Relativized Minimality and cue-based memory model: New insights on the role of similarity

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Relativized Minimalism and cue-based memory model: New insights on the role of similarity

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BACKGROUND

The extraction of a Wh-phrase across another Wh-phrase causes acceptability degradation:

* What did you wonder who solved __? No

But, whenever the extracted Wh-phrase is D(iscourse)-linked by lexical restriction (e.g., which problem), acceptability seems to improve (1):

? Which problem did you wonder who solved __? Yes


The present study puts these accounts to a further empirical test.

PRESENT STUDY

- Systematic study of the acceptability of configurations (a)–(d) and their counterparts without extraction
- Test of both the Discourse-linked Identity and the Inverse Inclusion configurations, which have never been tested before in a formal experiment

REFERENCES:


METHODS

Experiment 1: Acceptability out of context

Participants: 29 French-speaking adults
Material: 82 sentences (10 training sentences, 32 test sentences, 40 filler sentences)
Variables manipulated:
- Extraction of a Wh-phrase over another Wh-phrase;
- D-linking of the 1st Wh-phrase;
- D-linking of the 2nd Wh-phrase
Dependent variable: Acceptability judgment on a 7 point Likert Scale (Z-transformed)

Table: English translations of the French sentences in the 8 experimental conditions

<table>
<thead>
<tr>
<th>1st Wh</th>
<th>2nd Wh</th>
<th>No Extraction</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-linked</td>
<td>D-linked</td>
<td>(1) Who wonders who built that building?</td>
<td>(5) What do you wonder who built __?</td>
</tr>
<tr>
<td>D-linked</td>
<td>Non D-linked</td>
<td>(2) Who wonders which engineer built that building?</td>
<td>(6) What do you wonder which engineer built __?</td>
</tr>
<tr>
<td>Non D-linked</td>
<td>D-linked</td>
<td>(3) Which tourist wonders who built that building?</td>
<td>(7) Which building do you wonder who built __?</td>
</tr>
<tr>
<td>D-linked</td>
<td>D-linked</td>
<td>(4) Which tourist wonders which engineer built that building?</td>
<td>(8) Which building do you wonder which engineer built __?</td>
</tr>
</tbody>
</table>

RESULTS

Experiment 1: Acceptability out of context

- No Extraction: (1) = (2) = (3) = (4)
- A detrimental effect is observed when both NPs are D-linked (4)
- Extraction: (7) > (8) > (5) = (6)
- Bare Identity (5) and Inverse Inclusion (8) are worse than D-linked Identity (6)

Experiment 2: Acceptability in context

Participants: 24 French-speaking adults
Identical to Experiment 1 except that sentences were preceded by a context story aimed to increase the relevance of D-linking.

- No Extraction: (1) > (2) = (3) > (4)
- Extraction: (8) = (5) > (7) = (6)
- Bare Identity (5) is worse than D-linked Identity (8)

DISCUSSION

1. Acceptability of structures without extraction (presumably involving encoding only) mirrors that in structures with extraction (presumably involving retrieval). This finding suggests that encoding cost is associated with retrieval ease.
2. Inclusion (7) is more acceptable than Inverse inclusion (6), in line with predictions of both accounts.
3. D-linked Identity (8) is more acceptable than Bare Identity (5), against predictions of both accounts. The advantage of D-linked identity may be connected to:
   i) the special positional properties of D-linked Wh-phrases which have been argued to have a topic-like character due to the lexical restriction [5]; or
   ii) the semantic richness of D-linked Wh-phrases increasing the distinctiveness of the element to retrieve: as compared to what, which building is semantically richer and more tightly related to the verb built, which is likely to make retrieval easier.

REFERENCES: