

# Understanding focus sensitivity in the context of pre- and post-positional German *nur*

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**Abstract:** This paper contributes to the understanding of focus-sensitivity by fully integrating the distributional properties of the German focus-sensitive particle *nur*. Prosodic and pragmatic restrictions that have so far been neglected will turn out to be fundamental for understanding the structural relation of the particle and its focus associate. The current proposal is set in the context of two predominant approaches toward German focus-sensitive particles that can be distinguished by whether or not they allow adnominal attachment of the particle. It argues for a constituency of the sequence of [*nur* DP], which is only compatible with an adnominal attachment analysis. Further innovation comes from an analysis of post-positional *nur* by means of a pragmatic restriction in terms of frame topichood. The frequently discussed preferences of structural precedence and closeness are reconceptualised by including a prosodic constraint against accented material between the focus-sensitive particle and the prosodically most-prominent constituent.

**Keywords:** Focus-sensitive Particles, Association with Focus, Adnominal Attachment, Post-positional *nur*

## 1 Introduction

Focus-sensitive particles (FSPs) depend on a focused constituent for their interpretation. Despite a thorough investigation of German FSPs over the last few decades, one of the more recent publications concludes that there is a need for “a new comprehensive attempt, [which] not only require[s] theoretical but also considerable descriptive efforts” (Reis 2005, p. 482). This conclusion is primarily motivated by the fact that there are three problems in the study of FSPs that have not yet found a satisfying solution. These problems are exemplified by the following three examples:

- (1) a. Ich habe nur [einen ROMAN]<sub>F</sub> gelesen.  
‘I only read a NOVEL.  
b. Ich habe [<sub>VP</sub> nur [<sub>VP</sub> [<sub>DP</sub> einen Roman] gelesen]]  
c. Ich habe [<sub>VP</sub> [<sub>DP</sub> nur [<sub>DP</sub> einen Roman]] gelesen] (Büring & Hartmann 2001, p. 229)
- (2) a. Nur EIN Gutes hat diese Form der Sturheit.  
b. EIN Gutes nur hat diese Form der Sturheit.  
‘Only ONE good thing comes from this form of stubbornness’  
(corpus of written German of the IDS, Mannheim)
- (3) A: Was hat Maria gemacht? B: Maria hat nur jemanden GEFRAGT.  
‘What did Mary do?’ B’: \*Maria hat nur Peter GEFRAGT.  
‘Maria only ASKED somebody/Peter.’  
(modified from Reis 2005)

The first example raises an analytical problem: standard analyses of German syntax allows a sentence like (1a) to be analyzed either as adverbial attachment of the FSP as in (1b) or as adnominal attachment as in (1c). Depending on whether or not adnominal attachment is allowed,

there are consequences for the availability of *nur* to occur inside complex phrases as well as for the German V2 constraint, which ensures that the verb is always the second constituent in a German matrix clause (4). A proposal that only allows adnominal attachment violates this word order constraint for sentence-initial sequences of [*nur* DP] and [DP *nur*] as in (2) above.

- (4) Within German minimal clauses involving a fronted verb  $V^0$ , there is just **one** preverbal XP position to be overtly filled (Reis, 2005, p.460).

The second example addresses an empirical problem, the post-positional attachment of *nur*. Although the data has been noted from the beginning of studying FSPs (e.g. Jacobs 1983), an analysis for this phenomenon is still to be developed. The third example addresses the structural relationship between *nur* and the focused expression, particularly if there is an intervening constituent. In short, this paper addresses the categorial distribution of *nur*, the linear order of FSP and focussed expression, and the structural relations of the two at a local and non-local level.

I propose that attachment of *nur* is not categorically restricted, that post-positional *nur* is only available if its associate marks the frame of the proposition, and that the structural relation between *nur* and its associate is defined by a prosodic constraint against intervening, accented constituents. This proposal can be described with the following three generalizations:

(5) **Essential generalizations for the characterization of the German FSP *nur*:**

- a. *Nur* allows adnominal and adverbial attachment to a contrastively focused associate.
- b. The distribution of post-positional *nur* is pragmatically and syntactically restricted.
- c. The process of focus association allows only deaccented constituents to intervene between *nur* and the prosodically most prominent constituent.

These generalizations have to be seen in the context of the numerous existing proposals, which generally can be divided into two different camps. These camps are typically characterized by their solution to the first problem. If they allow adnominal attachment, they belong to the so-called mixed accounts (e.g. Bayer, 1996; Reis & Rosengreen, 1997; Niedersteg, 2003); if they do not allow adnominal attachment, they belong to the so-called adverbial only accounts (e.g. Jacobs, 1983; Bühring & Hartmann, 2001). The two camps are also distinguished by whether their analysis can incorporate the post-positional variant. Bühring & Hartmann (2001), as proponents of the adverbial-only account, straightforwardly reject the data. Jacob (1983) reformulates his principles so that they can be applied to the post-positional variant analogously to the pre-positional variant. Overall, the distributional properties of the phenomenon neither have not been fully described. As far as the structural relations of *nur* and the focused expression are concerned, both camps have different ways to express a general preference for the two to be as close as possible. It is the nature of the constraint that is at stake here. All accounts acknowledge the importance of c-command for non-local relations; they differ by how they analyze the existing preference for these elements to be as close as possible. My proposal will demonstrate that in both aspects of the structural relations, the importance of prosodic considerations has been neglected. Table 1 provides an overview:

**Table 1** Characteristics of the existing proposals as divided into adverbial-only and mixed accounts

	<b>Adverbial-only accounts</b>	<b>Mixed accounts</b>
<b>1) Adnominal attachment</b>	<ul style="list-style-type: none"> <li>• [<i>nur</i> DP] is not a constituent</li> <li>• [<i>nur</i> DP] cannot occur inside complex phrases</li> <li>• V2 constraint violated</li> </ul>	<ul style="list-style-type: none"> <li>• [<i>nur</i> DP] is a constituent</li> <li>• [<i>nur</i> DP] can occur inside complex phrases</li> <li>• no V2 constraint violation</li> </ul>
<b>2) Post-positional attachment</b>	<ul style="list-style-type: none"> <li>• distributional properties understudied</li> <li>• no analysis</li> </ul>	<ul style="list-style-type: none"> <li>• distributional properties understudied</li> <li>• no analysis</li> </ul>
<b>3) Structural relations</b>	<ul style="list-style-type: none"> <li>• grammatical notion of closeness</li> <li>• c-command constraint of non-local association</li> </ul>	<ul style="list-style-type: none"> <li>• stylistic notion of closeness</li> <li>• c-command constraint of non-local association</li> </ul>

