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Titel der Diplomarbeit

„Form and interpretation of the German discourse particles  
*ja, doch and wohl*“

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# Contents

|   |             |
|---|-------------|
| <b>Acknowledgements</b>   | <b>viii</b> |
| <b>Introduction</b>   | <b>1</b>    |
| Disambiguation . . . . .  | 1           |
| Overview . . . . .  | 2           |
| <b>1 A brief overview of German discourse particles</b>           | <b>3</b>    |
| 1.1 Introduction . . . . .  | 3           |
| 1.2 Methodology . . . . .   | 5           |
| 1.3 Characteristics of discourse particles . . . . .              | 6           |
| 1.3.1 Surface position in sentences with definite DPs . . . . .   | 8           |
| 1.3.2 Surface position in sentences with indefinite DPs . . . . . | 12          |
| 1.3.3 The particle <i>ja</i> and relative clauses . . . . .       | 17          |
| 1.3.4 Tag-questions . . . . .                                     | 18          |
| 1.3.5 Imperatives . . . . .                                       | 19          |
| 1.3.6 Interrogatives . . . . .                                    | 20          |
| 1.4 Conclusions—for now . . . . .                                 | 20          |
| <b>2 The syntax of discourse particles</b>                        | <b>25</b>   |
| 2.1 Preliminaries . . . . .                                       | 25          |
| 2.1.1 The middle field . . . . .                                  | 25          |

## Contents

---

|          |  |           |
|----------|--|-----------|
| 2.1.2    | The position of discourse particles . . . . .                | 27        |
| 2.2      | Discourse particles as VP-adjuncts . . . . .                 | 28        |
| 2.2.1    | Meibauer (1994) . . . . .                                    | 28        |
| 2.2.2    | Ormelius-Sandblom (1997) . . . . .                           | 29        |
| 2.2.3    | Conclusion . . . . .   | 32        |
| 2.3      | Discourse particles in a Split-IP . . . . .                  | 35        |
| 2.3.1    | Functional projections: an excursus . . . . .                | 35        |
| 2.3.2    | Discourse particles as adverbs . . . . .                     | 38        |
| 2.3.3    | Positioning discourse particles between adverbs . . . . .    | 42        |
| 2.4      | Conclusions and consequences . . . . .                       | 44        |
| <b>3</b> | <b>The meaning of <i>ja</i>, <i>doch</i> and <i>wohl</i></b> | <b>47</b> |
| 3.1      | Introduction . . . . .                                       | 47        |
| 3.2      | The particle <i>ja</i> . . . . .                             | 48        |
| 3.2.1    | The uses of <i>ja</i> . . . . .                              | 48        |
| 3.2.2    | The meaning of <i>ja</i> . . . . .                           | 50        |
| 3.2.3    | Formalising <i>ja</i> 's meaning . . . . .                   | 52        |
| 3.2.4    | Conclusion—attitudes or no attitudes? . . . . .              | 59        |
| 3.2.5    | Relative clauses . . . . .                                   | 63        |
| 3.3      | The particle <i>doch</i> . . . . .                           | 65        |
| 3.3.1    | The uses of <i>doch</i> . . . . .                            | 65        |
| 3.3.2    | The meaning of <i>doch</i> . . . . .                         | 66        |
| 3.3.3    | Formalising <i>doch</i> 's meaning . . . . .                 | 68        |
| 3.3.4    | Conclusion . . . . .   | 76        |
| 3.4      | The meaning of <i>wohl</i> . . . . .                         | 82        |
| 3.5      | Conclusion . . . . .   | 85        |
| <b>4</b> | <b>A unified approach to German discourse particles?</b>     | <b>87</b> |

## Contents

---

|          |  |            |
|----------|--|------------|
| 4.1      | Discourse particles and sentential meaning . . . . . | 88         |
| 4.1.1    | Reference and incompatibilities . . . . .            | 88         |
| 4.1.2    | Discourse particles and sentences . . . . .          | 89         |
| 4.1.3    | Complications . . . . .                              | 90         |
| 4.2      | Common characteristics . . . . .                     | 93         |
| 4.3      | Modifying the common ground . . . . .                | 96         |
| 4.3.1    | Activation . . . . .                                 | 98         |
| 4.3.2    | Defective contexts and their resolution . . . . .    | 103        |
| 4.3.3    | Other operations . . . . .                           | 104        |
| 4.4      | Conclusion and prospects . . . . .                   | 106        |
| <b>5</b> | <b>Conclusion</b>                                    | <b>109</b> |
| 5.1      | Findings . . . . .                                   | 109        |
| 5.2      | Final remarks . . . . .                              | 111        |
|          | <b>Bibliography</b>                                  | <b>112</b> |
| <b>A</b> | <b>Abstract (German)</b>                             | <b>117</b> |
| <b>B</b> | <b>Abstract (English)</b>                            | <b>119</b> |
| <b>C</b> | <b>Curriculum vitae</b>                              | <b>121</b> |





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After many years of only using them, I first started actively thinking about German discourse particles in a seminar in the winter of 2008, held by Werner Abraham at the University of Vienna. This seminar sparked my interest in this topic and since then I have more or less constantly in one way or another worked on completing this thesis about this strange class of words.

The process of coming up with the exact topic of this thesis has been long. First, I wanted to write about the grammaticalisation of discourse particles. Then, after thinking about the interaction between discourse particles and the topic-focus structure in German, I settled for the current topic, an account of the syntax and meaning of three common particles, *ja*, *doch* and *wohl*. My supervisor, Martin Prinzhorn, has been instrumental in guiding me throughout the development and completion of this effort and I am especially indebted to him.

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# Introduction

## Disambiguation

This thesis deals with a class of German particles that are mostly referred to as *discourse particles* in English, though sometimes the term *modal particles* is also used. This latter name is a more direct translation of the German word *Modalpartikel*, which is the most common label for these particles in German.

Historically, these particles have also been called *Abtönungspartikel* ‘shading particles’ or, according to Lindner (1991: 164) *epistemische Partikeln* ‘epistemic particles’. Thurmair (1989: 3) relates the reference to modality in the name *Modalpartikeln* to the idea that we deal with particles that do not change whether a sentence is true or not, i.e. to use a technical term they do not contribute to the truth conditions of a sentence. While the term *discourse particle* is the most common one in English, it does not only refer to particles that exhibit the same characteristics as German discourse particles, but rather to a wider set of different particles. Nevertheless, the term’s prevalence led me to use it in this thesis. Whenever the abbreviation MP (for *Modalpartikel*) appears in a relevant quotation, I chose to keep it to avoid confusion by abbreviating discourse particles as DP.

## Overview

This thesis is, first and foremost, not an exhaustive analysis of German discourse particles. It covers only three of many more discourse particles, namely the very common particles *ja*, *doch* and *wohl*. Second, this thesis mainly focuses on certain aspects of these particles, ignoring many others, e.g. the combination of discourse particles. Its aim is merely to give an overview of maybe the most striking characteristics of the particles mentioned and to try and show why the analysis of their meaning and function has been problematic.

The first chapter of this thesis tries to give an overview of the relevant discourse particles in German sentences, giving examples illustrating their possible occurrences and their interaction with clauses. It is a surface-syntactic overview and a short account of the characteristics peculiar to discourse particles. This chapter also addresses various points that have been discussed in earlier literature on discourse particles, like their interaction with the topic-focus structure and the position of their generation.

Chapter 2 is a review of some of the literature on the syntax of German discourse particles. The main points that are addressed in that chapter are the phrasal status of discourse particles, the specifics of their positions in the clause and finally the location of their generation, referring strongly to recent developments in the study of this area.

The meaning of the particles *ja*, *doch* and *wohl* is discussed in chapter 3. Again, I review earlier work, as I try to point out some problems with the semantic and pragmatic analysis of German discourse particles. In this chapter, each particle is discussed separately, allowing for a detailed account of each particle's meaning.

Chapter 4 proposes the possibility of a tentative unified pragmatic analysis of discourse particles. It elaborates on their function of modifying propositions in the context or common ground, the set of propositions taken for granted by the participants of a conversation. This idea is taken on by several authors whose approaches are reflected in that chapter. I include some of my own ideas to expand their original proposals, suggesting that discourse particles might be analysed as operators on the common ground.

# 1 A brief overview of German discourse particles

## 1.1 Introduction

Any comprehensive analysis of German discourse particles can be undertaken from various perspectives. Obviously, some assumptions about the characteristics of discourse particles or a list of morphemes that can be considered as such is necessary. One approach could therefore include a list these morphemes and the analysis of their syntactic, semantic, pragmatic, etc. aspects. This is particularly interesting in order to shed light on the relation between discourse particles and their homonyms. While an obvious difference is the heavily restricted syntactic behaviour of discourse particles (at least with regard to adverbial homonyms), some degree of semantic similarity (semantic bleaching of the particles' meaning) is expected. A morpheme based approach to classification is therefore surely interesting, but may not be the best starting point, since assumptions about discourse particles in general are necessary in order to take on such an analysis.

An approach based on shared semantic aspects only might even be more problematic. On the one hand, the quite abstract meanings that discourse particles convey are sometimes hard to discern from those of sentence adverbs, for example, and on the other hand, semantics alone is maybe not sufficient to describe the functions of certain particles. Therefore, syntactic and pragmatic aspects have to be considered as well.

The discourse particles' pragmatic aspects are arguably their most idiosyncratic characteristic, since they often refer to the speaker's and addressee's knowledge of the current situation, their level of information and are therefore also deictic elements. Moreover, not every discourse particle can appear in every type of sentence. These facts strengthen the view that pragmatics plays a very relevant role in the analysis of discourse particles and provide further evidence that they are a class of their own.

The distinction of discourse particles from other kinds of morphemes is necessary, because of their homonymy. Theory-internally, they have to be a class in order to account for certain characteristics that the particles share between them, but which they do not share with their counterparts. Therefore, I argue that a classification of discourse particles should take as a starting point a feature that is particular to them, discerning them from other morphemes. The morpheme based approach, in this view, is probably not very efficient, since—if we see discourse particles as a proper class—the same characteristics are listed for each morpheme, and, as shall be shown later, the distribution of particles across sentence types poses further problems for such an analysis.

For now, the relevant question is, which minimal assumptions can be used to postulate discourse particles as a proper class?

A syntactic criterion that is characteristic to discourse particles is the restriction to the middle field (cf. Abraham 1991b,c). While their homonyms are not necessarily free in their syntactic behaviour, the restrictions imposed on them vary broadly. Discourse particles, on the other hand, are all (as a class) restricted to syntactic positions following  $C^0$  and preceding VP.<sup>1</sup>

It can be shown in this manner that discourse particles behave differently than complementisers, coordinators, sentence adverbs and other particles like scalar particles. This might not be surprising at all, seeing that we deal with quite different types of morphemes. The interesting point, however, is that discourse particles that have homonyms

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<sup>1</sup>There is one exception: some discourse particles can be fronted as part of a wh-phrase. See the discussion later on.

belonging to said classes are all subject to the same syntactic restriction. Moreover, note that complementisers are already heavily constrained syntactically, while sentence adverbs can move more freely. Yet discourse particle-homonyms of these two classes are restricted in the very same way. I take this syntactic restriction to be a relevant characteristic of discourse particles.

But, as noted, pragmatic aspects also play a major role in defining the properties of discourse particles and help in delimiting them as a class. To see if a particle qualifies as a discourse particle, we can thus, in addition to the syntactic restriction to the middle field, check if its interpretation is compatible with the pragmatic properties that are assigned to discourse particles.

Still, there are some problems. As noted, not all clause types are compatible with all discourse particles. Nevertheless, the syntactic restriction to the middle field holds for every clause that can host discourse particles. Combining these three factors, it is therefore possible to organise such particles according to clause types in the following manner: for every clause type that can host discourse particles, it has to be shown which of these is compatible with that clause type. With syntactic and pragmatic criteria, it can be checked if the occurring particles are really discourse particles or not.

## 1.2 Methodology

Having illustrated some of the problems an analysis of discourse particles faces, a few points regarding the current methodology have to be brought up. For reasons of space, a complete investigation of all discourse particles in all clause types is not possible here. Therefore, this thesis will only cover the following particles: *ja*, *doch* and *wohl*.

The point of this chapter is to give a brief overview of the (surface-)syntactic behaviour of these particles in a few clause types. Assuming that syntactic restrictions apply to discourse particles generally, it is expected that the only difference between each particle

will be with regard to their relative order, i.e. that if two of these particles can appear in a certain clause type, they will exhibit the same (surface-)syntactic behaviour.

The restriction to three particles simplifies the analysis and reduces the number of examples that are necessary, while at the same time the findings should be general enough to be easily applied to other particles.

The examples in the following sections show how the said German discourse particles are restricted in the clause in two ways. First, it will be shown that discourse particles can appear only in certain positions. Second, these possible occurrences will be even more restricted due to the interaction with certain constituents.

As noted in the introduction to this chapter, there are different methods of analysing discourse particles. For the purpose of this thesis, the most practical approach is the one I argued for: listing clause types and showing for each of these which particles can appear in them. Since the particles under discussion all appear in at least one common clause type, this method will keep redundancy to a minimum. Additionally, when possible and useful, examples will be general enough to accommodate all relevant particles to further reduce unnecessary repetitions.

### 1.3 Characteristics of discourse particles

Abraham (1991c) lists ten particles, out of which the following can occur in declarative sentences (Abraham further distinguishes assertions as an illocution and as a sentence type, as I-ASS and S-ASS, respectively, cf. Abraham 1991c: 351): *auch, doch, eben, halt, ja, schon, vielleicht* (but not in I-ASS), *wohl* (Abraham 1991c: 351ff.).

Examples (1)-(4) illustrate some occurrences of these particles in declaratives (from Wahrig-Burfeind 2000, unless otherwise noted; even though Wahrig-Burfeind 2000 puts exclamation marks in some cases, the following examples are all declaratives).

- (1) Du weißt *ja*, dass ...  
you know *ja* that



‘Well, you know that ...’

- (2) Warum zündet Maggy Feuer an? Wir gehen *ja* im nächsten Augenblick.  
why lights Maggy fire prt we go *ja* in-the next moment  
‘Why does Mary light the fire? We shall be gone directly.’ (Charles Dickens, *Little Dorrit*)<sup>2</sup>
- (3) a. Ich habe es *doch* gleich gesagt.  
I have it *doch* immediately said  
‘I told you right from the start.’  
b. Du bist *doch* kein Kind mehr!  
you are *doch* no child anymore  
‘You’re not a child anymore!’
- (4) Er wird *wohl* schon abgereist sein.  
He will *wohl* schon left be.  
‘He probably already left.’

The particles in these examples share some properties that have been assumed to hold for the group of discourse particles as a whole in the literature (cf. among many others, Thurmair 1989: 22f., Gutzmann 2009: 1): they can not be inflected, they can not be modified ((5a)), negated ((5b)), coordinated ((5c)), stressed or focused ((5d)), etc.<sup>3</sup>

- (5) a. \* David ist *sehr/sogar/nur* ja ein Zombie.  
David is very/even/only *ja* a zombie  
intended: ‘You know, David is a zombie.’  
(Gutzmann 2009: 1, glosses and translation by A.B.)  
b. \* Hein ist nicht *ja* zu Hause.  
Hein is not *ja* at home  
intended: ‘Hein isn’t at home, you know?’ (ibid., glosses and translation by A.B.)

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<sup>2</sup>From <http://gutenberg.spiegel.de/> and <http://www.gutenberg.org/>, respectively. Last access: May 26th 2009.

<sup>3</sup>Both Thurmair (1989) and Gutzmann (2009) cite the lack of stress on discourse particles as one of their characteristics and I will also assume this. However, each of the three particles under discussion has a stressed alternative that will be discussed in later chapters. Some authors, like Meibauer (1994) and Ormelius-Sandblom (1997), seem to interpret these stressed particles as discourse particles as well, but I think their status is not completely clear.

- c. \* David ist **ja und halt** ein Zombie.  
David is *ja* and *halt* a zombie  
intended: ‘You know, David is a zombie after all.’  
(ibid., glosses and translation by A.B.)
- d. \* David ist **HALT** ein Zombie.  
David is *halt* a zombie  
intended: ‘David is just a zombie.’ (ibid., glosses and translation by A.B.)

### 1.3.1 Surface position in sentences with definite DPs

In this section, the possible surface positions of a discourse particle (*ja* is used in the following examples) in a declarative sentence will be shown with regard to other constituents. The following examples consist of a declarative with a subject, a direct and an indirect object, a temporal adverbial and a manner adverb in (German) perfect tense. As will be seen, every constituent except *ja* (the discourse particle) can be topicalised. Note that while only *ja* is shown in the following examples, each acceptable occurrence of *ja* would also be acceptable with the particles *doch* and *wohl*.

First, in example (6), neutral word order is illustrated, i.e. the subject precedes the indirect object which precedes the direct object. The most deeply embedded element is stressed, marked by capitals. In example (7), it is shown where the particle *ja* can appear in that sentence, retaining the other characteristics.

- (6) Sie hat ihrem Bruder den Weg vor langer Zeit ausführlich erKLÄRT.  
she has her brother the way before long time elaborately described  
‘She elaborately described the route to her brother a long time ago.’
- (7) a. \* *Ja* hat sie ihrem Bruder den Weg vor langer Zeit ausführlich erKLÄRT.  
b. \* Sie *ja* hat ihrem Bruder den Weg vor langer Zeit ausführlich erKLÄRT.  
c. Sie hat *ja* ihrem Bruder den Weg vor langer Zeit ausführlich erKLÄRT.  
d. Sie hat ihrem Bruder *ja* den Weg vor langer Zeit ausführlich erKLÄRT.  
e. Sie hat ihrem Bruder den Weg *ja* vor langer Zeit ausführlich erKLÄRT.

- f. Sie hat ihrem Bruder den Weg vor langer Zeit *ja* ausführlich erKLÄRT.
- g. \* Sie hat ihrem Bruder den Weg vor langer Zeit ausführlich *ja* erKLÄRT.
- h. \* Sie hat ihrem Bruder den Weg vor langer Zeit ausführlich erKLÄRT *ja*.

The examples in (6) and (7) show that possible surface positions are limited to the space between the finite verb (or auxiliary, as in this case) and an adverbial position before VP. This space roughly corresponds to the so called *middle field* (between C<sup>0</sup> and V<sup>0</sup>).

In examples (8)-(9) the effect of changing the stress pattern on the possible word orders will be shown. Then, in (10), the effect of topicalisation will be illustrated. Contrastive stress (on different constituents):

- (8) a. SIE hat ihrem Bruder den Weg vor langer Zeit ausführlich erklärt.  
'It was she who ...'
- b. SIE hat *ja* ihrem Bruder den Weg vor langer Zeit ausführlich erklärt.
- c. SIE hat ihrem Bruder *ja* den Weg vor langer Zeit ausführlich erklärt.
- d. SIE hat ihrem Bruder den Weg *ja* vor langer Zeit ausführlich erklärt.
- e. SIE hat ihrem Bruder den Weg vor langer Zeit *ja* ausführlich erklärt.
- (9) a. Sie hat IHRem Bruder den Weg vor langer Zeit ausführlich erklärt.  
'She elaborately described the route to her own brother a long time ago.'
- b. Sie hat *ja* IHRem Bruder den Weg vor langer Zeit ausführlich erklärt.
- c. Sie hat IHRem Bruder *ja* den Weg vor langer Zeit ausführlich erklärt.
- d. Sie hat IHRem Bruder den Weg *ja* vor langer Zeit ausführlich erklärt.
- e. Sie hat IHRem Bruder den Weg vor langer Zeit *ja* ausführlich erklärt.

Topicalisation:

- (10) a. \* Ihrem Bruder hat *ja* sie den Weg vor langer Zeit ausführlich erKLÄRT.
- b. Ihrem Bruder hat *ja* SIE den Weg vor langer Zeit ausführlich erklärt.
- c. Ihrem Bruder hat sie *ja* den Weg vor langer Zeit ausführlich erKLÄRT.

- d. Ihrem Bruder hat sie den Weg *ja* vor langer Zeit ausführlich erKLÄRT.
- e. Ihrem Bruder hat sie den Weg vor langer Zeit *ja* ausführlich erKLÄRT.

Following the first remarks on the surface positions of discourse particles, the unacceptability of example (10a) is not expected, since *ja* takes a position after the finite verb or auxiliary, a position where it can usually occur. Pronouns, however, seem to have an effect on this order. Example (11) shows that—at least with a usual stress pattern—there is a position right after the finite verb that is reserved for pronouns. Contrastive stress on a pronoun allows the particle to appear in front of it.

- (11) a. \* Sie hat den Weg ihm vor langer Zeit ausführlich erKLÄRT.<sup>4</sup>
- b. Sie hat ihm den Weg vor langer Zeit ausführlich erKLÄRT.
- c. \* Sie hat *ja* ihm den Weg vor langer Zeit ausführlich erKLÄRT.
- d. Sie hat *ja* IHM den Weg vor langer Zeit ausführlich erklärt.
- e. Sie hat ihm *ja* den Weg vor langer Zeit AUSführlich erKLÄRT.

Topicalising other constituents is more straightforward:

- (12) a. Den Weg hat sie ihrem Bruder vor langer Zeit ausführlich erKLÄRT.
- b. \* Den Weg hat *ja* sie ihrem Bruder vor langer Zeit ausführlich erKLÄRT.
- c. Den Weg hat sie *ja* ihrem Bruder vor langer Zeit ausführlich erKLÄRT.
- d. Den Weg hat sie ihrem Bruder *ja* vor langer Zeit ausführlich erKLÄRT.
- e. Den Weg hat sie ihrem Bruder vor langer Zeit *ja* ausführlich erKLÄRT.
- f. \* Den Weg hat sie ihrem Bruder vor langer Zeit ausführlich *ja* erKLÄRT.

The examples in (12) show no unexpected results, as (12b) is ruled out by the restriction that discourse particles do not appear in the position reserved for pronouns right after V2 and (12f) is ruled out, because *ja* can not appear directly before the final verb. Note that

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<sup>4</sup>Note that the unacceptability of this sentence lies in the order of direct and indirect object. If one object is realised as a pronoun, it has to precede the other one, as evidenced by (11b).

stressing the participle in the final position does not alleviate this restriction. It seems that the manner adverb *ausführlich* is adjoined to VP (containing the participle *erklärt*) and *ja* can not penetrate this combination. Further examples for topicalisation are shown in (13), ignoring the those that have been shown to be unacceptable:

- (13) a. Vor langer Zeit hat sie ihrem Bruder den Weg ausführlich erKLÄRT.  
b. Vor langer Zeit hat sie *ja* ihrem Bruder den Weg ausführlich erKLÄRT.  
c. Vor langer Zeit hat sie ihrem Bruder *ja* den Weg ausführlich erKLÄRT.  
d. Vor langer Zeit hat sie ihrem Bruder den Weg *ja* ausführlich erKLÄRT.

Because discourse particles are usually said to have wide scope (cf. Jacobs 1991, Kratzer 1999: 3, Zimmermann 2004: 16, Zimmermann 2008: 17) different meanings are not expected by moving a particle around certain focused constituents. This is illustrated in examples (14)-(16):

- (14) a. Sie hat ihrem BRUder den Weg vor langer Zeit ausführlich erklärt.  
b. Sie hat *ja* ihrem BRUder den Weg vor langer Zeit ausführlich erklärt.  
c. Sie hat ihrem BRUder *ja* den Weg vor langer Zeit ausführlich erklärt.  
d. Sie hat ihrem BRUder den Weg *ja* vor langer Zeit ausführlich erklärt.  
e. Sie hat ihrem BRUder den Weg vor langer Zeit *ja* ausführlich erklärt.
- (15) a. Sie hat ihrem Bruder den WEG vor langer Zeit ausführlich erklärt.  
b. Sie hat *ja* ihrem Bruder den WEG vor langer Zeit ausführlich erklärt.  
c. Sie hat ihrem Bruder *ja* den WEG vor langer Zeit ausführlich erklärt.  
d. Sie hat ihrem Bruder den WEG *ja* vor langer Zeit ausführlich erklärt.  
e. Sie hat ihrem Bruder den WEG vor langer Zeit *ja* ausführlich erklärt.
- (16) a. Sie hat ihrem Bruder den Weg vor LANGer Zeit ausführlich erklärt.  
b. Sie hat *ja* ihrem Bruder den Weg vor LANGer Zeit ausführlich erklärt.  
c. Sie hat ihrem Bruder *ja* den Weg vor LANGer Zeit ausführlich erklärt.

