**Common ground in interaction: the functions of medial *doch* in German**

**Abstract**

In a process-oriented approach to common ground, where participants negotiate and reconstruct it in interaction, it is necessary that speakers display to each other what they consider to be common ground in their interaction. For this purpose, special lexical markers may be employed. The paper investigates how the medial particle *doch* in German is used in this respect.
Medial *doch* is a modal particle functioning as a metapragmatic instruction. Its meaning can be described with relation to common ground where a distinction between dialogue and general common ground proves useful. The basic meaning of the particle is the instruction to replace non-p by p which in most contexts is an instruction "to update common ground". According to sentence type, this applies to either the speaker's or the hearer's individual common ground. The meaning of the stressed variant of this particle is shown to arise from the combination of the lexical meaning of the particle and the meaning of the focus accent. It signals the presence of non-p in collective dialogue common ground while indicating the need of revision.

## 1. Introduction

Common ground has been viewed as static in monological theories of context, where it is taken to be the set of true propositions common to both speaker and hearer. In a product-oriented conception of common ground, it is taken into account that the true propositions are not a stable set but new ones may be added during interaction. In the field of sociolinguistics and discourse pragmatics, a process-oriented approach to common ground has been established, according to which it is negotiated between coparticipants and reconstructed by them in interaction. This makes it necessary that speakers display to each other what they consider to be common ground in their interaction. For this purpose, special lexical markers may be used. These markers are derived from lexical items by a process of grammaticalization, which restrains the distribution of the item and reduces the meaning and tranfers it to a more subjective and pragmatic level (cf. e.g. Fetzer this volume).

This paper takes a closer look at one lexical marker in German, namely medial *doch* which is usually taken to be a modal particle relating to the context of the utterance. The purpose of this paper is to show that the description of the functions of this particle in interaction may profit from newer developments in the theory of common ground as well as deepen our understanding of the ways common ground is negotiated in interaction.

The paper is organized as follows: In section 2, recent developments in common ground will be pointed out followed by a survey over the functions of *doch* in section 3 and previous analyses of the particle in section 4. An integrated analysis of *doch* will be developed in section 5. Finally, a suggestion is made how the analysis can be applied to stressed *doch,* which is followed by a short summary of the findings.

## 2. Recent developments in common ground

Drawing a conclusion from the view of various authors, Clark states that "Two people's common ground is, in effect, the sum of their mutual, common, or joint knowledge, beliefs, suppositions." (1996:93).

Clark (1996) introduces a differentiation between personal and cultural common ground. Cultural common ground exists between members of certain groups, like people who speak the same language, belong to a nation, class or any other kind of group. Personal common ground, on the other hand, is established by interactions between individuals, which means that there is no personal common ground between strangers.

For the purposes of this paper, it is important to differentiate between personal common ground, which is the mutual knowledge gained through interactions between individuals and dialogue common ground which is the activated mutual knowledge at the time of the current interaction. This part of common ground is what Thomason called the "conversational record" which is established and constantly modified and updated during discourse.

Furthermore, Fetzer introduces a distinction between individual dialogue common ground and collective dialogue common ground (2002 and this volume). Speakers can indicate for instance by reformulation that something which is part of their individual common ground should not be attributed to the collective dialogue common ground (cf. Fetzer this volume).

Common ground is constantly updated and, if necessary, revised by an operation called grounding, as Clark (1996, 221) states it: "To ground a thing […] is to establish it as part of common ground well enough for current purposes. Grounding is anchored to a logic of upward completion and downward evidence, cf. Clark´s explanation (1996:389): "Levels of action form what I have called action ladders, which have the properties of upward causality, upward completion, and downward evidence." These action ladders which are vaguely reminicent of the different acts involved in a speech act as established by Austin range from the lowest level of executing a behaviour, on to the higher levels of presenting a signal and signalling to the highest level of proposing a joint project. Clark stresses that each of these actions is a joint action in which the recipient is involved, e.g. by attending to the behaviour at the lowest level up to considering the proposal of the joint project at the highest level.

The analysis of *doch* presented here will make use of the distinction between general common ground and dialogue common ground. It is assumed that the coparticipants in an interaction can draw upon general common ground, but in order to become effective in dialogue common ground, the beliefs, suppositions etc. of general common ground must be activated. If the speaker presents them as her/ his individual dialogue common ground, the coparticipants have to ratify them in order for them to become part of collective dialogue common ground. In a process-oriented view of common ground the ways and means of offering, accepting or rejecting the offer to accept something as part of the collective dialogue common ground play an important role.

As will be shown, *doch* is an effective means of grounding in German. The data base consists of 60 examples of *doch* in written language as well as 60 in spoken language.[1] They are complemented by examples found in the literature on the subject.


## 3. Medial *doch* in German

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*Doch* is a word which occurs in a number of different functions in German and is accordingly classified as belonging to different word classes.

(1)　　a.　　Er wollte kommen, doch er hatte keine Zeit. (coordinating conjunction)
　　　　　　　He wanted to come but he had no time.
　　　　b.　　Er wollte kommen, doch hatte er keine Zeit. (conjunctional adverb)
　　　　c.　　Kommt er nicht? – Doch. (reaction particle)
　　　　　　　Won't he come? Yes, he will.
　　　　d.　　Hans hat doch keine Zeit. (modal particle)
　　　　　　　John has no time, you know.
　　　　e.　　Hans hat DOCH keine Zeit. (stressed variant/modal particle).
　　　　　　　John has no time after all.[2]

*Doch* in (a) and (b) functions as a conjunction or conjunctional adverb relating the sentence to the previous, usually translated by *but* or *however*.[3] In (c) it is a reaction particle which can be used to reply to a question containing a negative bias towards the proposition by the speaker. Moreover, the reaction particle can occur after a negative reply (*Kommt er? Nein. Doch.*, cf. Graefen 2000)

