

Discourse Particles *ex situ* in Emphatic *Wh*-Questions

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1. Background

Discourse particles (DiPs) like German *aber*, *bloß*, *denn*, *doch*, *eben*, *halt*, *ja*, *nur*, *schon*, *vielleicht*, *wohl* are important parts of speech whose syntactic and semantic status is under debate. They usually “convey information concerning the epistemic states of discourse participants” (M. Zimmermann, 2011) rather than at-issue meaning. DiPs are typical root-phenomena and as such show sensitivity to sentence mood and illocutionary force. As non-inflecting elements, they resemble but cannot be identified with adverbs.

DiPs in *wh*-questions are mainly *denn*, *nur/bloß*, *schon*, *wohl*. Here is some illustration of their role in extending a regular question like (1) into kinds of special questions as seen in (2).

(1) *Wo wohnt er?*

where lives he

‘Where does he live?’

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

Given a common ground CG between speaker and hearer, where does he live in relation to some aspect of CG; *denn* is anaphoric to CG; 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 M. Zimmermann (2004).

c. *Wo wohnt er nur/bloß?*

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

d. *Wo wird er schon wohnen?*

By using *schon* (lit. already), 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 entities are high enough on the scale to make the answer true. Yields a rhetorical question; see Meibauer (1994), Bayer and Obenauer (2011).

2. Overview

In 3, I will sketch an account of DiPs in situ. In 4, the central part, I will introduce what Bayer & Obenauer (2011) and following work called *Small Particle Phrases* (SPrtP). There, I will show how the SPrtP connects with DiPs in situ, and then argue that SPrtP trigger emphatic movement and an emphatic interpretation. 5 will offer a summary of the derivational steps and highlight the advantages of the proposal.

3. DiPs in situ

2.1 Word order. Usually, DiPs demarcate the VP-boundary (s. Diesing, 1992). Their position is fixed. Word order variation is the result of movement (mainly scrambling) to the left of the DiP.

- (3) 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?*

The DiP has scope over the 'complete functional complex' vP. However, it depends on the illocutionary force of the *wh*-clause; notice the deviance of the assertive clause **Gestern könnte **denn** Otto den Brief ...*

Importantly, unlike adverbs, DiPs cannot be displaced (s. Thurmair, 1989). Fronting to SpecCP or extraposition either lead to a non-DiP reading or destroy the sentence altogether.

- (4) **Wann könnte Otto den Brief gestern ins Büro mitgenommen haben **denn**?*
(5) a. *Otto hatt **eben** keinen Hunger.*
Otto had EBEN no hunger
'Otto was just not hungry (leave him in peace)'
[Speaker conveys to hearer that he should acknowledge that p]
b. ***Eben** hatte Otto keinen Hunger.*
right-now had Otto no hunger
'Right now, Otto wasn't hungry (offer him something in two hours)'
c. **Otto hatte keinen Hunger **eben**.*

In German, DiPs may co-occur, and if they do they are rigidly ordered among themselves (s. Thurmair, 1989; Coniglio, 2011): *denn* > *wohl* > *schon* or *denn* > *wohl* > *nur/bloß*

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

DiPs precede negation and many adverbs. *Warum hast du {denn nicht/*nicht denn} gewartet?* etc.

3.2 Dependency on force. DiPs are licensed by being locally c-commanded by one of the moods: assertive, polar interrogative, *wh*-interrogative, imperative. (There is a certain similarity with NPI-licensing by negation or some related operator.)

Assume the DiP is a functional head *Prt* that is merged with *vP*. Force is a probe which agrees with its goal *Prt* via a *Q*-feature. In a root *wh*-interrogative, *Prt* has the uninterpretable feature *uQ* by which it agrees with force.¹ Agreement is feature sharing, indicated here by an arbitrary number.

- (7) a. [_{ForceP} *wh*_{iQ[1]} V_{fin} [_{TP} ... [_{PrtP} *Prt*_{uQ[1]} [_{vP} ... ~~*wh*~~ ...]]]] AGREE ⇒
 b. [_{ForceP} *wh*_{iQ[1]} V_{fin} [_{TP} ... [_{PrtP} *Prt*_{#Q[1]} [_{vP} ... ~~*wh*~~ ...]]]]

