
Syntax

A Medial Topic Position for German*

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Abstract

Drawing on a variety of different phenomena the paper argues for the existence of a designated topic position in the middle field of the German clause. This implies that German is discourse configurational with regard to topics. The result allows some basic questions to be addressed, including the possible number of sentence topics, the possibility of topics in embedded clauses, the question whether there is a dependence between scrambling and topicality, and the question whether the generic interpretation of a bare plural subject is dependent on its topical status. Moreover, a proposal for the structural representation of the medial topic position is put forward.

1 The concept ‘sentence topic’

The famous characterization of the concept ‘topic’ by Hockett (1958: 201) reads as follows:

- (1) “The most general characteristic of predicative constructions is suggested by the terms ‘topic’ and ‘comment’ for their ICs: the speaker announces a topic and then says something about it.”

The following sentences may serve as illustration¹:

- (2) a. /PEter forderte Maria zum \TANzen auf
P. asked M. to dance PRE
b. /MAria wurde von Peter zum \TANzen aufgefordert
M. was by P. to dance PRE asked

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¹ Capitals mark stressed syllables; ‘/’: rise, ‘\’: fall.

- c. Die Poli\ZEI kommt
the police comes
 ‘The police are coming’

(2a) is a statement which is understood primarily as talking about the referent of *Peter*.² The term *Peter* is the sentence topic of (2a). The rest of the clause constitutes the comment. In (2b), it is the referent of the term *Maria* which is understood as the object the sentence is primarily about. The sentences (2a) and (2b) make it clear that sentences which are semantically equivalent may exhibit different topic-comment structures.

In contrast to (2a, b), the sentence (2c) is not split up into topic and comment. One does not have the impression here that a referent is foregrounded and then a property is predicated of this referent. Instead, the sentence is felt to describe an event in an unstructured way.

Hockett’s (1958) characterization of topics is not the only one which can be found in the literature. In fact, there are many others. However, according to Reinhart (1981, 1995) one can distinguish two main schools of thought for the explication of the concept ‘sentence topic’:

- (3) (i) A topic is an expression whose referent the sentence is about (see Hockett’s definition cited in (1)). The concept topic is a category of pragmatic aboutness (aboutness concept of topic).
 (ii) Topics are those expressions whose referents have been already introduced into the discourse or are for other reasons already familiar to the discourse participants (familiarity concept of topic).

To a large extent, the literature may be classified accordingly. For example, Reinhart (1981, 1995) and Molnár (1991, 1998) argue for (3i) as the appropriate explication of topichood, whereas e.g. Kuno (1972), Krifka (1992), Haftka (1995), Jäger (1996) and Rizzi (1997) subscribe to the explication (3ii). Some authors assume both (3i) and (ii), i.e. they assume that the topic has to be familiar to the hearer, and that a sentence is about its topic (e.g. Gundel (1988), Lambrecht 1994, Vallduví & Engdahl 1996, Erteschik-Shir 1997, Choi 1999).

² Note that this referent does not have to be understood as being contrasted with other accessible referents. Thus, a sentence like (2a) has to be distinguished from the so called ‘I-topicalization’ as found in the following example (‘√’ marks fall-rise):

- (i) √Peter forderte eine Dame zum \TANzen auf (aber √OTto blieb einfach
P. asked a lady to dance PRE (but O. remained simply
 \SITzen)
seated)

In a construction with I-topicalization, a contrastive reading is induced for both stressed constituents. Jacobs (2001) also uses the sign ‘/’ for the stress pattern for the ‘neutral’ marking of a sentence topic and the sign ‘√’ for the fall-rise contour typical for the first stressed element in I-topicalization. Note, however, that in Buring (1996), a study about I-topicalization, the sign ‘/’ is used for marking the fall-rise contour. I will come back to I-topicalization in Section 3.9.

The present study will argue that it is the aboutness concept of topic which is the appropriate notion to describe the facts - at least of German.

The explication (3ii) has the advantage that there are precise semantic tools to model the property of familiarity (see e.g. Jäger 1996). The same is not quite true for (3i). However, Reinhart (1981) proposes an analogy to illustrate the aboutness concept. During the discourse, a context set is constructed which contains the set of propositions accepted to be true at this point. According to Reinhart (1981), the propositions in the context set are not stored there in an unordered way but according to ordering principles. One of these principles relates the propositions to the discourse referents which are designated by the sentence topics. This ordering principle is similar to the ordering principle of a subject catalogue of a library. A topic functions like an entry of a subject catalogue under which information is stored.

The paper is organized as follows. In Section 2, the question is raised whether there is a special position for sentence topics in German. It is argued that, contrary to standard assumptions, the answer is 'yes' if the middle field is taken into account. Thus, German is discourse configurational with respect to topics. In Section 3, this finding is used to answer different central questions related to the phenomena of topicality, among others the question what is the right explication for topics in German, the question how many topics are possible in a clause, and the question whether scrambling and topicality go together. In Section 4 the thesis that the position of topics in German is just an effect of linearization without the involvement of a designated structural position is discussed and refuted. Section 5 discusses syntactic properties of the topic position in the middle field and offers a proposal for its structural representation.

2 Topics in German

2.1 Current view of the topic position in German

In German, being a V-second language, in an independent declarative clause the finite verb is in second position following the so called 'prefield'. In a finite clause introduced by a complementizer or in a non-finite clause, all verbal elements occur at the end of the clause. It is standard to assume that the position of the finite verb in a V-second clause and the position of a complementizer in a V-end clause are one and the same (the C-position in many frameworks). The part of the clause which is between the position of the finite verb/the complementizer and the verbal elements at the end is called the 'middle field'.

- (4) a. Den Hans wird Maria morgen treffen
the^{ACC} H. will M. tomorrow meet
 PREFIELD VFIN MIDDLE FIELD VERBAL COMPLEX
 ‘Tomorrow Mary will meet Hans’
- b. dass Maria morgen den Hans treffen wird
 COMP MIDDLE FIELD VERBAL COMPLEX
 ‘that tomorrow Mary will meet Hans’

Most syntacticians working on topics in German assume that topics have to be placed in the prefield of a German clause (e.g. Müller & Sternefeld 1993, Vallduví & Engdahl 1996, Molnár 1991, 1998, Jacobs 2001 for prototypical topics). Note, however, that phrases of different informational statuses can be positioned in the prefield. Consider the following sentences:

- (5) a. /PAUL will heute in die \Oper gehen
P. wants today to the opera go
- b. Wer geht in die Oper?
who goes to the opera
 \PAUL geht in die Oper
P. goes to the opera
- c. Die Poli\ZEI kommt
the police comes
- d. Keiner wollte Otto \GELD leihen
no one wanted O.^{DAT} money lend

As already mentioned in Section 1, the indicated intonation in (5a) has the effect that *Paul* is regarded as a sentence topic. In (5b) the same item constitutes the informative part of an answer to a constituent question. It constitutes the narrow focus of the clause. In (5c), the subject *die Polizei* situated in the prefield is projecting its focus to the whole clause. It is the subject of athetic clause, a construction which is generally thought to have no topic. Finally, the non-focussed constituent in the prefield of the unmarked clause (5d) is a quantified DP, an expression normally thought not to be a possible topic (see the next section).

Given the assumption that topics have to be moved to the prefield and given the fact that non-topics may also be moved to the prefield, the standard view is that in a canonical German clause there is no position which is reserved exclusively for topics (cf. e.g. Lambrecht 1994, Vallduví & Engdahl 1996, Molnár 1991, 1998). Hence German is not considered to be discourse configurational with respect to topics.

It is a standard assumption in theories of information structure that topics have to occur at the beginning of a clause.³ As a result, the assumption that in

³ This view has a long tradition. Halliday (1967) even defined sentence topics as the first expression in a clause. However, the criticism of this view also has a long tradition. Reinhart (1981)

German, topics have to be placed in the prefield is often taken for granted. However, I think it can be shown that the data are not so clear after all. Therefore, it seems reasonable to reopen the issue of the topic position in German.

In the following section, it will be argued that in German, topics may in fact appear in the middle field. What is more, it will be argued that if one considers the middle field one even finds that German has a designated position for topics, i.e. that there is a position which is reserved for topics.

2.2 A new approach

Whereas according to the standard view there is no special position for topics in German, I believe that one comes to the opposite conclusion if one considers the middle field. Therefore, I would like to formulate the following central claim of the paper (cf. Frey & Pittner 1998, Pittner 1999):

- (6) In the middle field of the German clause, directly above the base position of sentential adverbials (SADVs), there is a designated position for topics: all topical phrases occurring in the middle field, and only these, occur in this position.

According to (6), German is discourse configurational with respect to topics: There is a special syntactic position which encodes the informational status of being a sentence topic.

In (6) the category of SADVs figures prominently. The term ‘SADV’ refers to adverbials which express the speaker’s estimation of an eventuality,⁴ e.g. *glücklicherweise* (‘fortunately’), *anscheinend* (‘apparently’), *sicherlich* (‘certainly’). Thus, temporal or locative adverbials, for example, are not among the SADVs. According to e.g. Frey (2003), different adverbial classes have different base positions in the German middle field. In their neutral use, in which SADVs characterize the whole proposition without any presupposition, SADVs have a structurally very high base position. In fact, the base position of a SADV is higher than the base positions of any argument and of any other adverbial.

SADVs may also have a focus inducing use (Jacobs 1986). In this use, the SADV relates to one narrowly focussed constituent of the clause, the rest of the clause being presupposed. As focus inducers, SADVs have special properties. In

argued that if topics are defined independently of position, it is incorrect even for English to assume that topics have to occur sentence initially.

⁴ Or, in case a SADV occurs in the clausal complement of a verb of propositional attitude, the SADV characterizes the estimation of the subject of the matrix clause:

(i) Hans glaubt, dass wahrscheinlich keiner kommen wird
H. believes that probably no one come will

particular, their distribution is very different compared to their neutral appearance.⁵ In the following, the focus inducing use of SADVs is not relevant and the reader is asked to disregard any focus inducing readings of SADVs which might be possible by narrowly focussing an accompanying constituent.

Let us now move to the justification of the claim in (6). Different phenomena support this claim:

(I) *the context forces aboutness*

Consider the following example:

- (7) Ich erzähle dir etwas über Maria.
I tell you something about M.
 a. Nächstes Jahr wird Maria wahrscheinlich nach London gehen
next year will Mary probably to London go
 ‘Next year Mary will probably go to London’
 b. #Nächstes Jahr wird wahrscheinlich Maria nach London gehen

In the given context, (7a) is fine, and (7b) is not possible. In (7a), *Maria* precedes the SADV; in (7b) it follows the SADV. The context requires that in these sentences *Maria* should be a sentence topic.⁶ Thus, the contrast between (7a) and (7b) shows that in this case *Maria* has to precede a SADV. This is just what we would expect given (6). According to (6), a sentence topic which occurs in the middle field of a German clause has to precede a SADV.