- d. Sie hat ihrem Bruder den Weg *ja* vor LANGer Zeit ausführlich erklärt.
- e. Sie hat ihrem Bruder den Weg vor LANGer Zeit *ja* ausführlich erklärt.

### 1.3.2 Surface position in sentences with indefinite DPs

As Hentschel (1986: 210f.) notes, this straightforward order of discourse particles and other constituents gets more complicated by replacing definite DPs with indefinite DPs. She illustrates this with the following example:

- (17) a. Dagobert Duck hat gestern seinem Kontrahenten die Goldmine *doch*  
 Dagobert Duck has yesterday his.DAT rival.DAT the goldmine *doch*  
 abgeluchst.  
 wangled  
 ‘Yesterday, Scrooge McDuck took the goldmine from his rival.’
- b. \* Dagobert Duck hat gestern seinem Kontrahenten eine Goldmine doch abgeluchst.  
 (Hentschel 1986: 210, glosses and translation by A.B.)

The contrast in examples (17a,b) shows that the particle *doch* can follow the direct object when it is a definite DP (marked by the definite article *die*), but it can not appear following the direct object if it is indefinite (marked by the indefinite article *eine*), as illustrated in (17b). Hentschel further notes that not only indefinite articles trigger this effect, but rather various types of indefinite constructions have a similar effect.

The following examples illustrate sentences with indefinite DPs. Example (18a) is a sentence with indefinite indirect and direct objects, respectively, and neutral stress. Examples (18b,c) are variations on the first sentence to show where discourse particles can not appear.

- (18) a. Der Briefträger hat ihnen gestern offensichtlich ein PaKET gebracht.  
 the postman has them.DAT yesterday obviously a.ACC parcel brought  
 ‘The postman obviously brought them a letter yesterday.’
- b. \* Der Briefträger hat *ja* ihnen gestern offensichtlich einen Brief gebracht.

- c. \* Der Briefträger hat ihnen gestern offensichtlich einen Brief *ja* gebracht.

For the sake of brevity, only relevant unacceptable examples are shown. These show that the particle *ja* can not appear following the direct object in example (18c), affirming Hentschel's finding. Topicalisation of certain constituents is shown in the following examples:

- (19) a. Ein PaKET hat der Briefträger ihnen gestern offensichtlich gebracht.  
 b. Ein PaKET hat der Briefträger ihnen *ja* gestern offensichtlich gebracht.  
 c. Ein PaKET hat der Briefträger ihnen gestern *ja* offensichtlich gebracht.  
 d. Ein PaKET hat der Briefträger ihnen gestern offensichtlich *ja* gebracht.
- (20) a. IHNen hat der Briefträger gestern offensichtlich ein Paket gebracht.  
 b. IHNen hat *ja* der Briefträger gestern offensichtlich ein Paket gebracht.  
 c. IHNen hat der Briefträger *ja* gestern offensichtlich ein Paket gebracht.  
 d. IHNen hat der Briefträger gestern *ja* offensichtlich ein Paket gebracht.  
 e. IHNen hat der Briefträger gestern offensichtlich *ja* ein Paket gebracht.  
 f. \* IHNen hat der Briefträger gestern offensichtlich ein Paket *ja* gebracht.
- (21) \* Gestern hat der Briefträger ihnen offensichtlich ein PaKET *ja* gebracht.
- (22) \* Offensichtlich hat der Briefträger ihnen gestern ein PaKET *ja* gebracht.
- (23) \* Gebracht hat ihnen der Briefträger gestern offensichtlich ein PaKET *ja*.

All examples in this section seem to show that a discourse particle can not follow an indefinite (object) NP. Hentschel herself provides examples that contradict this finding:

- (24) a. Dagoberts Geld ist vor Diebstahl doch geschützt.  
 Scrooge's money is from theft *doch* protected  
 'But Scrooge's money is protected from being stolen!'
- b. Dagobert riecht Gold doch auf zehn Meilen Entfernung.  
 Scrooge smells money *doch* on ten miles distance  
 'But Scrooge smells money from ten miles away.'

(Hentschel 1986: 211, glosses and translation by A.B.)

Hentschel concludes that discourse particles precede new information, so a focused position or *rheme* in her terminology. She generalises this with two rules:

(25) **Rule 1:** The particle precedes the rheme of the clause.

(Hentschel 1986: 212, translation by A.B.)

**Rule 2:** If the finite verb acts as the rheme, the particle may take the final position in the clause.

(Hentschel 1986: 213, translation by A.B.)

An example for the second rule is shown in example (26) (bold face indicates stress):

(26) Daisy **haßt** schlechte Laune doch!  
Daisy hates bad mood *doch*

‘But Daisy hates bad mood!’

(ibid., glosses and translation by A.B.)

Thurmair (1989: 29ff.) argues against an earlier, similar findings by Krivonosov (1965, 1966) that the *theme* (in Thurmair’s terminology) or topic, respectively, have to precede discourse particles, because there are cases where the topic follows a particle.

(27) *Wir sollten einfach die Taschen AUFGEBEN.*  
we should *einfach* the bags give in

‘We should just give in our bags.’ (Thurmair 1989: 29, glosses and translation by A.B.)

Note that in such a case the topic still precedes the focus, namely the infinitive *aufgeben*. Thurmair also criticises Hentschel’s approach: if the first constituent is the focus, the particle obviously has to follow it, a case not mentioned by Hentschel. This is shown in example (28), a simple dialogue:

(28) a. Mutter: *Wer hat sich ein Fahrrad gekauft?*

Mother: ‘Who bought a bike?’

b. Fritz: *PETER hat sich doch ein Fahrrad gekauft.*

F. P. has himself *doch* a bike bought

‘PETER bought a bike.’

(Thurmair 1989: 31, glosses and translation by A.B.)



While (28b) contradicts Hentschel's first rule, her discovery that discourse particles can not follow indefinite DPs (cf. (17b), p. 12) is illustrated with the following example, which is a variation on Thurmair's:

(29) \* PETER hat sich ein Fahrrad *doch* gekauft.

The violation of Hentschel's first rule (the particle should precede the focus, but does not) does not yield ungrammaticality, changing the order of the object and the discourse particle on the other hand does. This is odd, because Hentschel (1986: 211) argues that in cases where an indefinite DP can precede a discourse particle, this is because the particle precedes the focus (a different DP). Example (29), however, shows that this is not necessarily the case. It seems that indefinite constituents can interact with the positioning of discourse particles.

Thurmair (1989: 31f.) goes on to criticise Hentschel's second rule, which states that if the finite verb is the rheme, the particle can take the final position. Thurmair provides the following examples ((30c) and (31b)) that contradict this rule:

(30) a. *Daß der Willi den Hans so nett findet ...*  
 '(I don't understand why) Willi likes Hans...'

b. *Der HAT doch Launen.*  
 That has *doch* mood swings  
 'That guy has mood swings.'

c. \* *Der HAT Launen doch.*

d. In contrast:  
*Der VERURTEILT Launen doch.*  
 'That guy CONDEMNNS mood swings.'

(Thurmair 1989: 31, glosses and translation by A.B.)

(31) a. *Der NÖRGELT doch nicht/bestimmt/wieder.*  
 that whines *doch* not/surely/again  
 'He's {not/surely} whining {again}.'

- b. \* *Der NÖRGELT nicht/bestimmt/wieder doch.*

(Thurmair 1989: 32, glosses and translation by A.B.)

Thurmair concludes that Hentschel's finding—discourse particles relate to the focus of the clause—is flawed (Thurmair 1989: 32). However, while example (30c) contradicts Hentschel, the unacceptability of example (31b) does not lie in the particles' final position, but elsewhere. In fact, no MP can appear following the expressions *nicht* 'not', *bestimmt* 'surely' or *wieder* 'again', as shown in the following examples:

- (32) a. Sie ist *ja/doch/auch/eben/...* nicht gekommen.  
 he is *ja/doch/auch/eben/...* not come  
 'She didn't come.'
- b. \* Sie ist nicht *ja/doch/auch/eben/...* gekommen.
- (33) a. Er wird dir *ja/doch/auch/eben/...* ein schönes Geschenk kaufen.  
 he will you.DAT *ja/doch/auch/eben/...* a nice.ACC present buy  
 'He'll buy you a nice present.'
- b. Er wird dir *ja/doch/auch/eben/...* bestimmt ein schönes Geschenk kaufen.  
 'He'll surely buy you a nice present.'
- c. \* Er wird dir bestimmt *ja/doch/auch/eben/...* ein schönes Geschenk kaufen.
- (34) a. Sie hat den Zug *ja/doch/auch/eben/...* gerade verpasst.  
 she has the train *ja/doch/auch/eben/...* just missed  
 'She just missed the train.'
- b. Sie hat den Zug *ja/doch/auch/eben/...* wieder gerade verpasst.  
 'She just missed the train again.'
- c. \* Sie hat den Zug wieder *ja/doch/auch/eben/...* gerade verpasst.

Coniglio (2009: 106f.), citing Thurmair's examples, concludes that Hentschel's statements regarding the relationship between discourse particles and focus are still valid, while admitting that the idea that they delimit topic from focus might be exaggerated.

### 1.3.3 The particle *ja* and relative clauses

Discourse particles can appear in various embedded clauses. I want to focus briefly on the discourse particle *ja* in German relative clauses, since there is an interesting phenomenon when this particle is embedded in such a clause. The presence of the discourse particle *ja* changes a restrictive relative clause to a non-restrictive relative clause.

In German, restrictive and non-restrictive relative clauses are distinguished by prosody. First, with restrictive clauses the article of the DP the relative clause is referring to is stressed. This is not the case with non-restrictive relative clauses (cf. Wöllstein-Leisten et al. 1997: 47f.). This is illustrated by the following examples:

- (35) a. DIE Dänen, die viel Bier trinken, sind gute Fußballspieler.  
the danes who much beer drink are good football player  
'Danes who drink a lot of beer are good football players.'
- b. Die DÄNen, die viel Bier trinken, sind gute Fußballspieler.  
'The danes, who drink a lot of beer, are good football players.'

(cf. Wöllstein-Leisten et al. 1997: 48)

Second, there can be a audible gap between the head noun and the relative pronoun in non-restrictive relative clauses, see example (36a). In restrictive relative clauses, the pronoun follows the head noun more rapidly. There are other factors, like special articles that always trigger restrictive relative clauses (like *diejenigen* 'those').

- (36) a. Seine Tante, [gap] die in Salzburg wohnt, liebt Mozart.  
his aunt who in salzburg lives loves M.  
'His aunt, who is living in Salzburg, loves Mozart.'
- b. Seine Tante, die in Salzburg wohnt, liebt Mozart.  
'His aunt who is living Salzburg loves Mozart.'

Now, as illustrated in example (37), in cases where restrictive relative clauses are not ruled out in the first place by, e.g., stress on the article or the article *diejenigen*, the presence of the discourse particle *ja* can overwrite some effects of the prosodic characteristics.

- (37) a. # DIE Dänen, die *ja* viel Bier trinken, sind gute Fußballspieler.  
intended: ‘The danes, who drink a lot of beer, are good football players.’  
(cf. Wöllstein-Leisten et al. 1997: 48)
- b. # DIEjenigen Dänen, die *ja* viel Bier trinken, sind gute Fußballspieler.  
intended: ‘The danes, who drink a lot of beer, are good football players.’  
(cf. *ibid.*)
- c. Seine Tante, [gap] die *ja* in Salzburg wohnt, liebt Mozart.  
‘His aunt, who is living in Salzburg, loves Mozart.’
- d. Seine Tante, die *ja* in Salzburg wohnt, liebt Mozart.  
‘His aunt, who is living in Salzburg, loves Mozart.’

Whether *ja* can appear in a relative clause depends on some more factors with respect to the head of the relative clause. In cases with neutral stress on a head composed of a definite article and a noun, *ja* can mostly appear and trigger this phenomenon. I will return to this problem in Chapter 3.

### 1.3.4 Tag-questions

The three particles under discussion, *ja*, *doch* and *wohl* can all appear in tag-questions, with *doch* occurring quite often in such clauses. For the following examples, I will therefore use *doch* as a prototypical particle, both alternatives, however, are equally acceptable in all cases.

The basic distributional pattern that was established for discourse particles in declarative sentences, i.e. their syntactic restrictions, also holds for tag-questions, therefore only few examples are necessary. Moreover, the word order in tag-questions and declaratives is virtually equal, they mainly differ their intonational patterns. Nevertheless, the following examples illustrate occurrences of the particle *doch* in such a clause.

- (38) a. \* *Doch* kommst du morgen zu meiner Feier, oder?  
*doch* come you tomorrow to my party or

- intended: 'You're coming to my party tomorrow, aren't you?'
- b. Du kommst *doch* morgen zu meiner Feier, oder?  
'You're coming to my party tomorrow, aren't you?'
- c. Du kommst morgen *doch* zu meiner Feier, oder?  
'You're coming to my party tomorrow, aren't you?'
- d. \* Du kommst morgen zu meiner Feier *doch*, oder?  
intended: 'You're coming to my party tomorrow, aren't you?'

### 1.3.5 Imperatives

The discourse particle *doch* can appear in imperatives, while the particles *ja* and *wohl* cannot (they can if they are stressed, but see the discussion on p. 7). In imperatives, too, the possible syntactic positions of *doch* are restricted, as illustrated in the following examples:

- (39) a. Setz dich *doch* auf den Sessel!  
sit yourself *doch* on the chair  
'Do sit down on the chair!'
- b. \* *Doch* setz dich auf den Sessel!
- c. \* Setz *doch* dich auf den Sessel!
- d. \* Setz dich auf den Sessel *doch*!
- (40) a. Gib mir *doch* das Buch endlich!  
give me *doch* the book finally  
'Give me the book already!'
- b. \* Gib *doch* mir das Buch endlich!
- c. Gib mir das Buch *doch* endlich!
- d. \* Gib mir das Buch endlich *doch*!
- e. # Gib mir das Buch *doch*!

Example (40e) is remotely acceptable, but the addition of the adverb *endlich* in example (40c) improves it. In examples (39a-d), *doch* seems to be even more restricted. What is evident in the sentences shown is that discourse particles do not interact equally with different constituents.

### 1.3.6 Interrogatives

The particle *wohl* is compatible with interrogatives. Again, it is subject to syntactic restrictions. Capitals mark stress in the following examples.

- (41) a. Kommt Peter *wohl* nächsten Sonntag zu meiner FEIer?  
 comes P. *wohl* next sunday to my party  
 ‘What do you thin? Will Peter come to my party next sunday?’
- b. \* *Wohl* kommt Peter nächsten Sonntag zu meiner FEIer?
- c. Kommt *wohl* Peter nächsten Sonntag zu meiner FEIer?
- d. Kommt Peter nächsten Sonntag *wohl* zu meiner FEIer?
- e. \* Kommt Peter nächsten Sonntag zu meiner FEIer *wohl*?

The particle *wohl* can appear in the second position in the clause, as in example (41c). This may follow from the fact that there is subject-verb inversion. While an XP (often the subject) may move to SpecCP in declaratives, the subject remains in SpecIP (or a lower position) in these cases. Apparently the discourse particle can take a intermediary position.

## 1.4 Conclusions—for now

In this section, I have illustrated the occurrences of discourse particles in German clauses. It has been shown that the distribution of discourse particles is restricted to certain positions in the clause, basically between the finite verb in second position and a location

reserved for pronouns and adverbs right in front of VP. This is shown in more detail in the following structure (42) (PRON. indicates a stressed pronoun):

$$(42) \left[ {}_{CP} \text{ *PRT } \left[ {}_{C'} \text{ v}_{fin} \left[ {}_{IP} \left\{ \text{pron.} < \text{PRT} / \{ \text{PRT} \} < \text{PRON.} < \{ \text{PRT} \} \right\} \left[ {}_{I'} \text{ PRT? } \left[ {}_{VP} \left[ {}_{AdvP} \text{ *PRT} \left[ {}_{VP} \right] \right] \right] \right] \right] \right] \right]$$

Within this space, discourse particles can appear in several different positions between definite DPs, with indefinite DPs, however, the become syntactically more restricted. Furthermore, the can not appear following negation and certain adverbs in higher positions than adjoined to VP.

Hentschel (1986) suggests that these distributional properties are related to the topic-focus structure of German, with discourse particles marking the constituent bearing focus. While her predictions turned out not to be fully correct, a certain relationship seems to exist.

But both Hentschel and Thurmair merely discuss the relationship between discourse particles and topic-focus structure based on surface syntactic evidence, barely touching on pragmatic or semantic considerations. Because of this, Hentschel's original proposal might be flawed. On the surface, it might appear that discourse particles constitute a boundary between topic and focus, but a more thorough investigation might yield different results.

It has been argued, e.g. by Jacobs (1991) that there is no interaction between discourse particles and the topic-focus structure. Zimmermann takes a similar position, stating that

‘[d]iscourse particles thus take scope over the entire focus-background structure [...], showing once again that they do not contribute to the descriptive, i.e. propositional content of the clause.’

(Zimmermann 2008: 17)

For reasons of space, I want to include only a few more arguments against Hentschel's (1986) hypothesis that discourse particles separate topic from focus. As shall be shown in the following chapter, there is strong evidence that discourse particles have a fixed position in the syntactic structure of a sentence that does not necessarily correspond to their surface syntactic position.

If this is in fact true, then discourse particles do not move around other constituents, but all other constituents with which there seems to be any interaction move around the particles. Since this position is assumed to be in IP, the separating effect of discourse particles would be only epiphenomenal.

This implies that other constituents (definite DPs, indefinite DPs, etc.) can move quite freely, *inter alia* to positions above the particles fixed in IP. Diesing (1992) suggests that there are different positions for various readings of DPs in the clause. Grosz (2005) summarises this as follows:

‘This observation has lead scholars, such as Diesing (1992) to propose that the *existential closure* takes place in the VP, i.e. that indefinite DPs which remain inside of the VP are attributed an existential interpretation while those which move out into the IP receive a different *non-existential* one [...].’ (Grosz 2005: 132)

Grosz (2005: 139) further states that definite DPs are more likely to move out of VP than indefinite DPs which also explains the relative order of such DPs and sentence adverbs (which, according to Cinque (1999), are also thought to be located in IP).

Taking this into consideration, I want to stress again that the seemingly existing interaction between discourse particles and the topic-focus structure is maybe better analysed as an epiphenomenon that follows from various types of movement of definite and indefinite DPs in the German clause.

The goal of this chapter was to give an overview of various characteristics of German discourse particles, to illustrate briefly their distribution in clauses and to discuss their



relationship with topic-focus structure. We have seen that discourse particles are syntactically restricted in the clause, to positions that are part of the German *middle field*. The following chapter on the syntax of discourse particles will elaborate the basic ideas that have been presented here.



## 2 The syntax of discourse particles

In this chapter, I will discuss a few syntactic analyses of discourse particles, mainly by Meibauer (1994), Ormelius-Sandblom (1997) and Coniglio (2005, 2009).

While earlier work (e.g. Hentschel 1986) merely touches on the syntactic behaviour of discourse particles, said authors try to explain its various aspects in a generative framework. These aspects include the phrasal status of the particles, their position relative to other constituents and the position at which they are generated.

### 2.1 Preliminaries

#### 2.1.1 The middle field

It is well known that German discourse particles are restricted to the so called *Mittelfeld*, the middle field (Hentschel 1986, Abraham 1991a,b,c, Meibauer 1994, Ormelius-Sandblom 1997, Coniglio 2005, 2009). This restriction is nearly without exceptions<sup>1</sup> and is a useful tool for distinguishing discourse particles from their homonyms which can appear elsewhere. The existence of the middle field follows from German's V-2 (and V-last) property (cf. Abraham 1991b: 6). In syntactic terms, it is the space between  $C^0$  and  $V^0$ . In German main clauses, the finite verb (or the auxiliary) occupies  $C^0$ , as illustrated in (43):

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<sup>1</sup>But see Coniglio (2009: 98ff.) for a some possible exceptions.

- (43) Ich [<sub>C<sup>0</sup></sub> habe] dir das [<sub>MP</sub> doch] [<sub>V<sup>0</sup></sub> erzählt].  
 I have you that doch told  
 ‘I have told you that.’

In (43), the auxiliary *habe* occupies C<sup>0</sup>, while the participle occupies V<sup>0</sup>. These nodes form the edges of the middle field.

According to Abraham (1991b), the Westgermanic languages German, Dutch and Frisian all have this kind of middle field, while a similar structure, the *nexus field* can be found in Scandinavian languages, which also exhibit V-2 in main clauses. In these languages, discourse particles are restricted to positions in the nexus field.

In many languages, however, there is no structure that is equivalent to the middle field. Abraham (1991b,c) argues that such languages do not have discourse particles that correspond directly to Westgermanic discourse particles, because of various properties of these particles on one hand and some crucial properties of the middle field on the other hand. He writes (IF = initial field, MF = middle field, FF = final field):

‘In contrast to IF and FF, the MF is open for linear structuring in terms of definiteness, genericness (nominal plural), pronominalness in contrast to full, referential, nominalness, to linear movement, and to accent shift in dependence from discourse function (rhema vs. thema). [...]

The corollary suggests very strongly that there is some conditional relation holding between the illocutive force of discourse particles and the structural properties mentionend above.’  
(Abraham 1991b: 7f.)

Abraham goes on to assume that these properties of the middle field are related to the possibility of a language having discourse particles, contrasting the Westgermanic V-2 languages with English and Romance languages (cf. Abraham 1991b: 7f.). This argumentation seems flawed to me: Abraham is comparing languages with a middle field *and* discourse particles to languages which lack both of these properties and is implying that there is some kind of dependence between these factors. Yet middle field-languages

are hardly the only ones to express in one way or another the properties referred to by Abraham, they are simply the only ones that express these properties *in the middle field*. Therefore, assuming (maybe reasonably) that discourse particles strongly interact with or depend on said properties (cf. the quotation from Abraham 1991b) can explain why these particles appear in the middle field in a language that has this kind of structure, while it does not have to lead to the conclusion that discourse particles can only ever appear in a middle field.<sup>2</sup>

### 2.1.2 The position of discourse particles

Certain characteristics of German discourse particles suggest that they can not be generated anywhere in a sentence. One of these characteristics is the scope of discourse particles. It is generally assumed that they have scope over the proposition (cf. Jacobs 1991: 155, Meibauer 1994: 74ff., Ormelius-Sandblom 1997: 87, Coniglio 2009: 14f.). This assumption has some obvious consequences regarding their position. Jacobs (1991: 155) assumes that scopal relations have to be fixed at D-structure. From this follows that the particles have to be generated in a higher position than VP (note that this can only be a position in the middle field, if we assume that they are not generated in the CP), to include the propositional elements of the clause in its scope.

Meibauer (1994: 79ff.) imposes further restrictions on the possible positions of discourse particles. He argues that scrambling and focus relations in German sentences suggest that their base position is in the beginning of the middle field. Meibauer shows this by contrasting sentences with the focused temporal adverb *gestern* ('yesterday') preceding or following the particle *doch*. He assumes that the unmarked case is that of the

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<sup>2</sup>Note that the restriction to the middle field has been challenged by other authors as well. Molnár (2002: 120, fn. 1) notes that it is not 'valid without restrictions' (translation by A.B.), since there are discourse particles with similar functions in Hungarian, a language without a structure like the middle field. Additionally, Coniglio (2009: 34ff.) argues for the existence of discourse particles in Italian, another language without a middle field. Also, Russian and Finnish might have similar particles.

particle preceding the adverb. Further evidence comes from Haider (1993). He says that indefinite *wh*-expressions like *wer* ('someone') can not be scrambled. Since discourse particles have to precede such expressions, they have to be generated in a higher position. We can thus conclude that discourse particles are generated somewhere in the middle field—probably near to its left edge. We shall see that there are different assumptions as to what the exact location is.

## 2.2 Discourse particles as VP-adjuncts

### 2.2.1 Meibauer (1994)

Assuming that discourse particles really are generated in a position on the left edge of the middle field, it is not yet clear what their phrasal status is. Meibauer notes that 'an X-bar theoretic analysis of discourse particles does not yet exist.' (Meibauer 1994: 50, translation by A.B.). This point is not trivial, as they exhibit characteristics of both heads ( $X^0$ ) and phrases (XP): discourse particles can not be modified or extended, they are not complements and they can not appear in the initial field (i.e. before  $C^0$ , in SpecCP). This suggests that they are heads, since XPs can appear in the initial field, but it has been argued that they do not project as heads usually do (Meibauer 1994: 53).

