

## No Answer Required

Valentina BIANCHI and Silvio CRUSCHINA

1. Formal models of the conversation in possible world semantics focus mainly on information-seeking discourse moves targeting a Question Under Discussion and aimed at making public the participants' commitments, and/or increasing the Common Ground information (Stalnaker 1978, 2002; Roberts 1996; Gunlogson 2001; Farkas & Bruce 2010, a.o.). Thus, a speaker asking a canonical question is by assumption ignorant about the answer and assumes the addressee to be knowledgeable about it; vice versa, in canonical assertions the speaker presents themselves as having ground for the asserted proposition and assumes that it is undecided in the addressee's epistemic state (Farkas 2020). An interesting challenge for this approach is constituted by non-canonical questions that do not require an answer. In this discussion we limit ourselves to polar questions (PQs):

(1) [*A meeting B*]: Did you have your hair cut?

(confirmation PQ)

(2) [*B does something very stupid*]: Are you an idiot?

(rhetorical PQ)

(3) [*A enters B's room and finds them in bed*]: Are you still in bed at this hour?!

(surprise/disapproval)

(1) differs from a canonical PQ in that the lack of an answer does not violate cooperativity, and indeed conveys the addressee's tacit confirmation – as is the case in declaratives (Farkas & Bruce 2010). In rhetorical questions such as (2), the speaker “presupposes that the answer is entailed in the context of utterance” (Biezma & Rawlins 2017).

In surprise/(dis)approval questions (Obenauer 2004), the true answer can be directly inferred from evidence that is available to both participants in the speech context.

*Prima facie*, these question types seem to convey a specific speaker attitude towards the proposition  $p$  denoted by the PQ's sentence radical. However, an account in terms of a speaker attitude falls short of explaining why these discourse moves are implemented as questions in the first place. This is because the role of the addressee as the potential source of the answer, which characterizes canonical questions, is completely obliterated.

We outline here an alternative account in which the addressee's role is maintained. In a nutshell, we propose that the non-canonical imports are not about the core proposition  $p$ , but they convey the speaker's evaluation of the relative likelihood of the addressee's possible answers.

2. We adopt Kratzer's (1981 and seq.) approach, based on two contextual parameters: for any world  $w$ ,

- *the modal base*  $B(w)$  is a set of worlds compatible with a given body of information or evidence;

- *the ordering source*  $O(w)$  is a set of stereotypical propositions that partially orders the worlds in the modal base, according to their closeness to an ideal of normalcy;

-  $BEST(B(w), O(w))$  is the subset of worlds in  $B(w)$  that are top-ranked by  $O(w)$ .

Let  $w$  be the evaluation world:

(4) For any two worlds  $v, u$ :  $v$  is AT LEAST AS CLOSE as  $u$  to the stereotypical ideal of  $O(w)$  iff all the propositions of  $O(w)$  that are true in  $u$  are true in  $v$  as well.

(5) For any two propositions  $p, q$ :  $p$  is AT LEAST AS LIKELY AS  $q$  w.r.t.  $B(w)$  and  $O(w)$  iff none of *the  $q$  and-not  $p$*  worlds is closer to the ideal of  $O(w)$  than all the  *$p$ -and-not  $q$*  worlds.

(6) For any two  $p, q$ :  $p$  is MORE LIKELY THAN  $q$  iff  $p$  is at least as likely as  $q$  w.r.t.  $B(w)$  and  $O(w)$ , not vice versa (some  *$p$ -and-not  $q$*  worlds are closer to the ideal than all *the  $q$ -and-not  $p$*  worlds).

(7)  $p$  is CERTAIN iff all the  $BEST$  worlds in  $B(w)$  relative to  $O(w)$  are  $p$ -worlds.

3. We propose that the speaker's evaluation of likelihood does not apply to the core proposition  $p$ , but to the possible answer on the part of the addressee. Specifically, we adopt the distinction between at-issue content and Common Ground Management (CGM) content (Krifka 2008, Romero 2014): the latter indicates the status of the at-issue content w.r.t. the CG.

Let  $q$  be the proposition that  $p$  is entailed by the addressee's epistemic state ( $E_{\text{addr}}(w) \subseteq p$ ). Intuitively,  $q$  conveys that the addressee's epistemic state in  $w$  supports a *confirming answer*.

