



PA9.1 - Experimental investigation of presupposition projection

Student: Maik Thalmann

Supervisors: Clemens Steiner-Mayr, Thomas Weskott

Ext./Th.Com.: Viola Schmitt (HU Berlin/MIT)

I. The form-meaning mismatch

- Presupposition triggers can be viewed as a 0:1 mapping, having both presuppositional and non-presuppositional meanings. Presuppositions are considered substantially independent from the rest of the utterance.
- Yet in some contexts, independence appears violated: information structure/word order seems to affect truth-value intuitions in (1). In (2), the two kinds of quantifiers are said to cause different projection patterns.
- (1) a. The king of France visited the Exhibition.
 - b. The Exhibition was visited by **the** king of France.
- 2) a. Every woman **stopped** drinking beer.
 - b. John is certain that Mary stopped drinking beer.

Research questions

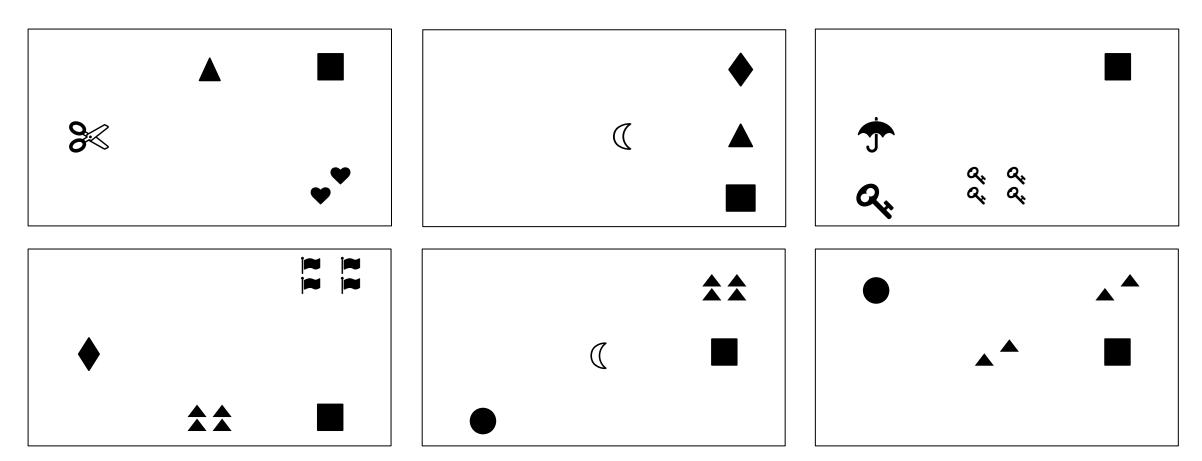
RQ1: What are the presuppositions of singular *the*? What is the role of syntax/information structure? [1] [2]

RQ2: How do presuppositions project from quantified environments? [3] [4] Are there differences between quantifiers over worlds/individuals?

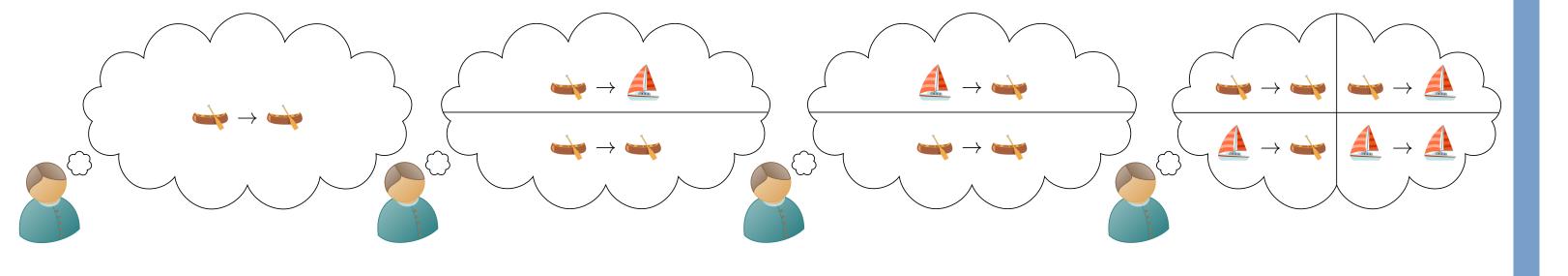
(RQ3): How do mistaken-beliefs affect factivity? [5] Is factivity weaker than originally thought?

