

Leftmost peripheral adverbs and adjectives in German

André Meinunger

Received: 10 May 2007 / Accepted: 17 October 2008
© Springer Science + Business Media B.V. 2009

Abstract In this contribution, I investigate the leftmost periphery of German CPs and DPs and try to give a unified account for some grammatical phenomena concerning the (non-) integration of orphan-like elements. It will be shown that in both cases, certain speaker-oriented adverbials or adjectives pattern much alike. They may be placed in a quasi-external position, in which they can be considered syntactic orphans. In particular, the adjectival construction has not really been discussed in the literature. Both—the investigated adverbials and adjectives—can also appear inside a clause (prefield) or within the noun phrase (i.e., between article and noun). The two relevant positions are associated with specific restrictions on the available readings. A possible explanation of these restrictions will be proposed. The results of the given analysis have some consequences for the architecture of the so-called interfaces, that is, the bridge character of the branch from core syntax to the morpho-phonological component on the one hand (PF in the broad sense), and the one between syntax proper and meaning (LF in a larger view) on the other.

Keywords Ellipsis · (German) adjectives · “Orphans” · Interface condition(s) · Left periphery · Speaker-oriented adverbs

1 Outline

The article is structured as follows: In the first part, I will briefly present and discuss some interesting data first published in Meinunger (2004, 2006). These data are clauses that start with a speech act adjunct or discourse adverbial which can be placed in a rather marginal position, arguably outside the core CP (orphan), resulting in a verb-third construction (henceforth often V3); or the related variants, in which the adverbials occur in the undeniably sentence-initial Spec,CP position. I will then

A. Meinunger (✉)
ZAS, Schuetzenstr. 18, 10117 Berlin, Germany
e-mail: andre@zas.gwz-berlin.de

offer an explanation for the observed restrictions which makes recourse to an old observation by Hankamer (1973) and is based on a ban on certain ambiguities. In the second part, I will introduce some new German DP data that have not been discussed in the literature so far. It turns out that these constructions—consisting of an orphan-like, noun-phrase-initial adjective introducing a regular DP—share some of the crucial properties with the sentences discussed above which have a decisive impact on both their reading and distribution.

2 Some aspects of the leftmost periphery of German clauses

2.1 Discourse adverbials on the left edge—a short recapitulation of Meinunger (2004, 2006)

The characteristic verb-second (V2) order of German provides a reliable tool with which to determine which constituents at the left edge definitely belong to the relevant clause. The position that immediately precedes the finite verb, traditionally called the ‘Vorfeld’ (henceforth prefield), is a position that undeniably belongs to the clause. Constituents appearing before the preverbal (i.e., ante-finite verb) constituent are harder to judge with respect to their affinity to the following, otherwise complete, sentence. However, it seems that for quite a number of constructions it can be argued that the first XP in a verb-third clause is syntactically connected to the relevant clause and should be regarded as a part of it.¹

Meinunger (2004, 2006) is concerned with constructions in which a discourse adverbial seems to shift its position between the V3 initial position and the canonical Spec,CP slot. For the sake of illustration: certain speech act adverbials, or discourse adverbs in Ernst’s terminology (Ernst 2002), sometimes called ‘style disjuncts’ in the older literature (Greenbaum 1969; Schreiber 1972), can occupy a position before the regular prefield.

- (1) Ehrlich gesagt, ich bin von dir total enttäuscht.
honestly said, I am of you totally disappointed.
- (2) Ehrlich, ich bin von dir total enttäuscht.
honestly, I am of you totally disappointed
Both: ‘To be honest/honestly, I am completely disappointed with you.’
- (3) Ganz offen gestanden, ich bin von dir total enttäuscht.
wholly open confessed, I am of you totally disappointed
- (4) Ganz offen, ich bin von dir total enttäuscht.
Wholly open I am of you totally disappointed
Both: ‘Frankly, I am completely disappointed with you.’

¹ Here I disregard the discussion of V3 constructions such as Hanging Topics versus Left Dislocation structures, which are the subject of discussion in Grewendorf (2002), Grohmann (2003), and Frey (2004), among others.

These examples provide no certainty that the pre-comma adverbial in fact forms an integral part of the sentence and should therefore be considered a regular part of the respective clause—hence such an expression would be a good candidate for an orphan in Haegeman’s sense of the term (Haegeman 1991/2008). However, these elements can equally well occupy a sentence internal position. Thus, these adverbial expressions are also fine not only in the prefield directly preceding the finite verb as in (5), but also in the upper ‘Mittelfeld’ (middle field) (6).

(5) Ehrlich gesagt bin ich von dir total enttäuscht.
Honestly said am I of you totally disappointed

(6) Ich bin ehrlich gesagt von dir total enttäuscht.
I am honestly said of you totally disappointed
 Both are interpreted as (1) or (2) above, i.e.:
 ‘To be honest/honestly, I am completely disappointed with you.’

In Meinunger (2004, 2006) one can find about 25 such examples. All of these expressions follow a certain pattern: there is some adverbial-like phrase which in the majority of cases is followed by a verbal form—mostly a participle of a *verbum dicendi*, that is, of a verb of communication, a verb of saying (*sagen* ‘say’, *bemerk* ‘remark’, *ausdrücken* ‘express’, *formulieren* ‘formulate’, *gestehen*, *zugeben* (both: ‘confess’ or ‘admit’)). However, as illustrated in examples (2) and (4), it is also possible to drop the performative verb. Thus, one can obtain the same effect if one leaves out or deletes the verbal part. I call this variant the short form. Semantically, the sentences—either with the verbal element or with just the short form—are equivalent. In Meinunger (2004, 2006) I have shown, however, that there is no free choice between the forms. The crucial observation is the following: (1–4) are V3 structures, so here the adverbials seem to be CP-adjoined or in some very high position of the left periphery. If the short form is placed within the regular prefield giving rise to V2, the sentences are bad (7), (8); whereas the corresponding long form is a good occupant of the ‘Vorfeld’, compare (5).

(7) *Ehrlich bin ich total enttäuscht von dir.
Honestly am I totally disappointed of you

(8) *Nebenbei habe ich mir die Sache anders vorgestellt.
Besides have I me the story different imagined
 (supposed to mean: By the way, I had a different idea of all this.)

Although neither Meinunger (2004) nor Meinunger (2006) offers an explanation (this will be done in the present article), both articles indicate the presumably correct path to take. The following data in (9) and (10) seem to suggest an explanation for the observed pattern. In some V2 cases, dropping of the verbal part does not necessarily lead to ungrammaticality as in the examples (7) and (8). Rather, when the verbal part is dropped in cases such as in (10) or (12), the sentence is grammatical but a speech-act oriented interpretation is always impossible.

