Framing the Issues:
The biasing effect of polarity items in questions

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The Topic

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

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

• Start from Borkin 1971.
• Follow the licensing saga from negation to informativity.
• Back out the “minimum value” scalar NPIs.
• Ask what is left.
• Insinuate and speculate.
“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)
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 what about the cognac?
An interlude: What’s a question?

Question act vs interrogative expression type.

How is the (propositional content) of the interrogative expression based on the context change effects of the question?

Or vice versa?
e.g. Groenendijk 1999:

The expression content formulates an *issue*.

The questioner raises the issue by posing the question, with a concomitant partitioning of the discourse information state into cells corresponding to potential resolutions (answers).

The turn shifts to the witness to resolve the issue.
Another interlude: What is a rhetorical question?

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

  (No end of turn (or expectation of a response other than that appropriate for an assertion. “Queclarative”)

• Asking a question that conveys to the addressee that the questioner is disposed to favor one (or more) resolutions over another.

  A biased question.
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 require a negative expectation (though they are consistent with bias).
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.
Tag Questions

• You’d rather eat out tonight, wouldn’t you./?
• She was pretty upset, wasn’t she./?
• Marcia has arrived already, hasn’t she./?

But cf:

• You wouldn’t rather eat out tonight, would you?
• She wasn’t pretty upset, was she?
• Marcia hasn’t arrived already, has she?
Tag Questions with NPIs

• Harold doesn’t do a damn thing around the house, does he./?
• John hasn’t seen Harriet in weeks, has he./?
• Bob wouldn’t care to go with us, would he./?

But cf:

• Harold does a damn thing around the house, doesn’t he?
• John has seen Harriet in weeks, hasn’t he?
• Bob would care to go with us, wouldn’t he?
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)

Does the negation change the issue or bias the question?
An interlude on disjunctive questions/interrogatives
• Would you care to go to chiCAGO OR CLEVELand?
• Did he drink any COFFEE OR TEa?
• Does he lift a finger in the HOUSE OR THE GARden?

Cf:

Did joHN OR MAry not lift a finger to help?
Taking stock

There are some clear cases above where the appearance of negative polarity items creates a biased question.

Strongest in constituent questions; weaker in polar questions; impossible in alternative questions.

Strongest with *drink a drop, lift a finger*; non-existent with *any* and *ever*.

Effects with PPIs in questions without negation are “subtle”. But there is an effect when negation is included in the question.
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 satisfying 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. Affective contexts are those in which reasoning on scales is reversed. NPIs outside these contexts are inferentially very weak, but in these contexts they are inferentially very strong.
Second Movement

• In a (fairly) direct compositional interpretation of a linguistic structure, the NPI licensors can be defined as downward-entailing based upon their functional denotations.

• NPIs bear a feature that must be eliminated by coming to fall in the scope of such a function.

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

• *Any* (and *ever*) have as their principal function the widening of the domain of quantification. (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, most recently Guerzoni, maybe back to Borkin, if not Schmerling)

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

• (NPIs other than the scalar ones must be handled in some other way. Where do PPIs fit in?)
The Krifka 1995 account: Assertions

• 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.

• Voila; semantics meets pragmatics.
Mode of explanation?

- 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.
Applying the approach to questions

• Questions as a class are not “downward entailing” in any straightforward way. (Hence derivative licensing.)

• But it is not questions as a class that allow negative polarity items anyway.

• Nor is it negative polarity items as a class that are licensed (context independently). Just wideners and minimal value ones.
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.
But…

Are we trying to account for bias in the questions with the strong ones, or the lack of bias in the questions with weak ones?

Are we licensing one class and triggering context-dependent inferential strategy for the other?

Are we trying in both cases just to guide the strategy for a context-dependent inferential motivation?
What is left of the bias phenomena?

Let us assume that there’s nothing further to be explained about the occurrence of the wideners / weak scalars *any* and *ever* in polar questions.

They don’t conventionally name the minimum value on a scale. But they are only good when they strengthen.

They occur in questions without creating bias because they formulate very informative questions.

The Fauconnier assumption that to ask about a low value implicates disbelief about the higher values should be dropped.
The strong scalars (incorporating even)

The same explanation for licensing extends to the strong minimum value NPIs, which incorporate even.

The fact that the likelihood scale associated with even is part of the conventional meaning of these minimum value items is what contributes the evidence of bias.

That bias is speaker-oriented (since the speaker chooses the words).

At least when they occur in polar questions.

Problem: Constituent questions.
Poking around the Periphery

Four types of scalar polarity items (Israel 2001)

1. Emphatic NPIs (the minimum value even ones above).
2. Attenuating NPIs: much, long, any too, all that
3. Emphatic PPIs: tons, awfully, insanely, a heap
4. Attentuating PPIs: a little bit, sorta, rather, somewhat

How would the alternatives/strong question apply to these?
Do these produce biased questions?

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.
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