

(Non-)Interactions of Initial Geminates and Stress: A case study of Pattani Malay

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Introduction

- Pattani Malay is often cited as a prime example of a language with **moraic onset**: Initial geminates (IGs) attract stress
(Hajek & Goedeman 2003, Topintzi 2008)

[bu'wɔh] 'fruit' [bɔuwɔh] 'to stand'
[ja'lɛ] 'path, road' [jɔ:lɛ] 'road, path'

- Caveat**: based on a single impressionistic description (Yupho 1989)

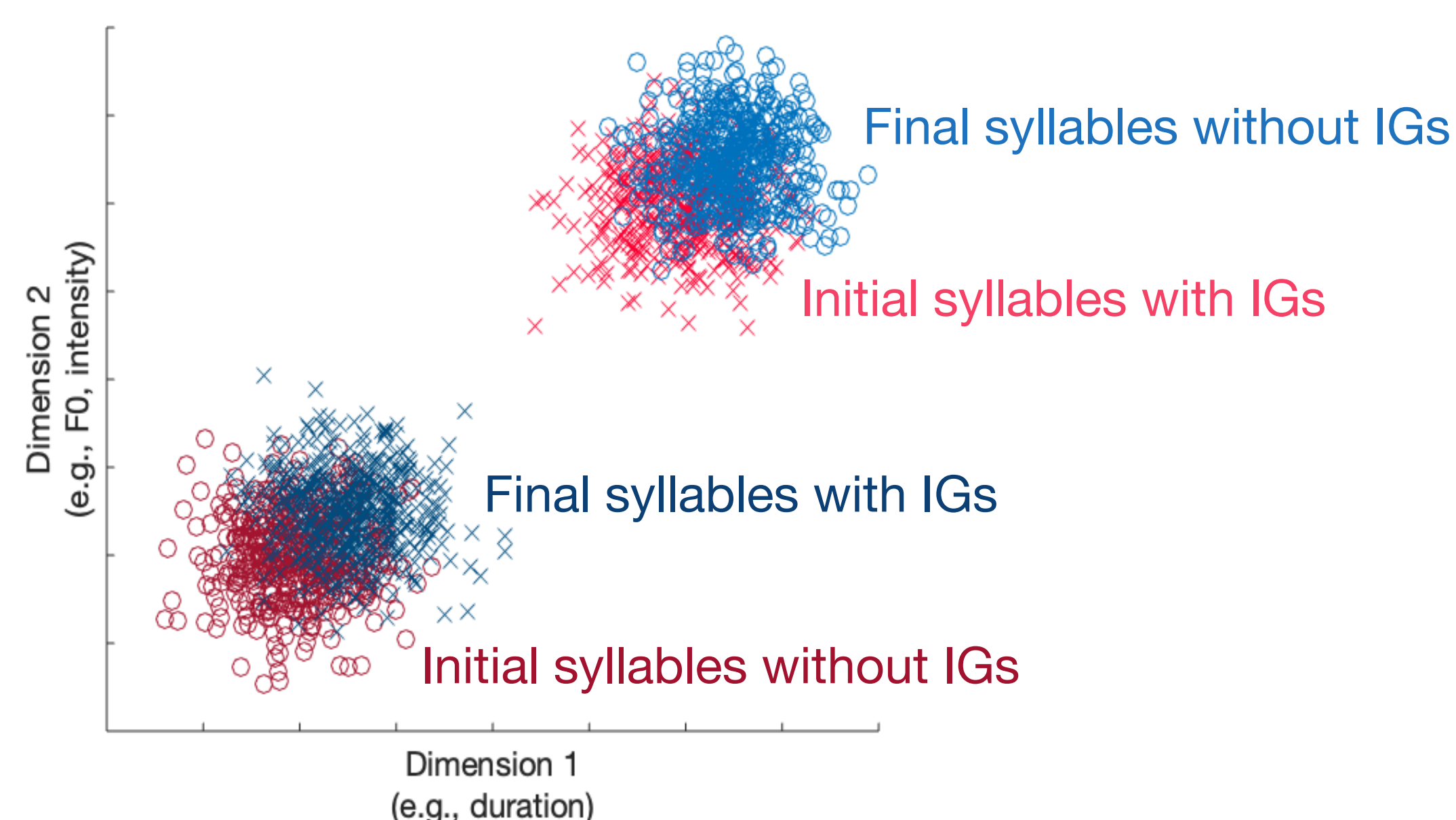
Research Question

Do words with and without IGs display different prominence patterns, based on acoustic data correlating with stress?