Medial *doch* in German as in (d) is generally assumed to be a modal particle. It has been argued by a number of authors that the whole class of modal particles is due to grammaticalization processes. These particles all have counterparts in other word classes, such as adverbs, adjectives and conjunctions. In contrast to these word classes, modal particles have no lexical meaning in the narrow sense, but operate on a pragmatic level. König (1997) calls them "metapragmatic instructions". In this way, they are instances of the process of subjectification that Traugott postulates for grammaticalization processes. Moreover, in accordance with the parameters for grammaticalization formulated by Lehmann (1995), they have lost not only semantic but also phonetic substance in a number of cases (cf. Wegener 1997, 2002). These particles also are more constrained in their syntactic distribution, since they can only occur in a position behind the finite verb and the 'right bracket' in independent sentences, in the 'middle field'. Additionally, modal particles cannot freely occur in all sentence types but have individual restrictions in this respect.

Due to these characteristics, modal particles can be assigned the status of a lexical marker operating at a pragmatic level. They can be differentiated from other types of lexical markers as for instance discourse markers. Gohl/Günthner (1999) and Günthner (2000) argue that discourse markers can develop out of conjunctions such as *weil* (because) or *obwohl* (although). Neither syntactically nor intonationally integrated into a clause, these discourse markers operate outside the confines of a single sentence indicating the relationship between larger parts of discourse.

Modal particles, on the other hand, are syntactically and intonationally integrated into a sentence and with a few exceptions they are unstressed (cf. Fischer this volume). These particles situate an utterance

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2　　Stressed *doch* is translated by *after all, nevertheless, yet, still*, by an accent on the verb (cf. section 6 on verum focus) or it may remain untranslated, as a study by Keyser (2002) shows.

3　　Conjunctional adverbs like conjunctions connect sentences, but in contradistinction to conjunctions they can fill the slot before the finite verb in declarative sentences ('prefield') alone.

in context and can be used to indicate common ground, to hint at assumptions of speaker or hearer thereby relating an utterance to the context. Foolen (1989:312f.) claims that they hint at implicit, contextually relevant propositions, which are a logical variant of the explicitly expressed proposition. A similar view is held by Diewald, who speaks of a „pragmatic pretext" (Diewald 1997) or a „pragmatically given unit" (Diewald to appear) that the modal particle relates to.

In contrast to the conjunction *doch* which relates the sentence to the clause immediately preceding it, *doch* as a modal particle relates the clause to a proposition that is not overtly expressed, but contextually relevant. The development from the conjunction to the modal particle can be seen as an instance of a development from textual functions to operations on a more illocutionary /subjective level which Traugott postulates as a general tendency for grammaticalization and meaning change.

The categorization of medial *doch* as a modal particle is uncontroversial as long as the particle is not accentuated. For accentuated *doch*, however, there are controversial views regarding its lexical category. While some authors take it to be a modal particle as well (Meibauer 1994), others claim that it is a special kind of adverb ("affirmative adverb", Thurmair 1989). Meibauer also claims that both uses of *doch* have a common semantics, to which the semantics of the focus accent is added in the case of accentuated *doch*.

We will take into account both the stressed and the non-stressed variant of medial *doch*, since they are closely related and both have special functions with regard to common ground which shed light on each other. We start by giving a survey of recent analyses of the meaning of unstressed *doch*.

## 4. Previous analyses

Generally speaking, there are two basic approaches to the description of the meaning of modal particles. In a minimalistic approach, a core meaning is assumed which occurs in all uses of the particle and may be modified by the sentence type the particle occurs in. In a maximalistic approach, different meanings are postulated depending on the various sentence types the particle can occur in. An example for such a maximalistic approach is Helbig (1990), who defines no less than seven different meanings of *doch* as a modal particle.

The particle has already been widely discussed in the literature on modal particles and a number of proposals have been made to define its meaning and uses in interaction. It is uncontroversial that *doch* signals the attitude of the speaker towards the utterance.

Some authors hold that *doch* has an affirmative meaning component which groups it together with the modal particle *ja* (e.g. Borst 1985). Lütten (1979) speaks of "consensus-constitutive" particles. The fact that *ja* and *doch* are the modal particles occurring most often shows that it is an important function of modal particles to establish what is considered to be common ground. Besides its affirmative meaning, however, *doch* is assumed to have a second contradictory or adversative meaning component (e.g. Weydt 1986, König 1997).

Doherty (1982 and 1985) for instance claims that *doch* expresses a positive attitude (usually of the speaker) and a negative attitude (usually attributed to the recipient) towards the proposition.

Thurmair (1989) sees the two elements 'known' and 'correction' at work in medial *doch*. `Known' may apply to the knowledge of the hearer or, in the case of questions, to the knowledge of the speaker. She assumes that utterances with *doch* contain propositions which are uncontroversial to the hearer. In

this respect, *doch* resembles the modal particle *ja* which has also the function to signal that the proposition is already known to the hearer and in no way controversial. But with medial *doch* we have an additional assumption of the speaker, namely that the speaker expresses that s/he has reasons to think that the hearer does not take the proposition into account at the moment. It is an instruction to the recipient to correct their assumptions and expectations on the basis of the facts actually known to them. (Thurmair, 1989:112; cf. Lütten, 1979:36).

A similar account is put forward by Ormelius-Sandblohm (1997) who sees the two components 'affirmation' and 'adversativity' at work. In the following formula, she states that the proposition is taken as fact accompanied by a conventional implicature that there is a proposition q in the context which implies ¬p:

(2)      $\lambda p$ [FACT p]
         implicature [$\exists q [q \rightarrow \neg p]$]

A strictly minimalistic analysis is developed by Lindner (1991). According to her, the common core of all the uses of unstressed *doch* is the following:

(3)      (It is necessary that) If the speaker uses MP *doch* in an illocution type IT referring to $\alpha$ then s/he assumes at the time of speaking that it is not the case that $\alpha$ is being taken into consideration.

