>j</sub> zhidao Wangwu<sub>k</sub> xihuan ziji<sub>i/j/k</sub>**  
 Zhangsan thinks Lisi knows Wangwu likes self  
 ‘Zhangsan thinks Lisi knows Wangwu likes self.’ (Cole et al 2002: 371)
- b. **Ahmad<sub>i</sub> tahu Salmah<sub>j</sub> akan membeli baju untuk diri-nya<sub>i/j/k</sub>**  
 Ahmad know Salmah will buy clothes for self-3SG  
 ‘Ahmad knows Salmah will buy clothes for him/herself.’ (Cole et al 2002: 379)
- c. **Zhangsan<sub>i</sub> renwei wo<sub>j</sub> zhidao Wangwu<sub>k</sub> xihuan ziji<sup>\*/i\*/j/k</sup>**  
 Zhangsan thinks I know Wangwu likes self  
 ‘Zhangsan thinks I know Wangwu likes self.’ (Cole et al 2002: 373)

In (2), we show that in a language like English which has bi-morphemic reflexives, their distributional property require that the use of reflexives be licensed only when the antecedents that c-command them are in the same local domain. This explains the illicitness of (2a) since the NP antecedent, ‘Mary’, is not in the same local domain as the reflexive, ‘herself’ and for that matter defies the Principle A of the GB Theory which states that reflexive pronouns should be bound in their binding domain. The grammaticality of (2b) is attributable to the fact that ‘Mary’ is c-commanded by ‘herself’ and the two are within that same clausal domain. The data in (3) are unlike the illustration in (2) where the antecedent (binder) and their reflexives pronouns (bindees) are in same clauses as is evident in the illicitness of (2a) and grammaticality of (2b). Cole et al. (2002) explain that the Chinese reflexive **ziji** in (3a) can be interpreted as referring to the matrix subject, ‘Zhangsan’, the intermediate subject ‘Lisi’ or the lowest subject, ‘Wangwu’. The flexibility in the interpretation of the reflexive **ziji** explains why a reflexive appearing in an embedded clause can be co-referential with the matrix subject. This is interpreted as an illustration of long distance binding given that the reflexive and the antecedent are not within the same clausal domain. In (3b), the reflexive, **dirinya** can be interpreted either as a local reflexive, in which case it refers to the matrix subject, or as referring to some third individual in the discourse. The data in (3c) exemplifies the claim of Tang (1985, 1989) that long distance reflexives are subject to a ‘blocking effect’. Tang argues that in an instance where the subjects of the matrix and the embedded clauses share features for person, either NP is a possible antecedent for **ziji**. However, when the subjects of these clauses differ with regards to person, then only the subject of the subordinate clause is a possible antecedent for **ziji** but never the subject of the matrix clause. This leads to the conclusion that the embedded subject blocks the matrix subject (and any higher subject regardless of person) from acting as antecedent of **ziji**. The ‘blocking effect’ is what manifests in (3c) where the presence of third person ‘Wangwu’ as subject of the lowest clause blocks the reflexive **ziji** from referring to either the intermediate subject **woj** or the main clause subject ‘Zhangsan’. This restriction according to Cole et al. (2002) is hitherto unknown because no similar restriction is noted in the literature on European languages which also allow long distance reflexives.

To sum up, we have so far outlined a definition of reflexive pronouns considering their morphological and syntactic characteristics. Also discussed is the categorisation of the reflexives based on their distributional properties. In the next section, we offer a brief discussion on the basic theoretical tenets of the Binding Theory, the theoretical tradition within which the analysis of the empirical data presented is cast.

#### 4. Binding Theory

The data on Likpakpaanl anaphors in this paper are examined using the Government and Binding Theory (henceforth, GB) of Chomsky (1981, 1986) as a theoretical framework. The Government and Binding Theory is a theory of syntax within the tradition of transformational grammar propounded principally by Chomsky (1981, 1986). GB is concerned with the interpretation of R-expressions (including anaphors). In the canonical Binding Theory of Chomsky (1981, 1986), nominal expressions are grouped into three basic categories: (i) anaphors (reflexives and reciprocals) (ii) pronominals and (iii) R-expressions. Anaphors are defined as referentially defective noun phrases or noun phrases that mandatorily get their meaning from another DP in the sentence (Chomsky, 1981:59; Carnie, 2013:148). Anaphors are therefore, characterized as nominal expressions that do not have inherent capacity for reference on their own. Reciprocals do not constitute part of this current study. Thus, anaphors invariably depend on some other (preceding) nominal expressions within the clause structure to license their interpretation. The nominal expressions on which an anaphor depends for its meaning/interpretation is termed as the antecedent. According to Chomsky (1981, 1986) among others, the three principles that govern the interpretation of the established nominal expressions is referred to as the binding theory. In explaining binding, it is assumed by scholars such as Chomsky (1981, 1986) among others that: A binds B if and only if A c-commands B and A and B are co-indexed. It is shown in the literature (Chomsky 1981, 1986, Haegeman 1994, Carnie 2013) *inter alia*, that the structural relation between a reflexive and its antecedent is accounted for using the notion of c-command. Haegeman (1994:212) claims that a node A c-commands a node B if (i) A does not dominate B; (ii) B does not dominate A; and (iii) the last branching node dominating A also dominates B. The notion of binding is also significant in accounting for the syntax of reflexives. Carnie (2013:152) defines binding as a simultaneous syntactic configuration which entails both c-command and co-indexation. It is thus, a syntactic configuration which indicates that a pronoun ('bindee') and its antecedent ('binder') have same reference and share same phi-features in a given syntactic structure.

In the study of reflexives, a distinction is made between two types of anaphors; reflexives such as *himself*, *themselves*, *ourselves* etc. and reciprocals which include expressions like *each other* and *one another* (cf. Carnie, 2013:148; Poole 2011:120). Poole (2011:123) argues that syntactically, the anaphor and its antecedent must occur in the same clause and must share the phi-features of number, gender and person, depending on the grammatical features that are active in a given language. It can be deduced from these definitions that an anaphor (reflexive pronoun) must obligatorily have a local or a 'nearby' antecedent within a given syntactic unit to which it will refer, whilst a pronominal may, but need not necessarily, have its antecedent within the same syntactic domain. Adger (2004:54) postulating a co-referentiality hypothesis argues that for 'two expressions to be co-referential, they must bear the same phi-features.' According to Adger (2004), phi-feature is a linguistic term used to describe the semantic features of person, number and gender encoded in such lexical categories as nouns and pronouns.

