

Lecture III

Discourse particles in long-distance dependencies

Josef Bayer

Tokyo, Keio University, 18-07-2015

Aim

DiPs are frozen in a scope position lower than the Force projection. Nevertheless, Q-sensitive DiPs can alternatively undergo merger with a *wh*-phrase and then move along with it. The [*wh*+DiP] construction gives rise to an emphatic reading with a distinctive phonetic correlate. How can this exceptional constituency be mapped onto the regular one? The answer will reveal a strong similarity with cyclic *wh*-movement. The analysis extends almost automatically to constructions with focus particles. Given the idiosyncratic appearance of DiPs, the lecture will close with speculations about the relation between language specificity and principles of universal grammar.

Let us recall one of the classical diagnostics for DiPs in the grammar of German:

Immobility

In Lecture II, we interpreted this as following from their status as functional heads. According to this analysis, DiPs are on a par with v, T, Neg, C, Fin, Force etc.

Nevertheless, the generalization seems to be affected by an exception:

DiPs can be displaced to the left clausal periphery if they co-occur with a *wh*-phrase, and they can do this even “long distance”.

(1) a. [*An wen **denn***] *könnte er sich* ___ *gewandt haben?*

at who DENN could he REFL turned have

‘Who on earth could he have turned to?’

b. [*An wen **denn***] *glaubst du*,[___ *dass er sich* ___ *gewandt haben könnte*]?

‘Who on earth do you believe than he could he have turned to?’

As the square bracket suggests, *whP* + DiP seems to form a constituent. If not, the V2-constraint, discussed in Lecture I, would be violated.

But if this is true, DiP is really ex situ, outside the scope position we have been arguing for, and in apparent violation of the scope facts that had been demonstrated so far.

A second scandal emerges in connection with rigid order. The strict hierarchy that had been diagnosed in Lecture II, e.g. *denn>wohl>schon*, seems to be disrupted in (2). Nevertheless, (2) is a perfectly the well-formed example

- (2) [*An wen **schon***] *wird er sich damals **denn** gewandt haben?*
'Who on earth will he have tuned to after all in those days?'
(the answer is obvious)

The linear order is: *schon* > *denn* !

The surface order is *schon*>*denn* is otherwise strictly excluded, also across the CP-boundary as (3) shows:

(3) *[*An wen*] *glaubst du **schon**, dass er sich damals **denn** gewandt haben wird?*

Notice that in (3) both DiPs are in what we have argued to be their scope positions. Both are in the pre-*vP* position, and – if they are heads – they project a *schonP* and a *dennP* respectively.

Now the pertinent questions are:

- (i) how can phrases like *wh*+DiP emerge
- (ii) how can we account for the strange exception to word order and scope?

The account

(I) DiPs do have a fixed position in the functional cartography of the clause as has been shown in Lecture II. This position is “untouchable”.

Given a phrase structure with a fixed functional DiP-position, the phrase *wh*+DiP cannot be derived from this structure.

Movement of *wh* to SpecPrtP is totally unmotivated. PrtP is not a *wh*-phrase or “*wh*-vP”. At least German grammar lacks such entities.

Other movement of *wh* to the head of the particle phrase (PrtP), say as a complement, would violate the Extension Condition (in a derivation, movement can only target the actual root node).

Removal of the DiP, the head of PrtP, would quasi “decapitate” PrtP.

Furthermore, removal would violate scope freezing, which we have seen so far is highly reliable.

We know that the scope of a DiP that has been merged into a scope position, i.e. merged with vP , cannot be manipulated.

Thus, an alternative derivation is needed.

(II) My solution is that DiPs can alternatively be merged with a *wh*-phrase. This operation yields a ☞ SMALL PARTICLE PHRASE (SPrtP).

What's the motivation for this? Compare (4) and (5).

(4) “big particle phrase”

*[An wen] wird er sich damals **denn** gewandt haben?*

‘Who will he have tuned to in those days after all?’

(5) “small particle phrase”

*[An wen **denn**] wird er sich damals gewandt haben?!*

Intuitively, (5) is a more emotional, more excited, more emphatic question than (4). In (5), the choice of a SPrtP carries the utterance toward a hybrid between question and exclamation.

