Proposed project

A sentence like "John was at the door" usually implies the *exhaustivity inference* (EI) that nobody else was at the door. At least three accounts have been developed to explain these EIs: (i) Gricean reasoning, (ii) syntactic ambiguity, and (iii) pragmatic enrichment. These three accounts make different predictions in the case of embedded contexts. We plan to test these predictions by means of an act-out experiment.

Purpose of the visit

During this meeting, we will discuss the precise hypotheses for our experiments and formulate the theoretical impact these experiments might have on the various accounts of SIs. We decide on the method and material to be used in the experiments. This is a particularly thorny issue, as several confounds (e.g., typicality) might affect participants' interpretation. We thus aim to set up a first experiment to adjudicate between different theories of SIs.

Work carried out

Before our meeting, Ye Tian and Richard Breheny carried out an act-out experiment using sentences that involve a monotone increasing ("every"), monotone decreasing ("at most three") or non-monotone ("exactly two") operator. During our meeting, we first fledged out the precise predictions of the various accounts. In discussing the results of this experiment, we noted that while seemingly embedded EI responses occur regularly in the case of monotone increasing operators, these might be attributed to typicality differences between situations. In the case of monotone decreasing and non-monotone operators, we found a low but not insignificant rate of embedded EI responses. We noted that these responses might be attributed to participants regarding "exactly two" as meaning "at least two." In line with this hypothesis, we found an equally large rate of 'error' responses where participants unambiguously adopted this interpretation. To corroborate our hypothesis, we ran a verification task, where participants had to indicate how well different situations where described by the sentence. The results of this experiment were fully in line with our expectations.

Future work

Theoretically, our main conclusion is that embedded EIs do not seem to occur in non-monotone and monotone decreasing environments. This calls for a reevaluation of current experimental data that purports to show that embedded EIs do occur in such environments (e.g., Chemla and Spector 2011). It also defuses one of the main arguments against a Gricean account of EIs. In the future, we need to form an explanation for these divergent results. A potential explanation is that most current experimental data involve *scalar inferences* (SIs). As noted by Geurts (2009), embedded SIs might be due to the scalar terms receiving a metalinguistic, contrastive interpretation. Perhaps the experimental data can be attributed to such an interpretation. We further want to focus on an interesting difference we found between the ways participants respond to "I

want to make sure..." and "I would like..." Lastly, we want to explain why participants often do more than is necessary. In other words, even though participants might consider a sentence true in a particular situation, they still undertake additional actions when asked to align the sentence with the situation. What motivates participants to undertake these actions? We hypothesize that typicality might play an important role, but have not fledged out the details of such an explanation.

Projected publications

First of all, we will present our work at the EURO-XPRAG meeting in Oslo. There, we hope to receive critical feedback about the persuasiveness of our data. If these are as convincing as we deem them to be, we may consider publishing them in a suitable journal (e.g., Journal of Semantics).