

Topics Detached to the Left: On ‘Left Dislocation’, ‘Hanging Topic’, and Related Constructions in German*

Andreas Nolda
Humboldt-Universität zu Berlin
andreas.nolda@rz.hu-berlin.de

Abstract

In this paper I argue that there are three distinct constructions in Modern German in which a ‘topic constituent’ is detached to the left: *(left-)dislocated topic* (‘left dislocation’), *(left-)attached topic* (‘mixed left dislocation’), and *(left-)hanging topic* (‘hanging topic’). Presupposing the framework of Integrational Linguistics, I provide syntactic and semantic analyses for them. In particular, I propose that these constructions involve the syntactic function *(syntactic) topic*, which relates the topic constituent to the remaining part of the sentence. Dislocated and attached topic constituents function in addition as a *strong* or *weak (syntactic) antecedent* of some resumptive ‘*d*-pronoun’ form.

Dislocated topic, attached topic, and hanging topic are in turn contrasted with ‘free topics’. Being sentential units of their own, the latter are syntactically unconnected to the following sentence. In particular, they are not topic constituents.

1 Introducing the Constructions

According to common assumptions about Modern German,¹ *den Hans* in (1) and *der Hans* in (2) are ‘topic constituents’, located in a detached, though sentence-internal, position.²

- (1) Den Hans, den kenne ich
the ACC SG MASC Hans MASC this/that ACC SG MASC know I
seit langem.
for a long time
‘Hans I’ve known for a long time.’ (Cardinaletti 1988: 9)

*I am grateful to Hans-Heinrich Lieb for discussing various theoretical aspects of my analysis.

¹ See, *inter alia*, Cinque 1997; Cardinaletti 1988; Grohmann 1997; and Zifonun *et al.* 1997: 518–520.

² The interlinear glosses and the paraphrases of the examples cited from the literature are my own.

- (2) Der Hans – ich kenne diesen Kerl seit langem.
the NOM Hans I know this guy for a long time
 ‘Hans — I’ve known this guy for a long time.’

(The punctuation symbols ‘,’ and ‘–’ hint at the prosodic organization of the verbal correspondences to (1) and (2). In particular, *den Hans* and *der Hans* can constitute separate intonational phrases, but they do not have a sentence intonation of their own.) Despite their common position, the ‘topic constituents’ in (1) and (2) differ in terms of their ‘connection’ to the following part of the sentence.³ For instance, *den Hans* in (1) agrees in case with the resumptive ‘*d*-pronoun’ form *den*. *Der Hans* in (2), however, does not match the case of the demonstrative noun phrase *diesen Kerl*, which normally is coreferential with it in an utterance of the sentence. Correspondingly, (1) and (2) are commonly analysed as instances of two different constructions, called ‘left dislocation’⁴ and ‘hanging topic’.⁵

Many authors assume this or a similar⁶ dichotomous classification of German left-detached constructions. Accordingly, a sentence like (3) is considered to be an instance of either ‘left dislocation’ (see, e.g., Zifonun *et al.* 1997: 518) or of ‘hanging topic’ (this seems to be the position of Altmann 1981: 122–124, who introduced the German translation ‘*freies Thema*’ — ‘free topic’ — for ‘hanging topic’):⁷

- (3) Der Hans, den kenne ich
the NOM SG MASC Hans MASC this/that ACC SG MASC know I
 seit langem.
for a long time
 ‘As for Hans, I’ve known him for a long time.’

(Vat (1981: 101f.), Cinque (1997: 112f.), and Cardinaletti (1988: 19–23), however, regard sentences of this type as a construction in its own right, called ‘mixed left dislocation’.) In addition, Altmann (1981: 49) also assigns examples of the following sort to the class of ‘hanging topic’ (or ‘free topic’, for that matter):

³ Cf. the notion of ‘connectedness’, applied by Vat (1981) and Cinque (1997) to the phenomena at hand.

⁴ Ross (1986: 253, n. 18) attributes the term ‘left dislocation’ to Maurice Gross. German ‘left dislocation’ is sometimes called ‘contrastive (left) dislocation’, a term introduced by Thráinsson (1979: 61f., 66) for the corresponding construction in Icelandic.

⁵ The term ‘hanging topic (left dislocation)’ is attributed to Alexander Grosu by Cinque (1977: 406). The traditional term is ‘*nominativus pendens*’.

⁶ The German literature usually contrasts *Linksversetzung* (‘left dislocation’) with *freies Thema* (‘free topic’).

⁷ (3) is an example adapted from Cardinaletti 1988: 19.

- (4) Der Hans? Ich kenne diesen Kerl seit langem.
the NOM Hans I know this guy for a long time
 ‘Hans? I’ve known this guy for a long time.’
- (5) Dem Hans? Ich kenne diesen Kerl seit langem.
the DAT Hans I know this guy for a long time
 ‘(To) Hans? I’ve known this guy for a long time.’

(In contrast to (1) and (2), *der Hans* in (4) and *dem Hans* in (5) do have a sentence intonation of their own.)

In this paper I shall argue that (1), (2), and (3) exemplify three different detachment constructions, to be called ‘(left-)dislocated topic’, ‘(left-)attached topic’, and ‘(left-)hanging topic’, respectively. Presupposing the non-transformational framework of Integrational Linguistics (Lieb 1983c; for an introduction, see Lieb 1992, 1993), I shall propose that all of those constructions involve the syntactic function (*syntactic*) *topic*, relating the dislocated, attached, or hanging *topic constituent* to the remaining part of the sentence. Syntactic and semantic differences between these constructions are related to the existence or absence of an additional link between the topic constituent and some anaphoric constituent included in the remainder. It will be assumed that *den Hans* in (1) and *der Hans* in (3) are linked as (*syntactic*) *antecedents* to the pronoun form *den*, which agrees with them in number and gender. Two subtypes of antecedent will be distinguished: *strong antecedent*, linking only formally similar constituents such as the two accusative ones in (1); and *weak antecedent*, relating the nominative topic constituent in (3) to the accusative pronoun form. In (2) there is no occurrence of syntactic antecedent at all: the utterance meaning according to which *diesen Kerl* is coreferential with *der Hans* is not required by the syntax.

In contrast to (1), (2), and (3), no syntactic topic function occurs in (4) or (5). *Der Hans* in (4) and *dem Hans* in (5) constitute (possibly elliptical) sentential units of their own, which are syntactically unconnected to the following sentence. I shall continue to call them ‘free topics’ despite their not being topic constituents in the sense introduced above.⁸

This paper is organized as follows. Section 2 justifies the taxonomy of left-detachment constructions in German in terms of left-dislocated topic, left-attached topic, and left-hanging topic as well as their distinction from free topics. In section 3 I shall make my syntactic and semantic analyses of left-dislocated topic, left-attached topic, and left-hanging topic explicit and contrast them with the analyses of elliptical and non-elliptical free topics. Section 4 provides a summary of the results and suggests some generalizations

⁸ In contrast to Altmann (1981: 82–92), I do not count expressions like *was Hans betrifft* (‘as for Hans’) as free topics.

of the analyses to further constructions such as ‘right dislocation’, ‘vocatives’, and ‘split topicalization’.

