

# German: A Grammatical Sketch

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Abstract

*This paper provides an overview of the most important grammatical properties of German. A large part of the paper is concerned with the basic clause types of German. I start with the Topological Fields Model, which is very useful as a descriptive tool, but – as will be shown – not sufficient for a thorough account of German clausal structure. I therefore explain additional theoretical assumptions that were made in order to assign structure to the observable linear sequences. After a sketch of an analysis of the basic sentence patterns, I give an account of passive, case assignment, and subject-verb agreement.*

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## 1 Topological fields for description

Drach (1937) developed terminology for talking about regions in the German clause. The terminology was changed and adapted over the years. More recent and more appropriate variants can be found in Reis, 1980 and Höhle, 1986. The starting point for the motivation of topological fields is the sentences in (1). The verbs are realized adjacent to each other only in subordinated sentences like (1a). In finite sentences without a complementizer the finite verb occurs to the left of other verbs and of non-verbal arguments and adjuncts (1b).

- (1) a. dass Max gestern das Eis gegessen hat [German]  
 that Max yesterday the ice.cream eaten has  
 ‘that Max ate the ice cream yesterday’  
 b. Hat Max gestern das Eis gegessen?  
 has Max yesterday the ice.cream eaten  
 ‘Did Max eat the ice cream yesterday?’

Since all examples in this text are in German, the language tag [German] is omitted in the remainder of the text.

The complementizer in (1a) and the finite verb in (1b) on the one side and the remaining verbal material on the other side form a bracket around the non-verbal material. The part of the clause which hosts *gestern das Eis* ‘yesterday the ice cream’ is called the *Mittelfeld* ‘middle field’, that hosting *dass/hat* is called the *linke Satzklammer* ‘left sentence bracket’ and that hosting *gegessen hat/gegessen* is called the *rechte Satzklammer* ‘right sentence bracket’. The *rechte Satzklammer* can contain non-finite verbs, the finite verb, or a verbal particle as in (2b).

- (2) a. dass Max das Eis aufisst  
 that Max the ice.cream up.eats  
 ‘that Max eats up the ice cream.’  
 b. Isst Max das Eis auf?  
 eats Max the ice.cream up  
 ‘Does Max eat up the ice cream?’

Predicative adjectives in copula constructions and resultative constructions pattern with particles and should be assigned to the *rechte Satzklammer* too (Müller, 2002). In sentences like (3) the *rechte Satzklammer* then consists of the adjective *treu* ‘faithful’ and the copula and the resultative predicate (*leer* ‘empty’) and the matrix verb, respectively:

- (3) a. dass er seiner Frau treu ist  
 that he his wife faithful is  
 ‘that he is faithful to his wife’  
 b. dass er den Teich leer fischt  
 that he the pond empty fishes  
 ‘that he fishes the pond empty’

Additional fields can be identified to the left of the *linke Satzklammer* and to the right of the *rechte Satzklammer*. In (4a) *Max* is placed in the so-called *Vorfeld* ‘pre field’ and in (4b) the relative clause that modifies *Eis* ‘ice cream’ is extraposed. It is located in the *Nachfeld* ‘post field’.

- (4) a. Max hat gestern das Eis gegessen.  
 Max has yesterday the ice.cream eaten  
 ‘Max ate the ice cream yesterday.’  
 b. Max hat gestern das Eis gegessen, das Barbara gekauft hat.  
 Max has yesterday the ice.cream eaten that Barbara bought has  
 ‘Max ate the ice cream yesterday that Barbara bought.’

In addition to the fields already discussed, Höhle suggested a clause-initial field for conjunctions like (*und* ‘and’, *oder* ‘or’, *aber* ‘but’) and a field between this initial field and the *Vorfeld* for left dislocated elements as for instance *der Montag* ‘the monday’ in (5). See Altmann, 1981 on left dislocation.

- (5) Aber der Montag, der passt mir gut.  
 but the monday it suits me well  
 ‘But Monday suits me well.’

Höhle calls the latter field *K<sub>L</sub>*. It is sometimes also called the *Vorvorfeld* ‘pre pre field’.

The examples above show that not all fields have to be filled in a German clause. For instance, in (5) the *rechte Satzklammer* and the *Nachfeld* are empty. The most extreme case is shown in (6a).

- (6) a. Schlaf!  
 sleep  
 b. (Jetzt) lies das Buch!  
 now read the book  
 ‘Read the book now!’

In imperatives the finite verb is serialized in the *linke Satzklammer* and the *Vorfeld* may remain empty. In (6a), there is only a finite verb, that is, only the *linke Satzklammer* is filled. All other fields are empty.

Sometimes the fact that fields may be unfilled leads to situations in which the assignment to topological fields is not obvious. For instance the *rechte Satzklammer* is not filled by a verb or verb particle in (7). So in principle it could be to the left or to the right of the relative clause. The relative clause could be considered as part of the *Nachfeld* or part of the *Mittelfeld*, depending on the decision made with respect to the location of the bracket.

- (7) Er gibt der Frau das Buch, die er kennt.  
 he.M gives the woman.F.SG the book.N.SG who.F.SG he knows  
 ‘He gives the book to the woman he knows.’

Fortunately, there is a test that helps to determine the position of the *rechte Satzklammer*. The test is called *Rangprobe* ‘embedding test’ and was developed by Bech (1955, p. 72): One can fill the *rechte Satzklammer* by using a complex tense like the perfect or the future. The tense auxiliary takes the position in the *linke Satzklammer* and the non-finite verb is placed in the right sentence bracket. Applying this test to (7) shows that the non-finite verb has to be placed before the relative clause. Placing it after the relative clause results in ungrammaticality:

- (8) a. Er hat der Frau das Buch gegeben, die er kennt.  
 he has the woman the book given who he knows  
 ‘He gave the book to the woman he knows.’

- b. \* Er hat der Frau das Buch, die er kennt, gegeben.  
 he has the woman the book who he knows given

As was pointed out by Reis (1980, p. 82), topological fields can contain material that is internally structured. For instance the *Vorfeld* in (9b) contains the non-finite verb *gewußt* in the *rechte Satzklammer* and the clause *dass du kommst* in the *Nachfeld*.

- (9) a. Wir haben schon seit langem gewußt, dass du kommst.  
 we have already since long known that you come  
 'We have known for a long time that you are coming.'
- b. [Gewußt, dass du kommst,] haben wir schon seit langem.  
 known that you come have we already since long

There is no obvious way to relate the clause type (declarative, imperative, interrogative) to the topological fields model. The reason for this is that irrespective of the clause type, all fields can remain empty (Müller, 2004c). The *Vorfeld* is usually filled in declarative main clauses, but it may be empty as in instances of *Vorfeldellipse* 'topic drop', see Fries, 1988, Huang, 1984 and Hoffmann, 1997:

- (10) a. Das hab ich auch gegessen.  
 that have I also eaten  
 'I ate that too.'
- b. Hab' ich auch gegessen./?  
 have I also eaten  
 'I also ate him/her/it.' or (with different intonation) 'Did I also eat?'

On the other hand there are examples in which more than one constituent seems to be located in the *Vorfeld*. These will be discussed in Section 3.

Similarly, yes/no questions are usually verb-first utterances, as in the second reading of (10b). But with a question intonation V2 is possible as well:

- (11) Das hab' ich auch gegessen?  
 that have I also eaten  
 'Did I eat that too?'

Conversely, V1 sentences are not necessarily questions:

- (12) a. Kommt ein Mann zum Arzt.  
 comes a man to.the doctor  
 'A man comes to the doctor.'
- b. Gib mir das Buch!  
 give me the book  
 'Give me the book!'

(12a) is a special form of declarative clause that is used at the beginning of jokes or stories (Önnerfors, 1997, Chapter 6.1). (12b) is an imperative.

Imperatives are not necessarily V1, as (13) shows:

- (13) Jetzt gib mir schon das Buch!  
 now give me already the book  
 'Give me the book now!'

To make matters worse, there are even verbless sentences in German. As Paul (1919, p. 13, p.41) noted, there is a variant of the copula that is semantically empty and hence it may be omitted if information about tense corresponds to the default value present.

- (14) a. Doch egal, was noch passiert, der Norddeutsche Rundfunk  
 but never.mind what still happens the North.German broadcasting.company  
 steht schon jetzt als Gewinner fest.  
 stands already now as winner PART  
 'But never mind what happens, it is already certain that the Norddeutscher Rundfunk  
 (North German broadcasting company) will be the winner.' (Spiegel, 12/1999: 258)
- b. Interessant, zu erwähnen, daß ihre Seele völlig in Ordnung war.  
 interesting to mention that her soul completely in order was  
 'It is interesting to point out that she was completely sane.'
- c. Ein Treppenwitz der Musikgeschichte, daß die Kollegen von Rammstein vor  
 a stair.joke of.the music.history that the colleagues of Rammstein before  
 fünf Jahren noch im Vorprogramm von Sandow spielten.  
 five years still in.the before.program of Sandow played  
 'It is an irony of musical history that the colleagues from (the band) Rammstein were  
 still playing as the support group of Sandow a few years ago.' (taz, 12.07.1999: 14)

(14b) is taken from Michail Bulgakow, *Der Meister und Margarita*. München: Deutscher Taschenbuch Verlag. 1997: 422. In the sentences in (14) the copula *sein* 'be' has been omitted. The sentences in (14) correspond to the sentences in (15).

- (15) a. Doch was noch passiert, ist egal, ...  
 but what still happens is never.mind  
 'But never mind what happens ...'
- b. Zu erwähnen, daß ihre Seele völlig in Ordnung war, ist interessant.  
 to mention that her soul completely in order was is interesting  
 'It is interesting to point out that she was completely sane.'
- c. Daß die Kollegen von Rammstein vor fünf Jahren noch im Vorprogramm  
 that the colleagues of Rammstein before five years still in.the before.program  
 von Sandow spielten ist ein Treppenwitz der Musikgeschichte.  
 of Sandow played is a stair.joke of.the music.history  
 'It is an irony of musical history that the colleagues from (the band) Rammstein were  
 still playing as the support group of Sandow a few years ago.'

So, the sentences in (14) are declarative clauses, but as Paul (1919, p. 13) noted, questions without a verb are possible as well:

- (16) Niemand da?  
 nobody there  
 'Is anybody there?' (Paul, 1919, p. 13)

This situation leaves us in a state where it is very difficult to get a clear picture of the connection between order and clause type. The situation can be improved by stipulating empty elements, for instance, for empty pronouns in topic drop constructions and empty copulas for the constructions in (14) and (16). The empty copula would be placed after *Treppenwitz* in (14c) and before *niemand* in (16) and hence the sentences would have a verb in first or second position, respectively. Similarly, the *Vorfeld* in (10b) would be filled by an empty element and hence the clause would be a verb second clause. With such fillings of the respective fields it is reasonable to state that prototypical declarative clauses are V2 clauses in German and yes/no questions prototypically are V1.