We find the same effect with an object:

⁵ For example, as a focus inducer, a SADV might even be positioned in the prefield together with the focussed constituent it relates to:

- (i) Dem OTto anscheinend/anscheinend dem OTto hat sich Maria anvertraut
the^{DAT} O. apparently has REFL M. confided (in)

A SADV which occurs in the prefield together with another constituent can only have the focus inducing reading. Note, that under standard assumptions, in the normal case only one constituent may appear in the prefield.

⁶ To phrase it in the library metaphor of Reinhart (1981): The given context demands that the information of the following sentence should be stored under the entry ‘*Maria*’. Thus, if the following sentence contains the item *Maria*, i.e. the item which gives the entry under which the information of the sentence has to be stored, *Maria* necessarily is topical. Note that the sentence following the given context does not have to contain the item *Maria*. For the text to be coherent, it seems sufficient that the sentence contains information which, in some sense, is relevant to *Maria*, cf.:

- (i) Ich erzähle dir etwas über Maria.
 Nächstes Jahr wird ihre Tochter nach London gehen
Next year will her daughter to London go

In this case, the following sentence may or may not contain a sentence topic. If it contains a topic, this means that the information of the sentence will be stored under two entries: under the one given by the context, i.e. the entry ‘*Maria*’, and under the one given by the sentence topic.

- (8) Ich erzähle dir etwas über Paul.
 a. Bald wird den Paul erfreulicherweise eine vornehme Dame
soon will the^{ACC} P. fortunately a fine lady
 heiraten
marry
 b. #Bald wird erfreulicherweise den Paul eine vornehme Dame heiraten

The context requires that the object has to be established as a sentence topic. The examples show that it has to precede a SADV.

Note that it is not the definiteness of the phrases which triggers the preposing in (7) and (8). For example, a definite subject which is not forced to be a topic may very well follow a SADV:

- (9) Heute wird wahrscheinlich Ronaldo von Anfang an spielen
today will probably R. from the beginning play

(II) *non-referential expressions*

Quantificational phrases cannot be topics. This follows in both popular conceptions of topics, the aboutness concept or the familiarity concept. A quantificational phrase is not familiar, and a quantificational phrase does not point to a referent in the context set as would be needed for the aboutness relation (cf. Reinhart 1981). The examples (10a, c) show that in the middle field a quantificational phrase cannot appear in front of a SADV:

- (10) a. *Während des Vortrags haben mindestens zwei leider
during the lecture have at least two unfortunately
 geschlafen
slept
 b. Während des Vortrags haben leider mindestens zwei geschlafen
 c. *weil fast jeder erstaunlicherweise heute arbeitet
since almost everyone surprisingly today works
 d. weil erstaunlicherweise fast jeder heute arbeitet

Thus, the data (10a, c) show that phrases which, by their inherent properties, cannot be topics cannot appear in the position which according to (6) is reserved for topics.

(III) *cataphoric pronouns*

According to Reinhart (1981, 1995) (based on Kuno 1972) a cataphoric pronoun has to relate to a topic. The following data show that an expression which is coreferential with a cataphoric pronoun and which occurs in the middle field has to be in front of a SADV, thereby again confirming (6):

- (11) a. Weil er₁ gut trainiert hat, wird Paul₁ wahrscheinlich morgen
since he well trained has will Paul probably tomorrow
 spielen
play
 b. *Weil er₁ gut trainiert hat, wird wahrscheinlich Paul₁ morgen spielen
 c. Sein₁ Vater wird dem Hans₁ glücklicherweise bei dem
his father will the^{DAT} H. fortunately with the
 Vorhaben helfen
project help
 d. *Sein₁ Vater wird glücklicherweise dem Hans₁ bei dem Vorhaben
 helfen

Note that these data exhibit true instances of cataphoricity. (11a, c) cannot be explained by a process of reconstruction because if the reason for the coreferentiality could be explained by appeal to reconstruction of the phrase in the prefield plus movement of the phrase in the middle field which is coindexed with the pronoun across the reconstruction site, the same option should also make coreferentiality possible in (11b, d). Furthermore, we find the same effect across a sentence boundary, cf.:

- (12) a. Er₁ hat gut trainiert. Deshalb wird Paul₁ wahrscheinlich
he has well trained. Therefore will P. probably
 morgen spielen
tomorrow play
 b. *Er₁ hat gut trainiert. Deshalb wird wahrscheinlich Paul₁ morgen
 spielen

(IV) *split DPs*

Another piece of evidence for (6) concerns the split DP construction in German. In this construction, the noun (perhaps together with some attributes) is dislocated from the rest of the DP. Speakers have the intuitions that in this construction the dislocated part has the status of a topic (Pittner 1995).⁷ Normally, the dislocated part appears in the prefield but it may also appear in the middle field. Interestingly, if it does, it has to occur in front of a SADV:

⁷ The noun may also undergo 'topic drop' (cf. e.g. Huang 1984), i.e. it may be left unpronounced if positioned in the prefield (thanks to Ewa Trutkowski for drawing my attention to this fact, cf. also Kniffka 1996):

- (i) Wirst Du dir heute Hemden kaufen?
will you REFL today shirt buy
 Nein. Habe ich mir gestern schon drei gekauft
no. have I REFL yesterday already three bought

As the name suggests, according to the standard assumption an item may be 'topic dropped' only if it is a topic of the clause in which the dropping occurs.

- (13) a. weil Paul Hemden₁ leider [nur blaue t₁] gekauft hat
since P. shirts unfortunately only blue bought has
 ‘since, as for shirts, P. unfortunately only bought blue ones’
 b. *weil Paul leider Hemden₁ [nur blaue t₁] gekauft hat

(13) shows that, in the middle field, the topical part of the split DP construction has to appear in the topic position characterized by (6).

(V) *phrases with rising accent*

The example (2a) shows that in German there is an intonation pattern with two stressed items which suggests that the phrase with the rising accent is the topic of the clause. This topic may have a non-contrastive interpretation. This intonation pattern is also possible with both stressed items in the middle field:

- (14) a. Gestern forderte /PEter zum Glück Maria zum \TANzen auf
yesterday asked P. luckily M. to dance PRE
 b. Gestern forderte zum Glück /PEter Maria zum \TANzen auf

In (14a) the phrase with the rising accent precedes a SADV, in (14b) it follows a SADV. There is an interesting difference between the two examples, though. (14a) has a reading which corresponds to a reading of (2a). *Peter* is understood as a sentence topic whose referent is not contrasted with any other object. This is different with (14b). First, *Peter* is not felt to be the sentence topic. Secondly, *Peter* has a contrastive reading only. This difference between (14a) and (14b) shows that the intonation pattern which is able to trigger a ‘neutral’ topic interpretation of the phrase with a rising accent can be employed in the middle field only if the phrase with a rising accent occurs in the topic position characterized in (6).

(VI) *topic sensitive demonstratives*

Reinhart (1995), using the concepts of Ariel (1990), discusses some demonstratives in Dutch that do not relate to a highly accessible antecedent. Topics are supposed to be highly accessible antecedents. A similar datum can be found in German with the (somewhat archaic) demonstrative *derselbige*:

- (15) a. Heute hat Hans₁ zum Glück einen Job bekommen. *Derselbige₁
today has H. luckily a job got. the-same
 hat es wirklich verdient
has it really deserved
 b. Heute hat zum Glück Hans₁ einen Job bekommen. Derselbige₁ hat es
 wirklich verdient

- c. Maria hat dem Hans₁ erfreulicherweise geholfen. *Derselbige₁
Mary has the^{DAT} H. fortunately helped. the-same
 war sehr dankbar
was very grateful
- d. Maria hat erfreulicherweise dem Hans₁ geholfen. Derselbige₁ war sehr dankbar

The demonstrative *derselbige* can only relate to a phrase following a SADV. As (15) shows, this is true whether the antecedent is a subject or an object. Thus, in the case of *derselbige*, SADVs constitute a crucial borderline for the accessibility of the phrases. Given that topics are highly accessible, the data in (15) constitute additional evidence for (6).

(VII) *particles which relate to topics*

In German, there are particles which, in a sentence with normal intonation, cause the phrases they enlarge to be felt to be topics.⁸ Among them is *jedenfalls* ('at any rate'). The following sentences show that, in the middle field, an DP which is enlarged by *jedenfalls* has to occur in front of a SADV:

- (16) a. weil [Peter jedenfalls] zum Glück morgen mithelfen wird
since P. at any rate luckily tomorrow help will
 b. *weil zum Glück [Peter jedenfalls] morgen mithelfen wird
 c. Eva wird [dem Peter jedenfalls] zum Glück die Unterlagen geben
E. will the^{DAT} P. at any rate luckily the documents give
 d. *Eva wird zum Glück [dem Peter jedenfalls] die Unterlagen geben

As (16) demonstrates, this holds irrespective of the grammatical function of the enlarged DP.⁹

(VIII) *thetic sentences, presentational constructions*

With the notion 'thetic sentence', I refer to intransitive sentences in which a falling accent on the subject may induce the whole sentence to be in focus, cf. (17a). Thetic sentences describe an event in one fell swoop. They constitute a primary example of a topic free construction (cf. e.g. Drubig 1992). As (17c) shows, the subject of a thetic sentence may not precede a SADV in the middle field of a German clause. The sentence somehow sounds strange because it is understood as if a special property were being ascribed to the telephone:

⁸ This test for the claim in (6) I owe to Marga Reis (p. c.).

⁹ Only if the DP associated with the particle in question is contrastively focussed may the enlarged phrase appear after a SADV:

(i) weil zum Glück [Peter jedenfalls] morgen mithelfen wird (wenn auch nicht OTto)
since luckily P. at any rate tomorrow help will (even though not O.)