- (9) Nebenbei bemerkt, ist so ein Job gar nicht zu schaffen.
Besides remarked, is such a job participle not to do
 ‘By the way, such a job is not doable.’
- (10) Nebenbei ist so ein Job gar nicht zu schaffen.
 ‘In addition to what you are already doing, such a job could be too much.’
 (manner reading)
 /##‘By the way...’ (speech act reading)
- (11) Offen gestanden, war der Tresor ein Kinderspiel für den Dieb.
Open confessed, was the safe a child’s play for the thief
 ‘Frankly (speaking), the safe was child’s play for the thief.’ (speech act reading)
- (12) Offen war der Tresor ein Kinderspiel für den Dieb.
 ‘Being open, the safe was a child’s play for the thief.’
 (secondary predication on the direct object, i.e., modifying ‘der Tresor’)
 /##‘Frankly,...’ (speech act reading)
- Another relevant piece of data is the discovery of a simplex, but inherently speech act related adverbial: *übrigens* (= ‘by the way’). Since this adverbial is unambiguous as are *erstens* ‘firstly’, *zweitens* ‘secondly’, etc., it is fine in all positions—exactly as was the case for the long form adverbials above (i.e., those with no verb part dropped).
- (13) a. Übrigens habe ich vorige Woche in München gearbeitet.
By the way have I last week in Munich worked
 ‘By the way, I worked in Munich last week.’
 b. Übrigens, ich habe vorige Woche in München gearbeitet.
 c. Ich habe übrigens vorige Woche in München gearbeitet.

In Meinunger (2004, 2006) I then showed that a restriction similar to that on the short forms in the prefield also holds for their internal, that is, middle field, distribution, and thus concluded that the speech act reading must be made explicit: either in a designated position or with the long explicit form. This can be done in two ways: The first option (i) is that a long form is used, which by its very meaning must be interpreted as speech-act related (5), (9), (11), and so on. In this case the verbal part that the expressions contain spells out the performative character of the utterance. This also applies to the inherently speech-act related adverb *übrigens*, as in (13). The other option (ii) is to put the adverbial in an unambiguous position, which normally means verb third (V3) with the adverbial in the leftmost position (1–4). If the (bare) adverbial is put into the regular first (i.e., prefield) position in a V2 clause, the interpretative parser wants to assign a sentence-internal reading (mostly manner, but also local etc.). If such a reading is available, the sentence is grammatical, i.e. (10) or (12), but there is no way to get a speech act reading. If no such reading can be triggered, the interpretative parser crashes (7), (8). We thus have a parsing-related restriction for V2 (for more details and an overview see Meinunger 2006, 157).

2.2 Ellipsis narrows down potential readings

In this paragraph I will identify the reason for the non-availability of the speech act or discourse reading when the short forms surface in the prefield position. It is

obvious that an explanation in terms of ambiguity can only be half of the story. It is well known that the German prefield is a syntactic position with a lot of ambiguity: it is the target of various types of topics and foci that are raised there by A-bar-movement and it exhibits all the reconstruction potential expected of an A-bar position, and hence a plurality of readings associated with reconstruction. The question thus is: what discriminates the canonically ambiguous Spec,CP occupants from our short form adverbials, which resist an ambiguous reading? The answer lies in the source of the ambiguity. Whereas truly ambiguous XPs are complete, fully pronounced constituents that are raised to the sentence initial position, our obligatorily unambiguous adverbials end up in the prefield as elliptical expressions. It seems that the difference between the long and the short form (reconsider (2) versus (7)) derives from the fact that the short forms are elliptical structures, in which the bare adverbial modifies a silent verb of saying or a non-overtly expressed event of communicating. Such an approach is inspired by work such as Ross (1970a), Schreiber (1972), and Lakoff (1972), as well as by a critique thereof by Mittwoch (1977). The former are proponents of the so-called performative analysis, which assumes an often silent performative root clause above all illocutionary sentences. Mittwoch points out serious problems with such a self-reflexive approach and proposes a solution in terms of parenthesis. However, both theories assume a clause-like or more articulate structure for the relevant adverbials which is cut down to the bare adverbials by some process of ellipsis.² Both approaches would therefore suggest a deletion process as illustrated in (14).

- (14) #/* Ehrlich gesagt(↔) [bin ich von dir total enttäuscht.]
Honestly said am I of you totally disappointed

The claim is thus that the relevant structures, that is, the short forms, derive from deletion, whereas the other potentially ambiguous phrases in Spec,CP do not. So *ehrlich*, the short form, is the result of a process of elision that deletes the part *gesagt*.

Deletion as a grammatical process has been a hot topic in ellipsis, mostly with respect to explaining certain restrictions on gapping structures. It started with Ross (1970b) and was continued somewhat later in Jackendoff (1971). I will base my analysis on Hankamer (1973). The data Hankamer looked at were examples such as (15) and (16).

² Additionally, Mittwoch explicitly assumes ellipsis: "I shall... put forward a provisional alternative to the performative analysis which preserves the assumption that style disjuncts arise from deleted clauses..." Mittwoch (1977: 180).

Note also that the solution presented in the the given article is different from both approaches, i.e., from the Ross-Lakoff analysis (i) as well as from Mittwoch's proposal (ii). The elliptical structures are neither claimed to be a (quasi) matrix clause (i), nor can they be claimed to have the status of a parenthetical expression (ii). The reason is that the relevant syntactic position, namely the prefield, can never host a matrix clause or a parenthetical. This is the crucial point here: the (presumably reduced) speech-act adverbial clauses find themselves in a slot which must be overtly realized (clause-internally), thus it is not possible to regard them as a matrix predicate with illocutionary force, or as loosely adjoined parentheticals.

- (15) a. Jack wants Mike to wash himself, and Arnie to shave himself.
 b. _____ and ?[Jack wants] Arnie to wash himself.
 c. _____ and Arnie * [wants Mike] to wash himself.
- (16) a. Max seemed to want Alice to get lost, and Susan to stay.
 b. _____ and ?[Max seemed to want] Susan to stay.
 c. _____ and Susan * [seemed to want Alice] to stay.

Considering these facts, Hankamer proposes a very general no-ambiguity condition (p. 17):

- (17) “...structural ambiguity which might be expected from deletion is in fact always avoided...”

To do justice to the subsequent research on deletion, it should be noted that there are ambiguities that result from deletion, especially if one considers intonation, contexts, and similar phenomena. So, Hankamer’s generalization is known to be problematic even as early as Kuno (1976). Indeed, the pattern in (15), (16) is doubtful in view of examples like:

- (18) A: With what did John and Bill hit Mary?
 B. John hit Mary with a stick and Bill __ with a belt.

