

Scrambling in German and the Definiteness / Specificity Effect

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Introduction

I would like to discuss certain phenomena that are associated with scrambling of NPs in German. Scrambling in German interacts with certain semantic functions of NPs such as indefiniteness or, better, specificity, focusing and genericity. I argue that NPs that are VP-internal at S-structure generally must be nonspecific, provided they receive structural Case. This condition concerns accusative and dative NPs, and nominative NPs, whether they correspond to 'internal' arguments or 'external' arguments in the traditional sense (Williams 1981). I discuss two possible accounts for this phenomenon. First, I consider an explanation that is a generalization of Safir's (1985) analysis of nominative-dative inversion in German, which links indefiniteness (nonspecificity) to Case assignment via chains. The generalization of this approach assumes that all NPs within VP can receive structural Case only by inheritance from expletive element, which occupies the specifier position of some Case-assigning functional element in an enriched inflectional system. Then, I propose an explanation in terms of the assignment of semantic functions at S-Structure in German which assumes that certain syntactic positions are associated with certain semantic functions at S-structure in German, but in a language like English only at LF. I show that the latter account is superior in a number of respects. Within this discussion, I shall make a number of further points about German syntax. For instance, I show that subjects which correspond to 'external argument' in William's (1981) sense may be VP-internal at S-Structure, and need not move to [SPEC, IP], thus supporting the general hypothesis that subjects are generated ^{inside} VP-internally (Diesing 1989, Kitagawa 1986, Sportiche 1989, and others). A final point I want to make is the following: in German, as in other languages that have scrambling (such as Hindi and Japanese), the position of scrambled NPs has properties of A-positions. However, crucially, with certain kinds of movement constructions, the same position behaves purely as an A'-position. The reason I suggest is based on Case-theory.

1. General assumptions about the clause structure and Case assignment in German with normal word order

1.1. German clause structure

I make the following assumptions about the structure of clauses with normal word order in German. First, I assume that all main clauses and embedded clauses are CPs (as recently argued for by Schwarz / Vikner, 1989). Second, all nominative NPs, those that correspond to 'internal arguments' as well as those that correspond to 'external argument' in the sense of Williams (1981), are generated inside VP. Nominative NPs that correspond to internal arguments are generated as sisters of V; nominative NPs that correspond to external arguments are generated as sisters of V". This will be supported empirically later. For convenience and continuity, I shall call nominative NPs that are generated as sisters of V 'internal nominative NPs', and NPs that are generated as sisters of V" 'external nominative NPs'. Then, the examples (1a) and (1b) have the structures (2a) and (2b) respectively.

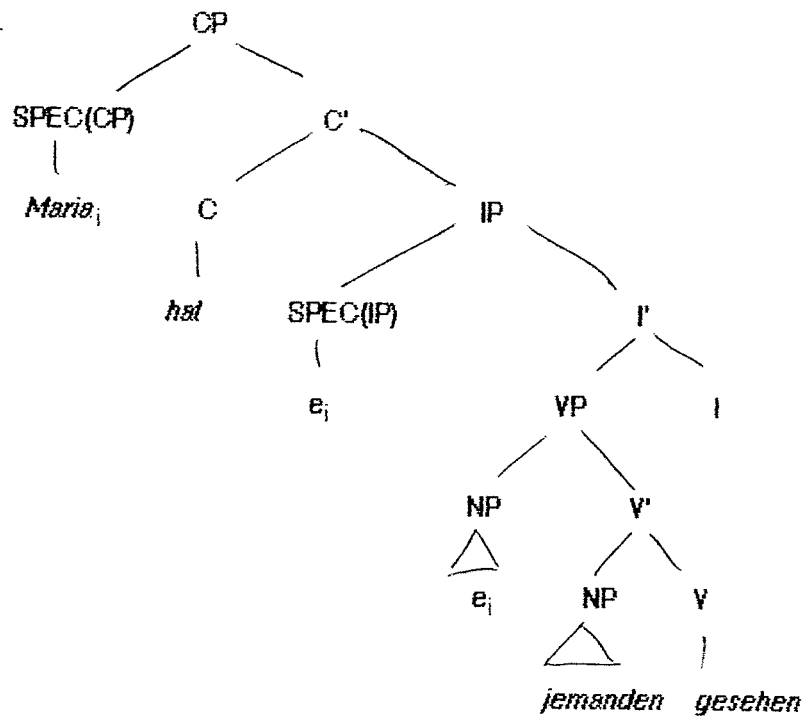
(1) a. Maria hat jemanden gesehen.

Mary has somebody seen

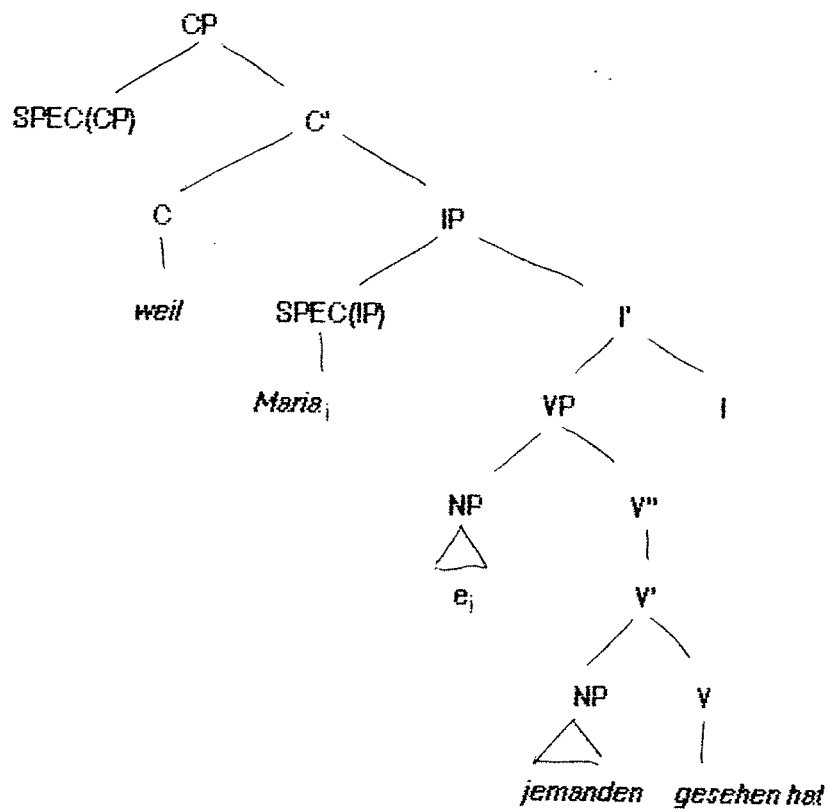
b. weil Maria jemanden gesehen hat

because Mary somebody seen has

(2) a.



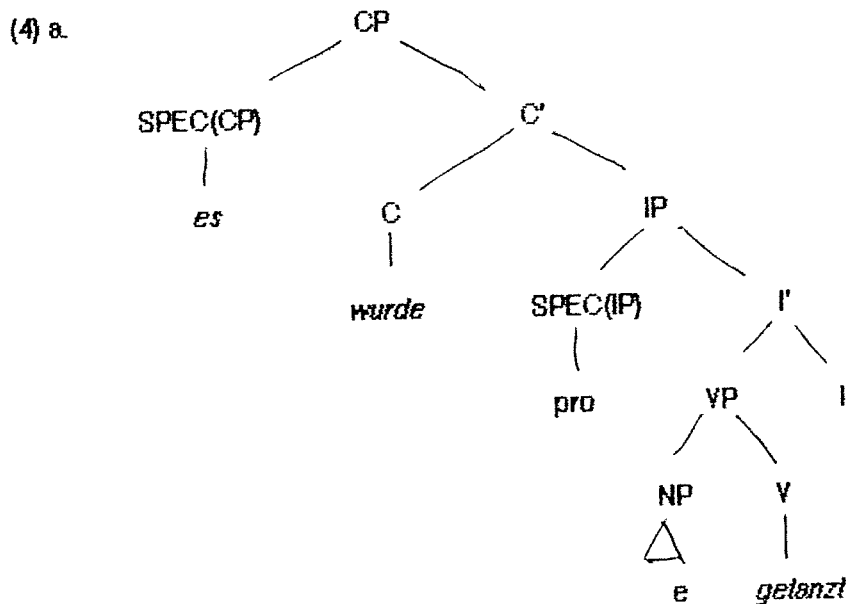
(2) b.



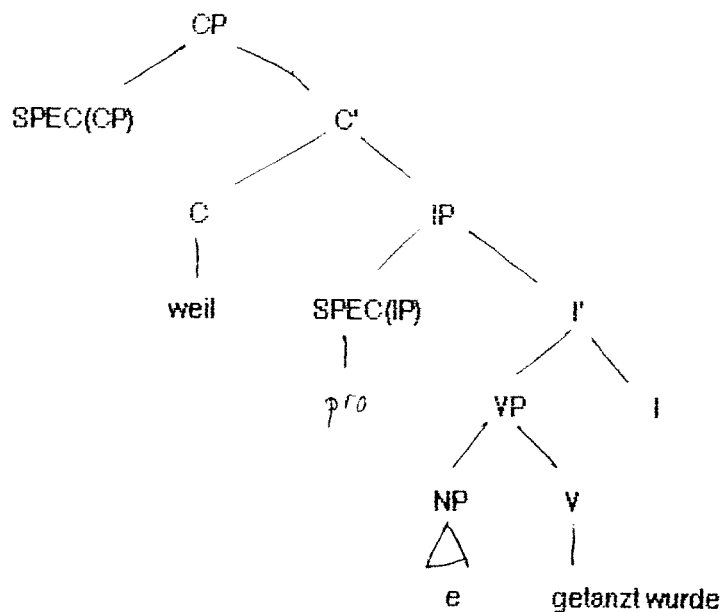
For the moment I assume (following den Besten 1984) that Case is assigned to NPs inside VP at S-structure as follows: V assigns accusative or, indirectly, nominative Case; V' assigns dative Case. Nominative Case-assignment by V is indirect in that it is assigned only if V stands in a certain relation to Tense in INFL (in den Besten's account it must be governed by Tense in COMP, thus establishing the relation of chain government between Tense and the NP). I extend this account of Case assignment to external nominative NPs to the effect that V'' assigns nominative Case iff it stands in the relevant relation to Tense.

Furthermore, I assume that German has expletive *pro* (see Cardinaletti, 1989, for discussion). Expletive *pro* may appear only in the position [SPEC, IP]. Assuming the extended projection principle, it must appear in this position if the position is not filled by an NP that has moved out of VP. Then it must appear, for instance, in impersonal passives or in existential constructions such as (3a) and (3b), which have the structures in (4a) and (4b) respectively:

- (3) a. *Es wurde getanzt.*
 it was danced
 b. *weil getanzt wurde.*
 because danced was



(4) b.



1.2. Unaccusativity diagnostics in German

There are a number of tests in German that indicate whether an argument is in VP internal position or not. These tests, among other things, seem to distinguish between subjects as external or internal arguments. Since they have been treated in part as tests for subjects of unaccusative and of unergative predicates (namely, the first test, *was fuer* split, by den Besten (1984) and the second test, quantifier split, by van Riemsdijk (1989)), one might call these tests 'unaccusativity diagnostics' - though, as we shall see later, they do not really distinguish between internal and external arguments in the traditional sense. These tests all involve extractions from NPs and display ECP effects.

The most well-known test is the *was fuer* split discussed in den Besten (1984). *Was fuer* split consist in the extraction of the *was* part of an NP of the form *was fuer* N' 'what sort of'. den Besten's makes the following generalization: *was fuer* split can apply to accusative objects and nominative NPs that are subjects of unaccusative predicates, but is worse with datives and impossible with external nominative NPs. This is illustrated with the type of data that den Besten employs in (5) - (8).

(5) Was hat Hans e fuer Leute gesehen?