The variable $\alpha$ represents the proposition in assertive sentences and exclamations. For imperatives the first occurrence of the variable represents the proposition p, the second one "bringing about p". As Meibauer (1994:112) points out, there is a problem with (3) as far as optative sentences are concerned, because they express (3) already without the particle, so that the meaning contribution of the particle does not become clear for this sentence type. Cf. the following example (taken from Lindner 1991:187):

(4)      [A has to write a paper, the sun is shining, the birds are singing…]
         A: Wenn ich doch jetzt in der Sonne liegen könnte!
         ‚If only I could go and lie in the sun now!'

In optative sentences, the obligatory subjunctive marks the proposition as counterfactual, which means that the proposition is not "being taken into consideration". For further discussion of this sentence type the reader is referred to section 5.6.

In Lindner's approach, it is not assumed that 'being known' to speaker or hearer is part of the meaning of *doch*. This minimal analysis of *doch* avoids meaning elements which would have to be cancelled in certain contexts and thus comes closest to the approach to be developed in this paper. It seems theoretically desirable to define a common core of meaning which holds for all the uses of *doch* and to develop a compositional view where the meaning contribution is stable and combines with the meaning of the various sentence types the particle occurs in.

A recent analysis of *doch* by Foolen (2003) refers to a model by Sekiguchi (1939) who proposed a three step model, illustrated by the sentence *es hat doch geschneit* ('it has snowed'):

1. affirmation: *it can be assumed that there is snow every year*

2. movement towards negation: *could it be that there will be no snow this year?*

3. return to affirmation: *no, it has snowed*

Foolen subscribes to the model developed by Sekiguchi without assuming that all the steps have to be realized explicitly. An analysis by Graefen (2003) is suggestive of similar steps.

In a way, the steps suggested in this model are reflected in the approach presented here, where the meaning of *doch* is to be explained with relation to common ground using a distinction between general and dialogue common ground. "Affirmation" means that the proposition is presented as part of the general common ground or at least as being compatible with it while at the same time indicating that it is not part of the collective dialogue common ground at the moment ("movement toward negation"). This means for the occurrence in most sentence types that the speaker has reasons to assume that the hearer is not taking the proposition into consideration at the present moment. By means of *doch* the speaker instructs the hearer to update dialogue common ground and to take the proposition into consideration.

## 5. Towards an integrated analysis

Most authors dealing with the meaning of *doch* are considering only a part of its occurrences. Both Thurmair and Lindner consider unstressed *doch* in all sentence types it can occur in except causal clauses. Doherty bases her account of the particle on stressed and unstressed *doch* in declarative sentences and assertive questions. Meibauer tries to explain the difference between stressed and unstressed *doch* but does not include its unstressed occurrence in causal clauses in his investigation. The aim of this section is to develop an approach to its common core of meaning that covers its functions in all sentence types including its use in causal clauses as well as the stressed variant of the particle.

From a theoretical point of view, it is desirable to follow a minimalistic approach which defines the common core of all uses of *doch*. This does not mean, that, especially for the purposes of German as a foreign language, more detailed descriptions of the use of the particle in various contexts may not be necessary (cf. Foolen 2003).

Thurmair and Ormelius-Sandblohm assume meaning elements which do not occur in all contexts, namely correction/adversativity. The feature 'correction' or 'adversativity' is a bit misleading and, as we will see, may be more aptly applied to the uses of stressed *doch*. In my view, if we consider this in the light of recent distinctions made relating to common ground, what the speaker wants the hearer to do is to take the proposition of the utterance into consideration, that is the speaker has to **update** common ground but not correct it in the sense that there is anything wrong with it. This can be construed as the difference between general common ground and dialogue common ground: *doch* signals that a proposition from the general common ground has to be **activated in the dialogue common ground**.

That a feature 'correction' or 'adversativity` does not occur in all uses of the particle as we will see would mean that these elements would have to be cancelled in certain contexts. Our approach comes close to the one by Lindner which is more reticent in this respect.

The purpose of this section is to establish the meaning contribution of the particle in the various sentence types and to define a common core of its meaning. We will consider the particle in all the main clause types it occurs in as well as in dependent types like causal and concessive clauses. Moreover, the stressed variant of *doch* will be closely looked at.

As a first approximation, the following formula characterizes the content of the metapragmatic instruction which is given by *doch*:

(5)        replace ¬p by p

As we will see, the communicative status of ¬p differs. In the case of unstressed *doch* it refers to the individual dialogue common ground of either speaker or hearer in which p is not present (and in this weak sense there is non-p). In the case of stressed *doch*, ¬p is present in the collective dialogue common ground.

## 5.1 *Doch* in declarative sentences

*Doch* in declarative sentences signals that the proposition is known to the hearer, i.e. part of the general common ground, but the hearer is assumed not to be aware of it at the moment. Consider the following example:

(6)        [A boy is about to drink a bottle of wine in the presence of a grown up, who says to him][4]
           *Du bist noch nicht groß genug. Du kannst doch nicht eine Flasche Wein allein austrinken.*
           'You are not yet grown up, you cannot drink a bottle of wine all by yourself.'

By using *doch* in the second sentence, the speaker signals to the boy that he knows that the fact he is telling him, but his actions signal clearly that he does not take it into account at the moment. As Thurmair states: "The knowledge of the hearer assumed by the speaker is not so much asserted by the use of *doch,* as the hearer is instructed to take that knowledge into account. (Thurmair 1989: 112, translation K.P.)  In terms of a differentiated view of common ground, this means that in (6) the boy is required to update his dialogue common ground from his general common ground.

