Discourse particles and their connection to sentence types, speech acts, and discourse

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Introduction - I

Overarching question: What are reasons for inserting discourse particles?

Following Eckardt, Rojas-Esponda, Zimmermann, and others: "discourse navigating devices" or means to perform "discourse management"

Eckardt 2011, Zimmermann 2011, Egg & Zimmermann 2012, Repp 2013, Rojas-Esponda 2015

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Introduction - II

"discourse navigating devices"/"discourse management":

discourse particles make reference to the speaker's attitudes regarding content contributed by the utterance with respect to the current state of the discourse.

For German: detailed analyses along this line (McCready & Zimmermann 2011, Kaufmann & Kaufmann 2012, Csipak & Zobel 2014, Grosz 2014a, ...)

WANTED: a more detailed account of how the semantics and pragmatics of the host clause interact with the contribution of the particle.

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Connection to models of discourse

Claim: understanding the distribution of particles provides a window into their contribution

 \Rightarrow connect discourse particle research to results on discourse models to make the effect of discourse particles more precise

 \Rightarrow Already quite some work in this area! (Gieselman & Caponigro 2010, Hogeweg et al. 2011, Rojas-Esponda 2014, Grosz 2014b, ...)

Discourse models: Starr 2010, Farkas & Bruce 2010, AnderBois et al. 2010, Murray 2014, Rojas-Esponda 2015 . . .

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Today's talk

Today, we address the licensing of discourse particles.

Claims

- The licensing is connected to the complex interaction of the semantics/pragmatics of the host clause and the contribution of the particles.
- The distribution of discourse particles cannot be captured by either sensitivity to sentence types or sensitivity to the illocutionary force of the utterance.

(Similar claims are defended by Rapp 2016.)

Restrictions:

only declaratives and interrogatives + selected set of German particles

Roadmap

Introduction

Previous proposals for licensing

Licensing by sentence type Licensing by illocutionary force

Discourse function matters

Farkas & Bruce 2010 The proposal Further evidence for our proposal

Conclusion

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Conclusion

Licensing by sentence type

Licensing by sentence type -I

Received view:

Discourse particles are sensitive to sentence type, and are licensed if the their sentence type restrictions are met.

- (1) a. Er kann halt kochen. (He can be #Kann er halt kochen?
 c. #Was kocht er halt?
 (2) a. #Er kann etwa kochen. (He can be can b
 - b. Kann er etwa kochen?
 - c. *#Was kocht er etwa*?

(He can HALT cook.) (Can he HALT cook?) (What does he HALT cook?)

(He can ETWA cook.) (Can he ETWA cook?) (What does he ETWA cook?)

Motivation for German: classifications given in the descriptive literature (e.g. Thurmair 1989 among many others).

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Licensing by sentence type

Licensing by sentence type – II

The distribution of selected particles in main clauses:

particle	decl.	polar interr.	wh-interr.
denn	-	\checkmark	\checkmark
doch	\checkmark	_	√(?)
eh	\checkmark	- (✓)	-
etwa	-	\checkmark	-
halt	\checkmark	_	-
ja	\checkmark	_	-
überhaupt	(√)	(√)	(√)
wohl	\checkmark	\checkmark	\checkmark

(Thurmair 1989: 49)

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Licensing by sentence type

Licensing by sentence type – III

Resulting Hypothesis:

Discourse particles are specified for whether they can occur in:

- declaratives
- polar interrogatives
- wh-interrogatives

This completely specifies their distribution.

NB: This hypothesis is never actually addressed in the literature.

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Licensing by sentence type

Problem: adverbial clauses - I

Adverbial clauses can host discourse particles.

For instance: In the antecedents of conditionals, we find *denn*, *doch*, *eh*, *halt*, *ja*, and *überhaupt* (of our selection of particles).

- (3) Peter kann mitkommen, wenn er **denn** / **überhaupt** will. 'Peter can join us if he DENN / ÜBERHAUPT wants to.'
- (4) Wenn Peter **doch** / **eh** / **halt** / **ja** mitkommen will, ruf ich ihn an. 'If Peter DOCH / EH / HALT / JA wants to join, I'll call him.'

