BACKGROUND

- Koh & Clifton (2002) used a sentence completion task to assess interpretations of the plural pronoun “they”. They manipulated equivalence (e.g., ontological category; human vs. inanimate) and symmetry (see Example 1; “sang with” is symmetric, “recognized” is not).
- Ex. 1. “Tom (sang with/recognized) Jim and Tony at the school.”

- Results indicated that participants prefer homogenous (all human) groupings.
- Participants interpreted “they” as referring to all three potential (human) referents in 88% of symmetric and 61% of nonsymmetric constructions. When participants interpreted it as referring to only two entities, they chose those from the conjoined NP (e.g., “Jim and Tony”).

CURRENT STUDY

- We manipulated equivalence semantically within symmetric structures in three languages to determine whether ontological category (humanness) and prominence can result in interpretations that include only the first and third item in a symmetric list.
- Groupings were restricted by verb biases and pronoun gender.
- First-third (1-3) groupings in a symmetric construction are considered difficult, if not impossible, to achieve by Koh & Clifton.
- There were three types of experimental passages, following the structure below:
  1 and 2 [did A] with 3. They [did B]. Who [did B]?

Experiments 1 and 2 (English & Russian):
- **Equal-Status** passages used proper names for 1, 2, and 3 (all human).
- **Prominence** passages used proper names for 1 and 3, and 2 was 1’s “friend” (all human).
- **Ontological** passages used proper names for 1 and 3 (human), and 2 was 1’s “dog”. B was an action limited to humans (e.g., “biking”).

Experiment 3 (gender manipulation; Spanish):
- 1 and 3 were female names, and 2 was a male name (all human). The feminine form of “they” (ellas) was used in the second sentence.

PREDICTIONS

- Equal-Status passages will result in the interpretation that 1, 2, and 3 all did B (123).
- Prominence passages will result in a majority of 123 interpretations, but it may also be interpreted that only 1 and 3 or 1 and 2 did B (1-3, 1-2).
- Ontological passages will result in a majority of 1-3 interpretations, but 123 interpretations may also appear.
- Gendered pronouns will always be interpreted as 1-3 (all female).

EXPERIMENTS 1 & 2: ENGLISH & RUSSIAN

- Ontological category (human vs. dog) was used to restrict antecedent grouping.
- Prominence was manipulated through naming (e.g., “Susan” vs. “friend”).

METHODS

- 12 native English speakers from MSU participated in Experiment 1 and 12 native Russian speakers from MSU participated in Experiment 2.
- Participants received five items of each experimental type (15 total), randomly mixed with 30 filler passages.
- Participants were instructed to “answer all questions completely, listing all that apply”.

RESULTS

- English and Prominence interpretations were clear.
- Russian interpretations were less clear-cut than expected.

EXPERIMENT 3: SPANISH (PILOT)

- Used gender-specific pronoun (ellas) to restrict antecedent grouping to females.

SPANISH EXAMPLE

Maria y Miguel fueron al almacén con Anita. Ellas compararon zapatos nuevos. ¿Quiénes compararon zapatos?

CONCLUSIONS

- Ontological and gender equivalence resulting from verb biases and gendered pronouns can overcome symmetric equivalence when resolving the antecedents of a plural pronoun.
- Cross-linguistic differences were found, with English allowing more freedom in referent grouping than Russian.
- Future directions include eye-tracking studies using similar materials to assess the on-line difficulty in overcoming symmetry.
- Further manipulations of ontological category (e.g., animacy) are also planned.

References