

COMPLEMENT CLAUSE FORMATION IN LETEH¹

Mercy Akrofi Ansah

ABSTRACT

This paper explores the complementation phenomenon in Leteh. The discussion is done within the framework of Basic Linguistic Theory (Dixon 1997), and further appeals to the theory of grammaticalization to explain the multiple functions of Leteh complementizers. Leteh is a South Guan (Kwa, Niger-Congo) language spoken in Larteh, in the southeastern part of Ghana. In Leteh, complement clauses mainly function as sentential objects of main clauses. Complement clauses in Leteh are signaled by three complementizers: *yè*, *nè*, and *bèé*, which combine with complement-taking verbs from four semantic classes to produce the types of complement clauses that operate in the language. There are co-occurrence restrictions between complementizers and complement-taking verbs. For instance, when the complement-taking verb occurring in the main clause is an utterance verb, the complementizer that initiates the complement clause must be *yè*. Finally, the paper demonstrates that complementizers could have a verbal origin, contrary to assertions in the literature (Noonan 2007: 57).

Résumé

Cet exposé explore le phénomène de complémentation comme cela se produit en langue « Leteh », dans le cadre de la Théorie Linguistique de Base (de Dixon, 1997). La langue Leteh est d'origine Guan du Sud (Kwa, Niger-Congo) et parlé dans la ville de Larteh, dans la partie sud-est du Ghana, en Afrique de l'Ouest. En langue Leteh, les clauses de complément fonctionnent surtout comme les objets phrastiques des clauses principales. Les clauses de complément en langue Leteh sont

¹The language under study is referred to by its speakers as Lete. In this paper, the language is spelt Leteh, whereas in the literature and elsewhere, it is written as Larteh, same as name of the town where the language is spoken.

signalées par trois complétiviseurs: *yè*, *nè*, et *bèé*. Ces complétiviseurs entrent en combinaison avec quatre catégories sémantiques de verbes pouvant prendre un complément (attribut) afin de produire les clauses de complément qui opèrent en langue Leteh. Il existe entre les complétiviseurs et les verbes suivi d'un complément pouvant prendre un attribut des restrictions de présence simultanée. A titre d'exemple, lorsque le verbe prenant un attribut se trouvant dans la proposition principale est un verbe d'énonciation, le complétiviseur déclencheur de la proposition de complément doit être *yè*. Enfin, ce document démontre que les complétiviseurs peuvent avoir une origine verbale, contrairement aux affirmations des écrits en la matière. (Noonan 2007: 57).

Preliminaries

The paper seeks to describe ways by which complement clauses are formed in Leteh. Data for this study were extracted from naturally-occurring conversations which form part of a larger Leteh corpus. The complementation phenomenon is described as "...the syntactic situation that arises when a notional sentence or predication is an argument of a predicate" (Noonan 2007: 52). A complementation construction is made up of two clauses: a main clause and a complement clause which functions as a sentential subject or object of the main clause. The internal constituent structure of a complement clause is the same as that of a main clause with respect to core arguments. A complement clause describes a fact, an activity or a potential state (Dixon 2006:15).

Complementation is a productive phenomenon in Leteh discourse where complement clauses mainly function as sentential objects. The Leteh complement clause functions as a sentential object to a main verb which can belong to any of the four semantic classes which will be discussed shortly. In the case where the main verb belongs to the class of manipulative verbs, the complement clause occupies the position of an indirect object. In all the various types of complement clauses, the syntax is the same, what makes the difference is the semantics of the main clause verb and the complementizer type.

Generally, the discussion in this paper is informed by insights from Basic Linguistic Theory (Dixon 1997: 128). However, the discussion on the multiple functions of Leteh complementizers is done within the theoretical framework of Grammaticalization. Basic Linguistic Theory differs from other contemporary theoretical frameworks in the sense that, contrary to many theoretical frameworks that do not pay much attention to earlier ideas, Basic Linguistic Theory takes as much as possible from earlier traditions. It may be described as traditional

grammar, minus the tendency to describe all languages within the framework of European languages. In this paper, concepts inherited from earlier theoretical orientations like traditional grammar, structuralism and typology have been employed in the description of Leteh complement clauses. The discussion of complement clause formation in Leteh is done without reference to concepts motivated for European languages.