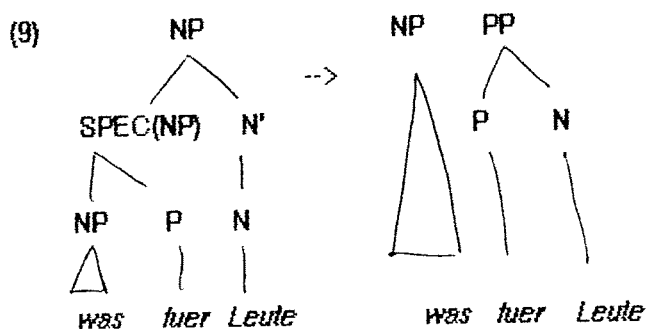
what has John for people (acc) seen

(6) a. Was sind fuer Leute gekommen.

- what have for people (nom) come
- b. Was sind dem Jungen e fuer Schuessel verloren gegangen?
what are the boy (dat) sort of keys (nom) lost gone?
- c. Was sind dem Jungen e fuer Bilder vertraut?
what are to the boy for pictures familiar?
- (7) a. ? Was haben e fuer Leuten ein Bild ^{bei} auf der Ausstellung gefallen?
what have for people (dat) a picture on the exhibition pleased
- b. ? Was hat der Junge e fuer Leuten ein Bild von sich gezeigt?
what has the boy sort of people a picture of himself show
- (8) a. ?? Was haben e fuer Leute den Politiker kritisiert?
what have sort of people the politician criticised
- b. ?? Was haben e fuer Kinder den Mann besucht.
what have for children the man visited

Notice that also adjectives may classify as unaccusative predicates according to this test (and also the following tests), for instance *vertraut* 'familiar' as (c); other unaccusative adjectives are *bekannt* 'known', *moeglich* 'possible', *erhaeltlich* 'available', *verstaendlich* 'comprehensible', and *verfuegbar* 'available'. (See also Cinque 1989 for evidence for unaccusative adjectives in Italian).

The possibility of *was fuer* split with direct objects and nominative NPs that are internal arguments can be considered an ECP effect. den Besten assumes that NPs of the form *was fuer N'* undergoing *was fuer* split are reanalysed as NP - PP structures in the following way:



The ECP explains the possibility of *was fuer* split with direct objects and internal subjects. But it does not explain why *was fuer* split is degraded with dative NPs. The explanation might be that

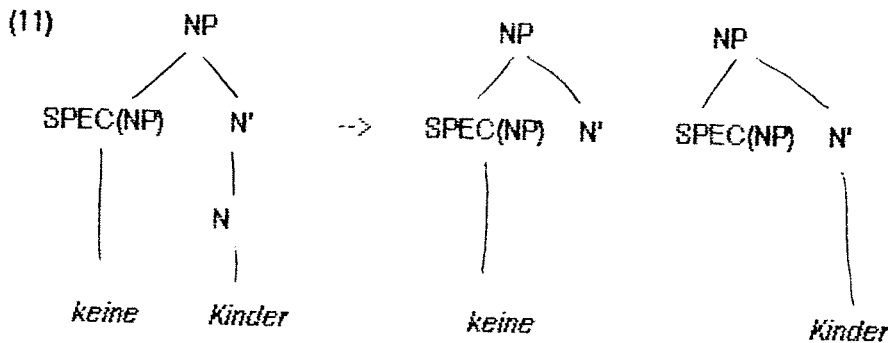
dative NPs in German are in fact PPs with an empty ^eproposition and that government by V is therefore blocked. However, speakers differ with respect to the acceptability of *was fuer* split with datives. Therefore, the status of datives as PPs might be unstable.

A second test is a construction of quantifier split, discussed, for example, by van Riemsdijk (1989). Quantifier split consists of movement of the N' out of an NP with weak determiner to topic position, i.e. [SPEC, CP] (with subsequent regeneration of the N' as an NP), as suggested by van Riemsdijk. (Alternatively, it can be viewed as base generation of the N' in topic position). Quantifier split and its apparent restriction to arguments in direct object position is illustrated in (10).

- (10) a. Kinder kamen [keine / viele / wenige / einige e].
 children came none / many / few / some
 b. Bilder hat er den Leuten [keine e] gezeigt.
 pictures has he to the people (acc) none shown
 c. ? Leuten hat er [keinen e] das Bild gezeigt.
 people has he shown none (dat) the picture
 d. ?? Kinder haben [keine e] den Mann besucht.
 children have none (nom) the man visited

Bild hat er keines gezeigt.

These differences can again be explained as ECP effects - under the assumption that if datives NPs are in fact PPs. Assuming that quantifier split is movement, then the NP undergoing the extraction should be subject to restructuring of the following sort:



Another sort of evidence for this restructuring process is that quantifier split may also occur as a result of VP-fronting:

- (12) a. Äpfel gegessen hat er [keine e].

- apples eaten has he none
- b. Fehler unterlaufen sind ihm [viele e].
mistakes occurred have to him many

Viele e
da

There are two constructions that are similar to quantifier split as in (6) and exhibit ECP effects, namely first, what I will call *da*-movement (described for the Dutch correlate *er*-movement in Bennis, 1985 and van Riemsdijk 1978) and second, what I will call partitive movement. With *da*-movement the NP-proform *da* is moved out of a PP to topic position. The ECP effect can be shown with NPs with partitive PPs with *von* 'of' as head:

- (13) a. Da hat der Mann [sehr viel e von] gegessen.
this has the man very much of eaten
- b. Da hat dem Mann [nichts e von] gefallen'
this has the man nothing of pleased
- c. * Da aehnelt [nichts e von] dem Bild.
this is similar to the pictures nothing of
- d. * Da hat [nichts e von] den Mann beeinflusst.
this has nothing of the man influenced

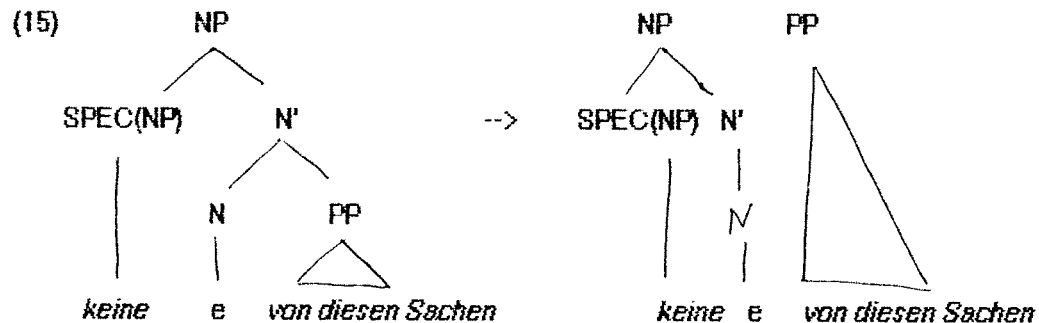
Again, with a restructuring process of an appropriate sort, the data can be explained as ECP effects.

Partitive movement consists in movement of a partitive phrase of the form *von* - definite NP to topic position. The relevant data are given in (14).

- (14) a. Von diesen Sachen hat Hans [viele / keine / die meisten e] gekauft
of these things has John many / none / most bought
- b. Von diesen Sachen wurden [keine e] verkauft.
of these things were none sold
- c. Von diesen Sachen sind [keine / alle e] verloren gegangen.
of these things have none / all lost gone
- d. Von diesen Sachen gehoeren ihm [keine e].
of these things belong to him none
- e. ?? Von diesen Leuten haben [keine / alle / viele e] den Mann kritisiert.
of these people have none / all / many the man criticized
- f. ?? Von diesen Leuten hat der Mann [keinen / vielen e] geholt.

of the people have the man (nom) none / many (dat) helped

The required restructuring process is of the sort indicated in (15).



Again, this process also shows up with VP-fronting:

- (16) Von diesem Wein getrunken hat er nichts e.
of this wine drunk has he none

Notice that the subjects of psych verbs also behave like internal arguments with respect to these tests:

- (17) a. Was haben den Mann e fuer Taten beeindruckt
what have the man (acc) for deeds impressed
b. Bilder haben dem Mann keine e gefallen.
pictures have the man (dat) none pleased
c. Da hat den Mann nichts e von beeindruckt.
this has the man nothing of impressed
d. Von diesen Taten haben den Mann keine e beeindruckt.
of these deeds have the man none impressed

Another test that behaves similar to the unaccusative diagnostics above is relative clause extraposition. Consider the following data:

- (18) a. weil ein Mann e kam, den wir sehr gut kannten
because a man came who we knew very well
b. weil Hans Maria ein Buch e gab, das er interessant fand
because John Mary a book gave that he found interesting

- *
 c. weil Hans das Bild einem Mann e zeigte, den er kaum kannte
 because John the picture a man showed who barely knew him
 d. weil Hans einem Mann e geholfen hat, der kein Geld hatte.
 because John a man helped has who didn't have any money
 e. ?? weil ein Mann e das Bild sah, den Hans kaum kannte. ✓

Notice that, relative clause extraposition with datives is fine, as (18c) and (18d) show. Relative clause extraposition, though, is traditionally not regarded as a test for unaccusativity, but rather as a test for whether an NP is nonspecific or not. However, as we will see later, there is a systematic connection between specificity and the syntactic status of an NP.

The data that were given in this section are incomplete in important respects. We have on purpose not mentioned the behavior of the extraction types with intransitive predicates and with other word orders of the NP arguments. In the next section, we will see that the application of these tests above is rather misleading. The tests actually do not give information about arguments absolutely, but rather only relative to the position of the arguments.

1.3. Nominative NPs inside VP in German

It appears that even NPs that are subjects of unergative predicates and thus external arguments according to usual tests may exhibit unaccusativity diagnostics under certain conditions. This is illustrated with *was fuer* split, quantifier split constructions and relative clause extraposition in (19) - (22):

- (19) a. Was haben den Professor e fuer Studenten kritisiert?

what have the professor (acc) for students (nom) criticised

- b. ?? Was haben e fuer Studenten den Professor kritisiert?

- c. Was haben dem Professor e fuer Studenten geholfen?

what have the professor (dat) e for students (nom) helped

- d. ?? Was haben e fuer Studenten dem Professor geholfen?

- (20) a. weil von diesen Studenten den Professor keine e kritisiert haben

because of these students the professor (acc) none (nom) criticised have

- b. ?? weil von diesen Studenten keine e den Professor kritisiert haben

- c. weil von diesen Studenten dem Professor einige e geholfen haben

because of these students the professor (dat) some (nom) helped have

acc - N - SObj.

he - SObj. →

dem Professor 'high shifted'?

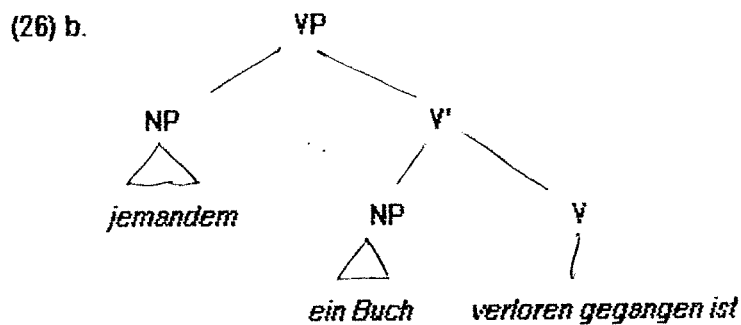
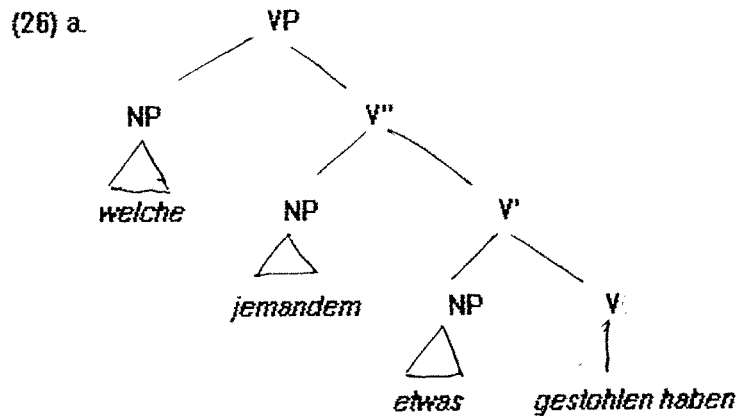
? dem 'gen' →

- d. ?? weil von diesen Studenten einige e dem Professor geholfen haben *no!*
- (21) a. weil da den Kuenstler nichts von e beeinflusst hat
because this the artist (acc) nothing of (nom) influenced has
- b. ?? weil da nichts e von den Kuenstler beeinflusst hat
- (22) a. weil den Professor [eine Frau e] kritisiert hat, die ihn kaum kannte
because the professor (acc) a woman (nom) criticised has that him barely knew
- b. ?? weil eine Frau den Professor kritisiert hat, die ihn kaum kannte
- c. weil dem Professor [eine Frau e] geholfen hat, die ihn kaum kannte
because the professor (dat) a woman (nom) helped has who him barely knew
- d. ?? weil eine Frau dem Professor geholfen hat, die ihn kaum kannte

Before discussing the conditions under which subjects of unergative verbs behave like internal arguments, let us look at the order of NPs inside VP in general. Given that the four tests bring up ECP effects, then the data in (19) - (22) indicate that subjects of unergative verbs sometimes may stay inside VP at S-structure and thus be governed by V. However, subjects of unergative verbs still differ in their position inside VP from subjects of unaccusative verbs. The normal word orders of NPs inside VP are: subject of unergative predicate - dative NP - accusative NP and dative - subject of unaccusative predicate. This is illustrated in (23) - (25) with NPs that have undergone extraction of one of the types discussed and indefinite nonspecific NPs, which also must be inside VP, as we shall see.

