Classifier Mismatch in Ellipsis Resolution

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Research Questions

What constraints the anaphoric link between an ellipsis site and its antecedent? (see van Craenenbroeck & Merchant, 2013 for a theoretical overview about the ellipsis phenomena)
- The information at the ellipsis site is recovered based on the antecedent—by default, semantic identity/parallelism should hold between the antecedent and the ellipsis site.
- However, should the retrieval of the antecedent also be constrained by the syntactic form of the antecedent—i.e. syntactic parallelism?
- Should these constraints be stated in the grammar, or only in processing?

Experiment 1 (itemN=160): to-be-retrieved antecedent target contains a classifier that makes a singular vs. plural distinction in the morpho-syntax

- Singular ellipsis site:
  - The girl in front of the piano is a composer.
  - The girl next to the piano is a composer.

- Plural ellipsis site:
  - The girls in front of the piano are composers.
  - The girls next to the piano are composers.

Experiment 2: the numeral-classifiers in the antecedent (i.e. content in the yellow brackets) were removed; but the the conceptual number information on the retrieval target is still available due to the number information on the first clause subject

Procedure:
- ERP recording
- phrase-by-phrase presentation of the stimuli;
- 160 additional ungrammatical fillers
- participants judged the acceptability of each trial (Y/N) after the last phrase was presented

ERP results (numbers in parenthesis indicating the acceptance rate of each condition from the behavioral task)

Experiment 1 (subjN=32)

- Singular ellipsis site:
  - Match (94%)
  - Mismatch (88%)
  - widely distributed late positivity (p<0.05)

- Plural ellipsis site:
  - Match (92%)
  - Mismatch (92%)

Experiment 2 (subjN=32)

- Singular ellipsis site:
  - Match (93%)
  - Mismatch (92%)
  - a trend of an anterior negativity, but n.s.

Discussion and Conclusion

- The antecedent retrieval is sensitive to the syntactic form of the antecedent, even when the morpho-syntactic features on the antecedent do not give rise to different truth conditions (also see Aparicio, Franich and Xiang, 2014).
- The morpho-syntactic mismatch elicited larger P600 only when the antecedent contains a plural classifier (Experiment 1), suggesting that the seemingly singular classifier “ge” is unmarked for the morpho-syntactic number feature.
- Mismatch in conceptual number (Experiment 2), on the other hand, elicited a different pattern. When the mismatched antecedent is conceptually singular (but not when it is plural), we observe a trend of an extended anterior negativity, consistent with the idea that semantically speaking “singular” is the marked feature, whereas “plural” is the unmarked one (Sauerland et al., 2005).
- A remaining puzzle: although the morpho-syntactic mismatch elicited extra processing cost (Experiment 1), it did not lead to ungrammaticality.