Grammaticalization has two meanings: as a research framework within which to account for language phenomena, and also as phenomena themselves (Hopper and Traugott 2003: 1). The present study makes use of the first meaning which has to do with explanations of how lexical items and constructions come in certain linguistic contexts to serve grammatical functions, or how grammatical items develop new grammatical functions. The paper will explain the function of *yè*, *nè*, and *bèé* as complementizers in one context, and then as lexical items in other linguistic contexts.

The paper is structured as follows: first, a brief grammatical profile of Leteh is given. This is followed by a discussion of Leteh complement-taking verbs. The third section pays attention to Leteh complementizers and complement clause types, where the morphosyntactic properties of Leteh complementizers and the co-occurrence restrictions of complement-taking verbs and complementizers are discussed. In the penultimate section, there is a brief discussion of the various functions of Leteh complementizers and their diachrony. The fifth section summarizes and concludes the discussion.

1. A Grammatical Profile of Leteh

In this section, I present the Leteh language and its grammatical features which have direct bearing on this paper. Lewis (2009) sub-classifies Guan (Kwa, Niger-Congo) into two language clusters: North Guan and South Guan. Leteh, the language under discussion, is a member of the South Guan group. The language is spoken by about 8,310 people (Ghana Housing and Population Census, 2000) in Larteh, a town located in the South-eastern part of Ghana, West Africa.

The Leteh language has a nine-vowel inventory with a corresponding vowel harmony system. However, in the few studies that have been conducted on the language, the Akan orthography which is based on seven vowels has been applied, because Leteh does not have an official orthography. Comparable to many African

languages, its consonant inventory displays labial-velar sounds, /kp, gb/ and avoids consonant clusters. However, syllable and word-initial nasal clusters like /ŋk, mf, nt/ are common. The preferred syllable structure is CV, an indication of an open-syllable language. Leteh is a tone language with two level tones: high and low. The lexical tone helps to distinguish meanings of words which otherwise are the same in terms of their constituents. The grammatical tone, coupled with verbal prefixes, is employed in marking tense and aspectual distinctions.

The language is isolating with agglutinative features. Case is not marked; constituent order marks grammatical relations. An unmarked Leteh clause has AVO and SV order and syntax.

Major word classes include nominal, verbal, adjectival and adverbial classes. Minor word classes comprise quantifiers, intensifiers, determiners, including demonstratives, utterance particles, interjections, adpositions and conjunctions. It is worth noting that some minor word classes, for instance, adpositions have evolved from major word classes like nouns and verbs through serial verb constructions (Heine et al, 1991; Lord, 1993). Leteh nouns may be categorized based on identical prefixes. Singular and plural prefixes are used in indexing number contrast in countable nouns. The nominal class is open, and processes like reduplication and compounding are two notable ways by which the class is augmented. In contrast to the class of nouns, no process has yet been identified which derives verbs. The class of underived adjectives numbers eight, whilst the majority of adjectives are derived from nouns and verbs. Adverbs are mostly derived from adjectives through partial and complete reduplication of adjective stems.

Available data on Leteh demonstrate that both prepositions and postpositions operate in Leteh grammar. Negation is marked through the prefixation of the main verb of a clause. Leteh complement clauses mainly function as sentential objects.

2. Leteh Complement-taking verbs

A complementation construction involves two verbs, the main clause verb which comes from a restricted class of complement-taking verbs (CTV henceforth) and a second verb which occurs in the complement clause, from an unrestricted class. It is however important that in order to produce semantically acceptable constructions, some degree of semantic compatibility must exist between the two verbs. In this paper, complement-taking verbs are categorized based on their semantic features. It must however be noted that the semantic classes discussed

here only reflect the uses of these verbs in complementation, and not the full semantic properties of these verbs in Leteh, and as a result some verbs appear in more than one class.

2.1 Propositional attitude verbs.

A propositional attitude verb (PAV hereafter) in the main clause gives additional information about the proposition in the complement clause in terms of its certainty, success, failure, intention or wish. The only propositional attitude verb that takes a sentential complement in Leteh is found in (1).

- (1) *kyîrê* ‘want/wish’

2.2 Utterance verbs.

Utterance verbs code a verbal activity in the main clause whose outcome is expressed by the complement clause. Utterance verbs which are complement-taking are given in (2).

