

Pragmatic Licensing of Polar Questions in Estonian

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Background. Since Ladd (1981), a significant body of work has aimed to characterize the difference between positive polar questions (PPQs) and corresponding negative ones (NPQs), as below:

- (1) Is Mabel home? (2) Is Mabel not home?

Both (1) and (2) request information to settle the issue of whether or not Mabel is home; indeed, in a Hamblin/Karttunen-esque alternative semantics for questions they are denotationally equivalent. However, they differ in their use. For instance, (1) cannot felicitously be used when the speaker expects Mabel not to be home, whereas (2) can (Büring & Gunlogson 2000). This poses a puzzle: if (1) and (2) are semantically equivalent, why do their use conditions differ, when the only morphosyntactic difference between the two is the presence or absence of overt negation?

This talk makes empirical and theoretical contributions towards answering this question with experimental evidence from Estonian. In Estonian, NPQs with different question particles are associated with different biases. The work described here will characterize what, precisely, those biases are, and suggest that while negative contextual bias plays a strong role in NPQ licensing, it cannot explain the full distribution of NPQs on its own.

Estonian PQs. In Estonian, there are two left-periphery PQ particles: *kas* or *ega*. Only *kas* may be used in PPQs, and these PPQs are not strongly associated with speaker bias:

- (3) **Kas/*Ega** sul on jalgratas?

Q you.ADE is bicycle

‘Do you have a bicycle?’

NPQs, conversely, may be introduced with either *kas* or *ega*. While *kas*-NPQs signal a private speaker bias for p , *ega*-NPQs are claimed to signal private bias for $\neg p$ (Keevallik & Habicht 2017). The discourse conditions in which each question type is licit are typically those where contextual evidence either contradicts or fails to support the prior belief of the speaker (Metslang 2017).

- (4) **Kas** sul ei ole jalgratast? (5) **Ega** sul ei ole jalgratast?

Q you.ADE NEG be.NEG bicycle.PART

≈ ‘Do you not have a bicycle?’

Q you.ADE NEG be.NEG bicycle.PART

≈ ‘You don’t have a bicycle, right?’

The superficial similarity between NPQ form with both *kas* and *ega* suggests the particles themselves may contribute significantly to bias. However, the fact that two different NPQs in Estonian are associated with very different biases provide a testing ground to determine to what extent NPQ bias is derived from the negative form of the question versus other contextual or linguistic factors.

Prior accounts of bias. In the Feature-Based account of Sudo (2013), PQ bias is classified along two dimensions: ‘epistemic’ (speaker’s prior beliefs/expectations) and ‘evidential’ (shared contextual information). All PQ types, then, are compatible with some combination of bias for p , against p , or neither, along both of these axes. Under this view, there is not necessarily an overt connection between the form of NPQs and their bias profile.

On the other hand, the ‘Polarity Match’ account characterizes PQ bias in terms of speaker expectation about addressee response: speakers use NPQs when they expect negative responses, and PPQs otherwise (van Rooy & Šafářová 2003). Subsequent authors have treated this as a general preference for questions/answers having identical polarity, e.g. Trinh’s (2014) Prejacent Compatibility or Roelofsen & Farkas’s (2015) Avoid Reverse. With this account, we might expect both *kas*- and *ega*-NPQs to reflect bias for $\neg p$.

Forced Choice Task. Exp. 1 was a forced-choice task after Domaneschi, Romero & Braun’s (2017, DRB) experiments on English and German. Participants ($n = 45$) read a scenario with a

background which manipulated the reader’s EPIstemic bias about a proposition p (for p (+), for $\neg p$ (-), or neutral (n)), followed by a current conversation which manipulated the EVIDential bias about p (same levels). Six of the 9 possible conditions were presented, as in DRB. They then were presented with three possible follow-up questions about p : a *kas*-PPQ, a *kas*-NPQ, or an *ega*-NPQ, and selected which one would be the most natural question for them to ask in context.

