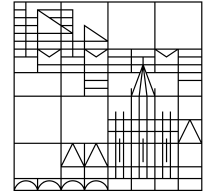


Universität
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Lecture II

Discourse particles

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Aim

German is known for its rather large number of discourse particles (DiPs). These have traditionally been considered to be highly idiosyncratic and therefore peripheral phenomena. In the face of their syntactic properties, this view is untenable. DiPs play a central role as heads in the functional clause structure above vP . Although they appear rather low in the clause, they contribute to illocutionary force. In the present account, this is achieved by probe/goal agreement with Force and DiP. The focus of the presentation will be on DiPs in questions.

Speech-act sensitivity

Discourse particles (DiPs, in German *Modalpartikeln* or *Abtönungspartikeln*) are geared to specific clause types (declarative, polar interrogative, *wh*-interrogative, exclamative, imperative etc.) and their interpretation as illocutionary acts. Therefore they arise – at least predominantly – in root clauses.

Recently, semantic theory has identified DiPs as parts of “non-at-issue” meaning, in contrast to “at-issue” meaning as familiar from truth-conditional semantics (cf. Kratzer, 1999 ; Potts, 2005; 2007; Gutzmann, 2012 among many).

Various key words exist: “expressive dimension” (Potts); “use-conditional meaning” (Gutzmann) etc.

The core idea is that at-issue meaning is composed at the propositional level as in model-theoretic truth-conditional semantics whereas non-at-issue meaning is composed at the utterance level, i.e. at the level at which propositions have already been turned into types of illocutionary acts and involve speaker and hearer in a crucial way.

DiPs make a semantic contribution to the basic meaning of the utterance by co-determining the illocutionary force of an utterance (Thurmair 1989; Coniglio 2011). *wh*-questions may with *denn* (lit. “then”), *wohl* (lit. “well”), *nur/bloß* (lit. “only”), *schon* (lit. “already”).

Semantic variations over (1).

(1) *Wo wohnt er?*
Where lives he
'Where does he live?'

(2) a. *Wo wohnt er **denn**?*

Given a common ground G between speaker and hearer, where does he live in relation to some aspect of G; *denn* is anaphoric to G; no out-of-the blue usage, see König (1977), Wegener (2002), Grosz (2005), Bayer (2012).

b. *Wo wohnt er **wohl**?*

Speaker signals that he/she is in a state of uncertainty about the answer, see Zimmermann (2004).

c. *Wo wohnt er **nur/bloß**?*

Speaker signals that he/she has already unsuccessfully tried to find an answer; Obenauer's (2004) "can't-find-the value questions."

d. *Wo wird er er **schon** wohnen?*

By using *schon*, speaker creates some scale by which the entities (here places) that can replace the variable are ranked according to their plausibility or likelihood of yielding a true answer. Speaker creates the implicature that few or even no entities are high enough on the scale to make the answer true. Yields a rhetorical question; see Meibauer (1994), Bayer and Obenauer (2011).

DiPs are clause-type (CT) sensitive but depend ultimately on an illocutionary force (ILL) interpretation of CT.

e.g. both (3) and (4) have the ILL of a directive.

- (3) Halte den Mund, wenn sie dich was fragen!
“Keep your mouth shut when they ask you questions!”
- (4) Du hältst den Mund, wenn sie dich was fragen!
“Keep your mouth shut when they ask you questions!”

However, only (3) has the form of an imperative. (4) is formally a declarative which can nevertheless be used as a directive ILL act.

Notice now that the DiP *nur* (“only”) can be applied only in (3) never in (4)

(5) a. Halte **nur** den Mund, wenn sie dich was fragen!

b. *Du hältst **nur** den Mund, wenn sie dich was fragen!

Thus, if *nur* is used in a directive, the directive’s CT must be formally in imperative mood.

Sensitivity to CT is a key property of DiPs.

Unlike in other languages, e.g. Japanese or Italian (dialects), German DiPs arise in clause-medial position.

- (6) a. Watasi-wa soko-ni ik-u **wa** Japanese
I-TOP there-to go-PRES *wa*
“I will go there”
- b. Taroo-wa soko-ni i-ta **yo**
Taroo-TOP there-at be-PAST *yo*
„Taroo was there“
- c. Hanako-wa soko-ni i-ru (daroo) **ne**
Hanako-TOP there-at be-PRES will *ne*
“I guess Hanako is there. Don’t you agree?”

