1. The Puzzle: “denn”, “etwa”, “leicht”, and “eh” across question types

All four German particles may occur in polarity questions, see (1). But: Only *denn* and *leicht* may occur in constituent questions, see (2).

| (1) | a. Hast du *denn* die Seife gefunden? |
|     | b. Hast du *leicht* die Seife gefunden? |
|     | c. Hast du *etwa* die Seife gefunden? |
|     | d. Hast du *eh* die Seife gefunden? |
|     | ‘Did you find the soap?’ + particle contribution |

| (2) | a. Was hast du *denn* gefunden? |
|     | b. Was hast du *leicht* gefunden? |
|     | c. *Was hast du *etwa* gefunden? |
|     | d. *Was hast du *eh* gefunden? |
|     | ‘What did you find?’ + particle contribution |

2. The contribution of *denn*, *etwa*, *leicht*, and *eh*

Following previous work on discourse particles: The particles’ contribution is only to the not-at-issue content (cf. Simons et al. 2010, Zimmermann 2011).

**Notation:** *p* symbolizes the question’s sentence radical, *q* is the sentence mood indicator for the question act (cf. Stenius 1976), and *c* is the speaker in the utterance context (cf. Kaplan 1978).

**Contribution of German “denn”:**

(3) [denn]([?], p): *c* has heightened interest in the answer to *p*

(4) Hast du denn Schule gekauft? #Na, eigentlich interessiert es mich nicht.

‘Did you buy shoes? #Actually, I don’t care.’

**Contribution of German “leicht”:**

(5) [leicht]([?], p): *c* believes that settling the question *p* may provide an explanation for another piece of information in the utterance context

(6) A: Die Iris hat immer irgendwelche Männer um sich. B: Ist sie leicht hübsch?

‘Iris always has men around her.’ ‘Is she pretty?’

(7) A: Der Peter war gestern auf meiner Party. B: Ist er (#leicht) gut nach Hause gekommen?

‘Peter came to my party yesterday.’ ‘Did he get home okay?’

**Contribution of German “etwa”:**

(8) [etwa]([?], p): *c* realized that he mistakenly believed the negative answer to *p* to be more likely than the positive answer

(9) (A sees open door) A: Wurde etwa eingebrochen?

B: ‘Did someone break in?’

(10) (A drops a pencil) A: #ist der Stift etwa runtergefallen?

B: ‘Did the pencil fall?’

**Contribution of Austrian German “eh”:**

(11) [eh]([?], p): *c*’s beliefs contain evidence for the positive answer to *p*, but are still compatible with the negative answer to *p*

(12) (A can’t see B’s kitten anywhere) A: Ist dein Katzchen eh im Haus?

B: ‘Is your kitten inside?’

(13) (A is inside; sees B’s kitten) A: #ist dein Katzchen eh im Haus?

B: ‘Is your kitten inside?’

For previous accounts of *denn*, *etwa* and *eh* cf. Weydt (1969), Thurmair (1989) and later works.

3. Why partition structure is a dead end

Polarity questions partition the common ground into two cells, i.e. the positive and the negative answer (cf. Hamblin 1973, Groenendijk and Stokhof 1984).

Constituent questions partition the common ground into a number of cells corresponding to the number of possible answers (possibly larger than two).

**Is this difference in partition structure the reason why “etwa” and “eh” cannot occur in constituent questions?**

No. Assuming there are two teams, red and blue, a speaker can use both a polarity question and a constituent question to ask about the winner:

(14) a. Hat das blasse Team gewonnen? ‘Did the blue team win?’

b. Welches Team hat gewonnen? ‘Which team won?’

Both questions partition the common ground into the same two cells: *blue won* and *red won*.

**But:** Only the polarity question allows all four particles to occur.

4. Capturing the distribution

Based on their not-at-issue content, the particles fall into two classes:

- *etwa* and *eh* are sensitive to the sentence radical explicitly identifies one answer (cf.Highlighting in Inquisitive Semantics, Farkas and Roelofsen to appear).
- *denn* and *leicht* comment on the question as a whole

Particles whose not-at-issue meaning singles out one particular answer can only do so if the sentence radical explicitly identifies one answer (cf. Hamblin 1973, Groenendijk and Stokhof to appear).

The sentence radical of polarity questions explicitly gives the positive answer.

The sentence radical of constituent questions can be seen as a partly unspecified proposition which does not specify one single answer (cf. Krifka 2011).

**Core of the proposal:** particles occurring in questions are sensitive to the number of answers that are explicitly identified, depending on the requirements of their contributed content.

5. Predictions

We predict that *etwa* and *eh* should not be able to occur in alternative questions, since the sentence radical does not identify a single answer. This is borne out:

(15) a. Hast du denn Deutsch oder Englisch studiert?

b. Hast du leicht Deutsch oder Englisch studiert?

c. *Hast du etwa Deutsch oder Englisch studiert?*

d. *Hast du eh Deutsch oder Englisch studiert?*

‘Did you study German or English?’

Note: *etwa* and *eh* are fine in the polarity question reading of (15-c) and (15-d).

We predict the behavior of the four particles to be the same in embedded interrogatives as in matrix questions, as long as the embedded interrogatives express a question. This is borne out:

(16) a. Peter fragt sich, ob Maria denn kommt.

b. Peter fragt sich, ob Maria leicht kommt.

c. Peter fragt sich, ob Maria etwa kommt.

d. Peter fragt sich, ob Maria eh kommt.

‘Peter wonders whether Maria is coming.’

(17) a. Peter fragt sich, wer denn kommt.

b. Peter fragt sich, wer leicht kommt.

c. *Peter fragt sich, wer etwa kommt.*

d. *Peter fragt sich, wer eh kommt.*

‘Peter wonders who is coming.’

The attitude holder or reported speaker, e.g. Peter in (16) and (17), takes the place of the actual speaker *c* in the description of the particle contributions.

6. Conclusions

Discourse particles occurring in questions seem to be sensitive to the number of answers that are explicitly identified, depending on their contributed not-at-issue content.

If they comment on the question as a whole (*denn*, *leicht*), they can occur both in polarity and in constituent questions.

If they comment on the speaker’s attitude towards a particular answer (*etwa*, *eh*), they can only occur in those questions that explicitly identify a particular answer – polarity questions, but not constituent questions.

References