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Licensing by sentence type

Problem: adverbial clauses - II

Particles that can occur in antecedents of conditionals:

particle	decl.	polar interr.	antecedent of cond.
denn	-	\checkmark	\checkmark
doch	\checkmark	\checkmark	\checkmark
eh	\checkmark	\checkmark	\checkmark
etwa	_	\checkmark	_
halt	\checkmark	_	\checkmark
ja	\checkmark	_	\checkmark
überhaupt	\checkmark	\checkmark	\checkmark
wohl	\checkmark	\checkmark	_

problems for "declarative"

problems for "interrogative"

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Introduction

Licensing by sentence type

Consequence

Possible ways to go:

► More fine grained individuation of sentence types. ⇒ loss of explanatory power

Discarding sentence type as deciding factor.

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Licensing by illocutionary force

Licensing by illocutionary force – I

Sentence type as the deciding factor for licensing discourse particles has been mostly discarded in the literature.

Updated received view: presence of illocutionary force in a sentence licenses particles.

Take a closer look at:

- Central assumptions of this view
- An empirical problem for this view

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Coniglio (2011), Bayer & Trotzke (2015), Bayer & Obenauer (2011),
Struckmeier (2014), ...
Gutzmann (2008), Zimmermann (2008), ...
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Licensing by illocutionary force

Central assumptions

- Discourse particles agree with the head of a ForceP (in the left periphery) which is specified for illocutionary force.
- The specified illocutionary force determines syntactic form and speech acts.
- Restrictions on the distribution of discourse particles are stipulated: the "right" syntactic features are specified in the lexicon.

Bayer & Trotzke (2015: 2):

"the choice of particle depends on major categories of Force"

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Conclusion

Licensing by illocutionary force

Empirical problem: declarative questions - I

Licensing proposals

- Declarative questions ("rising declaratives") have the form of a declarative with question intonation.
- Like polar questions containing "low negation", they are used to ask a negatively biased question.

 \Rightarrow Declarative questions are root clauses with illocutionary force. They should have a ForceP. Which force?

Ladd (1981), Gunlogson (2003), Krifka (2015)

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Empirical problem: declarative questions - II

Obvious candidates for illocutionary force: polar interrogative (+ bias) and declarative

Assumption 1:

same illocutionary force as a polar interrogative (+ bias)

 (6) A: Peter invited me for dinner at his place tomorrow.
 B: Maria ist morgen (# etwa) nicht zu Hause? (Maria is not home tomorrow?)
 B': Ist Maria morgen (etwa) NICHT zu Hause? (Is Maria not home tomorrow?)

 \Rightarrow Assumption 1 seems to be false.

Licensing by illocutionary force

Empirical problem: declarative questions – III

Alternative explanation for oddness of etwa:

- declarative questions have declarative force (which also licenses declarative word order)
- etwa is not specified for declarative force

Assumption 2: same illocutionary force as a declarative

- (7) A: Peter invited me for dinner at his place tomorrow.
 B: Peter kann (# halt) kochen? (Peter can cook?)
 B': Peter kann (halt) kochen. (Peter can cook.)
- \Rightarrow Assumption 2 seems to be false, as well.

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Empirical problem: declarative questions – IV

Observation: declarative questions cannot host any of "our" discourse particles

particle	decl.	polar interr.	decl. questions
denn	-	\checkmark	_
doch	\checkmark	\checkmark	_
eh	\checkmark	\checkmark	-
etwa	-	\checkmark	-
halt	\checkmark	_	_
ja	\checkmark	_	_
überhaupt	\checkmark	\checkmark	_
wohl	\checkmark	\checkmark	_

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Licensing by illocutionary force

Consequence

Possible ways to go:

- More fine grained individuation of illocutionary force types.
 - \Rightarrow loss of explanatory power

 \Rightarrow additional conceptual problems for illocutionary force accounts of embedded clauses (Rapp 2016)

Discarding presence of ForceP as deciding factor.

