Uptalk in semi-spontaneous and scripted speech

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I. INTRODUCTION

Overview

- "Uptalk": rising pitch movements at the end of statements.
- Uptalk in Australian, New Zealand, and British English has been well-studied (e.g., Fletcher et al., 2005), but American English usage has not.
- Gender differences have been reported (e.g., Barry, 2005), but American English usage has not.

Research Questions

1. Are different pragmatic uses of uptalk related to phonologically different melodies in SoCal English?
2. How does uptalk compare to other rising tunes?
3. Do sociolinguistic variables affect the use of uptalk and if so, how?
4. Is the use of scripted speech useful for verifying phonological categories in spontaneous speech?

II. METHODS

Participants

- 23 Native Southern Californian speakers (12 female, 11 male)
- Region: Los Angeles (8), San Diego (7), Orange (6), Riverside (2)
- Ethnicity: Asian (12), Hispanic (6), White (5)
- SES: Self-classification using the MacArthur Scale of Subjective Social Status; Lower (4), Middle (13), Upper (6)

Tasks

- Scripted statements and questions
- Retelling of story enacted in muted clip of popular sitcom (Clip Retell)
- Map Task with local landmarks
- Reading of the dialogue from the sitcom clip

III. ANALYSIS

- Rises: Rises included in analysis if rise $F_{0\text{max}} - F_{0\text{min}} > 10$ Hz
- Discourse Function: statement, confirmation request, floor holding, question
- Alignment: onset of rise with respect to the onset of the last stressed vowel (LSV) in the utterance
- Pitch excursion: $F_{0\text{max}} - F_{0\text{min}}$ of rise (in ERB)
- Statistics: LMEs with speaker as random effect and function as fixed effects in model comparisons (SES & region did not significantly contribute to the models)

IV. RESULTS

- Women used rises for statements and floor holding more than men.
- Men had smaller pitch excursions and confirmation requests were only produced with a rise.
- In statements and floor holding rises started much later than in questions and confirmation requests.

V. DISCUSSION

- Alignment details suggest that a rising L+H\* accent may be used instead of L\* in questions.
- Clarification comes from the scripted questions.
- In these, the nuclear syllable exhibited a marked dip and no rise when sufficiently early, as in Did you eat the WATERMELON?
- The rise was presented only when tonal crowding was present as well, as in Did you eat the LIME?
- This pattern confirms that the nuclear accent in questions is indeed a L* and the rise on the nuclear syllable (when present) is due to tonal crowding.

Takeaways

1. The form and functions of uptalk are homogeneous in SoCal, with only gender-related differences as to frequency, function and pitch excursion size.
2. SoCal uptalk is phonologically distinct from other rises, showing a L* L-H% pattern and thus a smaller and later rise than questions and confirmation requests (realized with H* H-H% or L* H-H%).
3. Complementarity of spontaneous and controlled data: use spontaneous data to document extent of variability in realization and formulate hypotheses; use controlled data to confirm or refute them.

VI. REFERENCES

Barry, A. S. 2008. The Form, Function, and Distribution of High Rising Intonation in Southern Californian and Southern British English. VDM Verlag Dr. Müller

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