Framing the Issues:

The biasing effect of polarity items in questions

William A. Ladusaw
University of California, Santa Cruz
The Topic

What is responsible for the biasing effect of (some) polarity items in (some) questions?

• Did John lift a finger to help you?
• Why did you donate a red cent to that organization?

What is bias?
Not (CG-)presupposition

Asking “Did John lift a finger to help you?”

Asks:
whether John did something to help you

Implies:
Speaker suspects:
> John didn’t help
i.e. the answer is probably “no”
Asking “Why did you donate a red cent to that organization?”

(CG-)Presupposes:
that you donated something to that organization
Asks:
why you did that
Implies:
Speaker believes:
  ➢ You shouldn’t have
donated to that organization

i.e.? the answer is probably “no reason”
Plot synopsis:

• Two modes of explanation
• Clarify relation of bias and question meaning
• Connect them to the saga of polarity item licensing
• Survey the fine structure of bias in questions
• Insinuate and speculate.
Two modes of explanation

The bias effect is an aspect of utterance interpretation.

It arises from the interpreter asking:

• Why did the speaker use those words to ask that question?
• Why did the speaker ask that question?
Modeling Questions

Question act vs interrogative expression type.

How is the semantic content of the interrogative expression related to the context change effects of asking the question?
Content
The expression content formulates an issue, which can be applied to a world to determine how the issue is resolved in that world.

The issue determines an equivalence relation which partitions a set of worlds into cells corresponding to each possible resolution of the issue (answer).
Context change effects
The questioner uses the question to raise the issue, which partitions the worlds consistent with the current context.

The discourse turn shifts to the witness who tries to resolve the issue, i.e. to return the discourse to an unpartitioned context.
Example
The issue in a polar question corresponds to the proposition expressed by the corresponding declarative sentence.

The partition that results from asking the question has two cells, one in which the proposition is true and the other in which it is false.

Asking the question takes the world set of the context and partitions it. The witness’s statement will resolve the issue when the partitioned context set is replaced by one of its cells.
An interlude

Bias ≠ Presupposition
If the bias were presupposition, then raising the issue would give the witness no choice.

Rhetorical questions
• Use of an expression with interrogative form with the force of an assertion.

  No expectation of a response. “Queclarative”

• Asking a question that conveys to the addressee that the questioner considers one resolution likely (suspects).

  A biased question.

Rhetorical questions are the limiting case of bias.
Bias without polarity items

Under these assumptions, these sentences ask the same question (issue):

• Is it raining?
• Is it not raining?
• Isn’t it raining?

Does the bias in the third arise because we used those words (that construction) to ask this question, or…

Is the third one (at least) asking a different question, which is responsible for the bias.

Cf Romero and Han (to appear) in L&P.
Where are we?

Assumptions about how compositional semantic content determines issues raised by questions.

Bias as an inference grounded in reasoning about why the speaker asked the question in that way (metalinguistic) or asked that question. (content-based)

How is the bias effect related to polarity item licensing?
“I believe that if we want to describe the distribution of polarity items in questions as anything but random, we must consider the assumptions of the speaker—more specifically, negative and affirmative assumptions about what is being questioned and consequently expectations of the speaker concerning the answer.” (p. 55)
The NPI Licensing Saga

Two themes:

Interplay of direct and indirect licensing.
  (e.g. Linebarger “Part A” and “Part B”.)

Interplay of a structure-sensitive licensing condition
(Klima 1961) and pragmatic motivation (Fauconnier
1975)

Track it by (i) what makes something a licensor and
(ii) what makes the PI respond.
**First Movement**

- NPIs bear a needy morphological feature that must be satisfied by coming into a structural relation with something bearing the appropriate nurturing feature.

- Morphological negation is the prototypical case. But there are lots of other elements that are “like” negation; call them ‘Affective’.

- Lots of NPIs are minimum value items. Correlation between “affective” and implicational reversal in scalar reasoning. NPIs outside these contexts are inferentially very weak, but in these contexts they are inferentially very strong.

Klima, Baker, Fauconnier
The nurturing feature of NPIs is downward-entailment, which is grounded in semantic content.

NPIs are conventionally associated with a feature that must be eliminated by coming to fall in the (immediate) scope of such a function.

The needy/nurturing (and the nurturing/allergic) features parallel other structural relations.

In cases where you can’t see the licensing relation but the NPI is OK, there must be some conveyed implication that is sufficiently negative to license it. (Derivative licensing.)
Third Movement

• Nurturing and needing comes in several strengths. (Zwarts, van der Wouden, Giannakidou)

• *Any* (and *ever*) function to accomplish strengthening through domain widening. (Kadmon and Landman)

• Minimal value NPIs are “strong” polarity items because they conventionally incorporate a likelihood scale like that of *even*. (Heim, Horn and Lee, Guerzoni, maybe back to Borkin or Schmerling)

• Increase in strength or informativeness is the only justification of using an NPI. So their use will be licensed only where this happens and their conveyed meanings will be their strengthening. (Krifka)

• NPIs conventionally associated with alternatives that are introduced when the expression is used.
• There must be some inferential motivation for using the NPIs.

• Given that the contribution of the NPI is a minimally informative one, that inferential motivation will come out (mostly) just in the downward-entailing contexts.

Locates licensing in inferential communication; therefore struggles with sensitivity to structure.

How to extend it to questions?
The Krifka 1995 account: Questions

- Asking a question about a minimal value will result in a very informative answer when the answer is *no*, but a not very informative answer if the answer is *yes*.

- Choosing to ask a question about a minimum value will pay off more if the questioner is expecting a negative answer.