2.3 The generalizations so far. DiPs seem to be (a) rigidly ordered functional heads in the construction of clause structure. As such they are (b) immobile and appear to (c) take scope exactly where they are merged with *vP* or its extended projection. They (d) depend on force and must be probed by force.

4. DiPs ex situ

Although DiPs can never move by themselves, (b) seems to be violated by the fact that they can be observed to move together with a *wh*-phrase. Consider the marked version of (8a) in (8b).

- (8) a. *An wen könnte er sich **denn** gewandt haben?*
 at who could he REFL DENN turned have
 ‘Who could he have turned to? (I’m wondering)’
 b. [*An wen **denn***] *könnte er sich gewandt haben?*
 at who DENN could he REFL turned have
 ‘Who on earth could he have turned to?’

In (8b), *whP* + DiP must form a constituent. Otherwise, the V2-constraint would be violated. Thus, the DiP is in linear terms “ex situ”.

Considering multiple occurrences of DiPs, a problem with (a) seems to emerge. The rigid order of *denn* > *wohl* > *schon* appears to be disrupted in the well-formed rhetorical question (9).

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

If scope would be read-off from linear order, the account in section 3 would be in trouble.

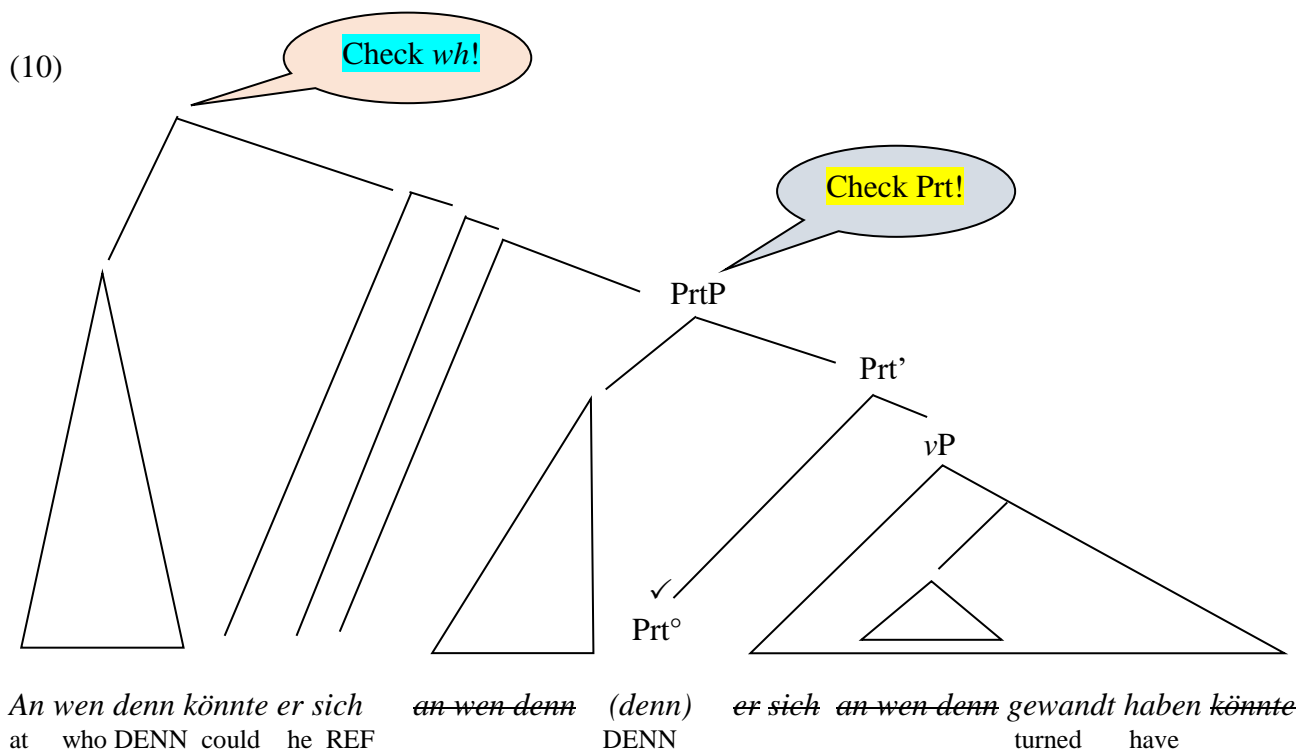
¹ This is a simplification. For details see Bayer and Obenauer (2011), Bayer et al. (2016), Bayer (2018).

