

## BIAS IN POLAR QUESTIONS

The current taxonomy of PolQs includes: positive polar questions (PosQ), positive questions with *really* (*really*-PosQ), questions with low negation (LowNQ), and questions with high negation, that are ambiguous [3] between an inner (InnerHiNQ) and an outer (OuterHiNQ) reading.

(1a) POSQ: Is Jane coming?

(1b) *REALLY*-POSQ: Is Jane really coming?

(1b) LOWNQ: Is Jane not coming?

(1c) INNERHiNQ: Isn't Jane coming? [double check  $\neg p$ ?]

(1d) OUTERHiNQ: Isn't Jane coming? [double check  $p$ ?]

To characterize the pragmatic import of different PolQ types, two kinds of bias have been discussed in the literature: first, the impact of newly-acquired **evidence bias (EB)** [1]: (i) a PosQ  $p$ ? is incompatible with evidence bias against  $p$ , (ii) a LowNQ requires evidence against  $p$ , and (iii) an OuterHiNQ is incompatible with evidence for  $p$ . Second, the **original epistemic bias (OB)** [5]: (i) PosQs and LowNQs are compatible with there being no original bias, (ii) *really*-PosQs require original bias for  $\neg p$  and are used to double-check  $p$ ; (iii) HiNQs require original bias for  $p$  and, following [3], are ambiguous between an inner negation reading double-checking  $\neg p$  and an outer negation reading double-checking  $p$ .

Currently, there is blatant disagreement as to what PolQ types need to be distinguished: (1c,d,e) have been treated as one single type [6], (1c,d) have been merged [2] and (1d,e) have been argued to be one single grammatical category [0]. Furthermore, it is not clear how the two types of bias interact, since most theoretical models consider only a proper subset of the data and analyse them as arising from one single bias kind [2, 6].

The goal of the present experiment is to establish the typology and empirical pragmatic characterization of PolQs using experimental methodology, in order to determine:

1. which linguistic forms of PolQs are selected depending on the combination between OB/EB;
2. whether specific intonational contours are associated with each type of PolQs.

The experiment had an English version and German one with 60 students each. For each language, there were six experimental lists, rotating OB and EB in trials. Participants read two captions attached to two pictures, which presented short fictional scenarios, afterwards, they selected and pronounced (to analyse prosody) from a list of five PolQs the one that sounded most natural. The captions were the same across conditions but the pictures varied to generate three different OB in the first case (i.e.  $p$ , neutral,  $\neg p$ ), and three different EB in the second case (i.e.  $p$ , neutral,  $\neg p$ ):

Data collected support three main results:

(i) Each combination of OB/EB has impacted significantly on the choice of the question type, both in English and in German. Hence, both factors seem to play a crucial role.

(ii) LowNQs and HiNQs are truly different types of PQs.

(iii) Interestingly, the preferred choices are very similar in both languages. Only one cross-linguistic difference is observed: in condition  $p/\neg p$ , in English, HiNQs was the only choice, in German, LowNQs has been selected as second alternative.

**REFERENCES.** [0] AnderBois S. 2011. *Issues and Alternatives*. Diss. UC S. Diego. [1] Buring, D. & C. Gunlogson. 2000. *Aren't Positive and Negative Polar Questions the Same?* Ms. UCSC. [2] Krifka M. To appear. Negated Polarity Questions as Denegations of Assertions. In F. Kiefer et al. (eds.), *Contrastiveness and scalar implicatures*. Springer. [3] Ladd, D. R. 1981. A First Look at the Semantics and Pragmatics of Negative Questions and Tag Questions. *Proceedings of CLS* 17:164-171. [4] Roelofsen, et al. 2012. Positive and negative questions in discourse. *Proceedings of SuB* 17: 455-472. [5] Romero, M. & C.-h. Han. 2004. On Negative Yes/No Questions. *L&P* 27:609-6. [6] van Rooij, R. & M. Šafářová. 2003. On polar questions. *Proceedings of SALT* 13.