

Effects of phonological phrasing on syntactic structure

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It is commonly assumed, with only a few exceptions, that phonological phrasing has no direct effect on syntactic structure but rather that syntactic structure often motivates patterns of phonological phrasing (Inkelas and Zec 1990, Truckenbrodt 1999, among others). This paper examines cases of relative clause formation in Bantu, showing that different phonologically motivated phonological phrasing patterns result in different syntactic structure analysis of relative clauses. Thus, the prosodic packaging of information structure in phonological phrases directly influences syntactic structure.

Relative clause constructions in Bantu can be formed in either of two ways; by the use of a relative pronoun or clitic or by a tonal strategy. The latter strategy of relative clause formation creates ambiguous sentences between relatives and non-relatives that can only be resolved by taking recourse to phonological phrasing. Thus examples (1a-b) are identical with respect to constituent structure and word order but respectively contrast a relative from a non-relative sentence.

- (1) a. umúkásháána á-áci-móna banamayo léelo [Bemba]
1girl 1SM-tns-see 2woman today
'The girl saw the women today'
- b. umúkásháána à-áci-móna banamayo leelo
1girl REL.1SM-tns-see 2woman today
'The girl who saw the women today'

Further examination of the tonal strategy of relative clause formation reveals that the tonal strategy is restricted to expressing restrictive relatives (i.e. relative clauses whose heads pick out a specific entity from a given domain/set) and can never be used to express non-restrictive relatives nor headless relatives. The tonal strategy is therefore restricted to relative clauses that have an overt head that must in addition be interpreted restrictively.

This restriction neatly follows from the phonological phrasing of relatives where heads of restrictives (both tonal and pronoun based) must be phrased with the relative clause that modifies them while non-restrictives cannot be. Headless relatives, which have no overt head, naturally pattern with non-restrictives.

- (2) a. [abáBembá bà-shipa]_{PPh} [beekala muZambia]_{PPh} - restrictive (tonal)
b. [abáBembá ába-shipa]_{PPh} [beekala muZambia]_{PPh} - restrictive (pronoun)
c. [abáBembá]_{PPh} [ába-shipa]_{PPh} [beekala muZambia]_{PPh} - non restrictive (pronoun)
'Bembas who are brave live in Zambia'
- d. [ába-shipa]_{PPh} [beekala muZambia]_{PPh} - headless (pronoun)
'Those who are brave live in Zambia'

What this phonological phrasing pattern entails for syntactic structure is that non-restrictives and headless relatives must be treated as appositive structures (Demirdache 1991) where the head DP is external to the relative clause CP. In contrast to this, restrictives must be represented as relative clauses (CPs) with an internal DP in the spirit of Kayne (1994).

This talk will also phonetically illustrate the tonal downdrift that defines the phonological phrasing shown in (2a-d) and hence provide evidence for the information structure packaging that is here argued to motivate syntactic structure.

References

- Demirdache, Hamida. 1991. *Resumptive chains in restrictive relatives, appositives, and dislocation structures*. MIT: PhD dissertation.
- Inkelas, Sharon and Draga Zec, eds. *The Phonology-Syntax Connection*. Chicago: University of Chicago Press.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass: MIT Press.
- Nespor, Marina and Irene Vogel. 1986. *Prosodic Phonology*. Dordrecht: Foris
- Truckenbrodt, Hubert. 1999, 'On the relation between Syntactic Phrases and Phonological Phrases'. *Linguistic Inquiry* 30.2: 219-255.