

Intonation Patterns in Typical and Atypical Speech of Buenos Aires Spanish

Claudia Enbe and Yishai Tobin
Ben-Gurion University of the Negev
claudiaenbe@hotmail.com / yishai@bgu.ac.il

Abstract

The goal of the present study is to determine the intonation patterns of Buenos Aires Spanish (BAS) in two different populations: (1) speakers with typical or normal speech (NS) and (2) speakers with atypical or pathological speech (PS) (e.g: stuttering, dysarthria, acquired hearing impairment, developmental speech disorder and dysphonia). This research aims to describe, compare and contrast the suprasegmental features of intonation in typical and atypical speech to establish new ways to evaluate and to treat speech impairments.

The population includes native speakers of BAS - 72 of NS and 18 of PS - grouped in three age groups (5-8, 18-50, 51-75), and divided equally according to gender. The corpus contains simple declarative, wh-questions and exclamatory sentences using a repetition task. This method was chosen because children and PS speakers may have difficulties with other elicitation tasks - such as reading aloud and spontaneous speech – that are associated with complex cerebral activities. We selected simple sentences that should be easy to repeat to help us compare and contrast the utterances for both NS and PS populations in these three different age groups.

The data were transcribed and described using the notation of Autosegmental-Metrical theory (AM) (Pierrehumbert, 1980) and the ToBI system adapted for Peninsular and Latin American Spanish (Beckman and Ayers, 1993/1997; Beckman et al, 2002), and for Argentine Spanish (“ToBI ampliado” (ToBI-A)) (Gurlekian et al 2001, 2004).

The results were analyzed and explained according to: (1) the definition that language is a symbolic tool whose structure is shaped both by its communication function and by the characteristics of its users (Tobin 1990, 1993, 1994) and (2) the principle that language represents a compromise in the struggle to achieve maximum communication through minimal effort (Diver 1979, 1995; Davis 1987, Tobin 1997).

Our results supported fundamental aspects found in the previous research for prosody in Peninsular and Latin American Spanish in general and Argentine Spanish and BAS in particular in the following ways:

1. The majority of NS speakers produce the sentence in two melodic groups. These two groups are usually divided for tonal change but can also be separated by respiratory pauses, as well as according to syntactic and semantic norms. However there were PS subjects who produced sentences with more than two melodic groups which were divided by tonal change, separated by respiratory pauses, but not always according to syntactic and semantic norms.
2. All NS speakers insert pitch accents on the stressed syllables of content words and not on function words. However, we found that some PS speakers also insert pitch accents on unstressed syllables and on function words (Enbe 2003, Enbe et al 2006).
3. All speakers of NS and the majority of PS speakers end the sentence with a lower terminal contour for declarative sentences. For the more marked exclamatory sentences, PS speakers produce a terminal contour pattern not described for typical speech. However, for the most marked and complex wh- questions, both NS and PS speakers show similar preferences.

PS speakers consistently show more variation than NS speakers. However, the results show an inverse proportion between the difficulty of the sentence and the range of prosodic variation between BAS NS and PS speakers: (a) in the unmarked declarative sentences, the differences between NS and PS speakers were the greatest, (b) this was followed by the more difficult marked exclamatory sentences, while (c) in the most difficult, complex and highly marked wh-questions requiring the most direct, defined and fixed effort, the difference between NS and PS speakers appears to be neutralized.

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