

## Final /s/ Reduction in Three Dialects of Spanish

Several factors condition the reduction of syllable- and word-final /s/ in Spanish (e.g. *¿cómo estás tú?* (*how are you?*) > aspiration: *¿cómo e[h]tá[h] tú?*; deletion: *¿cómo e[ø]tá[ø] tú?*). These factors include: the number of syllables in the word (mono versus polysyllabic), the prosodic stress of the syllable in which final /s/ occurs (tonic versus atonic), the position of final /s/ within the word (internal versus final), as well as the factor shown to have the greatest conditioning effect, the phonological context that follows final /s/ (see Terrell 1977, 1978, 1979; Lipski 1984, 1985, among others).

Glaringly neglected in the literature, however, is the influence of frequency. This, despite the fact that frequency has been shown to have a significant effect in other cases of phonological variation (such as the deletion of post-stress schwa in English: higher-frequency *mem[ə]ry* versus lower-frequency *mamm[ə]ry* (Hooper 1976)). This paper provides evidence that frequency significantly conditions the reduction of final /s/ reduction in Spanish.

Exceptions to the dearth of literature on the influence of frequency on final /s/ reduction in Spanish are Brown and Torres Cacoullos (2002, 2003), in the Spanish of Chihuahua, Mexico, and Brown (2004), in the Spanish of northern New Mexico and southern Colorado. These studies show that the token frequency of the word in which final /s/ occurs as well as the frequency with which a word occurs in a phonological context favorable to reduction (e.g. before a following consonant instead of a vowel or pause) significantly condition final /s/ reduction.

This paper contributes to the literature on the reduction of final /s/ in Spanish by analyzing 1,525 tokens of syllable- and word-final /s/ from three dialects of Spanish: Cali, Colombia (Travis 2005); Mérida, Venezuela (Domínguez and Mora 1995); and San Juan, Puerto Rico (Cortés-Torres 2005). The selection of these dialects was based on the overall rate of final /s/ reduction as roughly low, mid, and high, respectively. Tokens were coded for the traditional, well-studied, factors mentioned above as well as for the preceding phonological context, the token frequency of the word in which final /s/ occurs, the frequency with which the word occurs in a phonological context favorable to reduction, and the overall rate of reduction in the dialect.

The results of three multivariate analyses (Sankoff 1988; Sankoff, Tagliamonte, and Smith 2005) show that the token frequency of the word in which final /s/ occurs has a significant effect in two of the three dialects, such that higher frequency words show more reduction than lower frequency ones. The dialect that does not show a significant effect from token frequency is the dialect with the highest overall rates of reduction—Puerto Rico. Similarly, only the dialect with the lowest overall rate of reduction—Colombia—is affected by the frequency with which a word occurs in a phonological context favorable to reduction. These results suggest that frequency effects may be conversely related to the overall rate of final /s/ reduction in a dialect: frequency has a greater conditioning effect in dialects with low overall reduction but less of an effect in dialects with high overall reduction.

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