THE SYNTAX-PHONOLOGY INTERFACE AND PHRASING IN CISUKWA, CINDALI AND CILAMBYA RELATIVE PROSODIC CLAUSES

by

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Abstract

This paper is a descriptive analysis of the prosodic structure of relative clauses in relation to various syntactic structures in Cindali, Cisukwa and Cilambya - a cluster of related varieties spoken in Malawi, Tanzania and Zambia. The analysis in this paper is for the varieties spoken in Northern Malawi particularly in Chitipa district. The paper sought to answer the following questions: i) What is the prosodic structure of relative clauses of Cisukwa, Cindali and Cilambya? ii) What is the relationship between phonological phrasing of relative clauses and syntax.

The paper argues that the prosodic phrasing of Cisukwa, Cindali and Cilambya is determined by syntactic structure. This is similar to what has been observed in several other Bantu languages. The paper notes that restrictive clauses are right-bounded by a prosodic break and XPs serving as heads of relative clauses, whether as subjects, objects (both direct and indirect), or other adjuncts are normally phrased together with the relative clause.

Keywords: Cisukwa, Cindali, Cilambya, phonological phrase, relative clause, syntax

1.0 Introduction

In recent years, there has been a considerable amount of attention paid to analyses of prosodic phrasing in relative clauses in relation to the Syntax-Phonology interface. A number of theoretical proposals have been advanced to account for this phenomenon in several languages (cf. Cheng & Downing 2007, Cheng & Downing 2010, Kisseberth 2010, Downing & Mtenje 2011, Henderson 2006, Cheng & Kula 2006, Mtenje A.D. (2011), Mtenje, A.A

(2016), Kanerva 1990, Morimoto 2007, Morimoto & Downing 2007, Selkirk 2000, Simango 2006, Truckenbrodt 1995, 1999, Zeller 2004 and others).

In this paper, we present a description of the prosodic structure of relative clauses in relation to various syntactic structures in Cindali, Cisukwa and Cilambya, a cluster of related Bantu dialects spoken in Chitipa District of Northern Malawi. It is argued that the prosodic phrasing of restrictive relative clauses in this cluster, like in several other Bantu languages, is determined by syntactic structure. Particularly, it is shown that as in several other languages, restrictive relative clauses are right-bounded by a prosodic phrase break and that XPs which serve as heads of relative clauses, whether as subjects, objects (both direct and indirect), or other adjuncts are normally phrased together with the relative clause. The paper is structured as follows: In section 2.0, we present a brief linguistic background to the language cluster. This is followed by a description of various relative clause types and the interaction between Syntax and prosodic phrasing in section 3.0. The last section presents general observations and the conclusion.

2.0 Background to the language cluster

It has been argued that Cindali, Cisukwa and Cilambya are closely related dialects of the same language (cf. Mtenje, A.A 2016), although, for various socio-political reasons, the speakers of these varieties prefer to refer to them as different languages.Guthrie (1967-1971) classified them as belonging to Zone M. Mtenje A. A. (2016), uses the acronym **SuNdaLa** to refer to this language cluster and argues that the three dialects share 85% cognates, with Cindali and Cisukwa sharing 96% cognates, hence being more closely related. The Center for Language Studies of the University of Malawi's (2006) Language Survey report also draws similar conclusions about the morpho-phonological similarities among the three varieties.

2.1 Data collection and methodology

The data reported in this study was collected through oral interviews and recordings with Mr Steven Ng'ambi, a 57 year old Clerical Officer employed by Chancellor College, University of Malawi, and a native speaker of Cilambya. The Cindali data was supplied by Mrs Ng'ambi, a house wife and a native speaker of the variety, whose age is estimated at 55. In both cases, the data was collected using direct elicitation. As it will be noted, the paper presents data from Cindali and Cilambya only. Cisukwa data has been omitted due to the fact that it is identical to that of Cindali due to the close similarity between the two varieties.

3.0 Relative clauses and their interaction with prosodic phrasing

Many recent studies on relative clauses (cf. Cheng & Downing 2007, Downing & Mtenje 2010, 2011, Henderson 2006, Cheng & Kula 2006, Kanerva 1990, Morimoto 2007, Morimoto & Downing 2007, Selkirk 2000, Simango 2006, Truckenbrodt 1995, 1999, Zeller 2004 etc.) have argued that phonological phrases are principally defined with reference to syntactic constituent edges. In most of the analyses, it has been shown that right edges of XPs are generally aligned with phonological phrases. Hence, normally one finds a phonological phrase boundary at the right edge of major XPs like NP, VP.

