The German discourse particle *doch* in Imperatives

Abstract

I introduce a unified account for the two prosodic realizations of the German discourse particle *doch* based on declaratives, arguing that they conventionally convey the speaker's belief as well as her beliefs about the addressee's beliefs at a past time. I extend this account to imperatives, arguing that *doch* there operates on effective preferences instead of beliefs, hence, showing that *doch* can operate on different modal bases depending on the sentence type in which *doch* occurs.

1 Introduction

The discourse particle *doch* can be realized stressed ($doch_{\text{s}}$; (1a)) or unstressed ($doch_{\text{us}}$; (1b)). Despite the difference in meaning (indicated by the different paraphrases), there have been many attempts to give a unified account for $doch_{\text{us/s}}$ (Egg and Zimmermann (2011), Grosz (2014), Rojas-Esponda (2014) a.o.). This is in line with the argument that the two realizations are one lexical item as the stress in $doch_{\text{s}}$ is not an instance of lexical stress and, thus, cannot distinguish lexical items in an intonation language like German (Féry, 2011).

(1) a. A: Karl will come to the party.
S: Er kommt doch_{s} nicht.
'He won't come (after all).'

b. A: Karl will come to the party.
S: Er ist doch_{us} krank.
'He is sick (as we know).'

First, I will briefly introduce Egg and Zimmermann's (2011) account on *doch* as an example for previous work. I will then introduce the new account by looking at declaratives, and then expand it to imperatives which have been mostly neglected in previous accounts.

2 Previous accounts

Egg and Zimmermann (2011) argue that $doch_{\text{us}}(p)$ conveys that p is in the participants' Common Ground (CG). In addition, $doch_{\text{us}}$ retrieves a pattern from the CG such that p defeasibly entails $\neg q$ ($p > \neg q$). q can be identified by the propositional content of the preceding utterance ($u_{\text{-}1}$) or its felicity conditions. Given the antecedent, q, and the pattern saying that given p, generally $\neg q$ is true, a potential contrast arises (see (2a)). For $doch_{\text{s}}(p)$, Egg and Zimmermann (2011) claim that stress in $doch_{\text{s}}$ signals VERUM focus (see Romero and Han (2004)), hence explaining that $doch_{\text{s}}$ requires an antecedent q in the previous utterance, $u_{\text{-}1}$, such that $q = \neg p$ (see (2b)).

(2) a. $[\![doch_{\text{us}}(p)]\!] = p$, defined iff (i.) $p \in$ CG, (ii.) there is a salient antecedent q s.t. q is a content proposition or a felicity condition of $u_{\text{-}1}$, and (iii.) $p > \neg q \in$ CG

b. $[\![doch_{\text{s}}(p)]\!] = p$, defined iff there is a salient antecedent q s.t. $q = \neg p$

3 A new unified account for *doch*

I propose that both, $doch_{\text{us}}$ and $doch_{\text{s}}$, conventionally convey the speaker's beliefs at a time before the utterance time ($t < t_{@}$), as well as her beliefs on the addressee's belief at that past time. More precisely, with $doch_{\text{us}}(p)$, the speaker conventionally conveys that she believed p, and that she believed the addressee also believed p at $t < t_{@}$ (see (3a)). With $doch_{\text{s}}(p)$, the speaker conventionally conveys that she believed $\neg p$ and that she believed the addressee also believed $\neg p$ at $t < t_{@}$ (see (3b)). The difference in meaning between $doch_{\text{us}}$ and $doch_{\text{s}}$ follows from the stress in $doch_{\text{s}}$ indicating contrast. Both realizations presuppose an epistemic conflict at the time of the utterance. As we take $doch_{\text{us/s}}$ to be meta-conversational moves referring to the speaker's beliefs, this is in line with

the *Principle of Economy* saying that one should only use a meta-conversational move when needed to resolve epistemic conflict or to ensure Quality (Romero and Han, 2004).

(3) Where $B_{X,t}$ is the set of beliefs of participant X at a time t:

a. $[\![doch_{us}(p)]\!] = B_{S,t}(p)$ & $B_{S,t}(p \in B_{A,t})$, for $t < t_@$,
defined iff an epistemic conflict holds at $t_@$.

b. $[\![doch_{s}(p)]\!] = B_{S,t}(\neg p)$ & $B_{S,t}(\neg p \in B_{A,t})$ for $t < t_@$,
defined iff an epistemic conflict holds at $t_@$.

3.1 Unstressed *doch*

First, I show that $doch_{us}$ expresses a past belief of the speaker. In (4), the $doch_{us}$-utterance cannot be felicitously followed by Sue saying that she knew that Anna did not know that Karl was sick as this contradicts the meaning contribution of $doch_{us}$, namely that Sue believed that Anna believed that Karl was sick.

(4) Karl told Sue earlier that he was sick. Now, Anna asks where Karl is.
S: Er ist doch$_{us}$ krank. # Ich weiß, das wusstest du nicht.
'He is [$doch_{us}$] sick. I know that you didn't know that.'

I do not follow the assumption that p needs to be part of the CG prior to the utterance (Repp (2013) a.o.), but assume that the addressee needs to be able to accept that the speaker can have beliefs about the addressee's beliefs. In (5), $doch_{us}$ is infelicitous as Anna and Sue never met before, and Anna cannot accommodate how Sue could have beliefs about her beliefs. Unlike predicted by previous accounts, the use of $doch_{us}$ is felicitous in (6) although Karl's being sick is not part of the CG since Karl's habit enables Anna to accept that Sue can have beliefs about her beliefs.

(5) Anna is working at a party, checking the attendance list. At midnight, the host, Sue, asks whether everybody came and Anna tells her that Karl didn't come.
S: # Er ist doch$_{us}$ krank.
'He is [$doch_{us}$] sick.'

(6) Anna's and Sue's friend Karl always calls them the moment he feels sick. Today, Karl called Sue to tell her that he might have a cold. Now, Anna is asking why Karl does not join them at the movies.
S: Er ist doch$_{us}$ krank.
'He is [$doch_{us}$] sick.'

Unlike, Egg and Zimmermann (2011) and Grosz (2014) who take $doch_{us}$ to signal that its prejacent is undebatable information, I argue that $doch_{us}$ does not conventionally convey any current commitment regarding p. Hence, $doch_{us}$ is compatible with both conveying that p as well as checking whether p. In (7), Sue is biased towards p because she used to believe that p and that the addressee believed p, but does not necessarily hold that believe at $t_@$. If the speaker commits to p at the time of the utterance, this commitment is not conveyed by linguistic convention using $doch_{us}$ but is an inference drawn in this particular context.

(7) Karl told Sue two days ago that he was sick. Now, Anna is asking why Karl does not join them at the movies.
S: Er ist doch$_{us}$ krank, oder?
'He is [$doch_{us}$] sick, isn't he?'

The infelicity of (8a) is predicted by the *Principle of Economy* as it can be inferred from Anna's utterance that she believes that Karl will not come to the party (p), which is also what Sue believed. Thus, there is no epistemic conflict. In (8b), on the other hand, it can be inferred from Anna's utterance that she believes that Karl will come to the party ($\neg p$). Thus, there is an epistemic conflict as Sue believed that they both believed p but encounters evidence for $\neg p$.

(8) Anna and Sue know that Karl is their only friend who drinks wine. Earlier, Karl told them that he couldn't come to their party.

a. A: We don't have to buy wine.
S: # Karl kommt doch$_{us}$ nicht.
'Karl is [$doch_{us}$] not coming.'

b. A: We have to buy wine.
S: Karl kommt doch$_{us}$ nicht.
'Karl is [$doch_{us}$] not coming.'

3.2 Stressed *doch*

Comparing (9) and (10) shows that $doch_{s}$ in fact conveys a past belief of the speaker despite this claim being absent from previous accounts. In (9), using $doch_{s}$ is infelicitous as Sue did not have a past belief $\neg p$. In (10), where Sue believed $\neg p$ and

believed that Anna also believed $\neg p$ prior to the utterance time, the use of $doch_s$ is felicitous. Previous accounts would falsely predict the felicity of (9) as they assume that the contrast signaled by $doch_s$, holds between a preceding utterance stating $\neg p$ (A's utterance) and the prejacent of $doch_s$. However, the infelicity of Sue's utterance in (9) shows that the contrast holds between the past belief of the speaker and the prejacent of $doch_s$. It just follows from the meaning of $doch_s$ that it often occurs in contexts where it is preceded by an utterance stating that $\neg p$. But as (11) shows, this is not a necessary condition as $doch_s$-utterances can felicitously be used discourse initially under adequate discourse conditions.

(9) Karl told Anna that he wouldn't come to her party. He then changed his mind and told Sue that he would come without telling her about his original plan.
A: Karl isn't coming to the party.
S: # Er kommt doch$_s$.
'He is [$doch_s$] coming.'

(10) Karl told Anna and Sue that he wouldn't come to their party. He then changed his mind but only told Sue about it.
A: Karl isn't coming to the party.
S: Er kommt doch$_s$.
'He is [$doch_s$] coming.'

(11) Anna's and Sue's flatmate Karl normally spends the weekends at his parents' house. If not, he puts up a sign in the window. Anna and Sue are coming home on Friday night, when Sue sees the sign.
S: Guck mal, Karl ist doch$_s$ zuhause.
'Look, Karl is [$doch_s$] at home.'

Like $doch_{us}$, $doch_s$ is compatible with conveying that p as well as checking whether p (see (12)). This is taken to be evidence against Egg and Zimmermann's (2011) claim that $doch_s$ is an instance of VERUM focus, with VERUM roughly indicating that the speaker is sure that its prejacent should be added to the CG (see Romero and Han (2004)).

(12) Karl told Sue and Anna that he wouldn't come to their party. Anna bought wine although Karl is the only one drinking it.
S: Kommt Karl doch$_s$?
'Is Karl coming [$doch_s$]?'

Finally, I argue that in the case of $doch_s$ an epistemic conflict trivially holds as there is always a contrast between the prior belief, $\neg p$, and the prejacent of $doch_s$, p.

4 *Doch* in Imperatives

I follow Condoravdi and Lauer (2012) in that the underlying meaning of all possible illocutionary forces of imperatives is that the speaker commits to preferring the content of the imperative being realized and hence to act accordingly (see (13)). That is, an imperative *p!* publicly commits the speaker to p being the maximal element of her effective preference structure (PEP) with the effective preference structure being ranked preferences that are based on desires, obligations, etc. The various illocutionary forces are taken to arise through the interaction of this underlying meaning with different discourse conditions. It is also through adequate discourse condition, that it can follow from (13) that the speaker commits to an effective preference for the addressee to form an effective preference for p.

(13) $[\![\text{IMP}]\!]^c := \lambda p.[\lambda w.[PEP_w(Sp,p)]]$

Following this semantics for imperatives, I argue that the effect of *doch* in imperatives differing from its effect in declaratives can be accounted for by assuming that *doch* in imperatives does not operate on beliefs but on preference structures. As can be seen in (14), the lexical entry for *doch* is the same as for declaratives except that the beliefs are replaced with effective preferences (EP). [1] By uttering an imperative $doch_{us}(p!)$, the speaker, hence, commits to a preference for p via the constant meaning of imperatives, and conveys that p was her preference and that she believed that p was among the preferences of the addressee at a time before the utterance time via the meaning of $doch_{us}$ (see (14a)). By uttering an imperative $doch_s(p!)$, the speaker also commits to a preference for p via the constant meaning of imperatives, but conveys that she effectively preferred $\neg p$ and believed that $\neg p$ was among the effective preferences of the speaker at a time before the utterance time (see (14b)). The difference in meaning again follows from the stress in $doch_s$ signaling contrast. As in declaratives, both $doch_{us}$ and $doch_s$ presup-

[1] The beliefs are replaced by EP not the effective preference structure that has been publicly committed to (PEP) as speaker and addressee do not need to have made a public commitment to p being the maximal element of their effective preference structure at $t_@$.

pose an epistemic conflict at the time of the utterance.

(14) Where $EP_{X,t}$ is the effective preference structure of participant X at a time t:

a. $[\![doch_{us}(p!)]\!]$ = $EP_{S,t}(p)$ & $B_{S,t}(p \in EP_{A,t})$, for $t < t_@$,
defined iff there is an epistemic conflict at $t_@$.

b. $[\![doch_{us}(p!)]\!]$ = $EP_{S,t}(\neg p)$ & $B_{S,t}(\neg p \in EP_{A,t})$, for $t < t_@$,
defined iff there is an epistemic conflict at $t_@$.

4.1 Unstressed *doch*

I argue that the meaning for $doch_{us}$ proposed in (14a) can account for its distribution in imperatives. While $doch_{us}$ is compatible, e.g., with invitations, advise, pleas and requests, it is incompatible, e.g., with commands and permissions. The infelicity of $doch_{us}$ in commands and permissions is expected given their discourse conditions: they require the speaker to be some sort of authority. Hence, it is odd for the speaker to express her beliefs about the addressee's beliefs (via the meaning of $doch_{us}$) and to have an epistemic conflict (which is required for $doch_{us}$ to be felicitous).

(15) Mach die Musik aus!
'Turn off the music!'
Or what do you think about this?

With $doch_{us}$ added, the command reading of (15) is not available and the imperative is interpreted as advise instead. As (16) shows, advise is compatible with the speaker considering the addressee's beliefs and having an epistemic conflict. The epistemic conflict usually arises since for $doch_{us}$ to be felicitous, the addressee must not have taken any action to realize the content of the imperative up to the time of the utterance. Hence, there is a conflict between the addressee's lacking reaction and the speaker's belief that the content of the imperative was preferred by the addressee before the time of her utterance.

(16) [Anna is listening to loud music although she complained about having a headache. Sue advises her to turn off the music.]
Mach doch$_{us}$ die Musik aus!
'I advise you to turn off the music.'
Or do you think that won't help?