Another example of a topic sensitive particle is constituted by a special use of *aber*:

(ii) a. weil [Peter aber] leider nicht mithelfen wird
since P. however, unfortunately not help will
 b. *weil leider [Peter aber] nicht mithelfen wird

- (17) a. Das \Telefon läutet
 the telephone rings
 ‘The telephone is ringing’
 b. Beim Abendessen hat leider das Telefon geläutet
 at dinner has unfortunately the telephone rung
 c. ?Beim Abendessen hat das Telefon leider geläutet

Let us consider presentational constructions next. Note that in German the subject may be definite in such a construction:

- (18) Es spielt Max Greger für unsere Gäste die ganze Nacht
 it plays M. G. for our guests the whole night

However, the subject of a presentational construction cannot be a topic (Kuno 1972). (19a) shows that the subject of such a sentence may not precede a SADV (here: *erfreulicherweise* (‘fortunately’)):

- (19) a. *Es spielt Max Greger erfreulicherweise für unsere Gäste die ganze Nacht
 b. Es spielt erfreulicherweise Max Greger für unsere Gäste die ganze Nacht

Thus, we see that the subjects of Germanthetic and presentational sentences may not appear in front of SADVs. These constructions do not allow topical subjects. Therefore, (17) and (19) constitute additional evidence for the claim in (6).

To summarize, this section has presented the thesis that there is a designated position for topics in the middle field of the German clause. Different phenomena have been presented which support this claim.

3 Conclusions from (6)

The claim in (6) leads to definite positions on some controversies much discussed in the literature. I will discuss these consequences of (6) in the following.

3.1 The relevant notion of topic

As mentioned in Section 1, two different explications of the notion ‘sentence topic’ have been around for many years (cf. Reinhart 1981, 1995). According to the familiarity concept, topics are expressions which denote given, known

entities (e.g. Kuno 1972, Krifka 1992, Haftka 1995, Jäger 1996, Rizzi 1997). The other explication, the aboutness concept, takes as central that a topic is an expression whose referent the sentence is about (e.g. Reinhart 1981, 1995, Molnár 1991, 1998). Some authors characterize topics by both properties (e.g. Gundel 1988, Lambrecht 1994, Vallduví & Engdahl 1996, Erteschik-Shir 1997, Choi 1999).¹⁰

It is easy to show that (6) supports the pure aboutness concept of topichood without the familiarity requirement involved.

First, anaphoric phrases do not have to appear in the topic position:

- (20) Gestern hat Paul [eine nette Frau]₁ kennengelernt. Er wird
yesterday has P. a nice woman met. He will
 hoffentlich [die Dame]₁ wiedersehen
hopefully the lady see again

According to (6), the anaphorically interpreted definite description in the second clause of (20) is not a topic. Thus, (20) shows that familiarity is not a sufficient condition for being a topic in German. Therefore, theories like Jäger (1996), in which it follows that an anaphoric definite description necessarily is a topic, are incompatible with (6).

Note that it is not clear how a theory like Jäger's could account for the following difference in a presentational construction:

- (21) a. Es spielt zum Glück das schwäbische Orchester die ganze Nacht
it plays luckily the Swabian orchestra the whole night
 hindurch
through
 b. *Es spielt das schwäbische Orchester zum Glück die ganze Nacht
 hindurch

Both sentences contain an anaphoric definite description as the subject. However, only (21b), which, according to (6), has its subject in the topic position is ill-formed.

Note furthermore that even the subject of athetic sentence can be an anaphoric definite description. The following example is from Jörke (1997):

- (22) Warum trägst du deine Uhr nicht?
why wear you your watch not
 Die Batterie ist leer
the battery is empty

¹⁰ Gundel (1988: 216), for example, makes a very strong claim on this point: "two pragmatic properties, identifiability/definiteness and shared familiarity, are correlated with topic in all languages."

Given thatthetic sentences are generally assumed to be topicless, one wonders how (22) could be made compatible with an approach like Jäger (1996).

That our findings support the view that it is aboutness topics which are designated in the syntax of German is further demonstrated by indefinites. Indefinites can be topics:

- (23) Weil er₁ müde war, hat ein Student₁ leider während des
since he tired was has a student unfortunately during the
 Seminars geschlafen
seminar slept

The indefinite in (23) occurs in front of a SADV. As shown by (23), an indefinite in this position may license a cataphoric pronoun. The indefinite in (23) has a specific reading, i.e. the hearer assumes that the speaker has a certain referent in mind.¹¹ But this referent does not have to be related to any set which is already established in the discourse. Thus, the referent does not have to be in any sense familiar to the hearer. Therefore, (23) shows that familiarity is not a necessary condition for topichood. Claims to the contrary, which can often be found in the literature (cf. the references given at the beginning of this section), have to be rejected.

Our considerations are confirmed by the fact that a SADV does not necessarily separate the background material from the focus material of a clause.¹² For example, the second sentence in (24) is well-formed in the given context:

- (24) Was wird Eva heute wahrscheinlich mit Otto machen?
what will E. today probably with Otto do
 [Backgr. Heute wird Eva wahrscheinlich Otto] [Foc Krakau zeigen]
today will E. probably O. Cracow show

¹¹ That a topical indefinite necessarily has a specific interpretation is also illustrated by the difference in interpretation of the following examples:

- (i) a. Maria will einen jungen Spieler₁ unterstützen, damit er₁
M. wants a young player support so that he
 auf ein Fußballinternat gehen kann
to a football boarding-school go can
 b. Damit er₁ auf ein Fußballinternat gehen kann, will Maria einen jungen Spieler₁
 unterstützen

The indefinite in (ia) can have a specific or a non-specific interpretation, i.e., the speaker knows to which player the indefinite refers or the sentence just reports that Maria wants to support some player or other. In contrast, (ib) only has the specific interpretation of the indefinite. In (ib), the indefinite licenses a cataphoric pronoun. Therefore, the indefinite is a topic. As a topic, it has to have a specific interpretation.

¹² This view is taken by e.g. Haftka (1995), Zimmermann (1999) and Steube (2000). These authors assume that SADVs mark the boundary between elements belonging to the background and focal elements.

Although *Otto* belongs to the background of the answer in (24), it occurs after the SADV, i.e. it is a non-topic. On the other hand, material in front of a SADV, i.e. topical material, may belong to the focus of a sentence, as illustrated by the following examples:

- (25) Was ist heute passiert?
what is today happened
 Heute hat [_{Foc} ein Seminarteilnehmer leider heftig
today has a participant of the seminar unfortunately heatedly
 protestiert]
protested

These data demonstrate that the topic-comment distinction and the focus-background distinction are two information structural separations which are independent from each other.¹³

Let me briefly comment on Vallduví's (1992) and Vallduví & Engdahl's (1996) link concept. To explicate the concept of an aboutness topic, Reinhart (1981) uses the metaphor of an entry under which information is stored. Although Vallduví (1992) and Vallduví & Engdahl (1996) use a similar metaphor (i.e., a link points to an address under which information is filed), their link concept, in contrast to Reinhart's concept of an aboutness topic, is not appropriate to describe the 'middle field topics' of German. First, this is true for the trivial reason that links should always occur sentence-initially and therefore, according to Vallduví & Engdahl (1996), in German links are supposed to be positioned in the prefield. However, there are two other reasons why the link concept is not the right tool to cover our findings. One of these is that links are supposed to always be part of the background. The other is that Vallduví (1992) and Vallduví & Engdahl (1996) assume that a link is designated in a sentence

¹³ Musan (2002) argues against the central claim in (6) that in the middle field topics are preposed by considering examples like the following:

- (i) Wer hat dem Dekan den Beschwerdebrief überreicht?
who has the^{DAT} dean the complaint given
 a. (Ich glaube, dass) dem Dekan die Studenten den Beschwerdebrief
I think that the^{DAT} dean the students the complaint
 überreicht haben
given have
 b. (Ich glaube, dass) den Beschwerdebrief die Studenten dem Dekan überreicht haben

Musan reports that informants have graded the answer (ia) with an average score and the answer (ib) yet a little worse. From both data she concludes that aboutness topics are not preposed in the middle field. However, this conclusion is drawn much too fast. Musan assumes that the question in (i) requires that *dem Dekan* and *den Beschwerdebrief* are aboutness topics in the answer. This is not correct, I think. A question like the one in (i) is the typical means of inducing a special focus/background partition in the answering clause. It does not induce a definite topic/comment partition. However, also for the focus/background dimension of information structuring, no conclusion is justified on the basis of the examples in (i) because, strangely enough, Musan does not compare (i) with examples in which both phrases given in the question are treated positionally alike in the answer, i.e. both are preposed or both remain in their base positions.

only if the address pointed to by the link is a new one.¹⁴ The following example shows that this is not true for middle field topics in German. A middle field topic is also designated if it ‘points to the same address’ as the topic of the preceding clause:

- (26) In unserer Firma ist Hans₁ sicherlich der beliebteste Kollege.
in our company is H. certainly the most popular colleague
 a. Jedoch wird der nette Kerl₁ leider die Firma bald
however will the nice guy unfortunately the company soon
 verlassen
leave
 b. #Jedoch wird leider der nette Kerl₁ die Firma bald verlassen

3.2 The adverbial type which marks the topic-comment boundary

According to (6), it is the base position of the SADVs and not of any other adverbial type which marks the topic-comment boundary. The following examples demonstrate that it is crucial to distinguish the different adverbial types. Compare the following examples with (10a, c):

- (27) a. weil mindestens drei in diesem Raum geschlafen haben
since at least three in this room slept have
 b. weil fast jeder heute arbeitet
since almost everyone today works

As (27) demonstrates, it is possible to place a non-referential expression to the left of a locative or a temporal adverbial. This shows that not only topics precede these adverbials. The phenomena (III) and (VIII) of Section 2.2 prove the same. Compare the following examples with (11c) and (19a) respectively:

- (28) a. *Sein₁ Vater wird glücklicherweise dem Hans₁ heute bei dem
his father will fortunately the^{DAT} H. today with the
 Vorhaben helfen
project help
 b. Es spielt Max Greger heute für unsere Gäste
it plays M.G. today for our guests

In (28a), the object follows a SADV. Not being a topic according to (6), it cannot license a cataphoric pronoun. It is irrelevant that the object occurs in front of a temporal adverbial. (28b) shows that the subject of a presentational construction may appear in front of a temporal. Because such a subject cannot

¹⁴ Vallduví (1992: 75): “If the address relevant for information entry is the current one, there cannot be a link in the sentence.”

be a topic, this example proves the same point: in front of a temporal adverbial, non-topical phrases may appear. The same could be shown with regard to any other adverbial types apart from SADVs.