## 2 German as an SOV language

Starting with Fourquet (1957, 1970, p. 117–135), Bierwisch, 1963, p. 34, and Bach, 1962, German was analyzed as an SOV language, that is, the SOV order is considered the basic order and other orders like the V1 order in (17b) and the V2 order in (17c) are related to the SOV order in (17a).

- (17) a. dass Max das Eis aufisst  
that Max the ice.cream up.eats  
'that Max eats up the ice cream.'
- b. Isst Max das Eis auf?  
eats Max the ice.cream up  
'Does Max eat up the ice cream?'
- c. Das Eis isst Max auf.  
the ice.cream eats Max up  
'Max eats up the ice cream.'

The initial proposals by Forquet, Bierwisch, and Bach were adapted and further motivated by Reis (1974), Thiersch (1978, Chapter 1), and den Besten (1983). (See also Koster 1975 on Dutch.) The analysis of German as an SOV language is nowadays standard in GB/Minimalism and also adopted in various competing frameworks (GPSG: Jacobs 1986, p. 110, LFG: Berman 2003a, p. 41, HPSG: Kiss and Wesche 1991; Meurers 2000, p. 206–208; Müller 2005a,b).

The following observations motivate the assumption that SOV is the basic order: Verb particles and idioms, the order in subordinated and non-finite clauses (Bierwisch, 1963, p. 34–36) and the scope of adverbials (Netter, 1992, Section 2.3). The relevant data will be addressed in the following subsections.

### 2.1 Non-finite forms, verb particles, and idioms

In contrast to SVO languages like English, non-finite verbs cluster at the end of the clause in German:

- (18) a. [weil] er nach hause kommt  
because he to home comes  
'because he comes home'
- b. [weil] er nach hause gekommen ist  
because he to home come has  
'because he has come home'
- c. [weil] er nach hause gekommen sein soll  
because he to home come be should  
'because he should have come home'

In main clauses only the finite verb is placed in initial or second position, but non-finite verbs stay in the position they take in embedded clauses:

- (19) Er soll nach hause gekommen sein  
he should to home come be  
'He should have come home.'

Verb particles form a close unit with the verb. The unit is observable in verb final sentences only, which supports an SOV analysis (Bierwisch, 1963, p. 35).

- (20) a. weil er morgen anfängt  
because he tomorrow at.catches  
'because he starts tomorrow'
- b. Er fängt morgen an.  
he catches tomorrow at  
'He starts tomorrow.'

The particle verb in (20) is non-transparent. Such particle verbs are sometimes called mini idioms. In fact the argument above can also be made with real idioms: Many idioms do not allow rearrangement of the idiom parts. This is an instance of Behaghel's law (1932) that things that belong together semantically tend to be realized together. The exception is the finite verb. The finite verb can be realized in initial or final position despite the fact that this interrupts the continuity of the idiomatic material. Since the continuity can be observed in SOV order only, this order is considered basic.

Verbs that are derived from nouns by backformation often cannot be separated and verb second sentences therefore are excluded (see Haider 1993, p. 62, who refers to unpublished work by Höhle 1991):

- (21) a. weil sie das Stück heute uraufführen  
because they the play today play.for.the.first.time  
'because they premiered the play today'
- b. \* Sie uraufführen heute das Stück.  
they play.for.the.first.time today the play
- c. \* Sie führen heute das Stück urauf.  
they guide today the play PREFIX.PART

Hence these verbs can only be used in the order that is assumed to be the base order.

Similarly, it is sometimes impossible to realize the verb in initial position when elements like *mehr als* 'more than' are present in the clause (Haider, 1997; Meinunger, 2001):

- (22) a. dass Hans seinen Profit letztes Jahr mehr als verdreifachte  
that Hans his profit last year more than tripled  
'that Hans increased his profit last year by a factor greater than three'
- b. Hans hat seinen Profit letztes Jahr mehr als verdreifacht.  
Hans has his profit last year more than tripled  
'Hans increased his profit last year by a factor greater than three.'
- c. \* Hans verdreifachte seinen Profit letztes Jahr mehr als.  
Hans tripled his profit last year more than

So, it is possible to realize the adjunct together with the verb in final position, but there are constraints regarding the placement of the finite verb in initial position.

## 2.2 Order in subordinate and non-finite clauses

Verbs in non-finite clauses and in subordinate finite clauses starting with a conjunction always appear finally, that is, in the *rechte Satzklammer*. For example, *zu geben* 'to give' and *gibt* 'gives' appear in the *rechte Satzklammer* in (23a) and (23b):

- (23) a. Der Clown versucht, Kurt-Martin die Ware zu geben.  
the clown tries Kurt-Martin the goods to give  
'The clown tries to give Kurt-Martin the goods.'

- b. dass der Clown Kurt-Martin die Ware gibt  
that the clown Kurt-Martin the goods gives  
'that the clown gives Kurt-Martin the goods'

### 2.3 Scope of adverbials

The scope of adverbials in sentences like (24) depends on their order: the left-most adverb scopes over the following adverb and over the verb in final position. This was explained by assuming the following structure:

- (24) a. weil er [absichtlich [nicht lacht]]  
because he deliberately not laughs  
'because he deliberately does not laugh'
- b. weil er [nicht [absichtlich lacht]]  
because he not deliberately laughs  
'because he does not laugh deliberately'

An interesting fact is that the scope relations do not change when the verb position is changed. If one assumes that the sentences have an underlying structure like in (24), this fact is explained automatically:

- (25) a. Lacht<sub>i</sub> er [absichtlich [nicht <sub>i</sub>]]?  
laughs he deliberately not  
'Does he deliberately not laugh?'
- b. Lacht<sub>i</sub> er [nicht [absichtlich <sub>i</sub>]]?  
laughs he not deliberately  
'Doesn't he laugh deliberately?'

It has to be mentioned here, that there seem to be exceptions to the claim that modifiers scope from left to right. Kasper (1994, p. 47) discusses the examples in (26), which go back to Bartsch and Vennemann (1972, p. 137).

- (26) a. Peter liest wegen der Nachhilfestunden gut.  
Peter reads because.of the tutoring well  
'Peter reads well because of the tutoring.'
- b. Peter liest gut wegen der Nachhilfestunden.  
Peter reads well because.of the tutoring

(27a) corresponds to the expected order in which the adverbial PP *wegen der Nachhilfestunden* outscopes the adverb *gut*, but the alternative order in (27b) is possible as well and the sentence has the same reading as the one in (27a).

However, Koster (1975, Section 6) and Reis (1980, p. 67) showed that these examples are not convincing evidence since the *rechte Satzklammer* is not filled and therefore the orders in (26) are not necessarily variants of *Mittelfeld* orders but may be due to extraposition of one constituent. As Koster and Reis showed, the examples become ungrammatical when the right sentence bracket is filled:

- (27) a. \*Hans hat gut wegen der Nachhilfestunden gelesen.  
Hans has well because.of the tutoring read
- b. Hans hat gut gelesen wegen der Nachhilfestunden.  
Hans has well read because.of the tutoring  
'Peter read well because of the tutoring.'



The conclusion is that (26b) is best treated as a variant of (26a) in which the PP is extraposed.

While examples like (26) show that the matter is not trivial, the following example from Crysmann (2004, p. 383) shows that there are examples with a filled *rechte Satzklammer* that allow for scopings in which an adjunct scopes over another adjunct that precedes it. For instance, in (28) *niemals* ‘never’ scopes over *wegen schlechten Wetters* ‘because of the bad weather’:

- (28) Da muß es schon erhebliche Probleme mit der Ausrüstung gegeben haben, da  
 there must it PART severe problems with the equipment given have since  
 [wegen schlechten Wetters] ein Reinhold Messner [niemals] aufgabe.  
 because.of bad weather a Reinhold Messner never give.up.would  
 ‘There must have been severe problems with the equipment, since someone like  
 Reinhold Messner would never give up just because of the bad weather.’

However, this does not change the fact that the sentences in (24) and (25) have the same meaning independent of the position of the verb. The general meaning composition may be done in the way that Crysmann suggested.

Another word of caution is in order here: There are SVO languages like French that also have a left to right scoping of adjuncts (Bonami et al., 2004, p. 156–161). So, the argumentation above should not be seen as the only fact supporting the SOV status of German. In any case the analyses of German that were worked out in various frameworks can explain the facts nicely.

### 3 German as a verb second language

The *Vorfeld* can be filled by arguments or adjuncts of the verb:

- (29) a. Der Mann hat dem Jungen gestern den Ball gegeben. (subject)  
 the man.NOM has the boy.DAT yesterday the ball.ACC given  
 ‘The man gave the boy the ball yesterday.’  
 b. Den Ball hat der Mann dem Jungen gestern gegeben. (accusative object)  
 the ball.ACC has the man.NOM the boy.DAT yesterday given  
 c. Dem Jungen hat der Mann gestern den Ball gegeben. (dative object)  
 the boy.DAT has the man.NOM yesterday the ball.ACC given  
 d. Gestern hat der Mann dem Jungen den Ball gegeben. (adjunct)  
 yesterday has the man.NOM the boy.DAT the ball.ACC given

In addition arguments and adjuncts of other heads can appear in the *Vorfeld*:

- (30) a. [Um zwei Millionen Mark]<sub>i</sub> soll er versucht haben, [eine Versicherung <sub>-i</sub> zu  
 around two Million Mark should he tried have an insurance to  
 betrügen ].  
 cheat  
 ‘He is said to have cheated an insurance of two Million Marks.’ (taz, 04.05.2001: 20)  
 b. „Wer<sub>i</sub>, glaubt er, daß er <sub>-i</sub> ist?“ erregte sich ein Politiker vom  
 who.NOM believes he.NOM that he is excited REFL a politician from.the  
 Nile.  
 Nile  
 ‘“Who does he think he is”, a politician from the Nile asked excitedly.’ (Spiegel,  
 8/1999: 18)  
 c. Wen<sub>i</sub> glaubst du, daß ich <sub>-i</sub> gesehen habe.  
 who.ACC believe you that I seen have  
 ‘Who do you believe that I saw?’ (Scherpenisse, 1986, p. 84)

- d. [Gegen ihn]<sub>i</sub> falle es den Republikanern hingegen schwerer, [ [ Angriffe <sub>i</sub>] zu  
against him fall it the Republicans but more.difficult attacks to  
lancieren].  
launch  
'It is more difficult for the Republicans to start attacks against him.' (taz,  
08.02.2008: 9)

The generalization is that a single constituent can be put in front of the finite verb (Erdmann, 1886, Chapter 2.4; Paul, 1919, p. 69, p. 77). Hence, German is called a verb second language. Crosslinguistically verb second languages are rare. While almost all Germanic languages are verb second languages, V2 in general is not very common among the languages of the world.