- (23) a. weil Hans Leuten Bilder gezeigt hat
because John people (dat) pictures (acc) shown has
- b. ? weil Hans Bilder Leuten gezeigt hat (special effect) *except for some*
- (24) a. weil von diesen Leuten keine e jemandem etwas gestohlen haben
because of these people none from anybody (dat) anything (acc) stolen have
- b. ? weil von diesen Leute jemandem keine e etwas gestohlen haben
- c. ?? weil von diesen Leuten jemandem etwas keine e etwas gestohlen haben
- (25) a. weil von diesen Bildern einem Besucher welche e bekannt waren
because of these pictures to a visitor (dat) some (nom) known were
- b. ? weil von diesen Bildern welche e einem Besucher bekannt waren (special effect)

This suggests that in German a VP with a predicate taking an accusative and a dative object has a structure such as (26a) and with a predicate taking a dative and an internal nominative argument a structure such as (26b):



Thus, two VP internal positions for nominative NPs must be distinguished, the higher position being occupied by 'external' nominative NP and the lower position by 'internal' nominative NP.

Now let us look again at the data in (19) - (22). It seems that the following generalization holds for external nominative NP to behave like an internal argument: an external nominative NP may be VP internal just in case it is not followed by a definite accusative or dative NP. Notice that in the types of data in (5) - (8) employed by den Besten, the external nominative NP always precedes an accusative or dative NP. The generalization will have to be modified somewhat, but at least holds for the types of predicates in (19) - (22) and will be discussed in more detail later.

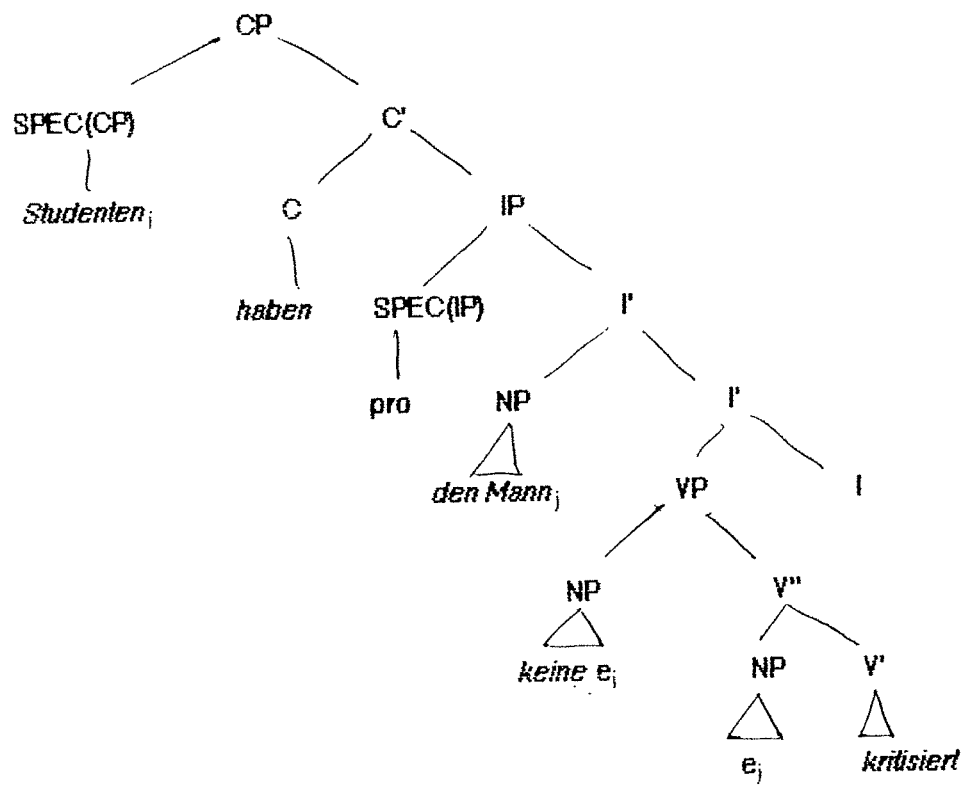
Notice that, under the same conditions, external nominative NPs may have the status of internal arguments also in main clauses:

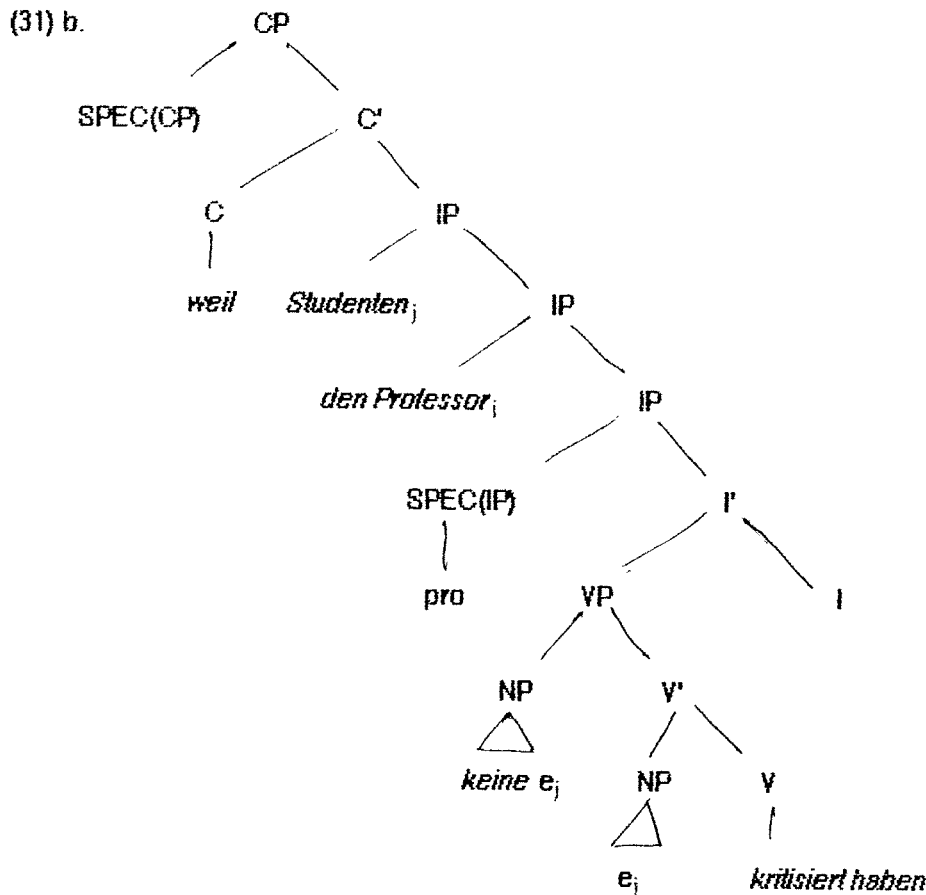
- (27) a. Studenten haben den Professor keine e kritisiert.
 students have the professor (acc) none e criticised
 b. ?? Studenten haben keine e den Professor kritisiert.

- (28) a. Von diesen Studenten haben den Professor keine e kritisiert.
 of these students have the professor none criticised
 b. ?? Von diesen Studenten haben keine e den Professor kritisiert.
- (29) a. Da hat den Kuenstler nichts e von beeinflusst.
 this has the artist (acc) nothing of e criticised
 b. ?? Da hat nichts e von den Kuenstler beeinflusst.
- (30) a. Es hat den Professor eine Frau e kritisiert, die ihn kaum kannte.
 it has the professor a woman criticised that barely knew him
 b. ?? Es hat eine Frau e den Professor kritisiert, die ihn kaum kannte.

The possibility of external nominative NPs to stay inside VP now raises the question about the [SPEC, IP] position. Apparently, nominative Case can be assigned to NPs inside VP. Therefore, Case is not a requirement for external nominative NPs to move to [SPEC, IP]. However, the extended projection principle requires that [SPEC, IP] be filled by some element. Since German allows for empty expletives in [SPEC, IP], it is natural to assume that an empty expletive occupies the [SPEC, IP] position if the external nominative NP stays inside VP. Independent evidence that empty expletives occupy the subject position comes from Dutch. Dutch contrasts with German in that it does not have empty expletives (or only under very restricted conditions) (see Bennis 1985). Both in impersonal passives in embedded clauses and in the Dutch correlates of (19) - (22), the expletive *er* has to appear in subject position. So, German arguably has for embedded and for main clauses the structures in (31a) and (31b) respectively.

(31) a.





So far, we have discussed only transitive unergative and unaccusative predicates and intransitive unaccusative predicates and have on purpose left out intransitive unergative predicates. The problem is that intransitive unergative predicates do not behave exactly as expected from the generalization above. It appears that certain intransitive predicates just never allow their subject to show up the unaccusativity diagnostics. In a recent discussion (Diesing 1989, Kratzer, 1989), it has been argued that whether a subject may exhibit the diagnostics for internal argumenthood depends on whether the predicate is a stage-level predicate or an individual-level predicate, following a distinction made by Carlson (1977). Stage-level predicates describe properties that hold of entities in general only temporarily, whereas individual-level predicate hold of entities permanently (or, better, are perceived as holding of entities only temporarily). Thus, being available is a stage-level property, whereas being intelligent is an individual-level property. Kratzer and Diesing cite data with *was fuer* split, quantifier split, and relative clause extraposition of the following type:

- (32) a. Was sind fuer Feuerwehrmaenner verfuegbar?
 what are for firemen available

- b. * Was sind fuer Studenten intelligent
 what are for students intelligent
- (33) a. weil Blumen keine e im Garten waren
 because flowers none in the garden were
- b. * weil Skandinavier viele blond sind
 because Scandinavians many blond are
- (34) a. weil zwei Buecher auf dem Tisch lagen, die niemand lesen wollte
 because two books on the table lied that nobody read wanted
- b. * weil zwei Buecher teuer waren, die niemand lesen wollte
 because two books expensive were that nobody read wanted

Another predicates they mention that belongs to the data in the a-sentences is *taub* 'deaf', a predicate that belong to the data in the b-sentences *sichtbar* 'visible'. So from these data, it appears that a subject may be VP-internal iff the predicate is stage-level and that it must be VP external iff the predicate is individual-level. Therefore, Diesing and Kratzer suggest that subjects of individual-level predicates are always generated outside VP in [SPEC, IP] position, whereas subjects of individual-level predicates are always generated inside VP. However, it turns out that the correlation between individual-level and stage-level predicates and the position of the subject inside or outside VP is not quite as clear as it seems to be. First, Kratzer herself notes that certain individual-level predicates allow for VP-internal subjects, for instance *belong*, as shown in (35).

- (35) a. Was gehoeren dem Mann e fuer Buecher?
 what belong to the man for books
- b. Buecher gehoeren dem Mann keine e.
- c. Von diesen Buechern gehoeren dem Mann keine e.

