

The Effect of Perception on Production of English /w/ by Costa Rican Spanish Speakers
Bethany MacLeod – Department of Linguistics, University of Toronto

Both English and Spanish have a labiovelar glide; however, when native speakers of Costa Rican Spanish (CRS) produce English words, the stop /g/ is often inserted preceding the English glide /w/, resulting in the pronunciation of an English word such as *why* as ['gwaj]. This study explores why CRS speakers would produce the Spanish sequence [gw] in place of simply using the existing Spanish labiovelar glide when producing English /w/. To answer this question, an experiment was conducted that collected data regarding the acoustic characteristics of the glides and /g/ and investigated the effect of the process of spirantization of Spanish voiced stops on velar insertion.

An acoustic analysis measured the durations and relative intensities of the velars and glides in Spanish and English words as produced by CRS speakers. In addition, productions of English words containing /w/ by native English speakers were compared to those by CRS speakers. Acoustic and statistical analyses found that, while the English and Spanish glides were very different, the Spanish /g/ and English glide were not significantly different. Also, it was found that there is an effect of the extent to which an underlying /g/ spirantizes on velar insertion. This effect, combined with the acoustic similarity of CRS /g/ and English /w/, creates a situation in which the English glide is perceived by CRS speakers as the sequence [gw] and is produced as such.

This research shows that velar insertion in the production of English words by CRS speakers derives from an influence of perception.