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Previous proposals for licensing Licensing by sentence type Licensing by illocutionary force

Discourse function matters

Farkas & Bruce 2010 The proposal Further evidence for our proposal

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Capturing the distribution - our proposal

From introduction: discourse particles

- make reference to the speaker's attitudes regarding content contributed by the utterance
- with respect to the current state of the discourse (the current common ground and public beliefs of the interlocutors)

 \Rightarrow They "fit the utterance to the discourse context" (Zimmermann 2011)

To make this more specific: discourse model of Farkas & Bruce (2010)

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The discourse model – I

Farkas & Bruce's model distinguishes:

- Common ground: what the interlocutors have agreed on up until the current utterance (cg)
- Public commitments: what the interlocutors are publicly committed to through their utterances, but which has not been generally agreed on (DC_X for interlocutor X)
- ► Table: what is currently up for discussion (the form and content) (≈ current QUD)
- Projected set: potential future states of the common ground given the material on the Table (*ps*)

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The discourse model – II

K_1 : discourse initial context state

Α		В	
Common Ground s ₁		Projected Set <i>ps</i> ₁ =	$\{s_1\}$

(Farkas & Bruce 2010: 91)

- No public commitments are registered for either A or B.
- ► No at-issue material is on the Table for discussion.
- The common ground only contains shared "background propositions".

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The discourse model – III

"Discourse function" of an utterance: the sum of all changes to the input context that results from performing the utterance

Discourse function is dependent (at least) on sentence type:

- ► Declaratives: The form S[D] and content [[S]] = p are added to the Table (to be accepted/rejected); the speaker is committed to p.
- Polar interrogatives: The form S[I] and content [[S]] = {p, ¬p} are added to the Table (to be answered); the speaker is not committed to either p or ¬p.

Non-default declaratives and polar interrogatives can depart from this default.

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The discourse model – IV

Example 1: A uttered/asserted a declarative

 $\mathsf{K}_2:$ A asserted Sam is home relative to K_1

А	Table		В
р	$\langle \textit{Sam is home}[D]: \{p\} angle$		
Common Ground $s_2 = s_1$		Projected	Set $ps_2 = \{s_1 \cup \{p\}\}$
(Γ_{autras}) , Γ_{autras} , $\Omega(10, 01)$			

(Farkas & Bruce 2010: 91)

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The discourse model – V

Example 2: A uttered/asked a polar interrogative

 K_4 : A asked *Is Sam home?* relative to K_1

А	Table		В
	$\langle Sam \textit{ is home}[l]: \{p, \neg p\} angle$		
Common Ground		Projected Set	
$s_4 = s_1$		$ps_4 = \{s_1 \cup \{p\}, s_1 \cup \{\neg p\}\}$	

(Farkas & Bruce 2010: 95)

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Discourse particles and the discourse model

Discourse particles are sensitive to the discourse function of their hosts and the make-up of the input context of the utterance.

 \Rightarrow restrictions on the make-up of the common ground cg and the public commitments of the interlocutors DC_X of the input or output contexts (similar to Farkas & Bruce's answering moves)

- Discourse particles contribute a speaker attitude on the material in its scope as not-at-issue content (e.g. Simons et al. 2010).
- \Rightarrow all of these components determine the distribution of a particle

Zeevat 2006, Schwager 2009, Kaufmann & Kaufmann 2012

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The proposal

Comparison of our proposal with Matthewson 2016

- Matthewson 2016: discourse particles contribute either (not-at-issue)
 - epistemic modality
 - discourse management
- Csipak & Zobel 2016: we need to consider
 - use conditions (always relative to discourse state)
 - meaning contribution (doxastic and/or bouletic attitude towards p)
- ⇒ We assume that discourse particles with distributional restrictions are always sensitive to the discourse state, and "mixed" contributions are possible.

The proposal

Extension of Farkas & Bruce: not-at-issue content

Extend Farkas & Bruce's model to capture "non-explicit proposals" = not-at-issue content that is added for update (inspired by AnderBois et al. 2010, Murray 2014)

 K_3 : A asserted Sam's car is red relative to K_1

Α	Table		В
q	$\langle \mathit{Sam's} \ \mathit{car} \ \mathit{is} \ \mathit{red}[D]{:}\{q\} angle$		
[<i>p</i>]			
Common Ground		Projected Set	
$s_3 = s_1$		$ps_3 = \{(s_1 \cup \{p\}) \cup \{q\}\}$	

(Csipak & Zobel to appear: 14)

Content p of the presupposition (Sam's car): that Sam has a car.

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Conclusion

Example: denn in the antecedent of conditionals - I

(8) Peter kann mitkommen, wenn er denn will.
 'Peter can join us if he DENN wants to.'

Condition 1

The *cg* state s_i of the input context K_i and the content expressed by the host utterance must not entail *p*.

Condition 2

There has to be a participant α such that $DC_{\alpha,i}$ entails p, but no content on the *Table* entails p (i.e., $[p] \in DC_{\alpha,i}$).