Where no ambiguity is likely to arise, I shall use the terms ‘dislocated topic’, ‘attached topic’, and ‘hanging topic’ as synonyms for ‘left-dislocated topic’, ‘left-attached topic’, and ‘left-hanging topic’, respectively. The term ‘coreference’ will be used in a weak sense: the relation it denotes obtains in utterance meanings, whether syntactically and/or semantically required or not.

2 Justifying the Taxonomy

In this section I shall justify the assumption that dislocated topic, attached topic, and hanging topic are three different detachment constructions in German — that is, that they are to be analysed in three distinct, though related, ways. In addition, I shall defend the view that free topics are to be distinguished from these detachment constructions altogether.

For lack of space, mostly nominal topic constituents will be considered below. Moreover, I shall discuss only those properties which are relevant for establishing the taxonomy. (For a much more extensive empirical account, see the seminal 1981 work of Altmann.)

I shall begin by contrasting free topics with the three detachment constructions. Next hanging topic will be singled out. The final subsection compares attached topics with dislocated topics.

2.1 Free Topic

The main distinctive feature of free topics that sets them apart from detachment constructions is their own sentence intonation (in orthographic notation represented by an appropriate punctuation mark; for phonological details, see section 3 below). Let us assume that verbal sentences and other sentential units are ‘maximal’ units with a sentence intonation of their own. Thus, the free topic *der Hans* in (4) may be analysed as such a nominal non-elliptical sentential unit — provided that there are indeed such sentential units in German.⁹ In addition, *der Hans* in (4) as well as *dem Hans* in (5) can be elliptical sentences.

On the other hand, neither the hanging topic constituent *der Hans* in (2) nor the remainder *ich kenne diesen Kerl seit langem* are sentential units. For one thing, *der Hans* does not have a sentence intonation. For another, *ich kenne diesen Kerl seit langem*, which may indeed have such an intonation, is ‘non-maximal’ in the following sense: it is a proper part of a larger unit (namely (2)

⁹ Other candidates for nominal sentential units in German include ‘vocatives’ such as *Hans!* and exclamations like *Achtung!* (literally, ‘attention’).

as a whole) with a single sentence intonation. (Analogous considerations apply to the dislocated or attached topic constituents in (1) and (3).)¹⁰

Another characteristic of free topics concerns their case. Non-elliptical nominal free topics — just like hanging and attached topic constituents — always appear in the nominative. Elliptical free topics, however, can appear in other cases, too (see Altmann 1981: 124f. and Cardinaletti 1988: 8); their case is determined by some ‘omitted’ constituent. Accordingly, elliptical free topics can differ in case from a coreferential expression in the following sentence (see (5), where *dem Hans* is dative and *diesen Kerl* is accusative). (Note that both free topics and hanging topic constituents need not be taken up by a coreferential expression; for an example, see section 2.2 below.) In this respect, elliptical free topics differ from nominal hanging and attached topic constituents, which appear in the nominative only, as well as from nominal dislocated topic constituents, which always agree in case with the resumptive element.

I conclude that free topics must be distinguished from dislocated, attached, and hanging topic constituents because the former are sentential units of their own while the latter are not.¹¹ In addition, as reflected by their case, free topics come in two flavours: elliptical ones and non-elliptical ones.

2.2 Hanging Topic

Having established the distinction between free topics and detachment constructions, I shall now contrast hanging topic to dislocated topic and attached topic.

Nominal left-dislocated and left-attached topic constituents are linked to a form of one of the ‘*d*-pronouns’ ‘*der*’, singular ‘*die*’, ‘*das*’, and plural ‘*die*’ in the remaining part of the sentence. Usually, these pronouns are regarded as substantival ‘weak’ demonstratives (see, for instance, Altmann 1981: 112). Lambrecht (2001: 1074), though, classifies them as an additional set of personal pronouns, supplementing — at least in colloquial German — the ‘standard’ third person personal pronouns ‘*er*’, singular ‘*sie*’, ‘*es*’, and plural ‘*sie*’. This question will be taken up in section 3.1. In unmarked order, a ‘*d*-

¹⁰ It goes without saying that, for instance, *der Hans* in the attached topic example (3) can be transformed into a free topic constituent by changing the intonation appropriately:

- (i) a. Der Hans. Den kenne ich seit langem.
- b. Der Hans? Den kenne ich seit langem.
- c. Der Hans! Den kenne ich seit langem.

¹¹ The term ‘free topic’ can be motivated as follows. For one thing, free topics are independent sentential units. For another, they have a ‘thematizing’ discourse function.

pronoun' form resuming a dislocated or attached topic is located in the 'pre-field' (*Vorfeld*) of the sentence or clause. When the pronoun form functions as a subject, or as an object, as *den* does in (1) and (3), and the topic constituent is a nominal one, the former agrees with the latter in number and gender.¹² Regarding hanging topic, there are no such constraints as to the position or the form of a potentially coreferential constituent. For instance, *diesen Kerl* in (2), which normally is coreferential with *Hans* in an utterance of the sentence, is a full noun phrase located in the 'middle field' (*Mittelfeld*) and containing a form of a 'weak' demonstrative pronoun. What is more, *diesen Kerl* in (2) may be replaced by a neuter noun phrase like *dieses alte Haus* ('this old chap'), not agreeing with *der Hans* in gender. (The same applies to free topics.)

The coreference of the '*d*-pronoun' forms in (1) and (3) with the dislocated or the attached topic constituent is syntactically required. The coreference of *diesen Kerl* with *der Hans* in (2), however, seems to be pragmatically determined. In fact, there is no reason to assume that the coreferential reading of *diesen Kerl* in (2) — whether it is obligatory or not — is determined differently from coreferential readings of this phrase in other sentences:

- (6) Ich lade Hans nicht ein, obwohl ich diesen Kerl
I invite Hans not VERB-PRT although I this guy
 seit langem kenne.
for a long time know
 'I won't invite Hans, although I've known this guy for a long time.'

¹² The only '*d*-pronoun' form functioning as a subject complement is the neuter *das*. In this case there is no (obligatory) agreement in number and gender; note the gender mismatch in the following example:

- (i) Aber die Stimme der Deutschen Demokratischen Republik,
but the FEM voice FEM the GEN German Democratic Republic GEN
 das war Erich Honecker.
this/that NEUT was Erich Honecker
 'It was Erich Honecker who was the voice of the German Democratic Republic.'
 (*Frankfurter Allgemeine Zeitung* 2, 2004, 36)

Pronominal topic constituents in the first or second person are resumed by forms of personal pronouns:

- (ii) Ihr beide, ihr kriegt doch nie genug!
you PL both you PL get MODAL-PRT never enough
 'You two, you can't get enough!' (Altmann 1981: 112)

For resumptive elements linking non-nominal dislocated topic constituents, see Altmann 1981: chap. 5 and 12.