The second form of DP as posited by Carnie (2013:149) is the pronoun which is explained as a noun phrase that optionally gets its interpretation either from another DP in the sentence or from a different context or from a previous discourse. There is another type of DP, which gets its interpretation by referring to entities in the world, and this type of DP is termed as a Referring expression or R-expression (Chomsky 1981).

There are three Principles of the Binding Theory, which describe the distribution of DPs. These binding Principles, as posited by Chomsky (1981) are;

- (4) a. Principle A: An anaphor must be bound in its binding domain.  
 b. Principle B: A pronoun must be free in its binding domain.  
 c. Principle C: An R-expression must be free. (Chomsky 1981: 190).

The definition of *binding domain* according to Chomsky (1981: 190) refers to the clause in which the noun phrase finds itself in. The following sentences illustrate the binding principles as stated above.

- (5) a. The men<sub>i</sub> hurt themselves<sub>i</sub>.  
 b. John<sub>i</sub> bought him<sub>j</sub> a car.  
 c. The Surgeon<sub>i</sub> told Dennis<sub>j</sub> that Bianca<sub>k</sub> would survive.

From (5a), it can be seen that the reflexive pronoun *themselves* is bound to its antecedent *the men* which is also the subject of the sentence and this binding relationship is shown by the co-indexation. In (5b), the pronoun *him* is not bound in any way to the subject of the sentence *John* and thus, it is free in the sense that it is referring to an entity that is outside the domain of the current discourse. Example (5c) amply indicates that the three NPs *the surgeon*, *Dennis* and *Bianca* are all independent of one another and stems from the Principle C which states that R-expressions must be free within their governing category. The three examples, (5a), (5b) and (5c) thus, demonstrate binding Principle A, B and C respectively.

The paper will focus on Principle A of the Binding Theory, which deals with the distribution of anaphors (reflexives and reciprocals). This is illustrated by the data in (6).

- (6) a. **Naja<sub>i</sub>** **tíí** **ù-bà<sub>i</sub>** **íwéén.** (NI)  
 Naja give 3SG-self pain  
 ‘Naja hurts himself.’  
 b. **Naja<sub>i</sub>** **tíí** **ù<sub>j</sub>** **íwéén.** (NI)  
 Naja give 3SG pain  
 ‘Naja hurts him/her.’

In (6a), we note that **Naja** and **ù-bà** are co-indexed to indicate that the subject of the clause is the same entity suffering the action of the clause. In (6b) however, **Naja** and the pronoun **ù** have different indices and so they are not co-indexed. It can therefore, be stated that in (6a) the two NPs are co-indexed, and **Naja** c-commanding **ù-bà** can be interpreted to mean that **ù-bà** gets its meaning and interpretation from **Naja**. This relationship between **Naja** and **ù-bà** is termed as binding.

Chomsky (1981) argues that binding is a simultaneous syntactic configuration which entails both c-command and co-indexation. From example (6a), **Naja** is the binder and the antecedent while the reflexive pronoun **ù-bà** is the bindee. Poole (2011:126) also asserts that an anaphor must be c-commanded by the antecedent and both must be in the same binding domain.

### 5. The morpho-syntax of Likpakpaanl reflexive pronouns

The goal of this section is to provide an account of the morpho-syntactic properties of the reflexive pronouns of Likpakpaanl. We aim to show that the reflexive pronouns are derived via an attachment of a personal pronoun to what we term as the reflexiviser, **-ba**. Based on this morphological account, we conclude that the reflexives are morphologically complex since they are made up of two different morphemes. The form of the pronoun that occurs with the reflexiviser is proposed to be the possessive form of the pronoun. The morphological components of reflexives are discussed in Section 5.1. We further show in Section 5.2 that in terms of the syntactic characterization, the reflexives are clause bound/local. This distribution property, we conclude, is in line with the principle A of Binding Theory and also tallies with the specification in the literature of generative linguistics that whereas mono-morphemic

reflexives can be long-distance bound, as shown for Chinese, their bi-morphemic counterparts are strictly clause-bound/local.

### 5.1 The morphology of Likpakpaanl reflexive pronouns

As we pointed out in the preceding section of this paper, Likpakpaanl reflexives are composed of personal pronouns and the reflexiviser. Thus, knowledge of the pronoun system of Likpakpaanl is essential in understanding reflexivisation since the personal pronouns play a role in the formation of reflexives. The goal of this subsection is to offer a discussion on the personal pronoun system and how this functions in the derivation of reflexives. Many scholars such as Shiraki, (2004), Reinhart & Reuland, (1993) as well as Anagnostopoulou & Everaert (1999) have argued that there is a tight relationship between the pronominal system and the reflexive system of languages that make use of bi-morphemic reflexives. The observation from the data (as will be shown later in this paper) indicates that Likpakpaanl reflexive pronouns comprise a combination of personal pronouns and the reflexiviser morpheme **-bà**. We, therefore, are of the view that in the language, the personal pronoun in reflexives is lexically pre-specified as possessive and this accounts for the reason why it is not possible to generate reflexives in Likpakpaanl using the object forms of the pronouns. The table below provides an insight into the pronominal system of Likpakpaanl.