To distinguish discourse particles from other categories, Meibauer assigns the following features to them:

- (44) a. MP [ $\alpha$ ,  $\beta$ , +S, -adv]  
b. GP [ $\alpha$ ,  $\beta$ , -S, -adv]  
c. SAdv [ $\alpha$ ,  $\beta$ , +S, +adv] (Meibauer 1994: 51)

GP (g. *Gradpartikel*) refers to scalar particles, SAdv means 'sentence adverb'.  $\alpha$  is short for [ $-N$ ,  $-V$ ],  $\beta$  is short for [ $-proj$ ,  $+max$ ]. Thus discourse particles are similar to sentence adverbs, the only difference being that they cannot appear in the initial field ( $+/-adv$ ),

while both sentence adverbs and discourse particles are analysed to share a kind of hybrid head/phrasal status (Muysken 1983, cited by Meibauer 1994). The feature [+S] accounts for the wider scope of adverbs and discourse particles opposed to the narrow scope of scalar particles which only have scope over one constituent. Note that this similarity between sentence adverbs and discourse particles may imply conflicting properties: the [+adv] feature of sentence adverbs allows them to appear in the initial field, while their feature [ $\beta$ ] denies them full XP status. Since only XPs can be moved to the initial field (i.e. SpecCP), these feature matrices may not be fully accurate.

Adopting characteristics of functional elements put forth by Abney (1987), Meibauer (1994: 55f.) argues that discourse particles can not be full functional elements. Discarding the possibilities of discourse particles being small functional heads or specifiers, he arrives at the conclusion that they are modifiers (g. *Modifizierer*): ‘Discourse particles may in a way be maximal, but this must not mean that they are XPs, since they do not project and can not appear in the initial field.’ (Meibauer 1994: 55, cf. also fn. 48, *ibid.*). Moreover, discourse particles themselves can not be modified by other elements. Following von Stechow and Sternefeld (1988), Meibauer analyses such modifiers as not enhancing the complexity of the material they modify: such elements are adjuncts to VP.

### 2.2.2 Ormelius-Sandblom (1997)

Ormelius-Sandblom’s analysis is similar to Meibauer’s in that she also argues that discourse particles are adjuncts. To find out their exact position in a sentence, Ormelius-Sandblom (1997: 33ff.) takes a closer look at their interaction with certain sentence adverbs. The particles she discusses are *ja*, *doch* and *schon*. These usually follow pronouns, NPs and certain adverb phrases, but precede negation and may also precede adverbs of manner. Yet the three particles do not behave the same way, Ormelius-Sandblom (1997: 35) notes that ‘[c]ontrary to other MPs that usually precede sentence adverbials [...], *schon* follows these [...]’ (translation by A.B.). In (45), a simplified order of discourse

particles and certain sentence adverbs is illustrated.

- (45) *ja, doch* > übrigens, wahrscheinlich, sicher, natürlich > *schon*  
*ja doch* by the way probably certainly of course *schon*

Thus on the surface—as we have already noted—discourse particles appear in the middle field, but their position relative to other constituents varies: negation (which may be assumed to be very close to VP) follows them, but other material can appear both before and after them.

Ormelius-Sandblom (1997: 36ff.) adopts a minimalist framework with X-bar phrase structure. Following Haider (1993) and previous work, German is analysed as being head-final in VP. As for the phrasal status of discourse particles, she argues against the possibility of them being clitics (cf. also Meibauer 1994) or heads and concludes that they are (real) XPs adjoined to VP, assuming that ‘every non-head is a phrase’ (Ormelius-Sandblom 1997: 42). One of the possible exceptions to the restriction to the middle field is that in certain cases a discourse particle can appear in the initial field when coupled with a *wh*-word, illustrated in (46):

- (46) Wer *schon* hätte damals wen *schon* fürchterlich ernstgenommen?  
 who schon would have back then who.ACC schon terribly taken seriously  
 ‘Who would have taken whom terribly seriously back then?’

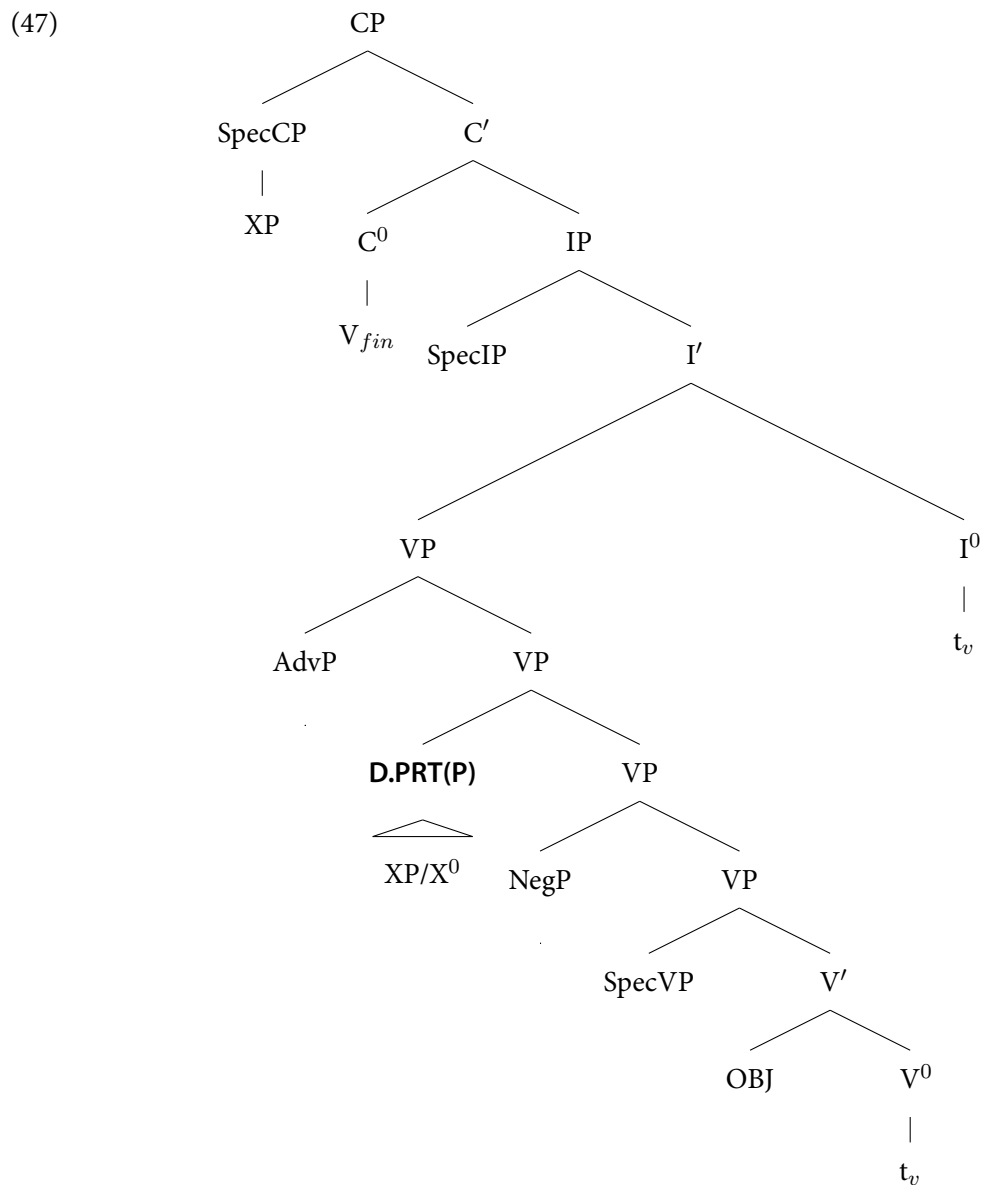
(Ormelius-Sandblom 1997: 41, glosses and translation by A.B.)

Ormelius-Sandblom (1997: 41f.) argues against any analysis taking discourse particles as specifiers or adjuncts of functional categories (e.g. MoodP) or heads because of examples like (46). E.g., proposals of particles being specifiers of empty heads are ruled out, she argues, because the head of the functional projection hosting the *wh*-phrase (with the discourse particle) is certainly not empty.

Note that one of Meibauer’s arguments against discourse particles being full phrases was that they can not appear in the initial field and that they can not be modified by elements like *sehr* (‘very’). Ormelius-Sandblom argues that certain sentence adverbs can



not be modified either, but may appear in the initial field. The ban on appearing there rather follows from semantic-pragmatic reasons (cf. Ormelius-Sandblom 1997: 41). Despite these differences, Meibauer (1994) and Ormelius-Sandblom (1997) both argue for discourse particles as VP-adjuncts, albeit with different internal structures. Their proposal is illustrated by the structure in (47).



Following in essence Meibauer's (cf. Haider's point regarding indefinite *wh*-phrases to which both refer) reasoning, Ormelius-Sandblom also reaches the conclusion that discourse particles are located at the left edge of the middle field, preceding certain adverbs that modify VP. She suggests that 'a constituent to the left of an MP that belongs to the verb's argument structure [...] must have been moved.' (Ormelius-Sandblom 1997: 45, translation by A.B.).

Discourse particles may be generated in this position, as adjuncts to VP, or in certain cases, they can be adjoined to a *wh*-phrase. The tree in (47) illustrates the syntactic structure of a German sentence following the discussion up to this point, with IP and VP shown as head-final projections. In this structure, a discourse particle is included as an adjunct to VP, preceding negation (NegP), but following certain kinds of adverbs (AdvP). The exact phrasal status of the D.PRT phrase is left ambiguous. Nevertheless, the highlighted node, adjoined to VP, may be a possible position for the generation of discourse particles.

### 2.2.3 Conclusion

#### **Positioning discourse particles**

The goal of this section was to show that the status of discourse particles in the syntactic structure poses some problems. For all the differences in the two analyses introduced here, various aspects require the particles to surface in a more or less fixed position. There is more consensus on this point than there is on the phrasal status of discourse particles, for example. These aspects include their scope: it demands a position high enough to allow for wide scope. In principle, a position above VP satisfies this requirement. Yet the serialisation of discourse particles with other elements (such as negation) shows that their location has to be restricted further. This task is complicated by the fact that certain elements can appear before and after discourse particles such as certain adverbs or

scrambled constituents. As for scrambling, the base-position of scrambled material may usually be analysed to be lower than the particles. Thus, the biggest difficulty arises from the serialisation of discourse particles with adverbs, whose positions are equally problematic. In the next section, we shall see that this issue can be dealt with by following an analysis of adverbs put forth by Cinque (1999).

### **The middle field, again**

As the restriction of discourse particles to the middle field is one of the most characteristic syntactic features of this class of words, I want to pick up the earlier discussion. Note that this restriction was formulated by Abraham (1991b,c) as a restriction not only based on purely syntactic properties (cf. for example the distinction between theme and rheme). However, the previous discussion may allow us to attempt a syntactic explanation of this restriction.<sup>3</sup> I argue that a syntactic formulation of such a constraint leaves us with the possibility of other languages having discourse particles that do not have any structure similar to the middle field. Thus, the restriction of certain particles to the middle field in V-2 languages could follow naturally, while languages without the V-2 property would not be excluded. Of course, this claim has to be supported by empirical data (cf. the footnote on page 27).

For a sketch of such an explanation, recall that it was assumed (following Jacobs 1991) that scopal relations have to be fixed at D-structure. As already noted, this necessarily leads to a position above VP. It follows that the only possible location for generation of discourse particles is *in* the middle field. But the restriction to the middle field is not a constraint imposed on D-structure, it is rather based on evidence from levels of representation or stages of a derivation after movement has occurred (S-structure in Jacobs' terms or Spell-out in minimalist terms).

For a syntactic restriction to work, it has to be clarified why discourse particles can

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<sup>3</sup>I imply here that scope can (inter alia) be seen as a syntactic phenomenon as it is closely tied to the notion of c-command (cf. Meibauer 1994: 75).

not move to positions outside of the middle field. Movement to the final field is highly restricted, even more so than movement to the initial field, as shown in (48) and (49), illustrating DPs, APs and PPs in the initial and final field, respectively. The initial field is the constituent before the finite verb, while the final field is the space after the participle, *getroffen*.

- (48) a. Sie/einen alten Freund habe ich gestern getroffen.  
 her/an old friend have I yesterday seen  
 ‘It was her/an old friend whom I met yesterday.’
- b. Gestern habe ich sie gesehen.  
 ‘It was yesterday that I saw her.’
- c. Mit meinem Bruder habe ich sie/einen alten Freund gestern getroffen.  
 with my brother have I her/an old friend yesterday met.  
 ‘It was with my brother that I met her/an old friend yesterday.’
- (49) a. \* Ich habe gestern getroffen sie/einen alten Freund.  
 intended: ‘I met her/an old friend yesterday.’
- b. Ich habe sie getroffen gestern.  
 ‘I met her yesterday.’
- c. Ich habe sie/einen alten Freund gestern getroffen mit meinem Bruder.  
 ‘Yesterday, I met her/an old friend with my brother.’

While any XP can be moved to the initial field, illustrated in (48), apparently only adjuncts (an AP and PP)—but not arguments, see (49a)—can appear in the final field.<sup>4</sup> If this is correct, following an analysis that treats discourse particles as XPs, we would expect them to be able to surface in the final field. That possibility is excluded, however. Because of this, Ormelius-Sandblom (1997) argues that particle-movement to the initial field is barred by semantic-pragmatic reasons. This reasoning would have to be extended to include the prohibition of movement to the final field.

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<sup>4</sup>(48c) and (49c) are ambiguous in both English and German, since the adjunct *with my brother* may be interpreted as an adjunct to both the subject and the object. This ambiguity is irrelevant for the present discussion.

So far, the only syntactic explanation to account for the lack of movement to the initial field was the discourse particles' hybrid head/phrasal status assumed by Meibauer (1994). But if extraposed elements in the final field are adjuncts (to VP), we need to account for the fact why discourse particles can be adjoined to the VP anywhere in the middle field, but not in the final field.

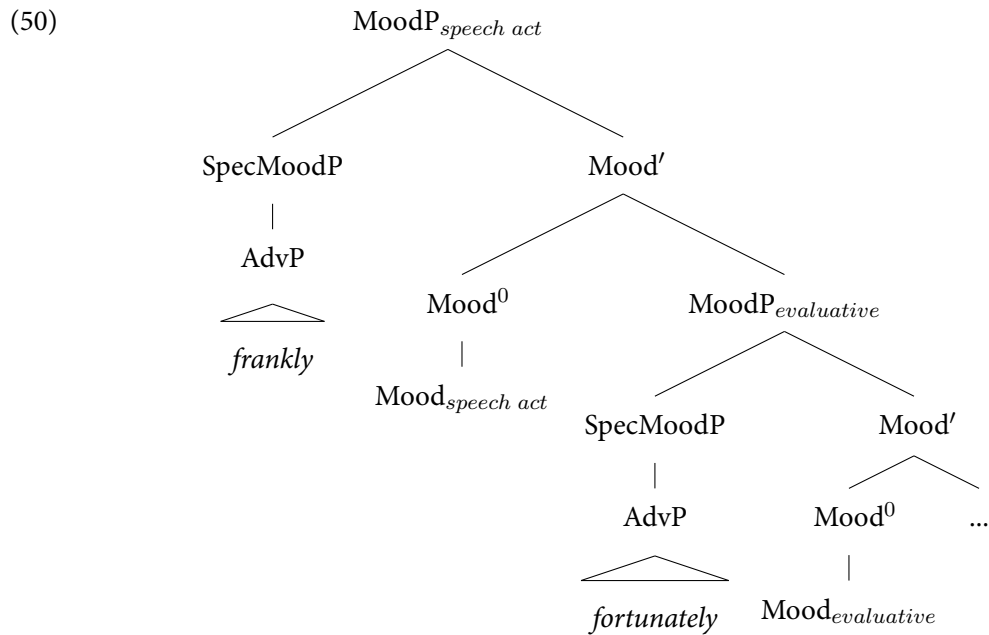
It is clear to see that we are not yet in a position to explain the restriction of discourse particles to the middle field in syntax only. The analysis presented in the following section takes a different approach to these issues and might offer explanations to the problems we have seen.

## 2.3 Discourse particles in a Split-IP

### 2.3.1 Functional projections: an excursus

In a comprehensive comparative study, Cinque (1999) argues that adverbs across languages are organised hierarchically in a certain universal order. Cinque suggests that adverbs are located in the specifier positions of various functional projections and share semantic properties with the heads of these projections.

We can imagine a series of such projections to resemble the structure shown in (50), following Cinque (1999: 106):



The MoodPs in this example are functional projections that express different nuances of meaning, like *mood*, *modality*, *tense* and *aspect* (for a discussion of these terms, see Cinque 1999: 78). The hierarchical order of these projections is on one hand consistent with the hierarchy of adverbs across languages and on the other hand consistent with the order of the corresponding heads. Such heads can take the  $X^0$  positions of these projections.

Moreover, Cinque argues that adverbs are fixed in their positions. Thus, in sentences that show different relative orders of *verb—adverb*, it is the verb that moves, see the following Italian examples:

- (51) a. Allora *aveva* forse saggiamente deciso di non presentarsi.  
 b. Allora forse *aveva* saggiamente deciso di non presentarsi.  
 c. Allora forse saggiamente *aveva* deciso di non presentarsi.  
 then maybe wisely had decided of not appear-REFL  
 ‘Then he had perhaps wisely decided not to go.’ (Cinque 1999: 49)

Cinque further writes that

‘...verbs, not AdvPs, can occupy different positions within a certain (here, the post-C<sup>0</sup> and pre-VP) “space”. This means that *mica* [an adverb meaning ‘not’, A.B.] has not really moved at all. It is the verb that has stopped in the head corresponding to the Spec occupied by *mica* ...’ (Cinque 1999: 51)

Note that the “space” referred to by Cinque roughly corresponds to the German middle field. Before turning to the question how discourse particles fit into this picture, we need to account for the fact that not only heads move around adverbs. A consequence of Cinque’s analysis is that even more projections have to be assumed, in order to provide landing positions for DP-movement (or XP-movement generally), for example. Cinque (1999: 110ff.) addresses this issue, by comparing—again, cross-linguistically—the positions of subject DPs. Cinque is not the first one to argue for different locations: he refers to an observation by Diesing (1992) that

‘bare plural subjects in German receive an existential reading when appearing to the right of such adverbs [sic!] as *ja doch*, and a generic one when appearing to their left.’ (Cinque 1999: 113)

According to Cinque, Diesing assumes that there are two positions for the subject DP: SpecIP and SpecVP. A bare plural subject in SpecIP has a generic reading, while a subject in SpecVP has an existential reading. This is illustrated by the following examples (cf. also Diesing (1992), stress marked by capitals by A.B.).

- (52) a. ...weil ja doch HAIfische sichtbar sind.  
 since ‘indeed’ sharks visible are  
 ‘...since there are sharks visible.’
- b. ...weil HAIfische ja doch sichtbar sind.  
 since sharks ‘indeed’ visible are  
 ‘...since (in general) sharks are visible.’ (Cinque 1999: 114)

To conclude this short, but relevant digression to Cinque (1999), we can sum up that AdvPs are assumed to be specifiers of functional projections that are ordered hierarchically across languages. The position of these projections is fixed. Thus, not only are

adverbs generated in these positions, they usually do not move out of these projections. To account for different word orders, Cinque assumes that it is heads and phrases that move to positions preceding and following adverbs.

### 2.3.2 Discourse particles as adverbs

Following the discussion so far, we have seen that the positioning of discourse particles mainly raises problems when combined with adverbs. In such cases, the order can vary. While some variation is also seen with other constituents, these facts can be more easily accounted for: it is mostly scrambling of DPs or other phrases. In the structure shown in (47) an AdvP is located higher than the supposed position of discourse particles. While Ormelius-Sandblom (1997) has tried to serialise (some classes) of adverbs and discourse particles, we have not yet assumed a definite order. Such a “hierarchy” might offer further insights regarding the syntax of discourse particles, especially concerning the position of their generation.

This hierarchy has been comprehensively investigated by Coniglio (2005, 2009). In addition to applying the hierarchy proposed by Cinque (1999) to German adverbs (see the Appendix in Coniglio 2005: 148ff.), Coniglio has analysed the order of several discourse particles in relation to adverbs. For this task to be successful, we have to assume a more or less fixed order of particles among each other. Establishing such a hierarchy poses some problems, since not every discourse particle can appear in all clause types and since there are incompatible combinations of particles, thus, in (53) (following Coniglio 2009: 118, ex. (49)), the order is not absolute.

$$(53) \quad \text{ja} > \text{denn} > \text{doch} > \text{halt} > \text{eben} > \left\{ \begin{array}{l} \text{wohl} \\ \text{eigentlich} \end{array} \right\} > \left\{ \begin{array}{l} \text{auch} > \text{einfach} \\ \text{eh / sowieso} \end{array} \right\} >$$

$$\left\{ \begin{array}{l} \text{nur} \\ \text{DOCH} \end{array} \right\} > \text{schon} > \text{ruhig} > \text{mal}$$

$$\left\{ \begin{array}{l} \text{nur} \\ \text{DOCH} \end{array} \right\} > \text{bloß} > \text{JA}$$



Combining Cinque's hierarchy of adverbs with the order of discourse particles in German, Coniglio (2005: 119) discovers that the order shown in (53) is more or less a subset of the order of adverbs. This means that the whole order in (53) fits into the array of functional projections proposed by Cinque (1999). See (54) for an illustration of this (following Coniglio 2009: 129):

- (54) [ *ehrlich* Mood<sub>speech act</sub> [ *glücklicherweise* Mood<sub>evaluative</sub>  
 [ *offensichtlich* Mood<sub>evidential</sub> [ *vermutlich* Mood<sub>epistemic</sub> ...  
 [ *normalerweise* Asp<sub>habitual</sub> [ *wieder/nochmals* Asp<sub>repetitive(I)</sub> ...<sup>5</sup>

This structure is basically the same as the one shown in (50). Testing the positions of various discourse particles (*ja*, *schon*, *wohl*), Coniglio (2005) found out that the node Asp<sub>repetitive(I)</sub> is the lower limit for the position of discourse particles, i.e. all discourse particles can appear preceding or following the adverbs above Asp<sub>repetitive(I)</sub>, but no discourse particle can appear below this projection.

- (55) Ich habe sie {*ja*} gestern {*ja*} vermutlich {*ja*} nochmals \*{*ja*} gesehen.  
 I have her *ja* yesterday *ja* probably *ja* again *ja* seen  
 '(You know,) I probably saw her again yesterday.'

Coniglio therefore assumes that discourse particles are part of the hierarchy that has been proposed by Cinque for adverbs across languages. This may not necessarily be a bold move. Recall that Meibauer (1994) argued that sentence adverbs and discourse particles have similar features (cf. that Cinque refers to *ja doch* as adverbs, suggesting—at least in that case—a certain similarity, see quote on p. 37, see also Ormelius-Sandblom 1997: 41, fn. 83, 84) and that—as noted above—the main difficulty in positioning discourse particles lies in the sequence of adverbs and such particles. Moreover, it has been assumed frequently that they are the result of grammaticalisation of adverbs (cf. Coniglio

<sup>5</sup>The original adverbs used by Cinque are: 'frankly', 'fortunately', 'allegedly', 'probably', 'usually' and 'again' (Cinque 1999: 106).

2005: 124, referring to Abraham 1991c, Meibauer 1994, Ormelius-Sandblom 1997, Molnár 2002, Coniglio 2005).

So while this assumption may fit the data quite well, it has quite strong theoretical implications that have to be addressed. It follows from Coniglio's analysis that discourse particles are—just like adverbs—specifiers of functional projections in IP.

Ormelius-Sandblom (1997: 41) has argued against similar analyses, because of problems with *wh* + *discourse particle* constructions, see (46). She further criticises the possibility that discourse particles are adverbs adjoined to *I'* (cf. Ormelius-Sandblom (1997: 41, fn. 84)). She argues that discourse particles appearing in certain attributes that have no IP contradict this analysis, see (56) for an example:

- (56) Der *doch wohl ziemlich angemessene* Einwand fand keine Beachtung.  
the doch wohl rather adequate objection found no attention  
'The rather adequate objection did not attract interest.'

(Ormelius-Sandblom 1997: 28, glosses and translation by A.B.)

I think that the following data provide evidence against Ormelius-Sandblom's (1997) arguments. In these cases, the particle can appear in the initial field, embedded in a DP and—more importantly—modifying an adjective (cf. Coniglio 2009: 101). Coniglio argues, following Thurmair (1989), that such DPs form a proper illocution and that the scope of the embedded particles never exceeds the DP itself, rather '[MPs] are considered as modifiers of a DP-internal element.' (Coniglio 2009: 101). This can be tested by comparing the possible interpretations of embedded particles with discourse particles in their usual position in the middle field. If Coniglio is right, we expect that the part modified by *ja* can be interpreted as known information. This is illustrated in the following examples ((58a) is similar to an example in Ormelius-Sandblom 1997: 28):

- (57) Der Einwand fand *ja* keine Beachtung.  
the objection found *ja* no attention  
'It is known that the objection did not attract interest.'

- (58) a. Der *ja* durchaus angemessene Einwand fand keine Beachtung.  
 the *ja* by all means adequate objection found no attention  
 ‘The objection that as we know is quite adequate did not attract interest.’
- b. # ‘It is known that the adequate objection did not attract interest.’

While (58b) is an acceptable utterance, it is not a possible interpretation of (58a). The particle *ja* modifies only the constituent it is part of (i.e. *der durchaus angemessene Einwand*), not the entire proposition as in (57).<sup>6</sup>

While the issue of the exact structure of such attributes shall not be addressed here, these examples show that Thurmair’s analysis of such attributes being proper illocutions seems to be right. Note also that in all examples of such constructions given in Ormelius-Sandblom (1997: 28), the particles are in fact modifying adjectives. It is also arguable to what extent these exceptions to the restriction to the middle field are relevant, since the particles seem to appear in the middle field of ‘attributive predications’ (Coniglio 2009: 101). Following Thurmair’s proposal, we can thus neglect Ormelius-Sandblom’s criticism on this point. Since *wh* + *discourse particle* constructions (see (46)) are problematic for any analysis, they shall not be a major concern here.

### The structure of discourse particles in IP

Having now removed potential obstacles for Coniglio’s assumption, we turn to the exact structure of discourse particles in the hierarchy of adverbs. Again, their phrasal status is an important aspect. Following Coniglio (2009: 122ff.), some arguments for discourse particles as heads and phrases, respectively, shall be reviewed.

Heads are not subject to topicalisation in German, i.e. they can not appear alone in the initial field, or SpecCP. Furthermore, heads can not be modified by words like *sehr*

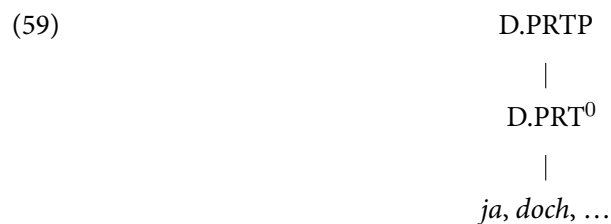
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<sup>6</sup>(58b) is rather the only possible interpretation of the following sentence:

- (i) Der angemessene Einwand fand *ja* keine Beachtung.  
 the adequate objection found *ja* no attention  
 ‘It is known that the adequate objection did not attract interest.’

‘very’ and they can not be part of coordinated structures. Coniglio further notes that the particles, being heads of functional phrases in IP should, but do not, block the movement of verbal heads.

It is therefore assumed that discourse particles are heads that ‘project an own deficient maximal phrase’ (Coniglio 2009: 124). This phrase is located in the specifier of a functional projection in IP. Following Cinque (1999), there are arguments for various landing positions between such functional projections that can host heads as well as phrases moved there. While Coniglio stresses the point that discourse particles show similarity to adverbs, it is clear that they can not be full XPs like AdvPs (cf. that movement to SpecCP is impossible). Coniglio (2009: 125) suggests the following structure of such an D.P RTP, a discourse particle phrase:



The structure in (59) accounts for the impossibility of modifying discourse particles, as there is no specifier position, and for some of their unusual characteristics. This special structure could be the result of the process of grammaticalisation from adverb to particle (cf. Coniglio 2009: 126).

### 2.3.3 Positioning discourse particles between adverbs

(55) has shown (at least for the particle *ja*) that adverbs referred to by Cinque as *repetitive* are the lower boundary for the occurrence of discourse particles. But (55) also made clear that there is not just one position for discourse particles, they can be found before and after several adverbs. This is an interesting result: while both adverbs and discourse particles have more or less fixed orders, one of these can be moved around relative to the

other. (60) illustrates this:

- (60) a. Ich möchte sie (ja schon) ehrlich gesagt (ja schon) wieder (\*ja schon) auf  
 i want her.ACC ja schon frankly ja schon again ja schon on  
 dem Photo haben.  
 the picture have.INF  
 ‘Frankly, I would rather like to have her on the picture again.’
- b. \* Ich möchte sie (ehrlich gesagt) schon (ehrlich gesagt) ja (ehrlich gesagt) wieder auf  
 dem Photo haben.
- c. \* Ich möchte sie ja ehrlich gesagt wieder schon auf dem Photo haben.

(60b,c) have the same intended meaning as (60a), but (60b) is unacceptable because of the inverted order of *ja* and *schon*, while (60c) is unacceptable because *schon* follows *wieder*, the lower boundary for discourse particles, while both the order of adverbs and the order of discourse particles kept up.

To make sense of this relative freedom of placement, there are in principle two possibilities: (a) everything is just generated in the order we see on the surface or (b) there is some kind of movement involved. Both these possibilities are of course not as simple as they sound. Looking at (b) first, we are faced with an obvious question: do the adverbs or the particles move? Ormelius-Sandblom (1997: 43ff.) argues against an account that discourse particles move, not quite convincingly, I think. She argues against movement from a lower to a higher position with the following example, where capitals indicate stress.

- (61) Peter hat den Aufsatz *doch* geTIPPT.  
 Peter has the.ACC essay *doch* typewritten  
 ‘Peter did typewrite the essay.’

(Ormelius-Sandblom 1997: 48, glosses, translation and stress by A.B.)

She argues that *doch* would have been generated in a position between the object and the verb, which seems rather unlikely. But she ends the same section with the conclusion that elements like objects that appear to the left of discourse particles have been moved

there. This is not necessarily a contradiction, but her account of movement to the left of the discourse particle does not mean that discourse particles have to be generated between the object and the verb.

Coniglio (2005) argues for such an approach based on movement. He assumes that discourse particles are all generated in the position just above repetitive adverbs and moved to their final positions from there. For this idea to be feasible, he assumes that the particles are generated in their hierarchy by adjoining each particle to the one that has to follow it (cf. Coniglio 2005: 114, Coniglio 2009: 148). Such a configuration, he argues, solves potential problems involving interfering movement operations. The movement then takes place because of reasons concerning focus and scope. Coniglio (2009) on the other hand presents a different approach, involving later covert movement on LF. This need not be addressed here, since for the purpose of this thesis, it suffices to show that the assumption of discourse particles in IP is tenable, which I hope has been satisfactorily done. I will return to the proposal of LF movement in chapter 4.

## 2.4 Conclusions and consequences

In this chapter, I gave a review of several recent analyses of the syntax of discourse particles. All of these share some characteristics, but also differ strongly in details. While Meibauer (1994) and Ormelius-Sandblom (1997) (along with many others, cf. just Abraham 1991b,c) assume that discourse particles are adjoined to VP, Coniglio (2005, 2009) argues that discourse particles are grammaticalised as weak adverbs and are generated along with adverbs in an IP that hosts a multitude of functional projections.

The idea of a hierarchy of AdvPs in the specifiers of functional projections has been put forth by Cinque (1999) who claims that this is a universal characteristic. Ideas similar to Coniglio's have been argued for by others before him (cf. Ormelius-Sandblom 1997: 41 and Grosz 2005: 70ff.). The point of this chapter was to try to show convincingly

that integrating the hierarchy of particles into the relatively high positions of adverbs is reasonable.

The consequences of this position, e.g. the need for IP-internal landing positions for the movement of elements, such as subject and object DPs, have also been mentioned. Note that the assumption that such positions are necessary was not only proposed by Cinque to consolidate his claim, but has been argued for independently (cf. (52), p. 37, with different subject positions for different readings).

Assuming that (German) discourse particles are generated and located in IP has further consequences. It has been argued that the proposal that discourse particles divide topic and focus in the German clause could rather be analysed as an epiphenomenon of the particles' position. Furthermore, it has been mentioned that languages other than those with a middle field—i.e. the Westgermanic and the Scandinavian languages—probably have discourse particles that are similar to those discussed here. This fact and Coniglio's (2009) analysis suggest that the hypothesis that discourse particles are restricted to the middle field has to be restated. It is not the case that discourse particles appear in the middle field because of its special properties, they rather do, because the German middle field includes IP, the location of discourse particles. Again, we are dealing with an epiphenomenon.

If this is true, certain hypotheses about the history of discourse particles might have to be changed as well. Both Abraham (1991b) and Molnár (2002) assume that in the history of the German language, discourse particles were not grammaticalised until the middle field emerged. However, if the assumptions discussed here are correct, the grammaticalisation of discourse particles can have taken place much earlier and did not depend on the development of the middle field.





## 3 The meaning of *ja*, *doch* and *wohl*

### 3.1 Introduction

For several reasons, a semantic investigation of German discourse particles faces bigger problems than a syntactic analysis. While all discourse particles seem to be subject to similar if not the same syntactic restrictions, formulating semantic boundaries is not as simple. While the restriction to certain positions in the clause is a syntactic aspect that affects discourse particles as a class, obviously each discourse particle has a specific meaning. Moreover, describing the specific meaning of a certain particle is sometimes a tricky task, as the particle's contribution to the computation of meaning is highly dependent on the context. As we have seen in earlier chapters, many particles can appear in different types of clauses, in which they do not necessarily convey exactly the same meaning.

Therefore, while it may be possible to define the meaning of each discourse particle properly, we might expect these results to be fuzzy: e.g., it seems clear that the discourse particle *wohl* expresses a degree of doubt regarding the proposition. But the context in which *wohl* is embedded is highly relevant, since in declaratives the uncertainty regarding the proposition lies with the speaker, while in interrogatives it lies with the addressee (see the discussion below for a more comprehensive analysis of *wohl*'s meaning). This is just one example of the difficulty of assigning a clear definition to each particle. One faces similar problems when trying to describe other discourse particles individually.

Assigning a common meaning to the class of discourse particles, however, also faces problems. Lindner (1991: 164) suggests that different approaches in research and different names (cf. *discourse* particles vs. *modal* particles vs. *epistemic* particles vs. g. *Abtönungspartikeln* ‘shading particles’) have all contributed to “the problem of establishing a unified class meaning.” (ibid.).

In this chapter, I will focus on analysing individual discourse particles rather than trying to find an adequate and unified class meaning. However, the findings regarding the particles under consideration can hopefully be applied to the discussion of other particles as well, in order to provide further insights regarding the whole class of German discourse particles.

## 3.2 The particle *ja*

### 3.2.1 The uses of *ja*

*ja* is among the most analysed of the German discourse particles. In this section, I want to give an overview of previous accounts of its meaning. Despite there being quite a few works related to the meaning of *ja*, a widely accepted formal account of its meaning has not been reached yet. One of the reasons for this might be the variety of different contexts in which *ja* can appear.

Apart from the morpheme’s obviously very different uses (e.g. in answers), some authors identify both the stressed morpheme *JA* and the unstressed morpheme *ja* as discourse particles. This adds to the confusion: while *ja* can never appear in imperatives, *JA* can, as illustrated in example (62):

- (62) a. Mach deine Hausaufgaben!  
          make your homework  
          ‘Do your homework!’

- b. \* Mach *ja* deine Hausaufgaben!  
intended: 'Do your homework!' (more aggressive than (62a))
- c. Mach *JA* deine Hausaufgaben!  
'DO your homework!'

Any imperative with *ja* is unacceptable, while the presence of *JA* can add an aggressive and threatening character to the sentence.

Yet another use of *JA* is presented by Meibauer (1994), also analysed by Ormelius-Sandblom (1997). This is illustrated in (63):

- (63) a. Fritz ist nicht verheiratet.  
Fritz is not married  
'Fritz is not married.'
- b. Fritz ist *JA* verheiratet.  
Fritz is *JA* married  
'Fritz *is* married.'

As these uses of *JA* are not intuitively connected to most other uses of the discourse particle *ja*, I will omit stressed *JA* from this analysis, like Lindner (1991) and Zimmermann (2008). The following examples shall illustrate the uses of *ja*.

- (64) a. Michael JACKson ist gestorben.  
Michael Jackson is died  
'Michael Jackson has died.'
- b. Michael Jackson ist *ja* geSTORben.  
'Michael Jackson has died, you know.'
- c. Michael JÁCKson ist *ja* gestorben!  
'Michael Jackson has died!' (surprised)

A sentence as in (64a) is good example of what Zimmermann (2008: 10) calls *breaking news*. If the information of the proposition *p* is in fact new, uttering (64b) is not felicitous. However, given the right intonation—rising intonation on the focus, marked with

capitals and a diacritic—(64c) can be appropriate in certain contexts. If the speaker is sure that the addressee does not know *p*, (64a) is felicitous, while (64b,c) are not. If the speaker himself does not know that *p* before uttering (64c), (64c) is felicitous, while (64b) is not. Thus, a surprised utterance like (64c) with *ja* rather refers to the speaker's level of knowledge, not necessarily the addressee's.

If the speaker knows or assumes that the addressee knows *p* (as does the speaker), (64b) is felicitous, while (64a,c) are not.

Looking at these three cases more closely, we see that (64a) and (64c) imply that the speaker and the addressee never have talked about *p*, i.e., in Zimmermann (2004)'s terms, *p* is not in the common ground of speaker and addressee. The common ground (or CG) is defined as “the set of propositions that seem mutually acceptable to the participants of the discourse” (Zimmermann 2004: 18, translation by A.B.; cf. also Stalnaker (1978)).

(64b), on the other hand, can only be felicitous if what is said *is* part of the CG or is assumed by the speaker to be part of the CG.<sup>1</sup>

### 3.2.2 The meaning of *ja*

These relations of shared knowledge can easily be illustrated using the sets of propositions the CG is built from. Zimmermann (2008: 9) writes:

‘A proposition *p* will be uncontroversial if a speaker assumes its content to be shared by the addressee, i.e. to be part of the common ground, or if the speaker considers the addressee to be in the possession of sufficient evidence for judging *p* to be true.’

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<sup>1</sup>For the sake of brevity, I will mostly simplify this by stating only that a certain proposition *p* is part of the CG, even if this is only assumed by the speaker, i.e. it is only part of the speaker's version of the CG. This simplification is justified by the fact that *assumptions* about the CG are enough for a sentence with *ja* to be uttered. This can lead to awkward situations, if it turns out that the addressee does not share the speaker's version of the CG. The statement, then, is actually not felicitous. I will ignore such cases and always assume that the speaker knows whether *p* is or is not part of the CG.

The following examples illustrate this definition using the proposition ‘*Michael Jackson has died.*’ and sets of other propositions. Example (65) is a variation on Zimmermann (2004: 18, (42)):

- (65) a.  $p = \text{‘Michael Jackson has died.’}$   
 b.  $CG = p, \dots, p_x, p_y, p_z, \dots$   
 c.  $p \in CG$

$CG$  is the set of propositions, the common ground, that a speaker and an addressee take for granted (cf. Zimmermann 2008). The set in (65) has multiple elements: one of these is the proposition  $p$ .

So far, without having given a formal account of *ja*’s meaning, it was assumed that *ja* refers to information that is assumed to be known by both the speaker and the addressee. Using the set theoretic view, we can say that uttering a proposition  $p$  using *ja* is felicitous if  $p \in CG$ , either from the start or because the addressee can accept  $p$  as true (see the quotation on page 50).

Apparently, if  $p$  is already present in a given  $CG$ , uttering a proposition  $p$  is not felicitous, i.e. if  $p \in CG$ ,  $p$  cannot be added to the set of propositions again. If, however it is not part of  $CG$ , because the addressee is not familiar with  $p$ ,  $p$  will be added to the set.

One of the uses of *ja* embedded in a proposition  $p$  refers to the fact that  $p$  is common knowledge, in such a way that if  $p$  is not part of  $CG$ , the utterance is not felicitous. Finally, the use of ‘surprise’-*ja* again is only felicitous if  $p$  is not part of  $CG$ . In that case, that is if the speaker has just learned that  $p$ , it is added to the set. If it is already in the set, it can not be added again. This is shown in the tables in (66) using the data from examples (64) and (65).

|      |    | Michael Jackson ist gestorben. | ‘Michael Jackson has died.’                     |
|------|----|--------------------------------|---|
| (66) | a. | $p \in CG$                     | #<br>$p$ already is part of $CG$                |
|      |    | $p \notin CG$                  | $\checkmark$ (for $H$ )<br>$p$ is added to $CG$ |

|    |               |  |                                       |
|----|---------------|--|---------------------------------------|
|    |               | Michael Jackson ist <i>ja</i> geSTORben. | ‘M.J. has died, you know.’            |
| b. | $p \in CG$    | ✓  | $p$ is in $CG$ , $p$ is referred to   |
|    | $p \notin CG$ | #  | $p$ is referred to, but not in $CG$   |
|    |               | Michael JÁCKson ist <i>ja</i> gestorben! | ‘Michael Jackson has died!’           |
| c. | $p \in CG$    | #  | $p$ already part of $CG$              |
|    | $p \notin CG$ | ✓ (for $S$ )                             | $p$ is learned by $S$ , added to $CG$ |

What is crucial in example (66) is that the different uses of *ja* change which participant’s knowledge is affected. A felicitous utterance (66b) involves the knowledge of both participants (or the possibility that the addressee can easily verify the speaker’s claim, cf. Zimmermann (2008)), while example (66c) mainly refers to the speaker’s knowledge. An analogous example with the particle *wohl* has been mentioned in the introduction to this chapter (p. 47).

Turning now to the formalisation of *ja*’s meaning, this point is a challenge for an approach that aims to account for all uses of the particle *ja* using a single formal description of its meaning.

### 3.2.3 Formalising *ja*’s meaning

#### Early approaches

One of the earliest formal analyses of German discourse particles are Doherty (1985) and Doherty (1987), both commented on by Lindner (1991). A short version of Lindner’s description of *ja* is given in (67) and Doherty’s (1985) in (68):

(67) (P1’) In using MP *ja* the speaker indicates that in his/her eyes the proposition  $p$  is not controversial. (Lindner 1991: 174)

(68) Ass ( $E_s(p)$ ) und IM ( $E_x(p)$ ) (Doherty 1985, cited by Lindner 1991: 179)

Lindner compares her own (informal) analysis to Doherty’s, referring to the latter’s formal treatment as ‘strange’ (Lindner 1991: 180), because of the following example:

(69) ... (A and B are talking about a third person's, Hans', trip to South America, who, in A's opinion, lacks the money for such a trip.)

B: Nein. Aber er hat ja was geerbt.

'No. But he's inherited some money.'

A: Ach so.—Das wußt ich nicht. (Na dann ...)

'Oh, well.—I didn't know that. (Oh, in that case ...)' (Lindner 1991: 180)

The 'strangeness' (ibid.) of this example lies in the fact that this is a case where B uses *ja* while stating a fact that A is not aware of, i.e. that is not common knowledge of A and B. But A knows of Hans' plan, so he accepts B's explanation. A's use of *ja* in this case shows that the proposition *Hans has inherited some money* is a fact that is known, albeit apparently not to B. This means that *ja* in (69) implicates that B *could* or even *should* be aware of the proposition *Hans has inherited some money*.

Such cases are accounted for by Zimmermann (2008: 9) who states that a speaker can accept a proposition (even if he does not know that it is true that *p*), if he/she can verify through the context that *p* is true. Since A in example (69) knows that Hans is going on a vacation, he/she can accept the fact that *Hans has inherited some money*.

Doherty's first analysis (given in (68)) involves both the speaker's and somebody else's ( $E_x$ ) 'attitude' (Doherty 1985). However, when using *ja* to express surprise, we have seen that the speaker can utter this without the addressee's attitude being relevant. Additionally, Lindner notes that A in example (69) is clearly not the person whose knowledge is referred to in Doherty's analysis ( $E_x$ ), since A does not know about Hans having inherited money. Doherty's revised analysis seems to capture such cases:

(70)  $IM (\diamond KNOW_h (p))$  (Doherty 1987, cited by Lindner 1991: 180)

The definition in (70) can be paraphrased as follows: When a speaker is using *ja* in his/her utterance, the addressee might know about *p*. This analysis still faces problems. While Lindner (1991: 181) acknowledges some surprised utterances fit this definition of

the speaker is assumed also to be the addressee, some are still better explained by her own analysis, see the following example:

- (71) Ich hab' ja gewónnen!  
 I have *ja* won  
 'I've won!' (Lindner 1991: 181)

Assuming that the speaker might have known that he/she has won while uttering the sentence in example (71) might be possible, but Lindner prefers her own analysis that uttering  $p$  (= (71)) at a certain time  $t$  is uncontroversial (cf. Lindner 1991: 178).

### Ormelius-Sandblom (1997)

Ormelius-Sandblom (1997: 77ff.) takes a different approach. While acknowledging that attitudes can intuitively help to characterise the meaning of discourse particles, she argues that attitudes are not actually *part* of their meaning, but are added pragmatically. Therefore, her account of *ja*'s meaning does without reference to the speaker's or addressee's knowledge. Rather, she assumes an operator FACT to account for the aspect of facticity that seems to be crucial for the meaning of certain particles, such as *ja* and *doch*. Example (72) shows her account of *ja*'s meaning:

- (72)  $\lambda p$  [FAKT  $p$ ] mit FAKT  $\in S/S$ ,  $p \in S$ ,  
 wobei  $p = e$  INST  $q$  (Ormelius-Sandblom 1997: 82)

This is paraphrased as follows:

'So the use of *ja* [...] points to the facticity of the proposition's instantiation by an actual situation, i.e. by a conceptual model of what happens.'

(*ibid.*, translation by A.B.)

What *ja* does is to stress that the proposition  $p$  in which it is used is a fact. Uttering  $p$  is allowed if  $p$  is true, according to the situation. This situation, or the circumstances that



license a certain proposition are—in my opinion—comparable to the common ground, as assumed by Zimmermann (2008) (see the earlier discussion).

We have seen in examples (66) and (69) that different uses of *ja* do not affect the speaker or the addressee equally. With a certain intonation, as in (66c), *ja* seems to affect the speaker's knowledge or attitude, while examples (69) is a case in which the addressee learns that the proposition *Hans has inherited some money* is a fact. Ormelius-Sandblom (1997: 83) argues that such 'effects [...] are to be derived from the usage of *ja*' (translation by A.B.).

By dispensing with references to attitudes or the speaker's or addressee's knowledge, her description of *ja*'s meaning seems to cover all the cases we have seen, irrespective of further—maybe purely pragmatic—consequences.

### **Kratzer (1999)**

In a short paper, Kratzer (1999) puts forth her own analysis of *ja*. She argues that discourse particles 'and other kinds of expressives are ignored in the computation of descriptive meanings [...]' (Kratzer 1999: 3), i.e. the meaning of discourse particles is computed compositionally, but crucially, not with the descriptive meaning of a sentence. She further notes in her informal account of the meaning of *ja* that the addressee might know about the proposition that the speaker utters. Her formal account is shown in example (73), *p* being the descriptive meaning of the proposition:

$$(73) \quad \lambda s (p(w_s) \ \& \ \text{might}(s)(\lambda s'(\text{knows}(s')(p)(\iota x(\text{addressee}(s)(x)))))) \quad (\text{Kratzer 1999: 4})$$

Zimmermann (2008) paraphrases this as follows:

'[...] *ja* takes a proposition *p* as argument and maps it to the set of situations in which *p* is true and in which *p* might—for all the speaker knows—already be known to the addressee.' (Zimmermann 2008: 9)

Moreover, in cases where the speaker knows that the addressee does not know *p*, the use of *ja* is not allowed, cf. example (74):

- (74) a. Webster asks Spencer: “Who did Austin marry?”  
       Spencer:  
       b. \* Austin hat *ja* Ashley geheiratet.  
           Austin has *ja* Ashley married  
           ‘Austin married Ashley.’ (Kratzer 1999: 4)

In addition, Kratzer shows various effects relating to scope and variable binding. She argues that ‘the scope of *ja* is determined by the same syntactic principles as the scope of other sentential adverbs’ (Kratzer 1999: 3) and that ‘[o]ther expressives in the scope of a discourse particle are ignored in the computation of the expressive meaning contributed by that particle.’ (ibid.). This means that for combinations of discourse particles, Kratzer argues that each particle’s expressive meaning is computed independently of any others, cf. the following example:

- (75) a. Sie muss *ja doch* ihre Zwillinge versorgen.  
       she must *ja doch* her twins take.care.of  
       ‘She must take care of her twins.’  
       b. Ingredients for expressive meaning:  
       { *ja* (she must take care of her twins), *doch* (she must take care of her twins) }  
       (Kratzer 1999: 3f.)