Comparing, for instance, invitations without (see (17a)) and with (see (17b)) $doch_{us}$, shows that $doch_{us}$ makes the imperative friendlier since by using $doch_{us}$ the speaker conveys that p is the obvious thing to do (because she preferred p and believed the addressee did so, too) and that, hence, it was not even necessary for her to invite the addressee to do p.

(17) a. Setz dich! / 'Take a seat!'
b. Setz dich doch$_{us}$!
'Take [$doch_{us}$] a seat!'

Requests and pleas differ from invitations and advise in that they presuppose that the realization of the content of the imperative is beneficial for the speaker (Condoravdi and Lauer, 2012), and hence that the speaker has an interest in the realization of the content. The plea in (18) could be uttered if the speaker had asked before and the addressee refused to lend her the money. The conflict between the addressee's refusal to realize the content of the imperative and the speaker signaling that she believes that p is the effective preference of the addressee, fulfills the requirement of an epistemic conflict. The addressee having signaled that p is not the maximal element of effective preferences by refusing to lend the money is still compatible with the speaker using $doch_{us}$ as the lexical entry for $doch_{us}$ proposed here only requires p to be among the addressee's effective preferences, however, it does not need to be the *maximal* element. That is, the addressee might be willing to lend the speaker the money but since she knows that the speaker never pays back her debts, p might not be her maximal effective preference. Without $doch_{us}$, the speaker could ask for the first time and be agnostic about whether or not the addressee will act on the imperative.

(18) Bitte leih mir doch$_{us}$ das Geld!
'Please, lend me [$doch_{us}$] the money!'

4.2 Stressed *doch*

The distribution of $doch_{s}$ in imperatives is less restrictive than the one of $doch_{us}$, as long as certain discourse conditions are fulfilled. For $doch_{s}$ to be felicitous in commands and permissions, the addressee must be able to accept that the speaker believed that $\neg p$ was the addressee's effective preference prior to the utterance time, and $\neg p$ must have been the maximal element of the speaker's effective preference structure at that time. In (19a)

doch$_{\text{s}}$ is felicitous as Sue effectively preferred *p* at a time before the utterance time and her daughter is able to accept that Sue believes that *p* was also her effective preference because she was told so. In (19b), *p* was Sue's effective preference but her daughter is not able to accept that Sue believes it was also her effective preference. Hence, the use of *doch*$_{\text{s}}$ is infelicitous. As in declaratives the antecedent can also be non-linguistic (see (20)).

(19) a. [Sue's daughter has been playing outside and now wants to come inside, covered in dirt. Sue told her to stay outside but then it starts to rain.]
S: Ok, komm doch$_{\text{s}}$ rein!
'Ok, come [*doch*$_{\text{s}}$] in!'

b. [Sue's daughter has been playing outside and now wants to come inside. Sue hoped she would play outside for a little longer but now it is raining]
S: # Ok, komm doch$_{\text{s}}$ rein!
'Ok, come [*doch*$_{\text{s}}$] in!'

(20) [Anna and Sue have been drinking wine at Sue's place. Sue pours Anna another glass of wine but then realizes how tired she is.]
S: Geh doch$_{\text{s}}$ nach Hause!
'Go [*doch*$_{\text{s}}$] home!'

doch$_{\text{s}}$ can also occur in advise and invitations. However, they require an additional lexical item such as *lieber* ('rather') to justify giving contradicting invitations or advise since invitations and advise also require that $\neg p$ was the maximal element of the speaker's effective preference structure and the addressee needs to be able to accept that the speaker believed that $\neg p$ was also the addressee's effective preference prior to the utterance time. Hence, the use of *doch*$_{\text{s}}$ is felicitous in (21a) but infelicitous in (21b), where Sue's daughter cannot accommodate that her mother can have beliefs about her effective preferences.

(21) a. [Sue invites her daughter to take a cookie. Her daughter then tells her that she thinks she has caries.]
S: Nimm dir lieber doch$_{\text{s}}$ keinen Keks!
'Do [*doch*$_{\text{s}}$] rather not take a cookie!'

b. [Sue wanted to offer her daughter a cookie but then she overhears how she tells her Dad that she has caries.]
S: # Nimm dir lieber doch$_{\text{s}}$ keinen Keks!
'Do [*doch*$_{\text{s}}$] rather not take a cookie!'

5 Summary

I have introduced a unified account for German *doch*$_{\text{us/s}}$ by means of declaratives in which both conventionally convey the speaker's beliefs as well as her beliefs on the addressee's beliefs at a past time. I have extended this account to imperatives, arguing that *doch* does not operate on beliefs but on effective preferences there. I have, hence, accounted for a new set of data in the discussion of *doch*. Moreover, I have shown that the difference in meaning between *doch*$_{\text{us}}$ and *doch*$_{\text{s}}$ is the same in declaratives and imperatives, and can be attributed to the stress in *doch*$_{\text{s}}$.

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