Sentences like the ones in (29) and (30) are usually analyzed as combination of a constituent and a verb first clause from which this constituent is missing (Thiersch, 1978; den Besten, 1983; Uszkoreit, 1987). The examples in (30b,c) show that the element in the *Vorfeld* can originate from an embedded clause. Since the dependency can cross clause-boundaries it is called an unbounded dependency. In any case it is a non-local dependency as all examples in (30) show.

The vast majority of declarative main clauses in German is V2. However, it did not go unnoticed that there appear to be exceptions to the V2 rule in German (Engel, 1970, p. 81; Beneš, 1971, p. 162; van de Velde, 1978; Dürscheid, 1989, p. 87; Fanselow, 1993, p. 67; Hoberg, 1997, p. 1634; G. Müller, 1998, Chapter 5.3). Some examples are given in (31):

- (31) a. [Zum zweiten Mal] [die Weltmeisterschaft] errang Clark 1965 ...  
for.the second time the world.championships won Clark 1965  
'Clark won the world championships for the second time in 1965.' (Beneš, 1971,  
p. 162)
- b. [Besonders schnell] [in die Zahlungsunfähigkeit] rutschen demnach junge  
especially fast in the insolvency slip according.to.this young  
Unternehmen und Betriebe mit Umsätzen unter 100.000 €.  
companies and firms with turnovers below 100.000 €  
'According to this young companies with a turnover below 100.000 € slip into  
insolvency especially fast.'
- c. „Wir erarbeiten derzeit Grundsätze für den Einsatz von Videoüberwachung“, sagte  
Jacob der taz. [...] [Völlig] [auf die Überwachung] könne aber nicht verzichtet werden, um  
absolutely on the surveillance can but not go.without be to  
„Inventurverluste“ zu vermeiden.  
stocktaking.losses to avoid  
'But the surveillance cannot be completely stopped, since this is the only way to  
avoid stocktaking losses.' (taz, 17./18.05.2008: 6)

Example (31b) is from tagesschau, 03.12.2008, 20:00, <http://www.tagesschau.de/multimedia/sendung/ts8914.html>. A documentation and discussion of various combinations of constituents can be found in Müller, 2003. My web page provides an updated list of examples. While the acceptability of examples like (31) is surprising, it is not the case that anything goes. As Fanselow (1993, p. 67) pointed out the fronted constituents have to be parts of the same clause:

- (32) a. Ich glaube dem Linguisten nicht, einen Nobelpreis gewonnen zu haben.  
I believe the linguist not a Nobel.price won to have  
'I do not believe the linguist's claim to have won a Nobel price.'
- b. \*Dem Linguisten einen Nobelpreis glaube ich nicht gewonnen zu haben.  
the linguist a Nobel.price believe I not won to have

This can be captured by an analysis that assumes an empty verbal head in the *Vorfeld* that corresponds to a verb in the rest of the sentence. The fronted constituents are combined with this empty verbal head. The analysis of (31a) is thus similar to the one of (33):

- (33) [[Zum zweiten Mal] [die Weltmeisterschaft] errungen] hat Clark 1995.  
 for.the second time the world.championships won has Clark 1965  
 ‘Clark won the world championships for the second time in 1965.’

See G. Müller (1998, Chapter 5.3) and St. Müller (2005b) for analyses of this type with different underlying assumptions. The analyses share the assumption that apparently multiple frontings of the type discussed here are instances of partial fronting (see Müller 1998; Meurers 1999a; Müller 1999, Chapter 18) and that the V2 property of German can be upheld despite the apparent counter evidence.

This is the place for a final remark on SOV as the basic order: all facts that have been mentioned as evidence for SOV as the basic order can be and have been accounted for in approaches that do not assume an empty verbal head (Uszkoreit, 1987; Pollard, 1996; Reape, 1994; Kathol, 2001; Müller, 1999, 2002, 2004b). However, such approaches do not extend to examples like (31) easily: Since no overt verbal element is present in the *Vorfeld*, the only way to account for the data seems to be the stipulation of an empty verbal head or an equivalent grammar rule (Müller, 2005a). Head movement approaches assume this element anyway and hence do not require extra stipulations for examples of apparent multiple frontings.

## 4 The order of elements in the *Mittelfeld*

German is a language with relatively free constituent order: the arguments of a verb can be ordered freely provided certain constraints are not violated. A lot of factors play a role: animate NPs tend to be ordered before inanimate ones, short constituents before long ones (Behaghel, 1909, p. 139; Behaghel, 1930, p. 86), pronouns tend to appear before non-pronouns in a *Mittelfeld*-initial position which is called *Wackernagelposition*, and definite NPs before indefinite ones. See Lenerz, 1977 and Hoberg, 1981 for discussion.

Another important constraint is that given information precedes new information (Behaghel, 1930, p. 84). Höhle (1982) looked at German constituent order in information structural terms and developed criteria for determining the unmarked constituent order. According to him the unmarked order is the one that can be used in most contexts.

Applying Höhle’s tests one can determine that the order in (34a) is the unmarked one:

- (34) a. dass der Mann dem Jungen den Ball gibt (nom, dat, acc)  
 that the man.NOM the boy.DAT the ball.ACC gives  
 ‘that the man gives the boy the ball’  
 b. dass der Mann den Ball dem Jungen gibt (nom, acc, dat)  
 that the man.NOM the ball.ACC the boy.DAT gives  
 c. dass den Ball der Mann dem Jungen gibt (acc, nom, dat)  
 that the ball.ACC the man.NOM the boy.DAT gives  
 d. dass den Ball dem Jungen der Mann gibt (acc, dat, nom)  
 that the ball.ACC the boy.DAT the man.NOM gives  
 e. dass dem Jungen der Mann den Ball gibt (dat, nom, acc)  
 that the boy.DAT the man.NOM the ball.ACC gives  
 f. dass dem Jungen den Ball der Mann gibt (dat, acc, nom)  
 that the boy.DAT the ball.ACC the man.NOM gives

While the reference to utterance contexts makes it possible to determine the unmarked order, this does not tell us how the marked orders should be analyzed. One option is to derive the marked orders from the unmarked one by transformations or something equivalent (Ross, 1967). In a transformational approach, (34b) is derived from (34a) by movement of *den Ball* ‘the ball’:

- (35) dass der Mann [den Ball]<sub>i</sub> dem Jungen <sub>i</sub> gibt  
 that the man the ball the boy gives

Another option is to allow all possible orders and constrain them by linearization rules. This option is called base-generation in Transformational Grammar since the various constituent orders are generated by phrase structure rules before transformations apply, that is, they are part of the transformational base (Fanselow, 1993).

Non-transformational theories like LFG, HPSG, and CxG can implement analyses that are equivalent to movement transformations, but this is rarely done (see Choi 1999 for an example). Instead the analyses are surface-oriented, that is, one does not assume an underlying order from which other orders are derived. The surface-oriented approaches come in two varieties: those that assume flat structures or flat linearization domains (Uszkoreit, 1987; Reape, 1994; Bouma and van Noord, 1998; Kathol, 2001) and those that assume binary branching structures (Berman, 2003a, p. 37 building on work by Haider, 1991; Kiss, 1995; Müller, 2005a). One way to analyze (34b) with binary branching structures is to allow a head to combine with its arguments in any order. This was suggested by Gunji (1986) for Japanese in the framework of HPSG and is also assumed in many HPSG grammars of German. Fanselow (2001) makes a similar proposal for German in the Minimalist Program.

The fact that adverbs can appear anywhere in the *Mittelfeld* is straightforwardly accounted for in analyses that assume binary branching structures:

- (36) a. dass [der Mann [dem Jungen [den Ball [gestern gab]]]]  
 that the man.NOM the boy.DAT the ball.ACC yesterday gave  
 ‘that the man gave the boy the ball yesterday’  
 b. dass [der Mann [dem Jungen [gestern [den Ball gab]]]]  
 that the man.NOM the boy.DAT yesterday the ball.ACC gave  
 c. dass [der Mann [gestern [dem Jungen [den Ball gab]]]]  
 that the man.NOM yesterday the boy.DAT the ball.ACC gave  
 d. dass [gestern [der Mann [dem Jungen [den Ball gab]]]]  
 that yesterday the man.NOM the boy.DAT the ball.ACC gave

The verb is combined with one of its arguments at a time and the results of the combination are available for modification by adverbial elements. This also accounts for the iterability of adjuncts. In flat structures one would have to admit any number of adjuncts between the arguments. While this is not impossible (Weisweber and Preuss, 1992; Kasper, 1994), the binary branching analysis is conceptually simpler.

Proponents of movement-based analyses argued that scope ambiguities are evidence for movement. While a sentence in the unmarked order is not ambiguous as far as quantifier scope is concerned, sentences with scrambled NPs are. This was explained by the possibility to interpret the quantifiers at the base-position and at the surface position (Frey, 1993). So for (37b) one gets *jedes* > *einem* (surface position) and *einem* > *jedes* (reconstructed position).

- (37) a. Es ist nicht der Fall, daß er mindestens einem Verleger fast jedes Gedicht  
 it is not the case that he at.least one publisher almost every poem  
 anbot.  
 offered  
 ‘It is not the case that he offered at least one publisher almost every poem.’

- b. Es ist nicht der Fall, daß er fast jedes Gedicht<sub>i</sub> mindestens einem Verleger <sub>-i</sub>  
 it is not the case that he almost every poem at.least one publisher  
 anbot.  
 offered  
 'It is not the case that he offered almost every poem to at least one publisher.'

As it turned out this account overgenerates and hence, the scope data can be used as an argument against movement-based analyses. Both Kiss, 2001, p. 146 and Fanselow, 2001, Section 2.6 point out that the reconstruction analysis fails for examples with ditransitive verbs in which two arguments are in a marked position but keep their relative order. For example *mindestens einem Verleger* 'at least one publisher' in (38) is predicted to be interpretable at the position <sub>-i</sub>. This would result in a reading in which *fast jedes Gedicht* 'almost every poem' outscopes *mindestens einem Verleger*.

- (38) Ich glaube, daß mindestens einem Verleger<sub>i</sub> fast jedes Gedicht<sub>j</sub> nur dieser Dichter  
 I believe that at.least one publisher almost every poem only this poet  
<sub>-i -j</sub> angeboten hat.  
 offered has  
 'I believe that only this poet offered at least one publisher almost every poem.'

Such a reading does not exist.