### **Gast (2008)**

A final account of *ja*’s meaning shall be presented briefly, before turning to the conclusion of this section. Gast’s analysis of four German discourse particles is in some ways different to the approaches discussed so far. His analysis is rooted in Relevance Theory (cf. Sperber and Wilson 1986), i.e. a pragmatic theory. Rather than analysing the meaning of discourse particles, Gast tries to examine their use. Basically, Gast’s method is to

analyse how a proposition  $p$  with discourse particles ‘fits’ into a context  $C$  and what the effects of their use are. Such contexts are sets of propositions (cf. Gast 2008: 8 and the CG). He further tries to classify the particles he is discussing using certain parameters:

|              | context-consistent | non-context-consistent |                |
|--------------|--------------------|------------------------|----------------|
| (76) factive | <i>ja</i>          | <i>doch</i>            | (Gast 2008: 5) |
| non-factive  | <i>wohl</i>        | <i>etwa</i>            |                |

The parameter ‘facticity’ obviously refers to the aspect of stating that something is a fact, while the parameter ‘consistency’ is related to similar propositions in the context, more precisely to affirming or replacing a certain proposition in the context (see the section on *doch* for further discussion). According to (76), then, *ja* is a *factive* and *context-consistent* discourse particle, i.e. it suggests that  $p$  is a fact and it does not overwrite a proposition  $\neg p$  in the context with  $p$ .

Gast analyses utterances as ‘update functions’ (Gast 2008: 8), that take one context as their input and produce another context as their output. This can easily be illustrated with a simple example.

- (77) A: Is Jane married?  
 B: No. (Gast 2008: 8)

For A, who does not know whether Jane is married or not, Gast assumes that in ‘his’ context (the input context,  $C_i$ ) there is a hypothesis (cf. Gast 2008: 5) of the form ‘Jane is married  $\vee$  Jane is not married’. B’s answer to A’s question reduces this to a fact, namely that ‘Jane is married’. That is, the context (or common ground) has been updated.

Turning to *ja*, Gast calls its function a ‘trivial update’ (Gast 2008: 10), i.e. the context is not actually updated, because no proposition is added or changed in the set. Having seen that *ja* often indicates that the proposition is not new information, this is not surprising.

What is the use of *ja*, then? It seems to activate a piece of information it is referring to, in order to make it relevant in the discourse. In addition, Gast argues that the use of *ja* can ‘strengthen existing suppositions or trigger “contextual implications”’:

- (78) Kannst du mir 1000 Euro leihen? Du bist *ja* mein Freund.  
can you me 1000 euro lend? you are *ja* my friend  
'Can you lend me 1000 euros? You're my friend after all.' (Gast 2008: 11)

*ja* in example (78) does not change the context (or common ground), since both participants are aware of the fact that they are friends (more precisely, that the addressee is the speaker's friend). So it is really a trivial update. But uttering 'Du bist *ja* mein Freund', Gast argues, 'make[s] background assumption explicit' (Gast 2008: 11), namely that friends lend each other money.

The surprised use of *ja* can be analysed similarly, according to Gast. While stating a sentence like (79), a fact that is obvious to both the speaker and the addressee (and possibly others) is, again, made explicit (*ibid.*) or, put differently, a known proposition is activated in the discourse.

- (79) Du bist *ja* betrunken!  
you are *ja* drunk  
'Oh, you're drunk!' (Gast 2008: 11)

While Gast's analysis of *ja* in assertions ((78)) and surprised statements ((79)) seems to be correct, his account of stressed *JA* in imperatives and *ja* in monologues is not as convincing:

- (80) a. Gib mir *JA* mein Buch zurück!  
give me *JA* my book back  
'Return my book!'  
b. (thinking:) Heute ist *ja* mein Geburtstag!  
today is *ja* my birthday  
'It's my birthday!' (Gast 2008: 11)

Gast argues that in example (80a), the addressee is aware of the proposition 'You have to return my book to me' (*ibid.*) and the speaker's statement is a reminder of that fact. As noted before, it is hard to find a semantic connection between stressed and unstressed *ja*, and while Gast's explanation may be accurate, I doubt that a statement like (80a) is just

a reminder, since using *JA* always turns an imperative into a (more aggressive) warning. Likewise, Gast's explanation of example (80b) seems inaccurate. He states that the fact that it is the speaker's birthday is clear, but stating (80b) 'may give an explanation for some state of affairs ('Why is there a cake on the breakfast table?')' (ibid.). Maybe this inaccuracy is due to example (80b)'s overall awkwardness.

A different monologue, like (71) ('I've won!'), might fit this explanation better. Gast could still argue that stating 'I've won!' is an explanation for a state of affairs, but I think that it suffices to state that such a surprised statement is making an obvious proposition explicit.

### 3.2.4 Conclusion—attitudes or no attitudes?

Before discussing all findings of this chapter extensively, a few points regarding the different approaches to the meaning of *ja* shall be made. The analyses given in this section can be divided into two types. First, analyses that include references to the speaker's or addressee's level of knowledge and second, those that do not. The only analysis I have discussed that omits references to speaker or addressee is Ormelius-Sandblom's account of *ja*.

This is due to the fact that Ormelius-Sandblom (1997: 76f.)—as noted—argues against discourse particles like *ja* and *doch*<sup>2</sup> representing attitudes. Her first point is related to the number of attitudes expressed by each MP. The case of multiple attitudes with one discourse particle is illustrated with the following example (taken from Helbig 1988)

- (81) a. Es ist *ja* heute kalt!  
it is *ja* today cold  
'Oh, it's cold today!'
- b. Arbeite *já* fleißig! (sonst wirst du die Prüfung nicht bestehen)  
work *já* studiously (otherwise will you the exam not pass)

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<sup>2</sup>Ormelius-Sandblom (1997) also includes the discourse particle *schon*, which is left out here.

‘Do work hard! (or you won’t pass the exam)’

(cited by Ormelius-Sandblom 1997: 76, glosses and translation by A.B.)

*ja* (unstressed in (81a), stressed in (81b)) does different things in these examples. The first case is a surprised utterance, the second use of *ja* is a ‘strong’ imperative. Ormelius-Sandblom’s main point of criticism is that the mechanisms choosing the right attitude for each context are not clear and depend on ‘context and intonation’ (ibid.).

As Ormelius-Sandblom (1997: 76f.) argues, resorting to only one attitude does not necessarily make things easier, since *one* has to be chosen. Ormelius-Sandblom opposes this approach. First, the etymology of the particles she discusses does not give clues about any similar attitude as with some adverbs like *vermutlich* ‘presumably’ and associated nouns like *Vermutung* ‘presumption’. Her second argument is similar. She states that discourse particles can not be referenced as adverbs like *vermutlich* can, illustrated as follows:

(82) a. A: Anna wird *vermutlich* morgen nach Hause fahren.

‘Anna will presumably go home tomorrow.’

B: Warum vermutest du das?

‘Why do you presume that?’

b. A: Anna wird *ja* morgen nach Hause fahren.

‘Anna will go home tomorrow, you know.’

B: Warum Vst du das? [...]

‘Why do you V that?’ (V being a verb)

(Ormelius-Sandblom 1997: 76, translation by A.B.)

Ormelius-Sandblom (1997: 77) further criticises Lindner’s definition of *ja*, which states that ‘in using MP *ja* the speaker indicates that in his/her eyes the proposition p is not controversial’ (Lindner 1991: 174, cf. Ormelius-Sandblom 1997: 77). Her criticism refers to the following example:

(83) A: Da kann Karin beim Umziehen helfen!

‘Karin can help with the move.’

B: Nein. Sie ist *ja* verreist.

‘No. She’s travelling.’ (Ormelius-Sandblom 1997: 77, translation by A.B.)

Ormelius-Sandblom argues that since B is contradicting A, the proposition ‘*Karin is travelling*’ is controversial, since A just assumed the opposite to be true.

The aim of assuming that discourse particles do not convey attitudes is to reduce the meaning of *ja* (and others) to a minimum, leaving pragmatics out of its meaning. But, each of Ormelius-Sandblom’s examples can be criticised as well and, moreover, her approach is not as different after all.

Her first point about what number of attitudes a discourse particle can represent (see example (81)) is a problem for any description of *ja*’s meaning. The two uses illustrated in (81) are very different, so that no explanation has been fully convincing (see the discussion of Gast 2008). Ormelius-Sandblom probably seeks to describe *ja*’s meaning in a simple way, so that the more aggressive feeling of the imperative shown in (81b) is merely added by other mechanisms, taking pragmatics, intonation, etc. into account. But it is still hard to see how to incorporate the notion of facticity into an order as in the example discussed.

Her second point (see example (82)) is not very convincing, since *ja* and *vermutlich* have very different meanings. Using the particle *wohl*, which will be discussed later, this example loses its explanatory power to a certain extent. While it is clearly not possible to take up the lexical item (the adverb) and use it as verb (derived from a particle), it is still not at all out of place to use the verb *vermuten* ‘presume’ if the particle *wohl* is used.

(84) A: Anna wird *wohl* morgen nach Hause fahren.

‘Anna will presumably/probably go home tomorrow.’

B: Warum vermutest du das?

‘Why do you presume that?’

Ormelius-Sandblom's point might be justified so far as the contrast in (82) becomes stronger if *vermutlich* is stressed. Since this is not possible in the same manner with discourse particles, taking up the exact lexical item in such a case is more common. Still, *Warum vermutest du das?* is far from being the only possible utterance in reaction to the utterance of A in (82) and (84).

Her final point is about the level of controversy that a proposition used with *ja* conveys. Most authors agree that a proposition *p* used with *ja* is not controversial. Lindner (1991), who Ormelius-Sandblom refers to, does the same. Example (83) represents a dialogue, in which B contradicts A using *ja* in his/her statement, i.e. A's apparent assumption that  $\neg p$  is contradicted by B's stating that *p*.

In this case, Ormelius-Sandblom just misses Lindner's point. Lindner (1991: 174) states explicitly that a proposition has to be uncontroversial in 'his/her eyes', i.e. the speaker's eyes. B, knowing that his/her utterance is true (a fact), can utter *p*, even if it seems that A is not aware of *p*. In this case, maybe by further implicature, B's utterance suggests to A that *p* is a fact that could or should be known to him/her (cf. example (69), p. 53).

Can we now easily answer the question whether the meaning of discourse particles incorporate attitudes or not? Some of Ormelius-Sandblom's points are justified and her approach of a small account of *ja*'s meaning is useful, but instead of referring to the speaker's and the addressee's attitude, she inserts a further operator FAKT to her description. This is a good idea from a diachronic point of view, since the presence of this operator easily accounts for the fact that the particles *ja* and *doch* retain some of the semantics of the morphemes from which they emerged (which are both affirmative).

Ormelius-Sandblom (1997: 80) also acknowledges that assuming certain attitudes that are conveyed by discourse particles is very intuitive. The following quote further shows that it is hard to completely eliminate the speaker's thoughts from this discussion:

'In other words, we can assume that a speaker characterises the relation between



propositions, i.e. descriptions of circumstances, on the one hand and [the relation between propositions] and his beliefs about the world, on the other hand, with these MPs.’ (Ormelius-Sandblom 1997: 80, translation by A.B.)

To conclude, I believe that completely eliminating speaker’s and addressee’s attitudes from the meaning of discourse particles is not necessary, because, first, it is—as shown in this section—hard to accomplish to arrive at a clean and short description and, second, it is maybe a bad move, because it seems to me that the involvement of the attitudes of speaker and addressee might be the common denominator of different particles’ meaning. This is also an area where semantics and pragmatics are very close, which complicates things even more.

#### 3.2.5 Relative clauses

As briefly mentioned in chapter 1, the presence of the discourse particle *ja* can change restrictive relative clauses to non-restrictive relative clauses, given the right requirements. This has been illustrated by a few examples (cf. (35)-(37), p. 17).

There seems to be a similar phenomenon with what one may call restrictive attributes. In example (56) and the discussion referring to it, it has been shown that discourse particles can not only be embedded in clauses, but also in attributes. I think that restriction effects with such attributes can parallel the phenomena witnessed with relative clauses. See the following examples with the relevant attributes printed in *italic*.

- (85) a. Die *erst vor kurzem erschienenen* Produkte ...  
the not until recently released products  
‘The products that have been released only recently’
- b. Die *ja erst vor kurzem erschienenen* Produkte ...  
the *ja* not until recently released products  
‘The products which—as you know—have been released only recently’

Imagine one of the two DPs in example (85) as an answer to a question like the one in (86a). For comparison, the analogous relative clauses are also shown.

- (86) a. Welche Produkte müssen ausgetauscht werden?  
 which products must replaced become  
 ‘Which products have to be replaced?’
- b. Die erst vor kurzem erschienen Produkte sind betroffen.  
 ‘The products that have been released only recently are affected.’
- c. Betroffen sind die Produkte, die erst vor kurzem erschienen sind.
- d. # Die *ja* erst vor kurzem erschienen Produkte sind betroffen.  
 intended: ‘The products, which—as you know—have been released only recently, are affected.’
- e. # Betroffen sind die Produkte, die *ja* erst vor kurzem erschienen sind.

In the previous discussion of discourse particles that are embedded in DPs (see p. 40) it has been stated that the scope of these particles is restrained to the DP itself. Also, for a proposition with *ja* to be licit, the information conveyed in that proposition has to be known.<sup>3</sup> This might account for the unacceptability of the answers with *ja* in examples (86d,e).

These two facts suggest that for an attribute or a relative clause with *ja* to be acceptable, their propositional content has to be given information. To provide a definite explanation for this phenomenon goes beyond the scope of this thesis, but I want to sketch a proposal.

It seems that discourse particles in general are not compatible with restrictive relative clauses or restrictive attributes as shown in the examples above. If this is true, one approach to explain this lies with focus. As shown in the introductory chapter, discourse particles can not be focused. The semantics of restrictive relative clauses, however, seem to require some sort of focus. This focused or in a way “new” information is furthermore incompatible with the meaning of *ja* especially. For other discourse particles, it might

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<sup>3</sup>This phrasing might be simplifying the actual facts, cf. e.g. example (69) and the following discussion, where *ja* is assumed to signal that the addressee could or should be aware of the information given.

simply be impossible to be part of a focused structure like a restrictive relative clause or a restrictive attribute.

### 3.3 The particle *doch*

#### 3.3.1 The uses of *doch*

The particle *doch* has more uses than *ja*, Lindner (1991) lists the following: (a) assertions, (b/c) (two types of) exclamations, (d) directives, (e) w-expressives, (f) assertive questions and (g) deliberative wh-questions. An example for each is given in (87) (all examples from Lindner 1991, glosses by A.B.):

- (87) a. Du gehst? Es gibt *doch* Erdbeeren.  
 you go there gives *doch* strawberries  
 ‘Are you going? There are strawberries.’ (Lindner 1991: 182)
- b. Mannomann, dás ist *doch* ein Handwerker!  
 man that is *doch* a mechanic  
 ‘Good grief, a fine skilled worker he is!’ (184)
- c. Sägt der sich *doch* in den Daumen!  
 saws he himself *doch* in the thumb  
 ‘Goes and cuts his thumb with a saw!’ (ibid.)
- d. Nehmen Sie *doch* noch ein Plätzchen.  
 take you *doch* another biscuit  
 ‘Do have another biscuit.’ (186)
- e. Wenn *doch* nur die Sonne schiene!  
 if *doch* just the sun shine.CONJ  
 ‘If only the sun would shine!’ (187)
- f. Du kommst *doch* heute abend?  
 you come *doch* today evening  
 ‘You are coming this evening, aren’t you?’ (188)
- g. Wie hieß er *doch* noch? —Ado?—Arno?—Arndt. Jetzt hab’ ichs.  
 how was-called he *doch* still? Now have I-it.CLIT

‘[...] What was his name again? [...] Oh, I’ve got it—Arndt.’ (ibid.)

It is quite obvious that these uses of *doch* vary. In addition, *doch* can also be stressed (see *ja*) while intuitively retaining its meaning, i.e. the difference between stressed and unstressed *ja* is bigger than between stressed and unstressed *doch*. Still, I shall concentrate mainly on the use of *doch* in assertions, see (87a), discussing the other uses less extensively. Once again, it is an important question if it is possible to find a *single* semantic description that fits all of *doch*’s uses in different sentences.

### 3.3.2 The meaning of *doch*

In her comprehensive study on the history of German discourse particles, Hentschel (1986: 87) notes that in Old High German (OHG) and later stages of German ‘adversativity’ is an aspect of *doch*’s meaning. While Hentschel’s account is not formal in any way, she argues for this with a few examples, two of which are shown in (88):<sup>4</sup>

- (88) a. múater ist si máru, joh thíarna thoh zi wáru  
 ‘Mutter ist sie die berühmte, und Jungfrau doch zuwahr’  
 ‘She is the famous mother, but still a virgin.’  
 (Hentschel 1986: 94, translation by A.B.)
- b. ...inti batun inan thaz sie thoh tradon sinis qiuuates ruortin ...  
 (und baten ihn, daß sie doch einen Faden seines Gewandes berührten)  
 ‘and they asked him, that they could just touch one thread of his garment.’  
 (Hentschel 1986: 90, translation by A.B.)

The presence of an adversative component in *doch*’s meaning is not surprising, since the particle *doch* is assumed to have developed from the adversative conjunction *doch* through grammaticalisation (cf. Hentschel 1986, Abraham 1991c, Molnár 2002). The particle’s adversative meaning is weakened over the course of this process. The similarity

<sup>4</sup>Hentschel does not provide glosses; given my lack of knowledge of OHG, I will only supply a translation.

is however quite apparent in example (88a), where there is an obvious contradiction between being a mother and being a virgin. Whether the interpretation of a sentence like (88a) works via implicature is not discussed by Hentschel.

In example (88b), *doch* is more similar to the modern German particle and the contradiction is more subtle. Hentschel analyses this appearance of *doch* as expressing the difference between the reality of not touching the garment and the wish to do so (Hentschel 1986: 90).

This weakened sense of adversativity conveyed by the particle *doch* is also present in the examples by Lindner (1991), shown in (87). In example (87a), the adversativity or the ‘contradiction’ we look for lies in the fact that the addressee is not expected to leave, because there are strawberries for tea, i.e. it is possible that the speaker tries to implicate some proposition like *If there are strawberries, one does not leave.* or, maybe in a more abstract manner, *One does not leave, if there is a special occasion (whatever that special occasion might be).* I do not agree, however, with Lindner (1991: 182), who is giving three possible answers to the utterance (87a), that only one of these is appropriate.

In uttering (87a), the speaker expects the addressee to have the same assumption as him or her, but the addressee can nevertheless dismiss this. Note that this reasoning is akin to the reasoning seen in the section covering *ja* and that—again—turning to the concept of the Common Ground might be reasonable. Before turning to the formalisation of *doch*’s meaning, I want to point out how Hentschel’s assumption about the notion of adversativity in *doch*’s meaning is more or less apparent in the other examples shown in (87).

The first exclamation, (87b), *Das ist doch ein Handwerker* (‘That’s a fine skilled worker’) is an example of a less apparent contradiction. The question is, exactly what contradiction such a sentence is referring to. The reasoning seems to suggest that (87b) is referring to ‘the extraordinariness of D’s behaviour.’ (Lindner 1991: 185). The following sentence, shown in (87c) is understood as being uttered after (87b), i.e. the second utterance can

be interpreted as contrasting the first one. Therefore, uttering *Sägt der sich doch in den Daumen!* ('Goes and cuts his thumb with a saw!') is appropriate since this is not necessarily expected to happen, if the person referred to is in fact a mechanic; *doch* points out this difference.

An imperative like (87d) can be uttered to stress the fact that something is not the case, i.e. if we take the utterance *Nehmen sie doch noch ein Plätzchen* ('Do have another biscuit.') to be a proposition  $p$ , *doch* can be understood to emphasise that  $\neg p$ . Example (87e) is similar to the extent that  $\neg p$  is in a way accentuated by stating *doch p*. Similar argumentation is possible for (87f,g).

### 3.3.3 Formalising *doch's* meaning

#### Early approaches

While this non-formal manner is handy for intuitively discussing *doch's* meaning, it is not yet a full account of the meaning of *doch*. As with *ja*, there have been a few different authors who have tried to establish a formal semantic description that covers the use of the particle *doch* in various contexts, and, again analogously to *ja*, these approaches differ. I want to summarise some of these analyses in this section.

Giving five different descriptions of the usage of *doch* in various types of illocutions, Lindner (1991: 190) arrives at a 'common core' of the different uses stated as follows:

( $P_{\text{doch common core}}$ ) (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. (Lindner 1991: 190)

Given the discussion so far, we can identify the notion of adversativity being referred to in this quote by  $\alpha$  not being taken into consideration, which can also be taken as a reference to the speaker reminding the addressee to 'activate' a certain proposition in the

common ground that the speaker is referring to and that is not being considered by the addressee.

Doherty's approaches to *doch* are shown in (89a,c) with Lindner's comments to (89a) in (89b):

- (89) a. Ass' ( $E_s(p)$ ) und IM ( $neg_x(p)$ ) (Doherty 1985: 71)
- b. In using *doch* in declarative sentences the speaker asserts an attitude E (specified by the devices within the scope of *doch*) towards a state of affairs p and implies that the opposite attitude is held by some person x (specified by the non-linguistic context). (Lindner 1991: 192)
- c. IM ( $POS_h(p) \vee \neg POS_h(p)$ ) (Doherty 1987, cited by Lindner 1991: 192)

Doherty's first proposal, (89a) is stronger than Lindner's in that it explicitly refers to the opposite of a proposition *p*, which Lindner (*ibid.*) criticises as too strong a restriction, not covering all uses of *doch*, as illustrated in (90), a dialogue between D and B:

- (90) D: Du, da gab's *doch* mal 'n Flohzirkus aufm' Oktoberfest. Gibt's den noch?  
 'Hey, didn't there use to be a flea circus at the oktoberfest once? Is it still there, d'you know?'  
 B: Weiß ich nicht. War lange nicht mehr da.  
 'No idea. It's ages since I've been there.' (Lindner 1991: 183)

Lindner's formulation that a  $\alpha$  is not taken into consideration fits this dialogue better than Doherty's approach assuming the opposite of a proposition. It is not very probable that the speaker, D, tries to refer to the common assumption that there is no flea circus at the Oktoberfest. Lindner (1991: 192) refers to *doch* in this example as an 'introductory utterance', I believe that means that *doch* is used to remind the addressee of the proposition.

Doherty's revised approach, (89c), is weaker, stating that the 'common denominator is the speaker's assumption about the hearer's evaluation of p, which he considers to be

(possibly) opposite to his own.’ (Doherty 1987, cited by Lindner 1991: 192). Still, this proposal seems too strong to me and, more importantly, seems to miss the point of using *doch* in utterances like (90).

In that example, D wants to know if a certain flea circus that he or she remembers from the Oktoberfest is still there. This is split into two sentences. First, the speaker establishes that he or she remembers there being a flea circus, second, he or she asks whether the addressee knows if it is still there. Following Doherty’s proposal, we would expect the speaker to assume that the addressee is (possibly) opposed to the proposition of his or her utterance. In that case, however, why would the speaker bother to ask the addressee at all? If D assumed B to (possibly) believe that  $\neg p$ , why would he or she try to verify if the information is correct?

