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
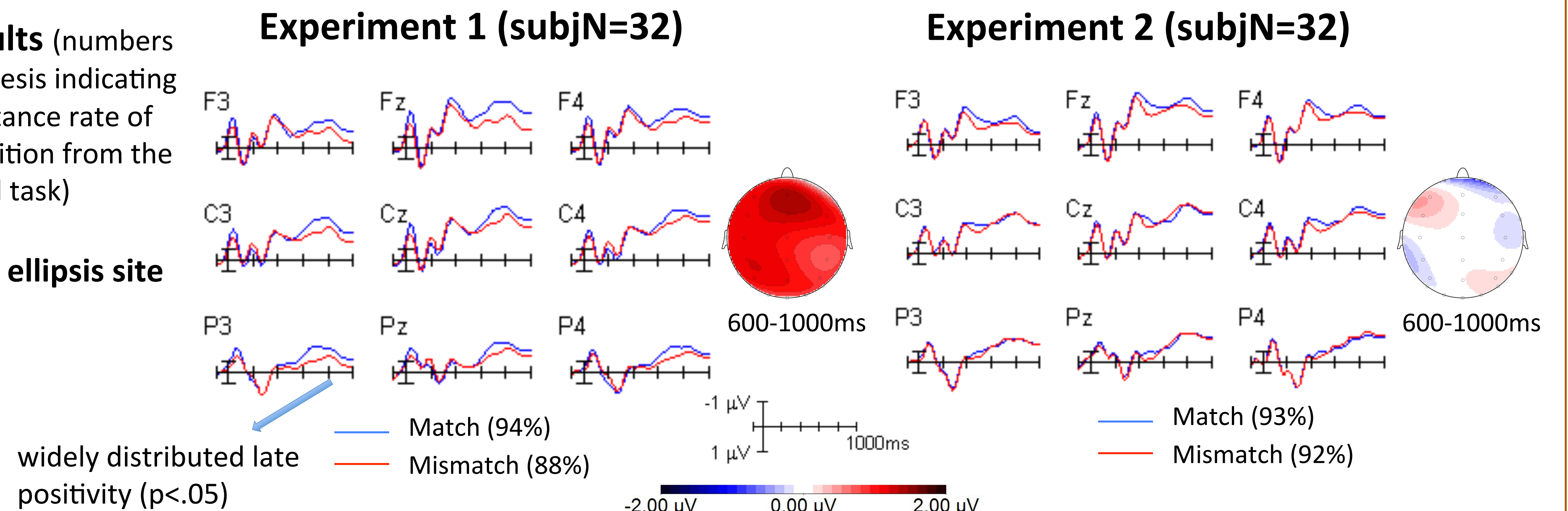

Experiment 2: the numeral-classifiers in the antecedent (i.e. content in the yellow brackets) were removed; but the the conceptual number information on the retrieval target is still available due to the number information on the first clause subject
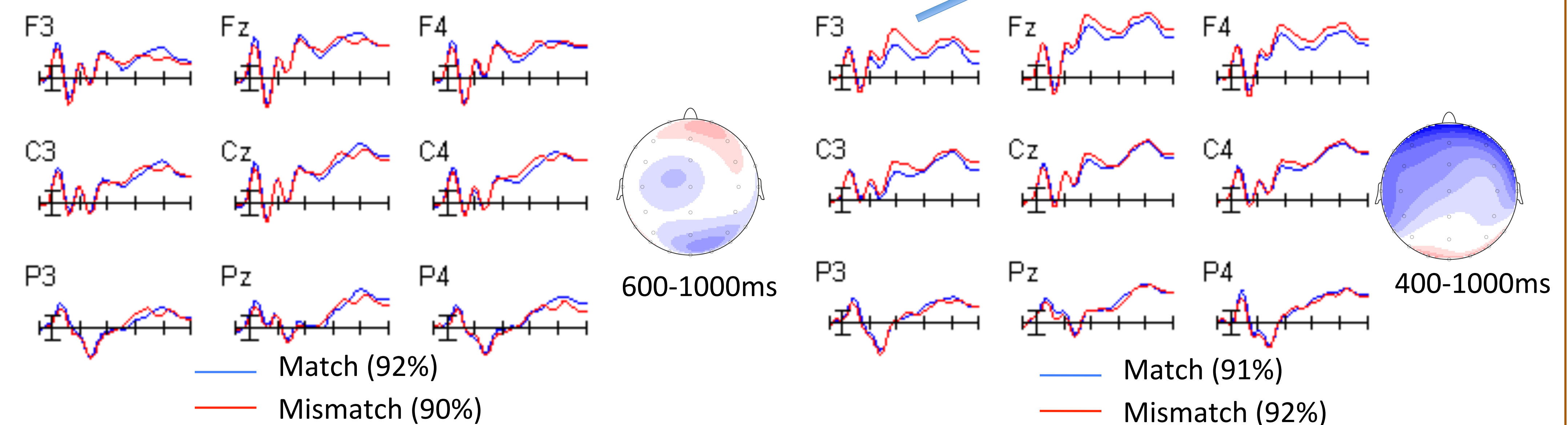
Procedure:

--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

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

Experiment 1 (subjN=32) — Singular ellipsis site — 600-1000ms — widely distributed late positivity (p<.05) — Match (94%) / Mismatch (88%)

Experiment 2 (subjN=32) — Singular ellipsis site — 600-1000ms — a trend of an anterior negativity, but n.s. — Match (93%) / Mismatch (92%)

Plural ellipsis site — 600-1000ms — Match (92%) / Mismatch (90%)

Plural ellipsis site — 400-1000ms — Match (91%) / Mismatch (92%)

-1 µV / 1 µV / 1000ms

-2.00 µV   0.00 µV   2.00 µV

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.

References: Aparicio, H; Franich, K. & Xiang, M. 2014. The syntax of ellipsis resolution: Eye-tracking evidence from phi-feature mismatches. Talk presented at the 45th North Eastern Linguistics Society (NELS). van Craenenbroeck, J. & Merchant, J. 2013. Ellipsis phenomena. In Marcel den Dikken (ed.), The Cambridge Handbook of Generative Syntax, 701-745. Cambridge U. Press. Sauerland, U.; Anderssen, J. & Yatsushiro, J. 2005. The plural is semantically unmarked. In Stephan Kepser & Marga Reis (eds.), Linguistic evidence, de Gruyter. doi:10.1515/9783110197549.413.

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