The current proposal can be considered to be an update of the mixed account since it allows for adnominal attachment and thus fulfills the litmus test for the mixed account. The current proposal will add two important observations to the study of *nur* in that it demonstrates the importance of prosodic considerations for both local and non-local relations of FSP and focused constituent. Additionally, it will fill an important gap in the existing literature by providing an account for post-positional *nur* that can explain the distributional properties of post-positional *nur*.

For the sake of completeness, Stefan Sudhoff's (2010) hybrid account should be mentioned here as well. It tries to reconcile the two camps with an information-structural proposal. Yet, this proposal comes at the expense of disassociating the notion of focus-sensitivity from contrastiveness. Sudhoff (2010) allows adnominal adjunction, but considers adverbial adjunction to extended verbal projections to be the default case. For this default case, the process of focus association relies on what he calls the sentential focus. DPs, PPs, and CPs must be contrastively focused to allow association with focus. Hence, *nur* may only occur outside the verbal projection if this requirement is met. The most obvious reason to overlook the contrastive quality of the focus of FAs inside the VP is that contrastive stress often coincides with the default stress, which Sudhoff (2010) call sentential focus. Note the following example from his paper where this is the case:

- (6) Gestern<sub>i</sub> hat<sub>j</sub> [<sub>VP, [+F]</sub> auch [<sub>VP</sub> t<sub>i</sub> ein Mann einen HUND geschlagen t<sub>j</sub>]].  
 'Yesterday, a man hit a DOG, too.'

Sudhoff is aware that his notion of sentence focus "in the standard case, corresponds to the syntactically determined focus domain in the middlefield" (p. 95). It is confusing, then, that he does not even consider that this focus domain can have a contrastive nature. Even for the FSP *auch* ('too') in (6), I cannot think of a way of how not to define the FSP contrastively. I will therefore neglect Sudhoff's (2010) account for the overall comparison of the proposals, but will refer to some of his crucial observations along the way. The remainder of this paper is organized as follows: after this brief introduction to the empirical problem and the existing literature, section 2 will explain a few of the key assumptions relevant for my proposal. Section 3 addresses each of the three problems individually. Section 4 shows some further consequences of my proposal. Section 5 concludes.

## 2 Key assumptions

The lack of a consensus on the notion of focus-sensitivity and the multitude of papers that have addressed this topic coming from different perspectives and traditions requires a brief characterization of the basic notions of the current proposal. Focus sensitivity is synonymous with the process of association with focus (AwF), which is defined by Krifka (2008) as a process in which “semantic operators whose interpretational effects depend on focus are associated with focus” (p. 253). This definition draws attention to the fact that AwF and FSPs are notions that do not exist independent of each other. Specifically about *nur*, the emphasis of the current proposal on the contrastive nature of the process is linked to an interpretation of the particle as an “exclusive” particle, similarly to Wagner’s (2006) proposal for *only*. *Nur* excludes any pragmatically available alternative interpretation of a focused expression except the one specifically mentioned. It is generally agreed that the presence of these alternatives is evoked by focus itself (Rooth, 1985, 1992). The term focus associate (FA) refers to the maximal projection containing the focused, i.e. prosodically most prominent, constituent. The size of this maximal projection depends on the location of the FA, as will be demonstrated in section 3. To avoid confusion with the concept of focus, I will refer to the prosodically most prominent constituent as Alt-trigger, a term that is motivated by Beck (2007) as the constituent that introduces the “alternatives into the calculation” (p. 257). Beck’s (2007) counterpart to Alt-Trigger is the XP-Alt, which is identical to the scope of the FSP. I will maintain the traditional term and therefore distinguish between Alt-trigger, FA, and scope. The distinction between scope and FA is originally Rooth’s (1985), who translates Partee’s (1993) tripartite structure into the realm of focus-sensitivity (his equivalent to FA is called restrictor). In the following, prosodic prominence is marked by capitalization. In (7), the adjective is the Alt-trigger, the DP corresponds to the FA, and the VP marks the scope:

- (7) Das Orchester hat nur [<sub>VP</sub> [<sub>DP</sub> den ERSTEN Satz]<sub>FA</sub> gespielt]<sub>Scope</sub>  
 ‘The orchestra only played the first motion.’

Crucially, *nur* can associate both with the directly adjacent constituent and with a constituent contained in the directly adjacent constituent. If the FA cannot be extracted from the directly adjacent constituent, the FA is embedded in a syntactic island. For these cases, I adopt Krifka’s (2006) notion of the focus phrase (FP), which is necessary since AwF is sensitive to island constraints (Drubig, 1994). In (8), the FA *den ERSTEN Komponisten* is contained in a complex DP and therefore cannot be extracted:

- (8) Das Orchester hat nur [[das Stück [des ERSTEN Komponisten]]<sub>FA/FP</sub> gespielt]<sub>Scope</sub>  
 ‘The orchestra only played the piece of the FIRST composer.’

Finally, it should be noted that all FAs are phrases. The fact that *nur* exclusively attaches to phrases used to be controversial for verbs (König, 1991), but placement of the verb in C instead of its lower position conclusively demonstrates the ungrammaticality of non-phrasal attachment:

- (9) a. Er hat die Küche<sub>i</sub> nur [<sub>VP</sub> *t<sub>i</sub>* GEWISCHT]<sub>FA</sub>.  
 b. \*Er nur [WISCHT<sub>i</sub>]<sub>FA</sub> die Küche *t<sub>i</sub>*.  
 ‘He only MOPPED the kitchen.’

