ON THE PHONOLOGICAL AND MORPHOSYNTACTIC CONDITIONS FOR CLITIC PLACEMENT IN KABɩYƐ

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Abstract

Kabɩyɛ, an eastern Gur language spoken in the north of Togo, has complex phonological, morphological and syntactic structures including clitic morphemes, as the latter are open to misinterpretation with affixal morphemes. The placement of such clitics is subject to a certain number of constraints. The aim of this study is to elucidate and tell what governs the position of the different clitics in larger structural constituents of Kabɩyɛ language. The study is carried out within the framework of structural linguistics, and the data analysis is performed using the technique of word and sentence segmentation in different constituents. Findings reveal that the placement of Kabɩyɛ clitics is not a groundless operation, but it is rather governed by the phonotactics, morphotactics and syntactics of that language. Other findings are the freedom of movement that some clitics have, in that they can shift from one position to the other, and the violation of lexical integrity by other clitics yielding new meaningful lexical units.
Keywords: *clitics, adposition, anaphoric pronoun, host, lexical integrity*

Résumé

Le kabɩyɛ est une langue du gur oriental parlée dans le nord-Togo et dont les structures phonologiques, morphologiques et syntaxiques sont complexes lorsque celles-ci renferment des morphèmes clitiques, étant donné que ces derniers prêtent à confusion avec les morphèmes affixaux. Le positionnement de ces clitiques relève d'un certain nombre de contraintes. Notre étude a pour objectif d'élucider et de dire ce qui régit la position des différent clitiques dans les grandes unités structurales du kabɩyɛ. Cette étude est réalisée dans le cadre de la linguistique structurale et l'analyse des données est faite sur la technique de segmentation des mots et des phrases en différents constituants. Les résultats révèlent que le placement des clitiques kabɩyɛ n'est pas une opération fortuite, mais plutôt régie par la phonotactique, morphotactique et la syntactique de cette langue. D'autres résultats sont la liberté de mouvement dont bénéficient certains clitiques qui peuvent changer de position dans des structures syntaxiques, et la violation de l'intégrité lexicale par d'autres clitiques produisant ainsi de nouvelles unités lexicale significatives.
Mots clés : *clitiques, adposition, pronom anaphorique, hôte, intégrité lexicale.*

Introduction

Kabɩyɛ is an Eastern Gur language spoken in northern Togo. It is a cliticizing language in that many of its lexical items, as Trask (1996, 74-75) opines about clitics in general, exhibit behavior intermediate between

that of a word and that of an affix and have the phonological form of a separate word but occupy a particular position in the sentence in such a way that they are dependent on an adjoining word, their host. This poses a real problem of distinguishing them from affixes. Those lexical items (clitics) are legion in Kabɩyɛ and are of different categories such as pronouns, conjunctions, adpositions (prepositions and postpositions), possessives, etc. The question of clitics has been of little concern in previous linguistic studies of Kabɩyɛ. The only study which approached that class of morphemes is Tchazim (2021), but the issue of clitic placement in sentences was not discussed therein. This means that there is a knowledge gap in determining the motivation of clitics for occuring in specific positions in syntactic components. That lack of knowledge is a real challenge to meet. So the current study, which addresses some few clitic elements in Kabɩyɛ, namely personal pronouns, anaphoric pronouns, possessive adjectives and adpositions, intends to find out what governs the positioning of those different clitics in that language. Therefore, the following research questions can be raised: "What conditions the positioning or placement of the four aforementioned clitic types in Kabɩyɛ?" and "What meaning do those clitics bestow to the sentences and other syntactic structures according to their positions? These two questions make way for the following hypotheses.

- Clitics may occur in any position in the sentence, free from every constraint.
- Clitics are likely to take positions in a sentence under some specific linguistic constraints.

The above statement of the problem moves on with the structure of the work made up of five sections. The first section concerns the theoretical and methodological approaches. The second section is devoted to the identification and presentation of the different types of clitics addressed in this study. The third section broaches data analysis pertaining to cliticization and clitic position in different structures. This section also sheds light on the different conditionings of clitic placement in Kabɩyɛ. The fourth section displays the results of the research whereas the fifth and last section elaborates on the discussion of the results.

1. Theoretical and methodological approaches

This section consists in telling the theoretical framework on which the research is grounded and the methodological approach used to carry it out.

1.1. Theoretical framework

This study is carried out within the framework of descriptive grammar which, according to Greenbaum and Quirk (1990), describes the language, its structure, and the syntactic rules that govern sentence and phrase constructions. The principle of that theory, as put forward by Leech, Deuchar, and Hoogenraad (2005), is that the descriptive grammar is non-judgmental and does not determine what represents correct or incorrect structures. This theory fits well the present work which simply seeks to analyze the different positions of clitics without any prescription of how sentences and phrases containing those clitics should be structured in Kabɩyɛ.