Saito & Haraguchi (2012)

- (7) a. Dove valo, **ti**? Venetian
where goes-he ti
 „Where is he going?“
- b. L` a piovest, **lu**! Pagotto
it -has rained lu
 „It has rained!“
- c. Quando rivar` ali, **mo**? Pagotto
when arrive-FUT-they mo]
 „When will they arrive?“
- d. Quando, **mo**, rivar` ali? Munaro & Poletto (2005)
 „When will they arrive?“

Some particles are only final, other can also appear after *wh*.

- (8) a. Du hast **ja** eine neue Frisur German
you have ja a new haircut
„You have – remember/ as I notice – a new haircut“
- b. Nimm **doch** noch ein Stück Kuchen!
Take doch still a piece cake
„Please take yet another piece of cake!“
- c. Wo hast du **denn** diesen Quatsch gehört?
where have you denn this nonsense heard
„Where have you heard this nonsense?“
- (9) a. *Du hast eine neue Frisur **ja**
b. *Nimm noch ein Stück Kuchen **doch!**
c. *Wo hast du diesen Quatsch gehört **denn?**

DiPs in peripheral position may be argued to be in the force projection.

For Italian dialects it has been argued that the DiP is in initial position, and that its sister (a TP-like phrase) has been raised to its left.

Where we see the DiP following a wh-prase, it is most likely this sub-sentential phrase which has undergone movement. (The grammar of Bangla gives very clear evidence for such a type of derivation.)

For German such an option is not available. The DiP is in clause-medial position. This raises the question how it can contribute to the left-peripherally located CT/ILL

A popular proposal has been that the DiP undergoes LF-movement. We will, however, show later that this proposal must be discarded.

Phrase structure

DiP marks the left edge of vP (cf. Diesing)

vP-internal material may (or must) scramble to the left of DiP

- (8) a. *Wann könnte **denn** Otto den Brief gestern ins Büro mitgenommen haben?*
when could DENN Otto the letter yesterday to office along-taken have
'When could Otto have yesterday taken the letter to the office? (I'm wondering)
- b. *Wann könnte Otto **denn** ~~Otto~~ den Brief gestern ins Büro mitgenommen haben?*
- c. *Wann könnte Otto den Brief **denn** ~~Otto den Brief~~ gestern ins Büro mitgenommen haben?*
- d. *Wann könnte Otto den Brief gestern **denn** ~~Otto den Brief~~ gestern ins Büro mitgenommen haben?*
- e. *Wann könnte Otto den Brief gestern ins Büro **denn** ~~Otto den Brief~~ gestern ins Büro mitgenommen haben?*

A first proposal

(10) [_{ForceP} Force° ... [_{FinP} Fin° [_{TopP} ... [**Prt** [_{VP} ...]]]]]

Unlike adverbs, DiPs are weak closed-class elements. Unlike adverbs, they can never be preposed nor postposed; they are \rightarrow immobile. These properties follow if DiPs are functional heads (that fail to undergo systematic movement such as T-to-C movement). This changes (10) to (11).

(11) $[_{\text{ForceP}} \text{Force}^\circ \dots [_{\text{FinP}} \text{Fin}^\circ [_{\text{TopP}} \dots [_{\text{PrtP}} \mathbf{Prt}^\circ [_{\text{VP}} \dots]]]]]]$

The particles we see in Japanese and in other head-final languages are obviously heads. Munaro & Poletto argue also for the particles' head-status in Northern Italian Dialects.

So, are they also head-like in German? Traditionally they have been analyzed as adverbs, and recently by Cardinaletti as „weak“ or „deficient“ adverbs. Thus, the answer requires some elaboration.

Interlude on grammaticalization

All DiPs have older counterparts in the language from which they derive.

These counterparts are mostly adverbs or other particles with a freer distribution.

In comparison with their counterparts, DiPs show syntactic, semantic as well as phonological differences.

- Syntax: word order more restricted, clause-type dependency
- Semantics: loss of referential meaning, enhanced abstraction
- Phonology: weakening, trend toward monosyllabicity

These features have been identified as signs of grammaticalization (cf. Lehmann (2002), <http://www.christianlehmann.eu/publ/ASSidUE09.pdf>)

(12) a. Die Oberfläche ist nicht **eben**
the surface is not even

“The surface is not smooth”

b. **Eben** ist die Fläche nicht
even is the surface not

c. Karl ist **eben** angekommen
Karl is just arrived

“Karl has just arrived”

d. **Eben** ist Karl angekommen

e. Karl ist angekommen **eben**

(13) a. Karl ist **eben** ein Schurke
Karl is eben a crook

„Karl is (irreversibly) a crook“

b. ***Eben** ist Karl ein Schurke

c. *Karl ist ein Schurke **eben**

(14) a. Otto ist **vielleicht** krank [σ σ]
Otto is perhaps ill
“Perhaps Otto is ill”

b. **Vielleicht** ist Otto krank

c. ?Otto ist krank **vielleicht**

(15) a. Bist **leicht** deppert? Viennese dialect (P. Grosz, p.c.)
are-you leicht crazy [ϕ σ] ⇒ [σ]
“Are you crazy?”

b. ***Leicht** bist deppert?

c. *Bist deppert **leicht**?

