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1. Purpose of the visit

Our joint project investigates the perception and production of both direct (beginning with 'no') and indirect (other) denials across a variety of languages. We had results from the initial perception task for direct denial in three languages (English, Spanish, Catalan), some of which had not yet been analyzed. Our goal was to look at the full set of results together and start working on an article for publication (or two, depending upon how we see the project evolving, the right kind of journal targets, etc.). Related to this goal, we planned to discuss a variety of theoretical literature and come up with ideas for explaining the pattern of results and the differences among the three languages with respect to this task. Also on the agenda were a variety of decisions about proceeding with next steps for the experiments on the perception of indirect denial and the production of both kinds of denials.

2. Description of work carried out

As expected, we began by discussing the results of the first perception task for the three languages of interest. In particular, we talked about how to use results of a normalization task in the analysis of the results of the main task. We discovered that we had different numbers of participants for each language and decided to run more subjects in the Spanish task. We discussed what piece of our work to this point we would like to try to present at the upcoming XPRAG conference, and we decided upon *Semantics and Pragmatics* as the journal target for the first article resulting from this collaboration. To this end, we created a list of references for the article, looking up recent relevant work, etc. We agreed upon the thrust of this first article and created an outline that we began filling in during the trip (though we set as a goal the end of our second meeting in Montreal for finishing the manuscript). We also set an agenda for that meeting. We debated our use of terminology, especially related to the notion of denial and came up with new terms and acronyms where appropriate, so that we were all on the same page.

A major part of our time together was spent discussing next steps. We had originally planned a production study that would require video and audio manipulation in stimuli creation, which would be very time consuming. We decided instead to do a series of corpus studies to fulfil the same goal of trying to see how people actually signal disaccord. We also agreed that one of my graduate students could join the project in order to run the same study in French and Tunisian Arabic, adding to our ability to make cross-linguistic comparisons. We reaffirmed our intention to run the third perception experiment in the style of the first once we have a set of indirect denial markers for each language as determined by the corpus study. We talked about changes to our ethics certification and how we needed to modify consent documentation. Finally, because we all continue to be interested in the project and see it progressing, we discussed possibilities for funding after this initial grant runs out, and we wrote a grant application during the time together.

3. Description of main results attained

The distinction between assertions and projective meanings in terms of deniability is significant. In English, predicates of personal taste and epistemic modals are felicitous only when not relativized, supporting previous proposals. Many of the other meaning types were judged as intermediate, but clefts were infelicitous, and the emotive CIs were the worst (unlike the descriptive expressives, which we are innovative in separating from emotives). Even more interesting, assertions prefer denials without alternatives, while all of the marginal meaning types are much better with *No* responses than *No that's not true* (NTNT) responses. There are some interesting contrasts between Spanish and Catalan, on the one hand, and English, on the other hand. In both Catalan and Spanish, denying a non-restrictive relative clause is judged much better than in English. For Spanish, the distinction between assertions and relative clauses is hardly significant ($p = 0.04$), contrary to what the literature predicts. Another data point that is at odds with current theoretical research is the significant lack of parallelism between epistemic modals and predicates of personal taste; while relativized epistemic modals are judged to be infelicitous, relativized predicates of personal taste pattern with the unrelativized ones both in Spanish and Catalan ($p = 0.4$). Finally, even though Spanish and Catalan are very closely related, our results show some contrasts for the descriptive expressives: in Catalan they receive higher ratings (similarly to English), while the ratings are much lower for Spanish.

4. Future collaboration

As mentioned in the second section, we see a future for our continued collaboration and for continued investigation of the proposed topic. To this end, we came up with an agenda for our next meeting before the end of the official funding in June, and we talked about involving graduate students to work on related topics and extend the project. Finally, in the hopes of prolonging the project, we worked on a grant for the Social Sciences and Humanities Research Council of Canada that would give us another two years of collaboration on the same topic, extending it a bit as well. For example, when it comes to denial, there is also a cultural component at play in terms of choices to be more or less direct, what is considered polite, etc. We could test phenomena where someone is denying something that the other person is in a better position to assert, such as 'no, you were not born in Barcelona' to see whether these are judged to be worse in some languages than in others, comparing the results to our earlier results for predicates of personal taste. We could also run our first experiment with participants in Latin America because there are a number of studies that already exist comparing the general cultural difference between Latin American Spanish and European Spanish, and it would be interesting to see whether we see a difference in results with respect to direct denial between the two groups.

5. Projected Publications

Smith, E., Mayol, L and Castroviejo, E. (In Progress). Signalling dissent in conversation: implications for distinguishing meaning types across languages. *Semantics and Pragmatics*.

We plan to write a minimum of three additional articles for semantics and pragmatics audiences, targeting *Journal of Semantics* (results of Study 3), *Natural Language Semantics* (theory of expressives), and *Linguistics and Philosophy* (predicates of personal taste and modality). If possible, we would also like to write a culminating article for all linguists, targeted at *Language*.