The present study is inspired by the work of Borer (1986) where pronominal subject clitics are proven to be both phonologically and syntactically conditioned. It is postulated in the source that clitics serve as syntactic constituents but are phonologically bound to adjacent elements of lexical categorical stutus. Inspiration came also from Anyanwu (2012) who opined about clitic positioning in sentences by saying that unlike affixes, clitics enjoy a much larger freedom of attachment and can attach to more than one grammatical category provided that grammatical category is located in the appropriate domain. Clitics straddle the boundaries between words and morphemes and between syntax and morphology. Thus, their presence in any grammatical structure can be explained in terms of syntactic dependencies, though their position follows from morphological rules. The other work of interest for this study is Nash and Rouveret (2002) who discussed the distribution and position of clitics in Romance. The authors substantially put forward that pronominal clitics can precede or follow the verbal word to which they are attached, depending on the syntactic environment and the type of the clause which contains them.

The present study is inspired by the work of Kroeger (1998) who examined the distribution of second-position clitics in Tagalog and attempted to use these clitics as a diagnostic tool for examining the phrase structure of Tagalog clauses. Another researcher who inspired this

work is Katamba (1995) and Zwicky (1994a) who provided the definitional clarification of the term clitic by saying that it is derived from the Greek word *klinien* meaning 'to lean' and is neither a clearly independent word nor an affix. This definition is quite operational in this work because the words treated as clitics therein (pronouns, possessive adjectives and adpositions) have absolutely the same characteristics. Inspiration came also from the study of Mbah, Mbah and Iloene (2012). In this work, the researchers have discussed different types of clitics and broached also their different positions or placements with regard to their hosts.

1.2. Methodological approach

Data were collected mainly through observation and introspection as I am a native Kabɩyɛ speaker. The research design is purely descriptive and worked out by the technique of segmentation which consists in separating the hosts from their clitics, or cutting longer words (verbal hosts) into morphemes by means of hyphens to see clearly the morphemic boundaries. As pointed out by Lehmann (2004), the use of glosses in the representation of primary data became a standard for linguistic publications. In the same vein, Beermann, and Mihaylov, (2009) argue that interlinear glosses for sample sentences started to be required for all language examples except those coming from English if the research work is done in English. So, in this study, interlinear morphological glossing is used particularly at the level of exemplified data in Kabɩyɛ. Such glossing is simply a literal or word-for-word translation or even morpheme translation inserted between the data in Kabɩyɛ and their accurate translation into English, to help readers better follow and understand the relationship between the examples provided in Kabɩyɛ and their translation into English. They also help understand the structure of Kabɩyɛ language itself. To make this study more accessible, definitions and explanations of abbreviations and symbols used throughout the work are provided in an index at the end.

2. Identification and presentation of clitics

The lexical units which act as clitics in larger linguistic components and are the subject matter of this study are worth being known to make further discussions more accessible. They are identified and presented in the following subsections.

2.1. Pronouns

Pronouns, as one of language universals, are so productive in Kabɩyɛ and divided in different groups such as personal pronouns, relative pronouns, anaphoric pronouns, interrogative pronouns, demonstrative pronouns, indefinite pronouns, etc. But the present study is interested in personal pronouns and anaphoric pronouns (reflexives and reciprocals).

2.1.1. Personal pronouns

Strictly speaking personal pronouns are of two kinds: subject personal pronouns and object personal pronouns. Both types of pronouns, as recorded in table 1 below, attach to verbs in phrases, clauses and sentences.

Table 1: Subject and object personal pronouns

PERSONAL PRONOUNS			
Subject pronouns		Objecct pronouns	
1Sg	má "I"	má > m "me"
2Sg	ɲá/ɲɛ "you"	ɲá/ɲɛ > ŋ "you"
3Sg	énʋ́ > ɛ "he/she"	énʋ́ > ɩ "him/her"
1Pl	ʈá "we"	ʈʋ́ "us"
2Pl	mí > í "you"	mí "you"
3Pl	ḿbá > pa "they"	wɛ́ "them"

All the personal pronouns in the table above are clitics. Their cliticization and positioning/placement will be discussed in section 3.

2.1.2. Anaphoric pronouns

Anaphoric pronouns include reflexives and reciprocals whose role is to prevent repetition of a full lexical unit that might have been previously referred to.

- According to Akanbi (2014), reflexivization is a phenomenon that exists in all the languages of the world. So, like Àhàn language (Akanbi, ibid) or Dagbani Gurenɛ languages (Issah, Nsoh and Atintono 2020), Kabɩyɛ manifests some reflexive expressions that can be used to indicate that a semantic or a syntactic argument of a predicate is co-referent with

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another argument of that predicate, typically, the subject. In other words, the same entity plays the function of subject and that of object of the verb in the clause (cf. section 3).

Those reflexive expressions in Kabɩyɛ are translated into reflexive pronouns that are recorded in table 2 below.

Table 2: Kabɩyɛ reflexive pronouns system

	Process	**Reflexives**	**Gloss**
1Sg	ma + tɩ my + self	ma-tɩ > mandɩ	myself
2Sg	ɲá + tɩ your + self	ɲá-tɩ > ɲádɩ	yourself
3Sg	ɛnʊ + tɩ > ɛ́nʊ + tɩ his/her/it+ self	ɛ-tɩ > ɛdɩ	him/herself/itself
1Pl	ţá + tɩ our + self	ţá-tɩ > ţádɩ	ourselves
2Pl	mí + tɩ your (pl) +tɩ	mí-tɩ > mɩdɩ	yourselves
3Pl	mbá + tɩ > pa + tɩ their + self	pa- tɩ > padɩ	themselves

- As for the reciprocal anaphor in Kabɩyɛ, it is the pronoun *ţamá* "each other/one another" which, like the reflexives, is co-referential with the subject of the verb.

