

An acoustic analysis of s-lenition in Chilean Spanish-speaking children

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Many varieties of Spanish – including Chilean Spanish – undergo a phonological process of s-lenition, as illustrated in (1).

(1) Las pelotas → [lah] [pelota]

Although there is a substantial amount of research on s-lenition in Spanish-speaking adult-to-adult speech (Poplack 1979, Lipski 1985, 1999, Cepeda 1995, Brown 2005, File-Muriel & Brown 2010, among many others), we know next to nothing about how s-lenition is acquired by children. This question is important as it may have implications for how children acquire grammatical morphology during development (e.g. plural morphology as in *libros* ‘book-PL’ and verbal morphology as in *come* ‘eat-2SG’) (see Miller, 2007; Miller & Schmitt 2010, 2012).

Caregiver-child dyads (Ages: 2;0 – 5;0) were recorded over 4 one-hour sessions while they played alone together in a lab playroom (in a working-class neighborhood in Punta Arenas). The first 100 tokens of syllable final /s/ were extracted from both caregiver and child. Each /s/ token was coded categorically for [s], [h], and zero (omission) by a native-speaker of Chilean Spanish (reliability tests were performed on 25% of the data). In addition, each /s/ token was manually delimited on PRAAT and measures of frication duration were performed automatically using a PRAAT script. The conditioning effect of the following independent variables was examined: (1) following phonological context, (2) morphological function, (3) speech style, (4) word position, and (5) word length.

Given that caregivers produced the full range of forms (i.e., [s], [h], and omissions), we follow Widdison (1995) in the view that the target form is [s] and that s-lenition arises due to coarticulation between /s/ and its preceding vowel – as such, a partially devoiced vowel occurs even with the full [s] variant; when [s] is shortened to an omission, the remaining [h] is perceived as an aspiration (i.e., /Vs:/ → /Vhs/ → /Vh/ → /V^h/ → V). This process represents a continuum and we propose that while adults reduce /s/ along the entire continuum, children initially only reduce /s/ within a portion of this continuum. In particular, children initially reduce the full form [s] by decreasing its duration, but not to the point of leaving only an aspiration (i.e., /Vh/). A comparative variationist account between caregivers and children will be presented for both the continuous dependent variable (i.e., frication duration) and the categorical dependent variable (i.e., [s], [h], and zero).