Research Questions

Research Question 1: Is this lexical gap present in the phonological grammar of Thai speakers?

• The two experiments seek to find differences in grammaticality via a head-to-head judgment experiment.

Research Question 2: Do English loans from native Thai items?

• If so, is the high tone restriction relaxed in English loans?

Methods

Experiment 1: Loan interpretation is elicited:

• Experimenter is a monolingual native English speaker.
• Location: PA.
• Participants are told the stimuli are not Thai words.
• 14 Participants were recruited in Bensalem, PA.
• Task: They heard pairs of nonce words, and were told to choose the word that sounded more like it could be a Thai word.

Stimuli: Nonce stimuli with each of four non-occurring consonant-tone sequences, recorded at the Rutgers Phonology Lab.

• All stimulus pairs are minimal pairs, differing only in tone or onset.
• Tone onset and vowel quality vary between stimuli.
• Two types of onset pairs:
  - Tone varied, manner constant (e.g. [b] vs. [d])
  - Manner varied, tone constant (e.g. [b] and [p] vs. [b] and [f])

The experimental design also includes two control comparisons between grammatical nonce stimuli, summarized below with one example:

(3) Experimental Design illustrated for Unaspirated-High sequence

Results

(5) Experiment 1 – Loan Interpretation

Mean Response By Comparison

• Logistic Regression is run to confirm significant effect of interaction between tone and onset.

• Voice-High (VH) sequence is preferred to Voice-Low (VL) sequence but not to Aspirated-High (AH) sequence.

• Unaspirated-High (UH) sequences preferred to Unaspirated-Low (UL), but not to Aspirated-High (AH).

(6) Experiment 2 – Native Interpretation

Mean Response By Comparison

- Unaspirated-High (UH), Voice-High (VH) & Unaspirated-Rising (UR) sequences are all significantly dispreferred.
- Downward shift for each of the three sequences indicates the native stratum is stricter in its grammatical restrictions.
- Voice-Rising (VR) is surprisingly dispreferred to a greater degree in the loan stratum.

Discussion & Conclusions

• Ito & Mester’s (1995) hypothesis is consistent with all results except the VH preference over VL in English loans.
• An explanation: Of all the words containing VH sequences, a large portion are English loans, but there are no VL loans.

In control comparisons, participants exhibited significant preferences for VL (both experiment) and UL (experiment 2 only), both of which are grammatical.

(7) Results – Control Comparisons (Both Experiments)

Mean Response By Comparison

• This preference cannot be learned since both alternatives are grammatical.

• Similar findings are attested in Hebrew & English (Frisch & Zawadowski 2001; Bresett et al. 2007; Coetzee 2008, 2009).

• This preference is universal: Unaspirated and Voice stops are less marked preceding low tone (Bradshaw 1998, Lee 2008).

• In conclusion, all four consonant-tone restrictions are psychologically real in Thai, with only one of these four being significant in English loans.

References

Bradstreet, Jim, Donna Bostad, Tracy Kaczynski and Vicki Wordell. (2007). What we know about what we have heard: English loan-words in Register. Communication 384, 391-410.


• UNIPAY query results via AJAX.

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