

Searching for Phonological Phrases in Chichewa

Laura J. Downing, Göteborgs universitet

The issue: The traditional Prosodic Hierarchy (Nespor & Vogel 1986; Selkirk 1986) provides two levels of post-lexical prosodic phrasing:

(1)

Intonation Phrase (IntPh)

|
Phonological Phrase (PhonPh)

Phonological Phrases correlate, roughly, with minimal XP edges. Intonation Phrases correlate, roughly, with root clause edges (IP/CP). (See e.g., Selkirk 2009, 2011; Truckenbrodt 1995, 2007). While this much is generally accepted, it is far from straightforward to assign prosodic phenomena to a particular phrasal domain. In this talk I address the following issues:

- Do all languages that have Intonation Phrases also have a Phonological Phrase level?
- What prosodic cues can motivate each level?

This talk takes up these questions with a case study of prosodic phrasing in Chichewa, a Bantu language (N30) spoken (mainly) in Malawi. Kanerva's (1990) analysis – on which later work, notably Truckenbrodt (1995, 1999, 2007) is based – argues for two levels of phrasing: Phonological Phrase (or Focus Phrase) and Intonation Phrase.

The proposal: In this talk, I argue that there is no clear evidence for a Phonological Phrase level in Chichewa. A more parsimonious account of a wide range of data is provided by positing only an Intonation Phrase level. This study provides additional evidence for the following proposals: a- the prosodic properties of *Exhaustivity* and *Recursivity* are violable (Itô & Mester 2009; Selkirk 1995, 2011); and b- syntactic phase edges condition Intonation Phrase edges (Myrberg 2010; Selkirk 2011). As a result, it demonstrates how changes in theory can lead to a new perspective on what counts as evidence for particular prosodic constituents. I propose that these new theoretical parameters define a new typological distinction: between languages with both a Phonological Phrase and Intonation Phrase level, and those with only Intonation Phrases.

The data:

In the analyses of Bresnan & Mchombo (1987), Bresnan & Kanerva (1989), Kanerva (1990) and Mchombo (2004), Chichewa sentences have three main XP subconstituents, which can be freely ordered: an optional subject NP, an obligatory VP (i.e., the verb and all its complements), and an optional topic NP. Each of these three constituents is parsed into its own Phonological Phrase (in parentheses). In the data below, prosodic phrases (indicated with parentheses; phrase penult vowel lengthening is a salient cue) appear to right-align with minimal XPs: for this reason, they are labeled Phonological Phrases in earlier analyses:

(2) Subject, Topic and VP are minimal XPs

a. (Subj) (VP) – Kanerva (1990: 102, fig (112))

(Fíisi) (a-na-dyá m-káango)

CL1.hyena 1SUBJ-PST1-eat CL3-lion

'The hyena ate the lion.'

b. (Subj) (VP) (Top) – (Kanerva 1990: 107, fig (123b))

(Mwaána) (a-na-m-pézá kú-dáambo) (gaálu)

CL1.child 1SUBJ-PST1-1OBJ-find LOC-CL5.swamp CL1.dog

'The child found it at the swamp, the dog.'

Minimal XP edges and Phonological Phrase edges do not always coincide, however. Both complements of the verb in a [V DP XP] verb phrase are parsed with the verb into a single Phonological Phrase, as long as the first complement is not modified, cf. (3a) vs. (3b):

(3) VPs containing two verbal complements; [] sets off the main clause VP

a. ([a-na-pátsíra mwaná a-méné á-ná-wa-chezéera) ndalámá
 6SUBJ-PST1-give CL1.child CL1-REL 1SUBJ-PST2-6OBJ-visit CL10.money
 zá mú-longo wáake])
 CL10.of CL1-sister CL1.her
 ‘They gave [the child who visited them] money for her sister.’

cf.

b. ([a-na-pátsíra mwaná ndalámá zá mú-longo wáake])
 6SUBJ-PST1-give CL1.child CL10.money CL10.of CL1-sister CL1.her
 ‘They gave the child money for her sister.’

This is the essential problem to be accounted for in any analysis of Chichewa prosodic phrasing: the Phonological Phrase parsing the VP is bigger than we expect because there is no phrase break following the first complement of the verb, unless the complement is modified. The prosodic algorithm must therefore optimize a Phonological Phrase break setting off subject and topic DPs, yet it must not optimize a Phonological Phrase break following unmodified DPs internal to the VP. Truckenbrodt’s (1995, 1999, 2007) well-known WRAP constraint is a mechanism for achieving this result. Note, however, that (3a) violates WRAP. This shows that a new approach is called for.

A phase-based analysis:

Phase-based syntax (Chomsky 2005) provides new ways of thinking about the relation between syntax and prosodic phrasing. Phases – vP and CP – define derivationally ‘cyclic’ spell-out domains which can define the domain of prosodic processes. Crucially vP contains a verb and all its complements. This theory allows us to make a new generalization about prosodic phrasing in Chichewa: prosodic phrase breaks coincide with right edges of phases and of preverbal Topics. These breaks are consistent with a parse into Intonation Phrases, rather than Phonological Phrases, for the following reasons. Intonation Phrases are defined as aligning with CPs. It is a logical extension to propose that Intonation Phrases align with phase edges. This proposal solves the original problem mentioned for Kanerva’s (1990) analysis, namely, that prosodic phrases in Chichewa are typically larger than a single XP. It has been proposed for some Romance languages (Feldhausen 2010; Frascarelli 2000) that right edges of preverbal Topics define the right edges of an Intonation Phrase. This generalization extends to Chichewa.

New phonetic data on Chichewa phrasing provides additional motivation for a parse into Intonation Phrases. Boundary tones systematically coincide with the right edge of these prosodic phrases, as we expect if they are Intonation Phrases. And the maximal Intonation Phrase (roughly, an entire sentence) is the domain of downstep in Chichewa. (See Myrberg 2013 for a similar analysis of similar facts in Swedish.)

In sum, Phonological Phrases become superfluous in Chichewa given new theoretical developments allowing for new algorithms defining a well-formed parse of syntactic constituents into prosodic structure. As a result, it must be reclassified as a language with only one level of post-lexical prosodic phrasing, rather than two, as in earlier analyses.