Framing the Issues:

The Biasing effect of polarity items in questions.

William A. Ladusaw Univ. of California, Santa Cruz

The occurrence of a (negative or positive) polarity item can have a biasing effect on the interpretation of a question.

- 1. Did John *lift a finger* to help you?
- 2. Who would you *ever* trust to do that for you?
- 3. Has John already finished his paper?

For example, asking (1) reveals something about the speaker's opinion of John's helpfulness. Including the word *ever* in the question in (2) seems to raise the standard of trustworthiness needed for whatever *that* refers to. And in (3), the questioner seems poised on the point of mild surprise if answered in the affirmative.

These effects are consistent with a generalization that goes back at least to Borkin 1971 that questions containing negative polarity items expect negative answers and that those containing positive polarity items expect positive answers.

The bias effect is not automatic. The questions in (4)-(6) do not seem to require or reveal anything about the expectations of their posers.

- 4. Has John finished his paper yet?
- 5. Who wants *anything* to drink?
- 6. Has *anyone* arrived yet?

These biasing effects arise from the interaction of the semantics of interrogatives and individual polarity items with pragmatic reasoning about the progress of dialogue. In this paper I will address the following question:

What is the nature of the biasing effect and how can it be modeled? Why does the effect occur differently depending upon the type of interrogative? Why do some polarity items create a biasing effect while others do not? How is this bias effect related to other types of bias?

For the semantics of interrogatives and the discourse effect of questions I will follow Groenendijk 1999 and Ginzburg 1996 (and others) in assuming that the context change potential of a question "raises an issue" in dialogue. We will model this result by partitioning the information state of the context into cells that correspond to possible answers to the question.

On this approach, the semantic content of an interrogative provides the propositional issue which is the basis for the partitioning. Because the partitions correspond to potential answers that resolve the issue, they correlate with future progress of the

discourse in a way that makes them useful for modeling aspects of discourse topic as well.

Finally, I will assume that reasoning about context includes assessment of the separate public commitments of the participants in the dialogue separate from their status with respect to the common ground. (Cf. Gunlogson 2001.)

Building on this background, I will analyze a biased question as one that reveals (in its formulation) that the questioner has grounds for preferring one answer to another. I will model this by defining that preference over the cells in the partition that the question induces in the information state.

The goal is that what is correct about Borkin's generalization should follow from assumptions about how this preferential ordering arises from the formulation of the question, i.e. how the issue that underlies the semantics of the question is expressed. It seems clear that to make this connection requires us to look at both the lexical semantics of the polarity items involved and the details of contextual inferences that arise based upon those meanings.

However it is less clear that there is a consistent connection between the preferential ordering and a very general category of (positive or negative) polarity items. That is, the variation revealed as polarity items occur in different types of interrogatives reflects a fine structure similar to, but potentially more revealing than, that revealed in their licensing in declaratives.

References

Borkin, Ann. 1971. Polarity items in questions. CLS 7.

- Ginzburg, Jonathan. 1996. Interrogatives: questions, facts and dialogue. Shalom Lappin, ed. *The Handbook of Contemporary Semantic Theory*. Blackwell Publishers. 385-422.
- Groenendijk, Jeroen. 1999. The logic of interrogation: classical version. Tanya Matthews and Devon Strolovitch, eds. *Proceedings from Semantics and Linguistic Theory IX.* Ithaca, NY: Cornell University Linguistics Department. 109-126.
- Gunlogson, Christine. 2001. *True to form: rising and falling declaratives as questions in English.* PhD dissertation. University of California, Santa Cruz.