### 3 Understanding focus-sensitivity

With the fundamental notions in place, this section will address the three problems that were introduced at the beginning as being essential for understanding focus-sensitivity. Support for the constituency of [*nur* DP] will decide the case for acknowledging adnominal attachment, which will in turn play an important role in discussion of the post-positional data. The third subsection will introduce an observation that has so far eluded both traditional accounts: the importance of prosody for the structural relation between *nur* and the Alt-trigger.

#### 3.1 Adnominal attachment

The traditional arguments favoring or against adnominal attachment have all been identified as inconclusive by Reis (2005), which makes this theoretical problem of choosing the correct attachment site really an empirical problem. The empirical question is whether or not the sequence [*nur* DP] forms a constituent. Standard diagnostics for constituency, such as coordination, suggest that [*nur* DP] indeed is a constituent. Coordination is possible with other DPs by themselves, as in (10), and inside complex phrases, as in (11), which is incompatible with the adverbial-only account:

- (10) Jeder ... wünscht ihr für den weiteren Weg viel Erfolg und nur [das BESTE]<sub>FA</sub>.<sup>1</sup>  
'For her future endeavors, everyone wishes her great success and only the BEST.'
- (11) Das gesamte Video zeigt einen paranoiden, rassistischen alten Mann,  
[AdvP fasziniert nur [von ADOLF HITLER]<sub>FA</sub> und von sich selbst].<sup>2</sup>  
'The entire video shows a paranoid, racist, old man, fascinated only by ADOLF HITLER and by himself.'

Occurrence of [*nur* DP] inside complex phrases is quite readily available in general, which forms a second argument for the constituency of this sequence. I consider the smaller frequency of these cases to be pragmatically motivated, and thereby depart from (Bouma, Hendriks & Hoeksema, 2007), who insist that scalarity does not play a role in their distribution.<sup>3</sup> Example (12) stems from a Google Books search; example (13) is my own with some alternative variants that demonstrate the importance of a scalar reading for the availability of [*nur* DP] to occur inside complex phrases:

- (12) Wie soll das bitte gehen [pp mit nur [EINER Kamera]<sub>FA</sub>]?<sup>4</sup>  
'How should that be possible with only ONE camera?'
- (13) a. Nur der [tote]/[verletzte]/[leicht verletzte] Läufer.  
b. \*Der nur [[\*TOTE] / [VERLETZTE] / [LEICHT verletzte] Läufer].  
(Only) the only DEAD / INJURED / SLIGHTLY injured runner.'

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<sup>1</sup> <http://www.wochenspiegelive.de/nachricht/obj/2015/03/04/katrin-schneider-verlaesst-die-trierer-miezen>

<sup>2</sup> Hammerl, E. (2007). Title unknown. *Profil*, Vol. 38, 39.

<sup>3</sup> Even the original example that provoked the suggestions of scalarity by an anonymous reviewer becomes unacceptable once the scalar information introduced by a coordinated DP is omitted: "Wahlweise kann man sich die Maschine mit nur dem Piloten \*(oder 1-3 Passagieren) auswählen. 'Optionally, one may select the plane with only the pilot or 1-3 passengers.'" (p. 14).

<sup>4</sup> Hofmüller, H. (2009). *Die perfekte Tonaufnahme mit der Videokamera*. Berlin: Schiele und Schön, 69.

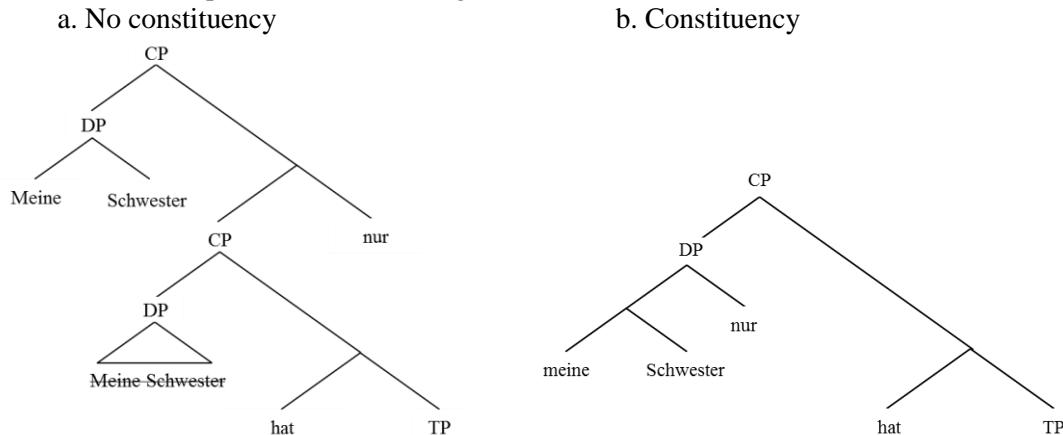
A third argument for the constituency of [*nur* DP] is its behaviour in the context of Diesing's (1992) *ja doch* diagnostic, which marks the VP boundary. Example (14) shows that [*nur* DP] must be base-generated low, as it can appear on either side of the discourse particles. This is not expected under an assumption where *nur* is base-generated on its own in a position above VP. Moreover, example (15) shows that [*nur* DP] is not penetrable by either of these particles, which is another reason for considering this sequence as one constituent:

- (14) a. weil *ja doch* [*nur* KINDER] auf der Straße spielen  
 b. weil [*nur* KINDER] *ja doch* [~~*nur*~~ KINDER] auf der Straße spielen  
 'since only children do play on the street'
- (15) a. \*weil ***nur*** *ja doch* **KINDER** auf der Straße spielen  
 b. \*weil *doch* ***nur*** *ja* **KINDER** *t* auf der Straße spielen  
 c. \*weil *ja* ***nur*** *doch* **KINDER** auf der Straße spielen

Lastly, the post-positional data is relevant for the discussion of the constituency of [*nur* DP] as well. To incorporate the post-positional data and still generate the correct linear order, the adverbial-only account has to stipulate movement of the DP in spec-CP into a second specifier position above *nur*. The solution of the mixed account is considerably more elegant with less stipulation. Consider example (16) with the alternative representations depending on whether sentence-initial [*nur* DP] is considered to be a constituent or not:

