



PROSODIC ANALYSIS OF NOUN CLASS MARKERS IN THE SYNTAX OF BÀTÒNU LANGUAGE

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ABSTRACT: *The grammatical derivation of languages varies, leading to language specificity. In particular, languages with noun classes have unique methods of realizing them through prefixing and sometimes suffixing, such as in the Bâtònu language. This study focuses on the interface between syntax and phonology in the grammatical realization of the noun class system in the Bâtònu language, spoken in the Baruteen Local Government Area of Kwara State in Nigeria. Interviews were conducted to gather data, supplemented by secondary sources. Theoretical principles from Government and Binding Theory (GB) and Autosegmental Phonology were used to represent sentence structure and the tonal analysis of the data. Previous research established that the language has seven noun class markers (NCM). We found that phonological features, such as labialization, nasalization, and tone, can influence and determine the grammatical functions of class markers in languages that attest to them. In the case of Bâtònu NCM, the tone is the determining factor. We assume that the class markers are unmarked at the underlying representation (UR), and when a floating high tone (HT) is assigned to the NCM underlyingly, they function as class markers. When a floating mid-tone (MT) is assigned, they become relative clause marker variants, and when in contact with the HT focus morpheme -á in focus constructions in the language, they function as focus marker variants.*

KEYWORDS: Tone, Noun class system, Autosegmental phonology, Government and binding theory, Bâtònu language.



INTRODUCTION

Noun class languages categorize nouns into semantically based classes, each of which has a distinct class marker. This is noted by Arokoyo (2020) and Sanusi (2001). Edgar (1999) explains that class membership and concord are usually marked by prefixes, and less commonly, by suffixes. For instance, Bulom and Tiv languages use prefixation while Tem and Fulani use suffixation. Bàtònu uses suffixation. Even in the Pacific, most class languages of Australia use prefixation while Gurma and Tobote use circumfixation. Gregersen (1999) notes that for a language to be classified as Bantu, it must have a certain number of noun classes and concord by prefixation. Languages without this feature are called sub-Bantu, while those that have it are referred to as Bantoid. Sanusi (2001) identifies seven prominent noun classes that distinguish a set of nouns using suffixes in Bàtònu. They are as follows:

- -wī class for human names (common noun)
- -mē class for liquids e.g., water, oil
- -gé class for animal e.g., goat
- -té class for craft work/artifact e.g., book, bag, pot, etc.
- -yé class for bicycles, sticks, bananas, etc.
- -ní class for edible items e.g., vegetables, legumes, etc.
- -sí class for iron, cotton

In African languages like Bàtònu, tone plays a significant role in creating semantic distinctions between lexical items in their derivations. This research delves into the relationship between syntax and phonology in the grammatical derivation of NCM. Our analysis focuses on describing the syntactic environments in which NCM occurs and functions in different constructions such as relative construction, focus construction, etc in the language

Bàtònu is commonly known as 'Bariba' or 'Baruba' among non-native speakers, but its native speakers refer to it as "Batombū." It is a tone language according to Williamson and Blench (2000). It was classified as a member of the Niger-Congo family's Gur (voltaic) sub-group. The Gur language group is divided into Central Gur and Peripheral Gur. The language is spoken as a first language or mother tongue in two neighboring countries in West Africa - Nigeria and the Republic of Benin. In Nigeria, Batonu is spoken in areas like Kosubosu, Okuta, Gwanara, Yashikira, Ilesha, and Chikanda, all in the Baruteen Local Government Area of Kwara State, with its headquarters located in Kosuboso. In the Republic of Benin, Bàtònu is spoken in areas like Parakou, Nikki, Kandi, and Natitingou, among others. The Nikki dialect of Bàtònu is considered the standard form of the language.



LITERATURE AND THEORETICAL REVIEWS

In this section, we will briefly review our theories of analysis: Government and Binding Theory (GB) and Autosegmental phonology. Additionally, we will attempt a brief literature review of noun classes in noun class languages.

GOVERNMENT AND BINDING THEORY

The development of TG came in phases from the first model of grammar in Chomsky's *Syntactic Structures* of 1957 to the Standard Theory (ST) named after Chomsky's **Aspect of the Theory of Syntax** published in 1965. The various transformational rules in TG are collapsed to a single rule of move alpha (henceforth move- α) which means moving anything anywhere leaving a trace of the movement at the extraction site. The move alpha mapped the D and S - S-structures together. The levels of representation in the ST wear a new look with different terminologies in the GB. D - Structure and S - Structure surface to replace the standard's Deep Structure and Surface Structure respectively. The phonological and semantic components of the ST were also replaced with PF (i. e. the output of grammar from sound's end) and LF (which is the output of grammar from meaning end). It is a modular theory with seven (7) sub-theories (Ndimele, 1992: 19).

AUTOSEGMENTAL PHONOLOGY

The central premise of Generative Grammar as set out in SPE is that what it means to know a language is to know a set of underlying representations and a set of rules. The approach is called Generative Grammar because the rules apply to generate the surface forms from the underlying representations. The process of generating surface representations (SRs) from underlying representations (URs) is called a derivation (Zsiga, 2013: 279-281).

Since the publication of SPE, this model of grammar as an assembly line has been revised significantly. Of such recent versions are Autosegmental Theory (a rule-based approach) and Optimality Theory (there are no rules whatsoever). What makes each of these a generative grammar; however, is the basic conception of language as a process or algorithm that generates all possible SRs from a set of URs that can be concatenated in various ways. Derivations show sequential rules operating to change URs into SRs.

Autosegmental phonology is an attempt to provide a more adequate understanding of the phonetic side of linguistic representation (Goldsmith, 1999: 137). With this theory, phonetic representation is composed of a set of several simultaneous sequences of segments with constraints on how the various levels of sequences can be associated. The basic insight of the autosegmental approach is that although tone is realized as a pitch contrast on vowels (high pitch vs. low, or falling vs. rising), tone features are independent of the segments that realize them: tones can easily jump from one vowel or syllable to the next, they can stay behind when a vowel is deleted, they can crowd onto one vowel or spread out over many. That is, tones are autonomous from segments. Hence, tones are separate features that are linked to the vowel, but not really part of the vowel.



REVIEW OF CLASS MARKERS

Several works have been attempted by scholars on NC from Welmers (1952), Dindi (1983), Doneux (1965), Hegeman (1992), Manessy (1993), Prost (1979) as cited in Winkelmann (2007). Winkelmann (2007) attempts a comprehensive analysis of Bàtònu's noun suffixes and their characteristic concords. He submits among others that the initial consonants of the class pronouns are also found with the noun suffixes except for class which has the suffix –u. Beyond the already established NCMs, Winkelmann (2007) includes in his analysis of NC the different distributions of the pronominal agreements and formulates rules to capture their distributions or occurrences. Dixon (1986: 106) in (Contini-Morava, 2002: 2) establishes that in terms of the realization, noun classes always constitute a closed grammatical system, on a par with number and case and tense (where any member can be specified as the complement of the other members of the system e.g., 'not masculine or neuter' must be 'feminine' in Latin). Information about noun class may be fused in a single morpheme with definiteness (as in French), number (as in Bantu languages), or case (as in Latin). Noun classes may be coded as affixes, or as separate grammatical words or clitics such as articles, or 'noun markers' in Dyirbal. All these observations form the basis on which analyses of the NC system are described and analyzed in languages that attest them, especially the Gur languages.

DATA PRESENTATION AND ANALYSIS

In this section, we present the description of the different sentential contexts of the NCM in the language to clearly show their occurrence, distributions, and functions. We will begin the analysis here by looking at the different items that belong to the NCM and their unique attributes before we examine the description of focus construction in the language, the relative construction, and finally the prosodic analysis of the derivation.

BÀTÒNU NOUN CLASS SYSTEM

As we have established earlier, Bàtònu attests to seven (7) NCMs that occur with different nouns in the language. They are structurally part of the noun and follow it directly. Unlike languages where they occur before the noun they quantified. In Bàtònu, they are suffix-like. Their distribution is shown as follows:

Noun Class Marker	Gloss
-wí class	
tònkùrò-wí	woman
tòndùrò-wí	man
bìi-wí	child
méro-wí	mother
bàá-wí	father
mẹ́rísíò-wí	teacher
-yé class	
góbí-yé	money
dùma-yé	horse
yàgèdè-yé	banana
siduma-yé	bicycle
táábùrù-yé	table



dóbí-yé	guinea corn
-mẹ class	
bóm-mẹ	milk
gúm-mẹ	oil
tím-mẹ	honey
-té class	
wéké-té	pot
kéùdi-té	school
kìrìkiri-té	mouse
wéké-té	pot
bòò-té	goat
dìi-té	room
-sì classes	
taa-sì	yam
síi-sì	iron
wẹn-sì	cotton
-ní class	
gbèrè-ní	corn
yàbo-ní	okra
gòò-ní	necklace
dia-ní	food
na-ní	cloth
-gé class	
nemù-gé	antelope
bọọ-geé	dog
boo-gé	goat
musukú-gé	cat
kùrúsò-gé	pig

From the data presented above, it is clear that the NCMs can only occur with an HT. We propose that underlyingly in the lexicon of the language, the NCMs are items without any tonal assignment. In other words, their bare forms are underlyingly toneless. What determines their syntactic function in the language is then the tone they are assigned. As we have said, they belong to the class of demonstrative qualifiers in the language kind of. They can be substituted by the definite article morpheme *-rú* to mark definiteness in the language such as:

tíré-rú	‘the book’	
bíré-rú	‘the basket’	
góbí-rú	‘the money’	
dùma-rú	‘the horse’	
gbèrè-rú	‘the corn’	
yàbo-rú	‘the okra’	
kìrìkiri-rú	‘the mouse’	
wéké-rú	‘the pot’	etc



2 *Olú kùn kità-rù òkà u na*
Olú NEG chairDET carry AGRS come

‘Olú didn’t bring the chair’

3 *Sà kòn tíré-rú garí-mó*
We FUT book-DET read.PROG

‘We will be reading the book.’

