A condition on the distribution of discourse particles across types of questions

This abstract investigates the distribution of four discourse particles across different types of questions: German leicht, eh, etwa and denn (we only consider leicht and eh in their understudied Austrian German variant, not Standard German eh). The central aspect of the puzzle that we are interested in is the following contrast.

(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?’

While all four particles may occur in polarity questions, see (1), only denn and leicht may occur in constituent questions, see (2). To our knowledge, this contrast has been treated neither in the formal nor in the descriptive literature on German discourse particles: in the formal literature, the focus has mainly been on doch, ja and wohl (cf. Zimmermann 2011), and while eh, etwa, and denn have received some attention in the descriptive literature, this contrast is neither discussed nor captured (cf. eg. Weydt 1969, König 1977, Thurmair 1989, 1991; but cf. Grosz 2005). Our aim is to present a semi-formal analysis of the semantic and pragmatic contribution of these particles that derives their distribution across question types in terms of their pragmatic function: As common for discourse particles, we propose that none of the particles contribute anything to the at-issue content of the question (cf. Simons et al. 2010; Zimmermann 2011). The not-at-issue content contributed by the particles comments on the content of the question. Specifically, investigations of naturally occurring examples suggest the following not-at-issue contents for the four particles, where the variable p symbolizes the question’s sentence radical, ? is the sentence mood indicator for the question act (cf. Stenius 1976), and cs is the speaker in the utterance context (cf. Kaplan 1978). The proposed analyses are supported by the pragmatic oddness of the sentences in the examples below (bearing hash marks).

- [denn]?(?, p): cs communicates heightened interest in the answer to ?p

  (3) A: Hast du denn Schuhe gekauft? #Na, eigentlich interessiert es mich nicht.
  A: ‘Did you buy shoes? Actually, I don’t care.’
  A’s question conveys: A cares about whether the addressee bought shoes.

- [leicht]?(?, p): cs believes that settling the question ?p provides an explanation for why a certain fact in the utterance context holds

  (4) 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?’
  B’s question conveys: B believes that Peter’s getting home okay is a/the reason for him being at A’s party.

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

  (5) (A drops a pencil) A: #Ist der Stift etwa runtergefallen?
  A: ‘Did the pencil fall?’
  A’s question conveys: A did not believe it likely that the pencil would fall when dropped.

- [eh]?(?, p): cs believes the probability of the negative answer to ?p to be too high to discard, and prefers the positive answer to hold
(6) (A is inside; sees B’s kitten) A: *Ist dein Kätzchen eh im Haus?*
   A: ‘Is your kitten inside?’ A’s question conveys: A believes it is likely that the kitten is outside

Based on their not-at-issue content, the four particles can be divided into two classes: *etwa* and *eh* pattern together since both convey the speaker’s attitude towards a particular answer; *denn* and *leicht* pattern together since they comment on the question as a whole. We argue that the contrast in (1) and (2) is due to this division into classes: Particles whose not-at-issue meaning singles out one particular answer can only do so if the sentence radical explicitly identifies one answer (in terms of inquisitive semantics: if one possibility is highlighted; cf. Farkas and Roelofsen 2012). The sentence radical of polarity questions explicitly mentions the positive answer. In contrast, the sentence radical of constituent questions can be conceived as a partly unspecified proposition (cf. Krifka 2011). Given this unspecificity, it cannot explicitly identify one particular answer. This derives the contrast in (1) and bspwas: *etwa* and *eh* comment on the speaker’s beliefs regarding a specific answer. Therefore, they are excluded from constituent questions. In contrast, *denn* and *leicht* do not single out a specific answer. Therefore, they are acceptable in both polarity and constituent questions. Note: The contrast in (1) and (2) cannot be explained in terms of the structure of the partition of the common ground created by a given question (cf. Hamblin 1973 and Groenendijk and Stokhof 1984): Polarity questions partition the common ground into two cells, i.e. the positive and the negative answer. Constituent questions, in contrast, partition the common ground into a number of cells correlating to the number of possible answers (possibly larger than two). 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: *did the blue team win?* and *which team won?*. Both questions partition the common ground into the same two cells: blue won and red won. Hence, if the structure of the partition were to play a role, all four particles should be able to occur in the polarity question. But, as predicted by our analysis, *did the blue team win?* (i.e. identifying the cell the blue team won) allows all four particles to occur, whereas *which team won?* can only host *denn* and *leicht*.

Our analysis also extends to alternative questions, in which both relevant cells are mentioned by the sentence radical, i.e. no single cell is identified. As predicted, these questions pattern with constituent questions with consequent questions: *eh* and *etwa* cannot occur in (7c) and (7d).

(7) a. Magst du *denn* Kaffee oder Tee?
b. Magst du *leicht* Kaffee oder Tee?
c. *Magst du *eh* Kaffee oder Tee?
d. *Magst du *etwa* Kaffee oder Tee? ‘Do you like coffee or tea?’

The second, disjunctive polarity question reading for (7c) and (7d) is available. This is also in line with our analysis.

Finally note that, like highlighting in inquisitive semantics, “explicitly identifying one answer” only depends on the at-issue content of the sentence radical. Hence, while speakers can use the not-at-issue content of certain lexical items to convey a bias for one specific answer in constituent questions, or for the negative answer in polarity questions (e.g. minimizer NPIs or *even*, cf. Guerzoni 2003), this has no effect on which answer is “explicitly identified”.