Mapping prosody to reference in L2

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Mapping Prosody to Reference in L2
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How does CONTRASTIVE INTONATION/PROSODY affect native and non-native speakers’ interpretation of ambiguous pronouns?

Background & Motivation
- Contrastive intonation/prosody affects native-speaker processing, although its precise role in the interpretation of pronouns has received limited attention.
- Pronoun interpretation is challenging in L2. This has been attributed to the need to integrate information from multiple domains. 
  (e.g., Roberts et al., 2008; Sorace, 2011)
- Pronoun interpretation is challenging in L2.

The role of prosody in L2 pronoun resolution has not been investigated.

Our goals:
- Test how contrastive intonation on potential antecedents (Exp1) and pronouns (Exp2) affects L1 and L2 speakers’ reference choices.
- Compare effects of contrastive intonation and grammatical aspect.

Predictions:
- IF prosody is generally challenging in L2, we expect L1-L2 differences in both Exp1 and Exp2. (NB: same L+H*/L-H% contour in both experiments)
- IF integrating information from multiple domains is generally challenging in L2, we expect L1-L2 differences in both Exp1 and Exp2.
- IF L2 speakers’ ability to use prosodic information depends on the complexity of the mappings (L1 -> L2; prosody -> reference), we expect greater L1-L2 differences in Exp2 compared to Exp1.

Event structure and pronoun interpretation in L1 & L2

(3) Emily_brought/was bringing a drink to Melissa. She___

L1 speakers of English write more continuations with ‘she’ - Sources following imperfective vs perfective aspect (Keiter et al., 2008). This is not the case for L1-Japanese/Korean learners of English (Güler et al., 2014, in press), even though (i) they reliably associate perfective/imperfective with completed/incomplete events in an independent task, (ii) aspect affects their choice of coherence relation in the continuation, and (iii) Japanese and Korean speakers show the same effect of aspect in their L1s (Iuno & Kehler, 2010; Kim et al., 2013).

Experiment 1: Contrast on antecedents

Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Age (years)</th>
<th>Versant English Test (overall score, range 20-80)</th>
<th>Self-rated English proficiency (out of 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 English (n=48)</td>
<td>23.4 (18-40)</td>
<td>9.6 (8-10)</td>
<td></td>
</tr>
<tr>
<td>L2 English (n=40)</td>
<td>25.6 (19-65)</td>
<td>5.1 (3-8)</td>
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<tr>
<td>L1 Japanese (n=23)</td>
<td>25.2 (19-45)</td>
<td>7.4 (5-8)</td>
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<tr>
<td>L1 Korean (n=17)</td>
<td>26.2 (21-65)</td>
<td>6.5 (3-9)</td>
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</tbody>
</table>

Method
- Story continuation: aural context sentence + written prompt (pronoun) + written completion
- 2 (contrast location) x 2 (aspect design)

Results
- Annotation for coreference by two trained coders.
- He wanted Paul to get really drunk.
  He thanked David.
- He insisted it was the best beer ever.

Conclusions
- L2 speakers show significant use of contrastive intonation on antecedents (Exp1), but not pronouns (Exp2) to determine pronoun reference.
- L2s’ success in using prosody may depend on the number, complexity and timing of steps required to make the relevant mappings:

Experiment 2: Contrast on pronoun

Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Age (years)</th>
<th>Versant English Test (overall score, range 20-80)</th>
<th>Self-rated English proficiency (out of 10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 English (n=48)</td>
<td>24.2 (18-49)</td>
<td>9.6 (8-10)</td>
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</tr>
<tr>
<td>L2 English (n=42)</td>
<td>31.1 (20-56)</td>
<td>5.9 (1-9)</td>
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<tr>
<td>L1 Japanese (n=24)</td>
<td>35.6 (20-56)</td>
<td>5.5 (1-3)</td>
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<tr>
<td>L1 Korean (n=19)</td>
<td>25.3 (20-48)</td>
<td>6.4 (3-9)</td>
<td></td>
</tr>
</tbody>
</table>

Method
- Story continuation: aural context sentence + 750ms silence + aural prompt (pronoun + adverb, to provide natural truncation point) + written completion
- 2 (pronoun stress) x 2 (aspect design)

Results
- Annotation for coreference by two trained coders.
- (ambiguous: 7.3/8.9% of L1/L2 data; missing: 0.3/0.0% of L1/L2 data)

Conclusions
- More reference to the Goal with stressed pronouns in L1 only.
- Effect of Aspect emerges in L2 when continuation point is moved after the adverb.

Acknowledgments: Many thanks to Amanda Blake, Amber Camp, Bonnie Fox, Victoria Lee, Ivana Matison, Eric Stepanov, and Klaus Tolva for assistance with data collection, annotation, and preparation of this poster. This research is supported by the National Science Foundation (BCS-1251540 to T. B. Grüter A. Schaefer).

References