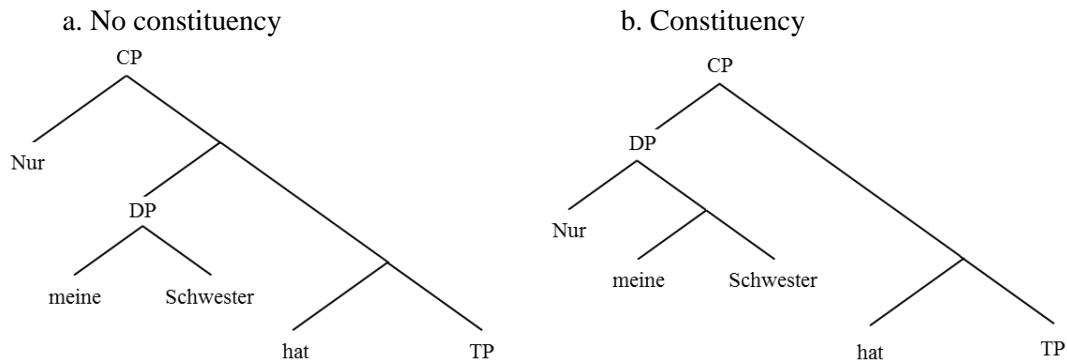
- (16) Meine Schwester *nur* hat den Unfall überlebt.  
 '[My SISTER only] survived the accident.' (Jacobs 1983)

- (17) Structural consequences of considering [DP *nur*] a constituent or not:



As already pointed out in the introduction, a proposal that assumes adjunction to CP goes against one of the most basic word order constraints in German syntax, the V2 constraint (4). Independent of the post-positional data, the adverbial-only account has to embrace this violation of the V2 constraint in the context of sentence initial *nur* as an exception to the rule. For (16b) this would result in a V4 order; for the pre-positional variant in (17b), this would result in a V3 order. An account that allows the constituency of [*nur* DP] and [DP *nur*] requires neither exception:

(18) Structural consequences of considering [*nur* DP] a consequence or not:



To conclude this subsection, there are a number of strong arguments for the constituency of [*nur* DP], and hence for assuming adnominal attachment. An account that allows adnominal attachment is superior to an account that does not since there is no reason for the former to exclude this constituent inside other phrases or to make an exception to the V2 constraint.

### 3.2 Post-positional attachment

The empirical problem of a post-positional variant of *nur* is not so much a matter of whether this variant naturally occurs (all examples from this subsection stem from the corpus of written German of the IDS, Mannheim), but rather a problem of adequately describing and explaining its distribution. To begin with, there are attested examples both of arguments and of adjuncts.

- (19) [<sub>DP</sub> EIN Gutes]<sub>FA</sub> nur hat diese Form der Sturheit.  
 ‘Only ONE good thing comes from this form of stubbornness’
- (20) [<sub>AdvP</sub> SELTEN]<sub>FA</sub> nur werden die unterirdischen Schatzkammern gezeigt...  
 ‘Only RARELY, the underground treasures are shown.’
- (21) Für die meisten wird ein Traum wahr  
 – [<sub>PP</sub> für die WENIGSTEN]<sub>FA</sub> nur ist es ein Albtraum.  
 ‘For most people, it is a dream come true – for a FEW people only, it is a nightmare’

All these examples of post-positional *nur* have the FA in the sentence-initial position. A closer look at the category of DPs clarifies that this is definitely a restriction associated with the location. Regardless of whether the DP is a subject as in (22) or an object as in (23), it is only the sentence-initial position that is available. The (b) examples without fronting to CP-spec are unacceptable:

- (22) a. [<sub>DP</sub> SIE nur] hat die Ehre und das Glück dich anzuschauen. (Subject-DP)  
 b. \*Die Ehre und das Glück dich anzuschauen hat [<sub>DP</sub> SIE nur]  
 ‘Only she is entitled and so lucky as to lay eyes on you.’
- (23) a. [<sub>DP</sub> EIN Gutes nur] hat diese Form der Sturheit. (Object-DP)  
 b. \*Diese Form der Sturheit hat [<sub>DP</sub> EIN Gutes nur].  
 ‘Only ONE good thing comes from this form of stubbornness’

There is, however, one exception to that pattern of a sentence-initial occurrence, which will turn out to be a decisive one. The adverbial *ganz KNAPP nur* ('only very MARGINALLY') in (24) constitutes an instance of post-positional *nur* that is much lower than CP-spec:

- (24) Auf dem Weg ins Endspiel hatte sie ... gegen ihre Mannschaftskollegin und Doppelpartnerin S. T. [ganz KNAPP nur] die Oberhand behalten können.  
 'On her way to the final, she only very MARGINALLY prevailed against her team mate and doubles partner S.T.'

This position is not available to every adjunct. Consider the example below where the adverbial of (24) is exchanged for a sentential adverb. The latter is only compatible with a pre-positional variant:

- (25) a. [Selten nur] werden die unterirdischen Schatzkammern gezeigt.  
 b. Die unterirdischen Schatzkammern werden [selten nur] gezeigt  
 'Only rarely, the underground treasures are shown.'
- (26) a. \*[Anscheinend nur] werden heute die unterirdischen Schatzkammern gezeigt.  
 b. [Nur anscheinend] werden heute die unterirdischen Schatzkammern gezeigt.  
 c. \*Die unterirdischen Schatzkammern werden [anscheinend nur] gezeigt.  
 d. Die unterirdischen Schatzkammern werden [nur anscheinend] gezeigt.  
 'Only apparently, the underground treasures are shown today.'

This difference above turns out to be the key to understanding the distribution of post-positional *nur*. The category that the adverbials in (25) and (26) fall in are so called *frame adverbials*. These adverbials have been identified as "set[ting] a frame for the overall proposition" (Maienborn & Schäfer, 2012, p. 10). The English examples below demonstrate that this is a positional property:

- (27) a. Siri examined the diamond [with a LOUPE]<sub>event-related adverbial</sub>  
 b. [With a LOUPE]<sub>frame adverbial</sub> small fissures of a diamond become visible.