The fact that *doch* signals that the proposition is known and uncontroversial can be exploited, for instance in narratives. Thurmair (1989:113) observes that, within a narrative, unstressed *doch* may have a kind of backgrounding function. Although the narrative element containing *doch* may be new and cannot be considered part of the common ground, it does not contain an important step and serves merely as background for a more interesting narrative element. Thus *doch* in these cases serves as an instruction to the hearer to treat the respective narrative element as if it were part of the common ground.

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4        Example slightly adapted from IDS-corpus (Deutsche Mundarten/German dialects).

## 5.2 *Doch* in imperatives

The analysis presented for declarative sentences carries over to imperative sentences: the hearer is not considering to perform the action, that is, s/he is not taking it into consideration. The speaker signals by using *doch* that there are reasons to assume that the speaker is not considering to perform the action.

It could be objected that imperative sentences are used only if the speaker would not carry out the action anyway because otherwise there would be a violation of the relevance maxim. But the special characteristic of imperatives containing *doch* becomes clear in comparison to imperatives containing the modal particles *eben* and *halt*. The latter particles suggest that the action referred to in the imperative is in a way a consequence out of a previous move of the coparticipant, in the case of *eben* it is presented as the only possible one, in the case of *halt* as a very plausible one (cf. Thurmair 1989).5

In imperatives containing *doch* however, the speaker signals that s/he is in a more initiative, less responsive position than in situations where s/he uses *eben* and *halt*. S/he has reasons to believe that the hearer is not considering to perform the act referred to. The hearer is required to update the dialogue common ground, i.e. to realize that there are no reasons not to carry out the action and in this way to replace non-p by p. Whereas the particles *eben* or *halt* signal a compliance on the part of the speaker with an action suggested by the recipient or one which is an obvious one in the situation at hand, *doch* signals that the action is in some way at variance with the situation.

In our sample, *doch* occurs 7 times in a request to tell more about a certain topic (*Erzählen Sie doch mal* 'tell us something about it'), where it is quite clear that the turn is initiative and the hearer would not tell more about the subject of his own accord.

It has been observed that *doch* in negated requests can be used to correct current or continuing behaviour as in (7a) and (7b), but can hardly occur in negated requests relating to actions in the future as in (7c), cf. Thurmair (1989: 118f.):

(7)　　a. Mach doch nicht immer so einen Krach!
　　　　　　Don't be so noisy!
　　　　b. Erzähl doch nicht immer alles der Frau Kling!
　　　　　　Don't always tell everything to Mrs. Kling!
　　　　c. Und bleib (*doch) nicht zu lange in der Kneipe!
　　　　　　Don't stay in the pub for too long!

That imperatives containing *doch* are in some way at variance with the situation becomes most clear in sequences where the hearer is instructed to change his past or present actions like in the following one:

(8)　　A: Und was ist mit dem Herrn, der stolz wie ein Pfau herumstolziert ist?6
　　　　　　And what about the man who walked about so proudly?
　　　　B: Sagen Sie doch so was nicht!
　　　　　　Don't say such a thing!

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5　　It is hardly possible to translate these particles in imperative clauses. In declarative clauses, *eben* might be translated by *just*: *Das ist eben so.* 'That's just the way it is.'

6　　Example slightly adapted from IDS-corpus (Belletristik).

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> A: Er versteht nichts von Pferden.
> He knows nothing about horses.

In this sequence, where A is instructed to correct his previous utterance, the use of the particle *doch* supports our assumption that also in imperatives the particle serves as an instruction to replace non-p by p. But, as this sequence shows, the hearer of course does not have to comply with such a request. A does not comply with the request to take back his previous utterance but tries to justify it.

## 5.3 *Doch* in questions

*Doch* cannot occur in information questions where there is no bias towards the truth of the proposition. It can only appear in assertive questions, in deliberative questions and in a special kind of rhetorical questions.

*Doch* occurs in assertive questions which have the form of an declarative sentence (indicated by verb-second position). What turns these sentences into questions is that they have a rising intonation contour:

> (9)　　Du kommst doch morgen?
> You will come tomorrow, won't you?

In assertive questions, *doch* serves as an instruction to the hearer to update the knowledge of the speaker. The speaker is convinced that the proposition is right (indicated by the form of the declarative sentence), but wants to be sure there is nothing the hearer knows which stands against his assumption. In other words, when using assertive questions, the speaker wants to be assured about the truth of the proposition. It is an instruction to the hearer to replace non-p (which occurs to the speaker as a possibility) by p (which the speaker assumes to be correct).

In the following interaction, the hearer may or may not react as was expected by the speaker. Consider the following examples from the sample:

> (10)　　A: Sie als Jurist haben doch sicher die richtige Einstellung zu Gesetz und Ordnung?
> You as lawyer certainly have the right attitude to law and order?
> B: Ja, hart und konsequent durchgreifen!
> Yes, rigorous action must be taken!

> (11)　　[Die Verteidigerin unternimmt einen Versuch, das Blatt zu wenden:]
> The defence counsel tries to change the situation:
>
> A: „Aber Sie sind doch hauptsächlich zu Frau E. gegangen, um mit ihr über ihre familiären Probleme zu reden?
> But you mainly went to Mrs. E. to talk with her about her problems with the family?
> B: Nein.
> No.

While *doch* in both cases signals that the speaker is trying to establish the proposition as part of the common ground, the hearer need not comply with this and may reject it, as in (11).

