The prosody of Montevideo Spanish: an intonational and rhythmic description

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When studying the prosody of a language, it is important to take a multidimensional descriptive approach, as it has been confirmed that intonation, rhythm, and tempo are directly correlated (Dellwo et al, 2006). Both F0 and durational values interact with each other giving a language its prosodic structure (Steffman and Jun 2013). Considering this, the present study has the main aim of describing the prosody of Montevideo Spanish (MS), a Rioplatense variety which has strong roots in Italian and Castilian Spanish, but that is -although not always perceptually obvious- prosodically distinctive from other varieties, including Buenos Aires Spanish, with its own "tonada". In particular, it intends to provide the first multidimensional prosodic description by looking at intonational, rhythmic, and speech rate patterns across three different generations of speakers.

To achieve this, 30 monolingual MS female speakers belonging to three age groups (18-31 y/o; 31-60 y/o; 61+ y/o) were recorded performing different production tasks that range from spontaneous to controlled[1]. Intonational patterns were analyzed following the Autosegmental Metrical Model (Pierrehumbert, 1980) by describing prenuclear and nuclear tonal configurations and peak alignment patterns across three utterance types (Y/N Questions, Statements and Tag questions). Peak height was also measured, as in Spanish questions and statements differ not only in tonal configurations (mainly nuclear) but also in prenuclear peak height with statements having lower initial peaks (Face, 2001). As for rhythm and speech rate, utterances were segmented and annotated in Praat (Boersma and Weenink, 2023) in three tiers: syllables, number of peaks, and interconsonantal and intervocalic intervals in order to report both F0 and durational rhythmic patterns. To achieve this, we calculated a) the level of Macrorhythm (following rules 1 and 2) (Sun, 2014), b) interval variability, measuring V%, DeltaC, nPVI, rPVI, VarcoV, VarcoC (Ramus et al, 1999) and c) speech rate, calculating VC rate (Dellwo 2010) and syllables per second.

Results confirm that MS has significant differences with other varieties at different prosodic levels. Our main findings confirm that a) differently from most Spanish varieties, MS uses mainly F0 peak height and placement to mark phonological differences across pitch accent positions within the utterance, as L+H seems to be the dominant pitch accent type; b) several prosodic factors contribute to characterizing MS as having a more flat intonation compared to other varieties, those being: the high percentage of initial and/or final mid-tones, and the very low F0 fluctuation across the utterance shown in low peak height difference between prenuclear and nuclear peaks and a stable pitch range, c) it is not a strong Macro rhythmic language for its low variety of pitch accent types and Macro Frequency levels, d) Vocalic nPVI and consonantal PVI values place MS within the referential values for syllable-based languages (Grabe and Low, 2002), e) low CV rate and syllables per second values contribute to the perception of MS as being slow.

With our findings, we intend to contribute to the understanding of Spanish prosody and of a variety of Spanish that is prosodically unexplored. At the same time, we intend to contribute to

[1] Data was originally gathered for the first author's dissertation (thesis defence July 2023).

prosodic studies by showing that taking a multidimensional analytical approach that does not follow a unique model, tests the effectiveness of the different models, and shows they can complementarily account for the prosodic system of a language.

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