Assume that Prt° can optionally adopt a feature for EMPHASIS . Bayer and Obenauer (2011) suggest that Prt° undergoes merger with wh and forces wh – due to an EPP-feature – to raise to its left.

(6) a. $\text{Prt}^\circ_{\mu\text{Emp} []} \text{wh}_{i\text{Emp} []} \Rightarrow \text{MOVE} \Rightarrow$

b. $[\text{wh}_{i\text{Emp} []} [\text{Prt}^\circ_{\mu\text{Emp} []} \text{wh}_{i\text{Emp} []}]]$ $\Rightarrow \text{AGREE} \Rightarrow$

c. $[\text{wh}_{i\text{Emp} [7]} [\text{Prt}^\circ_{\mu\text{Emp} [7]} \text{wh}_{i\text{Emp} [7]}]]$

Trotzke and Turco (2014) support this theoretical solution with experimental data that show a distinct acoustic signature for the emphatic SPrtP construction as compared with

a) the non-adjacent position with the DiP in situ (*wh ... Prt°*) and

b) the adjacent position of a PP (*wh+PP ...*, e.g. [*Wo bei euch*] *kann ich heute überhaupt ...?* „where at your place can I today ...?“ In this case, PP is simply right-adjoined to the *wh*-phrase).

In the emphatically marked SPrtP, the onset of the *wh*-word, /v/, and the following vowel were significantly longer than in the other cases.

As in the study by Niebuhr (2010), which investigates the phonetics of emotional intensification, the emphatically pronounced words were not realized with steeper pitch slopes than corresponding non-emphatic words.

This suggests the existence of a specific phonetic correlate that distinguishes emphatic fronting from phonetic correlates of alternative structures.

Additional evidence for SPrtP comes from sluicing-like fragments. :

- (7) a. Maria hat einen Gebrauchtwagen gekauft. Aber von WEM **denn**?!
Maria has a used.car bought but from who DENN
“Maria bought a second-hand car. But from who?!”
- b. Maria möchte einen Porsche kaufen. ... Ja WIE denn?
Maria wants a Porsche buy well how DENN
“Maria wants to buy a Porsche. ... Well, how on earth will she do that?! ... She’s got only 3000 Euros”

DiP must be part of the *wh*-phrase in SpecCP. Otherwise it would be deleted.

Adverbs are clearly different

(8) A. Maria will ein Auto kaufen.

Maria wants a car buy

“Maria wants to buy a car”

B. Bestimmt von einem Gebrauchtwagenhändler

certainly from a used.car.dealer

“Certainly from a second-hand car dealer”

B'. *Von wem bestimmt?