In accounting for this phenomenon, Truckenbrodt's (1995, 1999) Optimality Theoretic analysis proposes that maximal XPs (like the XP containing the verb and its complements) must satisfy a Wrap Constraint which states that an entire maximal lexical XP must be contained in a single Phonological Phrase (however, see Downing & Mtenje 2011 for an analysis of Chichewa phonological phrasing with mismatches between syntactic constituency and phonological phrasing).

In this paper, we demonstrate that Cindali and Cilambya restrictive relative clauses and their phrasing are consistent with the Wrap Constraint in that heads of relatives are phrased together with other constituents in the XP. In order to clarify the position, we start by presenting prosodic cues for phonological phrases in the two varieties in relation to what generally obtains in Bantu.

3.1 Prosodic cues for relative clauses

A number of studies on relative clauses in Bantu languages have shown that these may be distinguished from main clauses by both segmental and prosodic cues such as tone. Downing & Mtenje (2011) and Miti (2002), for instance, have argued for Chichewa and Cinsenga, respectively, that segmental relative markers in these languages can be omitted because tone cues are adequate to signal relative clauses. Additionally, for languages like Chichewa, the right edges of syntactic phrases are generally marked by prosodic features like vowel length on penultimate syllables which are sometimes accompanied by contour tones. Thus, right boundaries of relative clauses are also distinguished by these phonological cues (cf. Downing & Mtenje 2011 for details).

Likewise, in the SuNdaLa varieties, one finds prosodic cues for phonological phrase edges which are coterminous with syntactic phrase boundaries. Generally, the right edge of such a phrase is marked by vowel length on the

penultimate syllable and contour tones, whenever there is a high tone either on the penultimate or final vowel. Syntactic structures like relative clauses, are therefore, also signaled by similar phonological cues at their right edges.

We start by giving data which shows that NPs and VPs in the SuNdaLa form separate phonological phrases. This is shown below.

NPs and VPs are separate phonological phrases (phrase edge marked by "}")

Cindali

1. áβiifi} íβite indaláma ʃáaŋgu}   'The thief stole my money'
      thief- stole- money-my
      *áβifi íβite indaláma ʃáaŋgu}

2. áβana βa sukúulu} áβuli ʃjakufwáala}   'The students bought clothes
      children-of-school- bought-clothes
      *áβana βa sukúlu áβuli ʃjakufwáala}

As it can be seen in (1), the NP *áβiifi* (thief) has a long penultimate syllable, an indication that it does not phrase together with the verb phrase. This means that the NP constitutes an independent phonological phrase from the VP which forms its own phonological phrase as can be seen from the penultimate vowel lengthening at its right edge. If the NP and the VP phrased together, one would have expected to find only one penultimate vowel length (at the end of the entire construction).

Similarly, in Cilambya, NPs and VPs form separate phonological phrases as seen in (3) and (4) below where each one of these constituents has a long penultimate vowel on its right edge.

Cilambya

3. umwíivi} íβi   ndaláma ʃáaŋgu}   'The thief stole my money'
   thief   - stole – money - mine
   *umwívi íβi ndaláma ʃáaŋgu}

4. áβana βasukúulu} βaβúla ívjakuváala} 'The students bought clothes'
   children-of-school-bought-clothes
   *áβana βasukúlu βaβúla ívjakuváala}

In summary, the data from Cindali and Cilambya above show that the right edges of NPs and VPs are signaled by penultimate vowel length which is sometimes accompanied by a falling tone and this shows that XPs in the two varieties form separate phonological phrases and therefore, obey the Wrap Constraint.

3.2 The Morphology of Relative Clauses in Cindali and Cilambya

Relative clauses in Cindali and Cilambya are segmentally marked by the vowels **-o, -e** and **-a**. which are normally preceded by a consonant whose shape is determined by the noun class of the XP which serves as the head of the relative clause. The relative marker ordinarily occurs in front of the relative verb. This is illustrated in the examples below with the relative markers *βó*, *yó* and *βé*.