- (2) *bîsé* ‘ask’ *twù lé* ‘sing’
fòké ‘answer’ *yè* ‘say/tell’
kàé ‘remind’ *wòré* ‘force’

2.3 Cognition-perception verbs.

These are verbs that denote mental activities. The complement clause codes an event which is indicated by the cognition-perception verb in the main clause. Cognition-perception verbs that take sentential complements in Leteh are listed in (3). It is noteworthy that the verb *kàé* is polysemous: remind/remember, and therefore occurs as utterance verb in (2) and as a cognition-perception verb in (3).

- (3) *kà* ‘hear’ *nì* ‘know’
hù ‘see’ *kà àsé* ‘understand’
sùsú ‘think’ *kàé* ‘remember’

2.4 Manipulative verbs.

Generally, a manipulative verb codes an action that must be carried out by a direct object in the main clause. The activity that is performed is signaled by the verb in the complement clause. The subject/agent of the main clause is the manipulator while the direct object is the manipulee. The manipulee is co-referential with the subject/agent in the complement clause (6).

Manipulative verbs in Leteh are exemplified in (4).

- (4) *wòrɛ́* ‘force’ *bòá* ‘help’

3.0 Leteh complementizers and complement clause types

In this section, the interaction between Leteh complementizers and complement-taking verbs to produce complement clause types will be discussed. The types of complement clauses existing in Leteh are based on the semantics of the main clause verb and of the complementizer.

Three complementizers are identified in Leteh: *yè*, *nè*, *bɛ́ɛ́*. They function to identify a clause as a complement clause. Each complementizer co-occurs with some specific semantic class(es) of verbs to produce complement clause types. Available data suggest that the complementizer *yè* occurs with only one class of complement-taking verbs, namely, utterance verbs. The ensuing discussion will illustrate that the rest of the complementizers can be used with more than one semantic category of verbs.

3.1 The complementizer *yè*.

As already stated, the complementizer *yè* is used only when the main clause verb (CTV) is an utterance verb. It introduces a complement clause which represents direct speech (5).

- (5) *Ne* *a* *bísɛ́* *mo*
 And 3SG.SUBJ PST.ask 3SG.OBJ
- [yè,* *wo* *bò* *miredukuu* *anaa]??*

COMP 2SG PRES.have handkerchief or
 ‘And he asked him that do you have a handkerchief?’

In addition to being a complementizer (5), *yè* functions as a quotative verb for direct speech. As a quote orienter, it is used by the speaker to signal in his/her discourse, the occurrence of an adjacent representation of direct discourse (Güldemann, 2008).

3.2 The complementizer *nè*.

The second complementizer to be discussed is *nè*. This complementizer links a complement clause to a main clause whose verb usually belongs to the class of manipulative verbs as exemplified in (6).

(6) *Ama wòrè Kofi [nè a búè esumi].*
 Name PRES.force Name COMP 3SG PST.do work
 ‘Ama forced Kofi to work.’

In (6), the subject/agent of the main clause is different from that of the complement clause. The main clause contains a direct object, the manipulee, which is coreferential to the subject/agent of the complement clause. In this construction, the subject of the main clause is the manipulator who succeeds in getting a manipulee, Kofi to carry out an activity coded by the verb in the complement clause. It is common for a complement clause to occupy the position of an indirect object (6) when the CTV or main verb belongs to the class of manipulative verbs.

A past event coded by a manipulative verb is only understood as one carried out when it occurs with the complementizer *nè*; when it occurs with the complementizer *bèé*, it is not certain if the instruction was carried out or obeyed (compare (6) and (7)).

(7) *Ama wórè Kofi [bèé a bùè esumi a].*
 Name PST.force Name COMP 3SG PRES.do work DEF
 ‘Ama forced Kofi that he should do the work’.

The complementizer *nê* can also occur with a few cognition-perception verbs such as *hù* ‘see’ (8). In such a construction, however *hù* ‘see’ has a metaphorical meaning ‘consult’. In (8), there is a coreferential relationship between the subject/agent of the main clause and the object of the complement clause which is the beneficiary of the action coded by the verb in the complement clause. The object/beneficiary of the complement clause verb could also refer to a third party. A second coreferential relationship exists between the object in the main clause and the subject/agent of the complement clause so far as the main verb retains its metaphoric meaning.

