Testing the Role Of L1 Influence in Phonetic Accommodation by Indian English Bilinguals

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The Question

How do early sequential bilingual speakers of Indian English (IE) phonetically accommodate to American English (AE) in producing the alveolar lateral /l/?

This study focuses on the influence of first language (L1) on second language (L2) production & accommodation in two groups:

- Hindi-IE bilinguals: produce clear [l] in all word positions (1)
- Telugu-IE bilinguals: produce clear [l] word-initially but retroflex [l] word-finally (2)

Hypothesis

Previous studies report greater phonetic dissimilarity leads to greater accommodation in the form of convergence by L2 speakers (3).

→ Hindi-IE speakers' IE laterals in word-final position will differ more from AE's laterals than Telugu-IE speakers' laterals, resulting in more convergence towards AE for Hindi-IE speakers.

Methodology

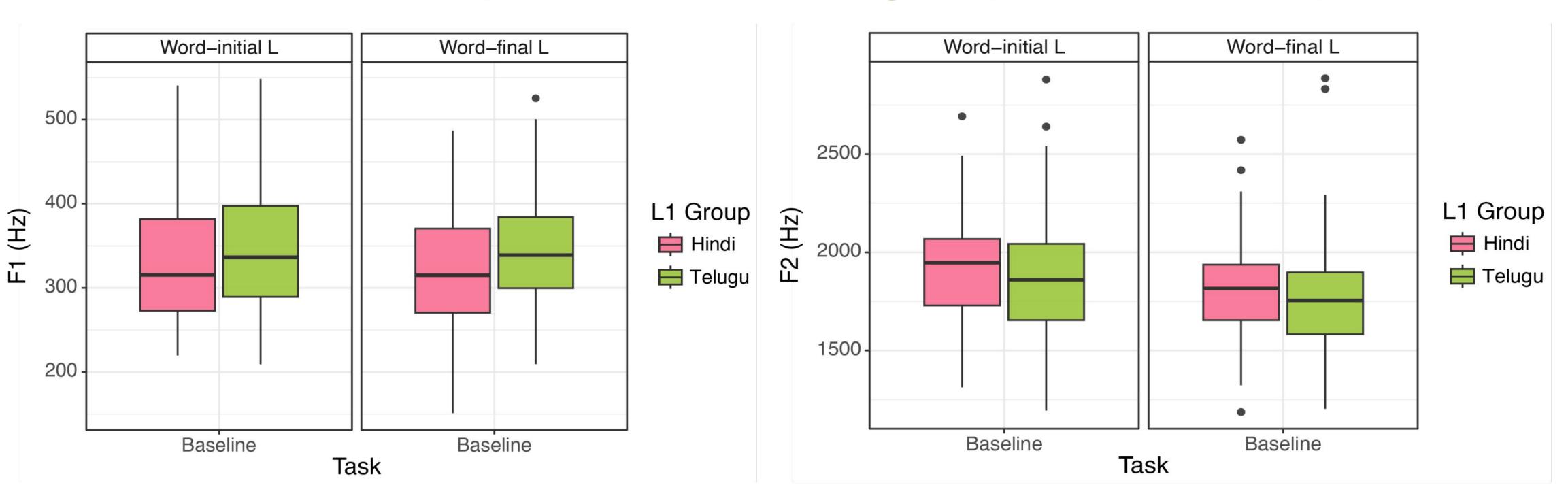
- 28 participants (14 Hindi-IE & 14 Telugu-IE)
- Baseline Production Task: read words off a screen
- Shadowing Task: repeat words spoken by an AE interlocutor
- Words with /l/ in initial and final positions
- Mean F1 and F2 were measured within a 30-ms steady-state interval annotated for each lateral (4)
- Statistical analysis: mixed effects linear regression analysis conducted in R

