Sluicing inferred propositions

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**Sluicing “New Words”**

**Definition:** Sluicing is a form of ellipsis that targets clauses under interrogative wh-phrases.

<table>
<thead>
<tr>
<th>New Words</th>
<th>QUD availability</th>
<th>reasonably acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Joe was murdered by someone, but we don’t know who Joe was murdered by.</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Joe was murdered, but we don’t know who Joe was murdered by.</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

**No New Words generalization** (Chung, 2006, ex. 29):

Every lexical item in the numerator of the sluice that ends up (only) in the elided IP must be identical to an item in the numerator of the antecedent CP.

**Central claim:** Sluicing can be alternatively acceptable.

**Figure 1** shows the acceptability of all items.

1. Some nominal-antecedent sluices are impossible. Many of them pattern with acceptable fillers (white bars), all of which are unacceptable. However, residual variance is insufficient for felicitous pronominal reference.

2. Some nominal-antecedent sluices are possible. Many of them pattern with acceptable fillers, i.e., cases that the literature agrees are unacceptable.

3. High variance: As a group, nominal-antecedent sluices span the entire range of possible acceptability ratings.

**QUD theories**

**Central claim:** Sluicing is only possible if the sluiced QUD is identical to the antecedent.

**Challenges:**

1. QUDs are made salient by “inquisitive elements” (exclamatory quantifiers, indefinites, disjunctions, or conditionals) in the antecedent. In the absence of inquisitive elements, sluicing is impossible.

2. Restricting the context’s “issue-raising capacity” to the antecedent is unnecessarily restrictive and problematic (Kote & Barrus, 2018).

**Roberts (1996/2012) approach to “QUD availability”**

- QUDs are inferred based on both top-down context constrains and bottom-up information from the target utterance.

- Bottom-up cases are reasonably well understood; top-down constrains largely remain mysterious.

**Our approach:** measure ‘QUD availability’ experimentally (Expt 3)

**Research strategy**

**Research question:** Are “New Words” really impossible to elide?

- **Expt 1:** Are the canonical cases as clear-cut as assumed in the literature? Are there cases that involve the ellipsis of “New Words” and are nonetheless reasonably acceptable?

- **Expt 2:** What about sluices with nominal antecedents?

- **Expt 3:** Can variance in nominal-antecedent sluices be explained in terms of QUD availability?

**Experiment 1**

**Goal:** Test New Words generalization.

**Methods:** 27 native English speakers from Mechanical Turk performed a forced-choice acceptability judgment task (1-5 Likert scale) and a free-response paraphrase task in which they paraphrased the sluice in their own words.

**Stimuli:**

- 10 regular sluicing items to establish upper and lower acceptability bounds.

**Results:** Figure 2 shows the acceptability of all items.

- **QUD availability** explains acceptability. QUD availability increases as a function of QUD availability (β = 0.037).

**Conclusion:** We set out to test the “No New Words” generalization, which prohibits the ellipsis of material not present in the antecedent clause. Expt 1 found that canonical cases often follow the bimodal distribution of QUD availability predicts (Figure 1), but there are also cases that achieve high levels of acceptability (Figure 2) despite QUD availability being low, which would be inconsistent with the antecedent clause (Figure 3).

We then compared two classes of theories of sluicing with respect to their predictions for nominal-antecedent sluices: theories that require antecedent-elicited QUD availability (1), and those that require the sluiced question to be a salient QUD. Our experimental results favor QUD theories over identity theories.

1) We found a high amount of variability in the acceptability of sluices with nominal antecedents, with some cases achieving peak acceptability (Expt 2).

2) Some (but not all) of the variance in acceptability can be explained in terms of QUD availability (Expt 3).

**Final Remarks**

1. While the contrast in (1) remains to be explained (Figure 1), the “No New Words” generalization is overly restrictive (Figures 2 and 4).

2. QUD availability may be necessary, but it doesn’t seem to be sufficient: the QUD [Who killed Joe?] is clearly inferable from “Joe was murdered,” yet sluicing is unacceptable.

3. Speculative analogy: Parlette’s marbles (Heim, 1982) similarly suggest that “reference infelicitability” alone is insufficient for felicitous pronominal reference.

(a) I dropped ten marbles and found all but one. It is probably under the sofa.

(b) I dropped ten marbles and found only nine of them. It is probably under the sofa.

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