4 *Sà kùnmáà tíré-rú garí-mó*
We NEGFUT book-DET readPROG

‘We will no longer be reading the book.’

This possibility of the NCM showing demonstrative qualifying, definiteness, and their other complex attributes gives the NP, a structural form of a DP in the language. Their derivation based on our proposal is illustrated in the table below:

Table 1: Derivation of Noun Class Marker (NCM)

Lexical Item	High Tone (HT)	Lexical Item + HT = Noun Class Marker (NCM)
-wi	´	-wí
-mẹ	´	-mẹ́
-ge	´	-gé
-te	´	-té
-ye	´	-yé
-ni	´	-ní
-si	´	-sí

As shown on Table 1 above, NCMs in Bàtònu are prosodically unmarked in the UR. They include the floating feature H(igh) tone. This floating HT attaches to the UR items and therefore it derives the class markers as illustrated in (5a) below. This allows us to derive the form for the NCMs. We can postulate an underlying Floating H rule which becomes associated to the surface lexical item as (5b).

(5a) UR item + HT → NCM

For example, *tònkùrọ-wi + ´* → *tònkùrọ-wí*

(5b) A Floating H associates to the rightmost tone-bearing unit of the noun.



NOUN CLASS MARKER IN FOCUS CONSTRUCTION

Focus is marked in various ways across languages, prosodically, (English intonational focus) morphologically or structurally (Yorùbá, Chinese, etc.). The function of intonation in English is morphologically taken over by specific meaningless words/particles that mark elements of the sentence in focus or not in some other languages.

In Bàtònu, the major focus particle is *-á*. It is used in bringing either constituents or an entire sentence into focus. However, we seem to identify variants for this marker based on the contact between the NCMs and the focus marker in the language. When the demonstrative qualifiers (NCMs) contact with the focus marker, it changes the form of the NCM thereby assigning them a new function of the focus marker.

(6) *Swaagbiyọ wí u tású-sí dí*
 leader NCM AGRS yam-NCM eat.PAST
 ‘The leader ate yam’

When the subject NP such as *swaagbiyọ* is focused, *wá* will be realized as the focus marker while *sá* will be the marker when the object NP of (6) is brought to focus as in (7-8) respectively.

(7) *Swaagbiyọ wá u tású-sí dí*
 leader FOC AGRS yam-NCM eat.PAST
 ‘It is the leader that ate yam’

(8) *Tá-sá swaagbiyọ-wí u dí*
 yam-FOC leader-NCM AGRS eat.PAST

‘It is yam the leader ate’

All major syntactic categories (Noun, Verb, Adjective, Postposition, etc.) can be focused by several syntactic explanations and analyses as well as different morphological derivations.

Focusing on an element of a sentence moves the element to an A¹ - position referred to as the [Spec, CP] position of the sentence. This reflects the sub-categorization capacity of the head (i.e. the focus marker) in sub-categorizing for different elements of the sentence. We will at this juncture examine their derivation one after the other:

(9) a. *Tònkùrọ-wí u Bíọ bọru-té dwua*
 woman-NCM Agrs Bio bag-NCM buyPAST

‘The woman bought Bio a bag’

b. *Tònkùrọ wá Bíọ bọru-té dwua*
 woman FOC Bio bag-NCM buy.PAST

‘It is the woman who bought Bio a bag.’



c. *Bòru tá tònkùrọ-wí u Bíọ dwua*
 bag Foc woman-NCM Agrs Bio buy.PAST
 ‘Bag is what the woman bought for Bio.’