The reason why the post-positional variant is not available for sentential adverbials is that frame adverbials occur below sentence adverbials (Störzer & Stolterfoht, 2012). This is an important observation since that means that frame adverbials cannot occur in Frey's (2004) dedicated topic position, which always precede sentence adverbials. These findings call for a distinction between frame topic and aboutness topic. The only conclusion left to be drawn is that CP-spec and the position below sentence adverbials are available for frame-setting arguments and adjuncts. Hence, it does not come as a surprise that VPs cannot form a constituent with post-positional *nur*. It does not make sense to associate a VP with a frame of the following proposition:

- (28) a. Maria hat nur [VP SUSHI gegessen]<sub>FA</sub>  
 b. \*Maria hat [VP SUSHI gegessen]<sub>FA</sub> nur  
 c. [VP SUSHI gegessen]<sub>FA</sub> hat Maria nur  
 d. \* [VP SUSHI gegessen]<sub>FA</sub> nur hat Maria (modified from Sudhoff 2010)  
 'Mary only had Sushi'

The distributional facts for the post-positional candidate can therefore be explained with a pragmatic requirement of frame topichood. There are only two positions available to frame topics, of which the lower position is only available to the corresponding adverbials. With this analysis of



postpositional *nur*, we can fill an important gap in the analysis of the mixed account and have further evidence against the adverbial only account.

### 3.3 Locality requirements

The third problem addresses the structural relation between the FSP and the FA. Throughout the literature on FSPs, there is an emphasis on a preference for *nur* and the FA to be maximally close. Find below the definition of adjacency by Jaeger & Wagner (2003, p. 5), which is elsewhere expressed as a closeness condition and is particularly emphasized by the adverbial-only account:

- (29) A focus-sensitive operator and its focus cannot be separated by a constituent that is not part of the focus.

Such a generalization is motivated by examples like (30) where material originating between *nur* and the Alt-trigger is scrambled to the left of *nur*. This generalization is complicated by counter-examples, such as (31), unfocused constituents between *nur* and Alt-trigger. Some of these counter-examples can be explained by the fact that the intervening material simply cannot scramble:

- (30) \*Gestern hat sogar Rufus dem MÄDCHEN Blumen geschenkt.  
 ‘Yesterday, even Rufus gave the. GIRL some flowers.’

(Büring & Hartmann, 2001, p. 237; judgments as in the original)

- (31) a. \* weil sie sich traurig nur [traurig FÜHLT]<sub>FA/FP</sub>  
 b. weil sie sich nur [traurig FÜHLT]<sub>FA/FP</sub>  
 ‘because she only FEELS sad.’

(Büring & Hartmann, 2001, p. 242; judgments as in the original)

For Büring & Hartmann (2001), cases like (31) and other constructions that do not allow scrambling are still compatible with a grammatical notion of closeness. Reis (2005) considers minimal pairs like (32) to be difficult to reconcile with a purely grammatical restriction. Instead, she proposes that closeness reflects a stylistic preference for FSP and FA to be as close as possible:

- (32) a. Maria hat nur [jemanden GEFRAGT]<sub>FA</sub>  
 b. \* Maria hat nur [Peter GEFRAGT]<sub>FA</sub>  
 ‘Maria only ASKED somebody/Peter.’

What the majority of existing accounts on closeness have missed so far is the fact that this preference is prosodically motivated. If the intervening material is deaccented, for instance because it is given (Schwarzschild 1999), scrambling is no longer obligatory. In (33), B’s response is acceptable regardless whether the object occurs to the left or to the right of *nur*. The only material able to intervene between FSP and Alt-trigger is a constituent that is deaccented:

- (33) A: Was hat Maria mit dem Buch gemacht?  
 ‘What did Mary do (with the book)?’

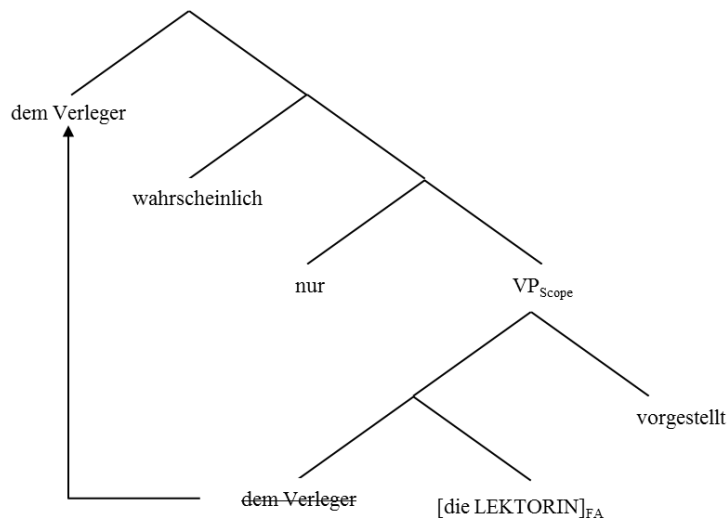
B: Maria hat das Buch nur [~~das Buch~~ VERLIEHEN]<sub>FA</sub>

B’: Maria hat nur [das Buch VERLIEHEN]<sub>FA</sub>  
 ‘Maria only LENT the book’

Sudhoff (2010) makes a similar observation, but renders the closeness preference in terms of a givenness restriction. The reason why deaccenting is to be preferred over givenness are double-object constructions. Here, the intervening constituent must scramble regardless of whether it is given or not. Hence, a givenness requirement cannot explain the closeness preference entirely:

(34) A: Wen hatte der GASTGEBER dem Verleger vorgestellt?  
 ‘Who had the HOST introduced to the publisher?’

B: Der Gastgeber hatte dem Verleger wahrscheinlich nur die LEKTORIN vorgestellt.  
 B’: \*Der Gastgeber hatte wahrscheinlich nur dem Verleger die LEKTORIN vorgestellt.  
 ‘The host had only introduced the EDITOR to the publisher.’



