

Doch is concessive after all!

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German *doch* functions as a pragmatic particle, an adverb, and as a contrastive conjunction. We propose an analysis connecting all of these by their relation to concessive meaning. This analysis not only sheds light on previously opaque connections between them, but also directly reflects intuitions on their use and accounts for differences in contribution.

Relating concessivity: the data The interaction of *doch*(PRT) and *DOCH*(ADV) with concessive conditionals, our understanding of which largely follows König and Siemund (2000), reveals overlaps in meaning, as the following examples illustrate:

- (1) Obwohl er doch viel gelernt hat, ist er DOCH durchgefallen.
although he PRT lots studied has has he ADV failed
“Even though he studied a lot, he failed after all.”
- (2) Obwohl er DOCH viel gelernt hat, ist er doch durchgefallen.
although he PRT lots studied has has he ADV failed
“Even though he studied a lot after all, he failed, as you know.”

In (1), the (obligatorily stressed) adverb *DOCH* in the consequent q = “he failed” dovetails with concessive meaning as it negates an expectation $\neg q$ arising from the antecedent p = “he studied a lot”. In the antecedent, the (obligatorily unstressed) particle *doch* strengthens the notion of contrast between the actual and the expected situation. When their positions are reversed, as in (2), they contribute independently of concessive meaning: in the antecedent, *DOCH* indicates that an expectation $\neg p$ has been discarded, whereas in the consequent, *doch* indicates that q is a previously established premise, but conveys uncertainty w.r.t., its status as common ground. Our goal is to determine the meanings of *doch* and *DOCH* from their overlap with concessive conditional meaning in (1), and to account for their independent contributions in (2).

Relating concessivity: the analysis We differentiate between **premises**, the grounds for reasoning, and **expectations**, what is normally the case based on the premises. While the premise set needs to be logically closed, expectations can be in contradiction with premises, but need to be ranked relative to each other if they contradict (essentially a normality modal, cf. Yalcin (2016)). Writing for Π the premise set, Ξ for the expectation set, we define Ξ as the set of expectations derived from the members of Π by defeasible entailment (\rightsquigarrow) in (3).

$$(3) \quad \Xi = \{ \xi \mid \exists \pi \in \Pi : \pi \rightsquigarrow \xi \}$$

Following Kratzer (2012), we view conditionals as modals, where the antecedent restricts the modal base, written as Ξ_π for restriction with π . Taking *doch* and *obwohl* to be truth-conditionally inert, we propose the following **use-conditional** meanings w.r.t. a given context, indicated by superscript u, c following Gutzmann (2015), for *obwohl*, *DOCH* and *doch*:

- (4) a. $\llbracket \textit{obwohl}(p, q) \rrbracket^{u, c} = q \in \Pi^c \wedge \neg q \in \Xi_p^c$
- b. $\llbracket \textit{DOCH}(q) \rrbracket^{u, c} = \exists \pi \in \Pi^c : \neg q \in \Xi_\pi^c$
- c. $\llbracket \textit{doch}(p) \rrbracket^{u, c} = p \in \Pi^c \wedge \exists \xi \in \Xi^c : \neg \xi \in \Xi_p^c$

The respective overlaps of *DOCH* and *doch* with concessive meaning observed in (1) are reflected by the relation $\neg q \in \Xi_p^c$ between concessive antecedent p and concessive consequent q taking different arguments. As for *DOCH*, the negation of the prejacent itself is expected ($\neg q \in \Xi_\pi^c$) based on a contextually salient premise π , thus it overlaps with concessive meaning when in the (unexpected) consequent q . As for *doch*, the prejacent is marked as a premise, and an expectation arising from it is in contrast with a contextually salient expectation. In the concessive case, this expectation is the consequent, which is a premise in the case of assertion.

Diachronic connections This matches grammaticalization paths proposed by Zeevat and Karagjosova (2009): *DOCH* originates in confirmation questions (seeking to rule out $\neg p$) and *doch* in reminding questions (seeking to rule out potential conflicting premises), and the conjunction *doch* has emerged from “proconcessive” *DOCH* in examples like (1) reanalyzed as single sentences with a contrastive conjunction, which fits our analysis of *doch*(CONJ) in (5):

$$(5) \quad \llbracket \text{doch}(\text{CONJ})(p, q) \rrbracket = \exists \pi \in \Pi : \neg(p \wedge q) \in \Xi_\pi$$

Positioning the proposal Its wide variety of uses make the particle *doch* difficult to account for. While there is some consensus that *doch* conveys “givenness” and “contrast” (here implemented as $p \in \Pi^c$ and $\exists \xi \in \Xi : \neg \xi \in \Xi_p^c$) analyses differ in whether there is: (i) a unified analysis of *doch* and *DOCH*, (ii) obligatory reference to some salient proposition, (iii) obligatory reference to addressee/shared belief, and (iv) accounting for restrictions in utterance/speech-act type.

(i) We connect *DOCH* and *doch* via concessivity, but do not derive one as a stressed version of the other. This is more economical than Enders (2018)’s proposal of including sequential belief update in *doch* to correctly stress-derive *DOCH*, and better accounts for the data than Egg and Zimmermann (2012), who take *DOCH* to be *doch* with VERUM-focus. While the meanings of *DOCH* and VERUM overlap, they co-occur, and VERUM scopes higher, as in (6). Inspired by Gutzmann and Miró (2011)’s proposal that VERUM downdates p from the QUDs, we take it to exclude all premises that give rise to expectations contrastive w.r.t. p . This is broader than *DOCH*’s indication of a previous expectation $\neg p$, which (7) conveys with VERUM only:

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| (6) | IST er DOCH durchgefallen?
did.FOC he ADV fail
“DID he fail after all?” | (7) | IST er durchgefallen?
did.FOC he fail
“DID he fail?” |
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(ii) Our proposal does not require a premise in direct conflict with the prejacent. Our requirement for a contrary expectation reflects the intuition that *doch* is used to narrate belief revision where conflicting expectations are in competition for addition to the (common) ground, cf. Karagjosova (2004). This more flexible condition is easier to accommodate examples like (8) and (9), which anticipatively exclude contrastive expectations like “You can not answer the following question” and “He could have failed” by confirming the premise status of their prejacent. While these acts of expectation management are not directly implemented in the formalism, this is independently necessary for modeling how the common ground is negotiated, cf. for instance Hogeweg et al. (2011) for discussion in connection with *doch*.

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| (8) | Du bist doch Linguist.
you are PRT linguist
“So you’re a linguist, right?” | (9) | Er hat doch auch viel gelernt.
he did PRT also lots learn
“He did study a lot, after all” |
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(iii) We do not require the obligatory involvement of addressee belief, which is welcome as *doch* is used productively in soliloquy, for instance narrating the speaker’s belief revision process in exclamations. For a finer-grained account of discourse-oriented uses, a split of the context set into speaker and addressee premises and expectations could be easily implemented.

(iv) By requiring the prejacent to be a premise, we account for restriction to declaratives, and for these exceptions: in deliberative *wh*-questions, the presupposed part, in (10) “x failed”, is a premise, in optatives (cf. Grosz 2011) and imperatives (cf. Kaufmann and Kaufmann 2012) like (11), the restriction is satisfied by a deontic/teleological modalized proposition:

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| (10) | Wer ist doch durchgefallen?
who has PRT fail
“Who was it again that failed?” | (11) | Fall doch durch!
fail.IMP PRT fail
“Fail, for all I care!” |
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References Egg, M. and Zimmermann, M. (2012). Stressed Out! Accented Discourse Particles: The Case of *DOCH*. In *Proceedings of Sinn und Bedeutung 16*, pages 225–238. • Enders, F. (2018). A unified account for German “doch”. Technical report, University of Pennsylvania Working Papers in Linguistics 24 (1), 8. • Grosz, P. (2011). Facts and Ideals: On the Role of doch in Conditionals and Optatives. In *Proceedings of Sinn und Bedeutung 15*, pages 275–289. • Gutzmann, D. (2015). *Use-conditional meaning: Studies in multidimensional semantics*. Oxford University Press. • Gutzmann, D. and Miró, E. C. (2011). The dimensions of verum. *Empirical issues in syntax and semantics*, 8:143–165. • Hogeweg, L., Ramachers, S., and Wottrich, V. (2011). Doch, toch and wel on the table. *Linguistics in the Netherlands*, 28(1):50–60. • Karagjosova, E. (2004). *Meaning and function of German modal particles*. PhD thesis, Universität des Saarlandes. • Kaufmann, M. and Kaufmann, S. (2012). Epistemic particles and performativity. In *Proceedings of SALT 22*, pages 208–225. • König, E. and Siemund, P. (2000). Causal and concessive clauses: Formal and semantic relations. In *Cause — Condition — Concession — Contrast. Cognitive and Discourse Perspective*, pages 341–360. Mouton de Gruyter, Berlin. • Kratzer, A. (2012). *Modals and Conditionals*. Oxford University Press. • Yalcin, S. (2016). Modalities of normality. In Charlow, N. and Chrisman, M., editors, *Deontic Modality*, pages 230–255. Oxford University Press. • Zeevat, H. and Karagjosova, E. (2009). History and grammaticalisation of “doch”/“toch”. *ZAS papers in linguistics*, 51:135–152.