2.2. Possessives

Like all other languages, Kabɩyɛ expresses the notion of possession by using a class of words, which indicate the possessor of somebody or something. Those words are possessive adjectives listed in table 3 below.

Table 3: Kabɩyɛ possessive adjectives

Possessive adjectives		
1Sg	ma	my
2Sg	ɲá	your
3Sg	ɛ	his/her
1Pl	ţá	our
2Pl	mí	your
3Pl	pa	their

It is worth highlighting that the possessive adjectives in table 3 above and the subject personal pronouns in table 1 are the same except for the 2Pl where the possessive is rather identical to the object pronoun *mɪ*. Again the vowel of the 1Sg possessive *ma* does not carry the high tone as the subject *má*.

2.3. Adpositions

An adposition, according to Crystal (2008), is a term that subsumes the two categories of preposition and postposition without having to precise whether the category precedes or follows the noun in its adjacency to the latter. The two categories are also attested in Kabɩyɛ as recorded in the table below.

Table 4: Kabɩyɛ adpositions

Adpositions	
Prepositions	**Postpositions**
ɛsíndáá "before"	cɔ́lɔ *"near"*
na "with"	ɛsíndáá "before"
na "from"	taá "in/inside"
taá "in/inside"	tɛ "by somebody's"
tɛɛ "under"	tɛɛ "under"
wáyɩ "behind"	wáyɩ "behind"
	yɔɔ "on/upon"

The identification of all the targeted lexical items acting as clitics makes way for the analysis of the clitic placement in words, phrases, clauses or sentences.

3. Data Analysis: Cliticization and clitic position in Kabɩyɛ

This section deals with the phenomenon which depicts dependency of some lexical items on other words or word stems known linguistically as their hosts.

3.1. Pronominal cliticization

Here emphasis is laid on the position of pronouns with regard to their host and their syntactic function in the string of words in which they appear.

3.1.1. Personal pronouns' cliticization

Talking of personal pronouns refers to two cases:

- The first is the subjective case referring to personal pronouns which, like in most languages, can be substitutes for nouns and thus precede the verb in the sentence as can be seen in the following data.

(1a) Abalʊ́ pá-ɣ   (1b)   ɛ́nʊ́-pá-ɣ > ɛbáɣ
      Abalʊ́ dance-Unacc   3Sg^Sbj- dance-Unacc
      "Abalʊ́ dances"   "He/she dances"

(2a) pɛláa tala-á   (2b) mbá-tala-á > pa-talaá   > padalaá
      girls arrive-Acc   3Pl^Sbj-arrive-Acc
      "Girls have arrived"   "They have arrived"

(3) má-wó-ki tʊmɪɛ > mowóki tʊmɪɛ   (4)   ɲá-sʊ-wá > ŋzʊwá

      1Sg^Sbj-go-Unacc work   2Sg^Sbj-enter-Acc
      "I go to the work"   "You entered"

(5) ʈá-wó-ki hayím > ʈuwóki hayím
        1Pl^Sbj-go-Unacc farm
        "We go to the farm"

In the examples above, data (1a) and (2a) display respectively the nouns *Abalʊ* (proper noun) and *pɛláa* "girls" as subjects of the verbs *paɣ* "dance" and *talaá* "arrive" respectively. Those nouns, functioning as subjects of verbs, are replaced by personal pronouns (*ɛ́nʊ́ > ɛ*) "he/she" in (1b) and (*ḿbá > pa*) "they" in (2b), which play the same role in the same position. Such pronouns are proclitic to verbs just like má "I" in (3), ɲá "you Sg" in (4) and ʈá "we" in (5).

A keen observation of the subject pronouns in (1b), (2b), and (4) offers a broad insight into the phonological deficiency of those pronouns (cf. 3.4.1.), hence their dependency upon adjacent verbs with which they combine to form phonological words.

- The second, the objective case, refers to personal pronouns which follow immediately the verb and act as object personal pronouns as the following data illustrate.

(6a)   ma-ná wílíyʊ́   (6b) ma-ná-í > manáí
        1Sg^Sbj-see^Acc teacher   1Sg^Sbj see^Acc-3Sg^Obj
        "I saw the teacher"   "I saw him/her"

(7a)   hulísi kpá ɛyáa   (7b)   hulísi kpá-wɛ
        Police arrest^Acc people   police arrest^Acc-3Pl^Obj
        "The police arrested people"   "The police arrested them"

(8) háró̞ há-ʈá tɔ́ɔ́nɔ́ɔ > háró̞ há ɖ́ʊ́ tɔ́ɔ́nɔ́ɔ
   farmer-give^Acc-1Pl^Obj foodstuffs
   "The farmer gave us some foodstuffs"
(9) ʈalʊ́ʊ́ yá-ɣ-mí > ʈalʊ́ʊ́ yáɣ mí
   elder brother call-Unacc-2Pl^Obj
   The elder brother is calling you"
(10) caá tíyu-u- ɲá > caá tíyuuɲ́
    Father send-Unacc-2Sg^Obj
    "Father sends you"

In (6a) and (7a) above, the common nouns *wílíyʊ́* "teacher" and *ɛyáa* "people" are placed after the verb and play the role of objects in the sentence. But in (6b) and (7b) it is rather the pronouns ɩ and *nɛ* which take the place of the nouns in (6a) and (7a) and act as object personal pronouns and thus enclitic as they occur in post verbal position. It is the same with the pronouns *ɖá > ɖʊ́* "us" in (8), *mí* in (9) and *ɲá > ŋ* in (10). This permits to posit that whatever the nature of the object (noun or pronoun), the word order in Kabɩyɛ is always subject-verb-object (SVO), unlike in some languages like Pashto which is strictly a verb final language where the word order is SOV (Din, 2013).