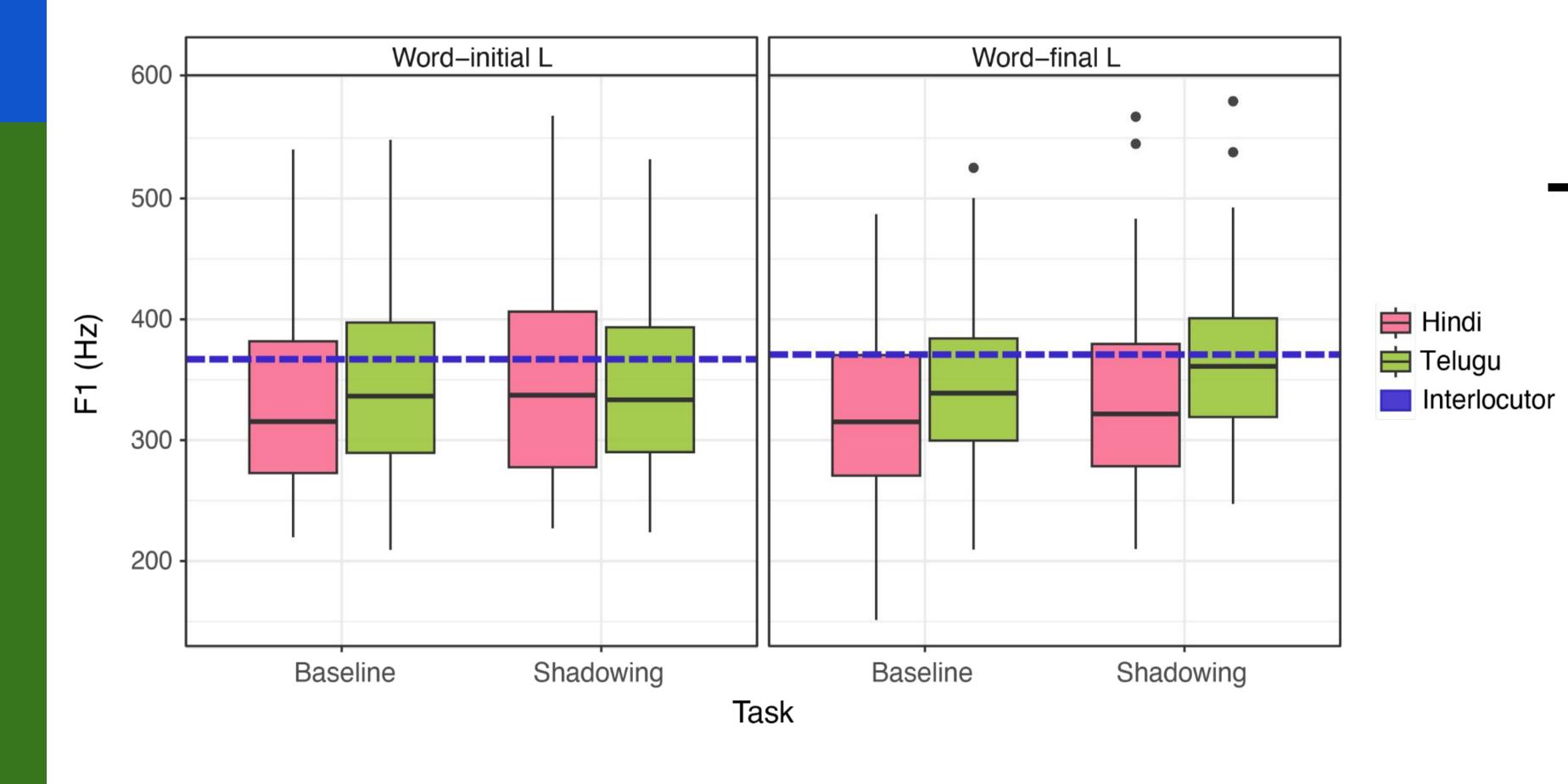
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Baseline IE laterals: Hindi-IE speakers differed from Telugu-IE speakers in both word positions