- (8) *Ama bè-hú Kofi [nê a bóà mo].*
 Name FUT-see Name COMP 3SG help 3SG.OBJ
 ‘Ama will consult Kofi to help her/ Ama will seek Kofi’s help.’

3.3 The complementizer *bèé*.

The third and last complementizer in Leteh to be discussed is *bèé* which most often occurs with cognition-perception verbs (9). With a cognition-perception verb, the complementizer links a complement clause which contains a proposition that the subject of the main clause can testify to or is aware of.

- (9) *A kà [bèé okireni dé-dé kɔne a].*
 3SG PST.hear COMP chicken PROG-beat drum DEF
 ‘He heard that chicken is playing the drum’.

In a reported speech too, *bèé* is known to occur with some utterance verbs (10). When *bèé* occurs with utterance verbs, there is an element of uncertainty in the proposition.

- (10) *Ama dé-bìsè [bèé Kofi dé-bùè esumi a].*
 Name PROG-ask COMP Name PROG-do work DEF
 ‘Ama is asking if Kofi is doing the work.’

Furthermore, the complementizer *bèé* occurs with the propositional attitude verb (11). When a propositional attitude verb functions as a complement-taking verb, the complement verb is marked for subjunctive mood. In (11) for example, the

verb *yó* ‘go’ receives the subjunctive marker *ké/ké*. The subject of the main clause is the experiencer expressing a desire that the proposition in the complement clause be realized. In this construction therefore, the arguments in the clauses differ.

- (11) *Kofi kyìrè [bèé Ama ké-yó sukuu]*
 Name PRES.want COMP Name SUB-go school
 ‘Kofi wants Ama to go to school.’

Table 1 Complement-taking verbs (CTV) and complementizers

			Complementizers		
Semantic Classes	CTV	Gloss	<i>yè</i>	<i>nè</i>	<i>bèé</i>
Propositional attitude verb	<i>kyìrè</i>	want/wish			x
Manipulative verbs	<i>wòrè</i>	force		x	x
	<i>bòá</i>	help		x	
Cognition Perception Verbs	<i>kà</i>	hear/listen			x
	<i>nì</i>	know			x
	<i>hù</i>	see			x
	<i>kà ase</i>	understand			x
	<i>kàé</i>	remember			x
	<i>sùsù</i>	think			x
Utterance verbs	<i>bìsé</i>	ask	x		X
	<i>fòké</i>	answer	x		X
	<i>twù</i>	sing	x		X
	<i>le</i>	say	x		X
	<i>yè</i>	say	x		X
	<i>kàé</i>	remind	x		X

In both (10) and (11), the complement clause functions as a direct sentential object. The interaction of complement-taking verbs and complementizers is summarized in table 1.

The following observations are made from table 1:

- i. Modality verbs occur with only the complementizer *bèé*.
- ii. Manipulative verbs occur with two complementizers, *nè* and *bèé* except the CTV *bòá*. ‘help’ which occurs with only the complementizer, *nè*.
- iii. Cognition-Perception verbs occur with the complementizer, *bèé* only.
- iv. Utterance verbs occur with two complementizers, *yè* and *bèé*.
- v. It is only manipulative verbs which occur with the complementizer, *nè*.
- vi. It is only utterance verbs which occur with the complementizer, *yè*
- vii. With the exception of one manipulative verb, *bòá* ‘help’, all complement-taking verbs occur with the complementizer, *bèé*.

Whenever complement-taking verbs function with more than one complementizer, some grammatical distinction is made. In the case of manipulative verbs (*wòré* ‘force’), the use of *bèé* connotes uncertainty (irrealis), whereas the use of *nè* implies certainty (realis). With utterance verbs, *yè* signals direct speech whilst *bèé* is employed in reported speech.

4.0 Multiple roles of complementizers, an indication of their diachrony.

It can be demonstrated that Leteh complementizers have both lexical and grammatical functions. In their lexical role, they mainly function as verbs, which give an indication of their source, and so within the framework of grammaticalization, one would say that the complementizers have developed from verbs. This is an observation which is contrary to the claim that complementizers rarely develop from verbs (Noonan, 2007: 57). The observation that Leteh complementizers are derived from verbs is also true of Akan (Kwa, Ghana) complementizers as reported by Osam (1994: 286-296) where the historical origin of Akan complementizers is traced, and their verbal origin substantiated.