The DiP *denn* as it occurs in interrogatives derives from OHG *thanne* and still survives as the temporal adverb *dann* (“then”) and the adversative or causative clause-linker *denn*.

(16) LOCALISTIC > TEMPORAL > LOGICAL > ILLOCUTIVE /
DISCOURSE FUNCTIONAL

Abraham (1991)

Grammaticalization turns XPs into X° (van Gelderen; Roberts & Roussou).

Grammaticalization pushes categories into a higher region of the tree.

This may explain why DiPs generally precede adverbs (except those which can take on topic like or stage-setter properties).

Grammaticalization suggests that German DiPs – unlike their counterparts – have shrunk down to heads. We will later see that this conclusion receives strong independent support.

Co-occurrence and fixed order

DiPs may co-occur as long as they are clause-type compatible, but their order is fixed (s. Thurmair (1989), Coniglio (2011)). Consider the order *denn* > *wohl* > *schon*.

- (17) a. *Wann könnte Otto **denn** den Brief **wohl** gestern **schon** ins Büro mitgenommen haben?*
- b. **Wann könnte Otto **wohl** den Brief **denn** gestern **schon** ins Büro mitgenommen haben?*
- c. **Wann könnte Otto **schon** den Brief **wohl** gestern **denn** ins Büro mitgenommen haben?*

Problem: Force c-commands the DiP, but in German the DiP is arguably not part of ForceP. How can it then contribute to Force?

Potential solutions in terms of LF movement or formal feature movement must be discarded. Why?

To see this, we select examples in which – so far unexpectedly – the DiP occurs in a clausal complement.

Scope

(18) a. *Wo glaubst du, dass man hier nachts um 3 Uhr schon Benzin bekommt?*
where believe you that one here at night at 3 o'clock SCHON gasoline gets
'Where do you believe that one can get gasoline here at 3 o'clock in the night? –
Nowhere/hardly anywhere!'

b. #*Wo glaubst du **schon**, dass man hier nachts um 3 Uhr Benzin bekommt?*

(18a) ≠ (18b); in (18a) the speaker asks about the places x such that the addressee believes there is a plausibility ranking of x according to which one can get gasoline in x at 3 o'clock in the night; (18b) is syntactically ok but semantically odd because the speaker asks about the places x such that there is a plausibility ranking of the addressee's BELIEVING that one can get gasoline in x at 3 o'clock in the night.

If this is right,

- the DiP must take scope exactly where we see it. The DiP in the embedded clause does not raise up to the root clause.
- Apart from this, LF-movement across the CP-boundary would be highly unexpected.
- LF-movement would be extra puzzling if DiPs are heads. Transclausal LF head-movement should be met with extra reservation.

A minimalist alternative

- DiPs access Force via probe-goal agreement
- under successive cyclic *wh*-movement, the Q-sensitive DiPs under consideration can be probed by an uninterpretable interrogative C (s. Bayer and Obenauer (2011) and subsequent work).

(19) Wo glaubst du [_{CP} ~~w~~ dass man hier ... [_{PrtP} schon [_{VP} ~~w~~ Benzin bekommt]]]]?



In the absence of long extraction, the DiP interpretation of *schon* in CP is unavailable; *schon* can only be understood as the temporal adverb ‘already’.

- (20) *Wer glaubt, dass man hier nachts um 3 Uhr schon Benzin bekommt?*
who believes that one here at night at 3 o'clock SCHON gasoline gets
‘Who believes that one can get gasoline here already as early as 3 o'clock in the night?’

Empirical control

To be sure the data about long-distance licensing of DiP are reliable, Bayer, Häussler and Bader (2014) conducted two experiments of which I would like to present the first one.

The experiment has a three-factorial design. It compares the DiP *denn* with the speech-act neutral adverb *damals* (“then”, “in those days”). It presents both of them in the root-clause or in the embedded clause; and it places them into *wh*-clauses with short as well as with long extraction.

Table 1. Sample Stimuli of Experiment 1

Short Movement, particle/adverb in main clause

Wer berichtete ihr denn/damals, dass die Einbrecher gefasst wurden?