These observations support the thesis that the different adverbial types have different base positions in the middle field. In particular, they confirm the assumption made e.g. by Haftka (1995) and Frey (2003) that SADVs have a higher base position than other any adverbial type.¹⁵

3.3 The possible number of topics in a clause

With regard to the possible number of topics in a clause, there are contradictory claims in the literature. On one side, linguists like Reinhart (1981, 1995), Vallduví (1992), Molnár (1991, 1998) for any language and Jacobs (2001) for German assume that at most one topic is possible in a clause. Note that the standard view for German that topics have to be placed in the prefield implies that there can only be one topic. On the other side, e.g. Lasnik & Saito (1992), Kiss (1995), Kornfilt (1997) and Rizzi (1997) allow an unlimited number of topics in English, Hungarian, Turkish or Italian respectively.

Our findings in Section 2.2 have as a consequence that a German clause can have more than one topic. The reason is very simple: More than one phrase may precede a SADV and, given (6), we expect that all these phrases are topics (for a qualification see Section 3.9). This is confirmed by evidence (III) for example, which uses cataphoric pronouns:

- (29) Da sie₁ ihn₂ mag, wird Maria₁ Hans₂ wahrscheinlich helfen
since she him likes will M. H. probably help

Since only a topic can be coreferential with a cataphoric pronoun, it follows that the main clause in (29) contains two topics.

Evidence (VI) of Section 2.2 also shows that the phrases in the middle field to the left of a SADV all have the status of a topic:

¹⁵ Thus, if we leave out the SADV in (28a) the cataphoric pronoun becomes possible:

- (i) Sein₁ Vater wird dem Hans₁ heute bei dem Vorhaben helfen
 (i) allows an analysis in which the object is situated in the topic position characterized in (6).
 In the following sentence, the object follows a non-referential temporal adverbial:

- (ii) *Sein₁ Vater wird niemals dem Hans₁ bei dem Vorhaben helfen
his father will never the^{DAT} H. with the project help

In this case, the object cannot be analysed as being in the topic position because the preceding temporal cannot be there due to its non-referential status. Therefore, the pronoun in (ii) cannot be interpreted cataphorically.

- (30) a. Vorher hat der Hans₁ den Karl₂ leider geschlagen.
earlier hat the^{NOM} H. the^{ACC} K. unfortunately hit
 *Derselbige_{1/2} war betrunken
the-same was drunken
 b. Vorher hat leider der Hans₁ den Karl₂ geschlagen. Derselbige_{1/2} war betrunken

3.4 Are there topics in embedded clauses?

According to the standard view on topics in German, there can be no topic in an embedded clause introduced by a complementizer or in an infinitival clause, the reason being that these clauses do not have a prefield. For other languages, however, the possibility of topics in embedded clauses has been assumed (cf. e.g. by Lasnik & Saito 1992 and Rizzi 1997).

Our findings imply that in German embedded clauses may have topics:

- (31) a. Sie hat behauptet, dass Ronaldo wahrscheinlich spielen wird
she has said, that R. probably play will
 b. Er beabsichtigt, Volvos₁ in Zukunft [nur blaue t₁] zu kaufen
he intends Volvos in the future only blue to buy

In (31a) *Ronaldo* occupies the topic position in front of the SADV, in (31b) a split DP occurs in an embedded infinitival clause.

It is even possible, via the context, to force a phrase to be a topic in an embedded clause:

- (32) a. Eva glaubt von Paul₁, dass dieser fähige Kandidat₁
E. believes of P. that this able candidate
 wahrscheinlich gewinnen wird
probably win will
 b. *Eva glaubt von Paul₁, dass wahrscheinlich dieser fähige
 Kandidat₁ gewinnen wird
 c. Eva las über Paul₁, dass wahrscheinlich dieser fähige Kandidat₁
E. read about P. that probably this able candidate
 gewinnen wird
win will

In (32a, b) the matrix clause expresses that the belief which is reported in its complement clause is about the referent of *Paul*. The examples show that, in this case, the DP in the complement clause which denotes this referent has to appear in the topic position. (32c) illustrates that the preposing of the item in question is not just triggered by its anaphoric status. The matrix clause in (32c) does not establish an aboutness context for the referent of *Paul*. In this case, the

coreferring phrase in the complement clause does not have to occur in the topic position.

3.5 Scrambling and topicality

Some authors assume that scrambling of a phrase is an indication of its topical status (e.g. Meinunger 2000, Jayaseelan 2001, Eckardt 2003). However, this assumption is not compatible with our findings.

It is possible to scramble a phrase from a position below a SADV to another position below a SADV. According to (6), such a phrase will not be a topic, because it remains below the topic position. This was already illustrated in (8b), repeated here for convenience:

- (8) Ich erzähle dir etwas über Paul.
I tell you something about P.
 b. #Bald wird erfreulicherweise den Paul₁ eine
soon will fortunately the^{ACC} P. a
 vornehme Dame t₁ heiraten
fine lady marry

In (8b) the object is scrambled to a position below the SADV. Therefore, the sentence is not appropriate in a context which demands the object to be the sentence topic.

The next example demonstrates that a phrase which is scrambled to a position below a SADV is not able to license a cataphoric pronoun:

- (33) *Als er₁ nach Hause kam, hat leider den Otto₁
when he at home arrived, has unfortunately the^{ACC} O.
 bereits jemand t₁ erwartet
already someone waited for

Furthermore, although a presentational construction does not allow a topical subject, its subject may be scrambled:

- (34) a. Es spielt Erwin Lehn₁ samstags t₁ die ganze Nacht hindurch
it plays E. L. on Saturdays the whole night through
 b. *Es spielt Erwin Lehn₁ zum Glück samstags t₁ die ganze Nacht
 hindurch

The presentational constructions in (34) contain the frame adverbial *samstags*. Its base position is above the base position of the subject (Frey 2003). On the one hand, (34a) shows that it is possible to scramble the subject across the frame adverbial. On the other hand, (34b) demonstrates once more the fact that the

subject of a presentational construction may not be further scrambled to the topic position above a SADV like *zum Glück* ('luckily').

Note also that it is possible to scramble phrases which could hardly be considered as potential topics:

- (35) a. Otto will irgendetwas₁ seiner Frau t₁ zeigen
O. wants something or other his wife show
 b. In dieser Woche hat Otto mindestens eine Briefmarke₁ jeder
during this week has O. at least one stamp every
 Kollegin t₁ gezeigt
colleague shown

So the question arises why many authors associate scrambling with topicality? The following assumptions seem to be responsible. First, it is assumed that scrambling always leaves the VP and, second, that material outside of VP is topical; the boundary of VP being defined by any type of adverbial. These assumptions are not justified. As demonstrated by (36), scrambling within the VP is possible:

- (36) weil heute ein Mann französische Gedichte₁ einer Dame t₁
because today a man French poems a lady
 vorgetragen hat
recited has

Note that the target position of the scrambled bare plural in (36) is still inside the domain in which a bare plural can be existentially interpreted, which is usually taken to be the VP. Furthermore, as demonstrated in (33) and (34a), scrambling a phrase across just any type of adverbial is not enough to guarantee its topical status.

Thus, we have seen that movement in the middle field is not in general associated with topichood of the moved phrase, but rather only movement to the position characterized in (6) is.

3.6 Generic indefinites and topicality

Some authors argue that an indefinite bare plural in subject position gets a generic interpretation if and only if it is a topic (cf. e.g. Jäger 1996, Erteschik-Shir 1997, Cohen & Erteschik-Shir 2002). This view is not compatible with (6). It is still worth noting this, even though these authors use a notion of topic different to that employed in this paper, which encodes just aboutness. Given the evidence provided here showing that it is the aboutness notion of topic that is relevant in German, the following data strongly undermine the alleged

- mit der Eisenbahn spielen
with the model railway play
- b. Ich habe gehört, dass Väter erfreulicherweise an Weihnachten mit der Eisenbahn spielen
- (41) a. *Weil sie₁ Zeit haben, spielen erfreulicherweise Väter₁
since they time have play fortunately fathers
 an Weihnachten mit der Eisenbahn
on Christmas with the model railway
- b. Weil sie₁ Zeit haben, spielen Väter₁ erfreulicherweise an Weihnachten mit der Eisenbahn

The tests demonstrate that the generic bare plurals in (40a) and (41a) are not topics.

Although a generically interpreted bare plural does not have to be a topic, a bare plural which is a topic is interpreted generically in German. This follows because the only interpretation with a definite reference for a German bare plural is the generic interpretation, a specific interpretation being hardly possible.

Let us now consider bare plurals as subjects of individual level predicates (IL-predicates). An IL-predicate is a predicate whose applicability to its argument is not restricted to certain times and places. As is well-known, a bare plural subject of an IL-predicate as in (42) can only have a generic reading:

- (42) weil Frauen zielstrebig sind
because women ambitious are

There are accounts which try to explain this fact by the topical status of the subject (e.g. Jäger 1996, Erteschik-Shir 1997, Cohen & Erteschik-Shir 2002). The argumentation goes as follows: Every sentence needs to have a topic. In sentences with a stage level predicate, this role can be played by the eventuality argument because stage level predicates talk about a specific situation located in time and space, or a generic type of situation. This is not possible in the case of individual level predicates because they describe properties which are not tied to particular situations. Therefore, if there is no other argument in the sentence, as in (42), the subject argument has to be the topic. A bare plural which is a topic has a generic interpretation.

This line of reasoning is in conflict with the thesis of a designated topic position in the German middle field. It can easily be shown that although the subject of an IL-predicate is interpreted generically, it does not have to be in the topic position (although it certainly can):

- (43) weil offensichtlich Frauen zielstrebig sind
because obviously women ambitious are

Given (6), (43) demonstrates that the subject of a one-place IL-predicate does not have to be topical. Nevertheless, the bare plural subject is generically interpreted. Therefore, the fact that the bare plural subject of a sentence like (42) necessarily has a generic interpretation has to be explained without recourse to topicality (cf. for one attempt Frey 2001). Note also that in (39) the subject necessarily is interpreted generically although there are expressions available in the sentence which could in principle serve as sentence topics. This cannot be explained by Cohen & Erteschik-Shir (2002) because their account tries to explain the necessity of a generic interpretation of a bare plural by recourse to the claim that the bare plural happens to be the only expression in the clause which can be a topic.

