

Particles ex-situ in Emphatic Wh-Questions

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1. Background and goals Focus particles (FP) as well as discourse particles (DiP) are kinds of operators and therefore take propositional scope. For FPs, there is an ongoing debate about apparent exceptions that emerge from examples like *John eats only vegetables* where *only vegetables* is by all syntactic criteria a constituent while the FP does not prima facie have propositional scope. Something must happen for the FP to attain scope. LF-movement was a popular rescuing device. For DiPs, a similar problem can be noticed. In German, DiPs are known to appear in clause medial position, and according to the most plausible analysis they take at least scope over the minimal proposition ('complete functional complex') VP/vP. Unlike adverbs, they cannot appear in the left or in the right clausal periphery, s. Thurmair (1989). A challenging exception is that there are *wh*-questions in which the DiP forms a constituent with the *wh*-phrase and moves along with it to SpecCP. Thus, the DiP participates in exceptional constituency and appears ex-situ. The first goal of this talk is to give a reason for the exceptional word order and to explain how the DiP obtains propositional scope nevertheless. The second goal is of a more general nature. We develop a theory by which there is parametric variation for particle constructions. Closer inspection reveals that this variation is already established in the grammar of more familiar operator-related areas such as *wh* and negation.

2. DiPs in *wh*-questions In *wh*-questions, DiPs normally remain in clause medial position.

- (1) An wen könnte er sich **denn** / **nur** / **schon** / **wohl** gewandt haben?
at who could he REF DENN NUR SCHON WOHL turned have
"Who could he have turned to?"

where it takes scope at least over vP as in (DiP (*er sich gewandt haben könnte*)). The DiP depends on sentence mood, here interrogativity, and it contributes meaning that pertains to the speaker's assumptions about the common ground which he/she shares or believes to share with the addressee. Bayer & Obenauer (2011) propose a probe-goal agreement relation between the left-peripheral force system and the DiP. In the cases under consideration, agreement yields an interrogative enriched with information about the speaker's state of mind depending on the choice of the DiP.

Next to the standard case with the DiP in situ as in (1), one can find DiPs ex situ. Consider (2).

- (2) An wen **denn** / **nur** / **schon** / **wohl** könnte er sich gewandt haben?
at who DENN NUR SCHON WOHL could he REF turned have

Given the V2-constraint that holds in German, the DiP must form a phrase with the *wh*-PP as it has been moved ex situ: [*an wen denn / nur / ...*] könnte er... (1) and (2) differ in meaning. (2) is more emphatic and has an almost exclamatory flavor. We will argue that the DiP undergoes merger with the *wh*-phrase, and that the latter is attracted to its left. This movement yields the special effect of *emphatization*. Fronting of this kind has nothing to do with information structure and can be found in independent constructions as well as across languages; s. Cruschina (2012) and Trotzke (2017).

3. Cyclic movement Contrary to much writing, DiPs (as well as FPs) are neither adverbs nor are they adjoined, they are functional heads. Merger of DiP with vP creates a *Particle Phrase* (PrtP) with the potential of licensing a specifier. Merger of DiP with a *wh*-phrase also creates a PrtP albeit one in which the DiP lacks scope. We call it a *S(mall) PrtP*. The SPrtP attains propositional scope when it cycles through the specifier of PrtP and undergoes feature matching with the head of PrtP. The head of PrtP is normally empty but it can also be overt, s. Barbiers (2010; 2014). SPrtP moves from SpecPrtP on to SpecCP to check the *wh*-feature. See the derivation of (2) in (3).

- (3) [_{CP} [_{an wen denn}] könnte er sich [_{PrtP} [~~an wen denn~~] [_{Prt'} (denn)] [_{vP} [~~an wen denn~~] gewandt haben]]]]?

Due to the presence of an over or covert Prt-head, the SPrtP freezes its scope in the medial position; due to the presence of *wh*, the SPrtP moves on and freezes the scope of *wh* in SpecCP.