Hence the limitation of biased questions to those contexts and the conveyed sense of speaker bias.
How does Semantics meet Pragmatics?

- The account in terms of strength/informativeness is how the acceptability of negative polarity items is determined.
- Strength / informativeness explains why languages settle out with the polarity items that they do.
- What gets accounted for? (Well-formedness, correlation with logical entailment, correlations with conveyed implications, …)
- Expression well-formedness vs context-dependent admissibility.
- Status of conventionalized “sets of alternatives” and “minimally informative value”.
- Identification of the * on unlicensed NPIs with failure to derive inferences.
Licensing in questions

- Questions as a class are not “downward entailing” or any other version of a semantic licensor. (Hence derivative licensing.)
- That’s good. Questions as a class are not uniform across types of questions or types of polarity items.

Working hypothesis:

Bias in questions tracks the “part A / part B” line.

When the item’s semantic content contributes to formulation of the issue (and presupposition), there is no stimulus for metalinguistic inference.

- Only “unlicensed” polarity items create bias.
Types of Polarity Item

After Israel 1996

Wideners: any, ever

Low scalar emphatics: a drop, a wink, so much as, at all

High scalar understating: much, long, any too, all that

High scalar emphatics: scads, totally, as hell, far Xer

Low scalar understating: a little bit, sorta, a tad, rather

Perspectival: yet, already
Types of Question

Polar (positive, negative, tag, rising declarative)

WH-argument (who, which, what)

WH-adjunct (where, when, how)
Referentially presuppositional

Why (propositionally presuppositional)

Alternative questions
Consensus results

(Positive) Polar questions
Wideners don’t create bias.
Low scalar emphatics create bias.

WH-argument questions
Wideners without bias if structurally licensed
Low scalar emphatics give “rhetorical” effect
Questions and Correlations

Why questions

How is their presupposition formulated? What does that show about the contribution of the strong scalars?

Why did you contribute (anything (at all)/a red cent) to them?

If John lifts a finger to help you should praise him.
Alternative Questions

Alternative questions simply to not contain unlicensed polarity items.

Do you want to lift a finger or budge an inch?

Do you want any coffee or any tea?
NPIs in Polar Questions

- Does Charlie *bat an eye* when you threaten him?
- Does Harold do *a damn thing* around the house?
- Will Max get here *until 4 o’clock*?

  Variable acceptability.
  Marked intonation.

  “Only acceptable when the speaker evidences a feeling of incredulity or expectation of a “no” answer.” (p. 54)
N.B. Aside:
“Only acceptable when the speaker evidences a feeling of incredulity or expectation of a “no” answer.” (p. 54)

I read this as ‘the appearance of the (unlicensed) negative polarity item is grounds for inferring the feeling of incredulity or expectation that the issue will be resolved negatively.’
NPIs in Constituent Questions

- What metropolitan newspaper is worth beans?
- Who drank a drop of your cognac?
- Who has seen Harriet in years?

All expecting negative answers, “allow the same polarity items as the corresponding negative existential statements that these questions are often used to convey.”
BUT...

• Have you ever been to Saipan?
• Did anyone talk to the Marcia?
• Is Marcia here yet?
• Who has ever been to Saipan?
• Who took anyone to the airport?

These don’t seem to suggest a negative expectation.
PPIs in Polar Questions

• Would you rather eat out (than cook) tonight?
• Was she pretty upset?
• Has Marcia already arrived?

    Fairly subtle; but I think that there’s something there.
Negative polar interrogatives

- Wouldn’t you rather eat out tonight?
- Wasn’t she pretty upset?
- Hasn’t Marcia already arrived?

The occurrence of the fronted negation itself conveys a speaker bias in favor of a positive answer.
• PPIs in Constituent Questions

• Who was pretty upset?
• Who has he long since given up on?
• Who has Fred already interviewed?

But cf:

• Who wasn’t pretty upset?
• Who hasn’t he long since given up on?
• Who hasn’t Fred already interviewed?

(Rhetorical rejoinders)
Did you make much progress?

Will this take long?

Was she all that pleased?

Was he insanely jealous?

Are you awfully tired?

Was she somewhat pleased?
Who has made much progress on this?

What linguistic problems take long to solve?

Who was insanely jealous?

What kind of car costs a heap?

Who is a little bit hungry?

Who was he somewhat upset with?
Aspectual Framing

Have you been to the grocery?

Have you been to the grocery yet?

Have you already been to the grocery?
Already frames the perspective from the + side; yet frames it from the – side.

Hence correlation with polarity of the assertion.

But in the question, …
Returning to the Issues

How are these fine-grained distinctions related to the notion of issue and partition test in the logic of interrogation?

Do all of these raise the same issue?

• Did you buy peanuts when you went to the grocery?
• Did you buy some peanuts when you went to the grocery?
• Did you buy any peanuts when you went to the grocery?
• Have you been to the grocery?
• Have you been to the grocery yet?
• Have you already been to the grocery?
How about:

Are you tired?

Are you somewhat / a little bit tired?

Are you at all tired?

If so, then they have the same answer conditions and the same discourse futures. So …
Did all of those raise the same issue?
If so, then the property that makes something polarity sensitive must be based upon resolutions of the issues, i.e. the answers.

And the perception of bias must be an inference drawn based upon the way the choice of words reveals a strategy for resolving the issue.
Did all of those raise the same issue?
If not, then the property that makes something polarity sensitive is part of formulating—or framing—the issue.

The perception of bias must be an inference drawn based upon the question that was asked. The underlying pragmatic account can be the foundation for assessing the utility of the question in context, but needn’t get enmeshed in the fine-structure of licensing.
Fin