3.7 Frames and topicality

There is a tradition of associating frame-setting expressions with topicality, cf. e.g. Chafe (1976), Jacobs (2001). However, frame-setting expressions are considered by these authors as different kinds of topic than aboutness topics. I will not try to comment on the plausibility of treating frames as a kind of topic. But what can be confirmed easily by distributional evidence is that frames are not in themselves aboutness topics. The following examples show that they do not have to occur in the topic position in the middle field (cf. also e.g. (39) and (40b) in the preceding section):

- (44) a. weil leider körperlich Peter nicht sonderlich fit ist
because unfortunately physically P. not particularly fit is
 b. weil offensichtlich in Deutschland Fußball sehr beliebt ist
because obviously in Germany soccer very popular is

In principle, frames may occur in the topic position of the middle field. However, as might be expected, this is only possible if they are referential and thereby suitable candidates for being an aboutness topic:

- (45) a. *weil körperlich leider Peter nicht sonderlich fit ist
 b. weil in Deutschland offensichtlich Fußball sehr beliebt ist

So, a frame adverbial can itself constitute an aboutness topic of a clause. The sentence (45b) is about Germany. As already mentioned above, Frey (2003) argues that the base position of frame adverbials is directly below the base position of sentence adverbials. Thus, (45b) shows that a referential frame can be moved to the topic position just as any other referential sentence constituent can. However, a non-referential frame adverbial like *körperlich* in (45a) is not a possible topic.

3.8 Topical adverbials

We can use (6) to show that adverbials may quite naturally be topics. This contradicts the claim made by e.g. Cohen & Erteschik-Shir (2002: 132) that adverbials are hard to construe as topics. In (3.7), it was demonstrated that frame adverbials can be topics. The following sentences exemplify that this is also true for other adverbial types:

- (46) a. Jemand ist dort leider gestürzt
 someone is there unfortunately fallen over
 b. Otto wird morgen wahrscheinlich eine Rede halten müssen
 O. will tomorrow probably a speech make to have
 c. Hans hat auf diese Weise leider viele Artikel geschrieben
 H. has in this way unfortunately many articles written

In (46a), it is a locative adverbial which is positioned in the topic position in the middle field, in (46b), it is a temporal adverbial, and in (46c), a manner adverbial.

If we replace the adverbials in (46) with non-referential counterparts, the sentences become ungrammatical:

- (47) a. *Jemand ist wo leider gestürzt
 someone is somewhere unfortunately fallen over
 b. *Otto wird oft wahrscheinlich eine Rede halten müssen
 O. will often probably a speech make to have
 c. *Hans hat nachlässig leider viele Artikel geschrieben
 H. has carelessly unfortunately many articles written

The examples in (47) demonstrate once more that a topical expression needs to be referential.

3.9 A position for non-topics with contrastive focus between C⁰ and the topic position

There is a position between C⁰ and the topic position characterized in (6) which is not reserved for topics. This becomes clear by considering the following examples (cf. e.g. Haider & Rosengren 1998):

- (48) a. da mindestens √EIN Bild Otto zum Glück heute
 since at least one picture O. luckily today
 fast \JEdem verkaufte
 nearly everyone^{DAT} sold

- b. obwohl ver√LIEren₁ Otto anscheinend nie und \NIMmer glaubte,
although lose O. apparently never believed
 jemals t₁ lernen zu müssen
ever learn to have
 ‘although Otto never believed that he would ever have to learn to lose’
- c. ?weil GRÜN Hans erstaunlicherweise die Tür gestrichen hat
because green H. astonishingly the door painted has
 (und nicht ROT)
(and not red)

Only contrastively focussed elements may occupy this position between C⁰ and the topic position. (48a) and (48b) contain an I-topicalization (cf. fn. 2). In an I-topicalization both stressed constituents induce a contrastive reading. In (48c) *grün* is contrastively focussed.

It can easily be shown that in the sentences in (48), the contrastively focussed elements occurring right after the complementizers are not in the topic position. In (48a), the element under discussion is a quantified expression, which cannot occur in the topic position (cf. (10)). In (48b), it is a verbal category, which has undergone long movement (Brand et al. 1992). As will be discussed in Section 5, the topic position can only be the target of short movement. In (48c), a resultative occurs after the complementizer. Under normal intonation, resultatives are not moveable at all in the middle field (c.f. e.g. Haider & Rosengren 1998, Frey & Pittner 1998). Only under contrastive focus can they marginally be moved to the position above the topic position.

The following data confirm that in (48) the phrases with special stress occurring middle field initially are not situated in the topic position:

- (49) a. ??da Otto mindestens √EIN Bild zum Glück heute fast \JEdem verkaufte
 b. *obwohl Otto ver√LIEren₁ anscheinend nie und \NIMmer glaubte, jemals t₁ lernen zu müssen
 c. *weil Hans GRÜN die Tür erstaunlicherweise gestrichen hat (und nicht ROT)

In (49) the elements under discussion are to the right of a topic and to the left of a SADV, i.e. they have to be analysed as being in the topic position. This results in ungrammaticality.

3.10 Topics in the prefield

As discussed in Section 2.1, the prefield of a German clause is not exclusively reserved for topics but it is a good position for topics. That topics can be

positioned in the prefield may also be demonstrated with the help of the topic criteria (I), (III) or (VII) of Section 2.2:

- (50) a. Ich erzähle dir etwas über Paul.
I tell you something about P.
 Den Paul wird nächstes Jahr eine vornehme Dame heiraten
the^{ACC} P. will next year a fine lady marry
 b. Er₁ hat gut trainiert. Paul₁ wird daher morgen spielen
he has well trained P. will therefore tomorrow play
 c. [Peter jedenfalls] wird morgen mithelfen
P. at any rate will tomorrow help

Because a sentence may contain several topics, cf. Section 3.3, nothing speaks against having one topic in the prefield and another one in the topic position of the middle field:

- (51) [Peter jedenfalls] wird der Eva zum Glück morgen helfen
P. at any rate will the^{DAT} E. luckily tomorrow help

4 Evidence for the structural nature of the topic position

In this section, I would like to consider evidence that (6) really talks about a designated structural topic position and does not just concern the linearization of a topic and a SADV. I will start by commenting on some arguments of Fanselow (to appear a, b) against the thesis of a designated topic position in the German middle field as formulated in (6) and in Frey (2000).

According to Fanselow (to appear a, b), it is just a matter of scope that in the middle field a topic occurs to the left of a SADV, the reason being that a topic is referential.¹⁷ However, this argument against (6) is not convincing. Referential terms are not scope sensitive:

- (52) a. weil Hans eine Linguistin / Maria einladen möchte
since H. a linguist / M. invite wants
 b. Keiner wird vermutlich Kerstin heute antreffen
no one will presumably K. today find

The sentence (52a) with the indefinite is ambiguous because an indefinite may have wide or narrow scope with respect to a modal verb. In contrast, (52a) with the referential term *Maria* has only one reading showing that there is no scope

¹⁷ Fanselow (to appear b): "Note that topic phrases are referential. It has been argued that referential phrases must have "wide scope" relative to other operators... Consequently, referential phrases must have wide scope relative to sentence level adverbs. When a language requires that scope be expressed in terms of surface structure c-command (if possible), topics will have to precede sentence level adverbs (if possible)."

interaction with the modal. (52b) demonstrates once more what has been already demonstrated above: A referential term does not have to occur to the left of a SADV, i.e., it does not have to c-command the adverbial. Thus, that a topic is preposed cannot be due just to the fact that a topic is referential.

Next, Fanselow (to appear a, b) claims that data like those discussed in Section 2.2 only concern the sequence of a topic and a SADV, i.e. they only show that a topic has to precede a SADV. Thus, according to Fanselow, topics need not be preposed at all if no SADV is present. However, the following data do not confirm this claim:

- (53) Ich erzähle dir etwas über Otto.
I tell you something about O.
 a. #Auf der Party hat fast jede Frau den Otto
at the Party has almost every woman the^{ACC} O.
 angesprochen
spoken to
 b. Auf der Party hat den Otto fast jede Frau angesprochen
- (54) a. ??In seinem₁ Auto hat keine Frau dem Otto₁ jemals einen
in his car has no woman the^{DAT} O. ever a
 Kuss gegeben
kiss given
 b. In seinem₁ Auto hat dem Otto₁ keine Frau jemals einen Kuss gegeben
- (55) a. *weil fast jeder Linguist Krimis nur amerikanische liest
since nearly every linguist thrillers only American reads
 ‘since, as for thrillers, every linguist only reads American ones’
 b. weil Krimis fast jeder Linguist nur amerikanische liest

In (53), (54), and (55) we have applied the topic criteria (I), (III), and (IV) of Section 2.2 respectively. These sentences do not contain a SADV but they contain a quantified co-argument of the phrase which is tested for topichood. The quantified co-argument by its very nature cannot be a topic. The sentences (53a), (54a), and (55a) show that if the phrase to be tested follows the quantified phrase, it cannot fulfil the topic criteria.¹⁸ In (53b), (54b), and (55b) the phrase to be tested precedes the quantified expression. In these sentences, it can be a topic. These data demonstrate definitely that our findings in the preceding sections do not just concern the linearization of a topic and SADV. In the middle field, a topical phrase has to occur to the left of any non-topical phrase (modulo the qualification in Section 3.9).¹⁹

¹⁸ See fn. 15, example (ii), for the same effect with a quantified adverbial.

¹⁹ Fanselow (to appear a, b) discusses the following example:

That, in fact, topical phrases target a designated structural position is clearly demonstrated by the following examples:

- (56) a. In Peters₁ Firma entscheidet offensichtlich er₁ über alle
in P.'s company decides obviously he about all
 Angelegenheiten
matters
 b. ??In Peters₁ Firma entscheidet er₁ offensichtlich über alle
 Angelegenheiten

In (56a), the pronoun does not induce a Principle C-violation for *Peter*, which is co-indexed with the pronoun, in (56b), if the pronoun is not focussed, it does. On the surface, the only difference between the two sentences is that in (56a) the pronoun follows the SADV and in (56b) it precedes the SADV.

These data, however, find a straightforward explanation once we take into account that in (56b) the pronoun has been moved to the topic position. The sentences in (56) contain the frame adverbial *in Peters Firma*. The frame adverbial has its base position (indicated by t_2 in (56')) above the base position of the subject and below the base position of the SADV (cf. Frey 2003):

- (56') a. [In Peters₁ Firma]₂ entscheidet offensichtlich t_2 er₁ über alle
In P.'s company decides obviously he about all
 Angelegenheiten
matters
 b. *[In Peters₁ Firma]₂ entscheidet er₁ offensichtlich t_2 t_1 über alle
 Angelegenheiten

For our purposes, it is enough to assume the following conditions for the application of the binding principles in German. For the checking of the binding conditions, a phrase in the prefield is reconstructed to its base position, whereas

-
- (i) (Ich erzähl Dir mal was über den Massenmörder Schulze.)
 ('I will tell you something about the mass murderer Schulze')
 Weil er₁ einen Hut trug, konnte kein Zeuge diese Bestie₁ zweifelsfrei
because he a hat wore could no witness this monster without doubt
 identifizieren
identify

According to Fanselow, (i) exemplifies an application of the topic criterion (III), which uses cataphoric pronouns. Fanselow claims that the well-formedness of (i) shows that topics need not be preposed if no sentence adverb is present.