3.1 How is *wh*+DiP established? Should (8b) be derived from (8a)? Clearly not! Considering (7a), merger of the *wh*-phrase with Prt would violate the Extension Condition. It would not conform to the requirement that merger can apply only to the root. (Chomsky, 1995: 327f.). Thus, an alternative derivation is needed.

We propose the DiP is merged with *vP* as seen in (7) in workspace 1 (WS1); in another workspace, WS2, the DiP is merged with a *whP*. The result of this is a “Small Particle Phrase” (SPrtP): [_{SPrtP} *wh* Prt]

SPrtP is first merged in *vP*. Due to its head Prt, it will move to the specifier of the “big” PrtP. The head-position of PrtP is normally empty but it can also be filled.² This is where we can assume a classical process of spec-head agreement.³ The Prt-feature of [_{SPrtP} *wh* Prt] is de-activated, and its scope is frozen. See the sign ✓ in (10).

What remains as a semantically active feature of SPrtP is the *wh*-feature. This will drive movement further to SpecForceP (alias SpecCP). The Prt inside [_{SPrtP} *wh* Prt] has no role in this process. It is pied-piped along with the *wh*-element. (8b) is as shown in (10).



- This is a good result as it mediates between the scope requirement of the DiP and the seemingly incongruent constituency.

- Another good result is that the apparent violation of rigid order seen in (9) disappears.

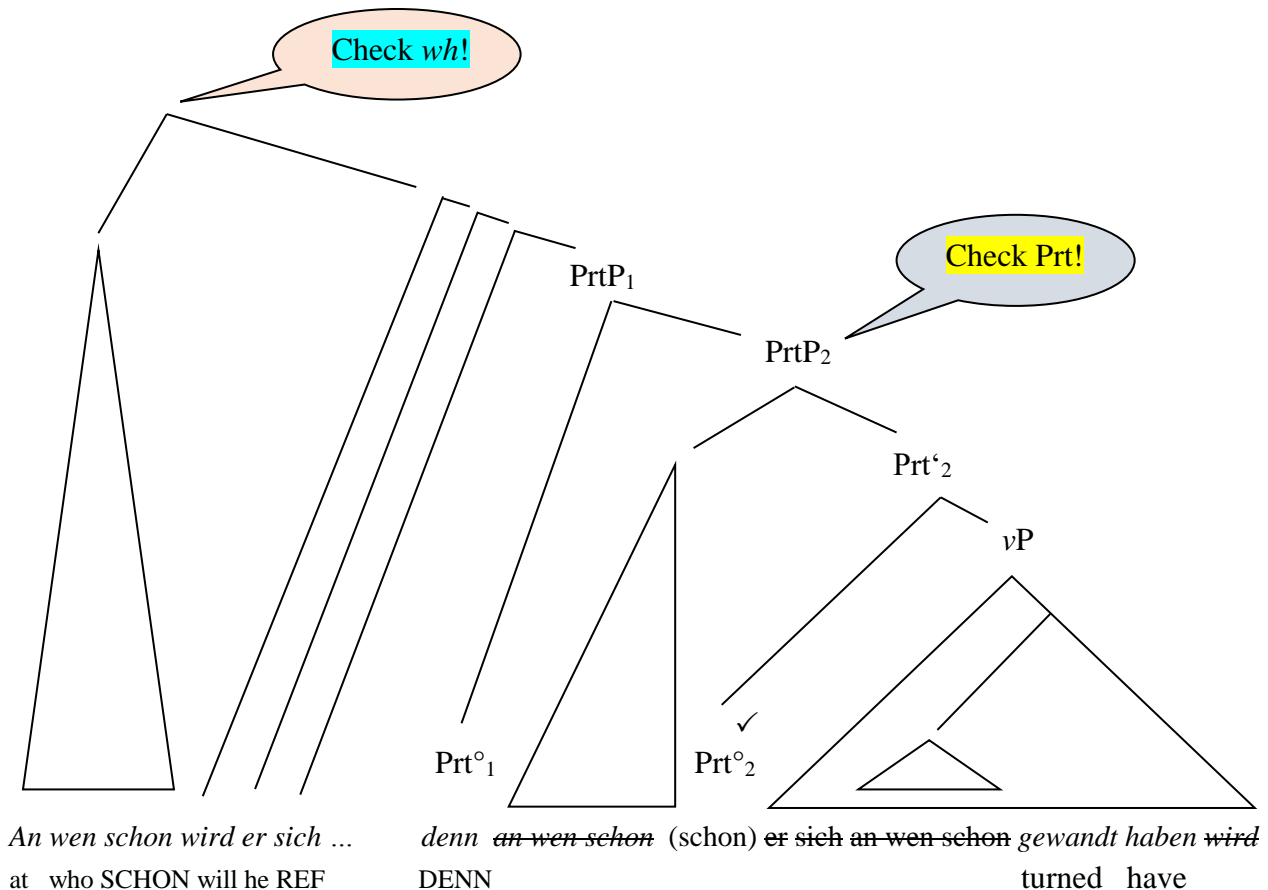
² (i) *An wen denn könnte er sich denn gewandt haben?*