Lindner seems to be right with her assumption that *doch* is used to refer to a certain  $\alpha$  (a proposition) that is not considered by the addressee. Another indication that this might be correct (at least for this example) is that *doch* in (90) can be substituted by *ja*, still resulting in an acceptable sentence, shown in (91):

- (91) D: Du, da gab’s *ja* mal ’n Flohzirkus aufm’ Oktoberfest. Gibt’s den noch?  
 ‘Hey, didn’t there use to be a flea circus at the oktoberfest once? Is it still there, d’you know?’  
 B: Weiß ich nicht. War lange nicht mehr da.  
 ‘No idea. It’s ages since I’ve been there.’ (cf. Lindner 1991: 183)

In this case, the meaning of *ja*, discussed in the last section, suggest that *ja* is used to remind the addressee of a certain proposition in the common ground between the speaker and the addressee. I think that *doch* is used similarly in this case. Note that this substitution is not at all possible in every case, either yielding unacceptable sentences or changing the meaning:

- (92) a. \* Du kommst *ja* heute Abend?  
 you come *ja* today evening



intended: ‘You are coming this evening?’ (cf. Lindner 1991: 188)

- b. # Sägt der sich *ja* in den Daumen!  
saws he himself *ja* in the thumb

intended: ‘Goes and cuts his thumb with a saw!’ (cf. Lindner 1991: 184)

Given these findings, Lindner’s analysis of *doch* seems weak enough to cover many different cases, including utterances that might be expressed very similarly by the use of *ja* instead of *doch*, while Doherty’s analysis seems too strong to account for all possibilities.

It seems like these two analyses cover a spectrum of meaning that *doch* can exhibit, ranging from a reminder of something being in the common ground (cf. (90)), similar to *ja* to uses where it really seems to imply the opposite of the proposition uttered (cf. 87e). Again, a major difficulty in assessing the meaning of a discourse particle, *doch* in this case, is the variety of similar meanings it can express.

One could argue that Lindner’s description of the common core of all of *doch*’s meaning, cf. p. 68, can not only cover the uses of *doch*, but also many uses of *ja*, which is not really a desired result. While both particles can be used in similar cases, there is still a semantic difference, which Lindner’s generalised account of *doch* fails to predict.

#### **Ormelius-Sandblom (1997)**

Ormelius-Sandblom’s (1997) account of *doch*’s meaning is similar to her analysis of *ja*, but more complex. She (also) argues that the affirmative use of the particle *doch* is accompanied by reference to the opposite of the proposition *p* that is uttered, i.e. ‘this proposition has to be referred to in the meaning of *doch*’ (Ormelius-Sandblom 1997: 83). She illustrates this with an example showing a typical use of the particle *doch* ((93a)), her account of *doch*’s meaning is shown in (93b). Note the similarity to the meaning of *ja*, as shown in (72).

- (93) a. A: Patrik ist nicht zu Hause.  
‘Patrik is not at home.’

B: Aber sein Auto ist *doch* da.

‘But his car is here.’ (Ormelius-Sandblom 1997: 83, translation by A.B.)

b.  $\lambda p$  [FAKT  $p$ ]

IMPLIKATUR [ $\exists q [q \rightarrow \neg p]$ ]

mit FAKT  $\in S/S$ ,  $p \in S$ ,  $q \in S$ , wobei  $p = e$  INST  $r$  (ibid.)

So Ormelius-Sandblom (1997) obviously refers to the negation of the proposition uttered, via conventional implicature. This fits a sentence like the one in example (93a) very well: A utters his belief that a person called Patrik is not at home. Person B does not believe this, since he or she is seeing Patrik’s car. Now, given *doch*’s meaning in (93b), B takes Patrik’s not being home to imply that his car is gone as well, but since the car is here, B utters ‘*Aber sein Auto ist doch da.*’

Ormelius-Sandblom (1997: 84) is further referring to an analysis by König (1995), who argues that ‘the entities that contradict each other are of different types’ (ibid.). Note that Hentschel (1986) argued for a similar analysis with regard to example (88), where she states that the contradiction that *doch* is referring to is between reality and the wish expressed by the utterance. Ormelius-Sandblom (1997) prefers an analysis where the contradiction that is inherent to the use of *doch* simply lies in the conflict between a proposition  $p$  and its negation  $\neg p$ .

However, as we have already seen—cf. Lindner’s (1991) criticism of Doherty (1985)—, assuming the presence of both  $p$  and  $\neg p$  in the meaning of *doch* may be hard to justify in some cases.

### Zimmermann (2008)

Zimmermann (2008) agrees with Lindner to a certain degree, as he does not assume the negation of a proposition to be necessary to be a necessary part of the meaning of *doch*. He rather refers to propositions that the speaker assumes not to be activated with the addressee, i.e. some information that ‘the addressee may have (temporarily) forgotten

about [or that the addressee] may think [...] false' (Zimmermann 2008: 11).

Zimmermann illustrates this with the following example:

- (94) Er fährt, und *doch* trinkt er.  
He drives and PRT drinks he  
'He drives, but still he drinks.' (Zimmermann 2008: 12)

Zimmermann (2008) argues that the phrase *Er fährt* ('He's driving a car') implicates that the person we are referring to does not drink (i.e.  $\neg p$ , if we assume  $p = \text{He's drinking}$ ). What *doch* does in example (94) is to activate a proposition  $p$  (*He's drinking*) in a context where it normally wouldn't be active.

A consequence of this is that in cases where a proposition  $p$  is already activated in the discourse, it is impossible to do so by using *doch*, see the following example:

- (95) A: I'm off, even if there's beer.  
B: #Du gehst? Es gibt *doch* Bier.  
'You're leaving? But there's beer.' (Zimmermann 2008: 12, translation by A.B.)

However, the presence of *doch* just worsens B's answer, even without *doch* this would hardly be a felicitous utterance.

#### **Gast (2008)**

As briefly discussed earlier and shown in the table in (76), Gast (2008) analyses *doch* as a factive discourse particle, just like *ja*, but as non-context-consistent, i.e. it is used to change existing assumptions about information.

In some cases, the similarity of these two particles can be shown by replacing *doch* with *ja*  $\neg(\neg p)$  in some uses, see the following example by Gast (2008):

- (96) A: Leihst du mir Geld?  
'Can you lend me some money?'  
B: Nein.

‘No.’

A: Warum nicht? Du bist doch mein Freund!

‘Why not? You’re my friend, after all’

A’: Warum nicht? Es ist ja nicht so, dass du nicht mein Freund bist!

‘Why not? It is not the case, after all, that we’re not friends.’

(Gast 2008: 13, translation by A.B.)

Obviously, the use of *doch* refers to the assumption that friends lend each other money. B’s answer to A’s request is—from this point of view—unexpected, therefore B uses *doch* (or  $\neg ja \neg p$ ) to emphasise A and B’s being friends, in order to remind B that friends do lend each other money.

In Gast’s (2008) terms, this relation between the context and *doch* can be put as follows:

‘The difference between *ja* and *doch* is that in the case of *doch*, the complement of P ( $\neg P$ ) is also in the propositional background, in so far as it seems to be taken for granted by the hearer, though not by the speaker. In other words, there is a contradiction or inconsistency in the hearer’s inferential system.’

(Gast 2008: 13)

In Gast’s (2008) model, based on context-updating functions, *doch* then modifies contexts that contain contradictions with contexts that do not. Such contexts have resolved the contradiction and contain a fact based on the contradiction, i.e.  $*(P \vee \neg P)$  is replaced by  ${}^T P$  (Gast 2008: 13).

Gast (2008: 14) also analyses *doch* in imperatives, see example (97):

(97) Setz dich    doch!  
      set    yourself *doch*  
      ‘Do sit down!’

(Gast 2008: 14, glosses and translation by A.B.)

Following Gast, the use of *doch* in this case resolves the contradiction whether to sit down or not to sit down. In the context of somebody (the addressee) entering someone

else's (the speaker's) house, for example, and the speaker uttering a sentence like (97), this analysis seems appropriate.

Also, Gast is referring to 'reminding *doch*' (Gast 2008: 12). This is the use of *doch* that was illustrated in example (90) (p. 69) where the particle is used to remind the addressee of the proposition *doch* is in embedded in. See the following example for illustration:

- (98) Da war doch neulich der schwere Unfall auf unserer Straße. [...]  
there was *doch* the other day the grave accident on our street  
'The other day, there was this massive accident on our street.'

(Gast 2008: 12, glosses and translation by A.B.)

Gast (2008: 12) assumes that *doch* is licit in this case, because it is used to remind the addressee that he or she is aware of the proposition uttered. This sounds very close, if not identical, to the use of *ja*.<sup>5</sup> Gast further states that 'reminding *doch* "prophylactically" prevents an answer of the type "I don't know what you're talking about"' (Gast 2008: 12). This implies that either the speaker, when using *doch*, knows that the addressee is aware of the proposition uttered or that he or she does not care whether the addressee knows about it.

But this means that that a sentence like (98) is not uttered, because the addressee is *not* thinking about the contradiction whether there had been an accident or not, it rather seems that certain information that is or should be known to the addressee is referred to by the speaker. In cases like example (98), an analysis involving the quite strong notion of negation ( $p$  and  $\neg p$ ) faces problems.

Gast is aware of this fact and states that

'I will therefore assume in the following that *doch* is generally associated with a contradiction or inconsistency, even though this aspect of meaning is not easily recoverable in all cases.'

(Gast 2008: 12)

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<sup>5</sup>Example (98) is another sentence where *doch* could be replaced with *ja*, while having a very similar meaning. Note that this is only possible for one intonation pattern, uttering the sentence in (98) as a declarative. With other intonation patterns, the use of both particles is not possible.

Again, this shows the problem of integrating the different uses of a single particle with one semantic description. The following section shall briefly review the problems encountered in the different analysis of *doch*'s meaning.

### 3.3.4 Conclusion

To sum up, the analyses of *doch* shown in this section seem to take two possible approaches. On the one hand, Lindner (1991) assumes that *doch* is merely used to refer to a proposition that is not active in the context, while on the other hand, Ormelius-Sandblom (1997) and Gast (2008) argue that *doch* is used to express that uttering '*doch p*' is used to make sure that the opposite  $\neg p$  is not true, while *p* is.

Gast (2008) noted that an utterance '*doch p*' can sometimes be substituted by '*ja* $\neg(\neg p)$ ', as shown in example (96). This might be a formal logical argument for the presence of the expression  $\neg p$  in the meaning of *doch*. However, this substitution is not possible in all cases. Take Gast's example of what he calls 'reminding *doch*', repeated here as (99a). In this case, the substitution is not possible, as shown in (99c).

- (99) a. Da war doch neulich der schwere Unfall auf unserer Straße. [...]  
 there was *doch* the other day the grave accident on our street  
 'The other day, there was this massive accident on our street.'  
 (Gast 2008: 12, glosses and translation by A.B.)
- b. Da war *ja* neulich der schwere Unfall auf unserer Straße.  
 'The other day, there was this massive accident on our street.'
- c. # Es ist *ja* nicht so, dass neulich nicht der schwere Unfall auf unserer  
 it is *ja* not so that the other day not the grave accident on our  
 Straße gewesen wäre.  
 street been was.CONJ  
 intended: 'You know, it is not the case, that there wasn't a massive accident on our  
 street.'

Note that while example (99c) is perfectly acceptable, its meaning is not the same as the meaning of example (99a). It seems that in this case, the speaker's assumption that the addressee is thinking  $\neg p$  is too strong.

Ormelius-Sandblom (1997: 11, 75ff.) argues that assuming 'slim' semantics for discourse particles, with their consequences for pragmatics (i.e. their use) being derived via other mechanisms, is preferable to semantics integrating all kinds of pragmatic factors. Consequently, however, the account of a particle's meaning should hold in *all* cases, while differences in its use are derived by different factors. This means that the meaning assigned to a certain particle should be obvious in every case it is used. Therefore, assuming an expression  $\neg p$  to be part of *doch*'s meaning may be problematic, since its presence is not at all obvious in every use of *doch*.

Pragmatic factors should not remove any aspect of the particle's meaning, they should rather complement it. Therefore I think that taking  $\neg p$  to always be present in a semantic description of *doch*'s meaning is too strong an assumption.

In sentences, where *doch* is stressed, Ormelius-Sandblom's (1997) account of the particle's meaning seems more fitting. See example (100), where capitals mark stress:

- (100) Fahren wir *DOCH* ins Krankenhaus.  
drive we *DOCH* in.the hospital  
'Let's go to the hospital after all!'

In such cases, with stressed *doch*, the negation of the proposition  $p$  is always implicated. Uttering (100) is only felicitous, if the option of not going to the hospital (i.e.  $\neg p$ ) has been active in the context. Any addressee, even one who has just joined the discourse and is thus not familiar the earlier context always understands such an utterance as overwriting a given proposition with its negation. Therefore, stressed *doch* (or *DOCH*) seems to be a stronger version of the particle *doch*, but it is not clear whether to regard it as a discourse particle as well.

Picking up the possibility of testing for the presence of  $\neg p$  by replacing *doch* with  $ja\neg(\neg p)$ , we would expect that it is possible to replace stressed *DOCH* with the negated expression with *ja*, this however, yields unfelicitous utterances, as shown in (101).

- (101) a. Sie hat den Kuchen *DOCH* gebacken.  
 she has the cake *DOCH* baked  
 ‘She baked the cake after all.’
- b. # Es ist *ja* nicht so, dass sie den Kuchen nicht gebacken hat.  
 it is *ja* not so that she the cake not baked has  
 intended: ‘It is not the case that she didn’t bake the cake.’

Again, (101b) is completely acceptable, yet not an acceptable paraphrase of (101a). But, as shown in (102a), it is possible to formulate sentences like ‘*DOCH p*, although we believed  $\neg p$ ’, i.e. integrating the belief that a negated proposition *p* was believed into the utterance.

This seems to be impossible with both unstressed *doch*, as shown in (102b), and ‘re-minding *doch*’ (cf. (99a)), as shown in (102c).

- (102) a. Er hat den Kuchen *DOCH* gebacken, obwohl wir glaubten, dass er den Kuchen  
 he has the cake *DOCH* baked although we thought that he the cake  
 nicht bäckt.  
 not bakes  
 ‘He did bake the cake, although we believed that he did not.’
- b. # Ihr Auto ist *doch* DA, obwohl wir glaubten, dass ihr Auto nicht da sei.  
 her car is *doch* there although we thought that her car not there is  
 ‘Her car *is* here, although we thought that it isn’t.’
- c. # Da war *doch* neulich der schwere Unfall auf unserer Straße, obwohl wir glaubten,  
 dass neulich kein schwerer Unfall auf unserer Straße war.  
 ‘The other day, there was this massive accident on our street, although we believed  
 that there was no massive accident on our street.’

(cf. Gast 2008: 12, cf. (99a))

These examples show which use of ‘*doch p*’ can be complemented by the belief that  $\neg p$ . Example (102) shows that the use of unstressed *doch* is not compatible with this.



Moreover, stressed *DOCH* is not compatible with certain contexts where unstressed *doch* is used. Take example (93a), repeated here as (103a). Replacing unstressed with stressed *DOCH* yields an unfelicitous utterance. Stressed *DOCH* seems to be licit only in cases where '*DOCH p*' is used after a proposition  $\neg p$  has been uttered<sup>6</sup>.

- (103) a. A: Patrik ist nicht zu Hause.  
'Patrik ist not home.'  
B: Aber sein Auto ist *doch* da.  
'But his car is here.' (Ormelius-Sandblom 1997: 83, translation by A.B.)
- b. A: Patrik ist nicht zu Hause.  
B: #Aber sein Auto ist *DOCH* da.  
'But his car *is* here.' (cf. *ibid.*)
- c. A: Patrik ist verreist, er wollte mit dem Auto fahren.  
'Patrik went away, he wanted to take his car.'  
B: #Aber sein Auto ist *DOCH* da.  
'But his car *is* here.'

(103b,c) are not felicitous. It seems that the use of stressed *DOCH* is only possible if the opposite of the utterance with *DOCH* has been uttered. The possible implicature in these examples does not seem to suffice to license the use of stressed *DOCH*.

This suggests the possibility of *doch* referring to chains of implicatures (cf. (93b), p. 71, Ormelius-Sandblom 1997: 83), while stressed *DOCH* referring to actual opposite propositions. The following example illustrates such a chain of implicatures:

- (104) a. B: Aber sein Auto ist *doch* da.  
'But his car is here.' (Ormelius-Sandblom 1997: 83, translation by A.B.)
- b. If someone is not at home, his or her car is not there either.  
Therefore, if someone's car *is* in front of the house, the person is at home.

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<sup>6</sup>Note that we could also call the original proposition  $p$ , and the later utterance  $\neg p$ . For the present discussion, referring to the original proposition as  $\neg p$  is more convenient. Despite the unusual order of  $\neg p$  being uttered before  $p$ , this should not make any difference for the argumentation.

So B wants to say that Patrik is at home, because his car is here.

What is negated in this example is not the utterance in which *doch* is used, but the first part of the dialogue, A saying ‘Patrik is not at home’. B’s answer (that his car is here) and the implicatures following it result in A concluding that Patrik is in fact at home. While this argumentation is similar to the analysis by Ormelius-Sandblom 1997: 83, I think that the crucial part of using *doch* in a sentence like (103a) is not to negate the proposition *p* with *doch*, but rather A’s original utterance.

Given the definition in (93b), p. 71, in the dialogue between A and B about Patrik’s being home or not, Ormelius-Sandblom assumes that some proposition *q* in the context implicates that  $\neg p$ , where *p* is the utterance ‘Aber sein Auto ist doch da’.

It seems to me that implicating  $\neg p$  in this case is more or less useless, since saying *p* usually implicates anyway that  $\neg p$ . The goal would be rather to negate the utterance ‘Patrik is not at home’. That is, with two propositions *q* and *p*, if *p* as a reaction is used with *doch*, one does not want to implicate that  $\neg p$  is not true, one rather wants to stress that  $\neg q$  is true, i.e. one is contradicting the first utterance.

- (105) a. A: Patrik ist nicht zu Hause. = *q*  
           ‘Patrik ist not home.’  
        B: Aber sein Auto ist *doch* da. = *p*  
           ‘But his car is here.’                   (Ormelius-Sandblom 1997: 83, translation by A.B.)
- b.  $p \text{ doch} \rightarrow \text{IMPLICATURE} (\neg q = 1)$

In contrast, the whole point of stressing *DOCH* is to stress that the belief was held that  $\neg p$ , which is at the time of the utterance of *DOCH* *p* corrected.

- (106)  $p \text{ DOCH} \rightarrow \neg p = 0$

Note that the assumption in example (105b) suggests that at least two propositions are needed for a felicitous use of *doch*. This is not always the case, however. In wishes, like example (88b), p. 66, or (107), one proposition alone with *doch* is acceptable.

- (107) Würde #(*doch*) die Sonne scheinen!  
 would *doch* the sun shine  
 ‘If only the sun would shine!’

In such cases, there is no proposition  $q$  that is negated by uttering the sentence in example (107) (=  $p$ ). However, a wish always implies that what is wished for is not the reality, i.e. it in a way implies its own negation. An out of the blue utterance, however, with unstressed *doch* seems to be lost on its own, since it is not at all clear, what it is contradicting.

- (108) Es scheint *doch* die Sonne!  
 it shines *doch* the sun  
 ‘But the sun is shining!’

Therefore, I think that with small modifications of Ormelius-Sandblom’s (1997) account of *doch*’s meaning, the following might be a slightly better description of the particle’s meaning.

- (109) *doch* in a proposition  $p$  marks that there is a proposition  $q$ , such that if  $p = 1$ ,  $q = 0$ .

The crucial difference to Ormelius-Sandblom’s (1997) analysis is that the description in (109) stresses the fact that  $p$  is true, while stating that if  $p$  is true, there is a proposition  $q$  that is (or should be, see below) false. In a way, this current approach reverses the earlier proposal (cf. (93b), p. 71) in that it does not refer to the proposition  $p$ ’s negation, but to the falsehood of another proposition  $q$ .

Taking a closer look at (109), it clearly states that it is impossible for both  $p$  and  $q$  to be true. Why, then, is it acceptable to assume that  $q$  only *should* be true? Take example (95), repeated here:

- (95) A: I’m off, even if there’s beer.  
 B: #Du gehst? Es gibt *doch* Bier.  
 ‘You’re leaving? But there’s beer.’ (Zimmermann 2008: 12, translation by A.B.)

B's utterance has two propositions,  $q = \textit{Du gehst?}$  and  $p = \textit{Es gibt doch Bier}$ . In this case, if B is seeing A leave,  $q$  is not false, neither is  $p$ . But the use of *doch* means that there is a contradiction between the two propositions  $p$  and  $q$ . If  $p$  is true, i.e. if there's beer,  $q$  should not be true, i.e. A should not be leaving. The arising contradiction can lead to this reasoning via implicatures.

### 3.4 The meaning of *wohl*

The particle *wohl* has been less extensively studied than *ja* and *doch*, therefore I will focus on the work of only two authors, Zimmermann (2004, 2008) and Gast (2008). Zimmermann characterises the particle *wohl* as follows:

‘The presence of *wohl* effects a weakened commitment towards the truth of the proposition expressed, such that the descriptive context of the clause is not presented as secure knowledge, but rather as an assumption or a conjecture [...]

(Zimmermann 2008: 12)

He further provides a formal account of its meaning:

(110)  $[[\textit{wohl}_x]](p) = \text{ASSUME}(x, p)$  (Zimmermann 2008: 13)

Zimmermann stresses that *wohl* does not add anything to the descriptive meaning of a sentence, i.e. a proposition  $p$  used with *wohl* is not modified by the presence of the particle. He illustrates this as follows. Given a proposition  $p$ , like in example (111a), uttering this proposition adds  $p$  to the common ground. Uttering a *wohl*  $p$ , however, like in example (111b), does not add  $p$  to the CG, but adds  $\text{ASSUME}(x, p)$ , i.e. the information that  $x$  (in many cases the speaker) assumes that  $p$ . This is shown in (112).

(111) a. Hein ist auf See.  
           Hein is at sea  
           ‘Hein is at sea.’ (Zimmermann 2004: 1, translation and glosses by A.B.)

- b. Hein ist *wohl* auf See.  
 ‘I think Hein is at sea.’ (ibid., translation by A.B.)
- (112) a.  $CG_i = \{\dots, p_x, p_y, p_z, \dots\}$  before uttering [(111b)]  
 b.  $CG_j = CG_i + \text{wohl}(p) = \{\dots, p_x, p_y, p_z, \text{ASSUME}(x,p), \dots\}$  after uttering [(111c)]  
 (Zimmermann 2004: 18, translation by A.B.)

What is added to the CG is therefore not a proposition stating the whereabouts of Hein, but rather that the person that has uttered (111b) is assuming that *p* is the case. Because *wohl* is in a way weakening an assertion, it is not compatible with sentences conveying the speaker’s certainty about *p* (cf. Zimmermann 2008), as shown in example (113):

- (113) # Ich weiß ganz sicher, dass sie *wohl* auf Urlaub ist.  
 I know completely sure that she *wohl* on vacation is  
 intended: ‘I know with certainty that I assume that she is on vacation.’

Gast (2008: 20) defines *wohl* as context-consistent, like *ja*, but non-factive, unlike both *ja* and *doch*. Its “non-facticity” is obvious, since the particle expresses a degree of certainty, yet never full certainty. As for the discourse particle’s context-consistency, Gast argues that hypotheses expressed with *wohl* are ‘contextually available’ (Gast 2008: 16). This availability is information that is known to the participants. Examples like (114a,b) support this assumption, but example (114c)—also by Gast (2008)—shows that ‘contextually available’ seems to be a quite broad notion, if it is to hold in the latter case as well. I therefore disagree with Gast on this issue. It seems rather obvious that B’s answer in (114c) is new information that is not available from the context.

- (114) a. Sie wird *wohl* noch später kommen. (Es ist viel Verkehr.)  
 she will *wohl* even later come (it is much traffic)  
 ‘She’ll probably come even later. (There’s a lot of traffic.)’  
 (Gast 2008: 16, translation and glosses by A.B.)
- b. Es wird *wohl* Schnee geben. (Das Wetter sieht danach aus.)  
 it will *wohl* snow give (the weather looks accordingly out)  
 ‘It’ll be snowing. (The weather looks like it).’ (ibid., translation and glosses by A.B.)

c. A: Wo hat Karl den gestern geschlafen?

‘Where did Karl sleep last night?’

B: Er hat *wohl* bei seiner neuen Freundin übernachtet.

‘He probably spent the night at his new girlfriend’s.’

(Gast 2008: 17, translation by A.B.)

Consequently, Gast (2008) refers to the use of *wohl* as ‘trivial hypotheses’ that do not modify neither the input nor the output context (cf. example (112), where there is modification), since he assumes an utterance with *wohl* to be only acceptable with given (or ‘available’ information).