I think, however, that the assumption that (i) contains a cataphoric pronoun is not correct. The context which Fanselow gives for the sentence containing the pronoun contains a phrase which is coreferential with this pronoun. Hence, the pronoun is not cataphorically related to the definite description *diese Bestie*, but is used anaphorically. Therefore, *diese Bestie* does not have to be a topic in order to make coreference with the pronoun possible. In sum, (i) is not an application of the topic criterion (III). Therefore, this example does not show that topics do not have to be moved to the left.

a phrase in the middle field stays in its surface position (cf. e.g. Haider & Rosengren 1998). In (56'a), the pronoun does not c-command the base position of the frame adverbial in the prefield, and, therefore, no Principle C-violation arises for *Peter*. However, the movement of the pronoun to the topic position in (56'b) crosses the base position of the frame adverbial. Thus, in its surface position the pronoun c-commands the base position of the frame adverbial and a Principle C-violation arises for the phrase *Peter*.²⁰

It is obvious that the explanation of these data relies heavily on the assumption that in (56a) and (56b) the pronoun occupies different structural positions. If, as Fanselow (to appear a, b) assumes, these sentences would only differ in the linearization of the pronoun and the SADV the different grammatical status of the sentences in (56) would remain mysterious.

Another piece of evidence for a structural topic position is given by the fact that a topic is not possible inside the constituent which undergoes so called 'VP-preposing':

- (57) a. *Diesen Roman jedenfalls gelesen hat Maria nicht
 this novel at any rate read has M. not
 b. *[Romane₁ immer nur russische t₁ gelesen] hat Peter
 novels always only Russian read has P.
 c. *Er₁ ist ein bekannter Schauspieler. Den Otto₁ sehen will
 he is a famous actor. The^{ACC} O. see wants
 daher jede Frau
 therefore every woman

By 'VP-preposing' a complex constituent which contains the main predicate is moved to the prefield. In (57), it is tested with the topic criteria (VII), (IV), and (III) of Section 2.2 respectively whether this constituent may contain a topic. The ungrammaticality of the sentences shows that it does not. If in the 'VP-preposing' construction in fact only VPs may be preposed, these data suggest that topics in the middle field have to occupy a designated position above the VP.

Evidence for a structural topic position is also given by the focus projection inthetic and categorial sentences:

- (58) Was ist passiert?
 'What happened?'

²⁰ Although, in this paper I cannot investigate the relation between pronouns and topicality in any depth, we should note in passing that (56a) shows that pronouns, in fact even subject pronouns, do not have to be topical in German. This observation is in conflict with the claim to be found in the literature that pronouns are inherently topical (Erteschik-Shir 1997).

- (Das Radio berichtet,
the broadcasting reports)
 a. dass JOHNson gestorben ist
 that J. died is
 b. dass Johnson geSTORben ist

In (58a), the wide focus of the clause projects from its subject. (58a) is athetic judgement. The subject of a thetic sentence cannot be a topic (cf. (VIII) in Section 2.2). Therefore, we can assume that the subject in (58a) is in its base position. Thus, given the type of verb, the subject can form an integrated structure with the verbal complex in the sense of Jacobs (1993). According to Jacobs, this makes it possible for the focus to project from the subject.

(58b) is a categorical judgement. Such a sentence is felt to have a topic-comment structure. From (6), it follows that the topical subject cannot be in its base position. Thus, according to Jacobs (1993), the prerequisite for building an integrated structure is not fulfilled and the subject cannot induce focus projection. The most deeply embedded constituent is the main predicate. From there, focus projection is possible.

Obviously, this explanation of the different intonational properties of wide focussed thetic and categorical sentences relies on the assumption that the topical subject of a categorical sentence occupies a position which is different from its base position.

5 On the structural representation of the medial topic position

According to the preceding sections, there is a designated topic position in the middle field of a German clause. We now have to consider the question how to represent this designated position. Among other linguists, Rizzi (1997) argues that pragmatic properties are represented by features which have to be checked in the syntactic structure. Rizzi (1997) assumes that topical and focal phrases must be moved to the specifier of the corresponding functional projections TopP and FocP respectively where they are licensed by checking of their features. Rizzi proposes to replace the CP-node (the positions associated with which are collectively called the 'C-domain') of the structural representation of a clause by the following projections:²¹

(59) ForceP TopP* FocP TopP* FinP

The Spec-positions of the projections in (59) are A-bar-positions. According to Rizzi (1997), focus involves quantificational A-bar binding while topic involves non-quantificational A-bar binding; the reason for this differentiation being the presence of Weak-cross-over effects with focus and their absence with topic.

²¹ ForceP relates to sentence mood and FinP to finiteness status of the clause.

Given a proposal like (59), we are faced with the question whether it is possible to treat parts of the German middle field as belonging to the C-domain of the clause in the sense of Rizzi. Note that usually the C-domain of a German clause is thought to contain either the prefield and the finite verb in a V-second clause or the position of the complementizer or of the wh-phrase in a verb-final clause. Parts of what is traditionally called the ‘middle field’ have never been considered to belong to the C-domain.

However, given that topics can also occur in the prefield, one might try to revise this picture and treat the prefield and the topic position in the middle field as part of the C-domain. ‘Medial topics’, i.e. topics positioned according to (6), and ‘outer topics’, i.e. topics in the prefield, would merely be iterations of the same thing, the difference between a ‘medial topic’ and an ‘outer topic’ being no more than an artefact of V-placement:

- (60) [_{TopP} dem Hans₂ [hat [_{TopP} Maria₁ [SADV t₁ t₂ geholfen]]]]
the^{DAT} H. has M. helped

However, it becomes clear very quickly that such an approach is not possible. This follows from the fact that topic preposing in the middle field is clause bound:

- (61) *dass dem Paul₁ anscheinend jeder glaubt, [_{CP} dass man t₁
that the^{DAT} P. apparently everyone believes that they
 den Preis zuerkennen wird]
the prize award will

(61) shows that it is not possible to move the topic of an embedded clause to the designated topic position in the middle field of a higher clause.

In contrast, movement of an element to the prefield can be long distant. This is true for elements of any informational status. Thus, topics cannot only be moved to the prefield by short movement (cf. (50)), but also by long distance movement:

- (62) Erzähle mir bitte etwas über Paul.
tell me please something about P.
 Dem Paul₁ glaubt anscheinend jeder, dass man t₁ den Preis
the^{DAT} P. believes apparently everyone that they the prize
 zuerkennen wird
award will

That the prefield may be the target of long movement, whereas the topic position in the middle field can only be occupied by phrases of the same clause

cannot be captured on the assumption of a structure like (60).²² Note that Rizzi's (1997) TopPs, which he proposes for different languages, are possible targets of long movement. The same is true e.g. for the topic position which Kiss (1995) proposes for Hungarian.²³

The property of clause boundedness of topic preposing in the middle field is shared by scrambling. As is well known, scrambling in German is clause bound:

- (63) *dass keiner dem Hans₁ glaubt, [_{CP} dass jemand t₁ helfen wird]
that no one the^{DAT} H. thinks that somebody help will

There are further properties which might be considered to group scrambling with topic preposing in the typology of movement. One such property concerns transparency. It seems that phrases situated in the topic position in the middle field are transparent for extraction, (64a). The same holds for scrambled phrases, (64b). Phrases moved to the prefield, however, seem not to be transparent, (64c).

- (64) a. Darüber₁ hat Otto [einen solchen Artikel t₁] leider
on that has O. a such article unfortunately
 damals nicht verfasst
at that time not written
 b. Darüber₁ hat Otto leider [einen solchen Artikel t₁] damals nicht
 verfasst
 c. *Darüber₁ meint Karl [[einen solchen Artikel t₁] hat Otto nicht
on that thinks K. such an article has O. not
 verfasst]
written

In examples like (64), it looks like a PP is extracted from a DP. Note, however, that there are good arguments against an extraction analysis of the splitting of a

²² Note, however, that there is a phenomenon which might give cause to give up the standard conception of the C-domain in German. In Section 3.9, data were reported which show that between the position containing a verb or a complementizer and the medial topic position there is a position which can be targeted by long movement. This position is reserved for contrastive elements. It seems natural to take this position as belonging to what is called the C-domain thereby revising the picture that in German the C-domain of a canonical clause only consists of the prefield and the position the finite verb or the complementizer occupies.

²³ There are proposals on the market which postulate a TopP in the sense of Rizzi (1997) inside IP, cf. Jayaseelan (2001) for Malayalam, German and other languages and Belletti (2002) for Italian. These authors have a rather different notion of topicality in mind than the one argued for in the present article. Jayaseelan (2001), for example, takes every phrase denoting a familiar referent to be a topic and he assumes, incorrectly in my view (cf. Section 3.5), that every scrambled phrase is a topic. However, these are not problems which are important for our current discussion. The problem why we cannot just adopt the proposal of an IP-internal TopP from these authors is the property of clause boundedness. Jayaseelan (2001) and Belletti (2002) do not raise the question whether or not the IP-internal TopP can be the target of long distance movement. Therefore, they do not propose any account of how to ensure that the IP-internal TopP may only be targeted by clause mates.

PP from a DP (cf. e.g. de Kuthy 2000). Therefore, data like (64) might be irrelevant for our question.

Another presumed instance of extraction from a sentence constituent, the *Was-für* split construction, is possible if a constituent sits in the medial topic position, (65a). It is also possible with scrambled phrases, (65b):

- (65) a. Was₁ hat Hans [t₁ für Leute] dummerweise angerufen?
what has H. for people annoyingly called
 ‘What kind of people has Hans annoyingly called’
 b. Was₁ hat dummerweise [t₁ für Leute] ein Kollege gestern
what has annoyingly for people a colleague yesterday
 angerufen?
called

It is more likely that the *Was-für* split construction is in fact an instance of extraction than is the case for the splitting of PPs from DPs illustrated in (64). (66) shows this construction is not possible with a phrase sitting in the prefield:

- (66) *Was₁ meint Maria [[t₁ für Leute] hat Hans angerufen]?
what thinks M. for people has H. called

Therefore, it seems that the difference in grammaticality between (65) and (66) constitutes additional evidence that topic preposing has the same characteristics as scrambling and is different from movement to the prefield. Note, however, that Reis (1995) offers strong arguments to the effect that regardless of the extraction site, no extraction out of a German V-second clause is possible. If this is correct, (66) does not tell us anything about freezing effects of phrases moved to the prefield, and the data (65) just show that there is no difference between the topic position and any scrambling position with regard to the *Was-für* split construction. Thus, so far clause boundedness remains the main evidence that in the typology of movement, topic preposing in the middle field has to be grouped with scrambling.