It is worthwhile highlighting that in Kabɩyɛ, both the pronominal subject and object clitics are prosodically defective, particularly in their short forms (*ɛ < ɛ́nʊ́* "he/she", *pa < ḿbá* "they" and *í < mí* "you Pl") and thus unable to stand alone in an ordinary sentence despite their status of lexical units. That is why as PSCs (pronominal subject clitics) and POCs (pronominal object clitics), as Anyanwu (2012) calls them, they need necessarily to lean against the verb to form with it a phonological entity. It is also valuable to note the following facts about the position of the PSCs and POCs in Kabɩyɛ.
-When it is a PSC, the position is strictly the same (proclitic position) even in interrogative form which fundamentally requires subject and verb inversion in most European languages, and allows certain flexibility in Gana, a Khoesan language (Letsholor, 2016: 81). So the sentence in (11a) below is grammatical and acceptable in Kabɩyɛ while that in (11b) is ungrammatical and therefore unacceptable in the language because of the inversion which makes the sentence awkward.
(11a)   /pa-kɔ-má-a/ > pɔgɔmáa   (11b) * kɔ-má-a-pa > kɔmáapa
        3Pl^Sbj-come^Acc-Interr
        "Have they come?"

- But when it is a POC, it can change the position by preceding the verb and its subject if it is used emphatically. Then, enclitic as it was initially, it becomes a co-proclitic with the subject if the latter is a pronoun as in (12b), and a single clitic in case the subject of the verb is a noun as in (13b) below where it takes the strong form with sometimes a vowel lengthening in that emphatic form.

(12) pa-kpá-mí > pagbá mí   (12b)   mɩ́ɩ́-pá-kpá-á > mɩ́ɩ́ págbáá
    3Pl^Sbj-caught^Aacc-2Pl   2Pl^Obj-3Pl^Sbj-catch-Acc
    "They caught you"   "It is you that they caught"

(13a)   wíliyú yɩɣkí má > wíliyú yíɣkɩ́m
       teacher praise^Acc 1Sg^Obj
       "The teacher praised me"

(13b)   máá wɩ́lɩyú yíɣka-a> máá wɩlɩyʊ yɩɣkaa
       1Sg^Obj teacher praise-Acc (me teacher praised)
       "It is me that the teacher praised"

In (12a) the sentence simply stipulates that they/somebody caught you, or else, you were caught. But in (12b) instead, the connotation is that it is you, and not anybody else, who were caught. Likewise, in (13a), the sentence simply denotes that the teacher praised me, which means that he might have praised some other person(s). But in (13b) there is emphasis which implies that it is me that the teacher praised, and not any other person.

3.1.2. Cliticization of the anaphoric pronouns

Kabɩyɛ anaphonric pronouns are the reflexives (cf. Table 2) and the reciprocal pronoun ʈamá "each other/one another". The illustrations below show their occurrence in sentences.

(14a)   tɩ-ɲá-m > tɩ ɲám   (14b)   ma-ɲá-ŋ ma-tɩ > maɲáŋ mandɩ
       oneself-respect-Inf   1Sg^Sbj-respect-Unacc 1Sg-Refl
       "to respect oneself"   "I respect myself"

(15a)   tɩ-wɩlí-ʊ > tɩ wɩlíʊ
       Refl-show
       "to show off"

(15b) pɛláa wílɩ-ʊ pa-ti > pɛláa wílʊ padi
     girls show-Unacc 3Pl-Refl (= Girls show themselves)
     "Girls are showing off"

(16a)   tɩ- pɔzʊ́-ʊ   (16b)   ɛ́-pɔzɩ-mí-tɩ >   ɛ́bɔzɩ mídɩ
       Refl-ask-Inf   2Pl^Sbj-ask^Juss-2Pl-Refl
       to ask/question oneself"   "Ask yourselves"

(17a)   ʈamá-sína-ʊ   (17b)   ʈa-síɣ-ná ʈamá > ʈɩzíɣná ʈamá
       Recp-help-Inf   1Pl^Sbj-help-Unacc Recp

	"to help one another"		"We are helping one another"
(18a)	ṭamá-kʊ́-ʊ	(18b)	sɔɔjanáa kʊ́-ʊ́-ṭamá
	Recp-kill-Inf		soldiers kill-Unacc-Recp
	"to kill one another"		"Soldiers are killing one another"
(19a)	ṭamá-cétʊ-ʊ	(19b)	pɛlɔ́ nɛ evebú pɛ-cétɪ-ṭamá
	Recp-lie-Inf		lady and gentleman they-lie^Acc-Recp
	"to lie each other		"The lady and the gentleman lied each other"

We can notice from (14a) to (16a) above that, the pronoun *tɪ* "oneself" doesn't refer to any particular person and is proclitic to the infinitive which it immediately precedes. But from (14b) to (16b), *tɪ* combines with the different possessives to form more personalized reflexives (*ma-tɪ* "myself"…..*pa-tɪ* "themselves") which follow the verb and play the enclitic function.

