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## Prosodic boundaries constraints by discursive elements

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From the second part of the 20th century the conception of speech processing and production has been predominantly conceived under a perspective in which the prosody is submitted to the syntactic domain. In a dynamic perspective, the syntactic analysis is considered just one of the linguistic elements that works in parallel. In this work, the dynamic model of speech production adopted (Barbosa, 2007; Lucente 2012) considers the speech a product of the dynamic activity. In a nutshell, the referred model assumes that information from superior linguistic levels are encoded in lexical gestures in parallel with accentual and syllabic coupled oscillators. These oscillators work on speech rhythm, and when connected with the gestures' duration, give as result the prosody. Following this theoretical perspective, it is proposed here an analysis of prosodic boundaries and their alignment with discursive breaks, in order to observe whether syntactic or discourse elements are involved in determining these boundaries. The discursive segmentation of a spontaneous speech corpus was made according to a computational model (Grosz and Sidner, 1986) that focuses on attention and intention of the speakers to the conversational segmentation. Based on the assumptions of speech production model, a Praat script was developed to detect the prosodic boundaries – finals and intermediates – and intonational prominences. When the discursive segmentation and the automatic detection of prosodic boundaries are put together is possible to observe that the boundaries aligned to the discursive breaks are mostly motivated by discursive elements.

**References:** • Barbosa, P. A. (2007) From syntax to acoustic duration: a dynamical model of speech rhythm production. *Speech Communication*. 49 (1-2), 725-742 • Grosz, B., Sidner, C. (1986) Attention, intention and structure of discourse. *Computational Linguistics*, v12(3), 175-204 • Lucente, L. (2012) *Aspectos dinâmicos da fala e da entoação no português brasileiro*. Ph.D. Thesis. Campinas.