**Table 1: The pronoun system on Likpakpaanl**

Person	Subject forms		Object forms		Possessive forms		Emphatic (Subject)	
	Singular	Plural	Singular	Plural	Singular	Plural	Singular	Plural
1 <sup>st</sup>	<b>m, n</b>	<b>tí</b>	<b>mí</b>	<b>tí</b>	<b>m, n</b>	<b>tí</b>	<b>mìn</b>	<b>nìmì</b>
2 <sup>nd</sup>	<b>áá</b>	<b>ní</b>	<b>sí</b>	<b>ní</b>	<b>áá</b>	<b>ní</b>	<b>sìn</b>	<b>bimá</b>
3 <sup>rd</sup> (H)	<b>ù</b>	<b>bí</b>	<b>ù</b>	<b>bí</b>	<b>ù</b>	<b>bí</b>	<b>ùmá</b>	<b>tìmì</b>
3 <sup>rd</sup> (NH)	<b>ù</b>	<b>yí</b>	<b>ù</b>	<b>yí</b>	<b>ù</b>	<b>yí</b>		

From Table 1, we claim that although it might be tempting to assume that there is morphological sameness in the subject and object forms of the pronouns, this is not wholly so. For instance, the second person subject pronoun **áá** is not same as **sí**, the object form. One key morphological generalization that can be made, however, is that the forms in both paradigms are morphologically simplex. However, overt morphological case is not motivated in this language, given the morphological paradigms shown in Table 1. Given this proposal, the distribution of the forms **m/n** for the subject forms, and **mí** for the object forms (1st person singular pronoun) is interpreted to mean that the various pronoun forms are motivated by their phonological status or wordhood<sup>3</sup>. Examples (7) and (8) illustrate the subject forms used in sentences.

- (7) a. **M**                    **gèè**    **kímó-băän.**                    (NI)  
       1SG.SUBJ        love    mouth-one  
       ‘I love unity.’  
       b. **\*John**            **gèè**    **m.**  
       John                love    1SG.SUBJ  
       Intended: ‘John loves me.’
- (8) a. **Joyce**            **mănn**            **sí.**                    (ED)  
       Joyce                visit                2SG.OBJ

<sup>3</sup> Thanks to an anonymous reviewer of JWAL for pointing out that one way to account for this proposal is to assume that the consonantal clitics lean on the adjacent item (verb, head in a genitive construction, or the morpheme **-bà** of the reflexive pronoun respectively), whereas the long form **mí** has nothing to lean on, for it occurs as clause final object (the language shows SVO word order) and is probably stressed.



- Intended: ‘Joyce visits you.’  
 b. \***Joyce**      **männ**      **áá.**  
     Joyce      visit      2SG.SUBJ  
 Intended: ‘Joyce visits you.’

From the data presented in (7b), it can be seen that in Likpakpaanl, when the subject pronoun occupies the position of the object pronoun the sentence is ungrammatical. The ungrammaticality of (8b) also emanates from the fact that the subject form of the pronominal has occurred in the object position of the sentence.

It is worthy of mention that the pronouns are proposed to have the person and number feature only, and for that matter do not show the gender and case match. For instance, **áá** apparently has person, and number, and is described as a 2<sup>nd</sup> person, singular DP. The feature as to it being male or female (gender) is not part of the category of the DP in Likpakpaanl. This means that the position of these morphologically similar personal pronouns in sentences will largely determine whether they are used in the subject or object positions. Examples (9) and (10) show that the third person singular pronoun **ù** and the first person plural **tì** can occur in different syntactic slots and in each case they have different meanings depending on whether they occur in the subject or object position.

- (9) a. **Bonpiir**      **gà**      **mée**      **ù**      **ílik.**      (ED)  
     Bonpiir      FUT      beg      3SG      money  
     ‘Bonpiir will beg for money from him/her.’  
 b. **Ù**      **gà**      **mée**      **Bonpiir**      **ílik.**      (ED)  
     3SG      FUT      beg      Bonpiir      money  
     ‘He/She would beg money from Bonpiir.’
- (10) a. **Nakoja**      **dàà**      **tì**      **lì-búákùr.**      MN/39  
     Nakoja      buy      1PL      SG-shirt  
     ‘Nakoja bought us a shirt.’  
 b. **Tì**      **dàà**      **Nakoja**      **lì-búákùr.**      (NI)  
     1PL      buy      Nakoja      SG-shirt  
     ‘We bought Nakoja a shirt.’

As already pointed out, morphologically, we have shown that Likpakpaanl reflexives are bi-morphemic comprising the genitive form of the personal pronoun and a reflexiviser -**bà**. The reflexiviser in Likpakpaanl denotes *-self* and this is similar to what is found in some languages such as the **maŋa** in Dagbani (Issah 2011:134), but different from **hó** in Akan which denotes ‘body’ (Osam, 2002:144; Saah, 2014:40). The assertion by Osam (2002) that body parts nouns are mostly used in African languages as reflexive markers is therefore, not valid for Likpakpaanl. Likpakpaanl therefore, employs a reflexive marking strategy continuum where the reflexiviser morpheme means ‘self’ and not ‘body’ or ‘skin’ as the case in Akan. We therefore, conclude that reflexive pronouns in Likpakpaanl are inflectional forms of the personal pronouns, which are formed morphologically by the affixation of **-bà** to the pronominal form. The Likpakpaanl reflexive pronouns have the morphological paradigm in table 2.

**Table 2: Likpakpaanl reflexive pronouns**

Personal Pronouns	reflexiviser	Reflexive Pronoun
<b>m</b> ‘my’	<b>-bà</b> ‘self’	<b>m-bà</b> ‘myself’
<b>áá</b> ‘your’	<b>-bà</b> ‘self’	<b>áá-bà</b> ‘yourself’

ù ‘his/her, it’	-bà ‘self’	ù-bà ‘himself/herself, itself’
tí ‘our’	-bà ‘self’	tí-bà ‘ourselves’
bi ‘them’	-bà ‘self’	bi-bà ‘themselves’
ni ‘your’	-bà ‘self’	ni-bà ‘yourselves’

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Arguing in line with typological proposals as put forward by Reinhart & Reuland (1993), Shiraki (2004) and Issah (2011) that subject forms of pronominal rarely partake in the formation of reflexives, as found in the English ungrammatical forms like \*Iself, \*heself, \*youself and \*sheself, we contend that it is the possessive personal pronouns that are combined with the reflexiviser to generate Likpakpaanl reflexives. We therefore, argue that the reflexive pronoun in the language is pre-specified as possessive. It can, therefore, be observed from Table 2 that, Likpakpaanl reflexive pronouns are a combination of possessive pronouns and the **-bà** morpheme. We conclude that, Likpakpaanl reflexives are morphologically bi-morphemic and for that matter complex morphologically because they comprise the pronominal form and the reflexiviser. This complex morphological structure of Likpakpaanl reflexives has some typological implications regarding complex reflexives that need further exploration.