Notice that Hankamer’s rule as given here in (17) is not a strong law without exceptions. In any case, however, the condition arguably holds for neutral, that is, ‘out-of-the blue’, contexts. The question (posed by speaker A) in (18) definitely imposes a very specific context which renders speaker B’s answer possible. Such a discourse structuring device is, however, completely absent in the constructions looked at here. Thus, for a large number of constructions Hankamer’s observation remains valid. For more problems with generalizations on ellipsis due to the overlooking of several facts see Carlson (2002), which contains a more or less detailed survey of the research on elided structures. (See also Fox’ work on ellipsis, e.g., Fox 2000). However, for the very basic things, it seems, Hankamer was aiming at the correct generalization, at least in contextually and prosodically neutral environments.³

The deletion generalization gives us the results for the German data. The short forms derive from deletion, and this makes the construction sensitive to potential readings. The adverbials clearly modify a speech act on the semantic–pragmatic level and (hence) they correspondingly modify a verb of saying in syntax. If this verb is deleted, ambiguity arises; and since this is not allowed according to (17)—which seems to be applicable for the given cases—bare adverbials with a discourse oriented, i.e., with a high speech act reading, are not admissible in the canonical prefield.

³ An attentive reviewer remarks that the no-ambiguity condition as quoted in (17) is just the preformulation of a more articulated ambiguity principle making recourse to gapping, which Hankamer gives later in his article. This is true, but any complication seems to lead away from the straightforward principle in (17), which is Hankamer’s short and simplified version, with no gain. Hankamer himself mentions the similarity of his final formulation of his condition to a very similar rule proposed by Tai (1969), called the ‘conjunction reduction rule’. This predecessor of Hankamer’s complex no-ambiguity condition operates on structures which do not involve gapping (either). Thus, the different refinements that were made later—as justified as they may be—shall be ignored here for the sake of comprehensibility. The correct and definite characterization is still due anyway.

3 A look at potential parallels to the noun phrase

3.1 A hitherto neglected pattern: The pre-determiner modification construction (PDMC)

3.1.1 *A first glance*

Everything said so far has been concerned with clauses, thus CPs, but what about DPs? To address this question, I will discuss a construction of spoken German—the pre-determiner modification construction (PDMC) in (19–22)—which is related to similar constructions in other languages. Although constructions of this type belong to some sort of youth-slang, most native speakers accept them and have developed intuitions. An appropriate analysis should provide new insights into the structure of the left periphery of DPs and beyond. Examples of the construction are given below.⁴

- (19) absolut die Enttäuschung
absolute the disappointment
 ‘a complete (throughout) disappointment’
- (20) total die Flasche
total the bottle
 mainly idiomatic: ‘a complete dummy’
- (21) voll der Unterschied
full the difference
 ‘a considerable difference’
- (22) ganz schön der Reinflall
whole beautiful the flop
 ‘a ‘nice’ flop’, ‘pretty much a flop’

What is unusual or non-canonical here is the occurrence of a bare, non-inflected adjectival element before, that is, in front of, the determiner (D°) which usually occupies the initial position of a German noun phrase.⁵ Further relevant adjectives in such a position are: *gro* ‘big’, *gut* ‘good’, *echt* ‘true/pure/genuine’, *knapp* ‘scarce (ly)’, *komplett* ‘complete’, and certainly more. (These adjectives are to be kept distinct from post-nominal non-inflected adjectives, which are discussed in

⁴ There seems to be a single publication which presents this construction: Androutsopoulos (1998), especially chapter 4.6. One even finds a rough structural description and a semantic characterization.

⁵ Admittedly, one can find some discussion of English predeterminer adjectives, e.g., a short presentation of the data, a note on distributional restrictions etc. in an article within a grammar of English by Huddleston and Pullum (2002). Furthermore, Marianne Borroff (2006) discusses examples like (i) to (iii).

- (i) I’ve never seen [that big a spider] before.
 (ii) [How good a student] is John?
 (iii) He is [such a boring person] ! (compare to the German ‘so’ examples in fn. 9)

However, what distinguishes these examples from the data that I discuss in the main text is that the German constructions in (18) to (22) and below involve definite noun phrases, at least formally. For the English data, as well as for the construction discussed in Lenerz and Lohnstein (2005), it is an irrevocable criterion that the determiner be indefinite ‘a(n)’ or ‘ein(es)’, respectively. (However, for the semantics and pragmatics of the German pre-definite-determiner constructions see the discussion in the main text.)

Dürscheid 2002: *Wahlkampf pur* (election campaign pure = ‘nothing but election campaign’) or *Polemik satt* (polemics full = ‘rich polemics’)—the point being that these adjectives are also peripheral and bare, that is, non-inflected. Although they even share some semantic properties, the construction is genuinely different. However, it seems that a future comparison might turn out to be fruitful for our knowledge of the fine structure of the German extended noun phrase.) The fact that the relevant pre-determiner, bare adjectives may even precede genitive or similar possessive denoting DPs suggests that they occupy a really peripheral, outermost position of the relevant DP.

- (23) voll Peters Ding
full Peter's thing
 ‘totally Peter’s sort of thing’
- (24) total Heides Interessengebiet
total Heide's area.of.interests
 ‘totally Heide’s area of interest’
- (25) voll dem Heiner sein Typ
full the-dat Heiner his type
 (ok, but non-standard) ‘Heiner’s type in every respect’

The present construction—the pre-determiner modification construction or PDMC—is used most often in (quasi-exclamative) copular sentences when the speaker wants to strengthen the meaning of the N°, or sometimes the whole NP. Examples in which the PDMC constitutes the predicate in copular sentences are given in (26) and (27).

- (26) Das war total die Katastrophe!
that was total the catastrophe
 ‘That was a disaster!’
- (27) Der ist (doch) voll die Flasche!
the is (prt) full the bottle
 ‘But, he is a complete dummy!’

This use in copula clauses, which is the dominant one, together with the bare form, in which the adjectival element surfaces, might suggest an analysis of the non-inflected adjective as a rather regular adverbial which takes syntactic and semantic scope over, and hence modifies, the predicate. In this case the adjective or adverbial would (have to) be adjoined relatively high to some projection, where it cannot form a constituent with the noun and hence cannot be bracketed as a single unified noun phrase such as [_{NP} voll die Flasche] or [_{DP} voll die Flasche], but rather [_{TP} voll [[_{NP} die Flasche] sei-]] (see below). However, the PDMC is not restricted to copular clauses. The interesting noun phrases also appear in regular thematic positions for referential expressions, illustrated here with noun phrases functioning as direct, accusative objects.

- (28) Da haben wir voll die Katastrophe erlebt.
There have we full the catastrophe experienced
 ‘And there we had to face a catastrophe.’

- (29) Und er dachte, er hat groß das Schloss ersteigert.
And he thought, he has big the castle buy.at.an.auction
 ‘And he thought that at this auction he had bought a castle like house.’

- (30) Die hat jetzt voll den Langweiler zum Freund. (google find)
she has now full the bore to.the friend
 ‘She’s got a bore of a boyfriend now.’

This proves that the PDMC is not restricted to copula clauses.