- Words without IGs display final prominence
- Words with IGs display initial prominence

Prediction

If IGs attract stress and words with and without IGs have different stress patterns...

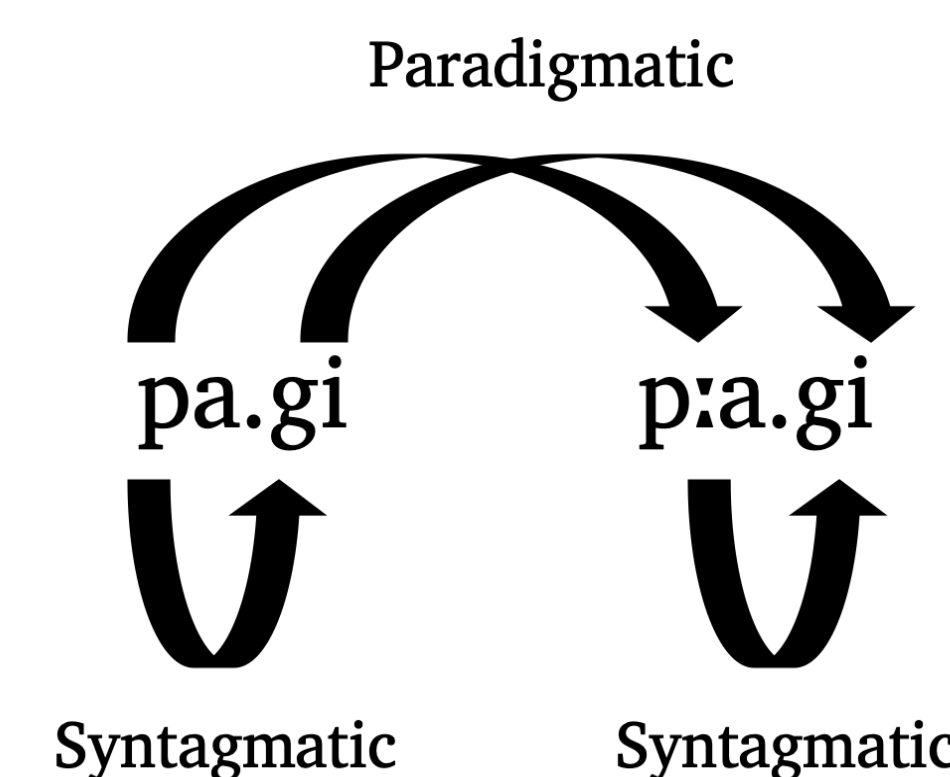


Data Collection

- 14 speakers (6M; 8F) in age range 20-61 y.o. ($\mu = 33$, $\sigma = 16$)
- Target words: 13 disyllabic minimal pairs x 6 repetitions
- Each target word embedded in a sentence
- Cued by natural sounding Thai sentences

Data Analyses

- Two sets series of comparison
 - 1) Paradigmatic: IG vs non-IG condition
 - 2) Syntagmatic: Initial vs final syllables condition (van Heuven 2018)