Cindali

6. umúlindu **βé** akíindiite}   'The girl who ran away'
   girl   - rel - ran away
   *umúliindu} **βé** akíindiite}

7. áβana βa sukulu **βó** aβúlite fjakufwáala} 'The students who bought clothes'
   children-of -school-rel-bought-clothes
   *áβana βa sukuulu} **βó** aβúlite fjakufwáala}

Cilambya

8. umusúngu **yó** akasamáala}   'The girl who ran away'
   girl -   rel - ran away
   *umusúungu} **yó** akasamáala}

9. aβána βasukúlu **βó** βakaβula ivyakuvwáala} 'The students who bought clothes'
   children-of-school-rel-bought-clothes
   *aβána βasukúulu} **βó** βakaβula ivyakuvwáala}

3.3 Phonological phrasing in various structures with relatives

A number of studies on phonological phrasing in relative clauses have shown that in the majority of Bantu languages, heads of restrictive relative clauses, unlike those in non-restrictive relatives, phrase together with the rest of the clause (cf. Downing & Mtenje 2011, Cheng & Kula 2006 for details). In the Cindali and Cilambya data in (6) - (9) above, we find a similar situation in that the subject NP does not have a phonological phrase boundary at its right edge which shows that it phrases together with the rest of the relative clause. The same scenario obtains even when the subject relative is followed by a verb complement as seen in (10) - (13) below.

Cindali

10. úmwifi βé anyíβile ndaláma ʃáangu} akukíinda}
    thief-rel-stole-money-mine-is running
    'The thief who stole my money is running away'
    *úmwiifi} βé anyíβile ndaláma ʃáangu} akukíinda}

11. umúlindu βákukíinda} mwíifi}
    girl-rel-ran away-thief

'The girl who ran away is a thief'
*umúliindu} βákukíinda} mwíifi}

Cilambya

12. umunkhúungu yó akiβi ndaláma zyaane} akusamáala}
    thief-rel-stole-money-mine-is running away
    'The thief who stole my   money is running away'
    *umunkhúungu} yó akiβi ndaláma zyaane} akusamáala}

13. umusúungu yó akasamáala} munkhúungu}
    girl-rel-ran away-thief
    'The girl who ran away is a thief'
    *umusúungu} yó akasamáala} munkhúungu}

In the data above, one finds a phonological phrase boundary at the right edge of the entire relative clause and not after the subject NP, as noted in the examples with an asterisk. This confirms that the head of the relative clause forms a single phrase with the rest of the clause.

Below, we present other types of structures with relative clauses and show the status of phonological phrasing for the relatives.

3.3.1 Headless subject relatives

In relative constructions which do not have an overt NP as the head, the relative clause is wrapped as one phonological phrase whose boundary is at the right edge of the clause. This is illustrated in the data in (14) – (17), below, where the last word in each of the relative clauses has a long penultimate vowel, signaling a phrase boundary. Thus, the forms *úmasuuwa, ndaláama*, *maβíila* and *ndaláama* in (14), (15), (16) and (17), respectively, with long penultimate vowels, are phrase final constituents.

Cindali

14. βé amuβéni uβanda úmasuuwa} aβúuka}
    rel-saw-Banda-yesterday-have gone
    'The ones who saw Banda yesterday have gone'
    *βée} amuβéni uβanda úmasuuwa} aβúuka}

15. βé iβite ndaláama} akíinda}
    rel-stole-money-has run away
    'The one who stole the money has run away'

*βée} iβite ndaláama} akíinda}

Cilambya

16. βó uβanda βaβéni maβíila} βaβúuka}
    rel-Banda-saw-yesterday-have gone
    'The ones who saw Banda yesterday have gone'
    * βóo} uβanda βaβéni maβíila} βaβúuka}

17. βé iβíte ndaláama} asamáala}
     rel-stole-money-has run away
    'The one who stole the money has run away'
      *βée} iβíte ndaláama} asamáala

3.3.2 Subject of relative clause is in an embedded clause

In structures where the subject of the relative construction is in an embedded clause, a phrasing pattern similar to that observed above involving structures with relative clauses with subjects is observed. Thus, the subject of the main clause and the relative clause appear as one phonological phrase. Consider the examples below.