*Doch* may also occur in wh-questions, where it has a somewhat different function. These questions can have two functions: Either they are deliberative questions or they are used as a rhetorical device. In deliberative questions, the speaker has forgotten the answer at the moment and thus is in need to update her/ his knowledge. Questions of this kind may have an addressee, but they may also be directed at the speaker her-/himself (only in this case they are truly deliberative), as a kind of request to his memory to provide the answer:

(12)    Wie hieß er doch?
        Now what was his name?

Besides *doch*, particles occurring typically in these sentences are *noch, gleich, wieder, schnell*. Their contribution is not exactly the same. *Noch* (still) indicates a state that persists. In this kind of questions, it signals that the speaker knew the answer which is a state that he wants to continue. *Gleich* (soon) indicates that this state will be reached shortly, *schnell* (quickly) has a very similar effect. *Wieder* (again) indicates the restitution of a state, in this case that the speaker knows the answer. By using these particles, the speaker suggests that the hearer can quickly update the knowledge of the speaker, to whom the answer is at hand, but just at the moment not accessible in his or her memory. This means that the answer is part of general common ground but not part of the speaker's individual dialogue common ground. The particle suggests that this is a situation which can quickly be fixed by the recipient.

*Doch* may also appear in rhetorical questions. These rhetorical questions are preparing the way for presenting the following proposition, which is assumed to be known, i.e. part of the general common ground:

(13)    Wie sagte doch Goethe so treffend?
        'How did Goethe say so aptly?'

Basically, these questions (e.g. occurring in lectures and speeches) suggest that the hearers know the answer and just have to be reminded of it, which means that they have to update their knowledge from non-p (dialogue common ground) to p (present in general common ground). In the case of the wh-questions, it is more correct to say that the proposition with the variable (expressed by the wh-word) is to be replaced by the proposition where the variable is instantiated, i.e. where one of the alternatives is chosen.

## 5.4 *Doch* in exclamations

Exclamation sentences can occur in three forms in German: as verb-second clauses with a strong accent, often on a demonstrative pronoun (14a), as verb-first clauses (14b),  and as wh-exclamations, which can exhibit verb-second- or verb-end-position  (14c), or as sentences introduced by *dass* (14d):

(14)    a. DAS ist doch toll!
           This is great!
        b. SCHLÄGT der sich doch mit dem Hammer auf den Finger!

          With a hammer he hits his finger!
   c. Wie SCHÖN er doch ist!
       How beautiful he is!
   d. Dass doch die Jugend immer zwischen den Extremen schwankt!
       That youth always varies between extremes!

They signal that the state of affairs is in some way unexpected to the speaker, either the fact itself or the degree to which it obtains. Lindner's formulation that the proposition has "not been taken into consideration" is an apt description of the speaker's state of mind while uttering these sentences. The speaker replaces non-p by p for himself and for a recipient if any is present. The speaker (and hearer) were not aware of the fact before, which means it is not part of the dialogue common ground although it is taken to be consistent with their general common ground.

### 5.6 *Doch* in optative sentences

Optative sentences often are called conditionals because they have several features of this clause type: They exhibit the subjunctive, which is used to mark counterfactual propositions. Moreover, optative sentences like conditional clauses in German either are introduced by *wenn* (if) or exhibit verb-first position.

  (15)    a. Wenn er doch (nur, bloß) käme!
         If only he would come!
       b. Käme er doch!

When considering the contribution of *doch* to optative sentences one has to bear in mind that counterfactuality is already clearly marked by the subjunctive. It is also interesting to note that the optative sentences cannot occur without a modal particle, either *doch*, *nur* or *bloß*.

These particles serve to indicate the attitude of the speaker towards the proposition. Whereas the speaker can remain neutral towards the counterfactuality of a conditional clause, optative sentences can only be used if the speaker wants the proposition to come true. This attitude is expressed by means of these particles, albeit in different ways. *Nur* and *bloß* are used also as exclusive focus particles (like *only*), which explicitly exclude the alternatives. This exclusive meaning component gives urgency to the wish expressed with these sentences.

*Doch* expresses the attitude of the speaker towards the proposition in a different way: it signals that the speaker wants to update their knowledge, s/he wants to follow the instruction expressed by the particle to replace non-p by p.

Admittedly, it may seem a bit far-fetched to speak of common ground in this kind of speech act which need not be addressed to anyone but oneself. This is only possible if a notion of individual common ground is employed as proposed by Fetzer (2002).

The contribution of *doch* is to express the attitude of the speaker towards the state of affairs: s/he would like to see the proposition to come true. That is the speaker would like to update their knowledge about that. In this way, a relation to "update common ground" exists.

**5.7** *Doch* **in causal verb-first sentences**

Usually, subordinated verb first clauses can either be conditional or concessive clauses. A causal interpretation crucially hinges on the presence of *doch* without which these sentences cannot occur.

These causal sentences have characteristics which causal clauses introduced by a conjunction do not have. As Reis (1985:285) notes, they can neither be considered coordinated nor subordinated because of their peculiar characteristics.

These sentences are not constituents of the preceding sentence because they fulfill none of the constituent tests: they neither can be pronominalized nor be the answer to an wh-question, be moved or topicalized. Also the fact that no correlates pointing towards the causal clause can occur shows that these sentences are not syntactically integrated in the preceding clause. Moreover, these sentences cannot be focussed and occur only in post-position.

We will see how these characteristics correlate with the specific pragmatic functions of these causal clauses and try to shed some light on the important contribution of the modal particle. As will be shown, these sentences can serve as a kind of causals due to the interplay of verb-first position, their postposition and the obligatory particle.

Verb-first position has a special function in this context. Önnerfors (1997) argues at length that declarative sentences with verb-first position are closely connected to the previous sentence, which is also the case in the causal sentences treated here.