A question that matters even more is the constituency of the whole chunk. In (28) and (29) as well as in (26) and (27), the relevant adjectives do not associate with their modified constituents unambiguously. They could again be argued to be adjoined either to the whole verbal phrase (or TP), or to just the noun phrase. This ambiguity is less likely in the google find (30), where *voll* can hardly be conceived of as modifying the VP (*den Langweiler*) *zum Freund haben* (to have a boring boyfriend). The intuition is clearly such that *voll* associates with the accusative noun phrase *den Langweiler* ‘bore, drag’. To have something or someone (as a friend) cannot be modified by an intensifying expression in a sensible, that is, comprehensible way.

Furthermore, topicalization as one of the classical and most reliable tests for constituency can bring some clarification. If the phrase pied-pipes the adjective, both elements can be argued to form one unit—a complex noun phrase, (32).

- (31) Mit Heiner haben wir dann voll die Katastrophe erlebt.
with Heiner have we then full the catastrophe lived.
 ‘With Heiner, we then ended up in total disaster.’

- (32) Voll die Katastrophe haben wir dann mit Heiner erlebt.
Full the catastrophe have we then with Heiner lived

Examples with a stranded adjective or adverbial are much more marked, if not even ungrammatical.

- (33) a. */??Die Katastrophe haben wir dann voll _ mit Heiner erlebt.
the catastrophe have we then full _ with Heiner lived
 b. *Die Katastrophe haben wir dann mit Heiner voll _ erlebt.

To the extent that (33) is not completely bad, these sentences marginally keep the adverbial reading described above, where *voll* modifies the whole VP or its remnants, excluding the moved DP.

Yet another piece of evidence for the adjunction of the relevant adjectival item to the noun phrase—as opposed to the whole VP or TP—is the existence of examples like (34) and (35), both true google finds.

- (34) ... und da saß er dann mit voll dem smily gesicht⁶
... and there sat he then with full the smiley face
 ‘... and there he was (sitting) with his smiley face’

⁶ Orthography not changed; lower-case letters for nouns are quite usual in chat communication.

- (35) Echt blöd, dass die sich mit voll dem Idioten abgibt!
truly stupid, that she herself with full the idiot up.gives
 ‘Truly too bad that she messes about with this complete idiot.’

Since *voll* is embedded inside a PP—it occurs after the preposition *mit*—it cannot scope over and hence modify anything larger than the noun phrase.

3.1.2 A second glance: The PDMC is a complex, but single, constituent

As described in the preceding section, it is quite conceivable that a sentence like (31) is structurally, and hence also semantically, ambiguous. In the given example *voll* might act as an adverbial being adjoined to and hence modifying the whole verbal phrase (31'a). (32), however, shows then that another structural interpretation must be available too. This additional bracketing is the structural representation which is relevant for the discussion in the present article: the relevant item (*voll*) groups together with the noun phrase *die Katastrophe* only, taking it in its scope. Thus (32) must go back to (31'b), rather than to (31'a).

- (31') a. Mit Heiner haben wir dann [voll [VP [die Katastrophe] erlebt]]
 b. Mit Heiner haben wir dann [DP [voll] [die Katastrophe]] erlebt

Now, to maintain the viewpoint that *voll die Katastrophe* or all the relevant, structurally parallel examples in (19) to (35) do indeed form a single unified constituent, one has to show that examples like (31) cannot be argued to be an instance of multiple or double constituent fronting in the sense of Müller (2005). Simultaneously, if it can be shown that the pattern in (19) to (34) does not show the properties of Müller's multiple filling of Spec,CP, then the PDMC (in the prefield) must be considered a single noun phrase—a complex chunk which belongs together. Usually these Müller-type doubly-filled prefields have alternatives in which both preverbal constituents can host the prefield alone.⁷ This is not the case with the complex DPs considered here.

- (36) Voll den Deppen haben wir jetzt zum Klassenlehrer bekommen. (google find)
full the fool have we now to.the class.teacher gotten
 ‘We just got a complete fool for our head room teacher.’
- (37) *Voll haben wir jetzt den Deppen zum Klassenlehrer bekommen.
- (38) *Den Deppen haben wir jetzt voll zum Klassenlehrer bekommen.

⁷ This is shown in (ii) and (iii) for the often-cited example in (i) from Beneš (1971). The same holds for all other “regular” cases of multiple fronting discussed in Müller (2005).

- (i) Zum zweiten Mal die Weltmeisterschaft errang Clark 1965.
to.the second time the world championship got Clark 1965
 ‘In 1965 Clark won the world championship for the second time.’
- (ii) Zum zweiten Mal errang Clark die Weltmeisterschaft 1965.
- (iii) Die Weltmeisterschaft errang Clark zum zweiten Mal 1965.

This fact rather strongly confirms that the relevant noun phrase forms one complex, but single, unit as bracketed in (31' b).

Another piece of evidence comes from Stefan Müller in personal communication: All the relevant examples, whether collected from corpora, that is, found in naturally produced texts, as well as sentences made up by linguists, exclude a subject joined with some other XP in the prefield. Haider (1982, 17) discusses examples like (39) and below.

(39) Gestern am Strand hat sie sich mit ihm getroffen.
yesterday on.the beach has she herself with him met.
 'She met (with him) on the beach yesterday.'

(40) Wann und wo hat sie sich mit ihm getroffen?
when and where has she herself with him met?
 'When and where did she meet (with) him?'

Example (41), however, is ungrammatical, possibly in connection with Haider's question hypothesis (42). (Müller, however, refutes Haider's approach, but he also assumes the ban on subjects in doubly filled prefields.)

(41) *Gestern Susanne hat sich mit Peter getroffen.
yesterday Susanne has herself with Peter met

(42) *Wann und wer hat sich mit Peter getroffen?
when and who has himself with Peter met
 Intended: 'Who met with Peter? And when?'

Sentences like (43) with a subject in the preverbal slot, however, are fine:

(43) Absolut die Härte war schließlich, dass Peter wegging.
absolute the hardness was finally, that Peter away.went.
 'The ultimate evil was finally that Peter left.'

Such examples should be impossible if the adjective and the nominative noun phrase were two separate constituents sharing a doubly filled Spec,CP.

It also seems that the intonation pattern of PDMCs and the relevant doubly filled prefield structures are quite different from each other such that a uniform treatment and analysis seems implausible.⁸

Much more important and crucial for the discussion here is the following observation: all the given examples have counterparts that sound equally natural, but the structural organization of which corresponds much more to a canonical German D+adjective+NP linearization. In this variant, however, the adjective is undeniably

⁸ It should be mentioned that the PDMCs in (19) to (27) are rather new in German. They are, however, claimed to be structurally identical or at least highly similar to older and commonly accepted expressions with *knapp* 'scarcely' in *knapp die Hälfte* 'just under half', see example (58) and the discussion there. For this expression an analysis in terms of two separate, independent XPs seems highly implausible. On the other hand, if it can and does become clear that the *knapp*-NPs are syntactically equivalent to the PDMC, a multiple fronting analysis can no longer be considered.

an adjective and must show a certain type of inflection, the so-called ‘schwache Adjektivdeklination’.⁹