In recent analyses in the Minimalist Program (Chomsky, 1995) it is assumed that movement of phrases is feature driven, that is, an element moves to a specifier position in a syntactic tree if it can check a feature at this position. Frey (2004a) assumes a KontrP (contrast phrase) and Frey (2004b) a TopP (topic phrase) in order to provide for targets for movement (see also Rizzi 1997 for TopP and FocP 'focus phrase' in Italian and Haftka 1995; Grewendorf 2002, Section 2.6, 2009; Abraham 2003, p. 19; Laenzlinger 2004, p. 224; Hinterhölzel 2004, p. 18 for analyses of German using TopP and/or FocP). Constituents have to move into the specifier position of one of these functional heads depending on their information structural status. Fanselow (2003) showed that such movement-based approaches fail, since there are cases of so-called altruistic movement (see Rosengren 1993, p. 290–291 and Krifka 1998, p. 90). That is, elements do not move because of their properties, but rather in order to free positions for other elements. For instance, assuming the main accent at the default position immediately before the verb, the object will not be part of the focus in (39b).

- (39) a. dass die Polizei gestern Linguisten verhaftete  
 that the police yesterday linguists arrested  
 'that the police arrested linguists yesterday'  
 b. dass die Polizei Linguisten gestern verhaftete  
 that the police linguists yesterday arrested

If the object stays in the position next to the verb as in (39a), it gets the structural accent (focus accent) and has to be interpreted as part of the focus.

Fanselow gives the following generalization with respect to reorderings: a direct object can be placed at a marked position if the information structure of the sentence requires that another constituent is in focus or that the object is not part of the focus. In languages like German partial focussing can also be established by intonation, but choosing a marked constituent order helps in marking the information structure unambiguously, especially in written language. German differs from languages like Spanish (Zubizarreta, 1998) in that the (altruistic) movement is optional in the former language but obligatory in the latter one.

It follows that it is not reasonable to assume that constituents move to certain tree positions to check features. However, this is the basic explanation for movement in current Minimalist theorizing.

Fanselow (2003, Abschnitt 4, 2006, p. 8) also showed that order restrictions that hold for topic and focus with respect to sentence adverbials can be explained in an analysis such as the one that was laid out above. The positioning of sentence adverbs directly before the focused part of the sentence is explained semantically: since sentence adverbials behave like focus sensitive operators, they have to be placed directly before the element they take scope over. It follows that elements that are not part of the focus (topics) have to be placed to the left of sentence adverbs. No special topic position for the description of local reorderings is necessary.

## 5 Extraposition

In Section 3 we discussed fronting data. In this section I discuss dislocations of elements to the right. Extraposition can be used to postpone heavy elements. This is useful since otherwise the sentence brackets may be too far away from each other to be processed successfully. (40) is an example of a train announcement:

- (40) Auf Gleis drei fährt ein der ICE aus Hamburg zur  
 on platform three drives PART the ICE from Hamburg to.the  
 Weiterfahrt nach München über ...  
 continuation.of.the.journey to Munic via  
 ‘The ICE train from Hamburg to Munich via ... is arriving at platform three.’

The syntactic category of the extraposed element is not restricted. PPs, VPs, clauses and—as evidenced by (40)—even NPs can be extraposed. See Müller, 1999, Chapter 13.1 and Müller, 2002, p. ix–xi for further naturally occurring examples of NP extraposition of different types.

Despite the tendency to extrapose heavy constituents, extraposition is not restricted to heavy phrases:

- (41) a. [[<sub>i</sub> Bekannt] dazu<sub>i</sub>] hatte sich die „Kämpfende Kommunistische Partei, eine  
 confessed there.to had REFL the fighting communist party, a  
 Neugruppierung aus den Resten der altterroristischen Roten Brigaden.  
 reformation from the remainders of.the.old.terrorist Red Brigades  
 ‘The Fighting Communist Party, a reformation of remainders of the old terrorist  
 group Red Brigades, confessed this.’ (Spiegel, 44/1999: 111)
- b. „Würde der sich doch aufhängen, jetzt, dann wäre Ruhe.“  
 would he REFL only hang now then would.be silence  
 ‘If he would hang himself now, peace would be restored.’ (taz, 18.11.1998: 13)

In (41a) the pronominal adverb *dazu* is placed to the right of the non-finite verb, that is, it is in the *Nachfeld* in a complex *Vorfeld*. In (41b) the adverb *jetzt* is extraposed.

The following example by Olsen (1981, p. 147) shows that sentential arguments may be realized in the *Mittelfeld*.

- (42) Ist, daß Köln am Rhein liegt, auch in Amerika bekannt?  
 is that Cologne at.the Rhine lies also in America known  
 ‘Is it known in America as well that Cologne is located at the Rhine?’

Hence, it is plausible to assume that verbs take their arguments and adjuncts to the left but, due to extraposition, the arguments and adjuncts may appear in the *Nachfeld* to the right of the verb.

In connection with the Subjacency Principle (Chomsky, 1973, p. 271, 1986, p. 40; Baltin 1981, 2006) it was claimed for German that extraposition is a restricted process in which only two maximal projections may be crossed (Grewendorf, 1988, p. 281; Rohrer, 1996, p. 103). Which projections may be crossed is said to be due to language-specific parameterization (Baltin,

1981, p. 262, 2006; Rizzi, 1982; Chomsky, 1986, p. 40). According to Grewendorf (1988, p. 81, 2002, p. 17–18) and Haider (2001, p. 285), NP is such a bounding node in German. As the data in (43) show, extraposition in German is clearly a non-local phenomenon that can cross as many NP nodes as we can come up with:

- (43) a. Karl hat mir [eine Kopie [einer Fälschung [des Bildes [einer Frau  $_{-i}$ ]]]]  
 Karl has me a copy of.a forgery of.the picture of.a woman  
 gegeben, [die schon lange tot ist]<sub>*i*</sub>.  
 given who already long dead ist  
 ‘Karl gave me a copy of a forgery of the picture of a woman who has been dead for a long time.’
- b. Ich habe [von [dem Versuch [eines Beweises [der Vermutung  $_{-i}$ ]]]] gehört, [daß  
 I have of the attempt of.a proof of.the assumption heard that  
 es Zahlen gibt, die die folgenden Bedingungen erfüllen]<sub>*i*</sub>.  
 it numbers gives that the following conditions satisfy  
 ‘I have heard of the attempt to prove the assumption that there are numbers for which the following conditions hold.’

(43a) shows an example of adjunct extraposition and (43b) shows that complement extraposition is possible as well. For discussion and corpus data see Müller (1999, p. 211, 2004a, 2007). Koster, 1978, p. 52 provides Dutch examples parallel to (43a). See also Strunk and Snider, 2013 for German and English data. A discussion of the differences between examples like (43) and the ungrammatical examples that have previously been discussed in the literature as evidence for subjacency constraints can be found in Crysmann, 2013.

The data from Section 3 show that fronting to the left can cross clause boundaries. In contrast, extraposition seems to be clause bounded. The clause-boundedness constraint was first discussed by Ross (1967) and later termed the Right Roof Constraint (RRC). However, the Right Roof Constraint was called into question by Kohrt (1975) and Meinunger (2000). Kohrt’s examples and most of Meinunger’s examples can be explained as mono-clausal structures involving several verbs that form a verbal complex and, hence, do not constitute evidence against the RRC. But Meinunger (2000, p. 201) pointed out that sentences like (44) pose a challenge for the RRC:

- (44) Peter hat, [daß er uns denjenigen Computer  $_{-i}$  schenkt] fest versprochen, [den er  
 Peter has that he us the.one computer gives firmly promised that he  
 nicht mehr braucht]<sub>*i*</sub>.  
 not anymore needs  
 ‘Peter can’t go back on his promise that he will give us the computer he no longer needs as a present.’

(45) shows a naturally occurring example:

- (45) [„Es gibt viele wechselseitige Verletzungen  $_{-i}$ “], befindet er, [in die sich  
 it gives many reciprocal injuries finds he in which REFL  
 einzumischen er nicht die geringste Neigung zeigt]<sub>*i*</sub>.  
 to.involve he not the slightest inclination shows  
 ‘He finds that there are many reciprocal injuries and he does not show the slightest inclination to get involved in these injuries.’ (taz, 01.04.2009: 16)

However, (45) differs from (44) in that it could be explained as a parenthetical insertion of *befindet er* ‘finds he’ into a normal sentence (see Reis 1995 on parenthesis in German). According to the parenthetical analysis, (45) would not involve extraposition at all.

While the above examples are marked – (44) is more marked than (45) –, it is an open question how these cases should be handled. For the corresponding restrictions on left-ward movement it has been pointed out that both information structure (Goldberg, 2006, Chapter 7.2; Ambridge and Goldberg, 2008) and processing constraints (Grosu, 1973; Ellefson and Christiansen, 2000; Gibson, 1998; Kluender, 1992; Kluender and Kutas, 1993) influence extractability. So, a combination of similar factors may play a role for movement to the right as well and hence, the Right Roof Constraint would not be a syntactic constraint but the result of other restrictions.

## 6 Subjects, passive, case, and agreement

German is a language that allows for subjectless constructions. There are a few verbs like *grauen* ‘to dread’, *schwindeln* + dative/accusative ‘to feel dizzy’, and *frieren* + accusative ‘to be cold’ that can be used without a subject. (46) shows an example:

- (46) Den Studenten graut vor der Prüfung.  
 the student.DAT.PL dreads.3SG before the exam  
 ‘The students dread the exam.’

The dative and accusative arguments of the verbs mentioned above are not subjects since they do not agree with the verb (46), they are not omitted in controlled infinitives, in fact control constructions are not possible at all (47a), and the verbs do not allow imperatives to be formed (47b) (Reis, 1982).

- (47) a. \*Der Student versuchte, (dem Student) nicht vor dem Examen zu  
 the student.NOM tried the student.DAT not before the exam to  
 grauen.  
 dread  
 ‘The student tried not to dread the exam.’  
 b. \*Graue nicht vor der Prüfung!  
 dread not before the exam  
 ‘Do not dread the exam!’

As Reis (1982) argued, German subjects are always NPs in the nominative. The view that clauses are never subjects is not shared by everybody (see for instance Eisenberg, 1994, p. 285). In particular in theories like LFG, in which grammatical functions are primitives of the theory, there is an ongoing debate concerning the status of sentential arguments: Dalrymple and Lødrup, 2000; Berman, 2003b, 2007; Alsina, Mohanan and Mohanan, 2005; Forst, 2006. However, I find Reis’s arguments pretty convincing and therefore assume that (non-raised) subjects in German are always noun phrases in the nominative. In any case, the status of sentential arguments does not affect the fact that subjectless constructions exist in German.