Our approach is inspired by Ford (1994), who takes a close look at the pragmatic functions of postposed causal clauses. She notes a repair function of causal clauses in spoken language which make a non-preferred reaction within a speech act sequence more acceptable. Her hypothesis is that postposed causal clauses in written language can have a similar function. As she observes, these clauses often occur after contrasting and negative sentences which do not fulfill the expectation of the readers or hearers. They serve to make these sentences more acceptable by providing a fact that supports the previous proposition. According to Ford, this is possible because the writer is having a kind of dialogue with a projected recipient.

Adapting an explanation of this kind, some of the characteristics of the causals considered here are motivated by their function. These sentences are not focussed, because they do not carry the main information but rather have a subsidiary function. They are postposed because their function is to support a statement already made.

It has been observed by several authors that these sentences always contain a fact which is considered to be uncontroversial (Engel 1990:269; Altmann 1993:1020). Here is where the contribution of *doch* comes in: it signals that the proposition is part of the general common ground. On the other hand, it would make no sense to add a fact to make a previous statement for the recipient more acceptable, if one would think that the recipient is aware of that fact anyway at the moment: Thus, *doch* in these sentences has the function to instruct the hearer to "update common ground".

Sentences with causal *doch* are primarily, if not exclusively, a phenomenon of written language. Our sample provides 13 instances of causal *doch* in written language, but none in spoken language. Consider the following examples:

(16)    Gerade an der Universität St. Gallen sei es unerlässlich, auf geschlechterspezifische

Konflikte hinzuweisen, handle es sich bei der Institution doch immer noch vorwiegend um eine "Männerwelt", die sich aus 75 Prozent Studenten und nur einem Viertel Frauen zusammensetzt.
Precisely at the University of St. Gallen it is imperative to point out gender-specific conflicts, since the institution still is a "men's world" mainly, with 75 percent male students und a quarter female students.

(17)     Der neue Pächter, Imro Rusnak, ist in St. Margarethen kein Unbekannter, verwöhnte er doch bereits vor 18 Jahren im Falken seine Gäste mit Spezialitäten.
The new leaseholder Imro Rusnak is not unknown in St. Margarethen, since he treated his guests to specialities in the "Hawk" 18 years before.

(18)     Diese Unterführung kenne ich sehr gut, gehört sie doch zu meinem täglichen Arbeitsweg von der Krontalstrasse in den SZB an der Schützengasse 4.
I know this subway very well since it is part of my way to work from Krontalstrasse to the SZB in the Schützengasse 4.

In each case, the information given in the *doch*-clause is presented as completely uncontroversial, i.e. as part of general common ground (either personal or collective) or at least as compatible with it.

Now the question is what the exact contribution of verb-first position for the interpretation of these sentences is. As Reis (2000:224) notes, verb-first declarative sentences in German assert true propositions, whereas verb-second declaratives assert propositions as true. Put in other words, verb first declaratives put the truth claim into the background, whereas V-2-declaratives foreground it. This supports the view that these sentences contain completely uncontroversial information from general common ground which is brought to the attention of the reader in order to ensure the acceptance of the main clause assertion.

As was already mentioned, verb-first position in declaratives signals also the close connection of the sentence to the previous one. But it is the modal particle which provides the instruction to the recipient how to connect this sentence by giving her/ him a hint how it relates to the context. Without the modal particle these sentences cannot occur because the recipient would be left at a loss as to the relation of this sentence to the context.

These sentences are not so much subordinated sentences but contain own speech acts that have a subsidiary function, which accounts for the impression that they are neither really coordinated nor subordinated.  Whereas causal clauses introduced by a conjunction usually give a cause for the proposition of the main clause these sentences give an additional fact which makes the acceptance of the proposition  of the sentence they relate to more plausible and thus more acceptable to the recipient. The function of these sentences is reflected in their intonational characteristics. These causal sentences cannot be intonationally integrated into the clause they relate to, but have an own intonation contour. This means that they contain an own information unit that is not part of the proposition of the sentence they relate to. Causal clauses introduced by *weil* (because), however, usually are integrated into the proposition of the main clause, adding a cause for it.[7]

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7     Sometimes clauses introduced by *weil* may also give a reason for the speech act performed in the main clause. In this case they have an own intonation contour and are never focussed because of their subsidiary function (cf. Pittner, 1999:235ff.).

Because of their special form verb-first-causals cannot be mistaken as part of the previous clause, since they cannot be intonationally integrated into them. Thus, these sentences provide a means of disambiguation in written language between clauses indicating a cause for the proposition and sentences that mention a fact that is merely supportive of the main assertion. In spoken language, this distinction can be made clear by pauses, accents and intonational contours.

Any meaning element in the kind of 'opposition' or 'adversativity' is not present in these sentences, which just signal that they contain a fact which the speaker thinks the recipient is not aware of at the moment. Thus, causal sentences containing *doch* serve as an instruction to the recipient to update their dialogue common ground with a fact that is part of the general common ground and in this sense to replace non-p by p.

## 6. Stressed *doch*

The question arises whether the meaning "replace non-p by p" can be found with stressed *doch*. It is not the main purpose of this section to discuss the syntactic categorization of stressed medial *doch* but by analyzing its meaning we will find some hints what a useful categorization might be.

In this context, it seems worthwhile to pursue the line of argumentation suggested by Meibauer (1994), who tries to explain stressed *doch* as a combination of the meaning of unstressed *doch* and the meaning of the focus accent. The basic ingredients of the analysis presented here are the meaning of *doch* as well as the meaning of the focus accent as developed in alternative semantics.

The accent on *doch* has been described as a contrastive focus accent by Meibauer (1994). Focus on single lexical elements that are neither verbal nor an argument of a verb cannot project, i.e. the accent can only be interpreted as indicating a narrow focus on that single element. As a consequence, the rest of the sentence is backgrounded, i.e. presupposed/taken to be present in the context in some way.