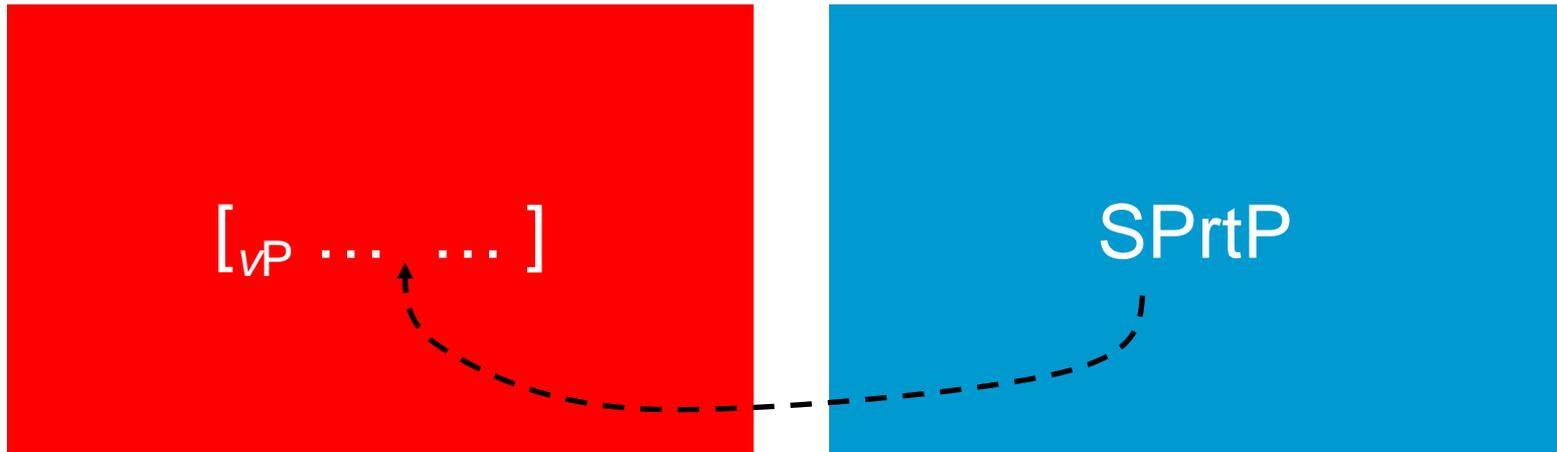
from whom certainly

No survival under sluicing.

(III) SPrtP is built in a \Rightarrow SEPARATE WORKSPACE (WS2), and is then put into the numeration which serves workspace WS1 to build VP, vP and its structural extensions.

WS1

WS2



- SPrtP is first merged in vP .
- Being a *wh*-phrase, it move to the edge of vP .
- In analogy to the merger of C in *wh*-movement, the functional head Prt is merged with vP projecting PrtP.
- Prt has the uninterpretable unvalued feature $uPrt[]$. The SPrtP moves into the specifier of PrtP and values $uPrt[]$.
- At this point, the particle is de-activated and its scope is frozen.

The process underlying this solution is exactly what Rizzi (1991/1996) and subsequent work has identified and described as ☞ CRITERIAL FREEZING.

In analogy to Rizzi's *Wh*-Criterion and Haegeman's (1995) Neg-Criterion, the present solution proposes a ☞ PRT-CRITERION.

Given that Criterial Freezing applies to a Spec-head configuration, the success of this account provides an extra argument for the DiP's status as a functional head, and against the widely popular assumption of DiPs as adverbs (of some sort).

(IV) The SPrtP is, of course, also a *wh*-phrase whose *wh*-feature is still active. It cannot be de-activated before the upper clausal periphery (SpecFinP etc.) has been reached.

Thus, SPrtP moves out of SpecPrtP pied-piping Prt along.

It is important to see that in this step Prt has no core grammatical function any longer.

This is in agreement with the classical observation that DiPs are immobile. Their “displacement” to the left periphery is simply an epiphenomenon of pied piping.

(9) gives the first part of the derivation (features sometimes suppressed):

- (9) a. [(...) V] MERGE SPrtP ⇒
- b. [_{VP} ... SPrtP (...)V] MOVE SPrtP ⇒
- c. [_{VP} SPrtP [_{VP} ... ~~SPrtP~~ (...)V]] MERGE Prt ⇒
- d. [_{PrtP} Prt_{uPrt[]} [_{VP} SPrtP [_{VP} ... ~~SPrtP~~ (...)V]]] MOVE SPrtP ⇒
- e. [_{PrtP} SPrtP_{iPrt[]} [_{Prt'} Prt_{uPrt[]} [_{VP} SPrtP [_{VP} ... SPrtP (...)V]]]] AGREE ⇒
- f. [_{PrtP} SPrtP_{iPrt[g]} [_{Prt'} Prt_{uPrt[g]} [_{VP} SPrtP [_{VP} ... SPrtP (...)V]]]]

This is the stage at which the particle of the SPrtP is deactivated and frozen. Due to the concomitant decomposition of SPrtP into Prt and the *wh*-phrase proper, the semantic problem of scope failure is solved.