### 5.1.1 On the morpho-syntactic nature of reflexives in Mabilia

To be able to set clearer the typology of reflexives in the linguistic congeners of Likpakpaanl and how the case of Likpakpaanl fits into these broader areal languages, we briefly discuss the nature of reflexives in the Mabilia in this section. In the study of reflexives in the Mabilia languages, it has often been shown that they are composed of pronouns and reflexiviser morpheme. The form of the reflexive is usually the possessive (genitive) form of the pronoun which is rather unsurprising since cross-linguistically, subject forms of pronouns do not seem to be specified for the derivation of reflexive pronouns (cf. English: \*theyself, \*heself, \*Iself, \*sheself etc). We however, contend that the languages under discussion here contrast with English given the fact that in English the accusative form of the pronoun also partakes in the derivation of reflexive pronouns as in the English ‘himself’, which morphologically, is composed of the accusative pronominal ‘him’ and the reflexiviser, ‘self.’

The derivation of reflexives exhibits striking similarities in the areal languages. Some languages surveyed here include: Gurene (Atintono 2013, Avea et al. 2019), Buli (Agbedor 2002), Dagaare (Bodomo 1997), Kusaal (Musah 2018) and Dagbani (Issah 2011). Thus, a key morphological characterization of the reflexives in the Mabilia languages is the fact that they share the same morphological property in that the reflexive pronouns are also made up of a reflexiviser and the possessive pronoun. For instance, in Buli, (Agbedor 2002) shows that the reflexives are derived by prefixing possessive pronouns to the reflexiviser **-dek** as in **wa-dek**, ‘myself’ and **ba-dek** ‘themselves.’ Thus, the reflexiviser does not inflect for number and it is the pronoun element that varies depending on the singular or plural features of the antecedent nominal element. A similar morphological composition is proposed for Dagbani by Issah (2011) who also contends that Dagbani has a reflexiviser **-maŋa**, which combines with possessive pronouns to derive the reflexive pronouns. Just as in the case of Buli, the plurality of the reflexive is coded in the pronoun as the morpheme **-maŋa** does not inflect for number. This explains the sameness of the reflexiviser in **m-maŋa** ‘myself’ and **bé-maŋa** ‘themselves’ for Dagbani. For the case of Kusaal, Musah (2018) also opines that reflexive pronouns are a combination of a personal pronoun and a reflexive morpheme **-meŋ** ‘self’ as in **m meŋ** ‘myself’, **fɔ meŋ** ‘yourself’ **ya meŋ** ‘yourselves’ and **tí meŋ** ‘ourselves.’ Regarding the coding of number in reflexives, what happens in Kusaal is not different from what has been shown for Buli, and Dagbani since the reflexive morpheme does not inflect for plurality. This is seen in the fact that in both singular and plural reflexives, the morphology of the reflexive morpheme **-meŋ** remains the same and only the pronoun changes to reflect the number feature. In Gurene (Avea et al. 2019), and Dagaare (Bodomo 1997) too, reflexive pronouns

are bi-morphemic comprising of a personal pronoun and the reflexiviser **-miŋa** (singular) /-**mis** (plural) and **-menge/-menge tɔr** (singular) or **menne /menne tɔr** together with the personal pronoun system for Gurene and Dagaare respectively. This is illustrated for Gurene with data as **mamiŋa** ‘myself’ **fumiŋa** ‘yourself’, **bamisi** ‘themselves’, **ya misi**, ‘yourselves.’ For Dagaare, the data here taken from Bodomo (1997) illustrate the derivation of reflexive pronouns: **a menne** ‘themselves’ **ye menne** ‘yourselves’, **fo menge** ‘yourself’, and **o menge** ‘himself/herself.’ The sensitivity of the Gurene reflexive morpheme **-miŋa** to the number feature of the antecedent, is responsible for the difference in **bamisi** ‘themselves’ and **tumisi** ‘ourselves’ on one hand and **fumiŋa** ‘yourself’ and **mamiŋa** ‘myself’ and this presents a rather exceptional case of the morphological characteristics of Gurene reflexives. Similar fact for Dagaare, where the reflexiviser makes a distinction between singular and plural, a morphological property that is not applicable to (at least) Dagbani, Kusaal and Buli.

Thus, what we have so far shown for the derivation of reflexives in the Mabilia languages patterns with what pertains in the English language where reflexives are formed by a combination of possessive pronouns and the reflexiviser ‘self’ as in ‘myself’, ‘herself’ or ‘ourselves’, or a combination of the accusative pronoun and the reflexiviser as in ‘himself.’ At least, the same report is made of another Ghanaian language, Ewe (a Kwa language) where, reflexives are formed by adding the reflexive morpheme **ɔ́okuí** to the stem of a personal pronoun. (cf, Agbedor, 2014). As shown above, Likpakpaanl employs a similar approach where the reflexiviser **-bà** meaning ‘self’ is combined with the possessive pronoun to form the reflexive pronoun. In (11a) and (11b) respectively, we exemplify the distribution of reflexive pronouns in Dagbani and Gurene showing that reflexives always require an NP antecedent and that they are also complex in their morphology, while (12) illustrates Buli based on data available in Agbedor (2002).

We claim that the reflexive morphemes that are used in the languages mentioned above are different from **hó** in Akan which denotes ‘body’ (Osam, 2002:144; Saah, 2014:46) as shown in (13).

- (11) a. **Abu<sub>i</sub> sa ku-ø o-maŋa<sub>i</sub>.**  
 Abu TRM kill-PERF 3SG-self  
 ‘Abu killed himself yesterday.’ (Issah, 2011: 134)
- b. **Ma<sub>i</sub> nye la n miŋa<sub>i</sub> bisega la puan.**  
 1SG see FOC 1SG self mirror DEF inside  
 ‘I have seen myself in the mirror.’ (Avea et al 2019:11)
- (12) **Ti miena pa ti dek te naawon.**  
 1PL all take 1PL.POSS self give God  
 ‘We all should devote ourselves to God.’ (Agbedor 2002)
- (13) **Kofi bɛ- pirá né hó.**  
 Kofi FUT -hurt 3SG.POSS self  
 ‘Kofi will hurt himself.’ (Saah 2014:46).