A further aspect of *wohl*’s meaning is that the uncertainty that it conveys can not only refer to the speaker, but also the addressee. This is the case when *wohl* is used in questions.

(115) Ist Hein *wohl* auf See?

intended: ‘Tell me your assumption about what is correct: Hein is at sea, or Hein is not at sea.’

(Zimmermann 2004: 11, translation by A.B.)

Zimmermann (2004: 11) argues that the paraphrase given is clearly different from a translation like ‘Do you think Hein is at sea?’, which can easily be answered with either *Ja* or *Nein* (‘yes’ and ‘no’, respectively), while an answer to a question with *wohl* is rather comprised of expressions like *wahrscheinlich* ‘probably’, *vermutlich* ‘presumably’, etc. optionally complemented by *ja* or *no*.

It can be shown that in questions with *wohl* the uncertainty lies with the addressee quite in cases in which one expects the addressee to be sure about what is asked for. Zimmermann (2008: 23) calls such cases ‘expert contexts’ and gives the following example:

(116) A to an airline official:

Geht der Flug (# wohl) um 7.00h?  
leaves the flight PRT at 7am

‘Does the plain leave at 7am?’

(Zimmermann 2008: 23)

The use of *wohl* is not allowed in such contexts.

This has been a short discussion of the particle *wohl*. Some aspects of the particle’s usage have been left out, since the main point of this summary of articles on *wohl* was to show how it interacts with the common ground, as analysed by Zimmermann (2004).

## 3.5 Conclusion

In this chapter, I have reviewed literature on the meaning of three German discourse particles, *ja*, *doch* and *wohl*. The point of this chapter was in particular to analyse different formal accounts of the said particles semantics. We have seen that the approaches differ in some ways, importantly in their reference to speaker and addressee. Some authors, like Lindner (1991) and Kratzer (1999) include them into their semantic descriptions, while Ormelius-Sandblom (1997) prefers to omit reference to either speaker or addressee.

This is a very relevant point, since it directly touches on the question of how to combine the discourse particles’ semantic and pragmatic aspects in a semantic description, or whether to combine them at all. Ormelius-Sandblom (1997) argues in favour of a short and compact semantic description, such that pragmatic aspects of the particles’ meaning are derived via pragmatic mechanisms, e.g. implicatures.

In the case of the particle *wohl*, another mechanism is needed to get its full meaning in the context of a sentence. The particle expresses a high degree of certainty regarding the proposition, but the subject of this attitude depends on the type of sentence it is used in. In declaratives, the speaker is understood to express that the proposition is only an assumption, while in interrogatives, this aspect lies with the speaker. Zimmermann (2004) therefore analyses *wohl* as a modifier of sentence types, which complement the particle’s basic meaning.

The particle *ja* shows similar effects. As shown in this chapter, it can be used to ex-

press different things: that the addressee takes some information to be given, i.e. to be known by the addressee and that—with a different intonation pattern—that the speaker himself/herself identifies some information as new to him or her. The accounts of the particle's meaning are not equally successful in pointing out these differences. Since it is not different sentence types that mark these two uses of *ja*, it might seem to be necessary of also integrating intonation pattern into the semantics of *ja*.

With this argumentation, I want to point out that there are many factors that influence the exact meaning of different particles, which are often hard to integrate with one semantic description. For example, all three of the particles discussed in this thesis have unstressed and stressed forms (though the stressed forms are not necessarily discourse particles) and at least *ja* and *doch* have different meanings even in their unstressed variants in different contexts (surprised *ja*, 'reminding *doch*', etc.).

The degree to which authors disagree on how to correctly describe each particle's meaning has been shown to be quite high in cases, since said factors complicate any analysis. Some problems remain: in cases where the meaning of discourse particles differs slightly in different contexts, is one semantic description enough? Do we need several to account for all meanings? If there is one description, should semantics be strong enough to cover all cases or do pragmatic mechanisms take care of the differences?

I have tried to address some of these questions in this chapter, but they have not been answered completely. In the following chapter and the final conclusion of this thesis, I will address these points again, building on the findings of this chapter. In particular, the following chapter shall give an overview of how to integrate each particle's individual meaning with the meaning a whole sentence and suggest how common characteristics of the particles under discussion (and maybe all discourse particles) could be another (not syntactic) argument for there being a class of discourse particles.



## 4 A unified approach to German discourse particles?

In this chapter, I will, among other things, review previous work by Ormelius-Sandblom (1997) and Zimmermann (2004, 2008), who try to show how the meaning of individual particles is part of the compositional semantics of whole sentences. This will raise the question whether all particles under discussion contribute equally to the computation of sentential semantics or whether there are differences. Zimmermann's work on discourse particles stresses the difference between expressive and descriptive meaning (or propositional meaning).

This discussion will also touch on the possibility of giving a unified semantic approach for discourse particles, by debating whether the particles share enough common characteristics to provide a basic meaning that all of them have.

Furthermore, I want to explore the way in which discourse particles interact with the common ground, i.e. the set of all propositions that a speaker and an addressee take for granted. Discussing the common ground, I will try to show how discourse particles could be interpreted as operators on elements of this set.

## 4.1 Discourse particles and sentential meaning

### 4.1.1 Reference and incompatibilities

As shown in chapter 1, not all discourse particles are compatible with all sentence types. According to Zimmermann (2008), this is one aspect of their interaction with sentences.

Why the particle *ja*, for example, is not compatible with interrogatives, can be explained with the particle's meaning. Its reference to information that the speaker signals to be known is simply not possible in an interrogative, where the speaker is asking for information, i.e. is unaware of something. This is illustrated in the following example:

- (117) \* Ist Peter *ja* gekommen?  
 Is Peter PRT come  
 'Has Peter JA come?' (Zimmermann 2008: 25)
- (118) Ist Peter *wohl* gekommen?  
 Is Peter *wohl* come?  
 'Has Peter PRT come?'

For the particle *wohl*, a similar effect has been shown to exist in the last chapter. In questions, where the addressee is assumed to have 'expert knowledge' on the theme of the questions, the use of *wohl* is illicit. In a simple question like (118), however, the use of *wohl* is grammatical. Even for the particle *doch*, Zimmermann (2008: 24) shows that its 'epistemic reference' (ibid.) depends on the clause type.

- (119) a. Es gibt doch Bier.  
 There is PRT beer  
 'But there will be beer! (Have you forgotten about it?)'
- b. Gibt es doch Bier?  
 Is there PRT beer  
 'Is there beer, after all? (I didn't know!)' (Zimmermann 2008: 24)

Zimmermann writes that *doch* in these examples should be accented. With the translation given for (119a), stressing the particle is only possible in example (119b), however.

With stressed *doch* in (119a), the translation would rather be as in (120).

(120) ‘But there *will* be beer! (You thought that there wouldn’t be any.)’

Nevertheless, Zimmermann (2008) argues that the reference point changes, i.e. while in (119a), the addressee is reminded that there *is* beer, in (119b), this affects the speaker. See chapter 3, p. 47, where this effect also has been shown to exist with *ja*.

So far, we have seen that discourse particles can be incompatible with sentence types because of their meaning and that depending on the sentence type, different reference points are available with the particles. The following section will show briefly how the meaning of the particles is added to the computation of the sentential meaning.

### 4.1.2 Discourse particles and sentences

Zimmermann (2004: 21) discusses how *wohl* can be analysed as a modifier on sentence types. He argues that it covertly moves to SpecForceP on LF, where the sentence type is specified in ForceP<sup>0</sup> (see also Coniglio 2009: 222ff. for further discussion). The particle *wohl* is interpreted in this position.

For a sentence with the sentence type operator *int* (for interrogative), Zimmermann (2008: 22) assumes the computation of the semantics to happen as follows.

(121) (i) Formation of a proto-question in Force(int):  $\lambda p. \{p, \neg p\}$

(ii) Functional application of *wohl*'s denotation in SpecForceP:

$$[[\text{wohl}]] = \lambda P. \text{ASSUME}(\text{addressee}, \{q | q \in P\})$$

(iii) Application of the speech act operator ?.

(Zimmermann 2004: 22, translation by A.B.)

This derivation is compatible with the fact that *wohl* takes scope over the formation of the question and negation (cf. Zimmermann 2004: 11, example (115), p. 84), which Zimmermann (2008: 16) illustrates as follows:

(122) ? ASSUME { Hans invited Mary, ¬ Hans invited Mary } (Zimmermann 2008: 16)

Ormelius-Sandblom (1997: 87ff.) argues that since discourse particles do not contribute to a sentence's truth conditions, they're not part of the actual proposition. They rather form a new proposition together with it. Therefore, she basically assumes—similarly to Zimmermann's analysis for *wohl*—that discourse particles are interpreted in a higher position than where the original propositional content is computed. In the slightly different framework she uses, this might be equal to covert movement in LF. For her, all particles are located in a position adjoined to the highest VP node and from there, their meaning is computed compositionally. The formation of a new proposition, however, might be problematic since Ormelius-Sandblom (1997) stresses the point that discourse particles are *not* propositional.

### 4.1.3 Complications

However, while Ormelius-Sandblom (1997) discusses *ja*, *doch* and *schon*, it is not clear, whether Zimmermann's analysis of *wohl* is compatible. Zimmermann shows that not all particles behave alike.

Take the following sentences, a basic declarative compatible with *ja*, *doch* and *wohl*:

- (123) a. Max ist *ja* auf See.  
 b. Max ist *doch* auf See.  
 c. Max ist *wohl* auf See.  
 Max is PRT at sea

(Zimmermann 2008: 3)

Both *ja* and *doch* do not change the meaning of the proposition *Max ist auf See* 'Max is at sea.' However, Zimmermann argues, example (123c) 'is consistent with Max's not being at sea at all' (Zimmermann 2008: 19). *wohl*'s contribution is weakening the 'force' of the proposition, by referring to an assumption by the speaker, and not the statement of a fact.

*ja* and *doch*'s contribution is different. While in example (123a) the speaker marks that the proposition is known and could or should be known to the addressee, *doch* in (123) suggests that the speaker thinks that the addressee is unaware of the proposition.

Here, *ja* and *doch* differ from *wohl*. According to Zimmermann (2008), in another context *doch* and *wohl* differ from *ja*: both *doch* and *wohl* can appear in embedded positions, while *ja* is heavily restricted, appearing only under verba dicendi. See the following examples:

- (124) a. Tom bedauert/glaubt, dass es (\**ja*) Erdbeeren gibt.  
Tom regrets/thinks that it PRT strawberries give  
'Tom regrets/thinks that there will be strawberries.'
- b. Tom erinnerte Ulf, dass es *ja* Erdbeeren gäbe.  
Tom reminded Ulf that it PRT strawberries give  
'Tom reminded Ulf that there would be strawberries.' (Zimmermann 2008: 20)
- (125) Tom hat vergessen, dass es *doch* Erdbeeren gibt.  
Tom has forgotten that it PRT strawberries gives  
'Tom forgot that there will be strawberries after all.' (Zimmermann 2008: 20f.)

The particles *doch* and *wohl* can be embedded. If they are, their meaning refers to the knowledge of the matrix subject (cf. Zimmermann 2008: 21). The particle *ja* behaves differently:

'In contrast, *ja* is always evaluated with respect to the utterance context. Hence, it cannot be embedded, unless it forms part of a report speech act (Kratzer 1999) [...]. In sum, these findings argue for an analysis of *ja* as a modifier on illocutionary operators, as proposed in Jacobs (1991).'

(Zimmermann 2008: 21)

This leads Zimmermann to conclude that *doch* and *wohl* are *not* modifiers of illocutionary operators and thus differ from *ja*. He further states that the data suggest that *doch* and *wohl* group together in cases of embedding, excluding *ja*, while *ja* and *doch* add to the descriptive meaning of a sentence, while *wohl* does not (cf. Zimmermann 2008: 21f.).

However, Zimmermann's examples might be a bit misleading. The translation he gives for example (125) indicates that *doch* should be stressed, since the translation suggests that Tom once thought that there would not be any strawberries, then he was told that there in fact would be strawberries, a fact which he then forgot. This means that the use of *doch* could be paraphrased as shown in (126), as  $\neg p$ . Since the implicature that Tom knew otherwise is clear, I take this to be an instance of stressed *DOCH*. In (126),  $t_n$  represents a certain point in time, while  $k_n$  represents Tom's knowledge at that point in time.

- (126) a.  $t_1$ : There are no strawberries.  
 $k_1$ : Tom knows this.
- b.  $t_2$ : There are strawberries after all.  
 $k_2$ : Tom knows that there are strawberries after all, even though he thought that there would not be any.
- c.  $t_3$ : Even though there *are* strawberries, Tom forgets this.  
 $k_3$ : Even though Tom knew that there would be strawberries ( $k_2$ ), he forgot about it.

The embedded clause in example (125) (introduced by *dass*) represents  $k_2$ , while the matrix clause represents  $k_3$ .

Moreover, I think that unstressed *doch* rather behaves similarly to *ja* than to *wohl*, as it *can not* be easily embedded, when not stressed. This is a crucial point, since Zimmermann's (2008) grouping of particles does not hold, if these data are correct.

- (127) a. Tom bedauert/glaubt, dass es (\**doch*) Erdbeeren gibt.  
 Tom regrets/thinks that it *DOCH* strawberries give  
 'Tom regrets/thinks that there will be strawberries.'  
 (cf. Zimmermann 2008: 20, example (124a))
- b. Tom erinnerte Ulf, dass es *doch* Erdbeeren gäbe.  
 Tom reminded Ulf that it *doch* strawberries give.CONJ  
 'Tom reminded Ulf that there would be strawberries.'  
 (cf. Zimmermann 2008: 20, example (124b))

To sum up, I think—in contrast to Zimmermann’s (2008) analysis—that unstressed *doch* behaves like *ja* when embedded. Following Zimmermann’s (2008) argument, this would make *doch* a modifier of illocutionary types as well (just as *ja* is). I think that such a result is expected, since both particles share some characteristics, like stressing the facticity of a proposition. The status of stressed *DOCH* is unclear, but not the main point of the present discussion.<sup>1</sup>

Zimmermann concludes that, because of the differences that the three particles *ja*, *doch* and *wohl* exhibit,

‘a unified semantic analysis of all discourse particles, or even for a set of necessary properties apart from the general characteristics [...], may be in vain.’

(Zimmermann 2008: 22)

Having shown that mixing the properties of stressed and unstressed *doch* leads to different results, Zimmermann’s conclusion might be a bit too pessimistic. Still, the differences between *wohl* on the one hand and *doch* and *ja* on the other hand suggest that a unified semantics of discourse particles does not seem to be a probable achievement.

In the following section, I will once again turn to Gast (2008) who tries to establish certain ‘parameters’ that characterise different types of discourse particles.

## 4.2 Common characteristics

While Zimmermann (2004, 2008) tries to put forth purely semantic analyses of discourse particles, Gast’s (2008) approach is different. As mentioned at the end of the previous section, Zimmermann (2008) concludes that a unified account of semantic properties of discourse particles is in vain.

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<sup>1</sup>Note however that the criticism of using stressed *DOCH* for this argument is legitimate, since stressed and unstressed *doch* are usually not interchangeable. Therefore, the behaviour of stressed *DOCH* under embedding is not representative of unstressed *doch*’s behaviour.

Gast (2008) is basing his approach on Relevance Theory, i.e. a pragmatic theory. Given the idiosyncracities of discourse particles, pragmatics might constitute a more suitable framework to account for the features of the group of German discourse particles. This is, in fact, what Gast (2008) tries to show.

Concentrating on four different discourse particles (*ja, doch, wohl, etwa*), Gast tries to find parameters that describe the particles' functions. Moreover, importantly, in his view, these particles are like functions that take different contexts as their arguments. Thus, using a certain particle equals to updating a certain context (which might correspond to the addressee's knowledge for example) with another context. The speaker might utter a proposition with a discourse particle to update the addressee's knowledge, e.g. to signal the addressee that he or she should be aware of something.

While the idea to look for common characteristics in pragmatics rather than semantics is promising, Gast's (2008) proposal suffers from various shortcomings (see p. 56ff.). First, his data are not always convincing. Second, at least for the particle *wohl*, his argumentation seems contradictory.

I think that some of these problems lie in the fact that Gast (2008) is trying too hard to provide a single meaning for each particle (especially *doch*), which has proven very difficult in other analyses as well (cf. Lindner 1991, Ormelius-Sandblom 1997). E.g., none of the approaches that have been mentioned has succeeded in covering every use of the particle *doch* with a single account of its meaning.

To illustrate this, I want to review once again some examples from the literature. The following examples, (128a-c), include the particle *doch*, but its usage varies. Trying to assign all instances a single meaning is difficult and hardly intuitive.

(128) a. A: Patrik ist nicht zu Hause.

'Patrik ist not home.'

B: Aber sein Auto ist *doch* da.

'But his car is here.'

(Ormelius-Sandblom 1997: 83, translation by A.B.)



- b. Setz dich doch!  
 set yourself *doch*  
 ‘Do sit down!’ (Gast 2008: 14, glosses and translation by A.B.)
- c. Da war doch neulich der schwere Unfall auf unserer Straße. [...]  
 there was *doch* the other day the grave accident on our street  
 ‘The other day, there was this massive accident on our street.’  
 (Gast 2008: 12, glosses and translation by A.B.)

I have argued in the previous chapter that in B’s utterance in example (128a) the use of *doch* is not to negate that utterance’s opposite, but rather to negate the original utterance by A, to which it is a reaction. While Gast argues that—similarly—the use of *doch* in the imperative in example (128b) also resolves a contradiction, namely that between not sitting and sitting at that particular moment. The third use, shown in example (128c), is what Gast (2008) refers to as reminding *doch*. In this case, *doch* is used to activate information that is (or should be) known to both the speaker and the addressee. Gast (2008), trying to account for all uses of the particle, argues that in such cases, *doch* is used to prevent the addressee from saying that he or she is not aware of the proposition. For Gast, this is an inconsistency in the context that *doch* refers to.

While the similarities in examples (128a,b) are obvious, the use of *doch* in imperatives has further consequences. It seems that imperatives with this particle tend to be less aggressive than ones without it. In a context, where politeness is unexpected, an imperative with *doch* is rather odd:

(129) Drill instructor:

- a. Machen Sie zehn Liegestütz!  
 make you ten push-ups  
 ‘Do ten push-ups!’
- b. # Machen Sie *doch* zehn Liegestütz!  
 make you *doch* ten push-ups  
 ‘Do do ten push-ups!’

The peculiarities of imperatives with *doch* are not the main point of this section, I just want to stress again that the differences between the different uses of *doch* are sometimes quite relevant. This is especially the case with reminding *doch*. Gast himself acknowledges this. He assumes that ‘*doch* is generally associated with a contradiction or inconsistency, even though this aspect of meaning is not easily recoverable in all cases.’ (Gast 2008: 12).

It seems obvious that trying to reconcile all uses of *doch* with one meaning alone complicates its analysis (as well as that of other discourse particles, probably), and, therefore, I will stick to the use of *doch* as in example (128a), where it clearly refers to another proposition. It will remain unclear what exactly *doch* adds to an imperative, but I will refer to reminding *doch* again later.

Still, Gast’s idea of trying to unify the *uses* of discourse particles rather than their meanings seems to me to be a clever idea. In the following discussion, I will try to show how discourse particles interact with propositions in the common ground and thereby interact with the discourse itself.

### 4.3 Modifying the common ground

In this section, I take the common ground to be a concept as referred to by Zimmermann (2004, 2008), who in turn refers to Stalnaker (1978), and by Stalnaker (2002). Stalnaker (2002) mentions many aspects of the common ground, some of which are not relevant for the present discussion, but others, e.g. the notion of ‘defective context’, or the notions ‘acceptance’ and ‘belief’ (Stalnaker 2002: 716f.), are. In the following discussion, I will use Stalnaker’s (2002) terminology, marking propositions with the letter  $\Phi$ .

According to Stalnaker (2002), acceptance is an attitude that one can have toward a proposition and belief is one possible type of acceptance, with ‘presumption, assumption, acceptance for the purposes of an argument or an inquiry’ (Stalnaker 2002: 716) being

other types. If one believes in a proposition, then one believes that proposition to be true—which entails the acceptance of that proposition. Using these concepts, Stalnaker proposes the following definition of common ground:

‘It is common ground that  $\Phi$  in a group if all members *accept* (for the purpose of the conversation) that  $\Phi$ , and all *believe* that all accept that  $\Phi$ , and all *believe* that all *believe* that all accept that  $\Phi$ , etc.’ (Stalnaker 2002: 716)

As already briefly discussed, Zimmermann (2004: 18) illustrates the common ground as a set of propositions that are mutually accepted by the participants of the discourse. See (130) for illustration:

(130)  $CG = \{ \dots, \Phi_1, \Phi_2, \Phi_3, \dots \}$  (cf. Zimmermann 2004: 18)

Each  $\Phi_n$  in (130) is a proposition that is accepted by the relevant participants. Both Zimmermann (2004) and Gast (2008) believe discourse particles to interact with or modify a given common ground or the belief system of each participant. These belief systems are organised like the common ground, but they might differ from each other in certain cases. There are of course various ways of modifying this set. Uttering a proposition that is accepted by all participants adds a proposition  $\Phi_{n+1}$  to the set. Zimmermann (2004) argues that uttering [*wohl*  $\Phi_x$ ] does not add  $\Phi_x$  to the common ground, but rather adds an element  $ASSUME(x, \Phi)$ , in Stalnaker’s (2002) terms, where  $x$  refers to either the speaker or the addressee.

Gast (2008) assumes that discourse particles modify the common ground and the participants’ belief systems, respectively, by operating on certain propositions. I choose a similar approach, but want to complement Gast’s terminology with further operations that I assume discourse particles to perform on propositions in the common ground.

### 4.3.1 Activation

The first of these operations might be called ‘activation’. In a given common ground, the set shown in (131), there are two propositions  $\Phi_1$  and  $\Phi_2$ .

$$(131) \quad CG = \{\Phi_1, \Phi_2\}$$

Instead of adding further propositions to this set, it is possible to refer to a certain proposition, e.g. to set the topic of a conversation. If the information (say  $\Phi_1$ ) that is to become the topic is not new information, it is not felicitous to just utter a proposition  $\Phi_1$ , the utterance rather has to be complemented by something that marks it as referring to or being known information. This can be achieved by using the discourse particle *ja*.

This can be easily illustrated with an example. Let us assume a situation in which two people, A and B, are having a conversation. Example (132) shows two short utterances that only differ in the presence of *ja*:

- (132) a. A: Michael Jackson ist *ja* gestorben. Jetzt will man ein Konzert für ihn  
 M. J. is *ja* died now wants one a concert for him  
 veranstalten.  
 hold  
 ‘You know, Michael Jackson died. They want to hold a concert for him.’
- b. # A: Michael Jackson ist gestorben. Jetzt will man ein Konzert für ihn veranstalten.  
 ‘Michael Jackson died. They want to hold a concert for him.’

Note that example (132b) is only infelicitous if A’s intention is activating the proposition *Michael Jackson died*. If we take this proposition to be  $\Phi_1$  from the set in (131)<sup>2</sup>, what happens to the common ground in both of A’s utterances can be illustrated as follows:

- (133) a.  $CG_a = \{\text{ACT}(\Phi_1), \Phi_2\}$   
 b.  $CG_b = \{\text{ADD}(\Phi_1), \Phi_1, \Phi_2\}$

<sup>2</sup>Of course, the second part of A’s utterance is new information that is added to the common ground as  $\Phi_3$ . For the present discussion, however, this is not relevant.

If  $\Phi_1$  is in fact common knowledge in (132b)—which we take it to be—than A’s utterance would add a proposition to the common ground that is already part of it. This makes the utterance unfelicitous. If, on the other hand,  $\Phi_1$  is not part of the common ground, the opposite happens. In that case, utterance (132a) is unfelicitous, while utterance (132b) is. See the following illustration:

- (134) a.  $CG_a = \{\text{ACT}(\emptyset), \Phi_2\}$   
b.  $CG_b = \{\text{ADD}(\Phi_1), \Phi_2\} \rightarrow CG_{b'} = \{\Phi_1, \Phi_2\}$

The “activation” of nothing ( $\emptyset$  in (134)) should not be possible, yet it sometimes is. Imagine, again, two people in a conversation. Say A spent some time in France, which he or she assumes B to be aware of. This is not the case, however, this is new information for B. B could respond in different ways. See the following examples for illustration.