Further movement raises SPrtP, which is also a *wh*-phrase, into SpecFinP etc.

$$\begin{array}{l}
 \text{g.} \quad [_{\text{FinP}} \text{SPrtP}_{\dot{w}h[12]} [_{\text{Fin}'} \text{Fin}_{\dot{w}h[12]} \dots [_{\text{PrtP}} \text{SPrtP}_{\dot{w}h[12]; \dot{P}rt[9]} [_{\text{Prt}'} \text{Prt}_{\dot{P}rt[9]} \\
 [_{\text{VP}} \text{SPrtP} [_{\text{VP}} \dots \text{SPrtP} (\dots)\text{V}]]]]]]
 \end{array}$$

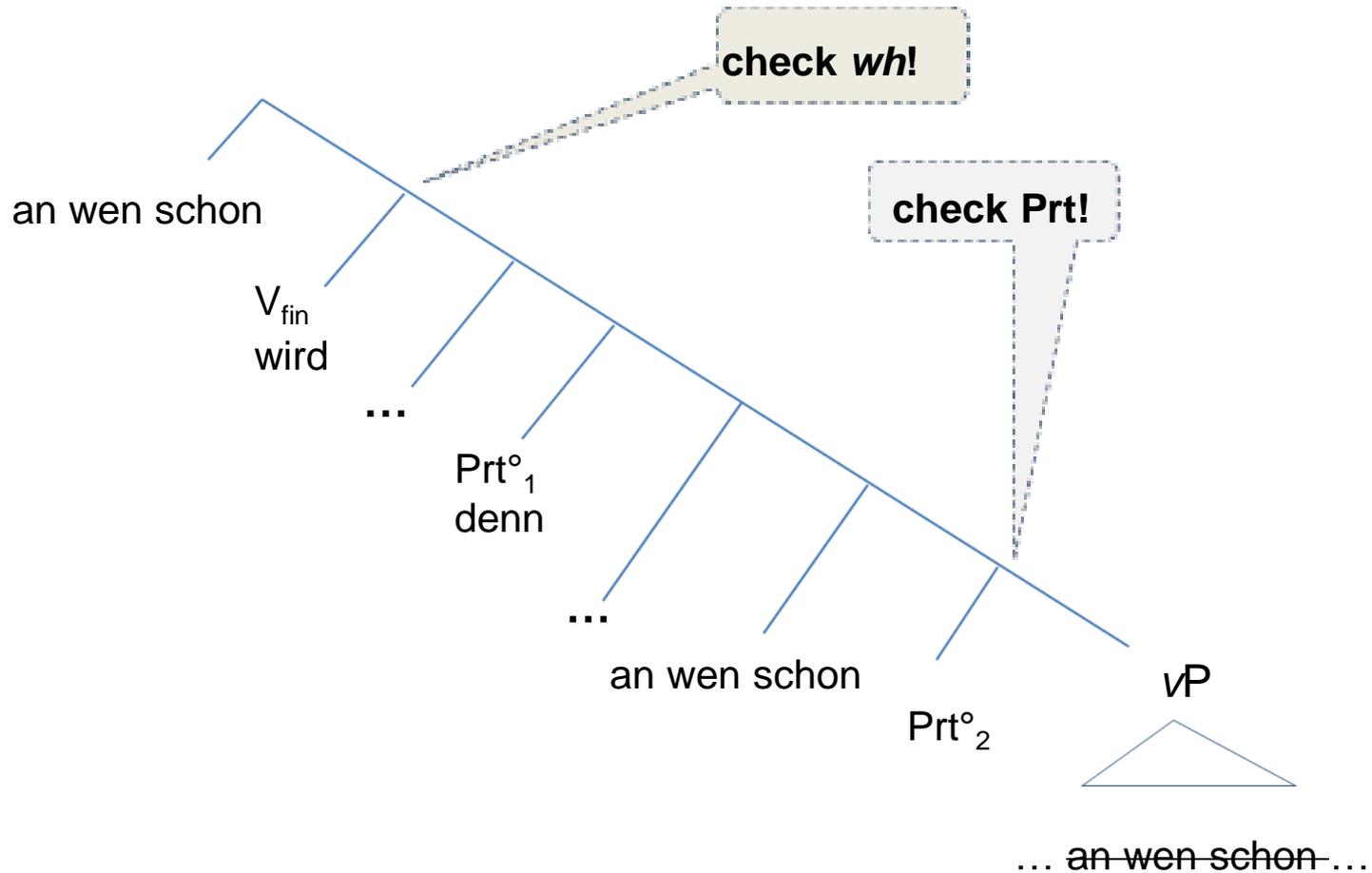
It is now easy to see how the problem of wrong order is solved. Recall that example (2), repeated here as (10):