What is more, there are instances of hanging topic without any coreferential constituent. Accordingly, the semantic relation between the meaning of the topic constituent and that of the remaining part of the sentence is rather vague.¹³

- (7) Und Gesang – habt ihr denn hier irgendwie so einen Lehrer,
and singing have you MODAL-PRT here somehow such a teacher
 oder wie läuft das?
or how does it work
 ‘And singing — do you have a teacher or somebody like that, or how does it work?’ (Selting 1993: 309)

(Again, free topics can have similar properties.)

Like non-elliptical free topics and attached topic constituents, nominal hanging topic constituents seem to appear in the nominative only. For instance, replacing *der Hans* in (2) by its accusative or dative counterparts results in unacceptable or at least marginal sentences:

- (8) a. ?Den Hans – ich kenne diesen Kerl seit langem.
the ACC Hans I know this guy for a long time
 ‘Hans — I’ve known this guy for a long time.’
 b. *Dem Hans – ich kenne diesen Kerl seit langem.
the DAT Hans I know this guy for a long time
 ‘Hans — I’ve known this guy for a long time.’

This restriction can be explained as follows. Since the case of these topic constituents is not governed by any constituent, they appear in the nominative, which is the ‘default’ case in German.

In sum, unlike dislocated and attached topic constituents, hanging topic constituents are not syntactically linked to some anaphoric constituent in the remaining part of the sentence. Therefore hanging topic constitutes a detachment construction of its own.

2.3 Attached Topic and Dislocated Topic

What remains to be shown is that attached topic and dislocated topic are different — though related — detachment constructions.

As mentioned above, dislocated topic constituents agree in case or in other formal features with the anaphoric constituent they are linked to. In (1), for instance, both the dislocated topic constituent *den Hans* and the ‘*d*-pronoun’

¹³ The orthography and the punctuation of (7) have been normalized. According to Selting’s prosodic annotation, *Gesang* does not appear to have a sentence intonation of its own — though it could have one.

form *den* appear in the accusative. In (9) the topic constituent is likewise introduced by the same preposition as the prepositional phrase containing the coreferential pronoun form:¹⁴

- (9) Mit dem Hans, mit dem spreche ich nicht mehr.
with the DAT Hans with this/that DAT talk I not any longer
 ‘To Hans I don’t talk any longer.’

Nominal attached topic constituents, however, appear in the nominative regardless of the linking constituent’s formal features. There is a case mismatch, for example, between the nominative topic constituent *der Hans* in (3) and the accusative ‘*d*-pronoun’ form it is linked to. Similarly, the topic constituent in (10) — the attached topic variant of (9) — is neither introduced by *mit* nor does it match the case of the resumptive pronoun form:

- (10) Der Hans, mit dem spreche ich nicht mehr.
the NOM Hans with this/that DAT talk I not any longer
 ‘As for Hans, I don’t talk to him any longer.’ (Vat 1981: 101)

Dislocated topic and attached topic differ also in their semantic properties. In particular, a pronoun form contained in a dislocated topic constituent may be ‘bound’ by some element in the remaining part of the sentence, whereas this is excluded for attached topic constituents (see Vat 1981: 92–94, Grohmann 1997: 18f., Grewendorf 2002: 83, and Frey 2004). Let us consider two pairs of examples. (11) is ambiguous according to whether or not the possessive pronoun form *seinen* is interpreted as being ‘bound’ by *niemand*:

- (11) Seinen Mantel, den hat niemand vergessen.
his ACC coat this/that NOM AUX nobody forgotten
 ‘Nobody forgot his (own) coat.’
 ‘Nobody forgot his (somebody’s) coat.’ (Grewendorf 2002: 83)

In the attached topic variant, however, the ‘bound’ reading of *sein* is not available:

- (12) Sein Mantel, den hat niemand vergessen.
his NOM coat this/that ACC AUX nobody forgotten
 ‘Nobody forgot his (somebody’s) coat.’

In (13) the subject constituent *er* ‘binds’ the reflexive *sich*, contained in the dislocated topic constituent:

¹⁴ Prepositional dislocated topic constituents in which the preposition’s complement does not denote a person are resumed by a matching ‘adpositional adverb’ (*Pronominaladverb*) such as *damit* (literally, ‘there with’) or by the adverb *da* (‘there’/‘then’). For details, see Altmann 1981: chap. 5 and 12.

- (13) Den Wagen von sich, den hat er verkauft.
the ACC car of himself this/that ACC AUX he sold
 ‘He sold his (own) car.’ (Grohmann 1997: 19)

Again, the ‘bound’ interpretation of *sich* is excluded in the case of an attached topic, resulting in an unacceptable sentence:

- (14) *Der Wagen von sich, den hat er verkauft.
the NOM car of himself this/that ACC AUX he sold
 (Grohmann 1997: 19)

Thus, dislocated topic constituents are both syntactically and semantically ‘more tightly integrated’ into the remaining part of the sentence than attached topic constituents.¹⁵ I therefore assume that dislocated topic and attached topic are two different constructions.

3 Analysing the Constructions

Having justified the distinction between dislocated topic, attached topic, and hanging topic, as well as the special status of free topics, I shall now explicate the syntactic and semantic analyses I propose for them. In the first subsection I shall discuss my analysis of dislocated topic. The analyses of attached topic and hanging topic will be contrasted to it in section 3.2. The final subsection will present the analysis of elliptical and non-elliptical free topics.

The analyses presented below presuppose the framework of Integrational Linguistics, in particular Integrational Syntax and Semantics (for introductory references, see section 1). Integrational Syntax is a non-derivational, modular approach. The analyses formulated in it aim to be surface-oriented as well as semantically plausible. Integrational Semantics, in turn, combines a psychologically oriented lexical semantics with a compositional syntactic semantics in the meaning-as-use tradition. Although Integrational Linguistics is a formal, axiomatically constructed framework, I shall present the objects of my analyses — syntactic structures, sentence meaning components, and the like — in a semi-formal way only and confine myself to informal comments on them.

¹⁵ The term ‘dislocated topic’ can be justified by the following consideration: since a dislocated topic constituent could be substituted for the ‘place-holder’ it is linked to, the former can be regarded *as if* it were ‘dislocated’ from the latter’s position.

verbal forms). ‘NGr’ and ‘VGr’ stand for the *derived* constituent categories *noun group* and *verb group*.

The lower part of (15) provides the *marking structure* of the syntactic unit relative to its constituent structure. The marking structure annotates the N-, V-, and Prt-constituents in (15) by sets of *word form categories* (such as *Sing[ular] N[oun form]* or *Pres[ent tense]*) and sets of (*lexical*) *word categories* (like *SUBST[antival] DEM[onstrative pronoun]* or *[verb governing a] NOM[inative expression] + [an] ACC[usative expression]*). Lexical words such as *kennen*^W are pairs consisting of a paradigm and a lexical meaning.

The constituent structure, the marking structure, and the intonation structure make up the *syntactic structure* of (15). The *lexical interpretation* assigns lexical meanings to (the numbers of) the syntactic unit relative to the syntactic structure. Lexical meanings such as ‘know’ are conceived as potential psychological concepts. The intension of such a concept contains a property or intensional relation; its extension is the corresponding set or extensional relation.