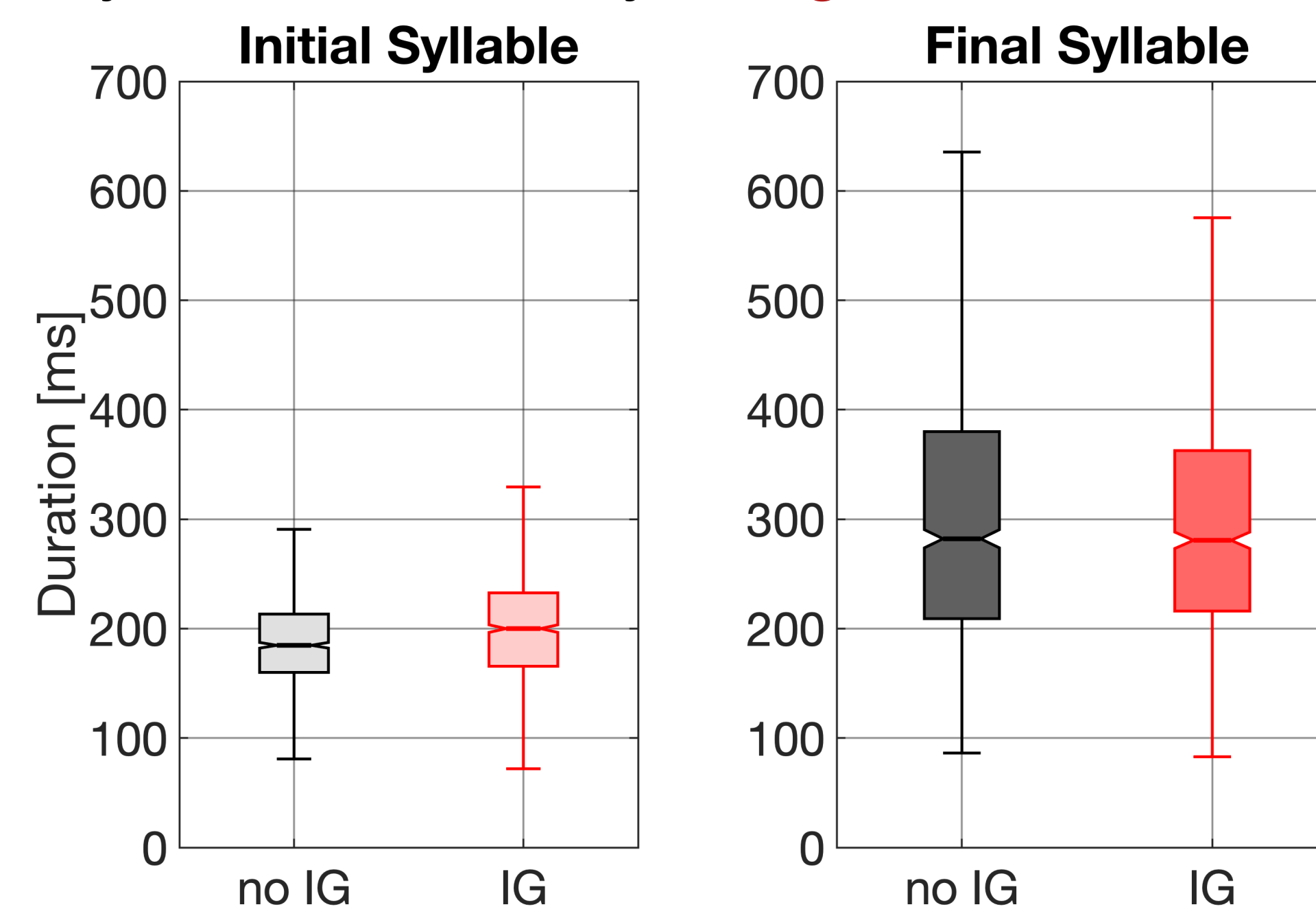


- Data was analyzed by fitting linear mixed effect regressions

Results

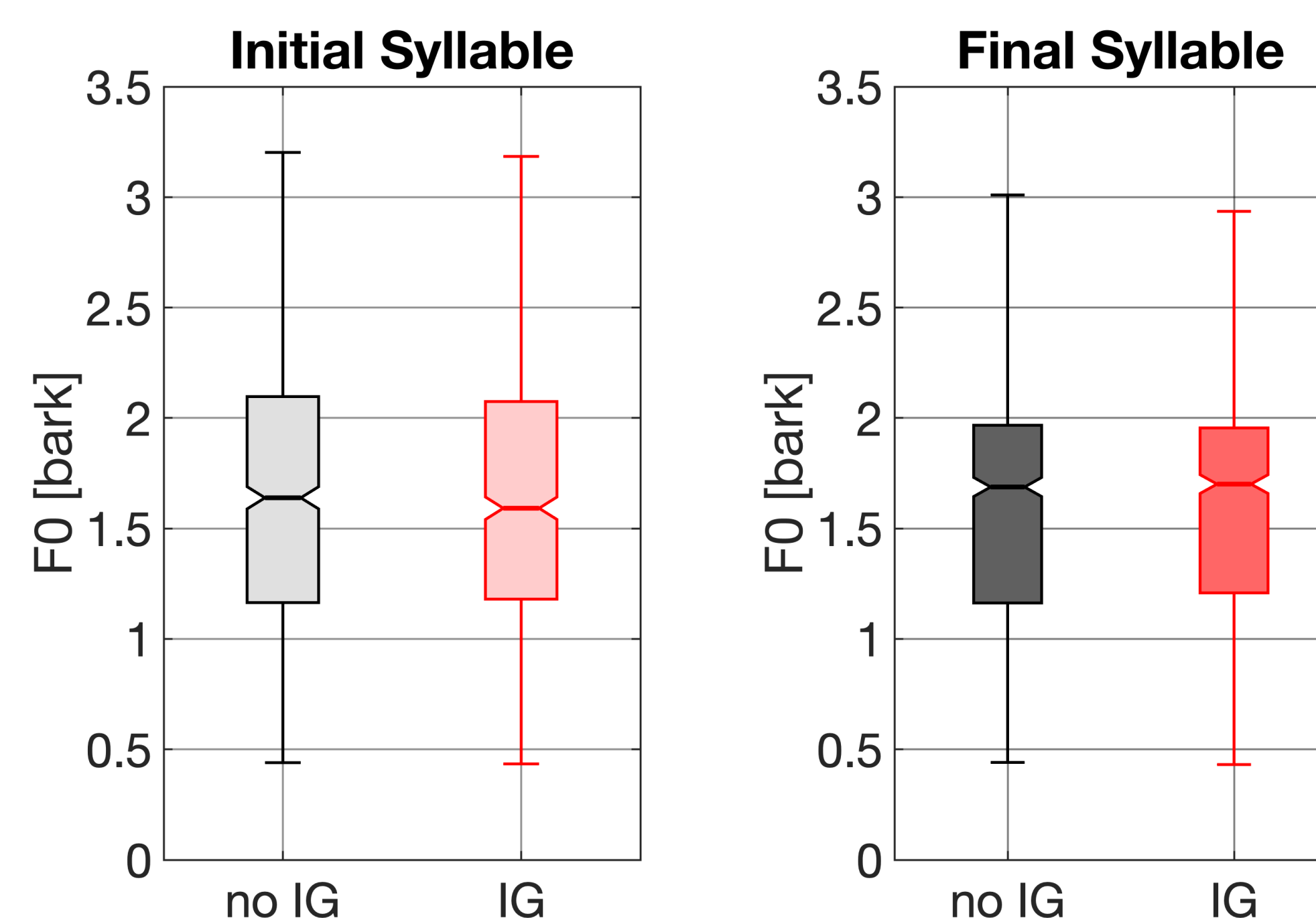
Duration

- No difference** between words with and without IGs
- Final** syllables are always **longer** than **initial** syllables