- (10) [*An wen **schon***] *wird er sich damals **denn** gewandt haben?*
'Who on earth will he have tuned to after all in those days?'
(the answer is obvious)

(2)/(10) is well-formed but shows the illicit order *schon*>*denn*. Our theory predicts that this order does not count. Linear order is irrelevant. What counts is the earlier step in the derivation, i.e. the step in which *schon* has undergone criterial freezing beneath *denn* as indicated with ✓ in (11).

- (11) [_{FinP} [*An wen **schon***] *wird er sich damals* [_{PrtP1} **denn** [_{PrtP2} [~~*an wen*~~
schon] **Prt** ✓ [_{VP} ... *gewandt haben*]]]]]]?]

(12) Two processes of Criterial feature checking



- SPrtPs move in close analogy to *wh*-phrases to the closest checking position.
- P_{rt} is merged optionally
- Like any other XP, SPrtP can move cyclically through SpecCP; therefore SPrtP may value a silent P_{rt}-head at a distance.

- (13) [*Vor wem **denn***] *glaubst du, dass sich James Bond **schon** fürchten würde?*
from who DENN believe you that REF James Bond SCHON fear would
'Who do you believe that James Bond would be afraid of?' – Of no one, of course!

Sentences with DiPs *ex situ* like (13) can give rise to ambiguity between a low and a high construal of *denn*. The corresponding examples with *denn* *in situ* give the two obtainable readings:

- (14) a. *Vor wem glaubst du, dass sich James Bond **denn schon** fürchten würde?*
b. *Vor wem glaubst du **denn**, dass sich James Bond **schon** fürchten würde?*

In (14a), scoping over the embedded clause is ok because the uninterpretable Q-feature of *denn* can be valued thanks to the cyclic movement of the *wh*-phrase via the embedded CP.

Scoping over the matrix clause is equally ok because no second Prt may have been merged in the embedded clause, and therefore valuation via SPrtP must be postponed until Prt is merged into the root clause.

Advantages

- All DiP-constructions rest on a single clausal architecture in which the DiP is a functional head in a fixed scope position.
- The phrases, headed by the DiP, a PrtP, is locally probed by Force (where Force splits up into CT and ILL).
- SPrtPs are motivated by an additional feature of Emphasis.
- The DiP in a SPrtPs has no scope; it is “active” and must reach a Criterial Prt-position to be de-activated.
- Movement of SPrtP has the core properties of A-bar movement as familiar from *wh*-movement and other kinds of A-bar movement.

An extension to focus particles

We can now, in the final part of this Lecture III, show that the syntactic account of DiPs squares rather straightforwardly with an account of the syntax and semantics of focus particles that had been proposed in Bayer (1996; 1999).

The syntax of focus particles (FP) is up to now highly controversial.

There are essentially two camps, the “adverb camp” and the “head camp”.

adverb camp: Jacobs (1983); Büring & Hartmann (2001) and many others; assumes that an FP (an adverb) always adjoins to a proposition (vP or CP) over which it takes scope. This proposition must not be an argument, i.e. FP+DP, FP+PP etc. should never occur, at least as long as DP, PP etc. is an argument.

mixed camp: Bayer (1996; 1999); Reis (2005); Barbiers (2014) and a few others;

FP adjoins to vP or to some other major category. According to Bayer (1996; 1999), FP is a syncategorematic head which projects either a vP (over which it takes scope) or some other major constituent, i.e. DP, PP, an argumental CP etc. In the latter case, FP+XP has to move through the specifier of an FP in scope position and discharge its scope there.

Consider first English.

FP immediately precedes vP or an XP below vP .

- (20) a. John had only studied SYNTAX
b. John had studied only SYNTAX

Contrary to the adverb theory, in (20b) *only* attaches to an argument. As Taglicht (1984), and following him Rooth (1985; 1992) have shown, this has clear semantic consequences.