‘Who told her DENN/at that time that the burglars were caught?’

Short Movement, particle/adverb in dependent clause

Wer berichtete ihr, dass die Einbrecher denn/damals gefasst wurden?

‘Who told her that the burglars were caught DENN/at that time?’

Long Movement, particle/adverb in main clause

Wen vermutete er denn/damals, dass die Polizei festgenommen hat?

‘Who did he assume DENN/at that time that the police arrested?’

Long Movement, particle/adverb in dependent clause

Wen vermutete er, dass die Polizei denn/damals festgenommen hat?

‘Who did he assume that the police arrested DENN/at that time?’

The experiment was run in form of a questionnaires using the method of Magnitude Estimation (ME), a method originally developed in psychophysics.

Participants judged the acceptability of the materials in comparison with a given “reference stimulus” which was associated with a number, say 50.

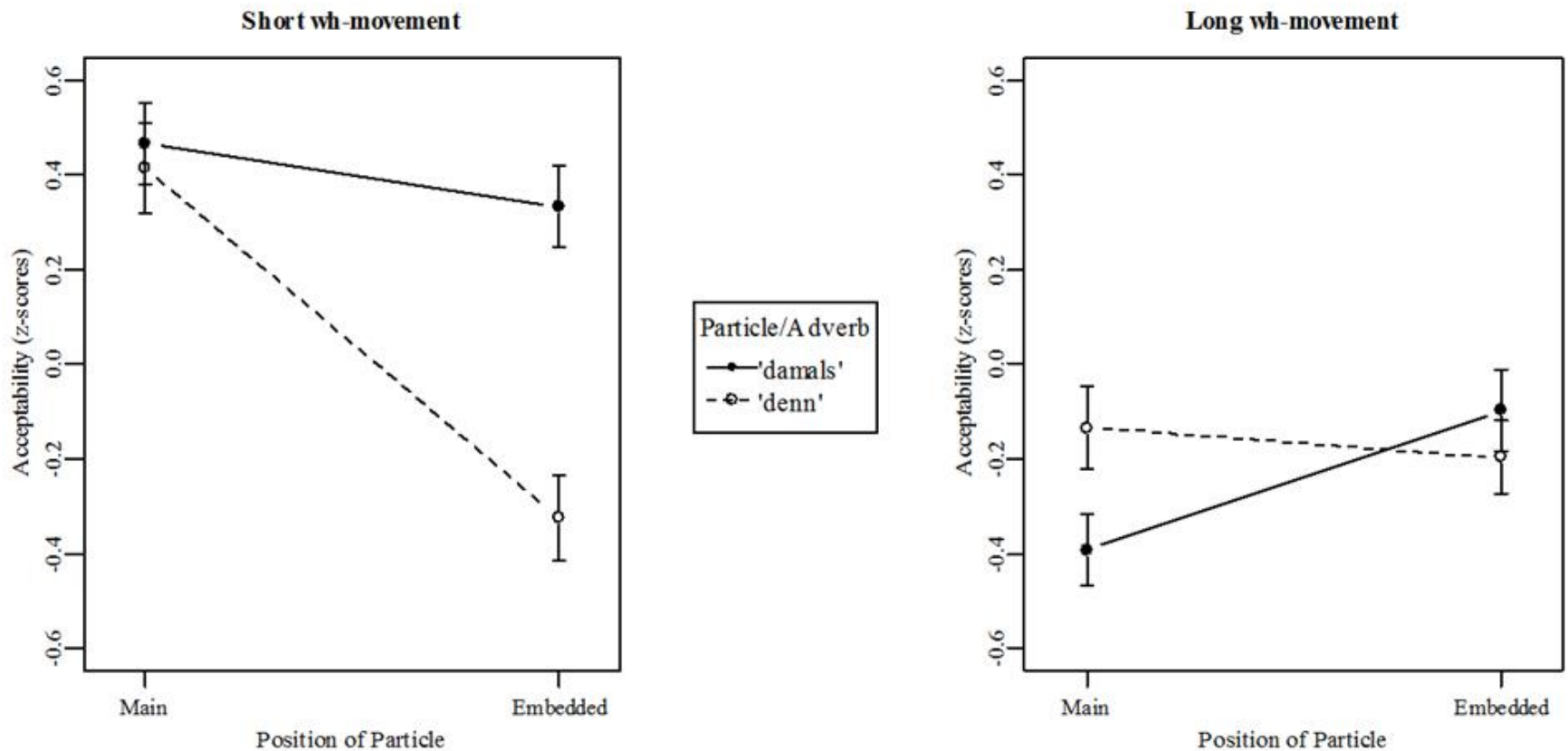
They are allowed to assign to the test sentences an arbitrary number above 50 (“x-much better than the reference stimulus”) or below (“x-much worse than the reference stimulus”) but always greater than zero.

