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Accents and prosodic phrasing influence wh-question interpretation

*Joe Castle, *Torianne Crouch, *Katherine Griffitts, and Dr. Katy Carlson

Department of English, Caudill College of Arts, Humanities, and Social Sciences

Introduction

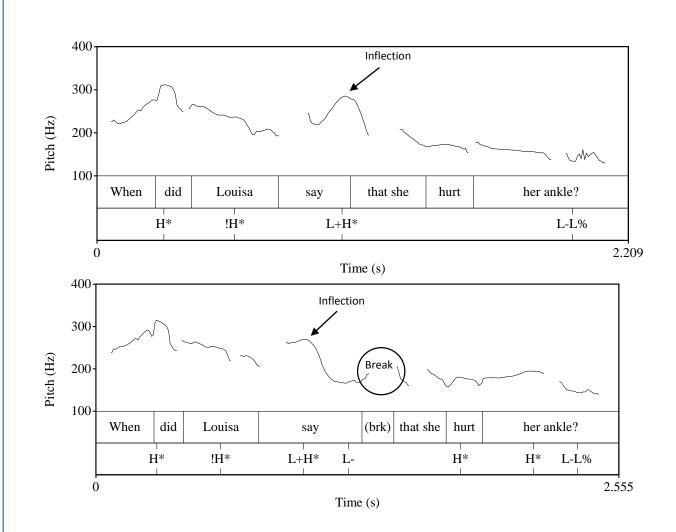
- Some clauses within sentences can be ambiguous; therefore, listeners must make a decision as to how to attach the clauses.
- In a sentence like:
- (1) When did Louisa say she hurt her ankle?
 - a. Louisa said it on Tuesday [Verb₁ attachment]
 - b. Louisa hurt her ankle on Tuesday [Verb₂ attachment]
- **Prosodic definitions**: prosodic boundaries are breaks between phrases; **accents** are when you make one word louder and higher than others for emphasis
- **Hypothesis 1:** A prosodic boundary after V₁ will increase V₁ associated answers because the V₁ will be the only verb in the same prosodic phrase as "when": (when did Louisa say) (she hurt her ankle)
- **Hypothesis 2:** Accenting each of the verbs would increase attachment to that verb, due to the Focus Attraction Hypothesis (Schafer et al. 1996).

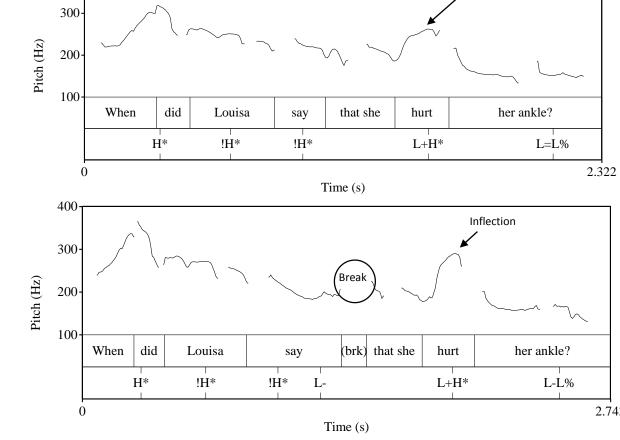
Method

 Conditions varied the presence and absence of a prosodic break and whether the first or second verb was accented.

Sample item: When did Louisa say that she hurt her ankle?

- (2) a. When did Louisa SAY that she hurt her ankle?
 - b. When did Louisa say that she HURT her ankle?
 - c. When did Louisa SAY ip that she hurt her ankle?
 - d. When did Louisa say ip that she HURT her ankle?





- 52 subjects listened to 24 questions with ambiguous structures and were then asked to choose the statement that best fit how they understood the question as in (3).
- (3) Which answer would best fit how you understood the question?
 - a. Louisa said it on Tuesday. (V₁ attachment)
 - b. Louisa hurt her ankle on Tuesday. (V₂ attachment)

Results

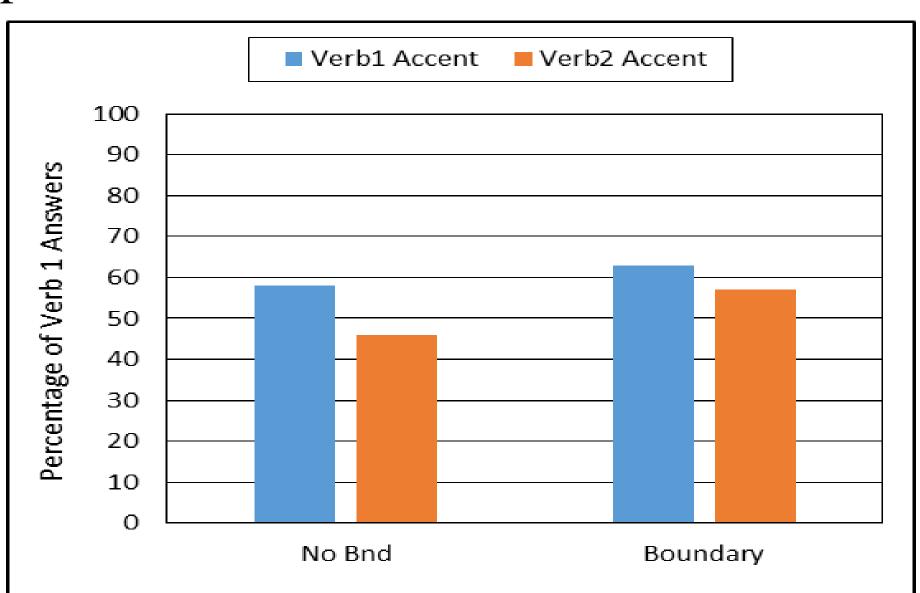
Our predictions were confirmed with:

- **Highest** V_1 attachment rate when accenting V_1 with a prosodic boundary.
 - o"When did Louisa SAY ip that she hurt her ankle?"



- Lowest V₁ attachment rate when accenting V₂ with no prosodic boundary.
 - o"When did Louisa say that she HURT her ankle?"

As expected, the other two conditions were intermediate:



•Summary: Both verb accents and prosodic boundaries increased high attachments.

Conclusion

- Accents draw the attachment of modifying phrases even when they precede the verbs to which they can attach.
- This extends previous research (Carlson & Tyler in press) showing accent effects in other structures (non-questions).
- It also replicates research showing prosodic boundary effects on attachment, e.g. Carlson, Clifton, & Frazier 2001, and again extends them to questions.

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