Another example for a verb which, like *gehören*, takes dative NPs, is individual-level and allows the subject to stay inside VP is *aechneln* as in (36).

- (36) Was aechneln ihm e fuer Schauspieler?
 what resemble him for actors

The behaviour of these predicates may, of course, have something to do with the presence of the dative argument. It is hard to find intransitive verbs that are individual-level. Candidates may be *existieren* 'exist'. *Existieren*, however, seems to allow for VP-internal subjects:

- (37) a. weil Dinosaurier keine e mehr existieren
because dinosaurs none anymore exist
b. Was existieren e fuer Dinosaurier?

Also habitual verbs can be considered individual-level predicates. However, there does not seem to be a contrast between the habitual reading of the predicate and the nonhabitual reading, for instance in the following examples:

- (38) a. Was rauchen dort e fuer Leute.
what smoke there for people?
b. Was rauchen generell e fuer Leute?
what smoke generally for people
(39) a. Was trainieren dort e fuer Sportler?
what exercise there for sportsmen
b. Was trainieren e fuer Sportler in dieser Halle?
what exercise for sportsmen in this gymnasium

Sound pretty bad to me.

Thus, an individual-level predicate does not necessarily require the subject to be VP external. It appears that also the correlation between individual-level and stage-level predicates and the position of the subject is not strict in the other direction. There is a rather large class of adjectives that are stage-level by any criterion, but require the subject to be VP-external. Such adjectives are, for example, *muede* 'tired', *nervoes* 'nervous', *froehlich* 'cheerful', *aufgeregt* 'excited', *heiss* 'hot', *krank* 'sick', i.e. adjectives describing psychological or physical states, and other adjectives, e.g. *verboten* 'forbidden' and *nett* 'nice, friendly'. The following data show that the subjects of these predicates do not exhibit unaccusativity diagnostics:

?? Es sind Kinder *muede*.

- (40) a. ?? Was waren e fuer Kinder *muede* / *nervoes* / *froehlich* / *aufgeregt* / *krank*.
what were for children tired / nervous / cheerful / excited / sick
b. ?? Kinder waren viele e *muede* / *nervoes* / *aufgeregt* / *sick*.
c. ?? Von diesen Kindern waren viele e *muede* / *nervoes* / *aufgeregt* / *sick*.
d. Was fuer Kinder / Viele Kinder / Viele von diesen Kindern waren *muede*.
(41) a. Was waren e fuer Oberflaechen *heiss*?
what were for surfaces hot
b. Was fuer Oberflaechen waren *heiss*?
(42) a. ?? Was sind e fuer Filme *verboten*.

what are for films forbidden

b. Was fuer Filme sind verboten?

(43) a. ?? Was waren e fuer Kinder nett zu Hans?

what were for children nice to John

b. Was fuer Kinder waren nett zu Hans?

Now let us look more closely at what sort of adjectives do allow their subjects to be VP-internal. There seem to be essential three types of adjectives. The first type consist of adjectives like *verhuegbar* 'available', as in (32a), and *erhaeltlich* 'available', *sichtbar* 'visible' and *loesbar* 'solvable', as in (44).

(44) a. Brot war keines erhaltlich.

bread was none available

b. Wolken waren keine sichtbar

clouds were none visible

c. Von diesen Aufgaben waren keine loesbar.

of these problems were none solvable

These adjectives are generally derived from transitive verbs and arguably all contain an implicit agent argument position. This position then should be, as usually, the external argument position. So these adjectives should classify as unaccusative predicates. Thus, (44a) should have the structure in (45), where '@' stands for the implicit agent argument.

(45) Brot_i war [_{AP} @ [_{A'} keines e_i [_A erhaeltlich]]]

But how should these adjectives be classified with respect to the stage / individual-level contrast? Generally, these adjectives are dispositional adjectives. However, this does not necessarily mean that they are individual-level adjectives. Rather, the adjectives in (44) seem to describe dispositions in a concrete situation.

The second type of adjectives comprises a number of adjectives that take dative or propositional arguments, for instance *bekannt* 'known', *vertraut* 'familiar', *sehnlich* 'similar', *verwandt* 'related to', as in (46) and (47).

(46) Konzerte sind ihm keine e bekannt / vertraut.

concerts are to him none known / familiar

(47) a. Schauspieler sind ihm keine e ähnlich.

actors are to him none similar

b. Schauspieler sind mit ihm keine e verwandt.

actors are with him none related to

These predicates do not all seem to classify as stage-level predicates. For instance, *verwand* is certainly individual-level. Furthermore, it seems that these adjectives are unaccusative adjectives, rather than unergative adjectives, and thus allow for internal subjects. In the unmarked word order of indefinite NPs within VP, the dative has to precede the nominative NP.

(48) a. weil jemandem eines bekannt / vertraut ist

because to somebody one known / familiar is

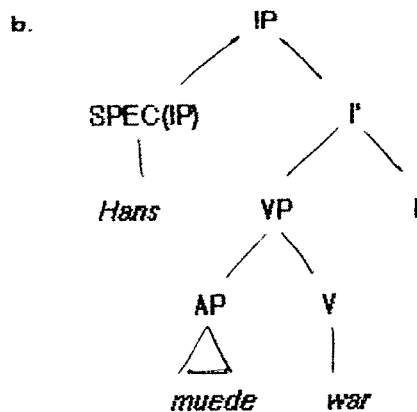
b. ?? weil eines jemandem bekannt / vertraut ist

These observations suggest the following generalizations: adjectives allow internal subjects only if they are unaccusative, but not if they are unergative, regardless of whether they are individual- or stage-level. Unergative adjectives seem to never allow the subject to be AP-internal. On the other hand, there barely are any intransitive unergative verbs that are individual-level. Therefore, the Kratzer/Diesing generalization cannot really be tested with verbs. With adjectives the generalization certainly fails. Here, it seems that the only relevant parameter is the distinction between unaccusative and unergative adjectives. Therefore, it the phenomena that led Kratzer and Diesing to invoke a link between the position of the subject and the individual-level / stage-level contrast presumably have to do with the structure of adjectives, rather than with a semantic distinction between predicates. The following syntactic explanation suggests itself. It could be a general fact that adjective phases do not have a position for 'external' nominative NPs, but only for dative (and, in German, genitive) and 'internal' nominative NPs. Therefore, the subject of an unergative predicate must necessarily be base-generated outside AP (and VP) in [SPEC, IP]-position. Thus, (49a) would have the structure in (49b) and (50a) the structure in (50b).

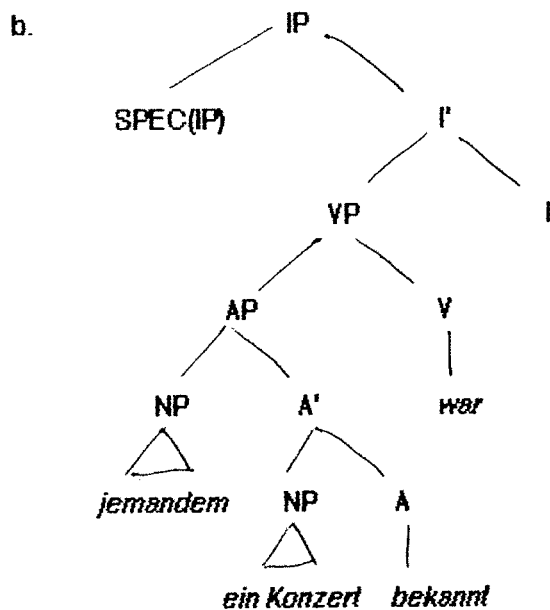
(49) a. (weil) Hans muede war.

→ unergative NP → defect with respect to word order?

Def. Case



(50) a. (weil) jemandem ein Konzert bekannt war



2. General properties of scrambling

Let me list some elementary properties of scrambling in German. First, whether a NP has been scrambled out of the VP can be seen from the position of adverbs such as negators *nicht* 'not' and *nie* 'never' and particles like *wohl*, *ja*, *doch* and others. Scrambling has occurred with the accusative NP in (50b), but not in (50a):

(50) a. weil Hans nicht / nie / wohl / ja doch dieses Buch gelesen hat

- because John not / never / presumably / prt. this book read has
 b. weil Hans dieses Buch nicht / nie / wohl / ja doch gelesen hat

Scrambling is also possible with dative arguments, as in (51).

- (51) weil Hans den Leuten nicht / wohl æhneht
 because John the people (dat) not / presumably resembles

(52) shows that scrambling of both accusative and dative objects is possible in the same clause:

- (52) a. Hans hat den Leuten das Buch nie gezeigt
 John has to the people the book never shown
 b. Hans hat das Buch den Leuten nie gezeigt

Scrambling need not move a NP between the subject in [SPEC, IP] position and adverbials like *nicht* but may move a NP also before the subject in this position. The result is, however, considerably worse than in the other case:

- (53) a. ? weil dieses Buch Hans den Leuten nicht gezeigt hat
 because this book (acc) John (nom) to the people (dat) not shown has
 b. weil Hans den Leuten dieses Buch nicht gezeigt hat

Scrambling is possible also with PPs, VP-internal adverbs and predicative elements:

- (54) a. weil Hans wohl in die Stadt gegangen ist
 because John presumably to the town walked has
 b. (?) weil Hans in die Stadt wohl gegangen ist
 c. ? weil in die Stadt Hans wohl gegangen ist

- (55) a. weil Hans nicht schneller laufen kann
 because John not faster run can
 b. (?) weil Hans schneller nicht laufen kann
 c. ? weil schneller Hans nicht laufen kann

- (56) a. weil Hans nicht gluecklich wurde
 b. (?) weil Hans gluecklich nicht wurde
 c. ? weil gluecklich Hans nicht wurde

2.1. Movement of definite pronouns vs. scrambling

A movement rule in German that is similar, but distinct from scrambling is a rule that moves definite pronouns in object position to some higher position - either between the subject in [SPEC, IP] and any scrambled NPs or before the subject in [SPEC, IP]. This rule moves only pronominal direct objects (both accusative and nominative objects), but not indirect objects. This can be seen from the fact that a pronominal direct objects must precede a pronominal indirect objects, as in (57b).

- (57) a. * weil Hans den Leuten nicht es gezeigt hat
 because John to the people (dat) not it (acc) shown has
 b. ?? weil Hans den Leuten es nicht gezeigt hat
 c. ?? weil Hans ihnen es nicht gezeigt hat
 d. weil Hans es den Leuten nicht gezeigt hat
 e. weil es Hans den Leuten nicht gezeigt hat

Presumably, movement of definite pronouns is necessary because they are clitics and must cliticize to some specific category, for instance the subject in [SPEC, IP]. Notice, however, that there are indefinite pronouns in German which are always reduced and stay inside VP, for instance *was* or *welche*:

- (58) a. Hans hat dem Jungen nie was / welche gezeigt.
 John has to the boy (dat) never something / some shown
 b. * Hans hat dem Jungen was / welche nie gezeigt.
 John has the boy something / some never shown
 c. * Was / Welche wurde(n) dem Jungen gezeigt
 something / some was / were shown to the boy
 d. * Es wird (werden) dem Jungen was / welche gezeigt.
 it was to the boy something / some shown

But of course, the fact that the movement rule applies only to definite pronouns, not to indefinite pronouns can be explained in that definite pronouns, being specific, have to move out of the VP in any case (see section 3.1.). The pronoun-movement rule, then, applies if scrambling alone does not yield the right position.