Likewise, the reciprocal pronoun *ṭamá*, when not referring to any particular entity as is the case in (17a) – (19a), precedes immediately its host, that is the infinitive form of the verb, and acts as a proclitic to the latter. However, when the action of the verb is performed by some agents/subjects as in (17b) – (19b), the reciprocal pronoun moves from its proclitic position to that of enclitic with regard to its verbal host. This shift or clitic movement is done with respect to the syntactic constraints of the Kabɪyɛ language which disallow the clitic *ṭamá* to precede the verb when the latter is inflected, whether in the perfective or imperfective mood.

3.2. Cliticization of the possessive adjectives
The data below show how the cliticization of possessive adjectives works as compared to that of pronouns.

(20)	ma-ṭoo > moɳɖoo	(21)	ṭá-pɛláɣ haɣ-waá > ṭɛ́béláɣ haɣwaá
	1Sg^Poss-mother		1Pl^Poss-daughter satiate-Acc
	"my mother"		"Our daughter is pregnant"

(22)   ɲá-halʊ́ nɛ ɛ-caa > ɲáhalʊ́ nɛ ɛjaa
        2Sg^Poss-wife and 3Sg^Poss-father
       "your wife and her father"

(23)   pa-lɔɔríyɛ tɔlá-a > pɔlɔɔrɪyɛ tɔláa
        3Pl^Poss-car fall down-Acc
        "Their car has had an accident"

(24)   mí-haláa sína-mí
        2Pl^Poss-wives help^Acc-2Pl^Obj
        "Your wives have helped you"

It is important to bear in mind that unlike personal pronouns whose host is the verb that they either precede or follow according to their case (subject or object), possessive adjectives rather lean against their nominal host which they always precede immediately as the above examples amply show. Possessive adjectives are thus proclitic to nouns. In (20) and (21) for example, the possessives *ma > moŋ* "my" and *ʈá* "our" precede the nouns *ʈoo* and *pɛláɣ* respectively and attach to them as their hosts.

3.3. Cliticization of adpositions

The adpositions concerned in this study are the preposition *na* "with" and *táá* "in/inside" which functions both as a preposition and a postposition. Consider the data below to see clearly how the cliticization of the two adpositions operates.

(25)   sá-ʊ́ > sáʊ́   (25c)   sa-a-ná
       knead-Inf   knead^Imp-with
       "to knead"   "knead with"

(25a)   sá-na-ʊ > sánaʊ   (25d) ɛ-sá-na ŋnáʊ́
       knead-with-Inf   3Sg^Sbj-knead^Acc-with spatula
       "to knead with"   "He/she kneaded with a spatula"

(25b)   ɛ-sá-na-a
       3Sg^Sbj-knead-with-Acc
       "He/she kneaded with"

(26)   ʈɛ́-ʊ > ʈɛ́ʊ́   (26b) pɛ-ʈɛ́-na-a > pɛɖɛ́naa
       leave-Inf   3Pl-leave-with-Acc
       "to leave/go away"   "They left with/The took away"

(26a)   ʈɛ́-na-ʊ   (26c)   pɛ-ʈɛ́-na pɪɣá > pɛɖɛ́na pɪ́ɣá
       leave-with-Inf   3Pl^Sbj-leave^Acc-with child
   "to leave/go away with" "They left with the child /The took the child
                                        away"

(27)   hɛ́-ʊ́ > hɛ́ʊ́   (27b) ma-caa taá-hɛ́-wá > maŋjaa taáhɛ́wá
       cool-Inf   1Sg^Poss-father inside-cool-Acc
       "to cool"   "My father has cooled down"

(27a)   táá hɛ-ʊ́ > tááhɛʊ́   (27c) pa-taá-ʊ-hɛ-ʊ́ > pa daá ʊhɛʊ
    inside-cool-Inf   3Pl^Poss-inside-Neg-cool-Unacc (Their
                                             inside
    "to cool down   "   does not cool down)

                         "They do not cool down"

In the above data, (25) and (26) indicate the verb root with its infinitive marker, without any clitic. Cliticization process is found in the data (25a, b, c, etc.) and (26a, b, c). The preposition *na*, for example, is mesoclitic to the infinitive and perfective forms of the verb in (25a, b) and (26a, b)

where that clitic preposition *na* is inserted between the verb root and the infinitive suffix marker *-ʋ,* like *sá-na-ʋ* in (25a), and *ʈɛ-na-ʋ* in (26a), and between the verb root and the accomplished or perfective suffix marker *-a* like *sá-na-a* in (25b) and *ʈɛ-na-a* in (26b). The same preposition *na* becomes enclitic to the verb when the latter is in imperative as *sa-a-na* in (25c), or when it is accomplished/perfective and followed by an object of means as the phrase *sá-na ŋnáʋ́* in (25d), or by a direct object as the phrase *ʈɛ-na pɪɣá* in (26c).