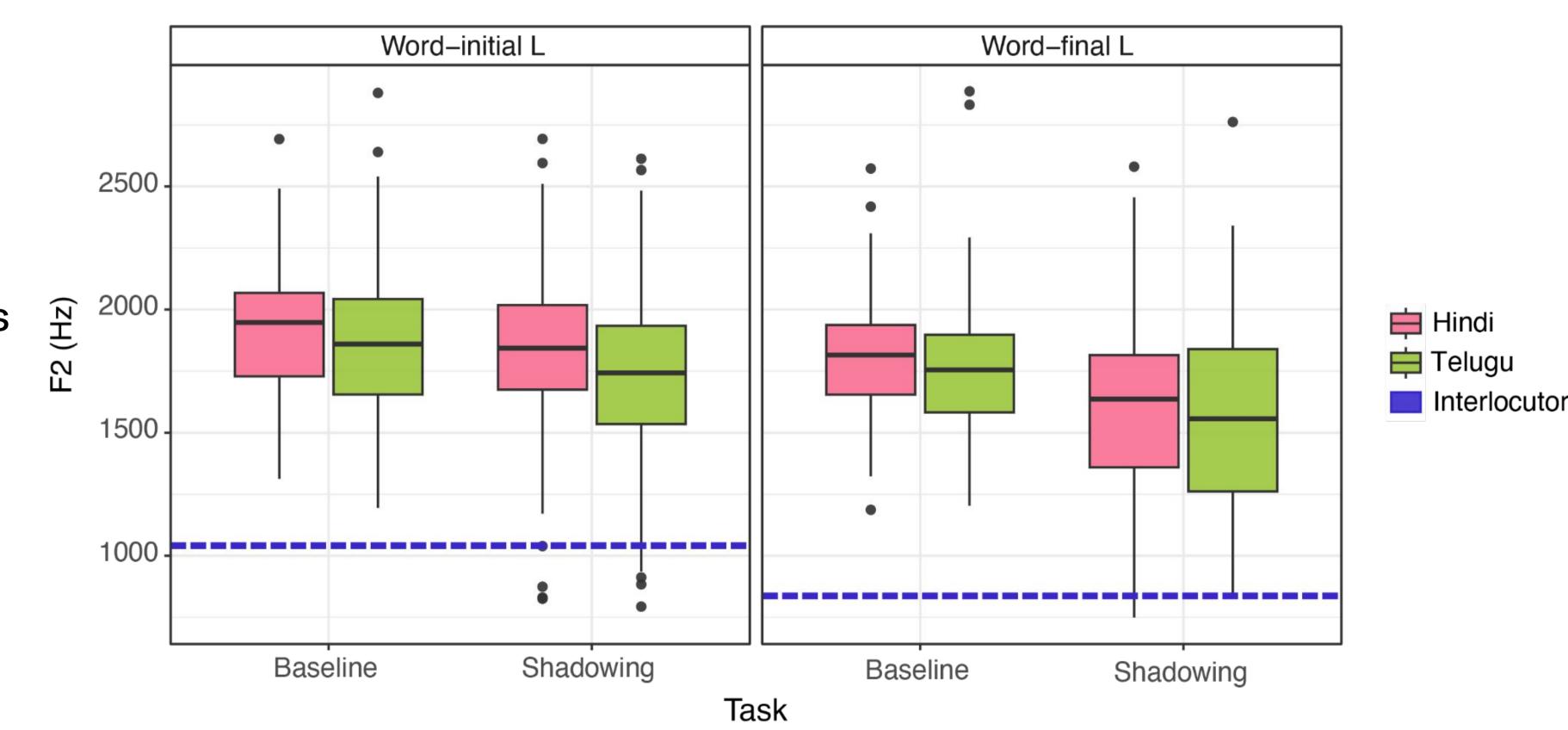


→ Regarding F1

- Hindi-IE speakers showed convergence in both word positions
- ◆ Telugu-IE speakers showed convergence in word-final position but none for word-initial position

→ Regarding F2

- Hindi-IE speakers showed slight convergence in both word positions
- ◆ Telugu-IE speakers showed the most convergence in word-final position



Conclusion

- → L1 influence on L2: Hindi-IE bilinguals' laterals differed from Telugu-IE bilinguals' laterals
- → Greater distance does not always lead to greater convergence
- → Phonetic proximity may facilitate convergence and future sound changes
 - ◆ Possibility of expanding beyond interactional settings to potentially in long-term, community-level sound change.

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