Resumption can aid comprehension even outside islands

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• People prefer RPs (Ackerman et al., 2014)
  - if forced to choose between RP or Gap in island context, RP preferred

She is the kind of person who it is obvious what *___/she* is feeling.
• But RPs don’t seem to improve acceptability
  (Alexapoulou and Keller, 2007, and Heestand et al., 2011)
  - both off-line and on-line:
  - in strong, weak, and non-island contexts:
  - for wh-questions and declarative statements:
    - RPs do not improve acceptability

WHAT GIVES?
Hypothesis

- RPs improve comprehension

- Previous evidence
  Dickey (1996) found that RPs improve comprehension in 3-clause sentences
  - may aid in memory retrieval of ‘shunted’ material
Sample Item Set

1. Island/Gap
   I distrusted the author [that the critic [who slammed __ yesterday] interviewed the Poet Laureate].

2. Island/RP:
   I distrusted the author [that the critic [who slammed him yesterday] interviewed the Poet Laureate].

3. Non-island/Gap:
   I distrusted the author [that the critic [who slammed the Poet Laureate] interviewed __ yesterday].

4. Non-island/RP:
   I distrusted the author [that the critic [who slammed the Poet Laureate] interviewed] him yesterday].
Was it the author that the critic interviewed?

→ Island Conditions (1, 2): No.
→ Non-island conditions (3, 4): Yes.
Results: accuracy

Figure 1: Accuracy across conditions

Table 1: Average accuracy for comprehension questions

<table>
<thead>
<tr>
<th></th>
<th>Island</th>
<th>Non-Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap</td>
<td>0.700</td>
<td>0.527</td>
</tr>
<tr>
<td>Resumptive Pronoun</td>
<td>0.659</td>
<td>0.437</td>
</tr>
</tbody>
</table>

Main effect of islandhood on accuracy: accuracy is significantly lower in non-island conditions
Results: response time

Figure 2: Response time across conditions

<table>
<thead>
<tr>
<th></th>
<th>Island</th>
<th>Non-Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap</td>
<td>3072</td>
<td>3145</td>
</tr>
<tr>
<td>Resumptive Pronoun</td>
<td>3147</td>
<td>3043</td>
</tr>
</tbody>
</table>

Table 2: Average response time (in ms) for comprehension questions

No effect for gap/RP or for islandhood
Results: RT for verb

Figure 3: Effect of Gap type in Verb Region

<table>
<thead>
<tr>
<th>Gap</th>
<th>Island</th>
<th>Non-Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap</td>
<td>418 (423)</td>
<td>490 (480)</td>
</tr>
<tr>
<td>Resumptive Pronoun</td>
<td>440 (415)</td>
<td>453 (483)</td>
</tr>
</tbody>
</table>

Table 3: Average reading time (in ms) for critical region and verb region

Main effect of islandhood in verb region:
Reading time is significantly slower in the non-island conditions
Results: Critical Region

Figure 4: Effect of Gap type in Critical Region

Table 3: Average reading time (in ms) for critical region and verb region

<table>
<thead>
<tr>
<th>Gap</th>
<th>Island</th>
<th>Non-Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resumptive pronoun</td>
<td>443 (415)</td>
<td>433 (383)</td>
</tr>
<tr>
<td>Gap</td>
<td>418 (423)</td>
<td>410 (380)</td>
</tr>
</tbody>
</table>

Interaction effect in the critical region:
RP improves reading time in the non-island conditions only.
Discussion

If RPs are a last-resort option, we might expect...

- RPs help in islands
- RPs don’t help in non-islands
Discussion

But these predictions were not borne out.

In fact, resumptive pronouns improved reading times only in the Non-Island condition.
Discussion

Wherefore?

Probably because of our stimuli.

The Non-island conditions involved a greater linear distance and more intervening NPs between the filler and the gap.
Discussion

1. **short dependency: Island/Gap**
   I distrusted **the author** [that the critic [who slammed __ yesterday] interviewed the Poet Laureate].

2. **short dependency: Island/RP:**
   I distrusted **the author** [that the critic [who slammed **him** yesterday] interviewed the Poet Laureate].

3. **long dependency: Non-island/Gap:**
   I distrusted **the author** [that the critic [who slammed the Poet Laureate] interviewed __ yesterday].

4. **long dependency: Non-island/RP:**
   I distrusted **the author** [that the critic [who slammed the Poet Laureate] interviewed **him** yesterday].
The weird significant effect?

- Processing effect due to stimulus design.
  - Our Non-Island sentences were harder
Conclusion

So, do RPs help comprehension?

- They didn’t influence reading time, response time, or response accuracy in islands.
- But for complex non-islands, they improve processing (reading time in critical region)
Conclusion

Future research

- Reconstruct the stimuli to make island contexts comparably difficult
- An easier task
- Longer dependencies? (Dickey 1996’s Shunting)