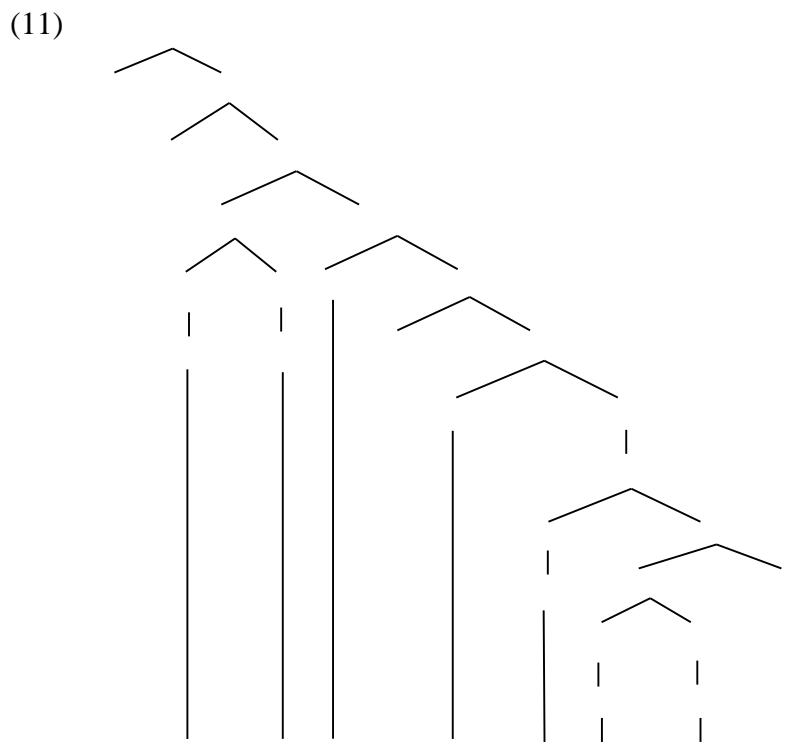
d. *Bíọ wá tònkùrọ-wí u bọru-té dwua*
 .
 Bio FOC woman-NCM AGRS bag-NCM buy.PAST
 ‘Bio is the one the woman bought bag for

e. *Dwùebá tònkùrọ-wí U Bíọ bọru-té dwua*
 buying.FOC woman-NCM AGRS Bio bag-NCM buy.PAST
 ‘Buying is what the woman did’

(10) a. *Swaagbiyọ-wí u tású-sí di gbèè-té sọ*
 Leader-NCM AGRS yam-NCM eat farm-NCM in
 ‘The leader ate yam in the farm’

b. *Gbèè-té sọ swaagbiyọ-wí u tású-sí di*
 farm-NCM in leader-NCM AGRS yam-NCM eat.PAST
 ‘It is in the farm that the leader ate yam’

(9a) and (10a) are the simple declarative sentences which invariably serve as the underlying forms or D-Structures for the derived focus sentences (9b - e) and (10b). The structure of (9a) is represented as follows:





Subject NP Focus

In (9b) rewritten as (12) for ease of reference below,

(12) [_{CP} *Tònkùrò_i* wá [_{IP} t u [_{VP} *Bíọ̀* *bòru-té* *dwùà*]]]

woman Foc Agrs Bio bag-NCM buy/Past

‘It is the woman who bought Bio a bag’

Communicative prominence is placed on the subject NP i.e. it is uttered from *tònkùrò* the woman’s point of view. This is syntactically achieved by moving the NP completely to occupy the [Spec, CP] position of the sentence (A¹ - position) leaving a space occupied by a co-indexed trace at the extraction site. This is contrary to the derivation of such in Yorùbá language. In Yorùbá, the movement of the subject NP left a resumptive pronoun with a phonetic content at the extraction site thereby giving it a different syntactic implication (see Táíwò 2008).

Direct Object NP Focus

The syntactic explanation in terms of the movement operation in focusing direct object is similar to that of the subject NP. In (9c), re-written as (13)

(13) [_{CP} *Bòru_i* tá [_{IP} *tònkùrò-wí* u [_{VP} *Bíọ̀_e* *dwùà*]]]

Bag FOC woman-NCM AGRS Bio buyPAST

‘Bag is what the woman bought for Bio’

Bòru-té ‘the bag’ which is the direct object (DO) and the internal argument of the verb *dwùà* ‘bought’ moved explicitly to occupy the [Spec, CP] position of the sentence. The movement of the NP left an empty category (EC) at the extraction site. The moved NP ‘*bòru* ‘bag’ becomes the antecedent of the ECs. Our VP representation in (10) follows Williams’s (1975) and Chomsky’s (1981) postulations on Double Object Construction (DOC). This is structurally different from Sanusi (2001) which is patterned after Oehrle (1976)¹

Indirect Object NP Focus

Focusing the indirect object of a verb has the same grammatical explanation as that of the direct object in section 3.2.2 above.

(14) *Bíọ̀* wá *tònkùrò-wí* u *bòru-té* *dwùà*
Bio FOC woman-NCM AGRS bag-NCM buy.PAST

‘Bio is the one the woman bought bag for’

But it is worthy of note that in Bàtònu, the objects of the verb in a double object construction cannot be transposed as in English dative construction (Sanusi, 2001).

¹

See Sanusi (2001) the syntax of double object construction in Bàtònu



15. (a) The man gave the money to the woman

(b) The man gave the woman the money

The order of the objects NPs in (9) re-written as (16) cannot be changed in Bàtònu to derive (16b) otherwise renders the construction unacceptable.