If the FSP associates with the indirect object, however, the accented material does not have to move. Accented material inside the scope of *nur* only matters when directly intervening; it is irrelevant if it follows the Alt-trigger. Scrambling is not mandatory in (35):

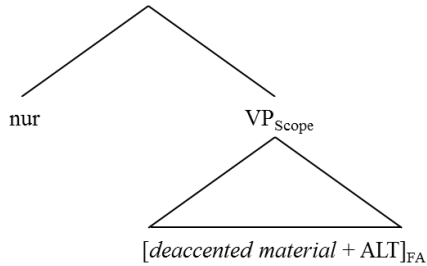
(35) Der Gastgeber hatte wahrscheinlich nur dem VERLEGER<sub>DAT</sub> die Lektorin<sub>ACC</sub> vorgestellt.  
 ‘The host had only introduced the editor to the PUBLISHER.’

If the FSP associates with the verb, both objects are scrambled outside of the scope of *nur*. This observations lends further support for restricting the process of AwF to phrases:

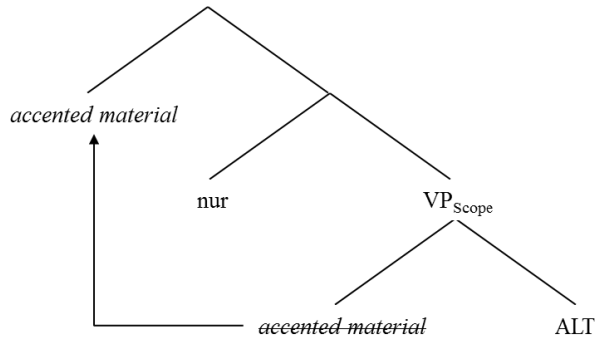
(36) Der Gastgeber hatte dem Verleger<sub>dat</sub> die Lektorin<sub>ACC</sub> wahrscheinlich nur  
 [VP dem Verleger<sub>dat</sub> die Lektorin<sub>ACC</sub> VORGESTELLT]<sub>FA/Scope</sub>  
 ‘The host had probably only INTRODUCED the publisher to the editor.’

The above observations correspond to two structural constellations. Deaccented material is allowed to intervene between *nur* and the Alt-trigger; intervening, accented material is moved outside of the scope of *nur*; accented material following the Alt-trigger can stay in situ:

(37) Structural relations in the local domain  
 a. deaccented, intervening constituents:



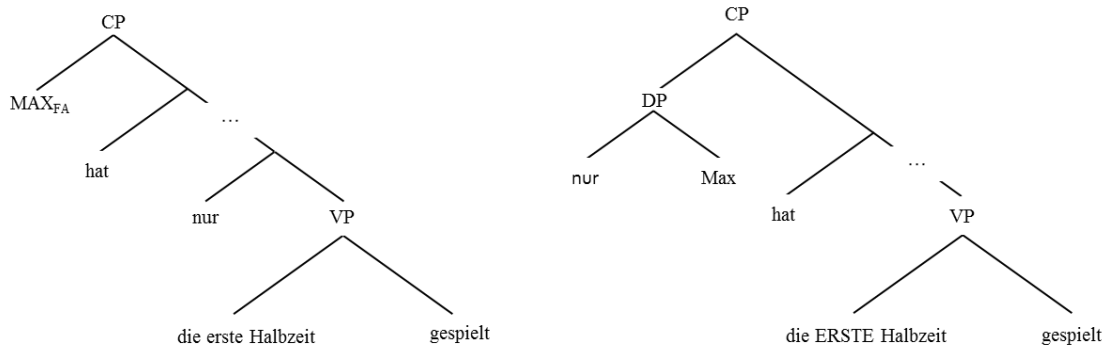
b. accented, intervening constituents:



Another predominant notion concerning the structural relation in the literature is that of precedence, usually expressed in terms of a c-command requirement (Altmann 1978; Büring & Hartmann 2001; Jacobs 1983; Reis 2005). The post-positional data renders any linear notion of precedence as false, but examples such as (38) and (39) are most easily explained by assuming the requirement of a c-command relationship between FSP and FA. In (38), the FSP cannot associate with the FA in CP-spec. The only way to give (38) a grammatical reading is to interpret *nur* to associate with constituent that is marked by second occurrence focus. In (39), the FSP is too deeply embedded to be able to c-command the direct object.

(38) MAX hat nur die erste Halbzeit gespielt.  
 ‘MAX played only the first half.’

(39) \*Nur Max hat nur die ERSTE Halbzeit gespielt.  
 ‘Max played only the FIRST half.’



An account that does not acknowledge the constituency of [*nur* DP] cannot draw on c-command as an explanation of why (40) is ungrammatical. Instead, such an account needs to make the closeness preference a grammatical requirement. The examples above revealed that this runs into problems and fails to explain the prosodic requirements. It appears, then, that the structural relations relevant in the process of AwF can be captured with two simple constraints. The FSP needs to c-command its FA and does not allow any accented constituent to intervene between FSP and Alt-trigger. If a constituent intervenes, it must be deaccented. Accented constituents that are inside the scope of *nur* must allow the ALT-trigger or be moved outside the scope when intervening.

As a conclusion of this section, it is safe to side with the mixed-account in light of the support for adnominal attachment. The constituency of [*nur* DP] was established on grounds of traditional diagnostics. This allows to dismiss the stipulation of FSPs to be an exception to the otherwise well-supported V2 constraint. The lower frequency of this constituent inside complex phrases was ascribed to a scalarity requirement that does not hold in a comparable fashion for simpler instances. An account that allows for adnominal attachment can also incorporate the post-positional data more elegantly. What has been shown independently of the conflicting discussion in the preceding accounts is the pragmatic requirement for post-positional *nur* to set a frame for the proposition. Finally, it was observed that the structural generalizations of closeness and precedence cannot be considered independently of a prosodic requirement preventing accented constituents to intervene.

#### 4 Consequences

Emphasizing the importance of prosody in the context of AwF has a number of interesting consequences that go beyond the structural relations within a local domain. A counterexample for the role of c-command is the association of *nur* with a preposed verb.

- (40) Die Krise BESCHLEUNIGT diesen Prozess [wahrscheinlich] nur.  
 ‘This crisis probably only ACCELERATES this process.’