A deeper analysis of data (25a, b) and (26a, b) reveals that the adpositional clitic *na* "with" has violated the lexical integrity of the verb with which it tightly combines, which proves and confirms its very low degree of independence as a lexical item.

As for the adposition *táá*, it is proclitic to its verbal host whatever the form of that verb as can be seen in the whole data from (27) through (27c).

3.4. Conditions for cliticization

This section addresses clitic position or placement from the phonological, morphological and syntactic perspectives.

3.4.1. Phonologically conditioned clitics

Kabɪyɛ PSCs and POCS are, like the Greek pronouns (Mavrogiorgos, 2010), the Igbo pronouns (Anyanwu, Ogbonna. (2012), incorporated into their verbal host from which they sometimes acquire some features. Consider the following data.

(28) [milibá] < /ma-lib-á/   (30) [ʈɪwɪ́sɪʋ náńdʋ] < /ʈá-
                                                 wɪsɪ-ʋ náńdʋ/
     1Sg^Sbj-swallow-Acc   1Pl^Sbj-smoke-Unacc meat
     "I have swallowed"   "We are smoking meat"
(29) [pezéɣ] < /pa-sé-ɣ/
          3Pl^Sbj-run-Unacc
          "They are running"

The deep structure in slashes in the above data shows that the vowel /a/ of the pronoun assimilates to the first vowel of the verb under vowel harmony constraint. So, it harmonizes with the verbal vowel to become in surface structure [i], [e], [ɪ] in (28), (29) and (30) respectively. Therefore, the pronouns *mi*, *pe* and *ʈɪ,* which represent just some examples, are not only incorporated into their verbal host, they are also phonologically conditioned clitics, and precisely proclitics in this very

position. They are phonologically conditioned in that they not only harmonize with the verbal vowel, but they also make up for their phonological defectiveness by combining with the verb to form with the latter a phonological entity. That is what Matsinhe (1998) calls phonological alteration and agreement with the verb. Without that attachment to their verbal host, pronominal clitics are proven unable to function alone in Kabɩyɛ.

3.4.2. Morphologically conditioned clitics

The clitics here, like affixal morphemes, attach to their host in which they are incorporated and constitute with the latter a stem onto which other morphemes may graft to form more complex morphological units as can be seen in the data (31) through (36) below. Those clitics are subject and object personal pronouns as well as adpositions.

(31) neezúu "to lick" ⇒ /ma-néézu-u/ > [menééziu]
         1Sg^Sbj-lick-Unacc
         "I am licking"

(32) páʋ "to dance" ⇒ /pa-a-pa-ɣ/ > [paabaɣ]
     3Pl^Sbj-Neg-dance-Unacc
   "They are not dancing"

(33) náʋ "to see" ⇒ /ʈalʋʋ ná-má/ > [ʈalʋʋ nám]
elder brother see^Acc-1Sg^Obj
  "The elder brother saw me"

(34) kpáʋ ⇒ /pa-kpá-ɩ/ > [pakpáɩ]
   3Pl^Sbj-arrest^Acc-3Sg^Obj
   "They arrested him"

(35) ʈɛʋ "to leave" ⇒ /ʈɛ-na-ʋ/ > [ʈɛnaʋ]
   leave-with-Inf
   "to leave with/to take away"

(36) ʈɛ́naʋ ⇒ /pɛ-ʈɛ́-na-a/ > [pɛrɛ́naa]
  3Pl^Sbj-leave-with-Acc
  "They took away"

Unlike in some Romance languages such as Cosentino, Martinsicuro, Ibero-Romance where the subject pronouns stand enclitic to some verbs and proclitic to others (Pescarini, 2018), and in Modern European Portuguese and Brazilian Portuguese where they are enclitic to verbs (Luís and Kaiser, 2016), those clitic pronouns always stand proclitic to verbs in Kabɩyɛ like *ma > me* in data (31) and *pa* in data (32) and (34) above. As for the object personal pronouns, they always stand enclitic to all verbs in non-emphatic structures like *má > m* in data (33) and *ɩ* in data

(34) above. In both constructions (proclisis and enclisis), the pronouns become morphemes incorporated in the verbal host as can be seen in the surface structure enclosed in square brackets like the subject proclitic pronoun *pa* of *pakpá* in (34) and the object enclitic pronouns *m* of *nám* in (33) and *ɩ* of *kpáɩ* in (34).

Likewise, the preposition *na* merges with the verb root to form a longer stem to which the suffixal morpheme attaches as *ʈɛnaʋ* in (35) and *ʈɛnaa* in (36). In (35) precisely we can notice the violation of lexical integrity of the verb *ʈɛʋ́* "to leave" by the clitic morpheme *na* "with" which has inserted itself between the root *ʈɛ* and the infinitive suffix *ʋ*, to yield *ʈɛ́naʋ* "to take away".

That surface structure as presented in the above analysis shows the true orthography of the Kabɩyɛ language written exactly the way it is spoken, as Roberts (2007) put forward. So the morphological process of cliticization as seen in the above examples operates in accordance with that orthography which respects the Kabɩyɛ morphotactics.