This assertion that the reflexiviser **-bà** in Likpakpaanl is not same as that of Akan is supported by fact that there is a distinct lexical item for body in the language, **wòn**, as exemplified in (14).

- (14) a. **Ù wòn sààk ù.** KNJ &TSJ/12  
 3SG body itch 3SG  
 ‘Her/His body itches her/him.’
- b. **Bì wòn kpà ì-buun.** KNJ &TSJ/23  
 3PL body have PL-sore  
 ‘Their bodies have sores.’

- c. \***Ù** **bà** **sààk** **ù**.  
 3SG self itch 3SG  
 Intended: ‘Her body is itching her’

The data in (14) strongly supports our analysis according to which the reflexiviser **-bà** in Likpakpaanl is semantically different from **hó** (13) in Akan since whereas the former has a distinct word for ‘body’ the latter uses the same lexical item as a reflexiviser and also as a body part. Data available also suggest that Likpakpaanl differs from languages such as Dutch and Norwegian where simple mono-morphemic reflexives are found. For example, Norwegian has **seg** as its reflexive pronoun while Dutch has **zich**.

To summarize, we propose that Likpakpaanl reflexives compose of a personal pronoun and the reflexiviser **-bà**. This reflexiviser does not inflect for number, the reason for which is that the number of the reflexive is determined by the personal pronoun. Considering the nature of reflexives in Mabia as outlined above, we further hypothesise that the Likpakpaanl reflexive pronouns do fit into the broader areal/genetic framework.

## 5.2 The Syntax of Likpakpaanl Reflexives

This sub-section focuses on the distributional properties of Likpakpaanl reflexives. Two major claims made in this section include: (i) Likpakpaanl reflexive pronouns exhibit a syntactic characterization that is in line with the prediction of principles A of the GB theory which stipulates that ‘an anaphor must be bound in its governing category (Chomsky 1981: 190); and (ii) that the typological conclusion in the literature that bi-morphemic reflexives are strictly clause-bound and generally cannot be long-distance bound is applicable to Likpakpaanl. This second account is in line with the conclusions drawn by Faltz (1977), Pica (1985, 1987) as well as Anagnostopoulou & Everaert (1999) that, typologically, when reflexives are complex (bi-morphemic) they are universally expected to be local; that is, they must be locally bound, with the reflexive and its antecedent occurring in the same clause (Neeleman & van de Koot 2002).

In the examples that follow, we test this typological assumption and property of complex (bi-morphemic) reflexives to ascertain whether Likpakpaanl reflexives, which have been identified as complex, conform to these assumptions or otherwise. The data in (15a) illustrates the distribution of reflexives in mono-clausal sentences whereas the (15b) and (15c) illustrates the interaction between reflexivity and nouns belonging to the **kì**-class. Likpakpaanl being a noun class language, it is important to point out that reflexive pronouns are related to other classes. For example, an animal which belongs to class **kì**- can hurt itself and in such a situation the reflexive form is related to the class. This motivates our assumption that the **kì**-class can equally be used reflexively. Consider for instance sentence (15b) and (15c).<sup>4</sup> The grammaticality of (15b) and (15c) is indicative that Likpakpaanl reflexives can go with animate NP controllers, and not only human NPs.

- (15) a. **Timor<sub>i</sub>** **kään** **ù-bà<sub>i</sub>** **n-náán.** (ED)  
 Timor sit 3SG-self kingship  
 ‘Timor enskinned himself a king.’
- b. **Kínánjé<sub>i</sub>** **gbáán** **nyéén** **ń-nyéén** **gbá** **kì-bà<sub>i</sub>** (NI)  
 Bat DEF urinate NOM-urine beat it-self  
 ‘The bat urinates on itself.’
- c. **Kìjápáark** **ké** **ńá-nì** **kì-bá** **fáláá.** (NI)  
 wall gecko DEM do-IMP it-self suffer  
 ‘This wall gecko is causing itself to suffer.’

<sup>4</sup>We are grateful to an anonymous reviewer of JWAL for pointing out this important aspect of reflexives to us. We contend that the use of **kì-bá** in this context is motivated strictly by the noun class system. For details on noun class system of Likpakpaanl, readers are referred to Bisilki & Akpanglo-Nartey (2017) and references cited therein.

In (15a), the reflexive **ù-bà** ‘himself’ is c-commanded by the antecedent **Timor** and the binding relationship between the two constituents is indicated by the co-indexation. It is also the case that the reflexive and its antecedent are in the same clause and, therefore, satisfy the locality constraint on reflexivisation based on Principle A of the binding theory. (Carnie, 2013; Neeleman & van de Koot 2002; Chomsky 1981, 1986).

- (16) a. **Tagan nì Wangol<sub>i</sub> gèè bì-bà<sub>i</sub>.** (ED)  
Timor and Wangol love 3PL-self  
‘Tagan and Wangol love themselves.’
- b. **\*Tagan nì Wangol<sub>i</sub> gèè m-bà<sub>i</sub>.**  
Timor and Wangol love 1SG-self  
Intended: ‘Tagan and Wangol love themselves.’
- c. **Tagan nì Wangol gèè tǎb.** (ED)  
Tagan and Wangol love RECI  
‘Tagan and Wangol love each other.’

In (16a), we realize that the antecedent **Tagan nì Wangol** ‘Tangan and Wangol’ is plural and therefore, requires a plural reflexive **bì-bà** to make the sentence grammatical. The ungrammaticality of (16b) is due to the fact the reflexive **m-bà** is singular and takes on a plural antecedent. The semantic interpretations of (16a) and (16c) are different in the sense that (16a) means that Tagan loves himself and Wangol loves himself too. These are two independent reflexive actions that have been conjoined. Example (16c) on the other hand, provides a reciprocal reading, which indicates that Tagan loves Wangol and Wangol loves Tagan. Given that the only valid interpretations for these sentences are as reflexives, we contend that reciprocity can also be licensed when there is an overt realization of **tǎb** ‘each other/one another’ suggesting that its absence blocks a reciprocal reading of the examples (16a).