The example is another result from the aforementioned corpus search with an additional sentential adverb. This adverb shows that even when the Alt-trigger is moved outside the scope, accented material has to be moved outside the scope of *nur*. For this reason, a proposal that stipulates that the closeness generalization only holds before movement (Jäger & Wagner, 2003) cannot be the solution to the problem. Instead, the data in (40) suggests that accented material may not even occur between the FSP and the copy of the moved Alt-trigger. Based on the data discussed so far, accented constituents only seem to obstruct the process of AwF if that constituent occurs inside the scope and to the right of *nur*. This finds support from the fact that other accented constituents can intervene between the particle and the moved Alt-trigger. Below, both subject and object intervene:

- (41) Tatsächlich BESCHLEUNIGT diese Krise diesen Prozess [wahrscheinlich] nur.  
 ‘In fact, this crisis probably only accelerates this process.’

This also holds for the other possible exception to the c-command requirement, viz. focus-moved constituents. The sentences in (42) are originally from Sudhoff (2010). As in the local domain (see section 3.2), accented material in the scope and to the right of the FSP is moved to the left (42a,c,d):

- (42) a. SUSHI hat Maja nur [~~Sushi~~ gegessen]<sub>FA</sub>.  
 b. [~~SUSHI~~ gegessen]<sub>FA</sub> hat Maja nur [~~SUSHI~~ gegessen]<sub>FA</sub>.  
 c. ESSEN wollte sie das Sushi nur [~~das Sushi~~ essen]<sub>FA</sub>  
 d. GEGESSEN hat sie das Sushi nur [~~das Sushi~~ gegessen]<sub>FA</sub> .  
 ‘Maja only ate Sushi’  
 e. [<sub>CP</sub> Dass FELIX kommt] hat Maja nur gehofft [<sub>CP</sub> ~~Dass Felix kommt~~]<sub>FA</sub>.  
 ‘That FELIX comes, Maja only hoped.’

The fronted material behaves exactly as in the case of preposed verb in (40). This is expected since only accented constituents inside the scope and to the left of *nur* should matter. This includes complement clauses, as in (46e). Accenting constituents that occur between *nur* and any moved components of the FA can only result in interpretation this constituent as a contrastive topic.

- (43) a. SUSHI hat MAJA nur [~~Sushi~~ gegessen]<sub>FA</sub>.  
 b. [SUSHI gegessen]<sub>FA</sub> hat MAJA nur [~~SUSHI~~ gegessen]<sub>FA</sub>.  
 c. ESSEN wollte MAJA das Sushi nur [~~das Sushi~~ essen]<sub>FA</sub>.  
 d. GEGESSEN hat MAJA das Sushi nur [~~das Sushi~~ gegessen]<sub>FA</sub>.  
 ‘Maja only ate Sushi’  
 e. [<sub>CP</sub> Dass FELIX kommt] hat MAJA nur gehofft [<sub>CP</sub> ~~Dass Felix kommt~~]<sub>FA</sub>.  
 ‘That FELIX comes, Maja only hoped.’

This behavior only allows one interpretation: the prosodic requirements directly concern the scope of *nur*. Exceptions to the c-command generalizations, i.e. verb raising and focus-fronting, do not affect this requirement. Regardless of whether the whole FA or just the Alt-trigger are moved to the left, accented constituents outside the scope of *nur* do not affect the process of AwF. If the Alt-trigger is moved on its own, accented constituents between *nur* and its trace still needs to be moved.

So far, the prosodic requirements have only been discussed for the verbal domain, and not for sentence initial phrases. Considering these variants is important because leftward movement is not available there. Outside the VP, the only way to unambiguously identify the alternative is via intonation. If the prosodic requirement holds for environments where movement is not available, it is expected that accented constituents are not allowed to intervene between FSP and the Alt-Trigger. This is exactly the case for complex DPs where the context does not allow deaccenting:

- (44) A: Was empörte die Zuschauer?  
 ‘What did outrage the audience?’  
 B’: Nur [die Übertragung [des FINALES]<sub>FA/FP</sub> empörte die Zuschauer, über die KOMMENTIERUNG hat sich niemand beschwert.  
 ‘The broadcasting of only the FINAL outraged the audience. Nobody complained about the COMMENTING.’

The postpositional data is difficult to evaluate. The corpus search did not unearth any complex phrases with post-positional *nur*. This may be due to the frame setting requirement. Complex phrases might comprise too much information to still count as setting a frame. It seems that accented material must be interpreted as a contrastive topic, but this is speculative:

- (45) A: Welche Geschwister deiner Mutter haben den Unfall überlebt?  
 ‘Which siblings of your mother survived the accident?’  
 B: ?[[Der ÄLTESTE Bruder]<sub>FA</sub> meiner Mutter]<sub>FP</sub> nur hat den Unfall überlebt.  
 ‘The OLDEST brother of my mother only survived the accident.’  
 (46) A: Welche Geschwister deines Vaters haben den Unfall überlebt?  
 ‘Which siblings of your father survived the accident?’  
 B’: [Der älteste Bruder]<sub>FA</sub> meiner MUTTER]<sub>FP</sub> nur hat den Unfall überlebt.  
 ‘The oldest brother of my MOTHER only survived the accident.’

Irrespective of the post-positional data, it appears that the prosodic generalization holds across categories and locations: constituents inside the scope of *nur* and intervening between FSP and the original site of the Alt-Trigger need to be deaccented. The details of the prosodic requirements require further investigations, but it is obvious that AwF is sensitive to these requirements even after movement. This is surprising because it suggests that unpronounced copies of moved associates play an important role in the process of AwF. Quite possibly, the actual association is established before the FA or the Alt-trigger is moved. The observation that accented material is not allowed to intervene between *nur* and the unpronounced copy, however, shows that the solution is more complex than simply assuming that closeness is only relevant before movement.

