

# The interaction of markedness and experience in phonotactic judgments

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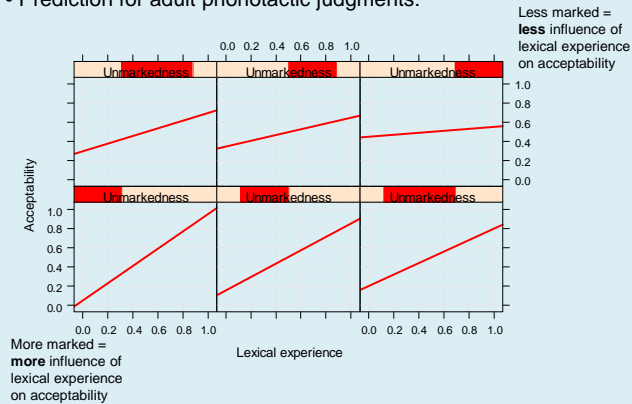
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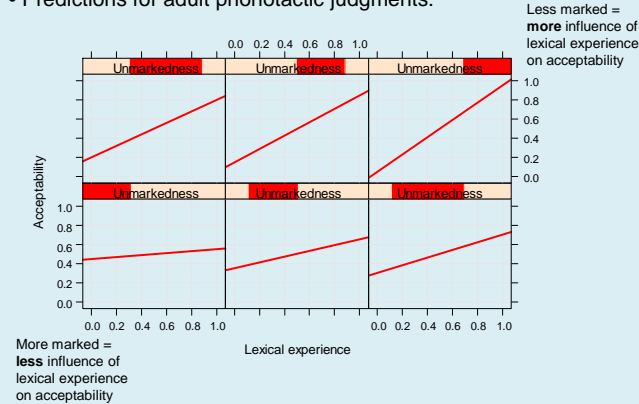
## Product-oriented Universal Grammar

- Logic (cf. Chomsky 1965, Tesar and Smolensky 1998):  
People innately know some of the target grammar  
All they have to learn are the non-universal aspects
- Implication for markedness vs. lexical experience:  
The more unmarked an item, the *less* learners should pay attention to its lexical pattern: **Competition**
- Prediction for adult phonotactic judgments:



## Process-oriented Universal Learner

- Logic (cf. Slobin 1973, Hayes and Wilson 2008):  
People have innate learning biases, not innate grammar  
Learning language-specific patterns depends on these biases
- Implications for markedness vs. lexical experience:  
The more unmarked an item, the *more* learners should use it to learn lexical patterns: **Cooperation**
- Predictions for adult phonotactic judgments:

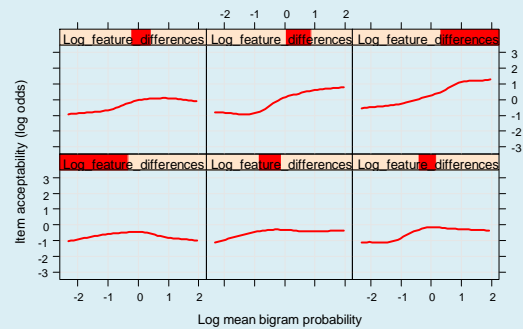


## Acknowledgments

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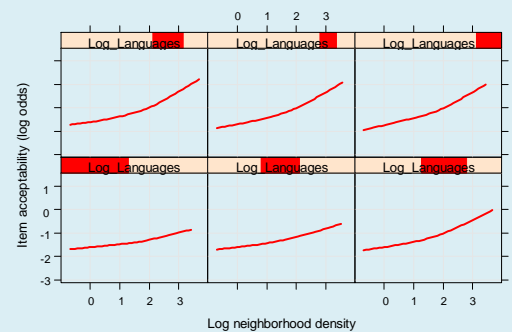
## Test 1: Southern Min ("Taiwanese")

- 20 native speakers of Southern Min (pre-tested for fluency)
- 255 non-lexical syllables (one per each logically possible bigram of Southern Min phonemes), presented auditorily:  
**Markedness:** Number of features different within bigrams (more = easier to distinguish perceptually = less marked)  
**Lexical experience:** Lexical bigram probability (observed / expected ratios; Frisch and Zawaydeh 2001)
- Binary good/bad judgments of acceptability



## Test 2: Mandarin

- 16 native speakers of Taiwan Mandarin
- All 3,274 non-lexical syllables that can be written in the phonetic notation used in Taiwan (BPMF), presented visually in BPMF:  
**Markedness:** Number of languages in UPSID (Maddieson 1984) containing target's initial consonant (more = less marked)  
**Lexical experience:** Number of lexical neighbors (one segment different from target item; Vitevitch and Luce 1999)
- Binary good/bad judgments of acceptability



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