The clause boundedness of topic preposing in the middle field and scrambling does not immediately prove that these movements are instances of A-movement. Grewendorf & Sabel (1999) argue that scrambling in German is A-bar-movement. They assume that scrambling is adjunction to an AgrP, which is supposed to have only A-bar-properties. To capture the clause boundedness of scrambling, they assume that adjunction is a ‘dead end’ for movement, i.e., from an adjoined position no further movement is possible. Thus, long scrambling would have to go via a Spec-position and would result in improper movement.

If we were to adopt a proposal like this for topic preposing in the middle field, we would have to assume that movement to a TopP in the middle field has to be adjunction and movement to a TopP in the prefield has to target SpecTopP. It is hard to find any independent evidence for this difference. In

addition, the main argument of Grewendorf & Sabel (1999) for treating German scrambling as A-bar-movement is perhaps not decisive. It is based on binding data showing that an anaphor contained in the subject cannot be bound by a direct object which is scrambled to a position in front of the subject:

- (67) *weil den Studenten₁ die Lehrer von sich₁ in guter
since the^{ACC} student the teachers of himself in good
 Erinnerung behalten haben
memory kept have

However, as Hinterhölzl (2002) points out, this datum might not show what it is supposed to show because a postnominal anaphor in German like the one in (67) is subject-oriented. In (68), no scrambling has taken place:

- (68) *weil ich dem Studenten₁ die Lehrer von sich₁ gezeigt habe
since I the^{DAT} student the teachers of himself shown have

Furthermore, there are data which suggest that scrambling can create new binding possibilities:

- (69) a. weil Peters₁ Mutter ihn₁ unterstützen wird
since P.'s mother him support will
 b. *weil ihn₁ Peters₁ Mutter unterstützen wird
 c. Ihn₁ sagt Peters₁ Mutter, dass man unterstützen sollte
him say P.'s mother that they support should

In (69b), the pronoun is scrambled across the subject and induces a Principle C-violation. Note the contrast to (69c), which contains an A-bar-movement of the object of the embedded clause to the prefield of the matrix clause that does not give rise to a Principle C-effect with an element in the matrix clause.

Finally, in German verbal elements may not be scrambled but they may undergo A-bar movement to the prefield:

- (70) a. *weil Hans protestiert heute hat
since H. protested today has
 b. Protestiert hat Hans heute

Given these observations, I will assume, like many other authors (e.g. Haider & Rosengren 1998, Meinunger 2000, Hinterhölzl 2002), that scrambling is an instance of A-movement.

As to be expected, topic preposing is not only similar to scrambling with regard to clause boundedness, but it also creates new binding possibilities:

- (71) *weil ihn₁ erfreulicherweise Peters₁ Mutter unterstützen wird
since him fortunately P.'s mother support will

Thus, I assume that topic preposing is an instance of A-movement too. It is clear that the important property of clause boundedness follows immediately. Long movement to the medial topic position will result in improper movement because this movement has to pass through an A-bar-position. Long movement to the medial topic position will also violate binding condition A, which A-movement has to fulfil.

According to the standard view, only L-related positions are A-positions. L-related positions are positions which are related to features of the verb, like the Spec-positions of AgrP or TP. Because the medial topic position in German is not related to verbal inflection (tense, agreement, mood), it seems that we have to look for a modification of the standard conception of an A-position.

Kiss (1995) defines an A-position not as being related to verbal features but as being involved in what she calls 'primary predication'. However, according to Kiss (1995), an A-position may be the target of long movement out of a finite complement clause. This feature makes Kiss' (1995) notion of an A-position unsuitable for our purposes.

Holmberg & Nikanne (2002) use a conception of an A-position which is closer to the standard one but which allows some flexibility. For Finnish, Holmberg & Nikanne (2002) postulate an A-position right below the CP which they call 'FP'. The F-projection of Holmberg & Nikanne corresponds to what is standardly called 'AgrSP'. It also checks nominative case. However, according to Holmberg & Nikanne the peculiar property of FP in Finnish is that although its Spec-position is the default position for the nominative subject, other phrases may fill this position too. AgrS and nominative case are associated with the head F but are not a defining property of it. According to Holmberg & Nikanne, except when it is an expletive, a phrase in this position has topic status.

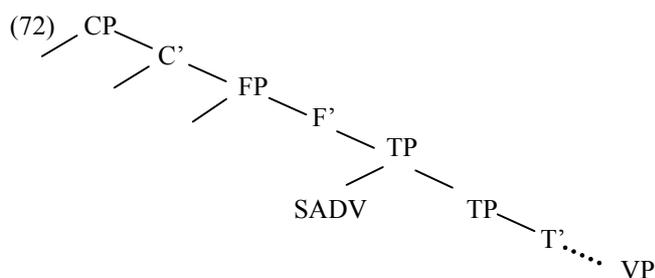
Clearly enough, there are important differences between Finnish and German. For example, German does not have an expletive in existential, ergative, and impersonal passive constructions. In Finnish, however, according to Holmberg & Nikanne, an expletive occupies SpecFP in these constructions. A further difference is that German is not a null subject language whereas Finnish is one (at least partially). According to Holmberg & Nikanne, in Finnish *pro* occupies SpecFP. Despite such differences, it is nevertheless convenient for our purposes that Holmberg & Nikanne envisage a conception of an A-position which we can use to represent the medial topic position in German.

I therefore tentatively assume that German also has available this F-projection; namely at the left periphery of the middle field (modulo the qualification in Section 3.9). In the spirit of Holmberg & Nikanne (2002), I will assume that the feature [topic] is checked by a feature of F, the 'EPP-feature'. The EPP-feature is optional. According to our findings, all [topic]-movement in

German is overt. Thus, we assume that there can be an iteration of features, i.e. F may come with several [topic]-checking EPP-features.

According to Holmberg & Nikanne (2002), in Finnish a non-subject topic occupies the same structural position as the subject topic. F has a nominative-checking feature. Thus, movement of a subject to SpecFP is movement to a case-checking position, whereas movement of a non-subject to SpecFP is movement to a non-case-position. Holmberg and Nikanne assume that phi-features and Case are part of the same indivisible feature complex, i.e., AgrS is inherently nominative in Finnish. Hence the verb can never agree with a non-subject even if that non-subject is in SpecFP. Finally, Case and phi-features are checked via Agree. Thus, case and the phi-features of the subject can be checked even when the subject remains below FP. We may adopt these assumptions for German too.

According to (6), the medial topic position in German, which we now have tentatively equated with FP, is right above the base position of the SADVs. According to e.g. Frey (2003), the base position of SADVs is above the base positions of the arguments and above the base positions of all other adverbial types. Furthermore, in Frey (2003) it is argued that a SADV is generated in a position where it c-commands the structural representative of the temporal information which appears on the finite verb. Thus, one may assume that in the German middle field a SADV is base generated just above TP or, if one does not believe in the existence of TP (and other functional projections) in the middle field of German, a SADV is base generated just above the VP-node minimally dominating the base positions of any other adverbials, of all the arguments, and of the finite verb. Whether a SADV is generated in an adjoined position or whether a SADV is in the specifier of its own functional projection merged with TP or VP could also be left open for our purposes. Just for the sake of concreteness, let us assume that a SADV is adjoined to TP:²⁴



²⁴ In the present paper, I cannot discuss the prefield of the German clause. In (72), as it is standard, the prefield is represented as SpecCP. SpecCP may be endowed with different features. However, in Frey (in prep.), I argue that [topic] is not among the features of SpecCP. Thus, a topic in the prefield (cf. Section 3.10) is first moved to the medial topic position, i.e. to SpecFP, before it is moved to its final destination.

It is possible to have multiple SADVs in a clause. It is also possible for a phrase to be positioned between two SADVs, as shown in example (73b):

- (73) a. *Während des Seminars haben mindestens zwei leider
during the seminar have at least two unfortunately
 anscheinend nicht zugehört
apparently not listened
 b. Während des Seminars haben leider mindestens zwei anscheinend
 nicht zugehört

(73a) shows that a quantified phrase may not occur in front of a series of SADVs. Given (6), this is certainly expected. What is now of interest is (73b). The wellformedness of this example indicates that the position between two SADVs is not a topic position. This is confirmed by the topic criterion which employs cataphoric pronouns:

- (74) a. Sein₁ Vater wird dem Hans₁ leider anscheinend nicht
his father will the^{DAT} H. unfortunately apparently not
 helfen
help
 b. *Sein₁ Vater wird leider dem Hans₁ anscheinend nicht helfen

(74a) shows that, as expected, a phrase in front of the SADVs can license a cataphoric pronoun. However, a phrase sitting below a SADV cannot do so. It follows that such a phrase is not topical. The same is shown by other phenomena which are sensitive to topichood. For example, the sentence in (75b) shows that the topical NP in a split-DP construction may not be positioned between two SADVs, and (76b) demonstrates that the subject in a presentational construction, which cannot be a topic, may appear between two SADVs:

- (75) a. weil Paul Hemden₁ leider offensichtlich [nur blaue t₁]
since P. shirts unfortunately obviously only blue
 gekauft hat
bought has
 ‘since, as for shirts, P. unfortunately obviously only bought blue ones’
 b. *weil Paul leider Hemden₁ offensichtlich [nur blaue t₁] gekauft hat
- (76) a. *Es spielt Max Greger erfreulicherweise wahrscheinlich bei .
It plays M.G. fortunately probably at
 diesem Fest
that celebration
 b. Es spielt erfreulicherweise Max Greger wahrscheinlich bei diesem Fest

Thus, the examples in (73)-(76) demonstrate that, in German, a phrase which is sandwiched by two SADVs does not have the status of a sentence topic.

This observation is easily explained. If there is more than one SADV in the clause, according to our assumptions, these SADVs are all adjoined to TP. Let us now consider a phrase which is positioned between two SADVs. Again, it is not crucial for our purposes what the structural representation of the target position of scrambling is. Let us again assume, just for the sake of concreteness, that scrambling is adjunction. Then any phrase sitting between two SADVs is adjoined to TP. Because the designated topic position is merged with TP, any such phrase has been moved to a position below the topic position. This explains the judgements of the b.-examples of (73)-(76). Note that it is not possible that a phrase below a SADV is sitting in the topic position with the SADV moved across the phrase. Although adverbials may be moved in the middle field (cf. e.g. Frey 2003 and Section 3.8 above), a SADV cannot be. A SADV would be moved to the topic position, which is impossible due to the non-referential status of SADVs.