(16) a. *Tònkùrọ-wí u Bító bọru-té dwua*
 woman-NCM Agrs Bio bag-NCM buy.Past

‘The woman bought Bio a bag’

(b) *Tònkùrọ-wí u bọru-té Bító dwua*
 woman-NCM AGRS bag-NCM Bító buy.PAST

‘The woman bought the bag Bio’

Predicate Focus

Before a verb can be focused in Bàtònu, it has to be nominalized. The predicate in the sentence is nominalized through a morphological process known as affixation (suffixation). The bound morpheme (suffix) *-bú* is attached to the root verb in (8e) to derive its nominal form *dwùebú* *buying*. The last vowel of this nominal form is elided when in contact with the focus marker ‘-á’ which eventually contracts with the relic. In other words, the verb *dwùe* means *to buy* while ‘*dwùebú*’ is the nominalized form (*buying*). The bare form of the verb is left at the extraction site while the nominalized form occupies the [Spec, CP] position. A similar claim is made in the predicate focusing on Yorùbá. The only difference is the morphological process involved in the nominalization of the verb that is reduplication (partial).

PP Focus

In (10b), the whole of the PP is focused in what looks like a total adjunction of the PP to the [Spec, CP] position of the sentence. There is no overt focus marker and the movement left a syntactic gap occupied by a co-indexed ‘e’ at the extraction site as shown in (17)

(17) *Gbèè-té sọ swààgbìyọ-wí u tású-sí di*
 farm-CM POST leader-CM AGRS yam-CM eat

‘It is in the farm that the leader ate yam’

The derivation as a result of the contact between NCMs and focus markers is summarized and illustrated in table (2) below:

**Table 2: Derivation of Focus Marker Variants (FMV)**

Lexical Item	Deletion of Final Vowel	Focus Marker	Derivation
- wi	w	-á	wá
- me	m	-á	má
- ge	g	-á	gá
-te	t	-á	tá
-ye	y	-á	yá
-ni	n	-á	ná
-si	s	-á	sá

The final vowel of the stem is elided and the focus morpheme with a H tone retains its tonal specifications to derive focus marker variants (FMV) when in Bàtònu. Therefore, to derive FMV, there is a deletion of the underlying vowel of the CV form of the lexical item, after which the H tone focus marker is linked to the lexical item. The vowel deletion rule is straightforward, as in (18a) below. The example in (18b) is therefore the focus marker variant derivation.

18a Vowel deletion:

$$V \rightarrow \emptyset / C _$$

18b. $w + \acute{a} \rightarrow w\acute{a}$

$$m + \acute{a} \rightarrow m\acute{a}$$

RELATIVIZATION

On relativization, different theoretical views have been suggested by scholars such as the matching theory by Chomsky (1965) which views relativization as involving the embedding of a simple sentence in an NP functioning within a matrix sentence. It also requires that the two NPs must be identical, promotion theory by Schachter (1973) assumes that relativization consists of a null NP head in which a simple embedded sentence is the qualifier among others. So, by insertion, relativization is the insertion of a relative clause into the structure of a sentence. In English, a relative clause or adjectival clause must meet three requirements:

- ❖ It will contain a subject and a verb.
- ❖ It will begin with a relative pronoun (such as who, whom, whose, or relative adverb when, where, why etc).
- ❖ It will function as an adjective, answering the questions, (What kind? How many? Which one?)



Relative clauses can be BOUND or FREE. A bound relative clause qualifies an explicit antecedent (usually a noun or noun phrase) appearing in the main clause and refers back to the element using some explicit or implicit device within the relative clause.

(19) The man who bought the car yesterday went home

A free relative clause on the other hand does not have an explicit antecedent external to itself. Instead, the relative clause itself takes the place of an argument in the matrix clause.

(20) I like what I see

The syntactic process of relativization manifests itself in two distinct forms in the language

-Mid - tone NCM - clause (Mid-T NCM)

-bì - clause

These make the relativization of almost all sentential constituents possible in the language and also make provision for two relative markers. The Mid-T NCM has a wider distribution than the morpheme *bì*. Therefore, it is more productive in the derivation of relative clauses. This is as a result of the fact that Mid-T NCM can be used as relative markers to relativize all constituents of a sentence apart from the verb which uses *bì*.

Sanusi (2001) proposes that the mid tone (MT) displaces the initial high tone (HT) of the NCMs in the derivation of the markers. We disagree with this position on the ground that it is phonologically plausible for a high tone to displace low tone but not vice versa.

