



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). **Why?**

- (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). The *at-issue content* remains unchanged.

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

► **Contribution of German “denn”:**

- (3) $\llbracket \text{denn} \rrbracket^c(?, p)$: c_s has heightened interest in the answer to ? p
 (4) *Hast du denn Schuhe gekauft? #Na, eigentlich interessiert es mich nicht.*
 ‘Did you buy shoes? #Actually, I don't care.’

► **Contribution of Austrian German “leicht”:**

- (5) $\llbracket \text{leicht} \rrbracket^c(?, p)$: c_s 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?*
 A: ‘Iris always has men around her.’ B: ‘Is she pretty?’
 (7) A: *Der Peter war gestern auf meiner Party.*
 B: *Ist er (#leicht) gut nach Hause gekommen?*
 A: ‘Peter came to my party yesterday.’ B: ‘Did he get home okay?’

► **Contribution of German “etwa”:**

- (8) $\llbracket \text{etwa} \rrbracket^c(?, p)$: c_s 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?*
 A: ‘Did someone break in?’
 (10) (A drops a pencil) A: *#Ist der Stift etwa runtergefallen?*
 A: ‘Did the pencil fall?’

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

- (11) $\llbracket \text{eh} \rrbracket^c(?, p)$: c_s '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 Kätzchen eh im Haus?*
 A: ‘Is your kitten inside?’
 (13) (A is inside; sees B's kitten) A: *#Ist dein Kätzchen eh im Haus?*
 A: ‘Is your kitten inside?’

► For previous accounts of *denn*, *etwa* and *eh* cf. Weydt (1969), Thurmail (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 correlating 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 blaue 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* convey the speaker's attitude towards a particular answer
 ► *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. *highlighting* in Inquisitive Semantics, Farkas and Roelofsen 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_s 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

- Farkas, D. and F. Roelofsen (ta) Polar initiatives and polarity particle responses in an inquisitive discourse model. Groenendijk, J. and M. Stokhof (1984) *Studies on the Semantics of Questions and the Pragmatics of Answers*. Hamblin, C.L. (1973) Questions in Montague English. FoL 10. Krifka, M. (2011) Questions. In: HSK 33.2. Simons, M. et al. (2010) What Projects and Why. In: Proceedings of SALT 2010. Stenius, E. (1967) Mood and language game, Synth. 17. Thurmail, M. (1989) *Modalpartikeln und ihre Kombinationen*. Weydt, H. (1969) *Abtönungspartikel. Die deutschen Modalwörter und ihre französischen Entsprechungen*. Zimmermann, M. (2011) Discourse particles. In: HSK 33.2.