Cindali

18. tutákumanya βá kwangala kulúsooko}
    we-neg-know-rel-playing-by rive
    'We don't know who is playing by the river'
    *tutákumaanya} βá kwangala kulúsooko}

19. uBanda ammenye βá kulemba mayéeso}
    Banda-knows-rel-is writing-exams
    'Banda knows who is writing exams'
    *uBanda ammeenye} βá kulemba mayéeso}

Cilambya

20. tutákumanya βé akwangala mu mbali mwa lúsooko}
    we-neg-know-rel-playing-by-side-of river
    'We don't know who is playing by the river.'
    *tutákumaanya} βé akwangala mu mbali mwa lúsooko}

21. uBánda akúmanya yó akusimba mayéeso}
     Banda-knows-rel-is writing-exams
     'Banda knows who is writing exams'

*uBánda akúmaanya} yó akusimba mayéeso}

In the forms above, the main clause, including its subject, phrases together with the relative clause. This is evident from the fact that there is only one long penultimate vowel in the whole construction and this appears at the end of the sentence. The structure becomes ungrammatical if a phonological phrase boundary is placed at the right edge of the main clause as shown through the examples with an asterisk.

3.3.3 Object relative clauses

Relative clauses which involve object NPs in various types of constructions behave like subject relatives. Thus, typically, the object NP forms one phonological phrase with the rest of the construction and the phrase boundary is signaled by the presence of a long penultimate vowel at the right edge of the construction. We present a number of object relative constructions which depict this.

3.3.3.1 Head of RC is direct object of main clause

Cindali

22. úmfifi βíβi chakúlya chó napíyiite}
    Thief-stole-food-rel-I-prepared
    'The thief stole the food which I prepared'
    *úmfifi βíβi chakúulya} chó napíyiite}

Cilambya

23. uβakwíβa iβíte ícakulya có nanozíize}
    thief-stole-food-rel-I-prepared
    'The thief stole the food which I prepared'
    **uβakwíβa iβíte ícakuulya} có nanozíize}

In the object relative constructions *chakúlya chó napíyiite* (for Cindali) and *ícakulya có nanozíize* (for Cilambya) above, we note that the head of the object relative clauses, *chakúlya* and *ícakulya***,** forms a single phonological phrase with the subject and the verb of the main clause and the other part of the relative clause itself. This is evident from the fact that there is only one long penultimate vowel which occurs at the end of the whole construction in the forms *napíyiite* and *nanozíize*.

3.3.3.2 Head of RC is topicalized direct object of RC

In situations where the head of a relative clause is a topicalized direct object, the entire relative clause is wrapped as one phonological phrase with its right-most edge as the boundary where a long penultimate vowel appears. This is illustrated in the examples below.

Cindali

24. ukalata yó ummanyíʃi aweléenga} ikutuka ílifuumu}
    letter-rel-teacher-read-criticize-chief
    'The letter the teacher read criticizes the chief'
    *ukalaata} yó ummanyíʃi aweléenga} ikutuka ílifuumu}

25. aβaléendo βó Banda aβaβéeni} aβúuka}
    visitors-rel-Mr Banda-saw-have gone
    'The visitors who Banda saw yesterday have gone'
    *aβaléendo} βó Banda aβaβéeni} aβúuka}

Cilambya

26. ukaláta yó ímfumu yaweréenga} ikunyoza ímfuumu}
    letter-rel-chief-read-criticize-chief
    'The letter the teacher read criticizes the chief
    *ukaláata} yó ímfumu yaweréenga} ikunyoza ímfuumu }

27. aβaléendo wó uBánda aβaβéni maβwíila} βaβúuka}
    visitors-rel-Mr Banda-saw-yesterday-have gone
    'The visitors who Banda saw yesterday have gone'
    *aβaléendo} wó uBánda aβaβéni maβwíila} βaβúuka}

As it can be seen in the examples above, there is a phonological phrase break at the end of the relative clause which is marked by a long penultimate vowel on the right edge of the relative clause. Let us consider what happens when a direct object relative clause has no overt head.

3.3.3.3 Headless direct object relative

Constructions with headless direct object relatives behave like headless subject relative clauses in that the entire clause forms one prosodic phrase which is signaled by a long penultimate vowel on the right edge of the clause. Consider the examples below.

Cindali

28. yúyo muyemba wangu amusuwalílaagha} ni mfuumu}
    rel-brother-my-admire-is-chief
    'The one who my brother admired is a chief'

Cilambya

29. yó umúkulu βáne akasuβaliila} yó mfuumu}
    rel-brother-my-admire-rel-chief
    'The one who my brother admired is a chief'

In the examples above, the forms *amusuwalílaagha* and *akasuβaliila* at the end of the relatives in (28) and (29), respectively, have long penultimate vowels because they occur at the edge of the phonological phrase.

We will now consider prosodic phrasing in indirect object relative constructions.