- (135) A: Ich war *ja* zwei Wochen in Frankreich.  
I war *ja* two weeks in France  
‘You know, I spent two weeks in France.’

If this is new information for B, and he or she is interested in the fact that A has spent some time in France, a possible response would be the one in example (136a). However, B can also accept A’s utterance and signal acceptance, i.e. even if B was not aware of the fact that A has spent time in France, it becomes clear through his or her utterance, see (136b). In that case, the proposition is simply added to the common ground.

The fact that it is possible for B to respond in the manner illustrated shows that both participants are aware that *ja* refers to given information.

- (136) a. B: Wirklich? Das wusste ich gar nicht.  
Really that knew I at all not  
‘Really? I didn’t know that.’  
b. B is signalling acceptance.

These examples have shown how it is possible to activate propositions that are in the common ground between various participants with the discourse particle *ja*. Before examining further examples regarding this particle, I want to turn to the particle *doch*.

Zimmermann (2008) argues that the presence of the discourse particle *doch* activates a certain proposition that ‘the addressee may have (temporarily) forgotten about [or that the addressee] may think [...] false’ (Zimmermann 2008: 11, cf. p. 73). Therefore, some kind of activation also seems to be involved with the use of *doch*. This is also evident in the use of reminding *doch*. Its main function is reminding someone of certain information, i.e. it activates that information in the common ground or a certain belief system, if it is available.

Zimmermann (2008) further argues that the reference point of an utterance can change not only with the particle *wohl*, but also with the particle *doch*. While his examples (see example (119), p. 88, and the discussion there) exhibit minor flaws, I think that his basic assumption of the changing reference point is true. The particle *doch* in tag-questions marks a conflict in the speaker’s knowledge system, which he wants the addressee to resolve.

It seems quite fitting that (reminding) *doch* appears in tag-questions very often, German tags being *oder* ‘or’ and *nicht* ‘not’. The tag signals that the proposition’s truth value is not clear to the speaker—its opposite is also a possibility. Given the meaning of *doch*, this is a perfect setting for the particle’s use.

Similarities with the particle *ja* become evident, since in many tag-questions, both particles can be used, even though *doch* might be the better choice. See the following examples.

- (137) a. Da war doch neulich der schwere Unfall auf unserer Straße. [...]  
there was *doch* the other day the grave accident on our street  
‘The other day, there was this massive accident on our street.’

(Gast 2008: 12, glosses and translation by A.B.)

- b. Er kommt *doch*, oder?  
 he comes *doch* or  
 ‘He’s coming, isn’t he?’
- c. Er kommt *ja*, oder?  
 ‘He’s coming, isn’t he?’

Example (137a), repeated here, has already been discussed and it has been shown that *doch* can be substituted by *ja*. The same is true for examples (137b,c). What are the differences between *ja* and *doch* then?

First, the use of both particles is unfelicitous if the proposition they are used with is not known to the addressee and the speaker knows this. For example, in a first introductory linguistics class, a teacher can hardly utter the following:

- (138) # Es gibt *ja/doch* eine Theorie namens Distributed Morphology.  
 it gives *ja/doch* a theory named D. M.  
 ‘There’s a theory called Distributed Morphology, isn’t there?’

This would be the activation of a non-existent proposition in the common ground.<sup>3</sup>

Second, as shown in example (137) both particles *can* be used in certain tag-questions. A minor difference in those examples is that with *doch*, the speaker seems less certain about his utterance. The crucial point discerning *ja* and *doch* seems to be about the participants level of knowledge about the proposition.

Again, imagine two people A and B. A seems to remember that B has played two particular songs a while ago to him/her, but is not sure about whether B remembers this. In this case, only the use of *doch* is licit, expressing in a way A’s uncertainty regarding this proposition or B’s knowledge of this proposition, which can be emphasised by starting the utterance with *I’m not sure but, ...*:

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<sup>3</sup>In contrast to example (135), no speaker would utter something like (138), because he or she is sure that the addressee is not aware of the proposition. In example (135), on the other hand, the speaker might believe that the addressee knows about his or her stay in France.

- (139) a. A: (Ich bin mir nicht sicher, aber) Du hast mir *doch* vor einiger Zeit zwei  
 I am me.DAT not sure, but you have me *doch* ago some time two  
 Lieder vorgespielt.  
 songs played  
 ‘(I’m not sure, but I think that) Some time ago, you played two songs to me, haven’t  
 you?’
- b. # A: (Ich bin mir nicht sicher, aber) Du hast mir *ja* vor einiger Zeit zwei Lieder  
 vorgespielt.  
 intended: ‘(I’m not sure, but I think that) Some time ago, you played two songs to  
 me, haven’t you?’

This can be illustrated by sets showing the common ground between the participants,  $\Phi$  being the proposition ‘You played two songs to me’.

- (140) a.  $CG_a = \{\text{ADD}(\Phi) + \text{UNCERTAIN}(\Phi), \dots\}$   
 b.  $CG_b = \{\text{ACT}(\emptyset), \dots\}$

Again, utterance (139b) is unfelicitous in a situation where it is not clear whether both participants are aware of the event referred to. Utterance (139a) however tries to add and activate a proposition  $\Phi$  in the common ground. The difference between an utterance without *doch* and the one shown in example (139) is related to the facticity of the utterance. Without *doch*, A is stating a fact, with *doch* the speaker acknowledges that his utterance might not be true, i.e. expressing doubts about the truth of this statement.

If in the context between A and B the truth of the statement in example (139a) has been established and A wants to refer to this again, it is much better to use *ja* than *doch*.

- (141) a. A: Wir haben *ja* über diese Lieder geredet.  
 we have *ja* about these songs talked  
 ‘We talked about those songs, do you remember?’
- b. # A: Wir haben *doch* über diese Lieder geredet.  
 intended: ‘We talked about those songs, do you remember?’



In this utterance, *ja* clearly activates the information that A and B discussed those two songs, that were earlier introduced to the common ground with *doch*. It seems that while *doch* can also activate propositions, it is necessary that the addressee is less or not at all aware of these propositions, additionally a certain degree of uncertainty regarding  $\Phi$  seems to be present with the speaker. To represent this, I chose the operation ADD. So, in example (141b), a proposition that is already active would be added.

- (142) a.  $CG_a = \{\text{ACT}(\Phi), \dots\}$   
b.  $CG_b = \{\text{ADD}(\Phi) + \text{UNCERTAIN}(\Phi), \Phi, \dots\}$

So far, I have taken for granted that there is a concept like activation in the common ground and that it is at least an aspect of the discourse particle *ja*'s meaning. If this is true, one could predict that a proposition that has been activated in the common ground, can not be activated again, just as a proposition cannot be added to the common ground twice.

While the contrast with double-activation is not as strong as with the doubled insertion of a proposition into the common ground, I think that there is still a noticeable difference. See the following example:

- (143) Er schloss die Tür. Da sie (#ja) zu war, konnte er in Ruhe arbeiten.  
he closed the door since she *ja* closed was could he in peace work  
'He closed the door. And since it was closed, he could work in peace.'

### 4.3.2 Defective contexts and their resolution

The notion of a *defective context* is taken from Stalnaker (2002). A defective context is a flaw in the beliefs about the common ground, i.e. a person might have a false belief about a certain proposition in the common ground (see Stalnaker 2002: 717).

To illustrate this, example (93) is repeated here.

(144) A: Patrik ist nicht zu Hause.

‘Patrik is not at home.’

B: Aber sein Auto ist *doch* da.

‘But his car is here.’

(Ormelius-Sandblom 1997: 83)

This is a defective context, because A is uttering a proposition that is apparently false. B notices this and corrects A. As discussed in chapter 3 this probably happens by implicature. Say A’s utterance is the proposition  $\neg\Phi_A$ , while B’s utterance is  $\Phi_B$ . Following the discussion in chapter 3, we expect the utterance *doch*  $\Phi_B$  to be incompatible with another proposition,  $\neg\Phi_A$  in this case, being true. Thus, if  $\Phi_B$  is true,  $\neg\Phi_A$  can not be.

(145) a.  $CG_A = \{\neg\Phi_A, \dots\}$

b.  $CG_B = \{\Phi_A, \dots\}$

(145) illustrates the participants’ belief systems before their dialogue, the following example tries to illustrate the mechanism of negating A’s original utterance, by stating that  $\Phi_B$  entails that  $\Phi_A$ . This deletes the A’s original utterance from the common ground, if A accepts B’s utterance to be true, in a way repairing the common ground.

(146)  $CG_A = \{\neg\Phi_A, \text{ADD}(\Phi_B) + \text{ENT}(\Phi_A), \dots\} \rightarrow CG_{A'} = \{\Phi_B, \Phi_A\}$

### 4.3.3 Other operations

As shown earlier, Zimmermann (2004) assumes the discourse particle *wohl* to operate on elements in the common ground, modifying the certainty of propositions (cf. p. 82, Zimmermann 2004: 18, Zimmermann 2008: 13).

Even though this thesis focuses mainly on the discourse particles *ja*, *doch* and *wohl*, I want to briefly illustrate how other discourse particles might also be analysed as modifying elements in the common ground. The following section discusses the discourse particle *auch* and its effects on the common ground.

The discourse particle *auch* has a homonym meaning ‘too’, another particle that behaves quite differently. Whether or not the original meaning ‘too’ is still present—albeit semantically bleached—in the discourse particle’s meaning is debatable.

Thurmair (1989: 155) assumes a feature <KONNEX>, which points to the fact that the particle always references a previous utterance. She gives the following examples:

(147) *Elke: Stell dir vor, der Peter hat eine Eins im Staatsexamen!*

E.: ‘Imagine, Peter got an A on his state examination!’

*Gisi: Der hat auch ziemlich viel dafür geschuftet.*

G.: ‘Yes, (it is because) he worked really hard.’ (Thurmair 1989: 155, translation by A.B.)

She further writes that ‘The content of the utterance with *auch* and the content of the previous utterance are therefore in a causal relationship.’ (Thurmair 1989: 156, translation by A.B.).

This suggests that an utterance with *auch* can hardly be interpreted on its own in a sensible way, since the particle’s meaning clearly relates two propositions. In a pair of utterances, the first one constitutes a proposition that acts as the effect while the second utterance with *auch* provides a cause for the event in the first one. Such a dialogue can be compared to a question-answer pair, since the information given is quite similar, but the first speaker does not request information with his or her utterance.

Thus, assuming the discourse particle *auch* to express causality, its effect on the common ground can be illustrated as follows:

- (148) a.  $CG_E = \{\Phi_E, \dots\}$   
b. The dialogue from example (147) takes place.  
c.  $CG_{E'} = \{\Phi_E, \text{ADD}(\Phi_G) + \text{CAUS}(\Phi_G \rightarrow \Phi_E)\}$

G’s utterance (cf. (147)) adds new information to the common ground and links this new information with a certain proposition that is already part of the common ground. Other characteristics of the particle *auch* that Thurmair (1989: 155f) identified, such as the

feature <ERWARTET> (which means that the first utterance in a pair consists of expected information) or the invalidation of surprise conveyed in the first utterance, follow from the addition of this causal link.

If Elke in example (147) is quite surprised about Peter's success, this surprise is eliminated by the explanation for Peter's success provided by Gisi. Also, since Gisi is aware of the fact that Peter has been studying a lot, she might expect him to get a good grade. Therefore, the feature <ERWARTET> is compatible with a causal link between the two utterances.

## 4.4 Conclusion and prospects

The point of this chapter was to sketch a way of analysing German discourse particles as a group. Since Zimmermann (2008) is probably right in his argument that a unified semantic account of discourse particles is hardly possible, a purely pragmatic approach might be more fitting. What I have suggested in the previous sections is also heavily influenced by Gast's (2008) work, who has tried to explain the usage of discourse particles through context-updating functions.

I have taken a similar approach, by suggesting that utterances using discourse particles modify elements in the common ground, i.e. the set of all propositions that each participants at a given moment take for granted. I tried to show that there are certain operations that discourse particles do on propositions in the common ground. Using the discourse particle *ja*, it is possible to activate a proposition that all participants know about. That known information can be activated implies that the common ground includes information that is not activated at a given time in a conversation.

The particle *doch* can be used in different ways and with different reference points, depending on the sentence type. In a tag-question, the speaker might express uncertainty about the facticity of the proposition, while also adding it to the common ground. In

declaratives, on the other hand, *doch* can be used to negate an earlier proposition by a chain of implicatures that in essence state that if the proposition with *doch* is true, the other one can not be.

The particle *wohl* can also change its reference point. In a declarative it expresses that the speaker does not state the proposition as a fact, but rather as an assumption. In interrogatives, however, the reference point changes to the addressee. Finally, the particle *auch* can establish a causal link between two propositions in the common ground.

By showing that other discourse particles behave similarly, i.e. that they all interact with the common ground, one could propose a unified, formal pragmatic theory of these particles as discourse modifiers, confirming the validity of the term “discourse particle”.



# 5 Conclusion

## 5.1 Findings

In this thesis, I have tried to give an overview of the characteristics of the three German discourse particles *ja*, *doch* and *wohl*. I have discussed syntactic, semantic and pragmatic aspects of these morphemes and the main findings of this thesis shall be summarised in this concluding section.

Regarding the syntax of German discourse particles, I have argued that the analysis proposed by Coniglio (2009) is the most promising one yet. Coniglio assumes German discourse particles to be hierarchically ordered in IP, similar to Cinque's (1999) proposal of adverbs in IP. This idea has several advantages over earlier approaches.

First, the similarity of discourse particles and sentence adverbs has been noticed often and is evident in certain characteristic that both classes of words share. To account for this via a similar structural position seems plausible. Second, this idea solves the problem of the positioning of discourse particles in the syntactic structure. A fixed position of discourse particles, however, of course implies that all possible surface structures involving such particles involve movement of other constituents around IP. I have briefly argued that, following proposals by e.g. Diesing (1992), this is tenable and quite possibly a correct assumption. This fixed position also leads to the conclusion that the restriction of discourse particles to the German middle field, an evident surface-syntactic phenomenon, might simply be an epiphenomenon of discourse particles located in IP and

the movement of other constituents for different reasons. Third, Coniglio (2005, 2009) has convincingly embedded the hierarchy of German discourse particles that in a way decides their relative order in the clause into the hierarchy of adverbs that has been argued for by Cinque (1999). These hierarchies account for the relative order of adverbs and discourse particles that is quite strongly restricted.

In chapter 3, I turned to analysis of the meaning of the discourse particles *ja*, *doch* and *wohl*. Much of the discussion has been a review of earlier literature, but I have argued that trying to cover as many uses as possible of a particle with one account of its meaning can lead to many problems. Such approaches have been—rightly, I think—criticised. The analysis of specific uses of the discourse particle *ja*, for example, led to the conclusion that it—as well as other discourse particles—can change its reference point depending on various factors. This means that the meaning of the particle *ja* can not only relate to the addressee of an utterance, but rather refer to the speaker’s level of knowledge as well. See the following definitions:

- (149) a. *ja<sub>S</sub>*: *ja* in a proposition  $\Phi$  with “surprised intonation”, i.e. rising intonation on the focus, marks that  $\Phi$  is new information for the speaker.
- b. *ja<sub>A</sub>*: *ja* in a proposition  $\Phi$  with “neutral intonation” marks that  $\Phi$  is information that is, could or should be known to the addressee.

This change of reference has been identified by Zimmermann (2004) with the particle *wohl* and has been also argued for to exist with the particle *doch* in Zimmermann (2008). It seems that *doch* can express a certain level of uncertainty with the speaker in its use as “reminding *doch*”, while it corrects a false assumption by the addressee in other cases. I focus on the latter case here.

Also regarding the particle *doch*, its stressed homonym *DOCH* has also been discussed in detail. While its status is not clear, I do not take it to be a discourse particle in this thesis, only focusing on the unstressed alternative *doch*. See the following accounts of the meaning of *doch* and *wohl*:



- (150) a. *doch*: *doch* in a proposition  $\Phi$ , a declarative, marks that there is a proposition  $\Psi$  available in the common ground, such that if  $\Phi = 1$ ,  $\Psi = 0$  (cf. (109)).
- b. *wohl<sub>S</sub>*: *wohl* in a proposition  $\Phi$ , a declarative, marks that the speaker is stating  $\Phi$  as a fact, but rather an assumption that he or she has about  $\Phi$ .
- c. *wohl<sub>A</sub>*: *wohl* in a proposition  $\Phi$ , an interrogative, marks that the speaker expects that the addressee might not know the answer to, but rather assume it.

The consequences of the discussion in chapter 3, illustrated by the definitions in (149) and (150) provide the background of my proposal in chapter 4. I argue that the meaning of the particles mentioned suggests that they (and probably other discourse particles as well) serve a specific pragmatic function. Based on earlier proposals by Zimmermann (2004, 2008) and Gast (2008), I suggested that this particular function is the interaction with the common ground, the set of propositions taken for granted by the participants of the discourse. I assume discourse particles to be modifiers of the propositions in the common ground, interacting with it by activating, negating or deleting certain propositions, while also relating them to each other.

## 5.2 Final remarks

As mentioned, this thesis has not even tried to account for every known problem in the analysis of discourse particles. It merely serves as a concise analysis of some aspects of three discourse particles. Therefore, my suggestions regarding a unified analysis of more, maybe all, discourse particles have only been few in number. I think that research on discourse particles can proceed along the lines of what I suggested, involving reference to the particle's interaction with the common ground.

Such research might provide more information not only on the nature of discourse particles but also on the nature of the context and the common ground and maybe other possibilities of interacting with and modifying it.



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# A Abstract (German)

Diese Arbeit beschäftigt sich mit den deutschen Modalpartikeln *ja*, *doch* und *wohl*. Besonders wird auf die Analyse der Bedeutung dieser Partikeln eingegangen, sowie ihre Funktion untersucht. Außerdem wird das syntaktische Verhalten der drei genannten Partikeln betrachtet.

Das erste Kapitel gibt einen Überblick über die Eigenschaften von Modalpartikeln, zum Beispiel, dass sie nicht betont oder koordiniert werden können. Weiters wird das Vorkommen von Modalpartikeln in deutschen Deklarativsätzen, Imperativen und Interrogativen illustriert. Dabei wird gezeigt, dass die Position von Modalpartikeln an der syntaktischen Oberfläche stark restringiert ist. Die Interaktion verschiedener Konstituenten mit Modalpartikeln wird hier erwähnt.

In Kapitel 2 wird Literatur zur Syntax der Modalpartikeln analysiert, wobei die Analyse von Coniglio (2009) als vielversprechendeste vorgeschlagen wird. Aus dieser Analyse folgen mehrere syntaktische Restriktionen und durch Vorschläge von Diesing (1992) ergänzt könnte auch das scheinbar offensichtliche Phänomen der Interaktion von Modalpartikeln mit der Topic-Fokus-Struktur des Deutschen als Epiphänomen der Position der syntaktischen Basisgenerierung von Modalpartikeln beschrieben werden.

Diese Position wird im IP-Knoten angenommen, ähnlich hierarchisch geordnet wie Adverbien in der von Cinque (1999) vorgeschlagenen Hierarchie. Darin unterscheidet sich Coniglios Vorschlag von früheren Analysen, zum Beispiel Meibauer (1994) und Ormelius-Sandblom (1997), die Modalpartikeln als VP-Adjunkte behandeln.

Das dritte Kapitel beschäftigt sich mit der Bedeutung der Partikeln *ja*, *doch* und *wohl*, wieder unter Berücksichtigung früherer Literatur, u.a. von Doherty (1985, 1987), Lindner (1991), Ormelius-Sandblom (1997), Zimmermann (2004, 2008), sowie Gast (2008). Es werden verschiedene Analysen zur Bedeutung jeder Partikel vorgestellt, sowie die Probleme dieser Analysen erörtert.

Es wird gezeigt, dass eher "weite" Annahmen zur Bedeutung von Modalpartikeln problematisch sein können, da zu viele Bedeutungsaspekte es sehr schwierig machen, einzelne Vorkommen von Modalpartikeln klar zu beschreiben und ihre Bedeutung vorherzusagen. Daher wird dafür argumentiert, für die Untersuchung der Bedeutung der Partikeln von einzelnen Verwendungen auszugehen, zum Beispiel unter Berücksichtigung von Betonungsverhältnissen im Satz (dadurch ergeben sich beispielsweise zwei Varianten der Funktion der Partikel *ja*). Ebenso ist der Unterschied zwischen betonten und unbetonten Varianten der Morpheme wichtig, in dieser Arbeit werden nur die unbetonten Varianten als Modalpartikeln analysiert.

In Kapitel 4 wird versucht, die zuvor gefundenen Erkenntnisse zusammenfassen, um eine gemeinsame Analyse aller Modalpartikeln zu ermöglichen. Wie von Zimmermann (2008) argumentiert, ist eine gemeinsame semantische Analyse wenig aussichtsreich. Daher wird vorgeschlagen, zu einem gewissen Grad Gast (2008) folgend, dass eine integrierte pragmatische Analyse von Modalpartikeln eher zu erreichen ist als eine semantische. Es wird argumentiert, dass die drei untersuchten Modalpartikeln als "Diskursmodifikatoren" aufgefasst werden können, sodass jede Partikel auf eine bestimmte Art, die sich aus ihrer spezifischen Bedeutung ergibt, mit Propositionen im sog. *common ground* interagiert. Der *common ground* wird, Stalnaker (1978, 2002) und Zimmermann (2004, 2008) folgend, als Menge der von den Gesprächsteilnehmerinnen und -teilnehmern als gegeben akzeptierten Propositionen angenommen. Die Interaktion der drei untersuchten Partikeln mit dem *common ground* wird anhand von Daten dargestellt und es wird gezeigt, dass diese Analyse auch auf andere Modalpartikel angewandt werden kann.



## B Abstract (English)

This thesis deals with the German discourse particles *ja*, *doch* and *wohl*. In particular, the analysis focuses on their meaning and their function. Additionally, I discuss the syntactic behaviour of these particles.

The first chapter provides an overview of the characteristics of German discourse particles, e.g. that they can not be stressed or coordinated. Furthermore, the possible occurrences of German discourse particles in declaratives, imperatives and interrogatives are illustrated. It is evident that the surface position of German discourse particles is heavily restricted. I also mention the interaction of certain constituents with German discourse particles.

In chapter 2, I analyse the earlier literature on German discourse particles and I take the analysis provided by Coniglio (2009) to be the most promising one. Various syntactic restrictions follow from his analysis and complemented with suggestions by Diesing (1992), it can be shown that the seemingly obvious phenomenon of the interaction of discourse particles with the topic-focus structure of German can rather be analysed as an epiphenomenon of the position of generation of discourse particles.

This position is assumed to be located in the IP node, ordered hierarchically, similarly to adverbs in the hierarchy proposed by Cinque (1999). Regarding this point, Coniglio's (2009) proposal differs from earlier analyses, e.g. by Meibauer (1994) and Ormelius-Sandblom (1997) who assume that discourse particles are adjoined to VP.

In the third chapter, I address the meaning of the particles *ja*, *doch* and *wohl*. Once

again, I review the earlier literature, inter alia by Doherty (1985, 1987), Lindner (1991), Ormelius-Sandblom (1997), Zimmermann (2004, 2008) and Gast (2008). I discuss various analyses of the meaning of discourse particles and try to point out their problems.

It is shown that a broad account of a discourse particle's meaning can be problematic, since having too many nuances of meaning makes it harder to explain single occurrences of discourse particles and make reasonable predictions. Therefore, I argue that an important aspect in analysing the meaning of discourse particles is an exact account of the circumstances, e.g. the stress pattern of a clause, which can lead to different uses of the particle *ja*. The difference between stressed and unstressed variants of morphemes is also addressed in chapter 3. In this thesis, only unstressed variants are analysed as discourse particles.

Chapter 4 tries to summarise the findings of the earlier chapters, in order to give a proposal of a possible common analysis of all German discourse particles. As argued by Zimmermann (2008), an integrated semantic analysis might be in vain. Therefore, following in a way Gast (2008), I argue that devising an integrated pragmatic analysis of German discourse particles is much more probable than formulating a semantic one. I argue that the three particles under discussion might be considered to be "discourse modifiers". Each particle, in its own way, due to its idiosyncratic meaning, interacts with the common ground. Following Stalnaker (1978, 2002) and Zimmermann (2004, 2008), I take the common ground to be the set of propositions that all participants accept as given. The interaction of the three particles with the common ground is illustrated by data and it is shown that this analysis could be expanded to other German discourse particles as well.

# C Curriculum vitae

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