I leave the question open why definite pronouns that are direct objects have to move to a specific position which is distinct from the scrambled position of definite full NPs. There are, by the way, differences among pronouns, for instance between the reciprocal pronoun *einander* 'each other' and definite pronouns. Like definite pronouns, *each other* seems to obligatorily move between the subject in [SPEC, IP] and any scrambled definite NP:

- (59) a. * weil die Frauen den Maennern einander vorgestellt haben. *weil die Frauen den Maennern einander vorgestellt haben*
 because the women to the men (dat) each other (acc) introduced have
 b. weil die Frauen einander den Maennern vorgestellt haben

However, the possible positions of *einander* at S-Structure are not the same as the possible positions of definite pronouns. In a sentence without definite scrambled NPs, *einander* need not precede adverbials like *nie* or *wohl*:

- (60) a. weil die Leute wohl / nie einander liebten
 because the people presumably / never each other loved
 b. * weil die Leute wohl / nie es liebten
 because the people presumably / never it loved

Furthermore, the pronoun *es* 'it', when it is direct accusative object (but not when it is nominative) can move to topic position. *Einander* cannot move to topic position - except under very marked focus conditions; the same holds for the reflexive *sich* or *sich selbst* can:

- (61) a. * Es hat der Mann gegessen.
 it (acc) has the man (nom) eaten
 b. Es gehoert dem Mann.
 it (nom) belong to the man
 c. Es stoerte den Mann.
 it (nom) bothered the man
 d. ?? Einander lieben die Leute.
 each other loved the people
 e. ?? Sich lieben die Leute.
 themselves loved the people

I leave the question open of what is responsible for the special behavior of *each other*.

3. The semantic conditioning and the semantic effect of scrambling

Scrambling in German appears to have both semantic conditions and semantic effects. But the question of what are the conditions that force a NP to scramble must be distinguished from the question of what semantic effect scrambling has.

3.1. What 'conditions' scrambling

Taking the position of adverbials like *wohl* and negators as a test for scrambling, it appears at first sight that definite accusative and nominative objects must obligatorily scramble. If the NP stays in situ and a negator is in adverbial position, then either the NP must be the focus associated with the negator (in the sense of Jackendoff 1972) or the verb must be focused.

- (62) a. * weil Hans nicht das Buch gelesen hat
 because John not the book read has
 b. weil Hans nicht das Buch gelesen hat, sondern die Zeitung
 because John not the book read has, but the newspaper
 c. weil Hans nie das Buch gelesen hat, sondern es bloss immer gekauft hat
 because John never the book read has, but it only always bought has
- (63) a. * weil dem Mann nicht das Buch verlorengegangen ist
 because to the man (dat) not the book (nom) lost gone has
 b. weil dem Mann das Buch nicht verlorengegangen ist

The notation is to be read as follows: If a clause is marked '*' and has constituents with the sign '(/)' on it, then the sentence is unacceptable only if one of the constituent is contrastively stressed. The observation above can also be made with dative objects:

- (64) a. * weil Hans das Buch nicht dem Mann gegeben hat
 because John the book (acc) not to the man (dat) given has
 b. weil Hans das Buch nicht dem Mann gegeben hat, sondern der Frau
 because John the book (acc) to the man given has, but to the woman
 c. weil Hans das Buch nicht dem Mann gegeben hat, sondern ihm weggenommen hat

- because John the book not to the man given has, but him taken away has
 d. weil Hans das Buch dem Mann nicht gegeben hat

This suggests that direct and indirect objects inside VP exhibit the definiteness effect, i.e. objects inside VP must be indefinite. Further evidence for this comes from the fact that NPs cannot scramble that must be indefinite because they are predicative or complement of a verb that imposes the definiteness effect (such as verbs of inalienable possession) :

- (65) a. weil Hans wohl / nicht ein Freund von Bill ist
 because John presumably / not a friend of Bill is
 b. * weil Hans ein Freund von Bill wohl / nicht ist
 (66) a. weil Maria wohl eine Schwester hat
 because Mary presumably a sister has
 b. * weil Maria eine Schwester wohl hat
 (67) a. weil der Text wohl / nie einen Fehler enthielt
 because the text presumably / never a mistake contained
 b. * weil der Text einen Fehler wohl / nie enthielt
 (68) a. obwohl sie ihn nicht einen Idioten nannte.
 although she him not an idiot called
 b. * obwohl sie ihn einen Idioten nicht nannte

However, there is evidence that the right generalization is not indefiniteness, but rather nonspecificity. But let me first clarify these two notions. I take definite NPs to be a syntactically definable category of NPs with a certain semantic content (reference to a unique object), namely NPs with determiners *the*, *this* or *that*, proper names, or pronouns like *he*. They contrast with indefinite NPs which are syntactically definable as NPs with weak determiners, bare plural or mass NPs or indefinite pronouns like *one*. Specificity, in contrast, I take to be a notion that can be defined only semantically and does not directly correlate with syntactically characterizable categories of NPs. I take specific NPs to be those occurrences of NPs in a sentence *S* that have a specific reference in the meaning or use of *S*, where specific reference means direct reference as opposed to reference by means of a concept, the mode of reference of nonspecific NPs. Thus, the distinction between specific and non-specific NPs corresponds to Donnellan's (1966) distinction between referential and attributive NPs, the distinction between directly referring NPs and NPs that refer only by means of a concept. Definite and indefinite full NPs, according to this distinction, can have both a specific and a nonspecific reading. There is a controversy in the literature about whether specificity is to a matter of structural meaning or just a matter of

pragmatics. The former position has been taken, for instance, by Donnellan (1966); the latter position, for instance, recently by Ludlow / Neale (1989). In this paper I assume that specificity is a matter of meaning, not of pragmatics. One of the reasons is that specificity is linked to certain syntactic positions in German. If specificity was a matter of pragmatics, then specificity should in principle be independent of syntactic positions. The following informal formulations can be taken as characterizations of the notions of specific and nonspecific reference for definite and indefinite NPs such as *the driver* and *a driver*.

- (69) a. A speaker refers specifically with *the driver* iff there is exactly one entity x that he refers to with uttering *the driver*, whereby he assumes that this entity be a driver and familiar to the addressee.
 b. A speaker refers specifically with *a driver* to an entity x iff there is exactly one entity x that he refers to by uttering *a driver*, whereby he assumes that this entity be a driver and familiar to the addressee.
- (70) a. A speaker refers nonspecifically with *the driver* iff he refers to an ~~relevant~~ entity x just in case x is ^{in the} relevant domain and is a driver, whereby he assumes that there is exactly one such entity.
 b. A speaker refers nonspecifically with *a driver* iff he refers to any ~~relevant~~ entity x just in case x is in the relevant domain and is a driver.

Now we can see why specificity is the relevant parameter for the position of an NP inside or outside VP. First, indefinite NPs that have a specific reading cannot stay inside VP:

- (71) a. ?? weil Hans nicht ein gewisses Buch gelesen hat
 because John not a certain book read has
 b. weil Hans ein gewisses Buch nicht gelesen hat
 c. ?? weil Hans nie einen Mann, den ich sehr gut kenne, erkennt (unless with nonspecific interpretation) *Johns der Mann kenne ich*
 because John never a man, whom I know very well, recognizes
 d. weil Hans einen Mann, den ich sehr gut kenne, nie erkennt

Second, definite NPs that have a nonspecific interpretation seem to be allowed inside VP. Definite NPs typically receiving a nonspecific interpretation are those with functional nouns as heads such as *Ende* 'end', *Wohnsitz* 'residence' or *Loesung* 'solution':

- (72) a. weil Hans nicht das Ende des Buches kannte
 because John not the end of the book knows
 b. (?) weil Hans das Ende des Buches nicht kennt (has special focus effect)
- (73) a. weil Hans nicht den Wohnsitz von Maria wusste
 because John not the residence of Mary knew
 b. (?) weil Hans den Wohnsitz von Maria nicht wusste (has special focus effect)
 because John the residence of Mary not knew
- (74) a. weil Maria nicht die Loesung dieser Aufgabe herausbekam
 because Mary not the solution to this problem got
 b. (?) weil Maria die Loesung dieser Aufgabe nicht herausbekam

Notice also that arguments that are subject to the definiteness effect may be definite in the sense of being nonspecific. Then, they still cannot scramble:

- (75) a. weil Hans nicht / wohl der Direktor der Firma ist
 because John not the director of the firm is
 b. * weil Hans der Direktor der Firma nicht / wohl ist

Other definite NPs with nonspecific reading are those that have a functional or implicitly functional head whose interpretation depends on the semantic context given by the sentence (for instance by the location or the described situation). Examples of this sort are given in (76) - (78).

- (76) a. weil Maria nicht die Regeln beachtet
 because Mary not the rules follows
 b. weil Maria die Regeln nicht beachtet
- (77) a. weil Hans nicht die Stimmung verderben moechte
 because John not the atmosphere spoil wanted
 b. weil Hans die Stimmung nicht verderben moechte
- (78) a. weil fast jedes Spiel nicht den Gewinner im voraus festlegt
 because almost every game not the winner in advance determines
 b. weil fast jedes Spiel den Gewinner nicht im voraus festlegt

With these NPs both positions, outside and inside VP, are possible. This is presumably so, because they can receive both a specific and a nonspecific interpretation. To summarize, we have the following generalization about German:

(79) NPs that are VP-internal at S-Structure must receive a nonspecific interpretation.

However, we shall see that this condition requires some modification. First, PPs, complements as well as adjuncts, stay, in the unmarked case, inside VP, regardless of the specificity of the nominal complement of the preposition:

(80) a. weil Hans das Buch nicht auf den / einen Tisch gelegt hat
because John the book not on the / a table put has

b. * weil Hans das Buch auf den / einen Tisch nicht gelegt hat (//)

(81) a. weil Hans nie im Garten spielt
because never in the garden plays

b. * weil Hans im Garten nie spielt (//)

Second, certain verbs in German assign genitive case to an object. These genitive NPs also seem to be allowed inside VP, regardless of specificity. Notice, however, that they need not stay inside VP. In contrast to prepositional complements, they may scramble without inducing a special effect.

(82) a. weil wir nicht der Toten / dieses Mannes gedachten
because we not the dead / this man (gen) commemorated

b. weil wir der Toten / dieses Mannes nicht gedachten

(83) a. weil Maria sich doch des Mannes erinnerte
because Mary herself prt this man (gen) remembered

b. weil Maria sich des Mannes doch erinnerte

(84) a. weil Hans sich nicht seines Vaters schämte
because John himself his father (gen) ashamed was

b. weil Hans sich seines Vaters nicht schämte

Finally, there are a few verbs in German that takes two accusative objects, namely *lehren* 'teach', *abhören* 'question' and *abfragen* 'question'. The second object also seems to be allowed inside VP at S-Structure. But, like genitive NPs, it may also move out of the VP without special effect.

(85) a. weil der Mann den Jungen nicht diese Sprache gelehrt hat
because the man the boy (acc) not this language (acc) taught has

- b. weil der Mann den Jungen diese Sprache nicht gelehrt hat
- (86) a. weil Maria ihren Sohn nicht diese Yokabeln abgehört / abgefragt hat
 because Mary her son (acc) not these words (acc) questioned has
- b. weil Maria ihren Sohn diese Yokabeln nicht abgehört / abgefragt hat

The difference between accusative, nominative and dative objects on the one hand and PPs, genitive objects and special accusative objects seems to be the following: accusative, nominative and dative NPs are assigned structural Case. Recall from section 1 that structural Case is assigned, in the extension den Besten's (1984) account, in one of the following ways: either by V (for accusative NPs) or indirectly by V or V'' through inheritance from Tense (for nominative NPs) or by V' (for dative NPs). PPs, of course, are not assigned Case at all, and genitive and special accusative objects are certainly assigned inherent Case by the verb. Thus, the generalization is the following. Those and only those complements may stay inside VP at S-Structure that are either nonspecific or not assigned structural Case. Thus, we have the following generalization for German:

- (87) Constituents that are VP-internal at S-Structure and receive structural Case must be interpreted nonspecifically.

Notice also that this condition should be understood in such a way that it also accounts for predicative NPs that receive Case by agreement such as the object of copula verbs and the second object of *nennen* 'call'. That is, Case by agreement should be taken as an instance of structural Case.

In section 4, I discuss possible explanations why this condition should hold and present two approaches that account for the link between specificity and structural Case in German.