II. Methodology and Hypotheses

- We used the continuous truth-value judgment task (CT).
- RQ1: two CTs w/ context images. [2] predicts that word order should affect judgments in the undefined scenario,
 [1] predicts medial judgments. Plurals served as controls.
 - (4) The triangle/s is/are to the left of the square.

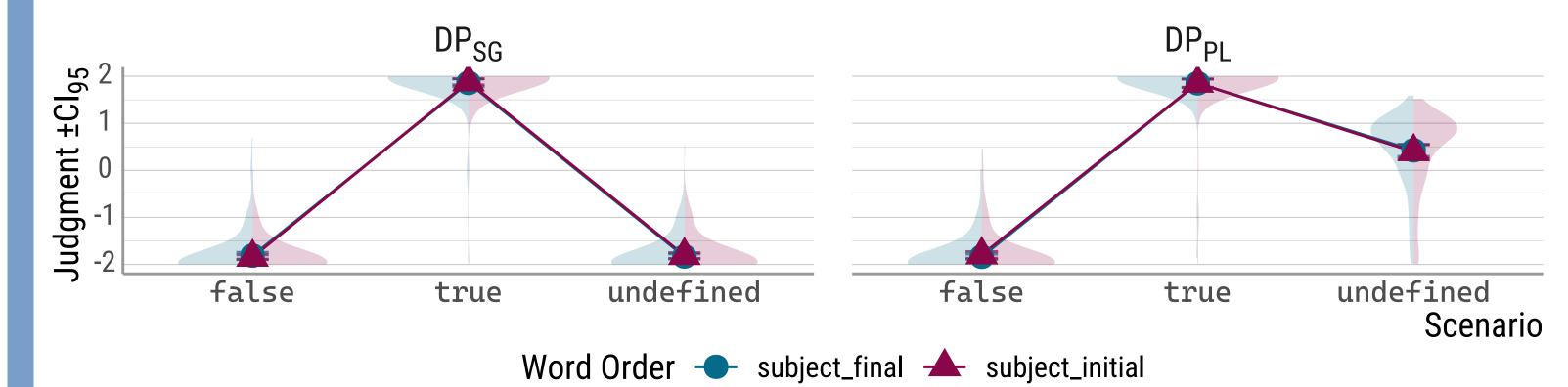


- RQ2: two CTs w/ context images. [4] predicts that the critical scenario should pattern like undefined, contra [3].
 - (5) Peter is (not) certain that Jan canoed again.

