How Many Selves are Bound? Distributivity and Number Effects in Bound Reflexives

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Background

The pronoun they is often able to reference a singular antecedent despite its seemingly plural number feature.

Underspecification Theory → the interpretation of they is not dependent on morphological properties, but on semantic, pragmatic, and/or contextual properties (Camilieri et al., 2019; Conrad, 2019; Kennedy & Cowper, 2020).

They is underspecified for gender and number, as evidenced by:

- Speaker judgements (Bjorkman, 2017; Conrad, Ahn & Schultz, 2022)
- Processing advantages for this pronoun, regardless of the number and gender features of its antecedent (Miao et al., 2004; Davenport & Yoshida 2023; cf. Sanford & Fells, 2007; Chen et al., 2021).

Moulton et al. (2022) explored bound variable singular they contrasting:

- Singular quantified antecedents (every and each)
- Plural quantified antecedents (all)
- Definite plurals (The cyclists)

Tested the contribution of number features vs. distributivity to the acceptability of singular they:

(1) A big group of cyclists decided to go for a ride despite the poor weather.

(The cyclists/All the cyclists/Every cyclist/Each cyclist) thought {themselves/themself} to be the only person who liked the pouring rain.

Predictions:

- If morphological number is what determines acceptability → all rated higher than every/each
- If distributivity makes singular they more available → cline in acceptability mirroring cline in distributivity (all < every < each)

Findings:

- In line with the distributivity hypothesis → bound singular they more acceptable with more distributive antecedents
- Supports underspecification theory

Current Study

- Quantifier-bound reflexives themselves and themself
- Seemingly correspond to a number distinction due to morphology: themselves = PL, themself = SG
- Do these reflexives pattern like they in quantifier-bound cases?

Methodology

Stimuli (based on Moulton et al.):

- Reflexives → must be bound by a local antecedent, so we avoid the unheralded interpretation, on which they in e.g. (1) refers to a referent not explicitly mentioned in the discourse context, which may have inflated acceptability ratings

- Swapped the only one with the only person → the only one can potentially be interpreted as the only group, a singular antecedent composed of multiple individuals; evidence that this may have happened comes from the relatively high acceptability of Moulton et al.’s definitive plural sentences

- Rated on a 7-point Likert scale (“Completely unnatural” to “Completely natural”):

  (2) A big group of cyclists decided to go for a ride despite the poor weather.

  {The cyclists/All the cyclists/Every cyclist/Each cyclist} thought {themselves/themself} to be the only person who liked the pouring rain.

Findings

- The overall numerical pattern follows Moulton et al.’s cline in acceptability (def=call=every=each) for both reflexives
- An overall degradation in the rating of themself in all four conditions compared to themselves (p < 0.001)

Experiment 1: Themselves

Participants (N=40), items (N=24)

Analysis: patterns confirmed both by forward difference coding (same analysis as Moulton et al.) and Helmert coding (values reported; Santarius, 2023)

- Exp 1: def=call=every=each suggests that themselves is more sensitive to semantic distributivity
- Exp 2: def=call=every=each suggests that themself is more sensitive to number

- Supports an analysis of they and its them- stem in themselves/themself as underspecified for number
- Themself prefers singular antecedents due to the -self morpheme
- Why was the def. plural condition relatively acceptable?

Supports an analysis where def. plural phrases can be construed distributively via a silent distributive operator (Roberts, 1987, 1991)

- A diagnostic for whether DIST is posited is the presence of a processing cost. (Frazer et al., 1999). We are interested in testing this possibility; suggestions are welcome!

Participant Age:

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<thead>
<tr>
<th>Participant Gender</th>
<th>Experiment 1: Themselves Acceptability</th>
<th>Experiment 2: Themself Acceptability</th>
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Analysis:

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Discussion

Taking a closer look at the stats...

Themselves: (def=call=every=each)
- rating of def < all (p<0.001)
- rating of all = every (p=0.12)
- rating of every < each (p<0.05)

Themself: (def=call=every=each)
- rating of def < all (p<0.001)
- rating of all < every (p<0.01)
- rating of every = each (p=0.38)

References

- Konnelly, S. (2019). Taking a closer look at the stats...