## 5 Conclusion

This paper reinvestigated the distributional properties of *nur* in order to shed new light on the divide of the existing accounts between analyses that allow adnominal attachment and analyses that do not. The adverbial-only account is untenable in light of the strong support for the constituency of [*nur* DP], including the attested examples of the sequence inside complex phrases. The adherence to the V2 constraint and the better compatibility with the post-positional variant of *nur* are further arguments that support analyses that do not assume a categorial restriction. Post-positional *nur* is well-attested and its distribution can be explained by postulating a pragmatic requirement of frame-setting. This requirement alone can explain why sentence-initial constituents can host this variant while constituents of the same category in their in situ positions cannot. The distinction between frame adverbials and sentence adverbials turned out to be the key to understand this distributional puzzle. My proposal goes beyond what can be predicted from the mixed account literature by revealing the importance of prosody for German AwF. Accented material cannot intervene between the FSP and the original site of the Alt-Trigger – even if the latter is moved to the left. This observation holds across categories and also includes complex phrases that do not allow extraction. The implications for the process of AwF in terms of movement, interpretation, and spell-out requirements are only discussed to a minor detail here, and require further attention.

What should not be underestimated is the fact that the divide in the traditional analyses corresponds to a real divide in the distributional properties of *nur*. The discussion of the ditransitive cases and the cases of association with a verb across non-scramblable constituents showed that verbal elements always associate with a FSP at the VP boundary, while FAs and FPs that precede that boundary are always directly adjacent to *nur*. I assume that this divide also lies at the heart of Sudhoff's (2010) attempt to reconcile the traditional camps by drawing on a distinction between associates that are contrastively focused and others that are in the scope of sentential focus. While I reject a divorce of contrastiveness from AwF, that proposal confirms that verbal constituents behave differently than associates that occur outside of the verbal domain. One promising proposal that may contribute to the explanation of this behavior is Drubig's (1994) postulation of Polarity phrases (PolPs) between VP and TP and between TP and CP. The traditional divide could then be explained by association with FSPs in two base positions. While verbal constituents would then associate with *nur* in the lower PolP above VP, structurally higher constituents would associate with a higher PolP position despite the fact that the FSP always surfaces adjacently. At this point, it is unclear, however, whether such an account would be able to explain the whole range of differences between verbal adjunction and other adjunction sites. I will have to leave this investigation and the discussion of its technical implications to future research.

## References

- Altmann, H. (1976). Die Gradpartikeln im Deutschen. Untersuchungen zu ihrer Syntax, Semantik und Pragmatik, Linguistische Arbeiten 33, Niemeyer, Tübingen.
- Bayer, J. (1996). Directionality and Logical Form. On the Scope of Focusing Particles and Wh-in-situ. Dordrecht: Kluwer.
- Beck, S. (2007). The Grammar of Focus Evaluation. In Uli Sauerland and Hans-Martin Gärtner (eds), 'Interfaces+Recursion=Language'? Chomsky's Minimalism and the View from Syntax and Semantics. Berlin: de Gruyter, 255–280.
- Bouma, G., Hendriks, P., & Hoeksema, J. (2007). Focus particles inside prepositional phrases: A comparison of Dutch, English, and German. *The Journal of Comparative Germanic Linguistics*, 10(1), 1–24.
- Büring, D. and K. Hartmann. (2001). The syntax and semantics of focus-sensitive particles in German. *Natural Language & Linguistic Theory* Vol. 19, No. 2, 229–269.
- Drubig, H. B. (1994). Island constraints and the syntactic nature of focus and association with focus. Universitäten Stuttgart und Tübingen in Kooperation mit der IBM Deutschland GmbH.,
- Diesing, M. (1992). Bare plural subjects and the derivation of logical representations. *Linguistic Inquiry*, 353–380.
- Frey, W. (2004). A medial topic position for German. *Linguistische Berichte* 198, 153–190.
- Jacobs, J. (1983) Fokus und Skalen. Zur Syntax und Semantik der Gradpartikeln im Deutschen, in: *Linguistische Arbeiten* 138, Niemeyer, Tübingen
- Jaeger, F.T. and M. Wagner (2003) Association with Focus and Linear Order in German. Unpublished Manuscript.
- Krifka, M. (2008). Basic notions of information structure. *Acta Linguistica Hungarica*, 55(3), 243–276.
- Krifka, M. (2006). Association with focus phrases. In V. Molnar, & S. Winkler (Eds.), *The architecture of focus* (pp. 105–136). Berlin, New York: Mouton de Gruyter..
- Maienborn, C. and M. Schäfer. (2011). Adverbs and adverbials. In: Maienborn, C., von Stechow, P., Portner, P. (eds.). *Semantics. An international handbook of natural language meaning; Volume 2. (HSK 33.2)*, Berlin, New York: de Gruyter, 1390–1420. *Meinunger* 2004
- Partee, B. (1993). “On the "Scope of Negation" and Polarity Sensitivity”. In E. Hajicova (ed.) *Functional Approaches to Language Description: Proceedings of the Conference, Prague, 24–27 November 1972. Faculty of Mathematics and Physics, Charles University, Prague.*
- Rooth, M. (1985). Association with focus. (Doctoral dissertation, Cornell University).
- Rooth, M. (1992). A theory of focus interpretation. *Natural language semantics*, 1(1), 75–116.
- Schwarzschild, R.. (1999). Givenness, Avoid F, and Other Constraints on the Placement of Accents. *Natural Language Semantics* 7:141–177.
- Reis, M. (2005) On the Syntax of So-Called Focus Particles in German: A Reply to Büring and Hartmann 2001. *Natural Language & Linguistic Theory* Vol. 23, No. 2, 459–483.

- Reis, M. and I. Rosengren.(1997). A Modular Approach to the Grammar of Additive Particles: the Case of German 'Auch', *Journal of Semantics* 14, 237–309.
- Störzer, M. and Stolterfoht, B. (2013). Syntactic Base Positions for Adjuncts? Psycholinguistic Studies on Frame and Sentence Adverbials. *Questions and Answers in Linguistics* 1(2), 57–72.
- Sudhoff, S. (2010). Focus Particles in German: Syntax, Prosody, and Information Structure. Amsterdam, Philadelphia: Benjamins.
- Wagner, M. (2006). Association by movement: evidence from NPI-licensing. *Natural Language Semantics*, 14(4), 297–324.