The final component of (15) is the relational structure, which is represented by the arrows. It is determined relative to the *syntactic triple* consisting of the syntactic unit, its syntactic structure, and its lexical interpretation. The labels ‘nuc’, ‘comp²’, ‘mod’, and ‘top’ name *basic grammatical functions*: (*one-place*) *nucleus*, *two-place complement*, *modifier*, and (*syntactic*) *topic*. The constituent *kenne*₄ is a *nucleus constituent* and the pair ⟨*kenne*₄, *den*₃ *kenne*₄ *ich*₅ *seit*₆ *langem*₇⟩ is a *nucleus occurrence*. We also say that *kenne*₄ is the nucleus of *den*₃ *kenne*₄ *ich*₅ *seit*₆ *langem*₇. From these functions, traditional grammatical functions such as *predicate*, *subject*, and *object* are derived. For instance, the just mentioned nucleus occurrence is also an occurrence of predicate. The label ‘ant’ denotes (*syntactic*) *antecedent*, which is a *phoric function*. In contrast to Lieb (1993: 437, 460f.), I assume at least two derived antecedent functions, namely *str[ong] ant[ecedent]* and *w[eak] ant[ecedent]* (see below).

The constituent *seit*₆ *langem*₇ is assigned to the basic constituent category Prt instead of to the derived constituent category PrtGr because of its idiomatic status. Various suggestions have been made for the analysis of article–noun syntagms like *den*₁ *Hans*₂ in Integrational Syntax. Clearly, this question is orthogonal to the analysis of dislocated topic. For the sake of exposition, I presuppose the analysis proposed by Lieb (forthcoming), according to which *den*₁ *Hans*₂ is an analytical noun form, marked by the unit category *Definite noun form*.¹⁸

¹⁸ See Eroms 1985: 316f. for a related proposal in the framework of Dependency Grammar. Other Integrational analyses assume that *den*₁ *Hans*₂ is a noun group with the nucleus constituent *Hans*₂; the article form occurrence *den*₁ either functions as a *determiner* of *Hans*₂

In (15) *den*₁ *Hans*₂ is related to two constituents. It is the topic of *den*₃ *kenne*₄ *ich*₅ *seit*₆ *langem*₇ as well as the antecedent of *den*₃. (This is the standard analysis of dislocated topic in Integrational Syntax; see the presentation in Budde 2000b: chap. 8 *passim*.)¹⁹ The agreement of *den*₃ in number and gender with *den*₁ *Hans*₂ is related to the occurrence of antecedent. If the antecedent occurrence is in addition an occurrence of strong antecedent, then the linked constituents have to match certain additional features: nominal constituents must match each other's case, prepositional constituents the preposition, and the like. As far as I can see, strong antecedent occurs only in combination with topic.

Two alternatives to this analysis may be considered. First, *den*₁ *Hans*₂ could be analysed as a 'loose apposition' (*lockere Apposition*) to *den*₃, or *vice versa*.²⁰ However, this analysis runs into difficulties in cases where the left-dislocated topic constituent cannot appear together with the appropriate 'd-pronoun' form as an appositional group in the 'middle field':

- (16) Traurig, das bin ich schon.
sad this/that am I indeed

'Sad – I do indeed feel like that.'

- (17) a. * Ich bin das, traurig, schon.
 b. * Ich bin traurig, das, schon.

Second, *den*₃ could be regarded as an occurrence of a relative pronoun form, introducing the relative clause *den*₃ *kenne*₄ *ich*₅ *seit*₆ *langem*₇. Despite certain similarities between dislocated (as well as attached) topic and relative clause constructions,²¹ there are two major problems related to this analysis. For one thing, German relative clauses have 'verb-final' order.²² For another, non-nominal dislocated topic constituents such as *traurig* in (16) are excluded from being the antecedent of a relative 'd-pronoun' form.²³

(Lieb 1983c: 102, 134–136) or as the *head* of the whole noun group (Eisenberg 1999: 52–55).

¹⁹ Cf. the related Generative analyses of Cinque (1997: 104–110) and Cardinaletti (1988: 8–12), where the base-generated 'topic constituent' forms a chain with the resumptive 'd-pronoun' form.

²⁰ Cf. the Minimalist analysis of Grewendorf (2002: 84–87), who assumes that the 'topic constituent' is base-generated as the specifier of the resumptive 'd-pronoun'.

²¹ Both constructions involve 'd-pronouns', demonstrative or relative, which generally agree with their syntactic antecedent in number and gender.

²² For the problem of apparent 'verb-second relative clauses' in German, see Gärtner 2001.

²³ If a relative 'w-pronoun' form is substituted for *den* in (i), then the resulting sentence is acceptable:

- (i) Hans ist traurig, was ich auch bin.
Hans is sad REL-PRON I also am

- (18) * Hans ist traurig, das ich auch bin.
Hans is sad REL-PRON I also am

As mentioned in section 2.2, the ‘*d*-pronoun’ occurring in (15) is usually regarded as a substantival ‘weak’ demonstrative pronoun. Adopting a proposal of Hans-Heinrich Lieb, Budde (2000a: 383f.) assumes that the corresponding adjectival ‘*d*-pronoun’ *der/die/das*_{DEM}^W has a *deictic* lexical meaning,²⁴ paraphrased as ‘in neutral distance to the speaker’.²⁵ The content of the intension of this concept, which I shall call ‘*this/that*’, can be identified with the following intensional relation:²⁶

- (19) The relation between x_1 , x_2 , and x_3 such that

1. x_2 produces x_3 by linguistic means and
2. x_1 is an entity which is ‘at a neutral distance’ to x_2 at the time of the production of x_3 .

The attribute ‘at a neutral distance’ characterizes a spatial, temporal, or discourse-related distance which is unspecific compared to the distances appropriate for the use of the ‘strong’ demonstratives *dieser/-e/-es*^W (‘this’) and *jener/-e/-es*^W (‘that’). Pointing out that adjectival and substantival ‘*d*-pronouns’ differ in part of their dative and genitive forms, Budde proposes several substantival ‘*d*-pronouns’ in addition to *der/die/das*_{DEM}^W. Each substantival pronoun contains forms of one gender only (plus plural forms, which are unmarked for gender).²⁷ Their lexical meanings are appropriate ‘expansions’ of *this/that*. In the case at hand the content of the intension of *this/that*_{MASC}(*S*) — which is the lexical meaning of the substantival ‘*d*-pronoun’ *der*_{DEM,MASC}^W occurring in (15) — is derived from *this/that* in the following way:²⁸

²⁴ A deictic lexical meaning is a concept the intension of which involves deictic entities: utterances, speakers, hearers (see Richter 1988).

²⁵ The ‘*d*-pronoun’ *der/die/das*_{DEM}^W differs from the definite article *der/die/das*_{ART}^W in terms of prosody and lexical meaning: the latter may not occur with a non-contrastive syntactic accent and has an empty lexical meaning (its definiteness effect is introduced by syntactic semantics).

²⁶ Cf. the definition of the lexical meaning of the demonstrative pronoun *dieser/-e/-es*^W (‘this’) of Richter (1988: 244 f.).

²⁷ In addition, there is at least one substantival ‘*d*-pronoun’ containing plural forms only.