We argue that both class marking and relativization are marked by high and mid tones in Bâtõnũ respectively. Lexical items such as -wi, -te, -mẹ, -ge, -ye etc. become NCMs when HT is assigned and relative markers when MT is assigned thereby giving them grammatical functions of modifiers and qualifiers respectively. So, in Bâtõnu, the derivation of the Mid-T NCM Rel. marker is illustrated below:

Table 3: Derivation of the Relative Marker Variants (RelMV) in Bâtõnu

Lexical Item	Mid Tone (MT)	+MT = Rel Marker Variants (RelMV)
- wi	-	wī
- te	-	tē
- mẹ	-	mẹ
-ge	-	gē
-ye	-	yē
-ni	-	nī
-si	-	sī

This is similar to our assumption on the variants of the NCMs in the language as in section 4.1 (Table 1). As shown in table (3) above, when the UR item is assigned MT in the language, a Mid-T NCM Rel marker is realized as stated in the rule in (21) below:

(21) UR item + MT → NCM Rel M



It is evident from the derivation of the FMVs, the Mid-T NCM Rel markers, and the NCMs that tone is phonemic in the language due to the different functions lexical items can perform at its assignment. We observe that the Mid-T NCM Rel markers and the ‘bì’ are in complementary distribution (CD) i. e. they occur in a mutually exclusive environment (where one occurs, the other does not). This can be represented thus:

Table 4: Distribution of Relative Markers

	Subject	Verb	Object	Adjunct
Mid-T NCMs	✓	x	✓	✓
bì	x	✓	x	x

The relativized sentences are exemplified in (22)

(22) a. *Mérisiò-wi u tònùrò-wí wa òù-té sọ*
 teacher-NCM AGRS man-NCM see.PST room-NCM in

‘The teacher saw the man in the room’

b. *Mérisiò wi u tònùrò-wí wa òù-té sọ u wa mìní*
 teacher REL AGRS man-NCM see.PST room-NCM in he BE here

‘The teacher that saw the man in the room is here’

c. *tònùrò wi mérisiò-wí U wa òù-té sọ u wa mìní*
 man REL teacher-NCM Agrs see.PST room-NCM in he BE here

‘The man that the teacher saw in the room is here’

(23) a. *Mérisiò-wi u tònùrò tíré-té sọsì òù-té sọ*
 Teacher-NCM Agrs man book-NCM Show room-CM In

‘The teacher showed the man the book in the room’

b. *Tònùrò wi mérisiò-wí u tíré-té sọsì òù-té sọ u wa bùrà*
 Man REL teacher-NCM AGRS book-NCM Show room-NCM in he BE Good

‘The man whom the teacher showed the book in the room is good’



c. *dù te so mérésiò-wí u tònùrò tíré-té sòsì ga wa bùrā*
 room REL in teacher-NCM AGRS man book-NCM show it BE good

‘The room in which the teacher showed the man a book is good’

d. *sòsìbù bì mérésiò-wí u tònùrò tíré-té sòsì dù-té sò wa bùramá*
 showin RE teacher- AG man book- show room- in BE good
 g L NCM R NCM NCM

‘Showing that the teacher showed the man a book in the room is good’

Sentences (22a) and (23a) are D-Structures of the relative clauses, while the whole relativized sentences in (22) and (23) have two different clauses, the matrixes clauses introduced by the relativized elements and the attached segment as in (24a) and (24b).

(24) a. *Mérésiò-wí u wa mìní*
 Teacher- AGR B here
 NCM S E

‘The teacher is here’

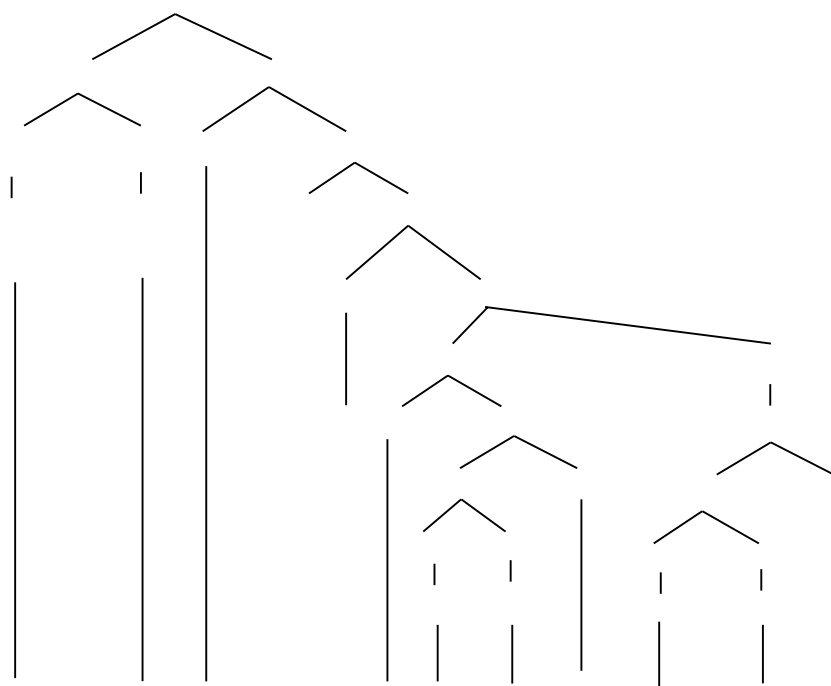
b. *Tònùrò-wí U wa bura*
 teacher-CM AGR B goo
 S E d

‘The teacher is good’

and the embedded clauses introduced by the markers. These are the relativized clauses whose D- structures are exemplified in (22a) and (23a). So far, we have demonstrated from the examples that the argument NP at the underlying form can be relativized in Bàtònu. Relativizing a sentential constituent grammatically changes the sentence form to an NP in which the relative clause structurally complements the relativized constituent. Segments must be attached to the clause to form a complete idea as in (22b-c) and (23b-d).