3.4.3. Syntax-based clitics

Syntax-based clitics are those whose placement is performed in such a way that the syntactic structure of the unit in which they appear (phrase, clause, sentence) is still in good order and meaningful in the language. Among the clitics studied in this paper, those which are really governed by Kabɩyɛ syntax are the anaphoric pronouns, the possessive adjectives and the adposition *táá*.

As said in section 2.1.2, anaphoric pronouns are the reflexive and the reciprocal pronouns which take different positions with regard to their verbal host and in accordance with Kabɩyɛ syntactics. Consider the data below.

(37a) tɩ-ɲá-m > tɩ ɲám   (37b) wɩ́lɩ́yʋ́ ɲá-ŋ ɛ-tɩ > wɩ́lɩ́yʋ́ ɲáŋ ɛdɩ
         oneself-respect-Inf   teacher respect-Unacc 3Sg-self
         "to respect oneself"   "The teacher respects himself"

(38a) tɩ-luzú-u > tɩ luzúu   (38b) luzi ɲá-tɩ > luzi ɲádɩ
         oneself-bow-Inf   bow^Imp 2Sg-self
         "to bow oneself"   "Bow yourself (Be submissive)"

(39a) ʈamá-siná-ʋ > ʈamá sináʋ
         Rcp-help-Inf
         "to help each other"

(39b) haláa sɩna-ʈamá > haláa sɩna ʈamá
         women help^Acc-Rcp
         "Women helped each other"

(40a) ʈamá-máb-ʊ > ʈamá mábʊ
        Rcp-beat-Inf
      "to beat each other"
(40b) píya máb-kɪ-ʈamá > píya mákɪ ʈamá
        children beat-Unacc Rcp
        "Children are beating each orher"

The reflexive pronoun tɪ in (37a) and (38a), as well as the reciprocal pronoun *ʈamá* in (39a) and (40a) precede the infinitive form of the verb and stand proclitic to it. The large corpus above allows to draw the conclusion that infinitive verbs never precede those anaphoric pronouns. Only when verbs are conjugated can they precede anaphoric pronouns as is the case in the data (37b) through (40b). So from the infinitive form to the conjugated form of the verb, the anaphoric clitics benefit from the freedom of movement but still complying with the syntax of Kabɪyɛ. However, in emphatic structures, Kabɪyɛ reflexives precede the verbs and stand thus proclitic to them as in (41) below, exactly like object personal pronouns (cf. 2.1.1 (12b and 13b)) which take the same position in such structures.

(41) ɲá-tɪ ŋ-kʊ́-wá > ɲádɪ ŋgʊ́wá
        2Sg-Refl 2Sg^Sbj-kill-Acc
        Yourself you killed
        "It is yourself that you have harmed"

The ultimate interpretation of all the clitics and their positionings as discussed in this study is that they are lexically independent as words but prosodically deficient and thus dependent on their hosts. Observed from morphosyntactic perspective, they are bound to other words as dependent morphemes even though they are syntactic words in their occurrences in sentences. In sum, Kabɪyɛ pronominal, possessive and adpositional clitics are phonologically, morphologically and syntactically dependent, just as are the PSCs in Igbo (Anyanwu 2012).

4. Results

The data analysis in this study reveals some pertinent pieces of information about clitic placement or clitic position that are displayed in the following subsections.

4.1. Cliticization with regard to verbs

The findings suggest that Kabɩyɛ verbs can be followed or preceded by clitics, in respect of the phonotactics, morphotactics or syntactics of the language. So, phonologically speaking, subjective and objective pronouns are in most cases subject to vowel harmony, and so are the possessive adjectives (cf. 4.2), with the vowel of the pronoun copying the features of the vowel of the verbal host. Furthermore, with regard to the morphology of Kabɩyɛ, subject personal pronouns are incorporated to the verb always from its left edge and stand proclitic to it. As for the object personal pronouns, they are completely incorporated to the verb by the right side and always stand enclitic to it when they are in their reduced form as in *(caá hám < caá há-mà)* "Father gave me". The reduced form *m* of the pronoun *má* "me" is incorporated to the verb and constitutes with it a single lexical unit, exactly as affixal morphemes behave. But in case they are in their full or strong form like in *(caá mákɩ má)* "Father beats me", they are not incorporated to the verb but they are rather subsequently juxtaposed with it and stand enclitic to it. And when they are used emphatically they precede both the verb and its subject and stand proclitic instead, like in *(máá caá mákɩ)* "It is me that father beats".

The anaphorical pronouns *tɩ* and *ʈamá* are proclitic to infinitive verbs like in *(tɩ ɲɔɔzʊ́ʊ)* "to prepare oneself" and in *(ʈamá sɩnaʊ)* "to help each other". But when the verb is in its aspectual form, they shift from that position to the enclitic position as in *(pɔɲɔ́ɔ́zʊʊ pa-tɩ)* "They are preparing themselves" and *(pasɩɣná ʈamá)* "They are helping each other/one another". Reflexive anaphoric pronouns, when used emphatically, shift from their enclitic position to verbs to the proclitic position.