Furthermore, Lord (1993:151) comments that in “many of the Kwa languages of West Africa, a that-complementizer can be shown to have developed historically from a verb ‘say’.”

The historical origin of the complementizer *yè* ‘say’ is quite obvious. Outside a complement clause, it functions as a full verb meaning ‘say’ with full verbal qualities. It can be marked for tense/aspect (12) and negation (13). Furthermore, *yè* can occur twice in a complement construction, serving two functions: first as a complement-taking verb, and then as a complementizer (14).

(12) A *bè-yé* *ese* *a*.
 3SG FUT-say matter DEF
 ‘He will report the matter.’

(13) A *bé-è-yé* *ese* *a*.
 3SG NEG-FUT-say matter DEF
 ‘He will not report the matter’.

(14) *Ne akpale yè okireni [yè, amo bè-sírè kɔne].*
 And crow PST.tell chicken COMP 3PL FUT-carve drum
 ‘And crow told chicken that, they will carve a drum.’

Güldemann (2008: 296) further reports that in African languages, it is common to find verbal lexemes that are said to have expanded their use as clause linkers. In related Kwa languages like Akan (Christaller, 1881 cited in Lord, 1993:178), Ewe and Ga (Lord, 1993: 185,191) for instance, a reanalysis of the verb ‘say’ is attested. In Ewe, the verb *bé* functions as a quotative, occurring with the utterance verb of saying. It has however extended its function to serve as a complementizer. Likewise in Ga, *áké*, a that-complementizer which occurs with utterance and cognition-perception verbs, is shown to have derived from the verb *kèé* ‘say’.

The second complementizer *nè* is derived from the verb ‘give’. Outside a complement clause, it exhibits full verbal qualities (15a &b). It also functions as a causative verb in causative serial verb constructions where it takes on the meaning

‘make’ (15c). It acts as an adposition to introduce a benefactive /recipient noun phrase (15d). As a complementizer, it occurs with manipulative and cognition-perception verbs. In example (15e) its extended use as a complementizer occurring with manipulative verbs is shown. In Akan too, the complementizer *máà* is shown to have historically originated from the causative verb *má* ‘give’ (Osam, 1994: 289).

(15)a. *Ama dé-né ayirebi a tegyi.*

Name PROG-give child DEF food
 ‘Ama is giving the child food.’

b. *Ama bé-dé-né ayirebi a tegyi.*

Name NEG-PROG-give child DEF food
 ‘Ama is not giving the child food.’

c. *Onyine a nè Ama wósò bíákè owure a.*

Man DEF PST.make Name PST.get up PST.greet chief DEF
 ‘The man caused Ama to get up and greet the chief.’

d. *Ananse sórè adaka a nè Nkɔnɔre.*

Name PST.carry box DEF PST.give Name
 ‘Ananse carried the box for Nkɔnɔre.’

e. *Ama wórè [nè Kofi bùè esumi a].*

Name PST.force COMP Name PST.do work DEF
 ‘Ama forced that Kofi do the work.’

The complementizer *nè* can therefore be said to play multiple roles in Leteh grammar. It functions as a simple verb, a causative verb, an adposition, then a complementizer. Following the meaning of grammaticalization adopted for this paper, it can be explained that in certain linguistic contexts, the morpheme *nè* serves a lexical function, whilst in other environments, it functions as a grammatical item. It can be argued that the lexical item *nè* might have first been

used as a causative verb, and then assumed other roles: an adposition and then as a complementizer. This is because, as a causative verb, it can be marked for all the verbal categories (see (15c)). However, in (15d) and (15e) where *nɛ* functions as an adposition and a complementizer respectively, neither of them can be marked for any verbal category.

Since the morpheme *nɛ* can still function as a lexical verb, it can be concluded that *nɛ* has four syntactic functions in Leteh grammar. The extended functions of the verb *nɛ* ‘GIVE’ in Leteh are similar to what Newman (1998) attests to.

Unlike the two complementizers which have already been discussed, the verbal origin of the complementizer *bɛɛ* is uncertain. The morpheme *bɛɛ* is homophonous to the simulative used in an equalitive comparative construction as exemplified in (16) where it carries the meaning ‘like’.

- (16) *Kofi dé-ná bɛɛ owurɛ.*
Name PROG-walk like chief
‘Kofi is walking like a chief’.