- (44) die absolutee Enttäuschung
the absolute+agreement disappointment
 ‘a/the absolute disappointment’
- (45) die totalee Flasche
the totale+agreement bottele
 ‘a/the complete dummy’
- (46) ??der vollee Unterschied
the full difference
- (47) ## die vollee Flasche
the full+agreement bottele
 (## stands for fully grammatical, but only with the literal meaning:) ‘the full bottle’
- (48) # der schönee Reinfall
the beautiful flop

Examples (44) to (48) are canonical constructions with attributive adjectives. The judgements vary so much because the internal readings of the adjectives are mostly different from the interpretation when the adjectives appear left-peripherally. What distinguishes the two readings will be made clear below. The internal readings often aim at a physical property (*groß* ‘big’, *echt* ‘true, pure’, *voll* ‘full’) or Cinque’s

⁹ There is a relatively recent contribution by Lenerz and Lohnstein (2005), in which the authors discuss a similar, yet different, construction, where there is a predeterminer expression which is adjective-like: German *so* or *solch* (such) (i). This determiner-like adjective may invert with the indefinite D° *ein* and must then show inflection as well, this time the strong one, of course (ii):

- (i) Da haben wir schon einmal so/solch einen Vogel gesehen.
There have we already once so/solch (both: such) a bird seen
 ‘It’s there that we have seen such a bird before.’
- (ii) Da haben wir schon einmal einen solch-en Vogel gesehen.
There have we already once a solch-inflection bird seen

Note that Lenerz and Lohnstein’s construction is indefinite and hence different from the examples discussed here. Still, their claim that *so* is incompatible with the definite determiner (as illustrated in (iii), their (57)) cannot be upheld generally. There are cases like (iv) or (v)—but notice also here that the interpretation is not canonically definite.

- (iii) *Diese Oper war so das tolle Erlebnis.
this opera was so the marvellous event
- (iv) Diese Oper war nicht so der Hit/Bringer.
this opera was not so the hit
 ‘This opera was not too much of a success.’
- (v) Das war so die (zweit)schlimmste Oper, die ich je gesehen habe.
that was so the (second)worst opera, which I ever seen have.
 ‘This was perhaps the (second) worst opera that I ever saw.’

(1994) subjective comment (*schön* ‘nice, beautiful’, *gut* ‘good’), but not always. The interpretation of the pre-determiner reading is not easy to grasp. However, in order to account for the construction one has to consider the semantics involved. This will be done in the next subsection.

3.2 On the semantic properties of the PDMC

First, as a matter of fact, the PDMC is good only with definite DPs, but the interpretation is, rather, either indefinite or predicative; see all the tentative translations of the above examples. Second, the contribution of the adjective is not that of an intersective modifier, which means that we are not dealing with attributive semantics here. This, in turn, means that a transformation into a copular sentence with the adjective in predicative position is not always and easily legitimate (see also below) and if it is, readings may change or disappear.¹⁰

(49) *Der Unterschied ist voll.
the difference is full

(50) Die Flasche ist voll.
the bottle is full
only non-idiomatic: ‘The bottle is full.’

(51) Die Enttäuschung war total.
the disappointment was total
‘The disappointment was complete/total.’

In any case, the pre-determiner bare adjectives I am discussing are definitely different from what Cinque (1994) and Scott (1998) labelled ‘subjective comment adjectives’—although this term sounds appropriate for the given class under a different perspective. A potential notion could thus be ‘outer subjective comment’, discriminating it from Cinque’s and Scott’s intension.

Most importantly, it seems certain that the given constructions can be used only if the descriptive content of the noun or the lower noun phrase may be conceived of as gradable and evaluable. The construction-initial adjective must associate with a scalar property (cf., e.g., Kennedy and McNally 2005). If the DP contains just a noun, the relevant reading can be obtained more easily if the concept can be aligned onto a scale of prototypicality. This is relatively unproblematic for nouns like *Katastrophe* ‘catastrophe’, *Glück* ‘luck’, *Zicke* ‘bitch’, *Sexbombe* ‘sex bomb’, *Macho* ‘macho’. This holds even more true for figurative expressions like *Flasche* ‘bottle’/‘dummy’ (see above), or also *Waschlappen* ‘washcloth’/‘wimp’, *Schwalbe* ‘swallow’/‘deliberate dive’, *Ente* ‘duck’/‘mare’s nest’, *Hammer* ‘hammer’/‘extraordinary thing or event’. Under the figurative reading these nouns are typically very expressive and hence scalarly interpretable. Thus, a person can be more or less of a slut or a wimp. Neutral nouns on the other hand undergo a meaning shift and coerce

¹⁰ A somewhat comparable case of the meaning-shift applied to an adjective-like adverbial, namely English ‘well’ is discussed in McNally and Kennedy (2001). E.g., ‘well’ is interpreted differently in ‘well done’ as compared to ‘well aware’.

the mental generation of competing objects, which are located along a scale from lesser to greater prototypicality according to the context. For example, (52) seems to be acceptable only in a context where the speaker means to say that light summer sandals would have been much more appropriate.

- (52) Das waren voll die (dicken) Winterschuhe...!
that were full the (thick) winter shoes
 ‘Those really were (thick) winter shoes!’

In this sense, speaker-oriented adverbials and left-peripheral bare adjectives pattern similarly. They are both evaluative adjuncts, they both convey some attitude of the speaker toward either the propositional or the descriptive content of the upcoming clause or noun phrase, respectively. This relatedness is also reflected in syntax. In both cases—figuratively speaking—it seems possible to shift the orphan from the apparent outside position into a position that undeniably belongs to the core clause or to the noun phrase itself.

The following seems to be the case with the adjectives. The outermost position signals the speaker’s attitude reading, which I call the ‘outer subjective comment’ interpretation. Any attempt to integrate such an adjective to the right of a D° requires or strongly favours the item to be unambiguous—exactly as with the adverbials as discussed in Section 2.1. This is the reason why potentially and canonically low adjectives for physical properties or inner subjective comments like *voll*, *groß*, and *schön* (i.e., ‘full’, ‘big’, and ‘nice’, respectively) cannot be placed in the post-D° position if intended to be outer subjective comments, whereas inherently subjective-comment adjectives, like *total* or *absolut* in (53), (54), can. On the other hand, (56) with the idiomatic interpretation for *Flasche* (dummy) is almost impossible. The only available reading seems to be the literal meaning (‘*voll*’ = physical property ‘full’ and ‘*Flasche*’ = ‘bottle’, not ‘dummy’), which triggers a pragmatically nonsense interpretation. (29) versus (57) also illustrates the difference: In the outside position without inflection (29), the adjective is used to describe a situation in which the subject of the main clause assumes he would have bought a building which comes close to the representative residence for an aristocrat (scalar reading), whereas the inflected adjective in (57) triggers the interpretation of a big castle in terms of spatial dimensions (mostly restrictive and hence contrastive, that is, not the small(er) castle).