We adopt the view of focus which has been propagated in alternative semantics as it was introduced by Rooth (1992): Focus establishes a relation to alternatives, where the kind of alternatives are determined by the type of the focussed constituent. In the case of stressed *doch*, the alternative is non-p.

By placing a focus accent on *doch* the speaker indicates that non-p is present in the context, namely in the collective dialogue common ground. In this way, it does not relate to the individual dialogue common ground of either hearer or speaker in the way unstressed *doch* does, but indicates that there are objective reasons, which are present in the collective dialogue common ground to assume the contrary.

The question arises how this special effect is achieved by stressed *doch*. The focus accent on *doch* obviously makes an important contribution. Although focus on *doch* cannot project to larger parts of the sentence according to the rules for focus projection, it can be assumed that the focus accent on the particle relates indirectly to the whole proposition because *doch* has scope over the proposition (Meibauer 1994:130). The effect of this is that the presence of an alternative proposition (namely non-p) is signalled, which may be expressed in the context or may remain implicit. Additionally we have the meaning to "replace non-p by p" which makes this alternative more explicit than so-called "verum focus" (Höhle 1992) does.

Verum-focus strengthens the truth of a proposition and is usually placed on the finite verb in declarative sentences or on the complementizer in subordinate clauses. The presence of verum focus indicates that the truth of the proposition has been under debate or at least seems to be questionable in the context. By using verum focus the speaker stresses the truth of the proposition by repudiating non-p at the same time. Thus, its effect is very similar to stressed *doch*, cf. the following interactions: [8]

(19)   A: Er ist nicht gekommen.
         He did not come.

         B: Er IST gekommen. (verum focus)
         He DID come.

(20)   A: Er ist gekommen.
         He has come.
         B: Er ist NICHT gekommen.
         He did NOT come.
         A: Er IST gekommen./Er ist DOCH gekommen.
         He DID come./Nevertheless he came.

The second interaction shows that a proposition containing a focussed negation can be contradicted either by an utterance containing a verum focus accent on the verb or, even better, on *doch*. The closeness of stressed *doch* to verum focus is illustrated by this example. It is interesting to note that B in (19) could reply by using the reaction particle *doch* instead. The reaction particle can be regarded as a special use of stressed *doch.*

Stressed *doch* is more explicit than verum focus in repudiating non-p because in addition to the focus on the particle there is its lexical meaning 'replace non-p by p', which is not there in the case of a verum focus accent on the verb or complementizer.

The effect of stressed *doch* can be compared to the sentence adverbs *wirklich* ('actually') and *tatsächlich* ('really'): These elements may carry a focus accent to the effect that the rest of the sentence is backgrounded. These sentences occur in contexts where the truth of the proposition has been doubted or controversial (cf. Pittner 1999:179f.). The mechanism is the same as in the case of stressed *doch*. Although focus from these elements cannot project because they are adjuncts, the focus accent on them indirectly relates to the proposition via the scope these elements have over it thereby indicating non-p as an alternative.

All the elements can occur stressed in the prefield (i.e. before the finite verb in declarative sentences), but are usually preceded by *und* ('and'):

(21)   Und tatsächlich/wirklich/DOCH kam er.
         And actually/really/yet he came.

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8   The study by Keyser (2002) shows that stressed *doch* can be translated by emphatic *do* or stress on the verb which signals verum focus, cf. the following example:

    (i)      Sie hat gelogen und ich bin doch ihr Vater. (Max Frisch, Homo Faber, p. 183)
             She was lying and I *am* the father. (English translation, p. 154)

The difference between stressed *doch* and the stressed sentence adverbs seems to be that there must be counterevidence in the case of *doch* whereas this is not necessary for the use of the sentence adverbs *tatsächlich* (actually) and *wirklich* (really). The following example illustrates this point:

(22)   Wir hofften alle, dass Peter kommt und tatsächlich/wirklich/*DOCH kam er.
       We all hoped that Peter would come and he actually/really came.

Whereas in the case of *tatsächlich* and *wirklich* it simply may have been unclear whether Peter will come or not, *doch* signals that there are reasons that speak against it. Again, it is the meaning 'to replace non-p by p' which is responsible for this effect.

The distribution of stressed *doch* in the sentence shows that a categorization as modal particle obscures rather than elucidates how stressed *doch* works. Also it is not yet entirely clear whether there is any difference between medial and initial stressed *doch* (cf. the discussion by Meibauer 1994). Initial position is a further argument not to count stressed *doch* among modal particles.

Several authors dealing with the meaning of stressed *doch* assume that the opposite proposition has to be expressed explicitly (e.g. Meibauer, 1994:118). Brauße, for instance, states that by using stressed *doch* "one does not refer to implicit inferences, but two opposite opinions are contrasted, that both have been uttered before, namely q and –q." (Brauße, 1988:99, translation K.P.)

As will be shown, it is too strong an assumption that stressed *doch* always presupposes the explicit presence of the opposite proposition in the context. But first, we take a look at portions of a dialogue from the sample where the opposite proposition is expressed explicitly. In this talk the nature of the institution of marriage is discussed at length. Speaker 1 tries to establish as part of the collective dialogue common ground that marriage is not simply a natural and primitive condition but an institution which was formed essentially by Christianity:

(23)   S1: ich meine, unter Ehe verstehen wir doch nicht nur eine Liebe, so ne besondere Liebe
       zu einer Frau, sondern Ehe ist eine ganze Institution mit sagenhaft vielen
       Verpflichtungen die beide Partner haben... und meine These (vielleicht ist sie falsch) ist
       doch die, dass unsere Vorstellung, der abendländische Begriff der Ehe, wesentlich
       geprägt ist durch das Christentum und durch...