4. Emphasis Why should an SPrtP like *an wen denn* exist in the first place? And why is *wh*-fronting obligatory? It must be noticed that **denn an wen* is out whereas both orders can be found with FPs: *Nur EINEN hat man erwischt* (“Only one was caught”) vs. *EINEN nur hat man erwischt*; s. Bayer & Trotzke (2015). The reason is that DiPs lack focus association in the sense of semantic alternatives but may come with a feature for emphasis which is checked under emphatic fronting as seen in (4).

(4) [denn_{Emp} [an wen]] ⇒ [an wen] [denn_{#Emp} [~~an wen~~]]

In FPs, Emp-driven checking is optionally superimposed. There is evidence that emphasis is interpretable only in the highest left periphery. In English, “aggressively non-D-linked” *wh*-phrases, which are arguably emphatic, must not remain in situ. s. Pesetsky (1987) and den Dikken & Giannakidou (2002)

- (5) a. Who the hell is in love with who?
 b. *Who is in love with who the hell?

Similarly, German and Bangla CP-complements with emphatic fronting to SpecCP have to undergo topicalization to the left periphery of the matrix clause, s. Bayer & Dasgupta (2016). And in fact SPrtPs in situ are deviant.

- (5) a. ?*Wann hast du dort [wen denn] getroffen? (multiple question)
when have you there who DENN met
 b. *Du hast dort [wen denn] getroffen? (*wh* in-situ)
you have there who DENN met

This suggests that the output in (4) does not by itself lead to an interpretable result of emphatic fronting, and that the SPrtP seen in (3) needs to make yet another move.

(6) [EmpP [an wen denn] [Emp' Emp [CP [~~an wen denn~~] könnte er sich [PrtP [~~an wen denn~~] [Prt' (denn) [vP [~~an wen denn~~] gewandt haben]]]]]]?]

5. Theoretical consequence “Special interrogatives” (Obenauer, 2006) rest to a large extent on specific syntactic form. DiPs contribute in a predictable way to the formation of special subtypes of *wh*-interrogatives. The exceptional word order seen in SPrtPs gives rise to emphatic interpretation. This result is obtained without extra assumptions (unlike in ‘particle theories’ according to which particles are adverbial adjuncts). The syntactic assumptions of the present account look entirely familiar. Since particles – DiPs as well as FP – are functional heads, there is an immediate parallel with the C-head in interrogatives and the Neg-head in negative sentences. SPrtPs are hardly more exotic than *wh*-phrases or negative quantifiers. Both are featurally complex syntactic constituents that need to undergo decomposition in the course of a derivation. SPrtPs do not differ in substance. They enter the derivation and cycle through functional projections until all their features (argumental, DiP, *wh*, Emp) are licensed. The parallel with *wh*-phrases cannot be overlooked. In the same way as there are languages without small *wh*-phrases or negative quantifiers (normally strictly head-final languages), there are languages without SPrtPs. DiPs may occur, for instance, exclusively in sentence-final position. Japanese *yo* seems to be of this kind; s. Endo (2010), Saito & Haraguchi (2012). SPrtPs and their behavior follow from the architecture of a grammar with *wh*-phrases, negative quantifiers etc. With the building blocks identified here, the present account of special interrogatives has predictive power for parametric variation in syntactic/semantic typology.

Selected References Barbiers, S. 2010. Focus particle doubling. In *Structure Preserved*, J.-W. Zwart & M. de Vries (eds). Amsterdam; Bayer, J. & H.-G. Obenauer. 2011. Discourse particles, clause structure, and question types. *The Linguistic Review* 28; Bayer, J. & A. Trotzke (2015). The derivation and interpretation of left-peripheral discourse particles. In *Discourse-Oriented Syntax*, J. Bayer, R. Hinterhölzl & A. Trotzke (eds). Amsterdam; Cruschina, S. 2012. *Discourse-related Features and Functional Projections* Oxford; Obenauer, H.-G. 2006. Special interrogatives: Left periphery, *wh*-doubling, and (apparently) optional elements. In *Romance Languages and Linguistic Theory*, J. Doetjes & P. González (eds).. Amsterdam; Saito, M. & T. Haraguchi. 2012. Deriving the Cartography of the Japanese Right Periphery: The Case of Sentence-Final Discourse Particles. *Iberia* 4.2; Trotzke, A. 2017. *The Grammar of Emphasis*. Boston/Berlin.