²⁸ Since *this/that*_{MASC}(*S*) makes reference to an idiolect system *S*, *this/that*_{MASC}(*S*) is a *system-relative* lexical meaning. System-relative lexical meanings were first considered for nominalizations by Lieb (1983b: 28–30).

(20) The relation between x_1 , x_2 , and x_3 such that

1. $\langle x_1, x_2, x_3 \rangle$ is an element of the extension of ‘this/that’ and
2. x_1 is an element of the extension of the lexical meaning of some masculine noun of [the idiolect system] S .

By the second condition in (20), the semantic contribution of the gender of $der_{\text{DEM,MASC}}^{\text{W}}$ is taken into account: by using its forms, one can only refer to entities in the denotation of some masculine German noun.

There is little evidence for assuming relative ‘*d*-pronouns’ which are formally identical to, but conceptually distinct from, substantival demonstrative ones. On the contrary, Integrational Syntax allows for classifying ‘ der_{MASC} ’ simultaneously as a demonstrative and a relative pronoun (see Budde 2000a: 384). Given that this classification can be confirmed by further empirical research, it contributes to an explanation of the similarities between left-dislocated topic and relative clause constructions.

As for personal ‘*d*-pronouns’ such as the one occurring in (21), they exist in colloquial German idiolect systems only:

(21) Wenn der Hans traurig ist, geht der tagelang nicht aus dem Haus.

when the Hans sad is go he for days not out

‘When Hans is sad, he doesn’t go out for days.’

It is for this very reason that I do not assume den_3 in (15) to be an occurrence of a form of a personal ‘*d*-pronoun’: although dislocated topic is used most frequently in colloquial varieties of German, it is not excluded in non-colloquial ones.

Let us now turn to the sentence meaning of (15). In Integrational Semantics, sentence meanings are conceived as intensional relations between utterances V and speakers V_1 , providing semantic conditions on *normal utterances* of the sentence in question. A sentence meaning includes a *propositional part*, a *referential part*, and a *background part*. Although all of these components are constructed compositionally, I shall not go into the details of the composition process.

The propositional part of the sentence meaning of (15) has two components. Its first component is the propositional attitude *communicating*, indicating the type of speech act performed by uttering (15). The second component is the *proposition* given in (22):

(22) The relation between V and V_1 such that, for all x_0 , x_1 , and x_2 ,

if V_1 refers by den_1 *Hans*₂ in V to x_0 ,

then,

if

1. V_1 refers by *ich*₅ in V to x_1 and

2. V_1 refers by den_3 in V to x_2 ,

then

3. x_2 is identical to x_0 and

4. there is a [state] x such that

a. $\langle x, x_1, x_2 \rangle$ is ‘contextually relevant’ for V_1 at the time of the *kenne*₄-part of V relative to ‘know’,

b. $\langle x, x_1, x_2 \rangle$ is an element of the extension of ‘know’,

c. [interpretation of the modifier occurrence], and

d. [interpretation of Pres].

The logical structure of the proposition mirrors the constituent structure and the relational structure of (15). The inner implication in (22) ‘applies’ the ‘predicate part’, corresponding to the predicate constituent *kenne*₄ and the modifier constituent *seit*₆ *langem*₇, to the variables specified in the ‘argument part’, which corresponds to the complement constituents *ich*₅ and den_3 . The outer implication, in turn, ‘applies’ the ‘comment part’, corresponding to the outer nucleus constituent den_3 *kenne*₄ *ich*₅ *seit*₆ *langem*₇, to the variables specified in the ‘topic part’, which corresponds to the topic constituent den_1 *Hans*₂ (the ‘topic part’). Both the ‘predicate part’ and the ‘comment part’ are open propositions. However, whereas the ‘predicate part’ directly involves the lexical interpretation of the predicate constituent, the ‘comment part’ is ‘non-lexical’ (Monika Budde, personal communication).

Note that the quantifiers binding ‘ x_1 ’ and ‘ x_2 ’ have scope over the outer implication as a whole. Due to this partial prenex normal form of the proposition, the ‘topic part’ may make reference not only to the variable it introduces itself (‘ x_0 ’ in the case of (22)), but also to the variables introduced by the ‘argument part’ (in (22): ‘ x_1 ’ and ‘ x_2 ’). This logical structure is required for ‘bound’ interpretations of pronoun form occurrences in dislocated topic constituents (recall the discussion of (11) and (13) from section 2.3 above). Without the occurrence of *strong* antecedent in (15), those quantifiers would be applied directly to the ‘comment part’ (as, for instance, in the proposition (25) of the attached topic example analysed in section 3.2 below).

The occurrence of antecedent in (15) has another semantic consequence, namely the identity clause in (22). According to this clause, every referent of

the den_3 must be coreferential with every referent of den_1 *Hans*₂. I assume that in a normal utterance of (15), the speaker intends to refer to exactly one entity by both constituents.

This restriction is expressed by the referential part of the sentence meaning of (15). It contains the following anaphoric *specific-doxastic* referential meaning for den_3 :²⁹

(23) The relation between V and V_1 such that

1. there is exactly one x such that
 V_1 refers by den_3 in V to x ,
 2. for all x ,
if V_1 refers by den_3 in V to x ,
then there is an x_1 and an x_2 such that
 - a. x_1 corresponds to V_1 for V_1 ,
 - b. x_2 corresponds to the den_3 -part of V for V_1 , and
 - c. $\langle x, x_1, x_2 \rangle$ is ‘contextually relevant’ for V_1 at the time of the den_3 -part of V relative to \cdot this/that_{MASC} (S),
 3. for all x ,
if V_1 refers by den_3 in V to x ,
then V believes that every addressee of V ‘knows of’ x ,
- and
4. V_1 presupposes that, for all x ,
if V_1 refers by den_3 in V to x ,
then there is an x_1 and an x_2 such that
 - a. x_1 corresponds to V_1 for V_1 ,
 - b. x_2 corresponds to the den_3 -part of V for V_1 , and
 - c. $\langle x, x_1, x_2 \rangle$ is an element of the extension of this/that_{MASC} (S).

The topic constituent in (22), in turn, has either a specific-doxastic referential meaning, too, or an *attributive* one (for details, see Lieb 1979: 371–376).³⁰

²⁹ The correspondence relation used in (23) (conditions 2 and 4) was introduced by Richter (1988: 313–316) for syntactic meanings involving deictic lexical meanings. This relation is required because variables of type ‘ x ’ and variables of type ‘ V ’ stand for entities from two different ontologies. The former are used for entities from the speaker’s point of view, whereas the latter denote (spatio-temporal) entities from the linguist’s point of view.

³⁰ Topic constituents can have also generic referential meanings of different types. In (i), for instance, the non-definite topic constituent *einen Spion* refers distributively to every ‘relevant’ spy:

*den*₃ in (24).³¹ Second, *der*₁ *Hans*₂ is marked by the word form category Nom[inative]: nominal topic constituents which are not strong antecedents always appear in that ‘default’ case. Since *den*₃ is an occurrence of an accusative form of *der*_{DEM,MASC}^W, there is no agreement in case between *der*₁ *Hans*₂ and *den*₃. (Note that *der*₁ *Hans*₂ and *den*₃ still agree in number and gender.)

