Is Contrastive Accenting Really Contrastive?: Effects of Contrastive Accenting on Processing in a Discourse
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PRIOR WORK & RATIONALE
L+H* pitch accent:
➢ Has been argued to have contrastive reading (e.g., Pierrehumbert & Hirschberg, 1990)
➢ Cues attention to contrast items in online processing (Watson et al., 2008; Braun et al., 2008)

Present study:
➢ Do pitch accents have consequences for memory?
➢ How do pitch accents affect long-term representation of a discourse?

EXPERIMENT 1 – TEST PHASE (30 MIN. LATER)
Visual presentation with forced choice recognition test:
To win the hand of the baron’s daughter, the English knight and the Scottish knight competed in a tournament of jousting and archery. Both knights gave it their best, but the ___(A)___ knight emerged victorious during the ___(B)___ competition and married the daughter.
(A) ENGLISH or SCOTTISH?
(B) JOUSTING or ARCHERY?

CONCLUSION
Pitch accenting has effects on long-term memory for a discourse.
➢ Even a day later!
Benefit in memory from L+H* accent seems to come from facilitating rejections of contrast item.
➢ Supports idea that L+H* is contrastive.

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EXPERIMENT 2 – TEST PHASE (1 DAY LATER)
Visual presentation of true-false verification task:
The English knight won the tournament and married the baron’s daughter.
TRUE or FALSE?
The tournament to marry the baron’s daughter was decided during the jousting competition.
TRUE or FALSE?

3 types of test possible:
Target Referent: “The English knight won...”
Contrast Item: “The Scottish knight won...”
Unmentioned Distractor: “The Welsh knight won...”

EXPERIMENT 2 – RESULTS
Replicated benefit in memory from L+H* accent.
L+H*:
➢ No increase in hits to target referent
➢ But facilitated rejections of contrast item
As predicted if L+H* is contrastive.

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**Data and References**

**EXPERIMENT 1 -- MEANS**

<table>
<thead>
<tr>
<th>% accuracy</th>
<th>Stress on referent being tested</th>
<th>Stress on other referent</th>
</tr>
</thead>
<tbody>
<tr>
<td>H*</td>
<td>83%</td>
<td>90%</td>
</tr>
<tr>
<td>L+H*</td>
<td>83%</td>
<td>90%</td>
</tr>
</tbody>
</table>

**EXPERIMENT 1 -- STATISTICS**

Reliable effect of pitch accent type on referent being tested:
\[ F_{(1,19)} = 13.27, p < .01 \]
\[ F_{(3,39)} = 26.05, p < .001 \]

No effect of pitch accent type on other referent:
\[ F_{(1,19)} = 0.93, p = .35 \]
\[ F_{(3,39)} = 0.73, p = .40 \]

No effect of position in the story:
\[ F_{(1,19)} = 2.29, p = .15 \]
\[ F_{(3,39)} = 1.44, p = .24 \]

All interactions n.s., \( F \)'s and \( F \)'s all < 1

**EXPERIMENT 2 -- MEANS**

<table>
<thead>
<tr>
<th>% of TRUE responses</th>
<th>Test type</th>
<th>Correct</th>
<th>Contrast</th>
<th>Distractor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress on referent being tested</td>
<td></td>
<td>referent</td>
<td>item</td>
<td>distractor</td>
</tr>
<tr>
<td>H*</td>
<td>68%</td>
<td>52%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>L+H*</td>
<td>70%</td>
<td>41%</td>
<td>39%</td>
<td></td>
</tr>
</tbody>
</table>

**EXPERIMENT 2 -- STATISTICS**

Interaction between test type and accent type is reliable by subjects but not by items
\[ F_{(2,25)} = 7.82, p < .01 \]
\[ F_{(2,12)} = 2.44, p = .13 \]

**REFERENCES**