- (21) a. *We are required to* [_{vP} *study* [_{DP} *only SYNTAX*]]
 AMBIGUOUS
- b. *We are required to* [_{vP} *only study SYNTAX*]
 UNAMBIGUOUS
- c. *We are* [_{vP} *only required to study SYNTAX*]
 UNAMBIGUOUS

In (21a), *only* can associate with the lower vP; this amounts to the strong deontic reading of (21b). It can alternatively associate with the higher vP; this amounts to the weaker requirement reading of (21c).

Thus, the formation [_{XP} FP XP] must be available somehow, and this XP undergoes movement to a scope position.

Back to German

The adverb theory follows a WYSIWYG (“what you see is what you get”) strategy.

The assumption of strict surface scope forces the adoption of an unconventional phrase structure.

(22) [_{FinP} *Nur* [_{FinP} *EINER* [_{Fin'} *hat* [_{TP} *die Polizisten angegriffen*]]]] V3
only one has the policemen attacked
'Only ONE person attacked the policemen'

Intuitively, it is very awkward to parse (22) not as a V2 but as a V3 construction.

Notice that in (23) as well as in (24) the FP cannot associate with a lower focus.

(23) *_{[FinP} *Nur* _{[FinP} *einer* _{[Fin'} *hat* _{[TP} *die POLIZISTEN angegriffen*]]]] V3
only one has the policemen attacked
'It was only the policemen that one person has attacked'

(24) *_{[TP} *Only* _{[TP} *Peter* _{[T'} *kissed MARY*]

To escape this dilemma, Buring and Hartmann (2001: 237) propose a “Closeness Principle”: *FPs are as close to the focus as possible.*

As Reis (2005: 470) points out, this principle makes many wrong predictions.
Consider the pair in (25)

- (25) a. Er wollte nur ein BISSCHEN in den Garten gehen (nicht LANGE)
he wanted only a little in the garden go not long
,He wanted to go into the garden only a little, not for a long time‘
- b. Er wollte nur ein bisschen in den GARTEN gehen (nicht auch
he wanted only a little in the garden go not also
ins DORF)
in.the village
,He wanted to only go a little into the garden, not also to the village‘

“Closeness” predicts (25a) but fails on (25b).

Apart from this, “Closeness” is a stipulation that results from the rejection of FP+XP as an admissible phrase structure.

Notice next a problem with word order

There is an alternative to (22) in which according to the adverb theory the focus would not even be “bound” by the FP due to a lack of c-command; see (26b).

- (26) a. *EINER nur hat die Polizisten angegriffen*
b. [_{FinP} *EINER* [_{FinP} *nur* [_{Fin'} *hat* [_{TP} *die Polizisten angegriffen*]]]] V3

Büring and Hartmann (2001) deny the existence of such data. However, standard grammars of German mention the construction (Zifonun, Hoffmann & Strecker 1997: 1010), and authentic examples abound.

Notice here also English examples like *JOHN even understands “Syntactic Structures”*. Such cases refute the adverb theory (21) as operative in (21).

A theory in which FP is a head, and FP+XP is an admissible phrase structure, there is a straightforward account for the marked word order, namely the one that we had already proposed for emphatic *wh*-fronting to the left of a DiP.

Scope

The adverb theory claims that in FP-initial clauses the FP has always widest scope, and that this cannot be predicted by the mixed theory in which FP+XP forms a constituent that reconstructs into its trace position.

(27a) is said to be unambiguous and can never have the meaning of (27b), cf. Buring and Hartmann (2001: 260ff) and Sternefeld (2007: 336).

- (27) a. *Nur seine Mutter* *liebt jeder*
only his mother-ACC loves everyone-NOM ONLY > \forall
- b. *Jeder₁* *liebt* *nur seine₁ Mutter* \forall > ONLY
everyone-NOM loves only his mother-ACC

The adverb theory predicts non-ambiguity because the FP is adjoined to CP and is by definition in an uncontroversial scope position.(27a) is (28).