3.2. The semantic effect of scrambling

Scrambling in German has a systematic semantic effect, at least with certain constituents. Lenerz (1977) has argued that scrambling implies that the scrambled constituent be defocused. More precisely, the scrambled constituent may not be part of the presentational focus of a sentence (see Rochemont, 1986, for the distinction between presentational and contrastive focus). In the following examples, the scrambled definite dative and accusative NPs may not carry 'new information': they may neither be (phonologically) focused (with the function of presentational

Constituents other than NPs are certainly not subject to the specificity condition. Recall also that the same effect occurs with PPs containing indefinite nonspecific NPs:

- (91) *Hans legte auf einen Tisch ein Buch.^(/)

John put on the table a book

A second argument that the semantic effect of scrambling is independent from specificity comes from the possibility of scrambling within VP. Indefinite nonspecific NPs may scramble within NP and retain their nonspecificity, but they must then be defocused. Even bare plurals and indefinite pronouns such as *welche*, which generally cannot have a specific reading can scramble within VP:

- (92) a. ?? weil Maria wohl ein Buch einem Kind gegeben hat^(/)
 because Mary presumably a book (acc) to a child (dat) given has
 b. ?? weil Maria wohl Buecher einem Kind gegeben hat^(/)
 because Mary presumably books (acc) to a child given has
 c. weil Maria wohl welche einem Kind gegeben hat^(/)
 because Mary presumably some (acc) to a child (dat) given has

It is to be expected that scrambling of indefinite NPs within VP is has a different semantic effect from scrambling of specific NPs out of the VP. In the first case, the usual nonspecific interpretation should be available. But in the second case, this interpretation should be impossible. This prediction is borne out, as can be seen from the comparison of scrambling within VP with structures in which the indefinite NP has been scrambled in front of a scrambled definite NP or an adverb of the relevant kind. Consider the following examples:

- (93) a. weil Maria Buecher dem Mann schenkte
 because Mary books to the man gave as presents
 b. weil Maria Buecher, die mir sehr gefielen, dem Mann schenkte
 because Mary books that I liked very much the man gave as a present
 c. weil Maria ein Buch dem Mann gegeben hat, nicht eine Schallplatte
 because Mary a book to the man given has, not a record
- (94) a. weil Maria Buecher nicht / wohl las
 because Mary books not / presumably read

- b. weil Maria Buecher, die mir sehr gefallen wohl gelesen hat
because Mary books that me very much pleased presumably read has
- c. weil Maria ein Buch sicher gelesen hat, jedoch keine Zeitung
because Mary a book certainly read has, though not a newspaper

The indefinite NPs in these examples cannot have the usual nonspecific interpretation. They can only be interpreted generically as in (93a) and (94a) or specifically as in (93b) and (94b) or be contrastively focused as in (93c) and (94c). We shall come to the possible semantic functions of scrambled indefinite NPs in more detail later.

3.3. Other semantic effects licensing scrambling: contrastive focus, genericity

Defocusing is actually not the only possibility to 'license' a scrambled constituent. Instead of being defocused (in the sense of presentational focus), a scrambled NP may also be contrastively focused, as in (95).

- (95) a. weil Hans das Buch wohl gelesen hat, nicht etwa die Zeitung
because John the book presumably read has, not the newspaper
- b. weil Hans das Buch jemandem gegeben hat (nicht die Zeitung)
because John the book (acc) to somebody (dat) given has (not the newspaper)

Under this condition even nonspecific NPs may scramble:

- (96) a. weil Hans ein Buch dem Mann gegeben hat (nicht eine Zeitung)
because John a book to the man given has (not a newspaper)
- b. weil Hans Buecher dem Mann gegeben hat (nicht Zigaretten)
because John books to the man given has (not cigarettes)

It even seems that scrambling of contrastively focused constituents is obligatory, even though it is hard to test, since many adverbs can be construed as 'focusoperators' such as *only* or *not* and thus be 'associated' with the focused constituent in the sense of Jackendoff (1972). But this seems to be impossible for instance with the particle *ja*.

(97) ?? weil Hans ja ein Buch gelesen hat, nicht eine Zeitung

So we can say that scrambled NPs are either licensed by being 'presentationally' defocused or by being contrastively focused.

The fact that contrastive focus allows indefinite NPs to receive a nonspecific interpretation outside VP shows that being VP-internal is not the only way of receiving a nonspecific interpretation.

There are still other conditions under which NPs outside VP may be nonspecific. Besides contrastive focus, focus operators like *nur* 'only' or *sogar* 'even' also allow for indefinite NPs outside VP to be interpreted nonspecifically.

- (98) a. weil Hans nur ein Buch dem Mann gegeben hat
 because John only a book to the man given has
 b. weil Hans sogar Buecher dem Mann gegeben hat

Independent focus can be subsumed under focus associated with focusoperators if we accept implicit focus operators.

Another condition under which NPs outside VP may receive a nonspecific interpretation is genericity. Examples were already given in (93a) and (94a). Notice that, conversely, if a NP stays inside VP a generic interpretation seems to be excluded, as the contrasts between the following examples show:

- (99) a. weil die Schule einen begabten Schueler nicht / ja doch akzeptiert
 because the school a talented student not / prt prt accepts
 b. weil die Schule nicht / ja doch einen begabten Schueler akzeptiert.

(99b) does not seem to be capable of a generic interpretation. For the connection between nonspecificity and genericity, we can again assume that an implicit generic operator is responsible for the possibility of a nonspecific interpretation.

In summary, the following generalization seems to hold: an NP outside VP may have nonspecific interpretation just in case it is associated with some operator, for instance a focusoperator or a generic operator. This in turn suggests that for VP-internal nonspecific NPs the verb has the status of an operator licensing the nonspecific interpretation. Furthermore, it seems that a NP may not be associated with two operators in a sentence: a VP-internal NP may not be associated with a

focus operator or a generic operator - presumably, precisely because it is already associated with the operator represented by the verb. I shall come back to this issue in section 4.2.

3.4. Scrambling vs. movement to [SPEC, IP]

So far I have discussed the semantic effect of scrambling only with accusative and dative NPs, not with nominative NPs. We have seen that accusative and dative NPs as well as ('internal' and 'external') nominative NPs must move out of the VP if they are specific. Apparently, nominative NPs must somehow be assigned Case within NP in German and thus movement to [SPEC, IP] is not obligatory for Case reasons (see the next section). At this point, I leave the question open of what the position of scrambled accusative or dative NPs should be. Right now, I would like to only point out certain asymmetries between the position of nominatives that are moved out of VP and other scrambled NPs.

First, it appears that the position of scrambled accusative or dative NPs is much freer than that of moved nominative NPs. If a sentence contains both a scrambled accusative and dative NP which follow the subject, then the order dative - accusative as well the order accusative - dative are allowed - without any semantic or pragmatic difference, as shown in the following:

- (100) a. weil Hans das Buch dem Mann gegeben hat
 because John the book to the man given has
 b. weil Hans das Buch dem Mann gegeben hat

In contrast, the order of specific nominative NP and scrambled dative or accusative NP is more restricted. Recall from section 2 that scrambling of accusative or dative NPs in front of the subject is worse or at least more marked than scrambling to a position following the subjects:

- (101) a. ? weil dem Mann Hans das Buch gegeben hat
 b. ? weil das Buch dem Mann Hans gegeben hat

Notice that the same effect occurs with specific subjects of unaccusative verbs (with respect to scrambled dative NPs):

- (101) a. ? weil das Buch dem Mann gehoert
 because the book to the man belongs

- b. weil dem Mann das Buch gehoert
- (102) a. ? weil das Buch dem Mann bekannt ist
because the book to the man known is
- b. weil dem Mann das Buch bekannt ist

A second difference between accusative or dative NPs and nominative NPs is that movement of nominative NPs to [SPEC, IP] does not seem to have the semantic effect of scrambling. It only seems to have the effect that the NP must be interpreted specifically. Thus, (103a) does not require any special context in order to be acceptable, and differs in this respect from (103b), which implies defocusing of the accusative NP.

- (103) a. weil der Mann ein Buch gelesen hat
because the man a book read has
- b. ?? weil der Mann das Buch einem Kind gegeben hat
because the man the book (acc) to a child given has

4. What is responsible for scrambling and the definiteness effect of VP-internal NPs in German?

In this section I would like to discuss two possible approaches for explaining the correlation between structural Case, specificity and VP-internal position, first an account based on structural Case-assignment by inheritance in German and second an account based on semantic functions.

4.1. A generalization of Safir's (1985) account

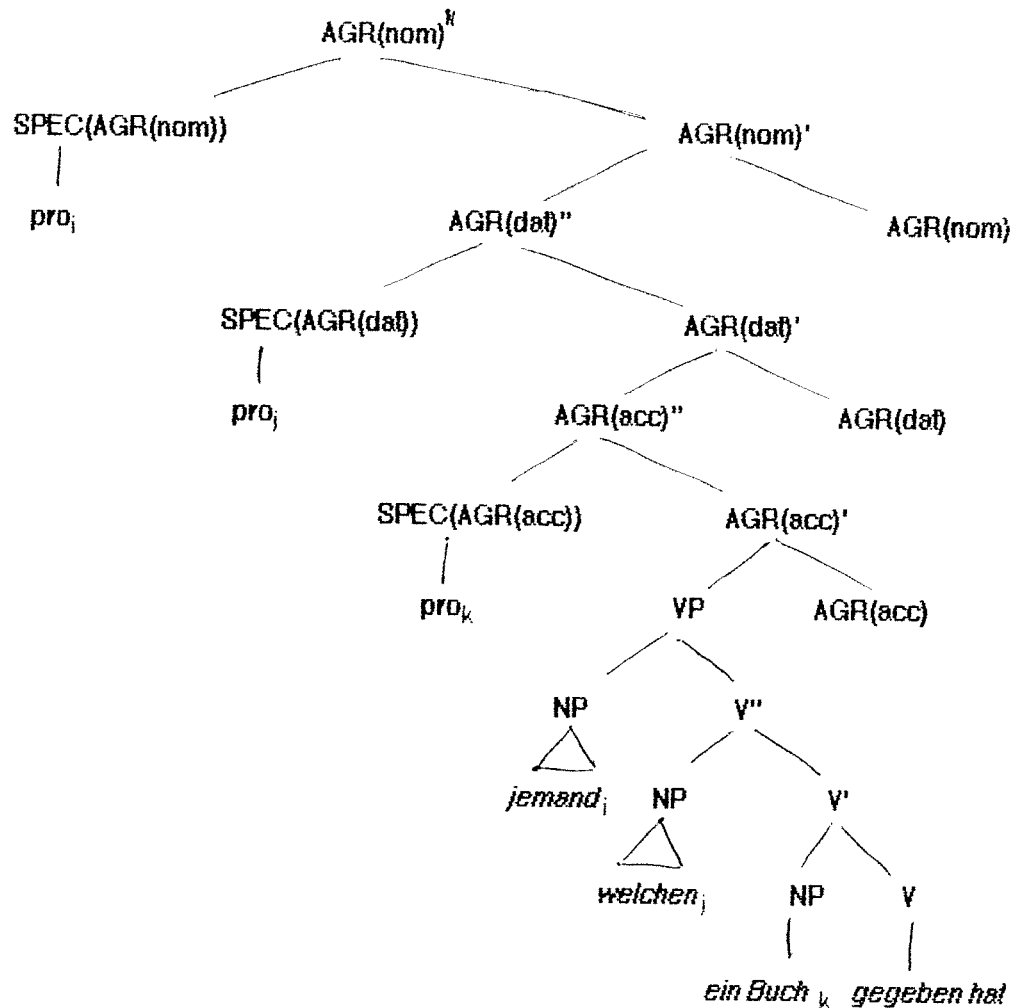
Now the question is: what is responsible for NPs inside VP being nonspecific. The only attempt of explanation in the literature (to my knowledge) is the K. Safir's (1985) account in terms of Case theory. The appeal of this account lies in an attempt to give a uniform explanation of definiteness effects, namely for instance the definiteness effect in English *there* sentences and within VP in German.

Safir's point of departure is den Besten's (1984) account of how Case is assigned in German, as outlined in section 1.1. Recall that den Besten was only concerned with Case assignment to 'internal' nominative NPs and dative NPs inside VP.

Safir adopts essentially this account of Case assignment. He proposes the following connection between the definiteness effect and VP-internal nominative NPs. In English *there* sentences nominative Case is assigned first to the expletive *there*, then, by coindexation of *there* with the postverbal NP, nominative Case is transmitted to the postverbal NP. Now, if the NP was definite, this coindexation relation would constitute a violation of condition C of Binding Theory (Chomsky 1981). Indefinite NPs, as Safir stipulates, are exempt from Condition C of Binding Theory. For VP-internal nominative NPs Case is transmitted from an empty expletive in [SPEC, IP], which is assigned nominative Case by INFL.