3.3.3.4 Head of relative clause is indirect object of RC

Indirect object relative clauses behave like direct object relatives. One typically finds that the head of the relative clause phrases together with the rest of the clause whose right edge also has the usual long penultimate vowel. This is illustrated through the examples below.

Cilambya

30. umunyamáta yó umunyawo mwambuzízghe yuula} ali kúuno}
    boy-rel-friend-introduce-that one-is-here
    'The boy whose friend you introduced me to is here'
    *umunyamáata} yó umunyawo mwambuzízghe yuula} ali kúuno}

31. aβána βasukúlu βó umanyísi awerengíle ukaláata} βafúma mukaláasi}
    children-of-school-rel-teacher-read to-letter-left-class
    'The students who the teacher read the letter to walked out of the class'
    *aβána βasukúulu} βó umanyísi awerengíle ukaláata} βafúma   mukaláasi}

In (30) and (31), the indirect objects *umunyamáta* and *aβána βasukúlu*, respectively, are the heads of the relative clauses and they form one

phonological phrase with rest of the clause. The forms *yuula* in (30) and *ukaláata* in (31) are the right edges of the relative clauses, hence the long penultimate vowels which they have.

3.3.3.5 Headless indirect object relatives

In indirect object relative constructions where the head is not overt, one finds the same scenario as that in (30) and (31) above where the head of the relative is fully specified. Thus, the entire clause is wrapped in one phonological phrase. Consider the data below.

Cindali

32. yúyo Banda amuswile cawuléele} akumupalíiʃa}
    rel-Mr Banda-gave-gifts-are-him-thanking
    'The ones who Banda gave presents to, thank him'

33. yó namulembéle ikálaata} íiza}
    rel-I wrote to-letter-came
    'The one who I wrote a letter to, came home'

Cilambya

34. βó uβanda akaβapa icaβúupi} βakumusalíisya}
    rel-Mr Banda-gave them-presents-are thanking him
    'The ones who Banda gave presents to thank him'

35. βó naβasimbili ukaláata} wíza kunyúumba}
    rel-I wrote to-letter-came-home
    'The one who I wrote a letter to, came home'

In the examples above, the forms *yúyo* and *yó* in (34) and (35), respectively, represent the heads of the indirect object relative constructions and they phrase together with the rest of the relative clauses whose right edges, predictably, have long penultimate vowels as seen in the forms *icaβúupi* and *ukaláata* in (34) and (35), respectively.

3.3.3.6 Stacked relative clauses

It is possible in Cindali and Cilambya, as in most other languages, for a number of relative clauses to be stacked and form one long construction. When

this happens, the same phonological phrasing pattern which occurs in individual relatives is attested. That is, the head of each of the relative clauses forms one phonological phrase with the rest of the clause and the right edge of each clause is coextensive with the end of a phonological phrase. This is shown in the examples below.

Cindali

36. ʃó nalíle umasuuwa} ʃo salisyiisya} nafyíghehela umuunda} '
    rel-I ate-yesterday-rel-were delicious-I took to-field
    Those which I ate yesterday, which were delicious, I took them to the field'

Cilambya

37. vyó nkhalya maβíila} vyó vikaya kúnoona} nasenda kumbóombo}
    rel-I ate-yesterday-rel-were-delicious-I took-to field
    'Those which I ate yesterday, which were delicious, I took them to the field'

As it may be observed in (36), *ʃó*, which is the head of the two relative clauses, forms a single phonological phrase with the rest of the material in each clause just like *vyó* does in (37).

4.0 Conclusion

The paper has shown the following issues regarding the relationship between Syntax and phonological phrasing in Cindali and Cilambya:

  i)   XPs like NP and VP in these varieties are wrapped in phonological phrases, which is consistent with the Wrapping constraint.
  ii)   Phonological phrase edges in Cindali and Cilambya are marked by penultimate vowel lengthening and (sometimes) contour tones.
  iii) The right edge of a Relative Clause forms a phonological phrase boundary and has penultimate vowel lengthening.
  iv)   In subject, Direct and Indirect object relatives, heads of the clauses phrase with the rest of the elements in the relative clause.
  v)   Headless relatives, even when stacked, constitute separate phonological phrases whose right edges are, as expected, signaled by penultimate vowel lengthening.

These characteristics are consistent with what has also been observed in many other Bantu languages on the syntax-phonology interface and prosodic phrasing.

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