The occurrence of (weak) antecedent in (24) is justified by the following considerations. For one thing, a nominal attached topic constituent must be resumed by an occurrence of a ‘*d*-pronoun’ form which in general agrees with it in number and gender.³² For another, the coreference of *der Hans* and *den* in (24) is strictly obligatory.³³

The proposition of (24) differs from the proposition of (15) in the scope of the quantifiers binding ‘*x*₁’ and ‘*x*₂’:

(25) The relation between *V* and *V*₁ such that, for all *x*₀,

if *V*₁ refers by *der*₁ *Hans*₂ in *V* to *x*₀,
then, for all *x*₁, and *x*₂, [continued by the inner implication in (22)].

Those quantifiers are applied directly to the ‘comment part’ because there is no strong antecedent occurrence in (24). Thereby, ‘bound’ interpretations of pronoun form occurrences in nominal attached topic constituents are excluded (see examples (12) and (14) in 2.3 above).³⁴

³¹ The term ‘attached topic’ is motivated by the weak antecedent occurrence: an attached topic constituent is syntactically ‘attached’ to some resumptive constituent. Being formally dissimilar, the former could not be regarded as if it were ‘dislocated’ from the latter’s position, though (cf. n. 16 in section 2.3 above).

³² In addition, the unmarked order of the ‘*d*-pronoun’ form occurrence in attached topic is the same as in dislocated topic (cf. section 2.2 above).

³³ Cardinaletti (1988: 19–23), who does not take the obligatory coreference into account, arrives at the opposite conclusion: *der Hans* and *den* in (3) do not form a chain.

³⁴ Note that in certain attached topic variants with non-nominal topic constituents, ‘bound’ interpretations are possible. Consider the following example:

- (i) Den Wagen von sich zu verkaufen, daran hat Hans nie gedacht.
the ACC car of himself to sell there at AUX Hans never thought
‘Hans never considered to sell his (own) car.’

I take (i) to be an instance of attached topic because the topic constituent does not match the adpositional part *an* of the resumptive ‘adpositional adverb’ *daran*. The fact that *sich* can be interpreted as being ‘bound’ by *Hans* is now explained as follows. In an utterance of *daran*, the speaker refers to a property. In the proposition of (i) this property is identified with the property ‘to sell one’s car’ introduced by the ‘topic part’. (*Den Wagen von sich zu verkaufen* is not a referential expression.) Finally, the property is applied to the referent of the subject constituent *Hans* in the ‘predicate part’ (cf. the analysis of infinitival complements in Lieb 1975: 208–210).

- (27) The relation between V and V_1 such that there is a [binary relation] y ³⁸ such that
1. [appropriateness conditions on y] and
 2. for all x_0 ,
 - if V_1 refers by *der*₁ *Hans*₂ in V to x_0 ,
then y holds between x_0 and the state-of-affairs such that, for all x_1 , and x_2 ,
 - if
 - a. V_1 refers by *ich*₃ in V to x_1 and
 - b. V_1 refers by *diesen*₅ *Kerl*₆ in V to x_2 ,
- then there is an x such that [continued as in (22), 4.].

The appropriateness conditions on the relation y should at least exclude trivial relations such as ‘being identical to or different from’. Stronger conditions could characterize y as being an ‘aboutness relation’. Further research needs to be carried out in order to specify these conditions.

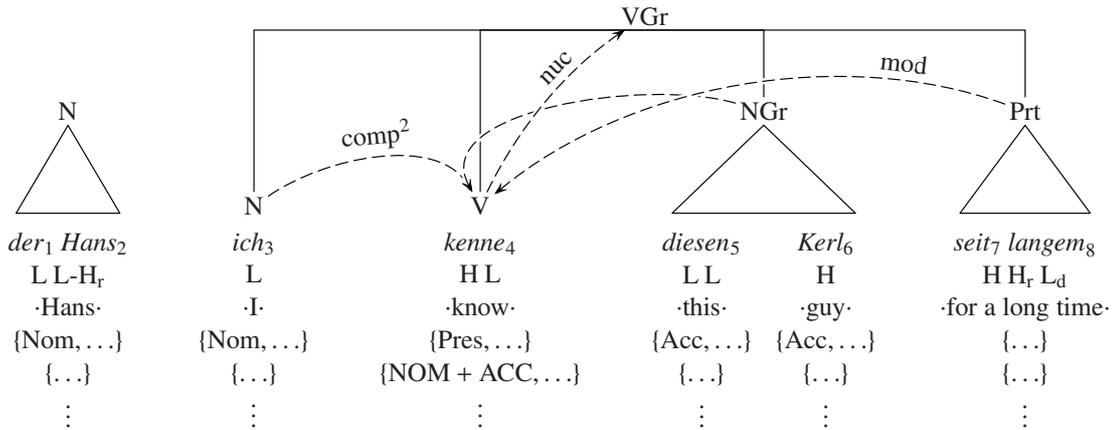
3.3 Free Topic

As established in section 2.1 above, two types of free topics are to be distinguished: elliptical free topics and non-elliptical ones. I shall discuss the latter first and then the former.

Recall that free topics are sentential units of their own, followed by another sentential unit. For the representation of multi-sentential, ‘textual’ units, Integrational Syntax provides the operation of *sentence concatenation* (see Lieb 1975: 169–171). (28) depicts the result of the sentence concatenation of the syntactic triples corresponding to *der Hans* and to *ich kenne diesen Kerl seit langem* in (4):

³⁸ I leave it open whether y is an extensional or intensional relation.

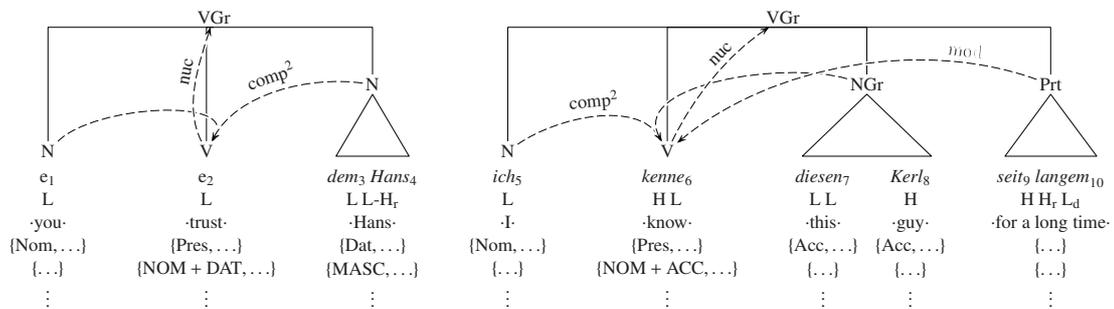
(28)



The intonation structure assigned to *der₁ Hans₂* is an interrogative sentence intonation (‘L-H_r’ stands for the pitch value sequence *low-to-high-rising*). The marking structure marks this constituent by Nom. The constituent structure parts for *der₁ Hans₂* and *ich₃ kenne₄ diesen₅ Kerl₆ seit₇ langem₈* are unconnected: there is no common ‘root node’. Likewise, no syntactic functions — in particular, neither topic nor antecedent — occur between them.