A case of particle “doubling”, s.Barbiers (2010; 2014) and Bayer (subm.)

³ Feel free to translate SHA into a more recent framework as long as the substance does not change.

As (11) shows, the DiP *schon* takes scope below the DiP *denn*. Thus, the SPrtP [_{SPrtP} *an wen schon*] moves first into the specifier of Prt₂. From there it moves to SpecForceP (SpecCP). The occurrence of Prt₁ which hosts the DiP *denn* does not interfere because Prt₁ and Prt₂ are featurally distinct.

(11)



The SPrtP *an wen schon* is “reconstructed”. *Schon* is interpreted where its scope freezes, i.e. below *denn*. The order/scope *denn* > *schon* is respected. Linear order is – as usually – irrelevant.

3.2 Why SPrtP? Why should SPrtPs exist next to “big” PrtPs? (8a) and (8b) differ systematically. Questions with SPrtP are marked questions which go in the direction of exclamation. (8b) is like (8a) in the sense that both require a common ground between speaker and hearer some aspect of which *denn* refers to anaphorically. Unlike in (8a), however, the QUD in (8b) must have been around in the discourse for a while.⁴ The speaker signals emotions such as impatience, excitement, irritation etc. by using a grammaticalized form of emphasis.⁵

⁴ A typical example is this: *Sezession ist gerade en vogue, in Katalonien wie in Kurdistan. Doch wann hat ein Volk ein Recht auf einen eigenen Staat? Das Kosovo darf, aber Katalonien nicht, Kroatien geht klar, Kurdistan hingegen auf keinen Fall. Wann denn nun hat ein Volk das Recht auf einen eigenen Staat?* <http://www.zeit.de/2017/40/sezession-voelkerrecht-katalonien-kurdistan>, 06.04.2018

Emphasis is achieved by fronting. The emphasized constituent must be able to bear phonological prominence. A *wh*-phrase is “intrinsically focused”. In the emphatic construction, however, this prominence is enhanced by extra stress.

Bayer and Obenauer (2011) suggest that Prt° undergoes merger with *wh*. Prt has an uninterpretable feature for emphasis which gets valued by attracting an emp-marked *wh*.