German also allows for passivization of intransitive verbs resulting in subjectless sentences:

- (48) a. Hier tanzen alle.  
 here dance all.NOM  
 ‘Everybody dances here.’  
 b. Hier wird getanzt.  
 here is danced  
 ‘Dancing is done here.’  
 c. Die Frau hilft dem Mann.  
 the woman.NOM helps the man.DAT



- d. Dem Mann wird geholfen.  
 the man.DAT is helped  
 'The man is being helped.'

*tanzen* is an intransitive verb. In the passive sentence (48b), no NP is realized. *helfen* is a verb that governs the nominative and the dative (48c). In passive sentences the subject is suppressed and the dative object is realized without any change (48d). The sentences in (48b) and (48d) are subjectless constructions. German differs from languages like Icelandic in not having dative subjects (Zaenen, Maling and Thráinsson, 1985). One test for subjecthood that Zaenen, Maling and Thráinsson (1985, p. 477) apply is the test for controllability of an element.

- (49) \* Der Student versucht, getanzt zu werden.  
 the student tries danced to get  
 Intended: 'The student tries to dance.' or 'The student tries to make somebody dance.'

Like (49), infinitives with passivized verbs that govern only a dative cannot be embedded under control verbs, as (50) shows.

- (50) \* Der Student versucht, geholfen zu werden.  
 the student tries helped to get  
 Intended: 'The student tries to get helped.'

This shows that the dative in (48d) is a complement and not a subject.

There is a very direct way to analyze the passive in German (and other languages) that goes back to Haider, 1984, 1986. Haider suggests to designate the argument of the verb that has subject properties. This argument is the subject of unergative and transitive verbs. Unaccusative verbs do not have a designated argument, since it is assumed that their nominative argument has object properties (see Grewendorf 1989 for an extensive discussion of unaccusativity in German, see Kaufmann 1995 for a discussion of semantic factors, and Müller 2002, Chapter 3.1.1 for problems with some of the unaccusativity tests). (51) shows some prototypical argument frames with the designated argument underlined: *ankommen* 'to arrive', *tanzen* 'to dance', *auffallen* 'to notice', *lieben* 'to love', *schchenken* 'to give as a present', and *helfen* 'to help'.

- (51) arguments
- a. *ankommen* (unaccusative):  $\langle \underline{\text{NP}}[str] \rangle$
  - b. *tanzen* (unergative):  $\langle \underline{\text{NP}}[str] \rangle$
  - c. *auffallen* (unaccusative):  $\langle \underline{\text{NP}}[str], \text{NP}[ldat] \rangle$
  - d. *lieben* (transitive):  $\langle \underline{\text{NP}}[str], \text{NP}[str] \rangle$
  - e. *schchenken* (transitive):  $\langle \underline{\text{NP}}[str], \text{NP}[str], \text{NP}[ldat] \rangle$
  - f. *helfen* (unergative):  $\langle \underline{\text{NP}}[str], \text{NP}[ldat] \rangle$

In the valence frames in (51) *str* stands for structural case and *ldat* for lexical dative. Structural case is case that changes depending on the syntactic environment. For instance the second argument of *schchenken* can be realized as accusative in the active and as nominative in passive sentences:

- (52) a. dass sie dem Jungen den Ball geschenkt hat  
 that she.NOM the boy.DAT the ball.ACC given has  
 'that she gave the boy the ball'

- b. dass dem Jungen der Ball geschenkt wurde  
 that the boy.DAT the ball.NOM given was  
 ‘that the ball was given to the boy’

I follow Haider (1986, p. 20) in assuming that the dative is a lexical case. As shown in (48d) the dative does not change in the *werden* passive. (Since arguments that are dative in the active can be realized as nominative in the *bekommen* ‘become’ passive, the status of the dative as structural or lexical case is controversial. See Müller 2002, Chapter 3 for a treatment of the *bekommen* passive and further references.) The arguments are ordered with respect to obliqueness (Keenan and Comrie, 1977), which is relevant for many phenomena, for instance, topic drop as in example (10b), case assignment, and pronoun binding (Grewendorf, 1985; Pollard and Sag, 1992).

The morphological rule that licenses the participle blocks the designated argument. (53) shows the participles and their blocked arguments.

(53)		DA	SUBCAT
	a. angekommen (unaccusative):	⟨ ⟩	⟨NP[ <i>str</i> ]⟩
	b. getanzt (unergative):	⟨NP[ <i>str</i> ]⟩	⟨ ⟩
	c. aufgefallen (unaccusative):	⟨ ⟩	⟨NP[ <i>str</i> ], NP[ <i>ldat</i> ]⟩
	d. geliebt (transitive):	⟨NP[ <i>str</i> ]⟩	⟨NP[ <i>str</i> ]⟩
	e. geschenkt (transitive):	⟨NP[ <i>str</i> ]⟩	⟨NP[ <i>str</i> ], NP[ <i>ldat</i> ]⟩
	f. geholfen (unergative):	⟨NP[ <i>str</i> ]⟩	⟨NP[ <i>ldat</i> ]⟩

The passive auxiliary combines with the participle and realizes all unblocked arguments (52b), while the perfect auxiliary deblocks the designated argument and realizes it in addition to all other arguments of the participle (52a).

Having explained which arguments are realized in active and passive, I now turn to case assignment and agreement: In verbal domains, nominative is assigned to the least oblique argument with structural case. All other arguments with structural case are assigned accusative in verbal domains. See Yip, Maling and Jackendoff, 1987 and Meurers, 1999b; Przepiórkowski, 1999; Müller, 2008 for further details on case assignment along this line.

In the analysis developed here, the verb agrees with the least oblique argument that has structural case. If there is no such argument, the verb is 3rd person singular.

Such an analysis of passive, as opposed to a GB analysis à la Grewendorf, 1989 can explain the German data without the stipulation of empty expletive elements. The problem for movement based analyses of the German passive in the spirit of Chomsky (1981) is that there is no movement. To take an example, consider the passive of (54a). The unmarked serialization of the arguments in the passivized clause is (54b) not the serialization in (54c), which could be argued to involve movement of the underlying accusative object (Lenerz, 1977, Section 4.4.3).

- (54) a. dass das Mädchen dem Jungen den Ball schenkt  
 that the girl.NOM the boy.DAT the ball.ACC gives.as.a.present  
 ‘that the girl gives the boy the ball as a present’
- b. dass dem Jungen der Ball geschenkt wurde  
 that the boy.DAT the ball.NOM given was  
 ‘that the ball was given to the boy’
- c. dass der Ball dem Jungen geschenkt wurde  
 that the ball.NOM the boy.DAT given was

The object in the active sentence is serialized in the same position as the subject of the passive sentence. Grewendorf captured this by assuming that there is an empty expletive element in the position where nominative is assigned and this empty element is connected to the subject which remains in the VP and gets case by transfer from the subject position. The same would apply to agreement information.

Given recent assumptions about the nature of linguistic knowledge (Hauser, Chomsky and Fitch, 2002; Goldberg, 2006; Tomasello, 2003), analyses that assume empty expletive elements are not adequate since they cannot account for language acquisition. In order for the respective grammars to be learnable there has to be innate language specific knowledge that includes knowledge about subject positions and knowledge about the obligatoriness of subjects. In the analysis suggested here, no such knowledge is necessary.

## 7 Summary

In this article I sketched the main building blocks of German clausal syntax. I assume a binary branching verb final structure. This structure is assumed for verb initial and for verb final clauses. In verb initial clauses the verb is related to a trace in the *rechte Satzklammer*. The arguments of the verb can be discharged in any order and adverbs can appear between the arguments at any place in the *Mittelfeld*. The subject is selected by the verb like any other argument. This gives a straightforward account of subjectless sentences.

While I hope to have been able to sufficiently motivate such an analysis throughout the individual sections, the analysis remains sketchy. Due to space limitations I could not go into the details, but the pointers to the relevant publications will enable the interested reader to get more information. Of course pointers to publications of authors working in different frameworks do not guarantee that a sketch can be turned into a consistent grammar fragment, but the reader may rest assured that the things that I represented here are consistent: They have been implemented in a downloadable, computer processable grammar fragment that is described in detail in Müller, 2013.

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## 9 Abbreviations

The following is a list of abbreviations that are not defined by the Leipzig Glossing Rules, which are used throughout the paper.

PART     particle  
PREFIX   prefix

## References

- Abraham, Werner. 2003. The Syntactic Link between Thema and Rhema: the Syntax-Discourse Interface. *Folia Linguistica* 37(1–2), 13–34.
- Alsina, Alex, Mohanan, KP and Mohanan, Tara. 2005. How to Get Rid of the COMP. In Miriam Butt and Tracy Holloway King (eds.), *Proceedings of the LFG 2005 Conference*, Stanford,