Elliptical units are conceived as phonologically reduced syntactic triples in Integrational Syntax (Lieb 1998/99; for the notion of ‘phonological reduction’, see Klein 1993: 789–797). (29) represents the sentence concatenation of one possible elliptical triple corresponding to *dem Hans* in (5) with the syntactic triple corresponding to *ich kenne diesen Kerl seit langem*:

(29)



The letter ‘e’ denotes the *empty phonological word*. Its occurrences in (29) result from the phonological reduction of the phonological words *du* (‘you’) and *traust* (‘trust’), occurring in the corresponding non-elliptical syntactic unit. The dative case of *dem₃ Hans₄* is determined internally in the elliptical triple: it is governed by the phonologically reduced nucleus constituent, which is marked by the word category [*verb governing a*] *NOM*[*inactive expression*] + [*a*] *DAT*[*ive expression*].

The semantic correlate of sentence concatenations still needs to be determined in Integrational Linguistics. I therefore have to leave the semantic analysis of (4) and (5) open.

4 Summarizing and Generalizing the Results

In this paper I argued that there are three distinct constructions involving a topic constituent detached to the left: left-dislocated topic, left-attached topic, and left-hanging topic. The constructions diverge from each other in terms of the existence and the type of antecedent occurrence between the topic constituent and some anaphoric constituent. In hanging topic there is no such antecedent occurrence. The nominal topic constituent in attached topic is a weak antecedent of the occurrence of a demonstrative ‘*d*-pronoun’ form; in general, the latter agrees with the former in number and gender. In dislocated topic the antecedent occurrence is a strong one, involving agreement in case or other formal features. Nominal topic constituents which are not at the same time strong antecedent constituents appear in the nominative.

As for the semantics of detached topic constructions, the proposition is articulated into a ‘topic part’, corresponding to the topic constituent, and a ‘comment part’. The proposition of sentences with a strong antecedent occurrence — that is, the proposition of dislocated topic instances — has a partial prenex normal form, allowing for ‘bound’ interpretations of pronoun forms occurring in the topic constituent. A strong or weak antecedent occurrence leads in addition to an identity clause in the proposition, requiring coreference between the topic constituent and the resumptive constituent. The proposition of hanging topic instances, on the other hand, establishes an underspecified relation between the referent of the topic constituent and the state-of-affairs expressed by the remaining part of the sentence.

In contrast to dislocated topic, attached topic, and hanging topic, no topic function occurs in free topics. Free topics are sentential units of their own, which are syntactically unconnected to the following sentence. Free topics come in two flavours: elliptical free topics and non-elliptical ones. While the latter appear in the nominative only, the case of the former is determined by some phonologically reduced constituent.

The analyses proposed for left-dislocated topic, left-attached topic, and left-hanging topic can be generalized to further constructions in German. ‘Right dislocations’ such as (30) are easily analysed as *right-dislocated topics*:

- (30) Ich kenne ihn seit langem, den Hans.
I know him ACC MASC for a long time the ACC MASC Hans
 ‘I’ve known Hans for a long time.’

In (30) *den Hans* is a right-dislocated topic constituent, which is linked by strong antecedent (or rather ‘postcedent’) to *ihn*.

Further candidates for dislocated topic constituents are ‘vocatives’. In the imperative sentence (31), *Hans* is a left-dislocated topic constituent and a strong antecedent of *du*:³⁹

- (31) Hans, schließ du auf!
Hans unlock you VERB-PRT
 ‘Hans, unlock the door!’

There are also hanging topic ‘vocatives’:

- (32) Hans, es hat geklingelt!
Hans it AUX rang
 ‘Hans, somebody just rang the doorbell!’

Accordingly, there is no antecedent function occurrence in (32). In order to capture the ‘addressation’ meaning of the ‘vocative’, the ‘predicate part’ of proposition for (32) must include a condition which correlates the referent of *Hans* with the hearer.

Finally, ‘split topicalizations’ such as (33) may be analysed as topic constructions, too:

- (33) Spanischen Wein trinkt er keinen.
Spanish ACC SG MASC wine MASC drinks he none ACC SG MASC
 ‘As for Spanish wine, he drinks none.’

It can be shown that — despite their agreement in case, number, and gender — *spanischen Wein* and *keinen* in (33) do not form a discontinuous noun phrase (cf., for instance, Fanselow 1988 and Pafel 1998: 236–239). In Nolda, in preparation I analyse *spanischen Wein* rather as a non-detached *integrated topic* constituent, which is linked by strong antecedent to the anaphoric direct object constituent *keinen*.⁴⁰ In the proposition of (33) the ‘topic part’

³⁹ In (i) *Hans* may be analysed as a topic constituent which is the antecedent of an ‘empty subject occurrence’ (Hans Heinrich Lieb, personal communication):

- (i) Hans, schließ auf!
Hans unlock VERB-PRT
 ‘Hans, unlock the door!’

⁴⁰ The occurrence of strong antecedent in (33) is confirmed by the ‘bound’ interpretation of *sich* in (i):

- (i) Bücher von sich hat er keine verkauft.
books of himself AUX he none PL sold
 ‘He didn’t sell his (own) books.’

introduces the set of all referents of the generically interpreted topic constituent *spanischen Wein*. The interpretation of *keinen* is linked to that set by an element relation, which is the semantic consequence of the antecedent occurrence.

References

- Altmann, Hans. 1981. *Formen der ‚Herausstellung‘ im Deutschen: Rechtsversetzung, Linksversetzung, freies Thema und verwandte Konstruktionen*. Linguistische Arbeiten 106. Niemeyer, Tübingen.
- Budde, Monika. 2000a. Identifying Substantival and Adjectival Pronouns: A Case Study on German. In Petra M. Vogel and Bernard Comrie, eds., *Approaches to the Typology of Word Classes*. Empirical Approaches to Language Typology 23. Mouton de Gruyter, Berlin, pp. 371–395.
- Budde, Monika. 2000b. *Wortarten: Definition und Identifikation*. Ph.D. diss., Freie Universität Berlin.
- Cardinaletti, Anna. 1988. Linksperiphere Phrasen in der deutschen Syntax. *Studium Linguistik* 22: 1–30.
- Cinque, Guglielmo. 1977. The Movement Nature of Left Dislocation. *Linguistic Inquiry* 8: 397–412.
- Cinque, Guglielmo. 1997. ‘Topic’ Constructions in Some European Languages and ‘Connectedness’. In Elena Anagnostopoulou, Henk van Riemsdijk, and Frans Zwarts, eds., *Materials on Left Dislocation*. Linguistik aktuell/Linguistics Today 14. Benjamins, Amsterdam, pp. 93–118. (Reprint of Cinque 1983. ‘Topic’ Constructions in Some European Languages and ‘Connectedness’. In Konrad Ehlich and Henk van Riemsdijk, eds., *Connectedness in Sentence, Discourse and Text*. Katholieke Hogeschool, Tilburg.)
- Eisenberg, Peter. 1999. *Grundriß der deutschen Grammatik*, Vol. 2. Metzler, Stuttgart.
- Eroms, Hans-Werner. 1985. Eine reine Dependenzgrammatik für das Deutsche. *Deutsche Sprache* 13: 306–326.
- Fanselow, Gisbert. 1988. Aufspaltung von NPn und das Problem der ‚freien‘ Wortstellung. *Linguistische Berichte* 114: 91–113.
- Frey, Werner. 2004. Notes on the Syntax and the Pragmatics of German Left Dislocation. In Horst Lohnstein and Susanne Trissler, eds., *The Syntax and Semantics of the Left Periphery*. Interface Explorations 9. Mouton de Gruyter, Berlin, pp. 203–233.
- Gärtner, Hans-Martin. 2001. Are There V2 Relative Clauses in German? *Journal of Comparative Germanic Linguistics* 3: 97–141. <http://kapis1.wkap.nl/oasis.htm/336481>.
- Grewendorf, Günther. 2002. *Minimalistische Syntax*. Francke, Tübingen.