As a simulative, *bɛɛ* introduces a standard of comparison, *owurɛ* ‘chief’ (see Akrofi Ansah, 2009). It is unclear at this stage whether the two morphemes, the simulative and the complementizer are merely homophonic or historically related. I will tentatively conclude that the complementizer *bɛɛ* has ever occurred as a verb with all its verbal properties, but has lost these lexical properties to become a function word; the morpheme *bɛɛ* may have developed from the Leteh lexeme for ‘resemble’.

5.0 Summary and Conclusion

The paper has discussed ways by which complement clauses are formed in Leteh. Complement clause types that operate in Leteh are constrained by the interaction of complement-taking verbs and the three complementizers: *yɛ*, *nɛ*, *bɛɛ* that operate in the language. For the purposes of complementation, the complement-taking verbs which are also the main clause verbs are categorized into four semantic classes: propositional attitude, manipulative, cognition-perception and

utterance verbs. The phenomenon therefore involves the matching of complement-taking verbs with certain complementizers.

It is interesting to note that with the exception of the CTV *bòá* 'help' the complementizer, *bèé*, matches all the CTVs. It may be concluded that the complementizer, *bèé* is the default complementizer in Leteh.

Furthermore, it is observed that when complement-taking verbs function with more than one complementizer, some grammatical differences result, for example, when the manipulative verb, *wòré* 'force' co-occurs with the complementizer, *nè*, the construction carries an element of certainty, but in the case of the complementizer, *bèé*, the opposite is deduced. Leteh complement clauses mainly function as sentential objects.

The paper has demonstrated that grammaticalization plays an important role in explaining synchronic grammatical facts in language. For instance, the occurrence of *nè* in various syntactic positions can be explained as a case of grammaticalization which enables the morpheme to assume different functions. Furthermore, the diachrony of the complementizers has helped to explain synchronic features like polysemy in the language.

ABBREVIATIONS

1PL	1 plural
1SG	1 singular
2PL	2 plural
2SG	2 singular
3PL	3 plural
3SG	3 singular
ADP	adposition
AVO	agent verb object
COMP `	complementizer
CTV	complement-taking-verb
DEF	definite
FUT	future
NEG	negative
OBJ	object
PAV	propositional attitude verb
PRES	present
PROG	progressive
PST	past
SUB	subjunctive
SUBJ	subject
SV	subject verb

REFERENCE

- Akrofi Ansah, Mercy. 2009. *Aspects of Leteh Grammar*. Ph. D. Thesis. The University of Manchester.
- Dixon, R. M. W. 1997. *The rise and fall of languages*. Cambridge: Cambridge University Press.
- Dixon, R. M.W. 2006. Complement clauses and complementation strategies in typological perspective. In R.M.W Dixon and Alexandra Y. Aikhenvald (eds.). *Complementation: A cross-linguistic typology*. pp. 1-48. Oxford: Oxford University Press.
- Ghana 2000 Population and Housing Census. Ghana Statistical Service.
- Givón, Talmy. 1984. *Syntax: A Functional-Typological Introduction Vol. 1*. Amsterdam: John Benjamins.
- Güldemann, Tom. 2008. *Quotative Indexes in African Languages: A Synchronic and Diachronic Survey*. EALT 34. Mouton de Gruyter.
- Heine, B., Claudi, U. & Hunnemeyer, F. 1991. From Cognition to Grammar: Evidence from African Languages. In E. C. Traugott and B. Heine (Eds.) *Approaches to Grammaticalization*. Vol. 1, pp. 149-187. Amsterdam: John Benjamins.
- Hopper, P. J. and Traugott, E. C. 2003. *Grammaticalization*. Cambridge: Cambridge University Press.
- Lewis, M. Paul. (ed.). 2009. *Ethnologue: Languages of the World*. Sixteenth edition. Dallas, Texas: SIL International.
- Lord, Carol. 1993. *Historical Change in Serial Verb Constructions*. Amsterdam: John Benjamins.

Newman, John. 1998. The Linguistics of Giving. *Typological Studies in Language* 36. Amsterdam: John Benjamins.

Noonan, Michael. 2007. Complementation. ed. by Timothy Shopen. *Language Typology and Syntactic Description*. Cambridge: Cambridge University Press.

Osam, Emmanuel Kwaku. 1994. *Aspects of Akan Grammar. Ph. D. Thesis*. University of Oregon.