CONSONANT CONFUSABILITY AND SIMILARITY AVOIDANCE PATTERNS
Sameer ud Dowla Khan • Reed College • skhan@reed.edu

Questions
-24 listeners: adult native speakers
-Multiple Forced Choice exp. in Praat
-Listeners heard os via headphones
-Identified C by clicking on letter

Methods
-3 noise conditions (NOISEX)
-Confusability and FSR similarity
-26 onset σs [Ca]
-Noise: added pink noise
-Clear: no added noise

Confusability and FSR similarity
-My 2nd goal is to see if confusability reflects the notion of similarity used in FS reduplication
-Disclaimer: preliminary investigation!

Presentation
-Confusability and FSR similarity

Background: C inventory

Background: FS reduplication
-Confusability and FSR similarity

Summary

Discussion and ongoing investigation

First confusion matrices for Bengali Cs [voi], [asp], [cont] are most confused in onsets [asp], [voi], MajPl are most confused in codas
-Noise and Babbile lower the accuracy of certain features
-Coda confusions are closest to rank order of FS /t/-avoidance, surprising as FSR targets onsets!
-/t/-avoidance may be connected to generalized confusability across position, noise contexts

Confusability rates:
-Noise: added pink noise

Confusion rates:
-Confusability rates:
-Confusability and FSR similarity

Ongoing investigations

Onsets
-Noise: /t/.6, /d/.76, /k/.65, /k̪/.32
-Babble: /t/.78, /d/.76, /k/.65, /k̪/.32
-Does this resemble FS /t/-avoidance rates?

Consequences of FS /t/-avoidance;

Noise lower accuracy, Babbile lowers MajPl accuracy further

Case study: Bengali

If this /t/-avoidance reflects overall confusability, the most to least confused features would be:

Babble: added multi-larker babble
-Clear: no added noise

Confusability rates:
-26 onset os [Ca]: all but /s/n/ /t/2avoidance rates
-Naturally produced tokens
-51 σs × 3 noise blocks × 3 reps = 459 trials, pseudorandomized

Summary

Feature errors in onsets

Feature errors in codas

Feature accuracy in onsets

Reference errors in onsets

Reference errors in codas

References
-JASA 27(2), 338?352.
-JASA 27(2), 338?352.