The data that follow further examine the distribution of Likpakpaanl reflexives in complex or bi-clausal sentences to investigate whether they are affected by the locality constraint (Carnie, 2013; Faltz, 1977) which requires that complex reflexives be locally bound in their binding domains.

- (17) a. **Ù<sub>i</sub> lén ké Tagan<sub>j</sub> kù ù-bà<sub>j</sub>.** (NI)  
3SG say that Tagan hurt 3SG-self  
‘He/She<sub>i</sub> said that Tagan<sub>j</sub> hurt himself<sub>j</sub>.’
- b. **\*Ù<sub>i</sub> lén ké Tagan<sub>j</sub> kù ù-bà<sub>i</sub>.**  
3SG say that Tagan hurt 3SG-self  
\*‘He/She<sub>i</sub> said that Tagan<sub>j</sub> hurt himself<sub>i</sub>.’
- (18) a. **Tì<sub>i</sub> dāk ké mbìm<sub>j</sub> gbǎǎn sù.**  
1PL think that children DEF insult  
**bì-bà<sub>j</sub>.** KNJ 1999/14  
3PL-self  
‘We<sub>i</sub> think that the children<sub>j</sub> insult themselves<sub>j</sub>.’
- b. **\*Nì<sub>i</sub> dāk ké m-bìm<sub>j</sub> gbǎǎn sù tí-bà<sub>i</sub>.**  
2PL think that PL-child DEF insult 2PL-self.  
\*‘We think that the children insult ourselves.’

We observe from the data that (17b) and (18b) are ungrammatical and this is as a result of the violation of the locality constraint imposed on complex reflexives. The violation emanates from the failure of the antecedent and its referent to be in the same clause. Thus, the reflexive which is located in the embedded clause in (17b) is bound to the antecedent of the matrix clause **ù** ‘s/he’ which is within a different clausal domain because of the intervening complementizer phrase (CP). This in (17b), attempting to co-index the upper subject **ù** ‘s/he’

with the object of 'hurt' results in illicit sentence. Accordingly, the reflexive **ù-bà** 'himself' cannot have the subject of the matrix clause **ù** 's/he' as its antecedent. Similar facts hold for the illicitness of sentence (18b), where **nì** 'we' and **tì-bà** 'ourselves' cannot be co-referential because they are in different clauses.

From the data presented so far, we conclude that Likpakpaanl reflexives are morphologically bi-morphemic (complex), comprising the genitive case of the pronoun and a 'self' reflexiviser **-bà**; and that typologically, Likpakpaanl reflexives obey the locality constraint that requires an anaphor to be bound in its binding domain (cf: Carnie 2013:157). This observation falls in line with the cross-linguistic observation as stipulated by Faltz (1977), Reinhart, & Reuland (1993) that bi-morphemic reflexives should be local in their distribution.

In the study of reflexives, reflexives and their antecedents are expected to share some features of gender and number. In the data that follow in (19) through (21), we investigate the extent to which the grammatical features of gender and number are valid for Likpakpaanl reflexives. Adger (2004:54) argues in his "co-referentiality hypothesis", that for any "two expressions to be co-referential, they must bear the same phi-features". Phi-feature, according to Adger (2004) is a linguistic term that describes the semantic features of person, number and gender, encoded in such lexical categories as nouns and pronouns. Phi-feature hypothesis therefore, serves as a form of universal linguistic interface rule that relates syntactic features of nouns, reflexives and pronouns to semantic interpretation. Although Winkelmann (2012: 467 ff.) argues that the **ù/bì** gender groups refers to human beings in Likpakpaanl, as opposed, among others, to the **ù/ì**, the **mù/ì**, the **lì /ŋì**, the **kì/mù** and other genders, which cover animals, body parts and long objects, fruits and small objects, and diminutives respectively, we do not have any empirical evidence to motivate gender as a grammatical category of the nominal system in reflexives.<sup>5</sup>

Cross-linguistically, it is argued that reflexives must agree with their antecedents in number. Number is a feature of nouns that distinguish between singular and plural nouns. Haegeman (1994:207) argues that in languages that have number agreement 'the reflexive and its antecedent must agree with respect to their nominal features of person, gender, and number.' (cf: Carnie, 2013:11). A critical analysis of the distribution of Likpakpaanl reflexives indicates that the assumption on number agreement between an antecedent and its reflexive is valid for the language as evidenced in as in (19), (20) and (21).

- (19) a. **Sanja<sub>i</sub> fǎǎn ù-bà<sub>i</sub>.** KNJ &TSJ/34  
 Sanja frighten 3SG-self  
 'Sanja frightened himself.'  
 b. **\*Sanja<sub>i</sub> fǎǎn bì-bà<sub>i</sub>.**  
 Sanja frighten 3PL-self  
 Intended: 'Sanja frightened himself.'
- (20) a. **Áá nì Binlu<sub>i</sub> gbán nì-bà<sub>i</sub>.** KNJ &TSJ/22  
 2SG and Binlu beat 2PL-self  
 'You and Binlu beat yourselves.'  
 b. **\*Áá nì Binlu<sub>i</sub> gbán àà-bà<sub>i</sub>.**  
 2SG and Binlu beat 2SG-self

<sup>5</sup> An anonymous reviewer of JWAL pointed out that the issue of how the gender attribute of nouns in the language explicate the gender characteristic of the reflexives could be well catered for if authors had included a section on the linguistic features of Likpakpaanl. We take note of the fact that gender has no reflection on the reflexive paradigm, the reason for which this is not given a special attention in this current paper. We therefore, contend that owing to the fact that reflexive forms signal that the initiator-subject and hence, most often a human being is at the same time the endpoint of the event, trying to prove the existence of gender reflected in reflexive pronouns is not promising.