(25)



It is expedient to also note that the class of the relativized NP determines the types of the matrix clause AGR. For instance, the human nouns in (22b-c) and (23b) select *u he* while in (23c) ‘*dìi*’ *room* selects *ga it*.

Different transformational movements are involved in the process of relativizing arguments and/or constituents from the extraction sites where they are base generated to the landing site. The movements are A^I - movements to an A^I - position of a relative clause (small clause) in a structure-preserving order. These movements are explicit, leaving at the extraction site an EC except VP relativization in which the copy of the nominalized item is left at the extraction site, which is then co-indexed with the moved.

Sanusi (2001) argues that no movement is involved in relativization of a subject NP. We partially agree with this assumption. Though there is no obvious movement on the surface, both structural and semantic implications of this show that movement is involved. One, relativizing subject NP also calls for the addition of a segment to complete the idea of the NP since we cannot say.

(26) Mérisiò wi u tònùrọ-wí wa òi-té sọ

Teacher REL AGRS man-NCM see room-NCM in

‘The teacher who saw the man in the room’

To give us the complete idea portrayed in (22b) re-written as (27), then, movement is involved.

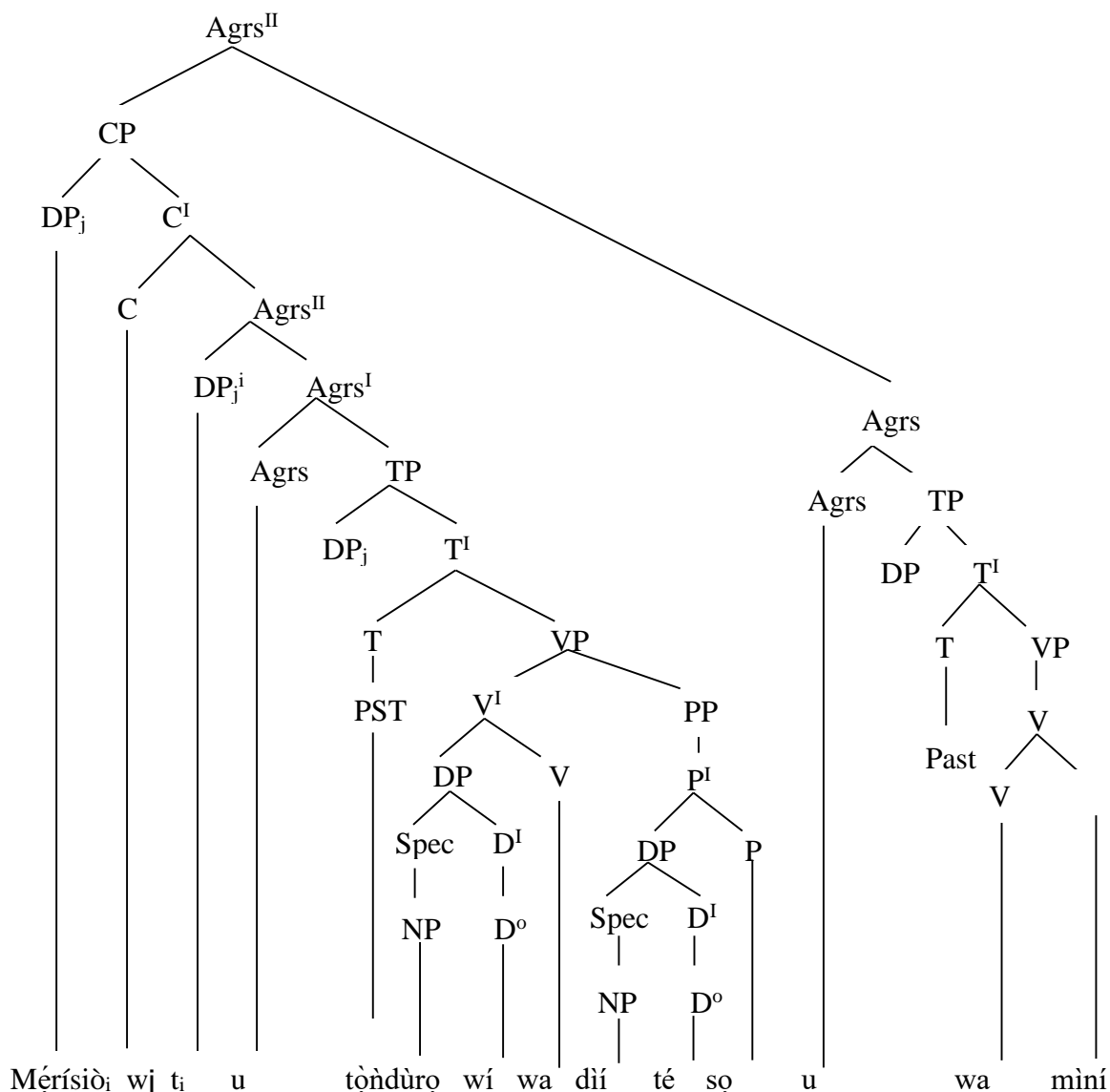


(27) m̀́r̀́s̀́ì́ò́w`i u t̀́ò́nd̀́ù́r̀́ò́-w`i w d̀́ì́-t̀́e s̀́o u w`a m̀́n`i
 Teacher REL AGRS man NCM see.PST room—NCM in he BE
 here

‘The teacher that saw the man in the room is here’ Subj Rel.

Two, (b) has the same structural representation as the other relativized sentences. Relativizing subject NP changes the structure of the underlying sentence as in (22a) to an NP and automatically occupies the [Spec, CP] position of the relative sentence as in (28).

28.



“The teacher who saw the man in the room is here”

The [Spec, Agrs] position is empty in the representation of the relative clause above. These justify the occurrence of movement even when the subject NP is relativized in B̀́t̀́ò́nu.



In the case of VP relativization, the verb undergoes nominalization similar to the case of predicate focusing in the preceding section, before the relative marker ‘bi’ is introduced (Sanusi 2001). A copy (the bare form) of the verb is left at the extraction site after the movement of the nominalized form as in (23d).