- CA: CSLI Publications. <http://csli-publications.stanford.edu/LFG/10/lfg05amm.pdf>, 23.01.2009.
- Altmann, Hans. 1981. *Formen der „Herausstellung“ im Deutschen: Rechtsversetzung, Linksversetzung, freies Thema und verwandte Konstruktionen*. Linguistische Arbeiten, No. 106, Tübingen: Max Niemeyer Verlag.
- Ambridge, Ben and Goldberg, Adele E. 2008. The Island Status of Clausal Complements: Evidence in Favor of an Information Structure Explanation. *Cognitive Linguistics* 19, 349–381. [http://www.princeton.edu/~adele/Publications\\_files/08Ambridge%26Goldberg-islands.pdf](http://www.princeton.edu/~adele/Publications_files/08Ambridge%26Goldberg-islands.pdf), 20.06.2008.
- Bach, Emmon. 1962. The Order of Elements in a Transformational Grammar of German. *Language* 8(3), 263–269.
- Baltin, Mark. 1981. Strict Bounding. In Carl Lee Baker and John J. McCarthy (eds.), *The Logical Problem of Language Acquisition*, Cambridge, MA/London, England: MIT Press.
- Baltin, Mark. 2006. Extraposition. In Martin Everaert, Henk van Riemsdijk, Rob Goedemans and Bart Hollebrandse (eds.), *The Blackwell Companion to Syntax*, Blackwell Handbooks in Linguistics, pages 237–271, Oxford: Blackwell Publishing Ltd. <http://www.nyu.edu/gsas/dept/lingu/people/faculty/baltin/papers/extrapos.pdf>, 16.05.2008.
- Bartsch, Renate and Vennemann, Theo. 1972. *Semantic Structures. A Study in the Relation between Semantics and Syntax*. Athenäum-Skripten Linguistik, No. 9, Frankfurt/Main: Athenäum.
- Bech, Gunnar. 1955. *Studien über das deutsche Verbum infinitum*. Linguistische Arbeiten, No. 139, Tübingen: Max Niemeyer Verlag, 2nd unchanged edition 1983.
- Behaghel, Otto. 1909. Beziehung zwischen Umfang und Reihenfolge von Satzgliedern. *Indogermanische Forschungen* 25, 110–142.
- Behaghel, Otto. 1930. Von deutscher Wortstellung. *Zeitschrift für Deutschkunde* 44, 81–89.
- Behaghel, Otto. 1932. *Die deutsche Syntax. Eine geschichtliche Darstellung. Band IV: Wortstellung. Periodenbau*. Germanische Bibliothek, Heidelberg: Carl Winters Universitätsbuchhandlung.
- Beneš, Eduard. 1971. Die Besetzung der ersten Position im deutschen Aussagesatz. In Hugo Moser (ed.), *Fragen der strukturellen Syntax und der kontrastiven Grammatik*, Sprache der Gegenwart – Schriften des IdS Mannheim, No. 17, pages 160–182, Düsseldorf: Pädagogischer Verlag Schwann.
- Berman, Judith. 2003a. *Clausal Syntax of German*. Studies in Constraint-Based Lexicalism, Stanford, CA: CSLI Publications.
- Berman, Judith. 2003b. Zum Einfluss der strukturellen Position auf die syntaktische Funktion der Komplementsätze. *Deutsche Sprache* 3, 263–286.
- Berman, Judith. 2007. Functional Identification of Complement Clauses in German and the Specification of COMP. In Annie Zaenen, Jane Simpson, Tracy Holloway King, Jane Grimshaw, Joan Maling and Chris Manning (eds.), *Architectures, Rules, and Preferences. Variations on Themes by Joan W. Bresnan*, Stanford, CA: CSLI Publications.
- Bierwisch, Manfred. 1963. *Grammatik des deutschen Verbs*. studia grammatica, No. 2, Berlin: Akademie Verlag.
- Bonami, Olivier, Godard, Danièle and Kampers-Manhe, B. 2004. Adverb Classification. In Francis Corblin and Henriëtte de Swart (eds.), *Handbook of French Semantics*, pages 143–184, Stanford, CA: CSLI Publications.
- Bouma, Gosse and van Noord, Gertjan. 1998. Word Order Constraints on Verb Clusters in German and Dutch. In Erhard W. Hinrichs, Andreas Kathol and Tsuneko Nakazawa (eds.), *Complex Predicates in Nonderivational Syntax*, Syntax and Semantics, No. 30, pages 43–72, San Diego: Academic Press. <http://www.let.rug.nl/~vannoord/papers/>,

- 31.05.2010.
- Choi, Hye-Won. 1999. *Optimizing Structure in Scrambling. Scrambling and Information Structure*. Dissertations in Linguistics, Stanford, CA: CSLI Publications.
- Chomsky, Noam. 1973. Conditions on Transformations. In Stephen R. Anderson and Paul Kiparski (eds.), *A Festschrift for Morris Halle*, pages 232–286, New York: Holt, Rinehart & Winston.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.
- Chomsky, Noam. 1986. *Barriers*. Linguistic Inquiry Monographs, No. 13, Cambridge, MA/London, England: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Current Studies in Linguistics, No. 28, Cambridge, MA/London, England: MIT Press.
- Crysmann, Berthold. 2004. Underspecification of Intersective Modifier Attachment: Some Arguments from German. In Stefan Müller (ed.), *Proceedings of the 11th International Conference on Head-Driven Phrase Structure Grammar*, Stanford, CA: CSLI Publications. <http://csli-publications.stanford.edu/HPSG/5/>, 29.10.2004.
- Crysmann, Berthold. 2013. On the Locality of Complement Clause and Relative Clause Extraposition. In Gert Webelhuth, Manfred Sailer and Heike Walker (eds.), *Rightward Movement in a Comparative Perspective*, Linguistik Aktuell/Linguistics Today, No. 200, pages 369–396, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Dalrymple, Mary and Lødrup, Helge. 2000. The Grammatical Functions of Complement Clauses. In Miriam Butt and Tracy Holloway King (eds.), *Proceedings of the LFG 2000 Conference*, Stanford, CA: CSLI Publications. <http://csli-publications.stanford.edu/LFG/5/lfg00dalrympl-lodrup.pdf>, 23.01.2009.
- den Besten, Hans. 1983. On the Interaction of Root Transformations and Lexical Deletive Rules. In Werner Abraham (ed.), *On the Formal Syntax of the Westgermania: Papers from the 3rd Groningen Grammar Talks, Groningen, January 1981*, Linguistik Aktuell/Linguistics Today, No. 3, pages 47–131, Amsterdam/Philadelphia: John Benjamins Publishing Co. [http://www.dbnl.org/tekst/best005inte01\\_01/](http://www.dbnl.org/tekst/best005inte01_01/), 11.10.2012.
- Drach, Erich. 1937. *Grundgedanken der deutschen Satzlehre*. Darmstadt: Wissenschaftliche Buchgesellschaft, 4., unveränderte Auflage 1963.
- Dürscheid, Christa. 1989. *Zur Vorfeldbesetzung in deutschen Verbzweit-Strukturen*. FOKUS, No. 1, Trier: Wissenschaftlicher Verlag.
- Eisenberg, Peter. 1994. *Grundriß der deutschen Grammatik*. Stuttgart, Weimar: Verlag J. B. Metzler, third edition.
- Ellefson, Michelle R. and Christiansen, Morten. 2000. Subjacency Constraints without Universal Grammar: Evidence from Artificial Language Learning and Connectionist Modeling. In *Proceedings of the 22nd Annual Conference of the Cognitive Science Society*, pages 645–650, Mahwah, NJ: Lawrence Erlbaum Associates. <http://cnl.psych.cornell.edu/abstracts/EandC-cogsci2000.html>, 26.09.2008.
- Engel, Ulrich. 1970. Regeln zur Wortstellung. Forschungsberichte des Instituts für deutsche Sprache 5, Institut für deutsche Sprache, Mannheim.
- Erdmann, Oskar. 1886. *Grundzüge der deutschen Syntax nach ihrer geschichtlichen Entwicklung*, volume 1. Stuttgart: Verlag der J. G. Cotta'schen Buchhandlung, Reprint: Hildesheim: Georg Olms Verlag, 1985.
- Fanselow, Gisbert. 1993. Die Rückkehr der Basisgenerierer. *Groninger Arbeiten zur Germanistischen Linguistik* 36, 1–74.
- Fanselow, Gisbert. 2001. Features,  $\theta$ -Roles, and Free Constituent Order. *Linguistic Inquiry* 32(3), 405–437.
- Fanselow, Gisbert. 2003. Free Constituent Order: A Minimalist Interface Account. *Folia Linguistica* 37(1–2), 191–231.

- Fanselow, Gisbert. 2006. On Pure Syntax (Uncontaminated by Information Structure). In Patrick Brandt and Eric Fuss (eds.), *Form, Structure and Grammar: a Festschrift Presented to Günther Grewendorf on Occasion of His 60th Birthday*, *Studia grammatica*, No. 63, pages 137–157, Berlin: Akademie Verlag.
- Forst, Martin. 2006. COMP in (Parallel) Grammar Writing. In Miriam Butt and Tracy Holloway King (eds.), *The Proceedings of the LFG '06 Conference*, Stanford, CA: CSLI Publications. <http://csli-publications.stanford.edu/LFG/11/lfg06forst.pdf>, 23.01.2009.
- Fourquet, Jean. 1957. Review of: Heinz Anstock: *Deutsche Syntax – Lehr- und Übungsbuch. Wirkendes Wort* 8, 120–122.
- Fourquet, Jean. 1970. *Prolegomena zu einer deutschen Grammatik*. Sprache der Gegenwart – Schriften des Instituts für deutsche Sprache in Mannheim, No. 7, Düsseldorf: Pädagogischer Verlag Schwann.
- Frey, Werner. 1993. *Syntaktische Bedingungen für die semantische Interpretation. Über Bindung, implizite Argumente und Skopus*. *studies grammatica*, No. 35, Berlin: Akademie Verlag.
- Frey, Werner. 2004a. The Grammar-Pragmatics Interface and the German Prefield. *Forschungsprogramm Sprache und Pragmatik* 52, Germanistisches Institut der Universität Lund.
- Frey, Werner. 2004b. A Medial Topic Position for German. *Linguistische Berichte* 198, 153–190.
- Fries, Norbert. 1988. Über das Null-Topik im Deutschen. *Forschungsprogramm Sprache und Pragmatik* 3, Germanistisches Institut der Universität Lund, Lund.
- Gibson, Edward. 1998. Linguistic Complexity: Locality of Syntactic Dependencies. *Cognition* 68(1), 1–76.
- Goldberg, Adele E. 2006. *Constructions at Work. The Nature of Generalization in Language*. Oxford Linguistics, Oxford, New York: Oxford University Press.
- Grewendorf, Günther. 1985. Anaphern bei Objekt-Koreferenz im Deutschen. Ein Problem für die Rektions-Bindungs-Theorie. In Werner Abraham (ed.), *Erklärende Syntax des Deutschen*, *Studien zur deutschen Grammatik*, No. 25, pages 137–171, Tübingen: originally Gunter Narr Verlag now Stauffenburg Verlag.
- Grewendorf, Günther. 1988. *Aspekte der deutschen Syntax. Eine Rektions-Bindungs-Analyse*. Studien zur deutschen Grammatik, No. 33, Tübingen: originally Gunter Narr Verlag now Stauffenburg Verlag.
- Grewendorf, Günther. 1989. *Ergativity in German*. *Studies in Generative Grammar*, No. 35, Dordrecht: Holland, Providence: U.S.A.: Foris Publications.
- Grewendorf, Günther. 2002. *Minimalistische Syntax*. UTB für Wissenschaft: Uni-Taschenbücher, No. 2313, Tübingen, Basel: A. Francke Verlag GmbH.
- Grewendorf, Günther. 2009. The Left Clausal Periphery. Clitic Left Dislocation in Italian and Left Dislocation in German. In Benjamin Shear, Philippa Cook, Werner Frey and Claudia Maienborn (eds.), *Dislocated Elements in Discourse. Syntactic, Semantic, and Pragmatic Perspectives*, *Routledge Studies in Germanic Linguistics*, pages 49–94, New York: Routledge.
- Grosu, Alexander. 1973. On the Status of the So-Called Right Roof Constraint. *Language* 49(2), 294–311.
- Gunji, Takao. 1986. Subcategorization and Word Order. In William J. Poser (ed.), *Papers from the Second International Workshop on Japanese Syntax*, pages 1–21, Stanford, CA: CSLI Publications.
- Haftka, Brigitta. 1995. Syntactic Positions for Topic and Contrastive Focus in the German Middlefield. In Inga Kohlhof, Susanne Winkler and Hans-Bernhard Drubig (eds.), *Proceedings of the Göttingen Focus Workshop, 17 DGFS, March 1–3*, *Arbeitspapiere des SFB 340*, No. No. 69, pages 137–157, Eberhard-Karls-Universität Tübingen.
- Haider, Hubert. 1984. Was zu haben ist und was zu sein hat – Bemerkungen zum Infinitiv. *Papiere zur Linguistik* 30(1), 23–36.