       I mean, by marriage we do not understand just love, such a special love for a woman,
       but marriage is a whole institution with many obligations both partners have... and my
       thesis (may be it is wrong) is that our notion, the occidental notion of marriage is
       essentially formed by Christianity and by...

By using unstressed *doch* the speaker indicates that he thinks his opinion is part of the general common ground. After some discussion by two other speakers about the dwindling influence of Christianity today, it occurs to speaker 1 that the Chinese are kind of abolishing marriage and finally he revises his view that Christianity is the prerequisite for marriage as an institution:

       S1: ... wie könnten die Chinesen plötzlich die Ehe abschaffen
           how could the Chinese suddenly abolish marriage
       S2:...
       S1: nein, nein du hast recht, die Chinesen waren nicht christlich und haben DOCH eine

Form der Ehe.[9]
no no you are right, the Chinese were not Christian and nevertheless have a kind of marriage.

By using stressed *doch* in the second part of the last sentence the speaker signals a contrast to the assumption he presented before, namely that marriage is an institution, which goes together with Christianity. He has revised his individual dialogue common ground and it is now established as collective common ground that Christianity is not a prerequisite for marriage.

Now we will turn to examples where the contrasting proposition is not explicitly expressed. A case in point is the use of stressed *doch* in concessive clauses:

(24)   a. Obwohl es regnete, ist er DOCH spazieren gegangen.
       Although it rained, he went for a walk.
       b. Wenn er auch berühmt war, war er DOCH nicht eingebildet.
       Even though he was famous, he was not conceited.

Concessive clauses express a condition under which the main clause proposition normally would not hold, as Brauße (1994:146) states it: "In concessive clauses the truth of both p and q is asserted and stands in contrast to an expectation that both cannot be true at the same time, but either p or q must be false." (translation K.P.) This is a background assumption that needs not be explicitly expressed but is considered to have a presuppositional character (e.g. König 1991). This means that the opposite proposition (non-p) is usually not openly expressed if *doch* is used in concessive constructions.[10]

The effect of stressed *doch* becomes most clear when it occurs in sentences without a written or spoken context. These sentences are usually introduced by *and*. The connective indicates that the sentence relates to some discussion generally known. Just to give two examples:

(25)   a. Und die Bibel hat DOCH recht. (title of a book)
       And the bible is right.
       b. Und sie bewegt sich DOCH. (Galileo Galilei)
       And it moves.

The reader or hearer can conclude from the presence of stressed *doch* alone that the opposite view is contextually relevant also without knowing the discussion presupposed to be generally known. This means that the effect of stressed *doch* is to indicate the presence of the opposite proposition in collective dialogue common ground while at the same time denying its truth.

It can be concluded that the formula 'to replace non-p by p' applies to stressed *doch* as well. The focus accent hints at the proposition non-p which is explicitly or implicitly present in the collective dialogue common ground.

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9    Example slightly adapted from IDS-corpus (Freiburger Korpus).

10   Stressed *doch* has a merely supportive function in clauses with *obwohl*, stressing the truth of the main clause proposition although there is a reason that speaks against it. In other types of concessive clauses like in (24b), it occurs more often and contributes to the concessive meaning of the construction (cf. Pittner 1999: 265 for details)

## 7. Summary

In a process-oriented approach to common ground where it is negotiated between participants and reconstructed by them in interaction it is necessary that speakers display to each other what they consider to be common ground in their interaction. For this purpose, special lexical markers may be employed. The paper investigated how the medial particle *doch* in German may be used in this respect. Medial *doch* is a modal particle functioning as a metapragmatic instruction whose basic meaning was argued to be an instruction to replace non-p by p. In this context, a distinction between dialogue and general common ground proved useful. p is positively evaluated by the speaker in all uses, whereas the status of non-p differs. P may be assumed to be part of the general common ground but not of dialogue common ground to the effect that the particle in these cases serves as an instruction "to update common ground", that is to activate it in collective dialogue common ground. According to the sentence type *doch* occurs in, the instruction is directed toward the hearer's or the speaker's individual common ground. *Doch* signals that p is not present in either the speaker's or the hearer's common ground  while at the same time presenting it as part of the general common ground or at least as compatible with it.

The particle is obligatory in postposed sentences with verb-first position which have a causal meaning. It was argued that these sentences serve to give a supporting fact for the main clause proposition thereby ensuring the acceptance of the main clause. This is possible because this additional fact is uncontroversial, i.e. it is part of the general common ground. The reader is assumed not to be aware of this fact, however, and has to update dialogue common ground.

The meaning of the stressed variant of this particle was argued to arise from the combination of the lexical meaning of the particle and the meaning of the focus accent. It comes close to so-called verum focus which stresses the truth of a proposition in contexts where non-p is under debate. The focus accent on the particle cannot be projected to the rest of the sentence but indirectly relates to the proposition via the propositional scope of *doch*, thereby implying non-p as an alternative. The status of non-p in this case is that of a proposition either present in collective dialogue common ground (explicitly expressed or as an inference from other facts). If there is no context at all, the focus accent on *doch* alone signals the presence of non-p in the dialogue common ground.

In each case, *doch* is used as a means of grounding, anchoring p in dialogue common ground by simultaneously ruling out non-p. With unstressed *doch*, p is signalled not to be present in individual dialogue common ground (and in this weak sense there is non-p). Stressed *doch* signals that non-p is part of the collective dialogue common ground of the coparticipants. Thus the particle serves as an instruction to update (activate p) or revise common ground (remove non-p).

The distinction between individual and collective dialogue common ground has proved useful for the description of the effects of *doch*. Unstressed *doch* indicates that p is not present in individual common ground, depending on the sentence type either the speaker's or the hearer's. Stressed *doch* indicates that non-p is present in the collective dialogue common ground.

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