Frequency and acoustic biases in the recognition of neutralized forms

Ashley Farris-Trimble & Danica Reid Simon Fraser University afarrist@sfu.ca; danicar@sfu.ca

Background

Medial /t/ and /d/ in English are neutralized in flapping contexts

knotted nodded

Listeners are at chance at identifying the source of the flap (despite available vowel duration cues) [1,2]

Biases compete to influence identification of neutralized forms [2] acoustic bias frequency bias (more frequent word > less frequent word)

In forced-choice ID task, acoustic bias > frequency bias [2]

Research questions: Do the same biases operate during real-time word recognition? Which takes precedence?

Frequency bias: use of top-down information during recognition Acoustic bias: use of bottom-up -

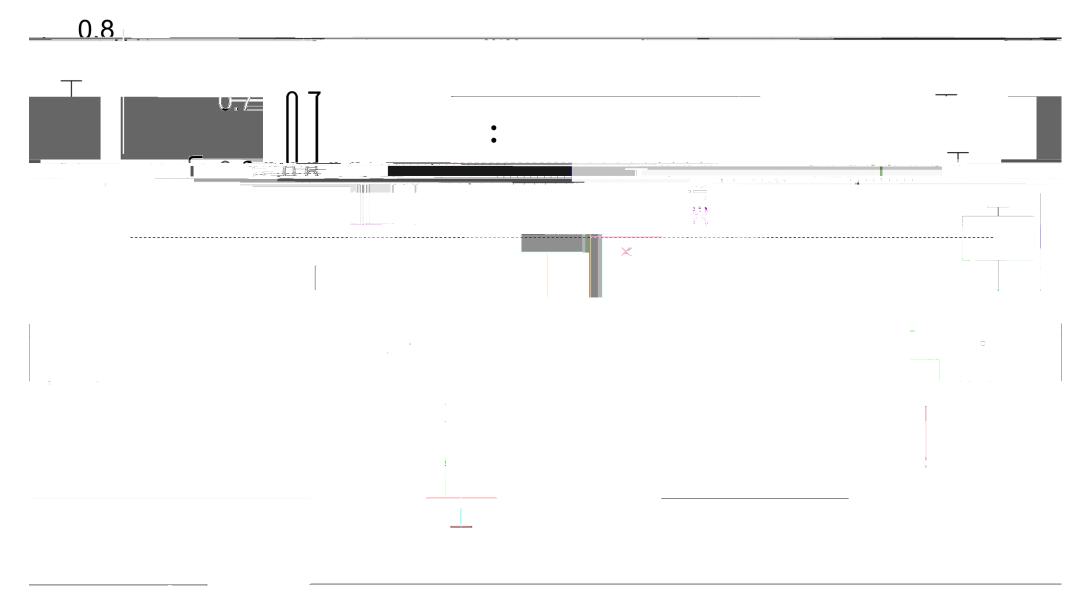


Figure 3.
Proportion /t/identification in
isolated words
and phrases