- Haider, Hubert. 1986. Fehlende Argumente: vom Passiv zu kohärenten Infinitiven. *Linguistische Berichte* 101, 3–33.
- Haider, Hubert. 1991. Fakultativ kohärente Infinitivkonstruktionen im Deutschen. Arbeitspapiere des SFB 340 No. 17, IBM Deutschland GmbH, Heidelberg.
- Haider, Hubert. 1993. *Deutsche Syntax – generativ. Vorstudien zur Theorie einer projektiven Grammatik*. Tübinger Beiträge zur Linguistik, No. 325, Tübingen: Gunter Narr Verlag.
- Haider, Hubert. 1997. Typological Implications of a Directionality Constraint on Projections. In Artemis Alexiadou and T. Alan Hall (eds.), *Studies on Universal Grammar and Typological Variation*, Linguistik Aktuell/Linguistics Today, No. 13, pages 17–33, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Haider, Hubert. 2001. Parametrisierung in der Generativen Grammatik. In Martin Haspelmath, Eckehard König, Wulf Oesterreicher and Wolfgang Raible (eds.), *Sprachtypologie und sprachliche Universalien – Language Typology and Language Universals. Ein internationales Handbuch – An International Handbook*, pages 283–294, Berlin: Mouton de Gruyter.
- Hauser, Marc D., Chomsky, Noam and Fitch, W. Tecumseh. 2002. The Faculty of Language: What Is It, Who Has It, and How Did It Evolve? *Science* 298, 1569–1579. <http://www.chomsky.info/articles/20021122.pdf>, 17.08.2007.
- Hinterhölzel, Roland. 2004. Language Change versus Grammar Change: What Diachronic Data Reveal about the Interaction between Core Grammar and Periphery. In Carola Trips and Eric Fuß (eds.), *Diachronic Clues to Synchronic Grammar*, pages 131–160, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Hoberg, Ursula. 1981. *Die Wortstellung in der geschriebenen deutschen Gegenwartssprache*. Heutiges Deutsch. Linguistische Grundlagen. Forschungen des Instituts für deutsche Sprache, No. 10, München: Max Hueber Verlag.
- Hoberg, Ursula. 1997. Die Linearstruktur des Satzes. In Hans-Werner Eroms, Gerhard Stickel and Gisela Zifonun (eds.), *Grammatik der deutschen Sprache*, volume 7.2 of *Schriften des Instituts für deutsche Sprache*, pages 1495–1680, Berlin/New York, NY: Walter de Gruyter. <http://www.ids-mannheim.de/gra/grammar/>, 20.07.2004.
- Hoffmann, Ludger. 1997. Zur Grammatik von Text und Diskurs. In Hans-Werner Eroms, Gerhard Stickel and Gisela Zifonun (eds.), *Grammatik der deutschen Sprache*, volume 7.1 of *Schriften des Instituts für deutsche Sprache*, pages 98–591, Berlin/New York, NY: Walter de Gruyter. <http://www.ids-mannheim.de/gra/grammar/>, 20.07.2004.
- Höhle, Tilman N. 1982. Explikation für „normale Betonung“ und „normale Wortstellung“. In Werner Abraham (ed.), *Satzglieder im Deutschen – Vorschläge zur syntaktischen, semantischen und pragmatischen Fundierung*, Studien zur deutschen Grammatik, No. 15, pages 75–153, Tübingen: originally Gunter Narr Verlag now Stauffenburg Verlag.
- Höhle, Tilman N. 1986. Der Begriff „Mittelfeld“, Anmerkungen über die Theorie der topologischen Felder. In Walter Weiss, Herbert Ernst Wiegand and Marga Reis (eds.), *Akten des VII. Kongresses der Internationalen Vereinigung für germanische Sprach- und Literaturwissenschaft. Göttingen 1985. Band 3. Textlinguistik contra Stilistik? – Wortschatz und Wörterbuch – Grammatische oder pragmatische Organisation von Rede? Kontroversen, alte und neue*, No. 4, pages 329–340, Tübingen: Max Niemeyer Verlag.
- Höhle, Tilman N. 1988. Verum-Fokus. Netzwerk Sprache und Pragmatik 5, Universität Lund-German. Inst., Lund.
- Höhle, Tilman N. 1991. Projektionsstufen bei V-Projektionen. Tübingen, ms.
- Höhle, Tilman N. 1997. Vorangestellte Verben und Komplementierer sind eine natürliche Klasse. In Christa Dürscheid, Karl Heinz Ramers and Monika Schwarz (eds.), *Sprache im Fokus. Festschrift für Heinz Vater zum 65. Geburtstag*, pages 107–120, Tübingen: Max Niemeyer Verlag.
- Huang, C.-T. James. 1984. On the Distribution and Reference of Empty Pronouns. *Linguistic*

- Inquiry* 15(4), 531–574.
- Jacobs, Joachim. 1986. The Syntax of Focus and Adverbials in German. In Werner Abraham and S. de Meij (eds.), *Topic, Focus, and Configurationality. Papers from the 6th Groningen Grammar Talks, Groningen, 1984*, Linguistik Aktuell/Linguistics Today, No. 4, pages 103–127, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Kasper, Robert T. 1994. Adjuncts in the Mittelfeld. In John Nerbonne, Klaus Netter and Carl J. Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, CSLI Lecture Notes, No. 46, pages 39–70, Stanford, CA: CSLI Publications.
- Kathol, Andreas. 2001. Positional Effects in a Monostratal Grammar of German. *Journal of Linguistics* 37(1), 35–66.
- Kaufmann, Ingrid. 1995. *Konzeptuelle Grundlagen semantischer Dekompositionsstrukturen. Die Kombinatorik lokaler Verben und prädikativer Elemente*. Linguistische Arbeiten, No. 335, Tübingen: Max Niemeyer Verlag.
- Keenan, Edward L. and Comrie, Bernard. 1977. Noun Phrase Accessibility and Universal Grammar. *Linguistic Inquiry* 8(1), 63–99.
- Kiss, Tibor. 1995. *Infinite Komplementation. Neue Studien zum deutschen Verbum infinitum*. Linguistische Arbeiten, No. 333, Tübingen: Max Niemeyer Verlag.
- Kiss, Tibor. 2001. Configurational and Relational Scope Determination in German. In Walt Detmar Meurers and Tibor Kiss (eds.), *Constraint-Based Approaches to Germanic Syntax*, Studies in Constraint-Based Lexicalism, No. 7, pages 141–175, Stanford, CA: CSLI Publications.
- Kiss, Tibor and Wesche, Birgit. 1991. Verb Order and Head Movement. In Otthein Herzog and Claus-Rainer Rollinger (eds.), *Text Understanding in LILOG*, Lecture Notes in Artificial Intelligence, No. 546, pages 216–242, Berlin/Heidelberg/New York, NY: Springer Verlag.
- Kluender, Robert. 1992. Deriving Island Constraints from Principles of Predication. In Helen Goodluck and Michael Rochemont (eds.), *Island Constraints: Theory, Acquisition, and Processing*, pages 223–258, Dordrecht/Boston/London: Kluwer Academic Publishers.
- Kluender, Robert and Kutas, Marta. 1993. Subjacency as a Processing Phenomenon. *Language and Cognitive Processes* 8(4), 573–633.
- Kohrt, Manfred. 1975. A Note on Bounding. *Linguistic Inquiry* 6, 167–171.
- Koster, Jan. 1975. Dutch as an SOV Language. *Linguistic Analysis* 1(2), 111–136.
- Koster, Jan. 1978. *Locality Principles in Syntax*. Dordrecht: Holland, Cinnaminson: U.S.A.: Foris Publications.
- Krifka, Manfred. 1998. Scope Inversion under the Rise-Fall Contour in German. *Linguistic Inquiry* 29(1), 75–112.
- Laenzlinger, Christoph. 2004. A Feature-Based Theory of Adverb Syntax. In Jennifer R. Austin, Stefan Engelberg and Gisa Rauh (eds.), *Adverbials: The Interplay Between Meaning, Context, and Syntactic Structure*, Linguistik Aktuell/Linguistics Today, No. 70, pages 205–252, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Lenerz, Jürgen. 1977. *Zur Abfolge nominaler Satzglieder im Deutschen*. Studien zur deutschen Grammatik, No. 5, Tübingen: originally Gunter Narr Verlag now Stauffenburg Verlag.
- Meinunger, André. 2000. *Syntactic Aspects of Topic and Comment*. Linguistik Aktuell/Linguistics Today, No. 38, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Meinunger, André. 2001. Restrictions on Verb Raising. *Linguistic Inquiry* 32(4), 732–740.
- Meurers, Walt Detmar. 1999a. German Partial-VP Fronting Revisited. In Gert Webelhuth, Jean-Pierre Koenig and Andreas Kathol (eds.), *Lexical and Constructional Aspects of Linguistic Explanation*, Studies in Constraint-Based Lexicalism, No. 1, pages 129–144, Stanford, CA: CSLI Publications. <http://www.sfs.uni-tuebingen.de/~dm/papers/hpsg-volume98/pvp-revisited.html>, 21.08.98.
- Meurers, Walt Detmar. 1999b. Raising Spirits (and Assigning Them Case). *Groninger Arbeiten zur Germanistischen Linguistik (GAGL)* 43, 173–226. <http://www.sfs>.