Prepositional clitics occur also in different positions with regard to their verbal hosts. The preposition *na* "with", for example, is mesoclitic to infinitive and accomplished verbs in that it inserts itself between the root of the verb and the infinitive marker like in *(mánaʊ < má-na-ʊ)* "to write with", or between the root of the verb and the accomplished morpheme as in *(mánaa < má-na-a)* "written with".

4.2. Cliticization with regard to nouns

In this study, the unique class of clitics taking position with regard to nouns is possessive adjectives. The latter are always placed before nouns and are thus proclitic to them as in *(ɲá-wálʊ́)* "your husband", *(ma-ɲálʊʊ)* "my mat", etc. Vowel harmony, one aspect of phonology, is also put into

play in the cliticization of possessive adjectives, in that the vowel of the possessive copies the features of the vowel of the nominal host like in *ma-hɛɛ > mɛ-hɛɛ* 'my yam", *ma-holú > mo-holú* "my mouse", *pa-neze > pe-neze* "their grandmother", etc.

5. Discussion

Based on the results presented above, the research questions posed in the introduction can be said to have been answered, because what triggers the positioning of clitics in Kabɩyɛ sentences is clearly made known. In fact, clitic positioning is motivated by phonological, morphological and syntactic constraints. The answer to the research question stands as a confirmation of the formulated hypothesis according to which 'clitics are likely to take positions in a sentence under some specific linguistic constraints'. Again, it has been highlighted that the different positions of clitics bestow different meanings to sentences in which they occur.

The results of this work, particularly those related to object pronouns, look like those found by Stigliano and Pavlou (2018) in Standard Spanish in that the two results display the well-known phenomenon of clitic climbing. But the slight difference that lies between their work and the present study is that in Kabɩyɛ, clitic climbing affects the meaning of the sentence with emphasis whereas in Spanish, that clitic movement does not have any effect on the meaning of the sentence. Another work to which the present study is related is that of Galves et al. (2005) where the authors have approached the position of object pronouns with regard to the verb in a sentence in Brazilian and European Portuguese. The results also show on the one hand that Kabɩyɛ and European Portuguese resemble in the positioning of object personal pronouns as enclitics with regard to the verb. On the other hand, findings reveal that Kabɩyɛ and Brazilian Portuguese differ in that object pronouns most often stand enclitic to the verb in the former language whereas they stand proclitic to the verb in the latter.

The results of this study allow to assert that Kabɩyɛ ia a cliticizing language wherein many types of clitics are attested, occurring in various positions in syntactic components (Sentences, clauses, etc**.).**

Conclusion

This study, which broached clitic placement in Kabɪyɛ, raised not only the issue of the confusion between clitics and affixes in that language, but also pointed out the knowledge gap in what exactly conditions the positioning of such elements in syntactic components (sentences, clauses and phrases) in that language. After that problematic, the theory on which the study is grounded, is made known; it is carried out in the descriptive approach. Then, the data are presented, analyzed and interpretd, using a certain number of techniques christened methodological approach. Under this rubric, phonetic spelling/orthography is used to present the data with dashes to show both morpemic and words boundaries. All data have undergone interlinear morphological translation before providing a gloss on them.

A step by step data analysis and interpretation was performed, going from pronominal clisis to adpositional clisis via the cliticization of possessive adjeectives. Factors conditioning the placement or positioning of all those types of clitics are also discussed. The work has also displayed the results of the analysis which show that the different poisitionings of those clitics are determined by phonological, morphological, but mostly by syntactic constraints of the Kabɪyɛ language. Other findings reveal that only subject personal pronouns and possessive adjectives stand in a static proclitic position with rgard to their verbal and nominal hosts respectively, whereas other pronominal (objective and anaphoric pronouns) and adpositional clitics may benefit from what (Szczegielniak, 1995) calls freedom of movement or clitic cimbing in syntactic structures. And when the clitic movement occurs, for example, from enclitic to proclitic position, it operates in the strict compliance with syntactic rules and semantic constraint so that the new structures that result are not anomalous. The results section is followed by the discussion which is a critical view of the results with regard not only to the study objectives but also to the results of other studies. The results of this study will be used as basis for future researches which prospect for verbal and other kinds of clitics in Kabɪyɛ. That will make up for the weaknesses of the work, of course, with the contribution of any reader whose suggestions will be taken into consideration.

The social and utilitarian significance of this study is, first, to help classify Kabɪyɛ in the typology of cliticizing languages. Moreover, the study gives a worthwhile insight into the intricacies of cliticization process that

involves pronouns and adpositions of Kabɩyɛ. This allows to avoid the haphazard positioning of such function words, which could lead to their wrong contextual occurrences in speakers' utterances.

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Appendix (Abbreviations and symbols used)

Acc	:	accomplished	1Sg	:	first person singular
Imp	:	imperative	1Pl	:	first person plural
Inf	:	infinitive	2Sg	:	second person singular
Interr	:	interrogative	2Pl	:	second person plural
Juss	:	jussive	3Sg	:	third person singular
Neg	:	negative	3Pl	:	third person plural
Obj	:	object	>	:	becomes/leads to
Poss	:	possessive	<	:	derives from
Recp	:	reciprocal	^	: links two glosses representing

Refl	:	reflexive			a complex but non segmentable
Sbj	:	subject			grammatical form
Unacc	:	unaccomplished	*	:	ungrammatical/unaceptable