- (12) a. $\text{Prt}^\circ_{i\text{Emp}} [] \text{ wh }_{i\text{Emp}} []$ \Rightarrow MOVE \Rightarrow
 b. $[\text{wh }_{i\text{Emp}} [] [\text{Prt}^\circ_{i\text{Emp}} [] \text{ wh }_{i\text{Emp}} []]]$ \Rightarrow AGREE \Rightarrow
 c. $[\text{wh }_{i\text{Emp}} [7] [\text{Prt}^\circ_{\#i\text{Emp}} [7] \text{ wh }_{i\text{Emp}} [7]]]$

This operation marks the SPrtP as emphatic. The construction is similar to *the hell* phases in English, *diable*-phrases in French, *ittai*-phrases in Japanese and similar phrases in other languages. Such “aggressively non-D-linked” *wh*-phrases are occasionally characterized as “exclamative” (Pesetsky, 1987: 111, 124) and indicative of the speaker’s surprise, disapproval etc. in questions (Obenauer, 2006: 376). Pesetsky (1987: 124f.) observes that these phrases must not remain in situ in multiple questions or in in-situ questions.

- (13) a. *Who **the hell** caught what?*
 b. **Who caught what **the hell**?*

- (14) a. *Où (**diable**) est-il allé?* ‘Where the hell did he go?’
 b. *Il est allé où (***diable**)?*

Unsurprisingly, German questions with SPrtPs show the same asymmetry.

- (15) a. *Wer **denn** hat dort wen getroffen?*
 who DENN has there whom met
 b. **Wer hat dort wen **denn** getroffen?*
 c. **Du hast dort wén (***denn**) getroffen?*
 you have there whom DENN met the same for other DiPs

Emphatic/mirative fronting occurs in other constructions too. Consider fronting in DPs.

“... But when does a people have the right of its own state? The Cosovo does but Catalonia doesn’t, Croatia clearly does but Kurdistan under no circumstances. Now, **WHEN after all** does a people have the right of its own state?”

⁵ Cf. Bayer (2001) for emphatic topicalization to SpecCP in Bavarian; Frey (2010); Trotzke (2017) provides an account that integrates also the phonetic side. Another well-established term is *mirativity*. s. De Lancey (1997), Cruschina (2012). Authier & Haegeman (2017) speak of “the emotive attitude the speaker has with respect to the descriptive content. This attitude can be surprise, awe, etc. In other words, the speaker expresses the fact that s/he finds the descriptive content noteworthy in some way.”

- (16) a. *Otto wird [den Zug [nach Bremen]] wahrscheinlich nicht mehr erwischen.*
 Otto will the train to Bremen likely not more reach
 ‘In all likelihood, Otto will not reach the train to Bremen.’
- b. *?*Otto wird [[nach Bremen] den Zug [~~nach Bremen~~]] wahrscheinlich nicht mehr erwischen.*
- c. *[[Nach Bremen] den Zug [~~nach Bremen~~]] wird Otto wahrscheinlich nicht mehr erwischen.*

Although (16b) may not be completely ungrammatical, there is a strong contrast with the unmarked in-situ version in (16a) and the topicalized ex-situ version in (16c), both of which are perfect. Emphatic fronting is a hard-wired device of the grammar to mark emphasis. The phonological side is independent. Extra stress may be used by an excited speaker but it will not affect the syntax. *Otto wird [den Zug [nach BREMEN]] wahrscheinlich nicht mehr erwischen* is contrastive; and as such it can be used as a corrective statement and could in addition be loaded with emotions, shouting etc. This would never affect the grammaticality of the sentence. But inversion as seen in (16b) does. Thus, one can be sure that inversion followed by emphatic topicalization is syntactically hard-wired.

Conclusion: Emp-topicalization in a constituent X drives X to the outer left periphery of the root clause.

This explains why in questions with SPrtP, the SPrtP must not remain in situ but needs to be moved to the left edge of ForceP. Emphasis is a root phenomenon. This is expectable because emphasis is an attitude of the speaker and as such is represented with the *utterance* of p rather than with p itself.