- uni-tuebingen.de/~dm/papers/gagl99.html, 18.04.2000.
- Meurers, Walt Detmar. 2000. Lexical Generalizations in the Syntax of German Non-Finite Constructions. Arbeitspapiere des SFB 340 No. 145, Eberhard-Karls-Universität, Tübingen. <http://www.sfs.uni-tuebingen.de/~dm/papers/diss.html>, 19.08.2002.
- Müller, Gereon. 1998. *Incomplete Category Fronting. A Derivational Approach to Remnant Movement in German*. Studies in Natural Language and Linguistic Theory, No. 42, Dordrecht/Boston/London: Kluwer Academic Publishers.
- Müller, Stefan. 1999. *Deutsche Syntax deklarativ. Head-Driven Phrase Structure Grammar für das Deutsche*. Linguistische Arbeiten, No. 394, Tübingen: Max Niemeyer Verlag. <http://hpsg.fu-berlin.de/~stefan/Pub/hpsg.html>, 11.08.2013.
- Müller, Stefan. 2002. *Complex Predicates: Verbal Complexes, Resultative Constructions, and Particle Verbs in German*. Studies in Constraint-Based Lexicalism, No. 13, Stanford, CA: CSLI Publications. <http://hpsg.fu-berlin.de/~stefan/Pub/complex.html>, 11.08.2013.
- Müller, Stefan. 2003. Mehrfache Vorfelddbesetzung. *Deutsche Sprache* 31(1), 29–62. <http://hpsg.fu-berlin.de/~stefan/Pub/mehr-vf-ds.html>, 11.08.2013.
- Müller, Stefan. 2004a. Complex NPs, Subjacency, and Extraposition. *Snippets* 8, 10–11. <http://hpsg.fu-berlin.de/~stefan/Pub/subjacency.html>, 11.08.2013.
- Müller, Stefan. 2004b. Continuous or Discontinuous Constituents? A Comparison between Syntactic Analyses for Constituent Order and Their Processing Systems. *Research on Language and Computation, Special Issue on Linguistic Theory and Grammar Implementation* 2(2), 209–257. <http://hpsg.fu-berlin.de/~stefan/Pub/discont.html>, 11.08.2013.
- Müller, Stefan. 2004c. Elliptical Constructions, Multiple Frontings, and Surface-Based Syntax. In Gerhard Jäger, Paola Monachesi, Gerald Penn and Shuly Wintner (eds.), *Proceedings of Formal Grammar 2004, Nancy*, Stanford, CA: CSLI Publications. <http://hpsg.fu-berlin.de/~stefan/Pub/surface.html>, 11.08.2013.
- Müller, Stefan. 2005a. Zur Analyse der deutschen Satzstruktur. *Linguistische Berichte* 201, 3–39. <http://hpsg.fu-berlin.de/~stefan/Pub/satz-lb.html>, 11.08.2013.
- Müller, Stefan. 2005b. Zur Analyse der scheinbar mehrfachen Vorfelddbesetzung. *Linguistische Berichte* 203, 297–330. <http://hpsg.fu-berlin.de/~stefan/Pub/mehr-vf-lb.html>, 11.08.2013.
- Müller, Stefan. 2007. Qualitative Korpusanalyse für die Grammatiktheorie: Introspektion vs. Korpus. In Gisela Zifonun and Werner Kallmeyer (eds.), *Sprachkorpora – Datenmengen und Erkenntnisfortschritt*, Institut für Deutsche Sprache Jahrbuch 2006, pages 70–90, Berlin: Walter de Gruyter. <http://hpsg.fu-berlin.de/~stefan/Pub/intro-korpus.html>, 11.08.2013.
- Müller, Stefan. 2008. Depictive Secondary Predicates in German and English. In Christoph Schroeder, Gerd Hentschel and Winfried Boeder (eds.), *Secondary Predicates in Eastern European Languages and Beyond*, Studia Slavica Oldenburgensia, No. 16, pages 255–273, Oldenburg: BIS-Verlag. <http://hpsg.fu-berlin.de/~stefan/Pub/depiktiv-2006.html>, 11.08.2013.
- Müller, Stefan. 2013. *Head-Driven Phrase Structure Grammar: Eine Einführung*. Stauffenburg Einführungen, No. 17, Tübingen: Stauffenburg Verlag, third edition. <http://hpsg.fu-berlin.de/~stefan/Pub/hpsg-lehrbuch.html>, 11.08.2013.
- Netter, Klaus. 1992. On Non-Head Non-Movement. An HPSG Treatment of Finite Verb Position in German. In Günther Görz (ed.), *Konvens 92. 1. Konferenz „Verarbeitung natürlicher Sprache“*. Nürnberg 7.–9. Oktober 1992, Informatik aktuell, pages 218–227, Berlin/Heidelberg/New York, NY: Springer Verlag. [http://www.dfki.de/lt/publications\\_show.php?id=420](http://www.dfki.de/lt/publications_show.php?id=420), 29.07.2004.

- Olsen, Susan. 1981. *Problems of seem / scheinen Constructions and their Implications for the Theory of Predicate Sentential Complementation*. Linguistische Arbeiten, No. 96, Tübingen: Max Niemeyer Verlag.
- Önnerfors, Olaf. 1997. *Verb-erst-Deklarativsätze. Grammatik und Pragmatik*. Lunder Germanistische Forschungen, No. 60, Stockholm: Almqvist and Wiksell International.
- Paul, Hermann. 1919. *Deutsche Grammatik. Teil IV: Syntax*, volume 3. Halle an der Saale: Max Niemeyer Verlag, 2nd unchanged edition 1968, Tübingen: Max Niemeyer Verlag.
- Pollard, Carl J. 1996. On Head Non-Movement. In Harry Bunt and Arthur van Horck (eds.), *Discontinuous Constituency*, Natural Language Processing, No. 6, pages 279–305, Berlin/New York, NY: Mouton de Gruyter, veröffentlichte Version eines Ms. von 1990.
- Pollard, Carl J. and Sag, Ivan A. 1992. Anaphors in English and the Scope of Binding Theory. *Linguistic Inquiry* 23(2), 261–303.
- Przepiórkowski, Adam. 1999. On Case Assignment and “Adjuncts as Complements”. In Gert Webelhuth, Jean-Pierre Koenig and Andreas Kathol (eds.), *Lexical and Constructional Aspects of Linguistic Explanation*, Studies in Constraint-Based Lexicalism, No. 1, pages 231–245, Stanford, CA: CSLI Publications.
- Reape, Mike. 1994. Domain Union and Word Order Variation in German. In John Nerbonne, Klaus Netter and Carl J. Pollard (eds.), *German in Head-Driven Phrase Structure Grammar*, CSLI Lecture Notes, No. 46, pages 151–198, Stanford, CA: CSLI Publications.
- Reis, Marga. 1974. Syntaktische Hauptsatzprivilegien und das Problem der deutschen Wortstellung. *Zeitschrift für Germanistische Linguistik* 2(3), 299–327.
- Reis, Marga. 1980. On justifying Topological Frames: ‘Positional Field’ and the Order of Non-verbal Constituents in German. *Documentation et Recherche en Linguistique Allemande Contemporaine* 22/23, 59–85.
- Reis, Marga. 1982. Zum Subjektbegriff im Deutschen. In Werner Abraham (ed.), *Satzglieder im Deutschen – Vorschläge zur syntaktischen, semantischen und pragmatischen Fundierung*, Studien zur deutschen Grammatik, No. 15, pages 171–211, Tübingen: originally Gunter Narr Verlag now Stauffenburg Verlag.
- Reis, Marga. 1995. *Wer glaubst Du hat recht?* On the So-called Extractions from Verb-Second Clauses and Verb-First Parenthetical Constructions in German. *Sprache und Pragmatik* 36, 27–83.
- Rizzi, Luigi. 1982. Violations of the *wh* Island Constraint and the Subjacency Condition. In Luigi Rizzi (ed.), *Issues in Italian Syntax*, Studies in Generative Grammar, pages 49–76, Dordrecht: Holland, Cinnaminson: U.S.A.: Foris Publications.
- Rizzi, Luigi. 1997. The Fine Structure of the Left Periphery. In Liliane Haegeman (ed.), *Elements of Grammar*, pages 281–337, Dordrecht: Kluwer Academic Publishers.
- Rohrer, Christian. 1996. Fakultativ kohärente Infinitkonstruktionen im Deutschen und deren Behandlung in der Lexikalisch Funktionalen Grammatik. In Gisela Harras and Manfred Bierwisch (eds.), *Wenn die Semantik arbeitet. Klaus Baumgärtner zum 65. Geburtstag*, pages 89–108, Tübingen: Max Niemeyer Verlag.
- Rosengren, Inger. 1993. Wahlfreiheit und Konsequenzen: Scrambling, Topikalisierung und FHG im Dienste der Informationsstrukturierung. In Marga Reis (ed.), *Wortstellung und Informationsstruktur*, Linguistische Arbeiten, No. 306, pages 251–312, Tübingen: Max Niemeyer Verlag.
- Ross, John Robert. 1967. *Constraints on Variables in Syntax*. Ph.D.thesis, MIT, reproduced by the Indiana University Linguistics Club. <http://www.eric.ed.gov/>, 06.04.2010.
- Scherpenisse, Wim. 1986. *The Connection Between Base Structure and Linearization Restrictions in German and Dutch*. Europäische Hochschulschriften, Reihe XXI, Linguistik, No. 47, Frankfurt/M.: Peter Lang.
- Strunk, Jan and Snider, Neal. 2013. Extraposition without Subjacency. In Gert Webelhuth, Man-

- fred Sailer and Heike Walker (eds.), *Rightward Movement in a Comparative Perspective*, Linguistik Aktuell/Linguistics Today, No. 200, Amsterdam/Philadelphia: John Benjamins Publishing Co.
- Thiersch, Craig L. 1978. *Topics in German Syntax*. Dissertation, M.I.T.
- Tomasello, Michael. 2003. *Constructing a Language: A Usage-Based Theory of Language Acquisition*. Cambridge, MA: Harvard University Press.
- Uszkoreit, Hans. 1987. *Word Order and Constituent Structure in German*. CSLI Lecture Notes, No. 8, Stanford, CA: CSLI Publications.
- van de Velde, Marc. 1978. Zur mehrfachen Vorfeldbesetzung im Deutschen. In Maria-Elisabeth Conte, Anna Giacalone Ramat and Paolo Ramat (eds.), *Wortstellung und Bedeutung: Akten des 12. Linguistischen Kolloquiums, Pavia 1977*, Linguistische Arbeiten, No. 61, pages 131–141, Tübingen: Max Niemeyer Verlag.
- Weisweber, Wilhelm and Preuss, Susanne. 1992. Direct Parsing with Metarules. In Antonio Zampolli (ed.), *14th International Conference on Computational Linguistics (COLING '92), August 23–28*, pages 1111–1115, Nantes, France: Association for Computational Linguistics. <http://acl.ldc.upenn.edu/C/C92/C92-4174.pdf>, 27.07.2003.
- Yip, Moira, Maling, Joan and Jackendoff, Ray S. 1987. Case in Tiers. *Language* 63(2), 217–250.
- Zaenen, Annie, Maling, Joan and Thráinsson, Höskuldur. 1985. Case and Grammatical Functions: The Icelandic Passive. *Natural Language and Linguistic Theory* 3(4), 441–483. <http://www2.parc.com/istl/members/zaenen/publications/Passive.pdf>, 04.12.2006.
- Zubizarreta, Maria Luisa. 1998. *Prosody, Focus and Word Order*. Cambridge, MA: MIT Press.