Results. Proportion of PQ responses per condition are in Figure 1. *Kas*-NPQs were preferred when EVID was for $\neg p$, but *kas*-PPQs were preferred otherwise. Preference for *ega*-NPQs was generally low, though nonzero, across conditions. For *kas*-PQs, these results are most compatible with accounts where biased questions are chiefly licensed by congruence between EVID and PQ polarity. The general lack of preference for *ega*-NPQs suggests that their use is licensed by non-bias factors.

AJT. To determine the felicity of each PQ type across conditions, Exp. 2 presented the stimuli of Exp. 1 with factors fully crossed in an acceptability judgment task: Rather than pick the best of three options, participants ($n=54$) rated either a *kas*-PPQ, a *kas*-NPQ, or an *ega*-NPQ on a 1-7 Likert scale for naturalness in context.

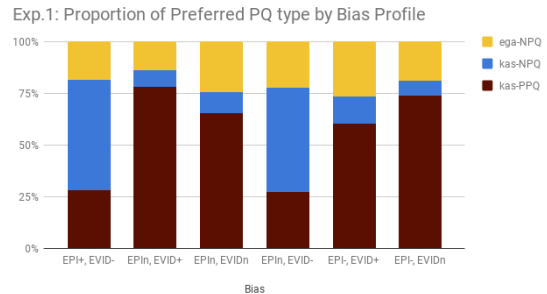


Figure 1: Proportion of responses of each PQ type per condition in Experiment 1

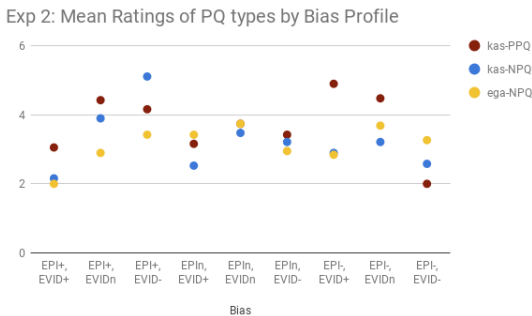


Figure 2: Mean rating of each PQ type per condition in Experiment 2

Results. *Kas* questions were rated highest when the polarity of EVID matched that of the question, but contradicted EPI, likely because situations in which the speaker’s private beliefs and public evidence diverge are ideal environments to ask information-seeking questions. Unlike Exp. 1, it is clear that while negative evidential bias plays an important role in licensing NPQs, it is not enough on its own: there was no significant difference between *kas*-PPQs and NPQs when EPI was neutral. The lack of effect of bias on *ega* ratings corroborates the results of Exp. 1, contra a naive form of Polarity Match which predicts both NPQ types to pattern similarly.

Conclusion. This talk’s contributions are twofold: first, it provides a descriptive and experimentally-supported characterization of NPQ bias in Estonian, a language virtually unstudied in this domain. Second, it suggests while speakers may prefer alignment between the polarity of evidential bias and the polarity of a PQ, evidential bias is neither necessary (in the case of *ega*-NPQs) nor sufficient (in the case of *kas*-NPQs) to fully characterize the use conditions of NPQs. Future work will investigate the pragmatic conditions which license other types of special questions (e.g. tag questions), as well as characterize the use conditions of bias-insensitive questions like *ega*-NPQs.

Selected References: Buring & Gunlogson. 2000. Aren’t PPQs and NPQs the same? • Domaneschi, Romero & Braun. 2017. Bias in PQs: Evidence from English and German production experiments. • Ladd. 1981. A First Look at The Semantics & Pragmatics of Negative Questions & Tag Questions. • Metslang. 2017. Kommunikatiivsed lausetüübid. • Roelofsen & Farkas. 2015. Polarity particles as a window onto the interpretations of questions & assertions. • van Rooy & Šafářová. 2003. On PQs. • Sudo. 2013. Biased PQs in English and Japanese.