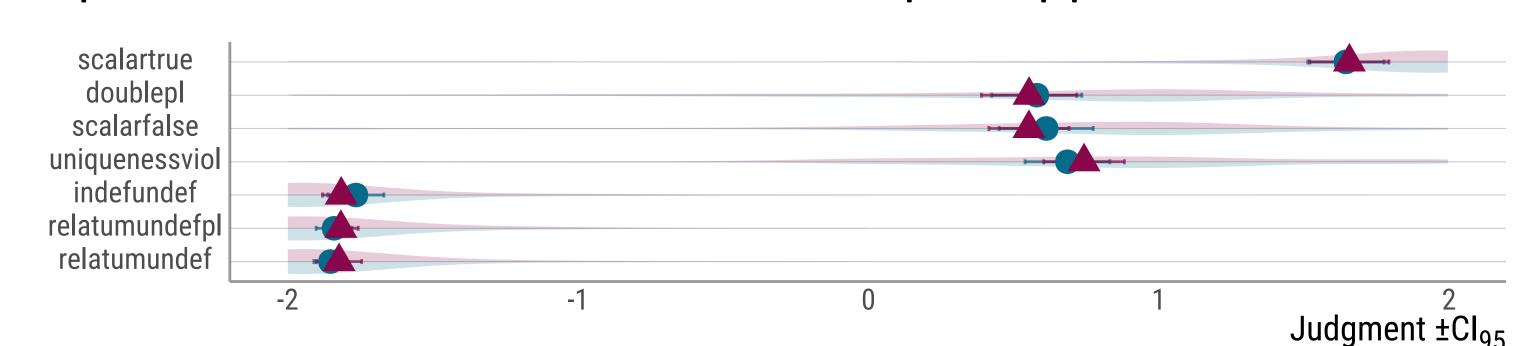


III. Results and discussion

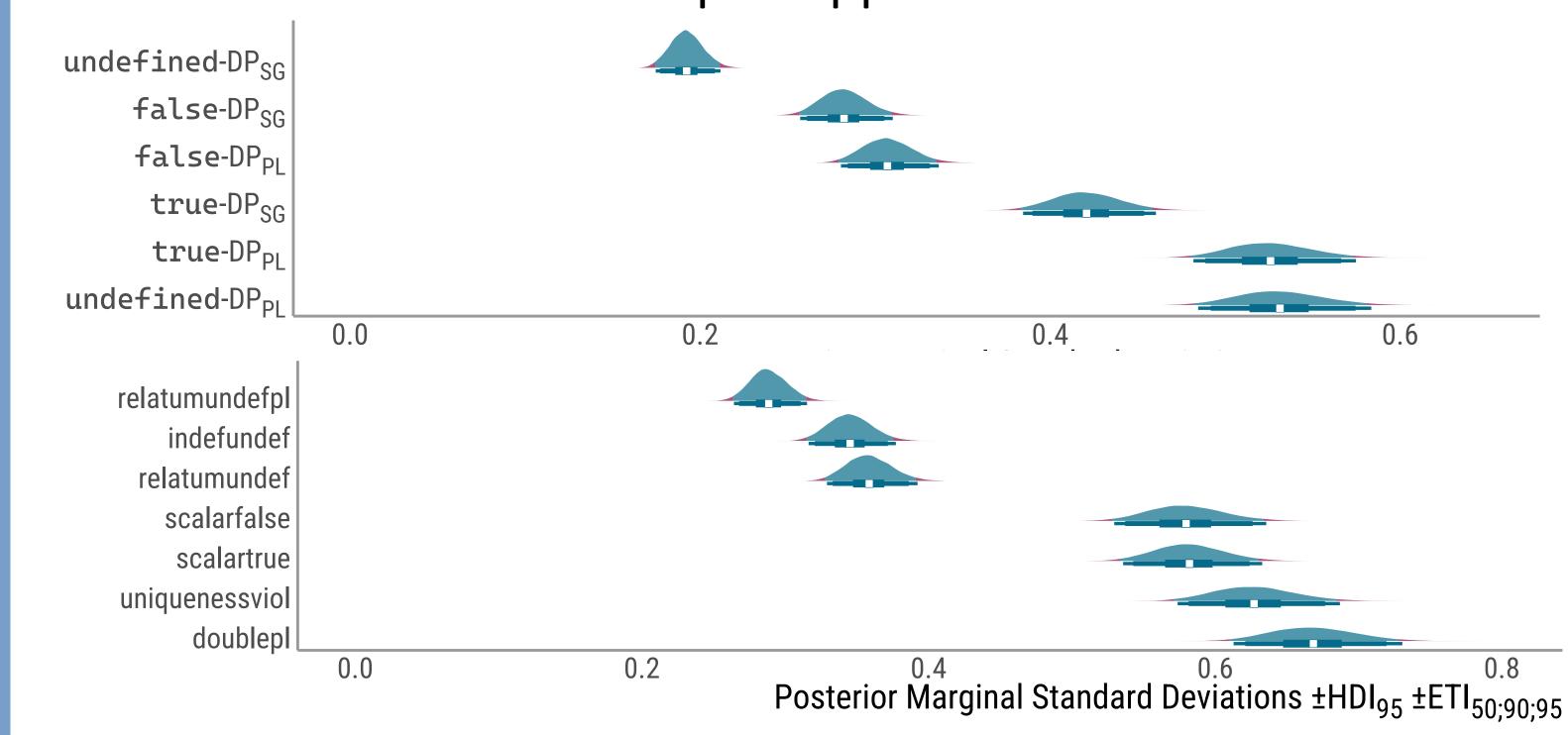
RQ1: There is no effect of word order in any of the conditions. The data also suggest that existence violations with definite singulars are not associated to a truth-value gap, contrary to violations of homogeneity with plurals.