(28) [_{FinP} *Nur* [_{FinP} *seine Mutter* [_{Fin'} *liebt* [_{TP} *jeder*]]]] V3

Assume the judgment is correct.

It is nevertheless no argument in favor of high adjunction of FP as an adverb.

Consider scrambling in a derivation along the lines we have been argued for so far with respect to DiPs. Assume first scrambling of the object-DP over the subject.

(29) [_{VP} [_{DP} nur seine Mutter] [_{VP} jeder [_{DP} ~~nur seine Mutter~~] liebt]]

If scrambling is A-scrambling, it bleeds binding; if it is A-bar scrambling (associated with extra focus) reconstruction obtains and binding remains an option.

Assume next merger of an empty Prt endowed with an unvalued FP feature.

(30) $[_{Prt'} Prt_{uFP} [_{VP} [_{DP} \text{ nur seine Mutter}] [_{VP} \text{ jeder } [_{DP} \text{ ~~nur seine Mutter~~]} \text{ liebt}]]]]$

DP raises to SpecPrtP and values the FP-feature on Prt:

(31) $[_{PrtP} [_{DP} \text{ nur seine Mutter}] [_{Prt'} Prt_{uFP} [_{VP} [_{DP} \text{ ~~nur seine Mutter~~]} [_{VP} \text{ jeder } [_{DP} \text{ ~~nur seine Mutter~~]} \text{ liebt}]]]]]]$

At this stage, the scope of FP is frozen, and the predicted scope is ONLY $> \forall$.

DP will then proceed to SpecFinP for reasons that have nothing to do with FP's scope. Thus, contrary to the assumptions of the adverb theory, its ultimate landing site has no relevance for its scope at all.

Note as an aside that there ARE examples in which FP+DP reconstruct into the c-command domain of a lower operator.

With the scope-inversion contour /...\ \backslash (32) gets a natural reading by which ONLY is in the scope of negation:

(32) /Nur FLEISCH aß NIemand\ \backslash \neg > ONLY
only meat ate no.one

Reis (2005: 478)

These considerations suggest that the adverb theory of FPs is no viable alternative to Bayer (1996; 1999) and especially to the present minimalist and cartographic implementation.

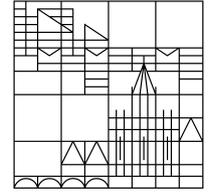
In fact, the syntax of FPs seems to be more closely related to the syntax of DiPs than previously assumed.

The important point is that FPs, just like DiPs, can form smaller constituents in which the particle lacks scope. In both cases, criterial feature valuation presents an attractive solution of solving the scope problem while avoiding wrong constituency, stipulations about focus association and problems with emphatic fronting.

Conclusions

- Attributing functional head status to DiPs (at least to those under consideration here) opens an avenue of research that puts them right into core syntax.
- An account could be given by which the DiP contributes to Force thanks to probe-goal agreement, i.e. without movement. The position into which the DiP is merged is a scope position and as such irreversible.
- DiPs in *wh*-questions could be shown to be licit in complement clauses from which *wh*-extraction has taken place. This provides a new argument in favor of cyclic movement through the CP-phase.
- DiPs can alternatively undergo merger with a *wh*-phrase. An SPrtP results. It gives rise to an emphatic interpretation.

- SPrtP moves through the specifier of a regular particle phrase and discharges its scopal potential there. The process is fully analogous to Criterial Freezing as proposed by Luigi Rizzi.
- Since SPrtP is a *wh*-phrase, the DiP is pied piped along to the left clausal periphery, an operation that gives rise to the illusion of deviant word order.
- Deviant word order is illusory, however, because the DiP of a SPrtP is not interpreted where it is seen in PF but in a lower position which does not induce contradictory order. WYSIWYG accounts are untenable.
- SPrtPs can move in the style of successive cyclic movement via SpecCP. Thus, their syntactic behavior falls into the domain of well-understood territory.
- The account ties up naturally with the syntax of FPs as proposed in earlier work. A unified approach of FPs and DiPs seems to be in reach.



Thank you for your attention

ご清聴ありがとうございました