- (53) Er ist total die Flasche.
he is total the bottle
- (54) Er ist die totale Flasche.
he is the total+infl bottle
 both: ‘He is a complete dummy.’
- (55) Der ist (doch) voll die Flasche!
the is (prt) full the bottle
 ‘But, he is a complete dummy!’

- (56) #Der ist die volle Flasche.
 (## because only (strongly preferred) literal meaning: ‘He is the full bottle.’)

(29) Und er dachte, er hat groß das Schloss ersteigert.
and he thought, he has big the castle buy-at-an-auction
 ‘And he thought that at this auction he would have bought a castle-like house.’

(57) Und er dachte, er hat das große Schloss ersteigert.
 ‘And he thought that at this auction he would have bought the big castle.’

The crucial difference can be nicely illustrated through a minimal pair with *knapp* ‘scarce(ly)’ and *gut* ‘good’. *Knapp*—in the relevant cases—means ‘a little less than’, ‘just under’; *gut* means ‘a little more’, ‘just over’. But only *knapp* is inherently quantity related, that is, inherently high. Thus only *knapp* may shift, yielding the same readings—inside as well as outside (58) and (59). *Gut* is different; it has the ‘just over’ reading only outside (60). If shifted inside, the almost exclusive reading is a different one, tentatively translated in (61): there, *gut* ‘good’ means *gut* ‘good’ in the literal sense—as the opposite of ‘bad, evil, rotten’—corresponding to the context.

(58) Ich habe knapp die Hälfte aussortiert.
I have scarce(ly) the half out.sorted

(59) Ich habe die knappe Hälfte aussortiert.
I have the ‘scarce’ half out.sorted
 Both: ‘I have sorted out just under half.’

(60) Ich habe gut die Hälfte aussortiert.
I have good the half out.sorted
 ‘I have sorted out just over half.’

(61) Ich habe die gute Hälfte aussortiert.
I have the good half out.sorted
 ‘I have sorted out those 50% that were good.’ (not rotten or broken)

This pattern exactly matches that of the left-peripheral semi-orphan adverbials in the clause. *Gut*, *groß*, and *schön* have the outer subjective-comment reading only in the left-peripheral position. *Total* or *absolut* or *knapp* are inherently high, that is, outer subjective comments. The latter do not change or lose their reading, they are not potentially ambiguous. In this respect, they correspond to *übrigens* at clause level, thus they may be placed in either position. Examples (53) and (54) as well as (58) and (59) mean the same thing. The potentially ambiguous adjectives may not appear in all the positions without restrictions: they (tend to) lose the high reading in the lower position. (29) is unambiguously an outer subjective comment. (56) with the adjective inside the NP is strange, because *voll* wants to have the lower property reading, but this is quite impossible and only the strange reading seems to be accessible.

Here, toward the end of the semantics section, a classification seems to be appropriate. Recall that the predeterminer bare adjectives presumably result from adverbials modifying verbal or other predicates. Under the bracketing in (31’a), *voll* modifies the whole VP. In (52) it may affect the complex noun phrase (*die*) *dicken*

Winterschuhe ‘(the) thick winter shoes’. In case the adjective (*dick* ‘thick’) is present, it definitely falls in the scope of *voll* and hence is affected together with the noun *Winterschuhe* ‘winter shoes’. Shifting is impossible.

(62) #Das waren die vollen dicken Winterschuhe.
that were the full thick winter.shoes

(63) #Das waren die dicken vollen Winterschuhe.
that were the thick full winter.shoes

Something analogous happens in constructions with possessives. Consider semi-idiomatic expressions like (23), here repeated for the sake of readability, or (64), a construction a reviewer brought up, where—in both cases—a possessive relation is involved.

(23) voll Peters Ding
full Peter's thing
 ‘totally Peter’s sort of thing’

(64) Das war total mein Tag!
that was total my day
 ‘It was totally my day.’

In both cases the adjective or adverbial (*voll* or *total*) has scope over the whole possessive construction, that is, it modifies the possessive relationship itself. This prohibits the ‘lowering,’ i.e., shifting inside, that would produce the unacceptable (65) and (66).

(65) #Peters volles Ding
Peter's full thing

(66) #Das war mein totaler Tag!
that was my total day

This shows that one has to be careful with the adjunction sites of the relevant modifying item.

3.3 Toward an analysis—prenominal adjectives as reduced relative clauses

An analysis which could fit best would be to carry over the same explanation proposed above for the adverbials in Section 2.2 in terms of restrictions on deletion. This turns out to be possible, and, in some sense, even straightforward. (An alternative analysis is presented in the [Appendix](#).)

The standard assumption is that adjectives are optional modifiers and adjoin as adjectival expressions in the form of APs to NPs or DPs. However, alternative hypotheses have existed for a long time. A very influential analysis was initiated by the late Carlota Smith in the ’60s and became popular in generative semantics. Smith (1964, 37): “Most noun modifiers can be accounted for [...] by three transformational rules. The first of these adjoins a sentence to a noun as a relative clause, and the other two form postnominal and

prenominal modifiers by the operations of deletion and order change [...]'". Thus, a surface relative clause construction and its adjectival variant have the same underlying structure:

(67) [_{NP} Determiner [_{Relative Clause} ... Predicate ...] Noun]

A relative clause structure is achieved by extraposition, a rule which exists in grammar independently. Adjectival modification is the result of deletion which affects everything but the (projection of the) adjectival predicate. For German, this deletion process is accompanied by introducing inflection:

(68) [das [~~das~~ groß ~~ist~~]-e Schloss → das große Schloss
the the big is castle (-e = inflection)
 'the big castle'

The derivation as illustrated in (68) is not the current one any longer (see Alexiadou et al. 2000), but nowadays there exists a strong challenge to the standard adjective-as-simple-adjunct analysis, which was initiated by Kayne (1994, chapter 8). There too, adjective phrases modifying nominals are considered to be predicates heading a clausal structure. The spirit of the Kaynean approach is the same as in Smith or, somewhat later, also Vergnaud (1974). In analogy to Kayne's (1994, 98–99) example "the yellow sweater of John's", a corresponding analysis or derivation of *das groß Schloss* would be:

(69) [_D* das [_{CP} ...C° ... [Schloss [_{XP} groß ist]]]] (→ copula deletion!)¹¹
 [_D* das [_{CP} ...C° ... [Schloss [_{XP} groß _]]]] (→ preposing of XP to Spec,CP)
 [_D* das [_{CP} [_{XP} groß _]_i C° ... [Schloss] t_i]] (→ inflection on the adjective)
 [_D* das [_{CP} [_{XP} groß-e _]_i .C° ... [Schloss] t_i]]

There has developed a whole "industry", not only in syntax, but also in phonology and semantics, which supports this so-called 'head raising' approach and pushes it forward. This holds, for example, for a recent, detailed analysis of German adjectival constructions (Struckmeier 2007), in which prenominal adjectives can be conceived of as derived from complex constructions (containing a relative clause as the source for the adjective). Struckmeier's modern analysis is heavily inspired by Fanselow (1986), who argued for the sentential nature of (German) prenominal adjectives as early as the mid '80s.