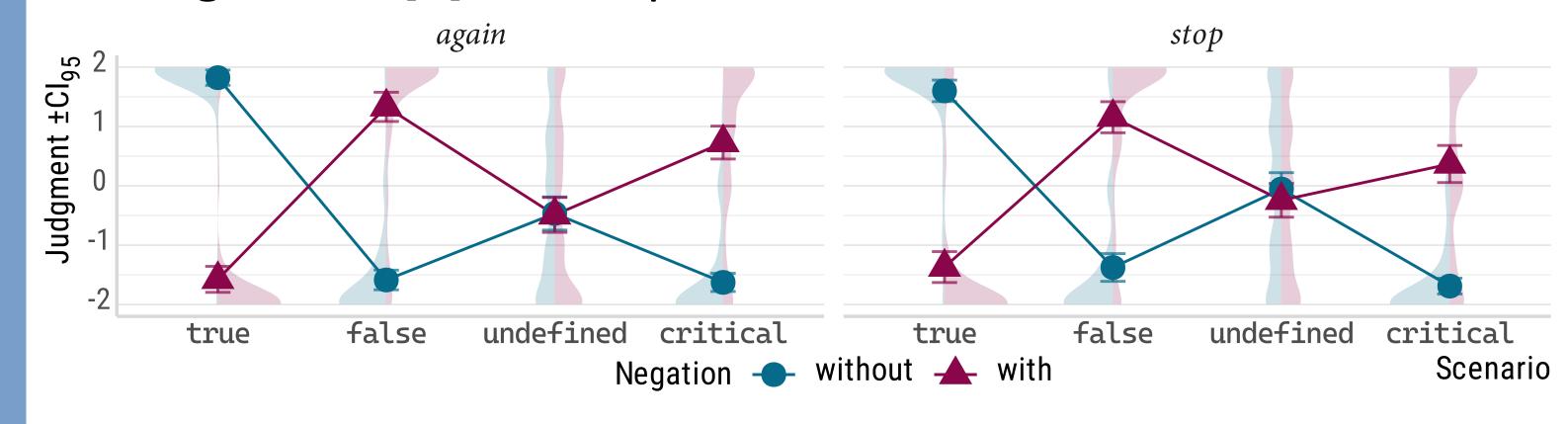
Uniqueness violations were treated as presupposition failure.



Variance contrasts enabled presupposition failure detection.



RQ2: Since critical behaves unlike undefined, the standard account makes wrong predictions, and a Strong Kleene logic from [3], which predicts our results, is to be favored.



IV. Consequences and follow-up questions

- We addressed the projection problem and the influence of pragmatics on truth-value intuitions. But:
 - While linear order did not affect participants' judgments here, what about domains where it does, like exceptives?
- How do projection and pragmatics interact? That is, can pragmatic processes always affect projection, or can presuppositions be immunized, e.g., using embedding?

References: [1] Frege, G. (1997). Uber Sinn und Bedeutung (1892). In Beaney, M., The Frege Reader, 151–171. Blackwell, Malden, MA. [2] Strawson, P. F. (1964). Identifying reference and truth-values. *Theoria*, 30(2):96–118. [3] Fox, D. (2013). Presupposition projection from quantificational sentences: Trivalence, local accommodation, and presupposition strengthening. In Caponigro, I. and Cecchetto, C., *From Grammar to Meaning*, 201–232. Cambridge University Press. [4] Heim, I. (1992). Presupposition projection and the semantics of attitude verbs. *Journal of Semantics*, (9):183–221. [5] Karttunen, L. (2016). Presupposition: What went wrong? In Moroney, M., Little, C.-R., Collard, J., and Burgdorf, D., *Proceedings of SALT* 26, 705–731.