- (21) a. Intended: ‘You and Binlu beat yourself.’  
**Ti** **tér** **ti-bà**. (NI)  
 1PL help 1PL-self  
 ‘We help ourselves.’
- b. \***Ti** **tér** **m-bà**.  
 1PL help 1SG-self  
 Intended: ‘We help ourselves.’

From the data above, it can be seen that the ungrammaticality of (19b) results from the lack of agreement in number between the antecedent, ‘Sanja’ which is singular and the governee (reflexive pronoun) **bi-bà** which is plural. Both the reflexive and the antecedent are regulated by the governor **tér** ‘help’ which is the verb of the sentence. The violation of the phi-feature of number further accounts for the ungrammaticality of (20b) which has a singular reflexive **àà-bà** striving to agree with a plural antecedent. The example in (20b) further lends credence to the observation that the ungrammaticality of the sentence emanates from the non-compliance with the phi-feature requirement of number. In Likpakpaanl reflexives, as in languages such as English (Chomsky, 1981; Reinhart & Reuland 1993, Japanese (Shiraki 2004), Swahili (Woolford 1999), Dagbani (Issah 2011), Dagaare (Bodomo 1997), there is an obligatory requirement that antecedents and their reflexives must agree in number. When there is a violation of this requirement, the resulting sentence becomes ungrammatical as evidenced in (19b), (20b) and (21b). This leads to the conclusion that reflexives and their antecedents must always agree in number in Likpakpaanl without affecting grammaticality as observed in most areal languages.

## 6. Pronominal intensifiers in Likpakpaanl

From our preceding discussion, it is shown that Likpakpaanl reflexive pronouns are prototypically used to indicate that a non-subject argument of a transitive predicate is co-referential with the subject. In this section, we discuss self-intensifiers in Likpakpaanl showing that the reflexives and self-intensifiers are not distinct in this language. The fact that there is a formal morphological identity between reflexive pronouns and intensifiers is a widespread phenomenon in most natural languages of the world. Accordingly, in a number of languages, reflexive pronouns and intensifiers are not formally differentiated and may only be distinguished on the basis of syntax whereas in some other languages, the two are formally distinguishable. Based on the data available, we motivate that Likpakpaanl falls under the former class of languages. We are of the view that the use of reflexives as intensifiers is somewhat related to the emphatic use of reflexive pronouns as in the English examples in (22).

- (22) a. They themselves destroyed the garden.  
 b. She herself came to the market.

We show that in Likpakpaanl, such use of reflexives as intensifiers requires the obligatory use of the focus head **lé**<sup>6</sup> which must immediately follow the intensifier. Given the fact that a typical reflexive encodes the identity of the initiator and the endpoint of an event as demonstrated in (Croft, 2012), we do not analyse these intensifiers as reflexives, but rather contend that Likpakpaanl is one of the numerous languages of the world (König et al. 2013) where the reflexive pronouns and intensifiers of the type of English *-self*, are identical. This usage is exemplified in data (23) and (24). For instance, in (23a), the context is that a question has been asked, ‘*She cooked the meal for her husband. Did he eat it?*’ Then the response to this question ‘*No, she ate it herself*’ is what is shown in (23a).

6 For a systematic discussion on the focus marker **lé** in Likpakpaanl, readers are referred to Schwarz (2007) and references cited therein. Schwarz identifies **lé** and **lá** as the two focus markers in Likpakpaanl and argues that **lá** focuses more on non-subjects with **lé** focusing on the subject of the sentence.

- (23) a. **Ááyì, ù-bà lé jì tì.** (ED)  
 No, 3SG-self FOC eat 3SG  
 ‘No, she herself ate it.’
- b. **\*Ù-bà jì tǐjír.** (ED)  
 3SG-self eat food  
 Intended: ‘She herself ate it.’
- c. **\*Ù-bà jì lé tǐjír.**  
 3SG-self eat FOC food  
 Intended: ‘She herself ate it.’
- (24) a. **Áá-bà lé gà mǎnn bí-bùm.**  
 2SG-self FOC will visit PL-patient  
**dín.** (ED)  
 today  
 ‘You yourself will visit the patients today.’
- b. **\*Áá-bà gà mǎnn bí-bùm dín.**  
 2SG-self will visit PL-patient today  
 Intended: ‘You yourself will visit the patients today.’
- c. **\*Áá-bà gà lé mǎnn bí-bùm dín.**  
 2SG-self will FOC visit PL-patient today  
 Intended: ‘You yourself will visit the patients today.’

The illicitness of sentence (23b) establishes the obligatory requirement for the focus marker when we have intensifiers. Also, the ungrammaticality of (23c) shows that the focus marker **lé** is required to immediately follow the intensifier, and thus, there cannot be any intervening material between the reflexive pronoun and the focus marker. Also, the syntactic constituent that is specified for ‘intensification’ is what the focus marker must be adjacent to. This is understandable, considering the tight correlation between focus marking and emphasis. Similar explanations hold for the ungrammatical sentences in (24b) and (24c). The intensifiers evoke alternatives to the referents in question. Thus, whereas ‘reflexive pronoun’ (anaphor) is used for the reflexive use of pronouns, ‘intensifier’ encodes only the emphatic use of formally identical expressions in Likpakpaanl.

There is another occurrence of intensifiers in which the exclusive marker **bǎǎnjá** ‘only’ can precede the focus marker and when it does, it comes immediately after the reflexive and before the focus marker. In terms of pragmatics, one key characterization of exclusives is the fact that they are used to indicate that nothing or nobody, but only the focused element. The fact that the exclusive marker occurs with the focus marker is not unexpected since exclusives are generally asserted to be focus-sensitive and invariably follow the focused constituents in their scope (König 1991). However, exploring the morpho-syntactic, semantic/pragmatic characteristics of exclusives is beyond the scope of this current article. As an exclusive marker, **bǎǎnjá** is used in Likpakpaanl to mean that there is just one or very few of something, or that there are no other possible referents apart from what is been described or talked about. This is illustrated in (26).