Thus, if this approach of reducing relative clause structures to adjectival expressions by deletion is assumed, the explanation of the behaviour of the adjectives in Section 3.1 can be explained straightforwardly. If the adjectives appear left-peripherally, that is, before the determiner and without inflection, they always

¹¹ Note that Kayne does not really comment on the fact that in his 'deep structures' the relativized noun starts out as a bare noun without an over D°-element. If one relied on potentially grammatical embedded clauses, one would have to assume a structure that contains an article before the head noun. This article then would have to undergo an additional process of deletion.

have the outer-subjective-comment reading. Under the approach offered here, there is no problem. The outer adjectives seem to be merged in this position directly; their interpretation is never ambiguous there. They cannot be merged as in (67), (68), or (69). First, outer adjectives cannot be derived from a relative clause structure since, semantically, they are not predicated of the head noun and do not yield an intersective meaning. The outer-subjective comment reading cannot be generated within an underlying copula clause unless the predicative adjectives are inherently evaluative, that is, inherently and exclusively outer subjective comments. Hence the underlying structure for the PDMC adjectives cannot be (traced back to) regular predicative copula clauses. Rather, these adjectival items originate as satellites from above the determiner, having no “transformational history”. Thus, these adjectivals behave exactly parallel to the verb-third adverbials: they appear in a specific peripheral position, which lets them unambiguously identify the relevant reading. Second, the Kaynean approach as illustrated in (69) designates no landing site for the XP, which is presumably an AP. This constituent (i.e., the bare adjective) may not leave its clause crossing the CP boundary and adjoining above D° without violating basic principles of syntax.

The actual potential ambiguity, and hence the problem, arises with the internal position. Remember, we have identified two classes of adjectives: (a) potentially ambiguous adjectives—these have the outer-subjective-comment-reading in the peripheral position and another, lower reading if they appear noun-phrase-internally (e.g., physical property, inner subjective comment)—and (b) inherently outer-subjective-comment adjectives like *absolut* or *total*. Thus, if the adjectives appear in the canonical, regular post-determiner position, they occupy the position that is argued to be derived by deletion of a sentential structure around them, much like in (68) or (69). This makes the construction (i.e., the internal, canonical adjectives) sensitive to Hankamer’s generalization in (17). Thus, ambiguity should be avoided; and indeed it is: inherently outer-subjective-comment adjectives are allowed since no different readings are available. Potentially ambiguous adjectives lose their second reading. They can surface in this position only with their predominant, lower reading¹²—exactly as was the case for the adverbials in the prefield.

4 Conclusion

It has been shown that in the German clausal and nominal left periphery certain speaker-oriented adverbials or adjectives behave very sensitively regarding their internal structure in connection with the position in which they are allowed to surface. They can both appear in a leftmost peripheral position, which is ‘almost’ outside the projection they seem to be adjoined to. Since the status of integration of

¹² In some cases a post-D° adjective can marginally keep the outer subjective reading. This is the case for speakers that can coerce *groß* ‘big’ to mean something like *großartig* ‘great’ or *voll* ‘full’ to *vollkommen* ‘complete, ful(ly)’. Thus, these flexible and cooperative, mostly young speakers establish a connection between the relevant adjectives which are lexically (and semantically) related. Then a high interpretation of the originally low (physical property etc.) is thus marginally possible, but still strongly dispreferred, especially if the modification is rather idiomatic. There seems to be a change in meaning going on.

these constituents is not clear and is rather loose, they are occasionally called ‘orphans’. These orphans have specific semantic properties in their marginal position. The same adverbials and adjectives can also appear in another slot, which undoubtedly constitutes an integral part of the German clause (prefield) or noun phrase (post-determiner, pronominal). In these positions, a potential ambiguity could arise in case the adjuncts’ lexical content is not expressed explicitly. This option of different readings is not attested, however. It has been argued that the potentially ambiguous expressions are reduced structures, and that the reason for the lack of ambiguity has been identified as a principle which states that (such cases of) ellipsis must not lead to a plurality of interpretations.

Appendix

Although an approach as depicted in Section 3.3 has several arguments and attractions to it, it depends on an analysis which diverges from the classical and still standard treatment of adjectival attachment. For this reason I would like to mention another proposal for how to account for the non-ambiguity of the cases we have examined. The crucial phenomenon for the discussion at hand is adjectival inflection. We have seen in the main text that the decisive feature (apart from the position) is the inflection on the adjective. Step 3 of the derivation in (69) illustrates how the inflected element comes in under the Kaynean approach. It is inserted at some point in the derivation—a step that is not fully understood or independently motivated. But already under the ‘the-adjective-is-an-adjunct’ approach, even ‘regular’ adjectival inflection remains a mystery. All post-determiner, that is, inflected, adjectives pose problems with respect to the so-called strong–weak distinction depending on the definiteness of the DP. A description of the basic facts can be found in any standard grammar (e.g., Duden [Band 4] 1995; Eisenberg 1998/2000). It turns out that modern morpho-syntactic theories have to resort to post- (or next-to-) syntactic areas to cover the inflection phenomenon. Schlenker (1999), working within Distributed Morphology, makes use of the ‘late insertion’ idea, arguing against a Bare Phrase Structure model. Standard Minimalism on the other hand would (have to) postpone adjectival inflection after core syntax (cf. Chomsky 2001 and subsequent work). Most often phonology (PF) is then declared responsible for the ongoing processes. Such a stance has occasionally been assumed in Minimalism for several phenomena: V2 in Germanic, auxiliary cliticization to non-constituents in Slavic, poorly understood restrictions in clitic cluster formation, metathesis which scrambles morphemes violating the mirror principle, etc. German adjectival inflection seems to be yet another instance of this sort. Either way, some post-syntactic, morpho-phonological process that is active after core syntax must be assumed, and it is this process which regulates or manipulates the adjectival endings within the German complex noun phrase. This process is also pretty much akin to phonological deletion. It is thus abstractly related to ellipsis or elision in the case of gapping or other grammatical phenomena. In some sense, it deletes features, that is, it reduces fully-fledged morphological case endings into unspecified, unmarked, and heavily syncretic forms. Such a view leads to the conclusion that deletion-like processes that are effective after syntax proper must not end in ambiguous structures.

This is arguably so because no connection can be established anymore to the semantic component, and it is the LF-level where ambiguities are resolved. Thus the new and more abstract generalization over sentential and nominal orphans can be stated as follows:

- (70) Post-syntactic phonological processes that affect the syntactic structure must not lead to ambiguity.

Such a principle ensures that the level of Logical Form is the area where transparent, unambiguous structures are finally fixed and then made ready for the real interpretation in the CI-system, which is much larger than syntax.

