The interaction of markedness and experience in phonotactic judgments

James Myers & Jane Tsay
National Chung Cheng University
Lngmyers@ccu.edu.tw  Lngtsay@ccu.edu.tw

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Product-oriented Universal Grammar
  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: Competiton
- Prediction for adult phonotactic judgments:

Process-oriented Universal Learner
  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:

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

References

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