6 Summary

According to the standard assumption, in German a topic is positioned in the prefield, which is commonly represented as SpecCP. Since the prefield may host elements with different informational status, German is thought not to have a position reserved for topics. In contrast, this paper has argued on the basis of different phenomena that German in fact is topic-prominent, i.e. that there is a designated position for aboutness topics in the structure of the German clause. It has been argued that the German topic position is situated right above the base position of sentence adverbials in the left periphery of the middle field (i.e., in the left periphery of the region of the German clause which is commonly represented as being dominated by the IP-node). It was shown, among other things, that a clause may contain several topics, that an embedded clause may contain topics and that scrambling in general cannot be equated with topic preposing. It was argued that the medial topic position in German is an A-position. Although not crucial for the main thesis of the paper, a proposal was adopted and sketched which allows for a non L-related A-position to check the topic-feature of a constituent moved to its specifier.

References

- Ariel, M. (1990): *Accessing Noun-Phrase Antecedents*. Routledge: London.
- Belletti, A. (2002): "Aspects of the Low IP Area". To appear in: L. Rizzi (ed.): *The Structure of IP and CP. The Cartography of Syntactic Structures*, vol. 2. Oxford: Oxford University Press.

- Brand, M., M. Reis, I. Rosengren & I. Zimmermann (1992): "Satztyp, Satzmodus und Illokution". In: I. Rosengren (ed.): *Satz und Illokution*, Bd. 1. Tübingen: Niemeyer, 1-90.
- Büring, D. (1996): *The 59th Street Bridge Accent*. Diss., Universität Tübingen.
- Chafe, W. (1976): "Givenness, Contrastiveness, Definiteness, Subjects, Topics, and Point of View". In: C.N. Li (ed.): *Subject and Topic*. New York: Academic Press, 25-55.
- Choi, H.-W. (1999): *Optimizing Structure in Context - Scrambling and Information Structure*. Stanford: CSLI Publications.
- Cohen, A. & N. Erteschik-Shir (2002): "Topic, Focus and the Interpretation of Bare Plurals". In: *Natural Language Semantics* 10, 125-165.
- Diesing, M. (1992): *Indefinites*. Cambridge, Mass.: MIT Press.
- Drubig, B. (1992): "Zur Frage der grammatischen Repräsentation thematischer und kategorischer Sätze". In: J. Jacobs (ed.): *Informationsstruktur und Grammatik*. *Linguistische Berichte Sonderheft 4/1991-92*, 142-195.
- Eckardt, R. (2003): "Manner Adverbs and Information Structure: Evidence from the Adverbial Modification of Verbs of Creation". In: E. Lang, C. Maienborn, and C. Fabricius-Hansen (eds): *Modifying Adjuncts*. Berlin: Mouton de Gruyter, 261-305.
- Erteschik-Shir, N. (1997): *The Dynamics of Focus Structure*. Cambridge: Cambridge University Press.
- Fanselow, G. (to appear a): "Zur Generierung der Abfolge der Satzglieder im Deutschen". In: S. Tanaka (ed.): *Akten des 30. Linguistenseminars*, Kyoto, Tokyo.
- Fanselow, G. (to appear b): "Free Constituent Order: A Minimalist Interface Account". In: *Folia Linguistica*.
- Frey, W. (2000): "Über die syntaktische Position der Satztopiks im Deutschen". In: K. Schwabe et al. (eds.): *Issues on Topics*. *ZAS Papers in Linguistics* 20, 137-172.
- Frey, W. (2001): "About the Whereabouts of Indefinites". In: *Theoretical Linguistics* 27.2/3, 137-161.
- Frey, W. (2003): "Syntactic Conditions on Adjunct Classes". In: E. Lang, C. Maienborn, and C. Fabricius-Hansen (eds): *Modifying Adjuncts*. Berlin: Mouton de Gruyter, 163-209.
- Frey, W. (in prep.): "The Grammar-Pragmatics Interface and the German Prefield".
- Frey, W. & K. Pittner (1998): "Zur Positionierung der Adverbiale im deutschen Mittelfeld". In: *Linguistische Berichte* 176, 489-534.
- Grewendorf, G. & J. Sabel (1999): "Scrambling in German and Japanese: Adjunction versus Multiple Specifiers". In: *Natural Language and Linguistic Theory* 17.1, 1-65.
- Gundel, J. K. (1988): "Universals of Topic-Comment Structure". In: M. Hammond et al. (eds.): *Studies in Syntactic Typology*. Amsterdam: John Benjamins, 209-239.
- Haftka, B. (1995): "Syntactic Positions for Topic and Contrastive Focus in the German Middlefield". In: I. Kohlhof, S. Winkler & H.B. Drubig (eds): *Goettingen Focus Workshop*. *Arbeitspapiere des SFB 340*, Bericht Nr. 69, 137-157.
- Haider, H. (1993): *Deutsche Syntax - Generativ*. Tübingen: Narr.
- Haider, H. & I. Rosengren (1998): "Scrambling". *Sprache und Pragmatik* 49, Lund.
- Halliday, M. A.K. (1967): "Notes on Transitivity and Theme in English, II". In: *Journal of Linguistics*, 3, 199-244.
- Hinterhölzl, R. (2002): *Scrambling*. Ms., Humboldt-Universität zu Berlin.
- Hockett, Ch. F. (1958): *A Course in Modern Linguistics*. New York: McMillan.
- Holmberg, A. & U. Nikanne (2002): "Expletive, Subjects and Topics in Finnish". In: Svenonius, P. (ed.): *Subjects, Expletives, and the EPP*. Oxford: Oxford University Press.
- Huang, C.-T. J. (1984): "On the Distribution and Reference of Empty Pronouns". *Linguistic Inquiry* 15, 531-574.
- Jacobs, J. (1986): "The Syntax of Focus and Adverbials in German". In: W. Abraham & S. de Meij (eds.): *Topic, Focus and Configurationality*. Amsterdam: John Benjamins, 103-127.

- Jacobs, J. (1993): "Integration". In: M. Reis (ed.), *Wortstellung und Informationsstruktur*. Tübingen: Niemeyer, 63-116.
- Jacobs, J. (2001): "The Dimensions of Topic-Comment". In: *Linguistics* 39/4, 641-681.
- Jäger, G. (1996): *Topics in Dynamic Semantics*. Diss., Humboldt-Universität zu Berlin.
- Jayaseelan, K.A. (2001): "IP-Internal Topic and Focus Phrases". In: *Studia Linguistica* 55(1), 39-75.
- Jörke, V. (1997): *Zur Rolle des Subjekts in der Informationsstruktur: Die Distinktion 'thetisch-kategorisch'*. Master thesis, Universität Stuttgart.
- Kiss, K. (1995): "NP Movement, Operator Movement, and Scrambling in Hungarian". In: K. Kiss (ed.): *Discourse Configurational Languages*. Oxford: Oxford University Press, 207-243.
- Kniffka, G. (1996) *NP-Aufspaltung im Deutschen*. Hürth: Gabel.
- Kornfilt, J. (1997): *Turkish*. London: Routledge.
- Krifka, M. (1992): "A Compositional Semantics for Multiple Focus Constructions". In: J. Jacobs (ed.): *Informationsstruktur und Grammatik, Linguistische Berichte Sonderheft 4/1991-92*, 17-53.
- Kuno, S. (1972): "Functional Sentence Perspective: A Case Study from Japanese and English". In: *Linguistic Inquiry* 3, 269-336.
- de Kuthy, K. (2000): *Discontinuous NPs in German*. Diss., Universität des Saarlandes.
- Lambrecht, K. (1994): *Information Structure and Sentence Form*. Cambridge: Cambridge University Press.
- Lasnik, H. & M. Saito (1992): *Move- α* . Cambridge, Mass.: MIT Press.
- Meinunger, A. (2000): *Syntactic Aspects of Topic and Comment*. Amsterdam: Benjamins.
- Molnár, V. (1991): *Das TOPIK im Deutschen und Ungarischen*. (Lunder germanistische Forschungen 58). Stockholm.
- Molnár, V. (1998): "Topic in Focus - On the Syntax, Phonology, Semantics and Pragmatics of the So-Called 'Contrastive Topic' in Hungarian and German". In: *Acta Linguistica Hungarica* 45 (1-2), 89-166
- Müller, G. & W. Sternefeld (1993): "Improper Movement and Unambiguous Binding". In: *Linguistic Inquiry* 24, 461-507.
- Musan, R. (2002): "Informationsstrukturelle Dimensionen im Deutschen". In: *Zeitschrift für germanistische Linguistik* 30, 198-221.
- Pittner, K. (1995): "Alles Extraktion oder was? Zur Distanzstellung von Quantoren im Deutschen". In: *Papiere zur Linguistik* 52 (Heft 1), 27-41.
- Pittner, K. (1999): *Adverbiale im Deutschen. Untersuchungen zu ihrer Stellung und Interpretation*. Tübingen: Stauffenburg.
- Reinhart, T. (1981): "Pragmatics and Linguistics: An Analysis of Sentence Topics". In: *Philosophica* 27, 53 - 94.
- Reinhart, T. (1995): *Interface Strategies*. Technical Report OTS Working Papers, Utrecht University.
- Reis, M. (1995): "Extraction from Verb-Second Clauses in German". In: U. Lutz & J. Pafel (eds.): *On Extraction and Extraposition in German*. Amsterdam: John Benjamins, 45-88.
- Rizzi, L. (1997): "The Fine Structure of the Left Periphery". In: L. Haegeman (ed.): *Elements of Grammar: Handbook in Generative Syntax*. Dordrecht: Kluwer, 281-337.
- Steube, A. (2000): "Ein kognitionswissenschaftlich basiertes Modell für die Informationsstrukturierung". In: J. Bayer, C. Römer (eds.): *Von der Philologie zur Grammatiktheorie*. Tübingen: Niemeyer, 213-238.
- Vallduví, E. (1992): *The Informational Component*. New York: Garland.
- Vallduví, E. & E Engdahl (1996): "The Linguistic Realization of Information Packaging". In: *Linguistics* 34, 459-519.

Zimmermann, I. (1999): "Die Integration topikalischer DPs in die syntaktische und semantische Struktur von Sätzen". In: M. Doherty (ed.): Sprachspezifische Aspekte der Informationsverteilung. Berlin: Akademie-Verlag. (= Studia Grammatica 47), 41-60.

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