5. Syntactic recycling

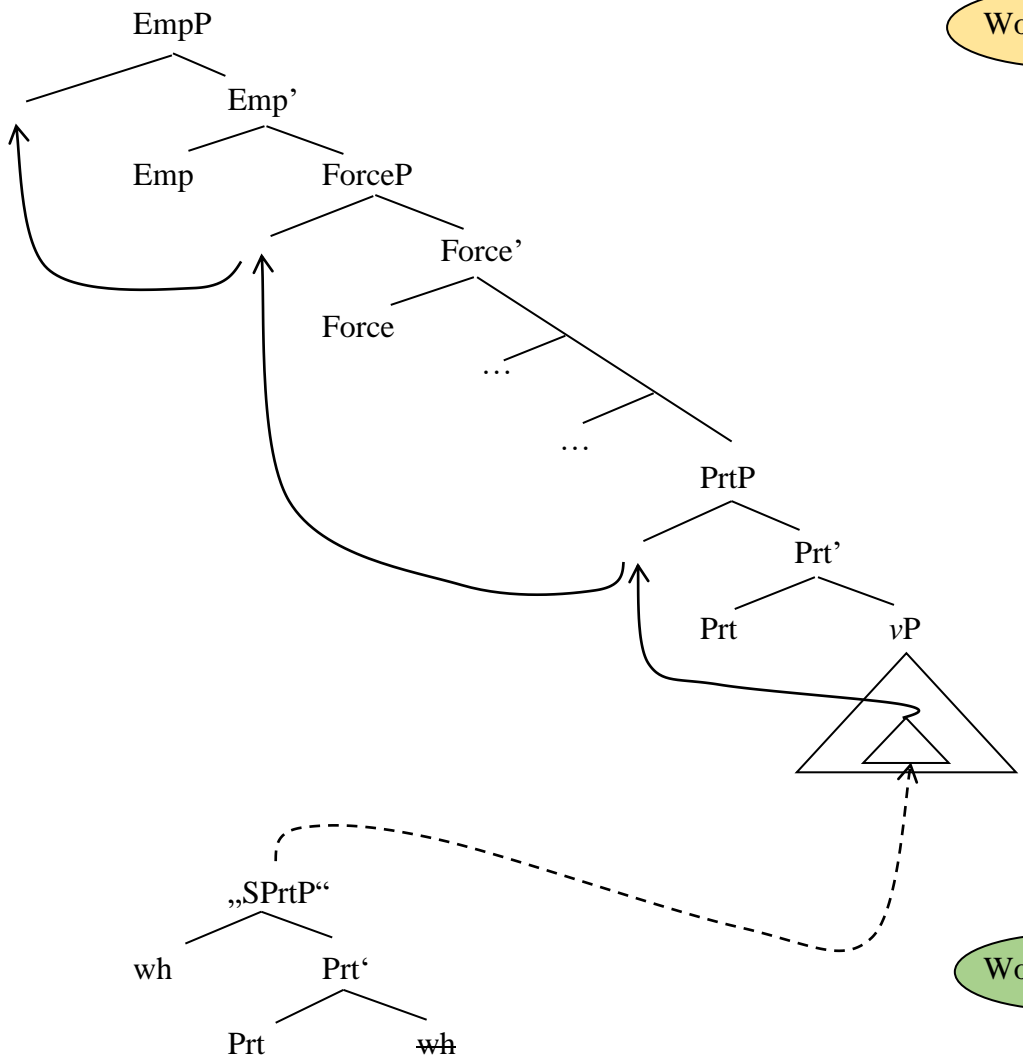
The picture that emerges from the present account of special wh-questions is completely uniform: Once SPrtP is formed and externally merged, it will be recycled. The steps are the following:

- i. A SPrtP is formed in WS2 and gets inserted in a vP formed in WS1. The process of merge is the same as any other process of argument/adjunct licensing.
- ii. Prt is merged with vP.
- iii. SPrtP moves to SpecPrtP; agreement and scope freezing of Prt result
- iv. SPrtP moves on to SpecForceP (alias SpecCP); agreement and scope freezing of Q_{wh} results
- v. SPrtP moves on to SpecEmpP; agreement and scope freezing of Emp results and the sentence is interpreted as an emphatic question.

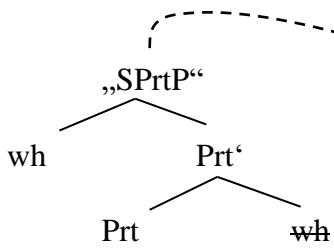
The account stands and falls with the assumption that DiPs are functional heads. Under this assumption, the derivational mechanics work perfectly within well-understood syntactic processes of external merge, agree and internal merge (move). No stipulation needs to be added.

(17)

Workspace 1



Workspace 2



Selected references

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