References

- Alexiadou, A., P. Law, A. Meinunger, and C. Wilder (eds). 2000. *Introduction to the syntax of relative clauses, 1–51*. Amsterdam: John Benjamins.
- Androustopoulos, J. 1998. *Jugendsprache. Linguistische und Soziolinguistische Perspektiven*. Frankfurt: Lang.
- Beneš, E. 1971. Die Besetzung der ersten Position im deutschen Aussagesatz. In *Fragen der strukturellen Syntax und der kontrastiven Grammatik, Sprache der Gegenwart (Schriften des IdS Mannheim, Nr. 17)*, ed. H. Moser, 160–182. Düsseldorf: Pädagogischer Verlag Schwann.
- Borroff, M.L. 2006. Degree phrase inversion in the scope of negation. *Linguistic Inquiry* 37(3): 514–521.
- Carlson, K. 2002. *Parallelism and prosody in the processing of ellipsis sentences*. Outstanding Dissertations in Linguistics: Routledge Series. New York/London: Routledge.
- Chomsky, N.A. 2001. Derivation by phase. In *A life in language*, ed. M. Kenstowicz and K. Hale, 1–52. Cambridge, MA: MIT Press.
- Cinque, G. 1994. On the evidence for partial N-movement in the Romance DP. In *University of Venice Working Papers in Linguistics* 3(2):21–40.
- Duden [Band 4]. 1995. *Grammatik der deutschen Gegenwartssprache*. Mannheim: Dudenverlag.
- Dürscheid, C. 2002. “Polemik satt und Wahlkampf pur”—Das postnominale Adjektiv im Deutschen. *Zeitschrift für Sprachwissenschaft* 21(1): 57–81.
- Eisenberg, P. 1998/2000. *Grundriss der deutschen Grammatik. Band 1: Das Wort.—Band 2: Der Satz*. Stuttgart: Metzler.
- Ernst, T. 2002. *The syntax of adjuncts*. Cambridge: Cambridge University Press.
- Fanselow, G. 1986. On the sentential nature of prenominal adjectives in German. *Folia Linguistica* 20: 341–380.
- Fox, D. 2000. *Economy and semantic interpretation. Linguistic inquiry monographs* 35. Cambridge, MA: MIT.
- Frey, W. 2004. Notes on the syntax and the pragmatics of German left dislocation. In *The syntax and semantics of the left periphery*, ed. H. Lohnstein and S. Trissler, 203–233. Berlin: Mouton de Gruyter.
- Greenbaum, S. 1969. *Studies in English adverbial usage*. London: Longman.
- Grewendorf, G. 2002. *Minimalistische syntax*. Tübingen: Francke.
- Grohmann, K.K. 2003. *Prolific domains: On the anti-locality of movement dependencies*. *Linguistik Aktuell* 66. Amsterdam: Benjamins.
- Haegeman, L. 1991/2008. Parenthetical adverbials: The radical orphanage approach. In *Aspects of modern English linguistics*, ed. Shuji Chiba et al. Tokyo: Kaitakushi. Repr. in *Dislocated elements in discourse: Syntactic, semantic, and pragmatic perspectives*, eds. B. Shaer, P. Cook, W. Frey, and C. Maienborn. New York: Routledge.
- Haider, H. 1982. Abhängigkeiten und Konfigurationen: Zur deutschen V-Projektion. *Groninger Arbeiten zur Germanistischen Linguistik* 21: 1–60.
- Hankamer, J. 1973. Unacceptable ambiguity. *Linguistic Inquiry* 4: 17–68.
- Huddleston, R. and G.K. Pullum. 2002. Adjectives and adverbs. In *The Cambridge grammar of the English language*, ed. R. Huddleston and G.K. Pullum, 525–596. Cambridge: Cambridge University Press.

- Jackendoff, R. 1971. Gapping and related rules. *Linguistic Inquiry* 11: 21–35.
- Kayne, R. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT.
- Kennedy, C. and L. McNally. 2005. Scale structure and the semantic typology of gradable predicates. *Language* 81: 345–381.
- Kuno, S. 1976. Gapping: A functional analysis. *Linguistic Inquiry* 7: 300–318.
- Lakoff, G. 1972. Linguistics and natural logic. In *Semantics of natural languages*, ed. D. Davidson and G. Harman. Dordrecht: Reidel.
- Lenerz, J. and H. Lohnstein. 2005. Nur so—Strukturaspekte der Vergleichs-konstruktion. In *Deutsche Syntax: Empirie und Theorie. Papers from the Göteborg Symposium*, Göteborger Germanistische Forschungen 46, ed. F.J. d’Avis, 81–104.
- McNally, L., and C. Kennedy. 2001. Degree vs. Manner ‘well’: A Case Study in Selective Binding. Paper presented at the Workshop on Generative Approaches to the Lexicon, Geneva, April 2001. [revised version of the paper in the Jorge Hankamer webfest.]
- Meinunger, A. 2004. On certain adverbials in the German ‚Vorfeld‘ and ‚Vor-vorfeld‘. *Lunder germanistische Forschungen (= Sprache und Pragmatik)* 52: 64–78.
- Meinunger, A. 2006. Interface restrictions on verb second. *Linguistic Review* 23: 127–160.
- Mittwoch, A. 1977. How to refer to one’s own words: Speech-act modifying adverbials and the performative analysis. *Journal of Linguistics* 13: 177–183.
- Müller, S. 2005. Zur Analyse der scheinbar mehrfachen Vorfeldbesetzung. *Linguistische Berichte* 203: 29–62.
- Ross, J. 1970a. On declarative sentences. In *Readings in English transformational grammar*, ed. R.A. Jacobs and P.S. Rosenbaum, 222–272. Waltham, MA: Blaisdell.
- Ross, J. 1970b. Gapping and the order of constituents. In *Recent developments in linguistics*, ed. M. Bierwisch and K.E. Heidolf, 249–259. Mouton: The Hague.
- Schlenker, P. 1999. La flexion de l’adjectif en allemand: la morphologie de haut en bas, *Recherches linguistiques de Vincennes* 28, La linéarité. URL: <http://rlv.revues.org/document1216.html>.
- Schreiber, P.A. 1972. Style disjuncts and the performative analysis. *Linguistic Inquiry* 3: 321–347.
- Scott, G.J. 1998. Stacked adjectival modification and the structure of NPs. *SOAS Working Papers in Linguistics and Phonetics* 8: 59–89.
- Smith, C. 1964. Determiners and relative clauses in a generative grammar of English. *Language* 40: 37–52.
- Struckmeier, V. 2007. *Attribute im Deutschen: Zu ihren Eigenschaften und ihrer Position im grammatischen System. Studia grammatica* 65. Berlin: Akademie Verlag.
- Tai, J. 1969. *Coordinate reduction*. PhD diss., Indiana University. Bloomington: Indiana University Club.
- Vergnaud, J.-R. 1974. *French Relative Clauses*. PhD diss., MIT. [Revised version (1985), *Dépendances et niveaux de représentation en syntaxe*. Amsterdam: John Benjamins].