The problem with Safir's analysis is first of all that it accounts only for the definiteness effect with internal nominative NPs inside VP. As we have seen, however, the definiteness effect shows up also with dative, accusative and external nominative NPs inside VP. What is crucial, though, is that the definiteness effect does not hold for objects that receive inherent Case or for PPs. Thus, the analysis, if it is on the right track, has to be extended in some way to all complements inside VP that receive structural Case. For dative and accusative NPs one might suggest that the inflectional system should be enriched with inflectional elements for dative and accusative case respectively. This would be in accordance with Chomsky's (1989) proposal that objective Case in English be assigned by AGR(o) and more generally that structural Case always is assigned via SPEC-head agreement. Thus, for German, in addition to the nominative assigning inflectional element Tense or, maybe, AGR(nom), one would have to assume inflectional elements AGR(dat) and AGR(acc). Indirect structural Case assignment (Case assignment to NPs inside VP) then would go as follows: the specifier position of each Case-assigning inflectional node is filled by an empty expletive which receives Case. This Case then is transmitted from the expletive to the NP in VP-internal position. This is indicated in (104).

(104)



The definiteness effect with VP-internal NPs receiving structural Case in German is then explained as follows: NPs inside VP receive Case by being coindexed with the expletive in the specifier position of the respective Case assigner. This coindexation relation requires that the NP be indefinite. If a NP is scrambled out of the VP, it may move to the specifier position of the relevant Case assigner. Then, it is assigned Case directly. The fact that scrambling may move an accusative or dative NP also to some other position than the specifier position of the relevant Case assigner then could be explained in either of two ways: the specifier position is an intermediate landing site for further adjunction to some other element, or the NP may move to the specifier position of any inflectional element. For the explanation of the indefiniteness effect, it is then crucial that the foot of a chain is assigned Case indirectly. I will leave it open which one of the two alternatives should be preferred.

This Safir-style account of the definiteness effect in German has the advantage of giving a uniform account for definiteness effects. However, this account, in whatever way it may be refined, is

problematic in some respects. First of all, if scrambling of dative and accusative NPs is treated as movement to the specifier position of some inflectional element in exactly the same way as movement of nominative NPs to [SPEC, IP], then the differences between scrambling of dative and accusative NPs and movement of nominative NPs to [SPEC, IP], namely with respect to normal word order and focus effects, as discussed above, is not accounted for. Furthermore, it is not quite clear that the definiteness effect in existential constructions is exactly the same as the definiteness effect with NPs inside VP in German. The latter, as we have seen, should more accurately be taken as a specificity effect, not a definiteness effect. There is some evidence that the definiteness effect in existential constructions is independent of specificity. It seems that not only nonspecific indefinite NPs may occur in existential constructions, but, under appropriate circumstances, also specific indefinite NPs, as, for instance, in (105) and (106). (The second example is due to David Pesetsky.)

(105) a. There was a certain man in the room.

(106) a. There are the following problems with this proposal.

b. ?? There are the problems above with this proposal.

Such examples, however, need not be decisive, since they may involve the list reading, as in (107), which is independent of the definiteness effect.

(107) There is still John who could help us.

There is another deficiency in the Safir-style account. It only explains why NPs that are inside VP and receive structural Case must be indefinite or nonspecific. It does not explain why NPs that have moved out of the VP cannot have a nonspecific reading without some operator (a focus operator or a generic operator). In the next section, I present a proposal that takes this into account.

4.2. An account in terms of semantic functions

Let recall the basic observations about correlations between syntactic positions and semantic functions. The following two conditions hold for definite and indefinite NPs that receive structural Case. First, within VP (or AP) a NP may only have a simple nonspecific reading in the usual sense; it may not be nonspecific in association with an operator. Second, a NP that has left the VP (or AP) must be either of the following: specific, generic (in association with a generic operator) or

contrastively focused (possibly in association with a focusoperator). A condition that holds for any constituent, is, that it must be defocused (or, alternatively, be contrastively focused) if it has scrambled. This condition only holds for scrambling as an adjunction operation, not for movement to [SPEC, IP] (disregarding the previous section).

Now a possible way to make sense out of these conditions is the following. Any NP must have some kind of closure which guarantees its semantic interpretation and is associated with a certain type of semantic interpretation. Syntactically, such closure conditions are: being governed by V, being specific, being associated with an implicit generic operator or with a (explicit or implicit) focusoperator. It is natural to assume that a NP may have only one kind of closure - for certain kinds of semantic functions this may even be logically necessary. The crucial point is that in German, the closure conditions must hold at S-Structure, but in a language like English at LF. Thus, in German, if a NP stays inside VP at S-Structure, it is closed by being governed by the verb. Therefore, it may only have a nonspecific interpretation and may not be associated with any other operator. But if a NP is outside of VP at S-Structure, it must have some kind of closure which is not correlated with the simple nonspecific interpretation. Then the kinds of closure that are available are: specificity, genericity or focusing. Thus, we have a bijection principle for the closure of a NP, which can be stated as in (108).

(108) A (definite or indefinite) NP in a sentence S must be associated with one and only one closure operator in S.

But what about the connection with structural vs. inherent Case? Government by the verb constitutes a closure relation that apparently can compete syntactically with other closure operators only for NPs that receive structural Case. It seems that government by the verb constitutes only semantically, but not syntactically a closure relation for NPs that receive inherent Case.

The condition in (108) raises the question about quantified NPs. Quantified NPs are presumably associated inherently with a closure operator and thus should be able to occur VP-externally, but not VP-internally. First, let us consider NPs with negative determiners such as *niemand* 'nobody' and *kein* N 'no N'. Negative NPs can appear outside of VP, as illustrated in (109).

- (109) a. weil kein Mensch dies Buch gelesen hat
 because no man this book read has
 b. weil niemand dem Mann geholfen hat

because nobody the man helped has

c. weil kein Mensch / niemand nie schläft

because no man / nobody never sleeps

However, they can also appear inside VP. Lenerz (1977) observes that negative subject NPs are far more acceptable when they follow a definite direct object than definite subject NPs, as shown in the contrast between (110b) and (111b).

(110) a. weil niemand dieses Buch lesen wird

because nobody this book read will

b. weil dieses Buch niemand lesen wird

(111) a. weil mein Vater dieses Buch lesen wird

because my father this book read will

b. * weil dieses Buch ^(/) mein Vater ^(/) lesen wird

A parallel observation can be made with adverbs:

(112) a. weil wohl niemand gelacht hat

because presumably nobody laughed has

b. weil dem Mann ja doch niemand geholfen hat

because the man prt prt nobody helped has

(113) a. * weil wohl das Kind gelacht hat

because presumably the child laughed has

b. * weil dem Mann ja doch Hans geholfen hat

because the man prt prt John helped has

However, as Kratzer (1989) observes, negative plural NPs cannot occur outside of VP.

(114) a. ?? weil keine Studenten dies Buch gelesen haben

because no students this book read have

b. ?? weil keine Menschen dem Mann geholfen haben

because no men the man helped have

c. ?? weil keine Menschen nie schlafen

because no men never sleep

(115) a. ?? weil Hans keine Bilder seiner Frau gezeigt hat

- because John no picture his wife shown has
 b. weil Hans kein Bild seiner Frau gezeigt hat

Kratzer argues that negative plurals of the form *keine N'* are in fact mergers of sentence negator *nicht* and bare plural. In contrast, negative singular NPs are syntactically ambiguous between being real quantifiers (and thus being themselves closure operators) and mergers of sentence negator and indefinite (nonspecific) singular NP. Since bare plurals and indefinite nonspecific singular NPs must stay inside VP, it follows that negative singular count NPs may not only occur inside VP like negative plural NPs, but also outside VP.

With negative plural NPs, there is still a problem to be explained. Negative plurals seem to never be able to occur as subjects, regardless of their position. Thus, the correlates of (113) in (116) are not acceptable either:

- (116) a. ?? weil dies Buch keine Studenten / OK kein Student gelesen haben / hat
 because this book no students / no student read has
 b. ?? weil dem Mann keine Menschen / OK kein Mensch geholfen haben / hat
 because the man no men / no man helped has
 c. ?? weil wohl keine Kinder / OK kein Kind schliefen / schlief
 because presumably no children / no child slept

Negative plural NPs also seem unacceptable when they are in the dative - in whatever position:

- (117) ?? weil Hans keinen Kindern / OK keinem Kind geholfen hat
 because John no children / no child helped has

Thus the merger between sentence negator and bare plural, apparently, is possible only if the bare plural is in direct object position.

Other quantified NPs, for instance *jeder N'*, seem to behave like definite NPs, as expected:

- (118) a. weil jeder Student dieses Buch lesen wird
 b. * weil dieses Buch jeder Student lesen wird

5. Properties of the scrambled position

5.1. Properties of A-positions:

Like other languages that allow for scrambling within IP (for instance Hindi, cf. Mahajan 1989), the scrambled position in German exhibits properties of A-positions (and maybe of A'-positions, as argued by Webelhuth, 1989). Let me illustrate the characteristics of A-positions for scrambled positions. First, a NP may bind anaphors that are contained in a NP that the former NP c-commands at S-Structure. (119) shows that a scrambled definite accusative NP may bind a nonspecific dative NP in base position. (120) shows that binding is possible also in the other direction: a dative in base position may bind an anaphor contained in an accusative NP that has remained in situ.

(119) a. weil Hans die Leute_i Freunden voneinander_j vorgestellt hat

because John the people (acc) to friends of each other (dat) introduced has

b. weil Hans die Frau_i einem Freund von sich selbst_j vorgestellt hat

because John the women (acc) a friend of herself (dat) introduced has

(120) a. weil Hans nie Leuten_i Bilder voneinander_j gezeigt hat

because John never to people (dat) pictures of each other (acc) shown has

b. weil Hans nie jemandem_i ein Bild von sich selbst_j gezeigt hat

because John never anybody (dat) a picture of himself (acc) has shown

A scrambled accusative NP may bind an anaphor inside a dative NP also if the dative NP, being specific, has been scrambled out of the VP. The condition, however, is that the accusative NP precede the dative NP:

(121) a. weil Hans die Leute_i diesen Freunden voneinander_j nicht vorgestellt hat

because John the people (acc) to these friends of each other (dat) not introduced has

b. * weil Hans diesen Freunden voneinander_j die Leute_i nicht vorgestellt hat

One apparent puzzle is that if the accusative is a pure anaphor, it may not be bound by a dative NP in a higher position, whether the dative NP is inside VP or scrambled:

(123) a. * weil Hans den Leuten_i einander_j vorgestellt hat

because John to the people (dat) each other (acc) introduced has

b. * weil Hans den Mann sich selbst vorgestellt hat

because John the man himself introduced has

However, one can see easily that this phenomenon has nothing to do with scrambling, specificity or binding theory. Notice that if the dative is a pure anaphor, it may be bound by an accusative NP moved to a higher position:

- (124) weil Hans die Leute einander vorgestellt hat
 because John the people (acc) to each other introduced has

Scrambling because of specificity cannot explain the situation, since specific accusative NPs containing an anaphor allow for binding by a higher dative NP:

- (125) weil Hans den Leuten die Bilder voneinander gezeigt hat
 because John to the people the pictures of each other shown has

It seems that the reason for the impossibility of binding of accusative anaphors by a dative NP has to do with the special movement rule for reciprocals and reflexive pronouns: recall from section 2 that reciprocals and reflexives must move to a position between the subject and any following scrambled NPs, if there are any scrambled NPs. Notice that also accusative reflexives that are bound by the subject must move in front of the dative:

- (126) a. * weil Hans den Leuten sich vorgestellt hat
 because John to the people (dat) himself introduced has
 b. weil Hans sich den Leuten vorgestellt hat

Binding of anaphors by scrambled NPs is also possible from presubject position. The result is only as bad as any scrambling of accusative or dative NPs to presubject position is:

- (127) a. weil die Leute, der Mann einander, vorgestellt hat
 because the people (acc) the man (nom) to each other introduced has
 b. weil den Jungen, der Mann sich selbst, im Spiegel gezeigt hat
 because the boy (acc) the man (nom) himself in the mirror shown has

The second property of the scrambled position that is typical of A-positions is that scrambled NPs do not show up weak crossover effects. Examples are given in (128) - (129).