Contribution of conditional *denn* $[[denn]](p) : \lambda w.prob(w, p) < T$, where T is at or below the threshold for a

where T is at or below the threshold for assertability.

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see Csipak & Zobel to appear
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Licensing proposals

Discourse function matters

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 $(\llbracket S \rrbracket = q)$ $(\llbracket S' \rrbracket = r)$

Example: *denn* in the antecedent of conditionals – II

- (9) Eva: Sarah and I will have Schlutzkrapfen. Sarah: Wenn es **denn** welche gibt (Δ) . 'If they DENN have them.'
- $\mathsf{K}_\ell:$ after updating both utterances of (9) relative to K_1

Eva	Table	Sarah	
q	$\langle S[D]: \{q\} angle$		
[p] _{Sarah}			
	$\langle S'[D]: \{r\} \rangle$	r	
		[denn(p)]	
Common Ground	Projected S	Projected Set	
$s_\ell = s_1$	$ps_\ell = \{((s_1$	$ps_{\ell} = \{(((s_1 \cup \{p\}) \cup \{q\}) \cup \{denn(p)\}) \cup \{r\}\}$	

(see Csipak & Zobel to appear: 21)

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Conclusion

Condition 1 determines the distribution of *denn*

Condition 1: The cg of the input context K_i must not entail p.

- \Rightarrow **Okay:** hypothetical indicative and subjunctive conditionals and biscuit conditionals; the speaker is not committed to the truth of the antecedent proposition *p*.
 - (10) a. I didn't see Peter's car, if he has one.
 - b. I would have seen Peter's car, if he had one.
 - c. There is Pizza in the fridge, if you are hungry.
- \Rightarrow **Impossible:** factual conditionals; occur in contexts where the speaker is committed to the truth of *p*.
 - (11) A: Look! It's sunny outside.B: Great! If it's sunny, we can have a picnic.

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Further evidence for our proposal

Prediction

Prediction:

If conditions on the use of particles restrict their distribution, different types of utterances with the same discourse functions / canonical contexts of use host similar sets of particles.

 \Rightarrow Borne out for:

- default declaratives/antecedents of factual conditionals
- default polar interrogatives/antecedents of hypothetical conditionals

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Further evidence for our proposal

Discourse function matters

Observation: a subset of declarative/interrogative particles are licensed in factual/hypothetical conditional antecedents, respectively.

particle	decl.	factual ant.	polar interr.	hypoth. ant.
denn	-	_	\checkmark	\checkmark
doch	\checkmark	\checkmark	\checkmark	_
eh	\checkmark	\checkmark	\checkmark	\checkmark
etwa	-	_	\checkmark	_
halt	\checkmark	\checkmark	_	_
ja	\checkmark	\checkmark	_	_
überhaupt	\checkmark	_	\checkmark	\checkmark
wohl	\checkmark	_	\checkmark	-

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Further evidence for our proposal

The conditional-interrogative link – I

This observation also has a bearing on the discussion in the literature of the connection between conditional antecedents and polar questions.

- Onea & Steinbach (2012) for V1-conditionals in German: antecedents with V1 word order are polar questions.
- Starr (2014): antecedents raise the question of whether their content holds or not.
- Romero (2015): antecedents directly correspond to an actual or hypothetical question in the QUD stack.

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Conclusion

Further evidence for our proposal

The conditional-interrogative link – II

This predicts for the distribution of discourse particles:

Only particles that do not require a commitment to p can occur in conditional antecedents

- (12) Ich will sie nicht ins Bett schicken, wenn sie morgen ja ausschlafen können.
 'I don't want to send them to bed if they (JA) can sleep in tomorrow.' (https://freiebildung.wordpress.com)
- (13) Können sie morgen (#ja) ausschlafen?'Can they (JA) sleep in tomorrow?'
 - \Rightarrow More needs to be said!

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Summary & Conclusion

- The distribution of particles is determined by the discourse state and the content and discourse function of the host utterance through conditions of use
- Conversely, observing which particles can occur in a particular utterance allows inferences about the make-up of the discourse state and the discourse function of the host utterance
- Their individual contributions can be modelled as (not-at-issue) speaker attitudes (doxastic/bouletic)

Investigating discourse function of utterances and particle distribution/contribution need to go hand in hand

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Thank You!

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