## Learning Problem

- **“John thinks that Bill painted himself.”** (himself = Bill, himself ≠ John)
- Japanese *zibun* can be bound across clause boundaries.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Local zibun</th>
<th>Long-distance zibun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taro thinks that Akira painted <em>zibun</em>. → True</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### No long-distance zibun in child-directed speech.

Learning long-distance *zibun* requires projecting beyond the input.

<table>
<thead>
<tr>
<th>2nd, local</th>
<th>3rd, local</th>
<th>3rd, non-local, intra-sentential</th>
<th>3rd, extra-sentential</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>zibun-de</em> (by <em>zibun</em>)</td>
<td>30</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>zibun-no</em> (self’s)</td>
<td>2</td>
<td>7</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><em>zibun-wa/ga</em> (zibun-TOP/NOM)</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><em>zibun-wo/nī</em> (zibun-ACC/DAT)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>8</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

MiPro Corpus, Arika (2;11-5;0): 40,412 utterances in total from her mother.

### Method: Truth Value Judgment task

- **TVJT:** A puppet makes a statement about a story. A child’s task is to reward or correct the puppet based on the statement.

- **Previous studies:** Children allow the long-distance *zibun* interpretation.
  - Otsu (1990): disproportional salience of potential antecedents (*zibun*’s picture)
  - Okabe (2008): failure to satisfy Condition of Plausible Dissent (Crain & Thornton 1998)

### Scenario example

The long-distance interpretation of *zibun* is true at the end of the scenario.

1. Painting game
2. Akira painted Akira (→ False)
3. Local *zibun* (→ False)
4. Long-distance *zibun* (→ True)
5. A puppet’s statement

### Experiment 1: local & long-distance *zibun*

**Children have local-bias**

- **Two possibilities**
  - *zibun* is local-only
  - unable to access the matrix subject

→ To distinguish these possibilities, we ran a kare condition.

### Experiment 2: kare

**Summary**

Children incorrectly rejected the long-distance antecedent for *zibun*, despite being able to access this antecedent for kare.

**Children’s knowledge of *zibun***

- Local-only?
- Ambiguity resolution difficulty?

**Acquiring LD *zibun* beyond the input**

- The form of intensifiers
- Occurrence in subject position

## Discussion

**Children incorrectly rejected the long-distance antecedent for *zibun*, despite being able to access this antecedent for kare.**

**Children’s knowledge of *zibun***

- Local-only?
- Ambiguity resolution difficulty?

## Acknowledgments

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