F0

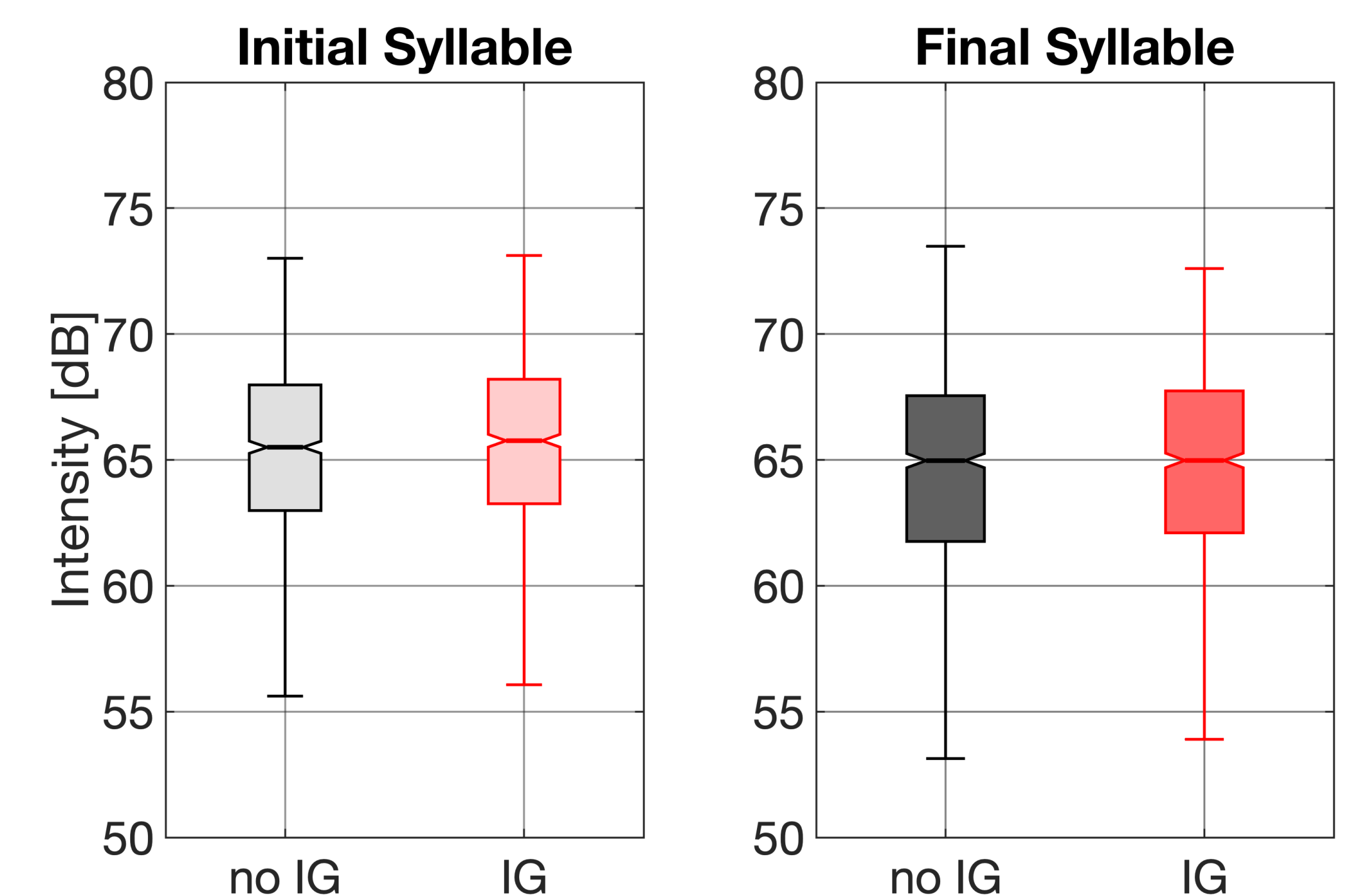
- No difference** between words with and without IGs
- Initial** syllables have **higher** F0 than **final** syllables



Results (cont.)

Intensity

- No difference** between words with and without IGs
- Initial** syllables have **higher** intensity than **final** syllables



Conclusion

- Three acoustic measurements correlating with stress suggest that IGs **do not** affect prominence profile
 - Duration: Final syllables are always longer
 - F0 & intensity: All words show falling profile over the word
- There is **no evidence**, so far, for moraic status of IGs in Pattani Malay

Acknowledgement

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References

- Hajek, J. and Goedemans, R. W. N. 2003. Word-initial geminates and stress in Pattani Malay. *The Linguistic Review* 20, 79-94.
- Topintzi, N. 2008. On the existence of moraic onsets. *Natural Language and Linguistic Theory* 26, 147-184.
- Van Heuven, V. 2018. Acoustic Correlates and Perceptual Cues of Word and Sentence Stress: Towards a Cross-Linguistic Perspective. In R. Goedemans, J. Heinz, & H. Van der Hulst (Eds.), *The Study of Word Stress and Accent: Theories, Methods and Data* (pp. 15-59). Cambridge: Cambridge University Press.
- Yupho, N. 1989. Consonant clusters and stress rules in Pattani Malay. *Mon-Khmer Studies* 15, 125-137.