How to be abnormal: discourse particles under accent

Markus Egg, Humboldt-Universität zu Berlin

1 Introduction

Discourse particles mediate the interaction of utterance semantics and common ground (CG), when utterances are interpreted and the CG is updated subsequently. As challenging cases in point, the German particles *schon* and *doch* characterise utterances as abnormal with respect to the CG, which can block their straightforward integration in the CG during conversation.

The paper offers a uniform analysis for both unaccented and accented uses of the particles, even though the accented versions behave in seemingly unpredictable ways. This behaviour is put down to the interaction of a core semantic contribution (of the unaccented version of the particles) with general pragmatic principles, which also accounts for the accentuation. In the following, the analysis is sketched for *schon*.

2 Unaccented and accented uses of the discourse particle

Schon expresses unexpectedness, in (1), it characterises its host utterance as unexpected, given A's claim (insufficient studying usually leads to failing). But accented versions of the particle differ: They refute negated sentences and weakly accept affirmative ones, see (2a) and (2b):

(1) A: *Ich habe nicht genug für die Prüfung gelernt.* B: *Du wirst es schon schaffen.*
'A: I haven't studied hard enough for the exam. B: You will pass nevertheless.'

(2) (a) A: *Max ist nicht klug.* B: *Max ist SCHON klug.*
'A: Max is not clever. B: 'Yes, he is.'

(b) A: *Max ist klug.* B: *Max ist SCHON klug (, aber...)*
'A: Max is clever. B: 'Admittedly yes (, but...)'

Reacting to affirmative sentences, accented *schon* (*SCHON*) shows weak acceptance, in ellipsis or in a repetition of the sentence. Reacting to negated sentences, *SCHON* alone expresses weak acceptance, in a repetition of the sentence (without negation), it denies the negation:

(3) (a) A: *Max ist klug.* B: *SCHON.* $\equiv$ *Max ist SCHON klug.*
'A: Max is clever. B: 'Admittedly yes.'

(b) A: *Max ist nicht klug.* B: *SCHON.* $\not\equiv$ *Max ist SCHON klug.*
'A: Max is not clever. B: 'Admittedly, he isn't.'/'Yes he is.'

3 Expectation and normality

Expectation and normality are based on defeasible implicature '$>$' (Asher and Lascarides 2003): $p > q$ holds for a world w if $*(p,w) \subseteq q$, where '$*(p,w)$' denotes the set of p-worlds in which everything that is normal for w holds too. Defeasible Modus Ponens models expectation in that it allows a (cancellable) conclusion from p and $p > q$ to q.

Next, similar to Stalnaker (2002), CG is the set of propositions taken for granted during a conversation by all interlocutors. 'Everything that is normal' is the proposition set X defeasibly derivable from CG ($X = \{p|CG > p\}$; slightly redefining '$>$' and assuming that the derivation of conflicting material can be blocked). Then $p > q$ can be redefined non-defeasibly in terms of X: $p > q$ iff $(p \wedge r) \rightarrow q$ (where $r = \bigcap X$). This allows a precise definition of abnormality for p, an abnormal p does not hold in a normal situation: $r \rightarrow \neg p$, which is equivalent to $p > \neg p$.

Thus, in a normal situation for p, its potential consequences q (such that $p > q$) hold (cp. Zimmermann 2014), but its potential obstacles q' (such that $q' > \neg p$) do not.

4 Interpreting unaccented and accented *schon*

Schon indicates abnormality by denial of expectation in terms of defeasible implicature (Abraham 1991). The speaker S believes that this implicature is in the CG. Abnormality emerges for its host sentence (with meaning p), in that a previous utterance it relates to anaphorically (very often an immediately preceding utterance, e.g., in (1)) introduces a potential obstacle q for p:

(4) $[\![schon(p)]\!]$ is defined if S believes that $q > \neg p$ is in the CG, with q the meaning of an expression anaphorically related to *schon*'s host utterance. If defined, $[\![schon(p)]\!] = [\![p]\!]$.

(4) leaves open whether q, but indicates p as abnormal if q holds. The discourse effect is that the speaker of the *schon*-utterance refrains from committing to q (see Krifka (2015) for the notion of commitment). In the cases like (1), this blocks updating the CG by q.

(2) and (3) do not introduce abnormality by pointing out unfulfilled expectations directly. We will review these uses in turn. In all of them, the particle is accented as the only new entity in B's responses (Egg and Zimmermann 2012).

In (2a), $q = \neg p$, which signals a conflict between updating the CG with either q or $\neg q$. The abnormality condition is trivialised to $\neg p > \neg p$, which causes its seeming disappearance. In (2b), B's response confirms A's claim only weakly because it presents the claim as true but abnormal. Formally, the two propositions related by *schon* in (2b) are identical, i.e., $q = p$, thus, the CG can be updated by q. The abnormality condition emerges as $p > \neg p$, i.e., p (or q) is abnormal. It is abnormal because it has unfulfilled potential consequences. This non-fulfillment can be expressed by *aber*-clauses, which are typical for this usage.

For elliptical *SCHON* reacting to a positive sentence in (3a), the material *Max ist klug* 'Max is clever' has been elided, as it is given. Thus, *SCHON* is interpreted like the answer in (2b).

(3b) shows that elliptical *SCHON* reacting to negated sentences expresses weak assertion (unlike the full answer). Again, $q = p$, thus, interpretation and discourse effect follow the pattern of (2b). What needs to be explained, however, is why reconstructing the ellipsis includes the negation, not just *Max ist klug* 'Max is clever'. The explanation is that elliptical *SCHON* in (3b) has different reconstruction options and that ellipsis reconstruction as discourse phenomenon favours high attachments (Frazier and Clifton 2005), which yield larger potential reconstructions in cases like (3b). Thus, the reconstruction option with the negation is chosen.

We formalise this preference in terms of the *maximal common theme* (MCT; Hardt et al. 2013). First, a *common theme* (CT) of two semantic expressions is derived by applying to them a sequence of generalisations (like deletions of or λ-abstractions over terms). Generalisations form a partial order '$\ll$': $p \ll q$ iff a sequence of generalisations applied to p yields q. The CT p of q and r is an MCT of q and r if there is no other CT p' of q and r such that $p' \ll p$.

For (3b), the MCT for A's utterance ($\neg$**klug**$'(\mathbf{m})$) and the reconstruction of B's response without negation (**schon**$'($**klug**$'(\mathbf{m}))$) is $\lambda p.p($**klug**$'(\mathbf{m}))$. For the reconstruction with negation, B's response emerges as **schon**$'(\neg$**klug**$'(\mathbf{m}))$, the MCT of this and A's utterance is $\neg$**klug**$'(\mathbf{m})$.

Reconstruction options for ellipses are selected in terms of the MCTs for them and the expression containing the antecedent: If $\ll$ orders them, the option with the most highly ranked MCT is chosen, in (3b), the one with the negation, because $\neg$**klug**$'(\mathbf{m}) \ll \lambda p.p($**klug**$'(\mathbf{m}))$.

5 Extension of the analysis to the particle *doch*

In a second step, the analysis will be extended to the particle *doch*, which also indicates abnormality by denial of expectation, but behaves differently in the environments (2) and (3): Its accented version cannot be used in reactions to affirmative sentences, and has the same interpretation (refusal) in reactions to negated sentences, both in a full host sentence and in ellipsis.

References

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