- (128) a. weil Hans jedem, seinen Pass, zurueckgegeben hat

because John to everybody (dat) his passport (acc) returned has
 b. weil Hans jeden Hund, seinem Besitzer, zurueckgegeben hat

because John every dog (acc) to his owner (dat) returned has
 (129) a. Wer hat wem, seine, Freunde vorgestellt?

who has to whom (dat) his friends (acc) introduced
 b. Wer hat wen, seinen, Freunden vorgestellt?
 who has whom (acc) to his friends (dat) introduced

Quantified NPs scrambled to presubject position may even bind a variable contained in the subject, although the result is marked for the usual reason:

(130) a. (?) weil jeden, sein Hund, gebissen hat
 because everybody (acc) his dog (nom) has bitten
 b. (?) Wen, hat sein Hund, gebissen
 whom has his dog (nom) bitten

Finally, scrambled NPs do not undergo reconstruction. First, reconstruction is impossible with scrambled NPs containing an anaphor. In (131) the dative NPs cannot bind the anaphor in the accusative NP in the higher position, even though, after reconstruction of both dative and accusative NP, the dative NP would c-command the anaphor in the accusative NP.

(131) a. * weil ich ein Bild von sich selbst, diesem Jungen, gezeigt habe
 because I a picture of himself to this boy shown have
 b. * weil ich die Bilder voneinander, den Leuten, gezeigt habe
 because I the pictures of each other to the people shown have

That reconstruction of scrambled NPs could in principle also be evidences by showing that scrambled NPs are not subject to condition C effects with examples of the following type:

(132) a. * weil ich ihr, Marias, Pass gezeigt habe
 because I her (dat) Mary's passport (acc) shown have
 b. * weil ich Marias Pass ihr gezeigt habe

According to this test, (132b) should be fine. However, it is ruled out by the fact that the definite pronoun *ihr* must precede the scrambled full NP *Marias Pass*, according to the rule of pronoun

movement mentioned in section 2. Notice also that full NPs may not precede subject pronouns, thus excluding another way of testing condition C effects:

- (133) a. * weil das Buch sie gesehen hat
 because the book (acc) she (nom) seen has
 b. * weil Marias Pass sie_i gesehen hat
 because Mary's passport she seen has

So it seems as if the positions to which NPs scramble behave like A-positions in German with respect to binding, weak crossover and reconstruction. However, it turns out that this cannot be quite correct, as we shall see in the next section. The reason is that the properties of A-positions cannot be absolute properties of the scrambled positions, but rather depend in some way on the nature of the position of the antecedent and the moved constituent.

In contrast to the scrambled position, the topic position behaves purely as an A'-position in German. Again, this appears to be a general fact about the difference between scrambling and topicalization (see Mahajan 1989 for Hindi). (134) illustrates that binding is impossible from topic position, (135) illustrates that topicalization exhibits weak cross over effects, and (136) illustrates that reconstruction is possible with topicalized elements.

- (134) a. * Einen Mann_i sah ein Freund von sich_i.
 a man (acc) saw a friend of himself
 b. * Den Männern_i ähneln Freunde voneinander_i.
 the men (dat) resemble friends of each other
 (135) Jeden sah seine Mutter
 everybody saw his mother
 (136) Sich selbst liebt jeder
 himself everybody loves

5.2. A problem

In the quantifier split constructions in German discussed in section 1.2., the moved element, i.e. the N', *da* or the partitive phrase, actually does not necessarily move to topic position ([SPEC, CP]). It may alternatively move to an adjunct position within IP, as in (137). However, it, apparently, must move out of the VP, as in the examples in (138) (with normal intonation) show.

- (137) a. weil die Leute da wohl nichts von e gegessen haben
 because the people this presumably nothing of have eaten
 b. weil die Leute von diesen Dingen nie etwas e gegessen haben
 because the people of these things never anything eaten have
 c. weil die Leute Pilze ja doch viele e gefunden haben
 because the people mushrooms prt prt many found have
- (138) a. ?? weil die Leute wohl da nichts e von gegessen haben
 b. ?? weil die Leute nie von diesen Dingen etwas e gegessen haben
 c. ?? weil die Leute ja doch Pilze viele e gefunden haben

The crucial point now is that the quantifier split constructions, as opposed to scrambling, seem to undergo reconstruction, independently of the landing site of the moved element. In this respect quantifier split differs from scrambling. (139) shows reconstruction effects with moved N' 's containing anaphors. (140) shows reconstruction effects with moved *von* phrases.

- (139) a. weil Hans Bilder voneinander_i den Leuten_j keine e zeigen moechte
 because John pictures of each other (acc) the people (dat) none to show wants
 b. weil Maria Bilder von sich selbst_i dem Jungen_j keine e zeigen moechte
 because Mary pictures of himself to the boy (dat) none (acc) to show wants
- (140) a. weil Hans von diesen Informationen ueber einander_i die Leute_j nichts e wissen lassen
 moechte
 because John of this information about each other the people nothing to know wants
 b. weil Hans von diesen Informationen ueber sich selbst_i den Mann_j nichts wissen lassen
 moechte
 because John of this information about himself the man nothing to know wants

A minimal pair illustrating that reconstruction effects show up with partitive constructions, but not with scrambling is (141):

- (141) a. * weil Maria diese Bilder voneinander_i den Leuten_j e zeigen wollte
 because Mary these pictures of each other (acc) to the people (dat) show wanted
 b. weil Maria Bilder von einander_i diesen Leuten_j sicher welche e zeigen wollte
 because Mary pictures of each other_i to these people_j (dat) certainly some (acc) show wanted

Reconstruction of partitive phrases also concerns condition C effects:

- (142) a. * weil Hans Bilder von Maria_i ihr_j viele e zeigen moechte
 because John pictures of Mary her many show wanted
 b. weil Hans_i Bilder von sich_j ihr_j viele e zeigen moechte
 because John pictures of himself her many show wanted

(142b) shows that scrambling and partitive movement differ in another respect. Definite pronouns always must precede a scrambled NP, as we have seen in section 2. But in (142b), the pronoun *ihr* is acceptable in a position after the moved N' in the partitive construction. (This is, of course, also the reason why reconstruction with condition C effects can be tested with partitive constructions.)

The moved element of a partitive construction differs again from scrambled NPs in that it does not behave like being in an A-position. Thus, binding as indicated in (143) is impossible.

- (143) * weil Hans Gaeste_i Freunden voneinander_j keine vorgestellt hat
 because John guests friends of each other none introduced has

Weak Crossover effects, though, cannot be tested.

In conclusion, it seems that the position of the moved element in partitive constructions within IP behaves entirely like an A'-position - exactly like the topic position, which is an alternative landing site. The reason for that must be some property that is common to the chains created by all three types of partitive movement. One common property is that some element is left in situ, namely a quantifier and that this element must be assigned Case. Thus, with a partitive construction the foot of a chain (or a certain constituent containing the foot) must be assigned Case. This is not necessarily so for scrambling. Recall that in the extension of Safir's account (and also in the account of scrambling in Hindi by Mahajan, 1989), Case is assigned to scrambled specific NPs only in the position they move to (at some point in the derivation), the SPEC-position of the respective Case-assigning inflectional element. Assuming that something like this might be correct for scrambled NP, then the following generalization seems to hold for adjoined positions within IP (and arguably also [SPEC, CP]) to behave like A-positions: A position in a chain C has the status of an A-position iff the foot of C is assigned Case (or the next higher 'complete constituent' containing the foot, as in the case of partitive constructions). If this account is correct

than the following examples should show the indicated contrast, as was suggested by David Pesetsky (p.c).

- (145) a. Was fuer Informationen ueber sich selbst gibt dieser Arzt nie einem Patienten?
 what sort of information about himself gave this doctor never a patient
 b. Was fuer Informationen ueber sich selbst gibt dieser Arzt diesem Patienten nie?
 (146) a. * Welche Informationen ueber sich selbst gab dieser Arzt wohl einem Patienten?
 which information about himself gave the doctor presumably a patient
 b. Welche Informationen ueber sich selbst gab dieser Arzt diesem Patienten wohl?

A *wh* phrase like *welche Informationen* in (146b) should first scramble out of the VP, since it is inherently specific or discourse-related (cf. Pesetsky 1987). In that position, it should receive Case. When it moves to topic position, a chain will be created of the following form: (*wh* N', t1 (+Case), t2 (-Case)). If the dative NP is nonspecific, as in (146a), then it should stay inside VP and not scramble across the intermediate landing site (as would be possible in (146b)). Then, according to the generalization above, reconstruction should be possible only to the Case-assigned intermediate position, but not to the base position, thus disallowing *sich* to be bound by *einem Patienten*. The *wh* phrase in (145) is nonspecific and thus should not exhibit the effect.

6. General considerations on the definiteness / specificity effect

In English the definiteness Effect shows up in essentially two types of constructions, *there* sentences and presentational sentences. It seems that even these constructions exhibit a specificity effect rather than a definiteness effect (see also Guéron 1980). The examples in (147) seem acceptable:

- (147) a. There is the president of France in the garden.
 b. There stood the president of France in the doorway.

As has been argued in Higginbotham / Fiengo (1981) and Guéron (1980, 1981), specific NPs in English, in contrast to nonspecific NPs, do not allow two types of extraction at S-Structure, PP-extraposition and, though the case is less clear, relative clause extraposition. Also specific NPs disallow extraction of *wh* phrases and of quantifier phrases at LF (cf. May 1975). This is illustrated with Guéron's example, a potentially presentational construction, in (148).

- (148) a. A book came out by Chomsky
 b. ?? A particular book came out by Chomsky.
 c. ?? A book we had been looking forward to came out by Chomsky

These constraints are generally considered as instances of a uniform condition, the Name Constraint, as stated in (149).

- (149) A name (i.e. a specific NP) X may not contain a variable free in X.

This raises a general question about extractions from VP-internal NPs in German. In principle, there are now two possible accounts for why VP-internal, but not VP-external NPs allow extraction, the ECP and the name constraint. Extraction with partitive constructions might be subject to the Name Constraint as well. Since VP-internal NPs are generally only nonspecific NPs and VP-external NPs specific NPs, the Name Constraint seems to account equally well for extractability from NPs as the ECP. However, there is some evidence that restrictions on extraction with partitive constructions are ECP effects, but restrictions with relative clause extraposition effects of the Name Constraint. Quantified NPs are not subject to the Name Constraint. When they scramble out of the VP, they seem to tolerate relative clause extraposition much better than scrambled specific NPs:

- (150) a. weil das Bild einem Kind gefallen hat, das es gesehen hat
 because the picture (nom) a child (dat) pleased that it seen has
 b. ?? weil einem (gewissen) Kind das Bild gefallen hat, das es gesehen hat
 because a (certain) child (dat) the picture pleased has that it seen has
 c. weil allen Kindern das Bild gefallen hat, die es gesehen haben
 because all children (all) the picture pleased has that it seen have
- (151) a. weil Hans das Bild der einzigen Frau gezeigt hat, die die Ausstellung besucht hat
 because John the picture (acc) the only woman (dat) shown has that the exhibition visited has
 b. weil Hans einer Frau das Bild gezeigt hat, die die Ausstellung besucht hat
 because John a woman the picture shown has that the exhibition visited has
 c. ?? weil Hans der Frau das Bild gezeigt hat, die die Ausstellung besucht hat
 because John the woman the picture shown has that the exhibition visited has
 d. weil Hans den meisten Frauen das Bild gezeigt hat, die die Ausstellung besucht haben
 because John most woman the picture shown has that the exhibition visited have

There is evidence also in the other direction: extraction with partitive constructions does not seem to be applicable to nonspecific NPs outside VP that are licensed by a generic operator.

- (152) a. weil viele Koeche den Brei / diese Gericht verderben
 because many cooks the pap / this dish spoil
 b. ??weil Koeche viele den Brei / dieses Gericht verderben

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