ME yields judgments on a continuous scale and is therefore suitable to standard statistical procedures.

106 students from the University of Konstanz participated for course credit or payment.

Results

Figure 1. Acceptability ratings in Experiment 1 (z-scores)



The Experiment shows ...

- a general penalty for long *wh*-movement,
- interactions of Movement Type, Particle/Adverb and Particle/Adverb Position,
- a dislike of the DiP *denn* in the embedded clause of sentences with short *wh*-movement.

This proves the hypothesis that cyclic *wh*-movement through the CP-phase enables local probing of the DiP, and that via the *wh*-chain the DiP contributes to the clause's illocutionary force.

Metaphorically speaking, probe-goal agreement enables Force to stretch its fingers into lower regions of the clause and search there for elements that may contribute to its fine-tuning.

Stretching the fingers across the minimal ForceP is under the grammar's control of locality. Due to successive cyclic movement, the phase boundary can be crossed without damage.

Theoretical implementation

As already suggested in Lecture 1, Force should be split up into CT (clause type) and ILL (illocution) . Following recent research, we call the latter SA (speech act), and its projection SAP (speech act phrase).

The DiP has an uninterpretable and unvalued CT-feature, here $uQ[]$, which is probed by a CT-head, here $Q[]$. The CT-head may be interpretable or not.

SA has an uninterpretable CT-feature which is valued by agreement with an interpretable CTP.

This is possible in the feature sharing theory of Pesetsky and Torrego (2007) in which valuation and interpretability are disconnected (unlike in the Chomskyan standard approach).

Consider for concreteness the following derivation of a long-distance dependency between the root's split force organization and the DiP-headed particle phase in a dependent clause.

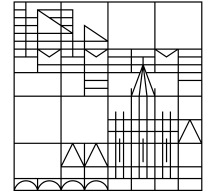
- (21)a. [_{VP} *wh* [_{VP} ... ~~*wh*~~ ...]] ⇒ MERGE *Prt* ⇒
- b. [_{PrtP} *Prt*_{uQ[]} [_{VP} ... ~~*wh*~~ ...]] ⇒ MOVE *wh* ⇒
- c. [_{CTP} *CT*_{uQ[]} [_{CP} *wh* *C* [_{TP} ... [_{PrtP} *Prt*_{uQ[]} [_{VP} ... ~~*wh*~~ ...]]]]] ⇒ AGREE ⇒
- d. [_{CTP} *CT*_{uQ[1]} [_{CP} *wh* *C* [_{TP} ... [_{PrtP} *Prt*_{uQ[1]} [_{VP} ... *wh* ...]]]]] ⇒ MOVE *wh* ⇒
- ...
- e. [_{SAP} *SA*_{uQ[]} [_{CTP} *CT*_{iQ[]} [_{FinP} *wh* [_{Fin'} *V*_{fin} [_{TP} ... [_{CTP} *CT*_{uQ[1]} [_{CP} *wh* *C* [_{TP} ... [_{PrtP} *Prt*_{uQ[1]} [_{VP} ... ~~*wh*~~ ...]]]]]]]]]]] ⇒ AGREE ⇒
- f. [_{SAP} *SA*_{uQ[1]} [_{CTP} *CT*_{iQ[1]} [_{FinP} *wh* [_{Fin'} *V*_{fin} [_{TP} ... [_{CTP} *CT*_{uQ[1]} [_{CP} *wh* *C* [_{TP} ... [_{PrtP} *Prt*_{uQ[1]} [_{VP} ... ~~*wh*~~ ...]]]]]]]]]]]

Agreement between CT and Prt guarantees that the CT is of the type that results from the application of Prt to CT. By transitivity, agreement between SA and CT guarantees that the root clause is an interrogative speech act enriched with the specific “flavor” of Prt.

Importantly, the DiP (Prt) itself does not move. It stays precisely in the position in which it was first merged. This predicts an irreversible scope position throughout. As we will see in the 3rd lecture, this is a desirable result.

This concludes my account of the syntax (and to some extent also the semantics) of German DiPs and their compositionality.

In the third lecture it will be shown how further more marked constructions and processes involving DiPs rest on this ground, and how the theory developed so far provides the right basis.



Thank you for your attention

ご清聴ありがとうございました