

Summary of the project:

Negative polarity items (NPIs) are a class of lexical items or phrases (including, ‘ever’, ‘any’, ‘lift a finger’) whose grammatical acceptability is sensitive to semantic features of their linguistic environment. It has long been claimed that NPIs are licensed exclusively in downward-entailing environments (Fauconnier, 1975; Ladusaw, 1979), where downward-entailingness (DE) is a generalized semantic notion of negativity. This generalization explains, for instance, the following contrasts in the acceptability of the NPI ‘ever’:

- (1) a. John won’t ever eat that. (2) a. Every student who ever ate that got ill.
b. *John will ever eat that. b. *Some student who ever ate that got ill.

Many researchers argue that the licensing of NPIs is pragmatic in nature, and closely related to the calculation of scalar implicatures (SIs) a paradigmatic pragmatic phenomenon.

The goal of this project was twofold. First, we wanted to use experimental techniques to collect robust grammaticality judgments about NPIs. To adjudicate between various theories of NPIs, we tested the acceptability of NPIs in DE environments but crucially also in non-monotonic environments and so-called Strawson DE environments for which different theories make different predictions and introspective judgments diverge (see Krifka, 1995; von Stechow, 1999; Chierchia, 2004; Homer, 2007). Second, we collected inferential judgments about scalar implicatures triggered in the same environments (see Chemla, 2009; Chemla and Spector, 2011).

Purpose of the visit: We have conducted most of these experiments. The correlations we were looking for turned out to be very high, but the interpretation of the results required careful statistical analyses. We have written up a full introduction for a journal article. Chemla traveled to Oxford to decide with Rothschild which of the results should be included in the experimental section and make publication plans.

Description of the work carried out during the visit:

Our main goal was to prepare the result section. There are two specific difficulties:

- (i) The statistics needed are unusual. In particular, there is no fully standard way in the experimental psychology literature to adjudicate between correlations with non-nested sets of predictors.
- (ii) The same data points in our results can be used to address different questions: some concerns the correlations between different phenomena (NPI, SI and Monotonicity), and some are more directly related to NPIs or to SIs, independently of the other phenomena. This situation makes it a bit difficult to decide on how to organize the results.

Description of the main results obtained

- (i) We decided to rely on bootstrapping analyses of the r^2 s for each subject linear correlations. We will present the results in the main result section, but we will describe our methodology in a separate more technical appendix. This appendix will be of little interest to readers with little statistical background, but psychologists will want to see the details of it. The method could be of potential interest for subsequent studies (see work in progress by Chemla and Medam on donkey sentences).
- (ii) We decided to first present the mean numbers for each phenomena (NPI, SI, Monotonicity). These “bare” results are of independent interest but we decided that we would not focus on these. Instead, we will concentrate our analyses and draw conclusions from the correlations between NPI and SI, and NPI and Monotonicity. These correlations were the very first motivations for these studies.

Future collaboration with host institution (if applicable)

With these goals in mind, we will now write up the result section. We hope to be able to assemble the paper quickly.

Projected publications/articles resulting or to result from your grant

We plan to advertize our results as early as we have the paper finished.