New evidence on D-linking
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**D-linking**

The phenomenon: D-linking increases acceptability of extraction out of certain islands.

1. *What do you wonder who will buy __?*
2. ?? *Which car do you wonder who will buy __?*

**A semantic account**
- D-linking allows for individualization of extracted wh-phrase.
- Facilitates Boolean operation required by island-inducing operator (e.g., Szabolcsi & Zwarts (1997)).

**A syntactic account**
- D-linked wh-phrase contains topic-like lexical material.
- Can bind gap without violating Relativized Minimality (e.g., Rizzi (2008)).

**A processing account**
- D-linking gives filler a higher activation level in working memory.
- Can be more easily reintegrated into structure at point of gap (e.g., Kluender (1998)).

**Distinguishing among accounts**

<table>
<thead>
<tr>
<th>Account</th>
<th>Predict D-linking advantage in non-islands?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semantic</td>
<td>NO</td>
</tr>
<tr>
<td>Syntactic</td>
<td>NO</td>
</tr>
<tr>
<td>Processing</td>
<td>YES</td>
</tr>
</tbody>
</table>

**Previous acceptability studies**


**Experiment**

- 48 participants
- Acceptability: 7-point scale (1 = “very bad”, 7 = “very good”)

<table>
<thead>
<tr>
<th>D-linked</th>
<th>Bare</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNPC</td>
<td>Which of the cars</td>
</tr>
<tr>
<td>wh-island</td>
<td>...do you wonder who might buy __?</td>
</tr>
<tr>
<td>that-clause</td>
<td>...do you believe that he might buy __?</td>
</tr>
</tbody>
</table>

• 4 tokens of each condition: Subjects see 24 experimental items
• 81 fillers (3.4 : 1 filler/experimental ratio)
• 12 lists: counterbalanced (Latin square) and pseudo-randomized
• 12 additional lists with reverse order of items
• 2 subjects randomly assigned to each list
• Subjects: native speakers, U.S.-born, English-dominant; outliers screened out based on fillers.

**Results**

- Main effects:
  - Filler-type (p<.001)
  - Structure-type (p<.001)
- No interaction (p=.134)
- D-linked vs. bare difference in:
  - CNPC (p<.001)
  - wh-island (p<.001)
  - that-clause (p=.019).

**Why wasn’t this found earlier?**

• In traditional syntax, no way to make sense of “degrees of goodness”.
• Lack of effect in A&K (in press) may be due to:
  - Likely ceiling effect
  - Insufficient ceiling effect (extraction depth not detected)
• Present study designed to avoid ceiling effect and increase sensitivity:
  - Full range of acceptability in fillers
  - Fully counterbalanced design
  - Careful screening of subjects
  - In-lab experiment
• Details matter, even in acceptability studies.

**Cautionary notes**

- Results argue for processing account, but not necessarily against semantic/syntactic accounts. These don’t predict a D-linking advantage in non-islands, but don’t exclude the possibility.
- The term “D-linking” is used in many ways in the literature. Here we see one type; others may be different.
- D-linking reduces severity of island effect, but doesn’t erase it. Results here don’t resolve the source of this residual effect.

**References**

Alexopoulou, T. & S. Keller (in press). “What vs. who and which: Kind-denoting fillers and the complexity of whether-islands.” In N. Hornstein and J. Spross (eds), Experimental Syntax and Island Effects, CUP.


http://grammar.ucsd.edu/syntaxlab