- (25) a. **M-bà lé gbù ñí-nùù gbǎǎn.** (ED)  
 1SG-self FOC dig PL-yam DEF  
 ‘(I) myself harvested the yams.’
- b. **Mín lé gbù ñí-nùù gbǎǎn.** (ED)  
 1SG.EMPH FOC dig PL-yam DEF  
 ‘It is I who harvested the yams.’
- c. **Ùmá lé yé kǐsáák gbǎǎn.** (NI)  
 3SG.EMPH FOC be farm DEF  
 ‘It is he who owns the farm.’



- (26) **M-bà**      **bǎǎnjá**      **lé**      **gbù**      **ńí-nùù**  
 1SG-self      only      FOC      dig      PL-yam  
**gbǎǎn.** (ED)  
 DEF  
 ‘Only I harvested the yams.’

Examples in (25) and (26) vary in terms of their syntactic configuration, in the sense that whereas (25) only licenses the morphological presence of a focus marker, (26) has the focus marker together with an exclusive marker. Notwithstanding this syntactic variation, both sentences still indicate that when the reflexive is found in the subject position, it has to be focused for the sentence to be grammatical. The exclusive must always precede the focus marker in such structures. When this order is violated, the resulting structures are illicit as illustrated in (27).

- (27) a. **\*M-bà lé**      **bǎǎnjá**      **gbù**      **ńí-nùù**      **gbǎǎn.**  
 1SG-self      FOC      only      dig      PL-yam      DEF  
 Intended: ‘Only I harvested the yams.’  
 b. **\*M-bà**      **bǎǎnjá**      **gbù**      **ńí-nùù**      **gbǎǎn.**  
 1SG-self      only      dig      PL-yam      DEF  
 Intended: ‘Only I harvested the yams.’

Though it has been demonstrated in the preceding discussion that reflexives may have an emphatic interpretation, it must also be pointed out that Likpakpaanl has emphatic pronouns and these pronouns (see Table 1) and the reflexive pronouns are not mutually exclusive. In this type of construction, however, the focus marker **lè** is still obligatory as earlier discussed with the emphatic usage of reflexive. This is demonstrated in (28) through (30).

- (28) a. **Mìn**      **m-bà**      **lè**      **bèè**      **bì.**      MB&TS2000/33  
 1SG.EMPH      1SG-self FOC      know      2SG  
 ‘I myself identified them.’  
 b. **\*Mìn**      **m-bà**      **bèè**      **bì.**  
 1SG.EMPH      1SG-self      know      2SG  
 Intended: ‘I myself identified them.’  
 c. **\*M-bà**      **mìn**      **lè**      **bèè**      **bì.**  
 1SG-self      1SG.EMPH      FOC      know      2SG  
 ‘I myself identified them.’
- (29) a. **Nìmi**      **nì-bà**      **lè**      **bàn**  
 2PL.EMPH      2PL-self      FOC      want  
**n-nyók.**      KNJ &TSJ 2006/18  
 SG-medicine  
 ‘It is you yourselves who need medicine.’  
 b. **\*Nìmi**      **nì-bà**      **bàn**      **n-nyók.**  
 2PL.EMPH      2PL-self      want      SG-medicine  
 Intended: ‘You yourselves who need medicine.’  
 c. **\*Nì-bà**      **nìmi**      **lè**      **bàn**      **n-nyók.**  
 2PL-self      2PL.EMPH      FOC      want      SG-medicine  
 ‘It is you yourselves who need medicine.’
- (30) a. **Tìmi**      **tì-bà**      **lè**      **yè**      **n-náán.** KNJ 1983/27  
 3PL.EMPH 3PL-self      FOC      own      SG-kingdom

- ‘We ourselves who own the kingdom.’
- b. \***Tìmì**      **tì-bà**      **yè**      **n-náán.**  
 3PL .EMPH    3PL-self    own    SG-kingdom  
 Intended: ‘We ourselves who own the kingdom.’
- c. \***Tì-bà**      **tìmì**      **lè**      **yè**      **n-náán.**  
 3PL-self    3PL.EMPH    FOC    own    SG-kingdom  
 ‘We ourselves who own the kingdom.’

From the sentences in (28a), (29a) and (30a), it is evident that in Likpakpaanl, there are two main licensing conditions for the emphatic interpretation/usage of reflexive pronouns: (i) the emphatic pronoun must precede the reflexive pronoun and (ii) there is the obligatory requirement for the introduction of the pre-verbal focus marker **lè**. The ungrammaticality of (28b), (29b) and (30b) is due to the absence of the focus marker which is obligatory in this kind of emphatic interpretation whereas (28c), (29c) and (30c) are illicit due to the fact that the reflexive pronouns precede the emphatic pronominals.

## 7. Conclusion

The current paper has offered an account of the morpho-syntactic and semantic characterizations of reflexive pronouns in Likpakpaanl, using Government and Binding Theory as an analytical tool. Following the idea of Reinhart & Reuland (1993), we defined reflexive pronouns not only based on their morphological make-up but also on the basis of their syntactic and semantic criteria. We demonstrated that Likpakpaanl reflexives are complex, comprising of personal pronouns and the reflexiviser **-bà**. Regarding their syntactic characterisation, we showed that Likpakpaanl reflexives can only be locally bound in terms of the traditional conception of governing category. The key observation about Likpakpaanl reflexives is that they only go with animate controllers, the reason for which reflexivisation cannot be achieved with other inanimate full NPs as antecedents. In terms of their semantics, it was shown that reflexives inherently lacks meaning and are always dependent on a preceding nominal element for their interpretation. We also showed that Likpakpaanl reflexives share formal identity with intensifiers and that in the latter use, there is always a mandatory requirement of the focus marker **lè** which must immediately follow the intensifier. Given the fact that the reflexive forms are also compatible with intensification reading, we concluded that Likpakpaanl falls under the class of languages in which intensifiers and reflexives share formal morphological characterisation. Though the authors empirically motivated the argument that that there is formal morphological correlation between intensifiers and reflexives, we did not consider in detail the syntactic properties of the former. This we consider as a future area of investigation, not only in Likpakpaanl, but also in the Mabia languages of Ghana. Finally, the coding of exclusivity was not discussed in detail in this work and it is hoped that that could also be an area for future research.

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