When the object of a PP is relativized such as ‘dii’ *room* in ‘dii - té sọ’ *in the room* as in (23c), the whole of the PP moves explicitly to occupy the [Spec, CP] of the clause. That means, that stranding of the postposition to relativize its object NP is not acceptable in the language but more extensive pied-piping is permitted or required as noted by Ross (1967) in Downing (1977:172).

SUMMARY OF THE PROSODIC DERIVATION OF NCM

Phonological features influence and determine the grammatical functions of class markers. Features that include grammatical morpheme include; [labial], nasalization, tones, etc. In the case of Bàtònu, it is tone. Grammatical morphemes that can be indicated by phonological features include; tense/aspect distinction, third-person singular, and noun class markers, among others. In our case in this study, it is NCM as we have demonstrated. The table below is the summary of the phono-syntactic analysis of the NCM we have attempted so far:

Table 5: Summary of the Prosodic Derivation of the NCMs

		COLUMN 1		COLUMN 2		COLUMN 3
Lexical Item	HT	+HT = Class Markers	MT	+MT = Relative Marker Variants	HT FOC Morpheme	+FOC MORP = Focus Marker Variants
-wi	/	- wí	-	wī	-á	wá
-te	/	- té	-	tē	-á	tá
-me	/	- mé	-	mē	-á	má
-ge	/	- gé	-	gē	-á	gá
-ye	/	yé	-	yē	-á	yá
-ni	/	ní	-	nī	-á	ná
-sí	/	sí	-	sī	-á	sá



CONCLUSION

The role of tone in the grammatical analysis of language, especially the tone languages of Africa can never be over-emphasized. Tone plays vital roles not only in the syntactic realization but across other levels of language description. Grammatical items combine different linguistic features in their derivation. And to adequately account for these inherent features, an all-encompassing and comprehensive linguistic apparatus is needed. All the suffixes in the data come to agree with the underlying tone of the NCM, relative marker etc.

In Batonu NC, there is tone stability; here, it is an instance where a derivational constraint makes the tone to attach the underlying tonal specification on the surface. Such that, if it is HT, then we have a NCM, and if it is a MT, the relative marker is derived.

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LIST OF ABBREVIATIONS

A ^I	Argument Bar
AGRSP	Subject Agreement Phrase
AGRS	Subject Agreement
CP	Complementiser Phrase
CD	Complementary Distribution
DET	Determiner
DO	Direct Object
DP	Determinant Phrase
EC	Empty Categories
FMV	Focus Marker Variant
FOC	Focus
FUT	Future Tense
GB	Government and Binding
HT	High Tone
IO REL	Indirect Object Relative
MORP	Morpheme
,MT	Mid Tone
NC	Noun Class
NCM	Noun Class Marker
NP	Noun Phrase
PP	Prepositional Phrase
PROG	Progressive
PST	Past
REL	Relative Clause
SPEC	Specifier
TP	Tense Phrase
UR	Underlying Representation
VP	Verb Phrase