Besides integrated topic constituents which are strong antecedents, there also seem to be integrated topic constructions with a weak antecedent occurrence:

- (ii) ? Buch von sich hat er keins verkauft.
book of himself AUX he none SG sold

‘He didn’t sell his (own) book.’

In case (ii) is indeed ungrammatical, the unavailability of a ‘bound’ interpretation of *sich* in (ii) can be attributed to the fact that the ‘bare singular’ count noun form *Buch* does not match *keinen*’s property of having the form of an independent nominal constituent.

- Grohmann, Kleantes. 1997. On Left Dislocation. *Groninger Arbeiten zur germanistischen Linguistik* 40: 1–33.
- Klein, Wolfgang. 1993. Ellipse. In Joachim Jacobs *et al.*, eds., *Syntax: Ein internationales Handbuch zeitgenössischer Forschung/An International Handbook of Contemporary Research*, Handbücher zur Sprach- und Kommunikationswissenschaft 9, Vol. 1. Mouton de Gruyter, Berlin, pp. 763–799.
- Lambrecht, Knud. 2001. Dislocation. In Martin Haspelmath *et al.*, eds., *Sprachtypologie und sprachliche Universalien/Language Typology and Language Universals/La typologie des langues et les universaux linguistiques: Ein internationales Handbuch/An International Handbook/Manuel international*. Handbücher zur Sprach- und Kommunikationswissenschaft 20, Vol. 2. Mouton de Gruyter, Berlin, pp. 1050–1078.
- Lieb, Hans-Heinrich. 1975. Nachträge zu den Arbeitspapieren. In *Zwei Arbeitspapiere*. Linguistische Arbeiten und Berichte 4, Freie Universität Berlin, pp. 166–225.
- Lieb, Hans-Heinrich. 1979. Principles of Semantics. In Frank W. Heny and Helmut S. Schnelle, eds., *Selections from the 3rd Groningen Round Table*. Syntax and Semantics 10. Seminar Press, New York, pp. 353–378.
- Lieb, Hans-Heinrich. 1983a. Akzent und Negation im Deutschen: Umriss einer einheitlichen Konzeption (Teil A). *Linguistische Berichte* 84: 1–32.
- Lieb, Hans-Heinrich. 1983b. Akzent und Negation im Deutschen: Umriss einer einheitlichen Konzeption (Teil B). *Linguistische Berichte* 85: 1–48.
- Lieb, Hans-Heinrich. 1983c. *Integrational Linguistics*, Vol. 1. Current Issues in Linguistic Theory 17. Benjamins, Amsterdam.
- Lieb, Hans-Heinrich. 1992. Integrational Linguistics: Outline of a Theory of Language. In Hans-Heinrich Lieb, ed., *Prospects for a New Structuralism*. Current Issues in Linguistic Theory 96. Benjamins, Amsterdam, pp. 127–182.
- Lieb, Hans-Heinrich. 1993. Integrational Linguistics. In Joachim Jacobs *et al.*, *Syntax: Ein internationales Handbuch zeitgenössischer Forschung/An International Handbook of Contemporary Research*, Handbücher zur Sprach- und Kommunikationswissenschaft 9, Vol. 1. Mouton de Gruyter, Berlin, pp. 430–468.
- Lieb, Hans-Heinrich. 1998/99. Integrative Sprachwissenschaft: Ellipse. Authorized minutes of a colloquium at the Freie Universität Berlin, Sommersemester 1998 and Wintersemester 1998/99.
- Lieb, Hans-Heinrich. To appear. Notions of Paradigm in Grammar. In *Lexikologie/Lexicology: Ein internationales Handbuch zur Natur und Struktur von Wörtern und Wortschätzen/An International Handbook on the Nature and Structure of Words and Vocabularies*, Alan Cruse *et al.*, Handbücher zur Sprach- und Kommunikationswissenschaft 21, Vol. 2. Mouton de Gruyter, Berlin.
- Moltmann, Friederike. 1992. *Lokalität und Individuation: Studien zur Ereignis- und Nominalphrasensemantik*. Studien zur Theoretischen Linguistik 12. Fink, Munich.
- Nolda, Andreas. In preparation. *Integriertes Thema: Zur Syntax und Semantik der ‚gespaltenen Topikalisierung‘ im Deutschen*. Ph.D. diss., Freie Universität Berlin.
- Pafel, Jürgen. 1998. *Skopus und logische Struktur: Studien zum Quantorenskopos im Deutschen*. Arbeitspapiere des Sonderforschungsbereichs 340 127. Universität Stuttgart, Universität Tübingen and IBM Heidelberg.
- Reinhart, Tanya. 1981. Pragmatics and Linguistics: An Analysis of Sentence Topics. *Philosophica* 27: 53–93.
- Richter, Heide. 1988. *Indexikalität: Ihre Behandlung in Philosophie und Sprachwissenschaft*. Linguistische Arbeiten 217. Niemeyer, Tübingen.
- Ross, John R. 1986. *Infinite Syntax!* Ablex, Norwood, NJ. (Published version of Ross 1967. *Constraints on Variables in Syntax*. Ph.D. diss., MIT.)

- Scheutz, Hannes. 1997. Satzinitiale Voranstellungen im gesprochenen Deutsch als Mittel der Themensteuerung und Referenzkonstitution. In Peter Schlobinski, ed., *Syntax des gesprochenen Deutsch*. Westdeutscher Verlag, Opladen, pp. 27–54.
- Selting, Margret. 1993. Voranstellungen vor den Satz: Zur grammatischen Form und interaktiven Funktion von Linksversetzung und Freiem Thema im Deutschen. *Zeitschrift für germanistische Linguistik* 21: 291–319.
- Thráinsson, Höskuldur. 1979. *On Complementation in Icelandic*. Garland, New York.
- Vat, Jan. 1981. Left dislocation, connectedness and reconstruction. *Groninger Arbeiten zur germanistischen Linguistik* 20: 80–103.
- Zifonun, Gisela *et al.* 1997. *Grammatik der deutschen Sprache*. Schriften des Instituts für deutsche Sprache 7, Vol. 1. Mouton de Gruyter, Berlin.