

Abstract

The primary objective of this dissertation is to assess which factors condition durational variability of a svarabhakti vowel (SV), which is a short vowel fragment evidenced in Spanish /Cr/ and /rC/ clusters. Seven hypotheses based on prosodic and segmental factors are tested on empirical data from a corpus consisting of 29 participants from six countries: Spain, Argentina, Mexico, Guatemala, Colombia and Ecuador.

Data results from /Cr/ clusters suggest that segmental factors related to the initial consonant play a more prominent role in SV durational variability than prosodic ones. That is, significant findings are evidenced for the segmental factors of order of constriction location, voicing of C₁, manner and place of articulation, whereas position within the word and prosodic stress are not found to vary SV duration at a significant level. Finally, I hypothesize that SV durational variability for /Cr/ clusters might be viewed across a continuum, which is based principally on manner of articulation.

Data results from /rC/ clusters suggest the opposite effect in that prosodic factors play a larger part in SV durational variability, with longer SV evidenced at a significant level across a word boundary. That withstanding, results from front-to-back order of constriction (e.g. r + k), manner and place of articulation suggest that segmental factors do have an effect on SV durational variability for /rC/ clusters. However, the exact effect is one which requires further analysis.

In the formal account of the empirical data, I explain the findings for /Cr/ clusters using Articulatory Phonology and Byrd's (1994, 1994b) notion of a Phase Window.

I make reference to Cho's (1998a,b) Phase Window alignment and Bradley and Schmeiser's (2003) use of a delayed Phase Window. With regard to the findings for /rC/ clusters, I employ a prosodic (π -) gestural model (Byrd and Saltzman, 2003; Byrd et al, 2005) in order to explain the correlation between longer SV duration and the strength of the intervening prosodic boundary.

Lastly, I compare the results of the current study with those of other empirical studies related to SV durational variability in Spanish and I discuss residual issues of the study for further research.

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