The negation of  $q$ , *not- $q$* , conveys that  $p$  is negatively decided or undecided in  $E_{\text{addr}}(w)$ . The second case, however, clashes with the speaker's assumption that the addressee is competent about  $p$ ; therefore, we take *not- $q$*  to convey that  $p$  is negatively decided, corresponding to an expected *reversing answer*.

The CGM-content associated to (1)-(3) can be characterized as follows:

- i) for a confirmation PQ like (1):  $q$  is more likely than *not- $q$* , relative to the speaker's doxastic state (modal base) and their stereotypical expectations (ordering source) in the utterance world (and time). The speaker believes that a confirming answer is probable.
- ii) for rhetorical questions:  $q$  is certain (or, more frequently, *not- $q$*  is certain), relative to the speaker's doxastic state and their expectations in the utterance world (and time). The speaker believes the addressee to be undoubtedly in the position to confirm (reverse) the core proposition  $p$ .
- iii) For a surprise/(dis)approval question like (3):  $q$  is certain. Importantly, in this case the speaker's evaluation of certainty always rests on a circumstantial (rather than doxastic) modal base embodying direct evidence that becomes available to the speaker in the utterance context: whence the overtone of sudden discovery, in the sense of DeLancey (1997).

The import of (dis)approval can be expressed in a counterfactual form (cf. Heim 1992). Informally: the modal base is extended by including maximally similar *not- $q$*  worlds in which the addressee gives a reversing answer. The *not- $q$* -worlds are ranked above the  *$q$ -worlds* by a bulletic ordering source anchored to the speaker: the speaker would have preferred a reversing answer to a confirming one.



'Tonight there's a party at the Atlantic Club: Have you ever been there?'  
(canonical PQ)

Giorgi (2018) analyses *ma* as a discourse-level operator that connects a silent proposition representing the speaker's expectations to a PQ, and conveys that the PQ's propositional content is incompatible with it. Consider, however, the confirmation question (4): plausibly, here speaker A had no expectations at all about B's hair-cutting (considering the interval since they last met B); they simply had no elements to anticipate that the issue would arise. In (5), A's rhetorical question is a reaction to a completely unforeseen behavior by B. Thus, the counter-expectation import cannot be easily generalized.

We speculate that *ma* bears the CGM import that the speaker did not expect their question to arise in the utterance context (independently of their expectations about the interlocutor's answer). As a first approximation: the PQ's at-issue propositional content is made salient by evidence that becomes available to the speaker in the utterance context. The problem here is how to characterize the notion of salience without making reference to an already established Question Under Discussion. We leave this issue for future research.

## References:

- Biezma, M. & K. Rawlins. 2017. Rhetorical questions: Severing questioning from asking. Proc. of SALT 27
- DeLancey, S. 1997. Mirativity: The grammatical marking of unexpected information. Ling. Typology 1: 33–52
- Farkas, D. 2020. Canonical and non-canonical questions. Ms., available from semanticsarchive.net. Farkas, D. & K. Bruce. 2010. On reacting to assertions and polar questions. J. of Semantics 27: 81-118
- Giorgi, A. 2018. *Ma non era rosso?* On counter-expectational questions in Italian. Repetti-Ordoñez (eds) Romance Languages and Linguistic Theory 14. Benjamins.
- Heim, I. 1992. Presupposition projection and the semantics of attitude verbs. J. of Semantics 9: 183-221
- Kratzer, A. 2012. Modals and Conditionals: new and revised perspectives. Oxford University Press
- Krifka, M. 2008. Basic notions of information structure. Acta Ling. Hungarica 55
- Obenauer, H.-G. 2004. Nonstandard wh-questions and alternative checkers in Pagotto. Lohnstein– Trissler (eds) Syntax and Semantics of the Left Periphery, 343–384. de Gruyter

Roberts, C. 1996/2012. Information structure in discourse. *Semantics and Pragmatics* 5.

Romero, M. 2014. High negation in subjunctive conditionals and polar questions. *Proc. Sinn und Bedeutung* 19, 449-516.

Stalnaker, R. 1978. Assertion. In P. Cole (ed), *Syntax and Semantics* 9, 315–32. Academic Press.