On Negation in German and Bavarian

2 authors, including:

Cecilia Poletto
Goethe-Universität Frankfurt am Main
90 PUBLICATIONS **1,204** CITATIONS

SEE PROFILE

On Negation in German and Bavarian

Gerhard Brugger & Cecilia Poletto
University of Venice

1. Introduction

In this paper we intend to analyze the position of the sentential negative marker in Standard German and in some Bavarian varieties. In section 2, we will try to determine the position of the negative marker with respect to nominal arguments, prepositional phrases and some classes of adverbs. We will formulate our hypothesis on the basis of some recent proposals regarding the position of nominal expressions which receive structural case (cf. Chomsky (1992) among others). We will propose that all nominal arguments move to agreement positions at S-structure, which precede the position of sentential negation. Furthermore it will be shown that there are two non thematic subject positions, and that the lower one is only open to indefinite elements. We will compare our analysis with Sportiche's (1992) account showing that in German there is no special position for indefinite objects, but only AGROP, where both definite and indefinite objects move to. Movement to AGRO is different from scrambling, as it is obligatory and it targets a position which is lower than scrambling in the functional structure of the sentence. Further movement of [-focus] elements is interpreted as scrambling to a higher position. In section 3 we examine Bavarian negative concord. We will show that standard German 'nicht' and Bavarian 'nit' occupy the same position in the structure and that the analysis put forth for standard German can be applied to Bavarian too. We will then try to determine what the syntactic space of negative concord is, or else where negative elements such as 'nobody', 'nothing', 'no girl' surface at S-structure. We will then consider Zanuttini's (1991) hypothesis that negative concord is an instance of a Spec-head relation inside the negative projection. We will see that this analysis is not tenable for Bavarian. We will propose a different analysis for Bavarian negative concord, which is not instantiated by a Spec-head relation of the negative quantifier with the negative head, but which is possible in a very limited structural space. Section 4 contains a very sketchy comparison of what we have found in Bavarian with West Flemish and Romance negative concord. We will see that the X'-status of the negative marker is irrelevant for our analysis. Bavarian negative concord shows at SS what happens at LF in Romance.

2. Negation between NPs and PPs

2.1 Negation and direct objects

2.1.1 Scrambling

German sentential negation has often been analyzed as an adverb which is adjoined to VP (Webelhut 1989, Moltmann 1990,...). Within this hypothesis, we would expect (internal) arguments of the verb to follow the negative marker 'nicht'. But, contrary to this, 'nicht' must follow nominal arguments. The unmarked position of 'nicht' in (1a) is at the right of definite NPs. If it precedes a NP, it functions as contrastive negation (1b).

(1) a. daß Hans das Auto nicht verkauft hat
that H. the car not sold has
H. did not sell the car
b. #daß Hans nicht das Auto verkauft hat

Webelhut (1989:377) proposes that arguments which precede negation at S-structure have been scrambled out of the VP and adjoined to positions to the left of 'nicht'. This approach, however, has some shortcomings. First, while scrambling in itself is optional, it becomes obligatory in the presence of sentential negation. The internal argument in (2) can either scramble to a position preceding adverbs like 'wohl' and 'wahrscheinlich' (probably) (2a), or follow it (2b). But as shown by the contrast in (1) the internal argument has to precede 'nicht'.

(2) a. daß Hans das Auto wohl verkauft hat
that H. the car probably sold has
H. probably sold the car
b. daß Hans wohl das Auto verkauft hat
that H. probably the car sold has

Second, an argument preceding sentential negation does not behave as a scrambled element with respect to focus. Lenerz (1977) notices that the unmarked order of nominal internal arguments is: indirect object - direct object. In this order both arguments can be focused (3a). In the reversed order (3b), only the indirect object can be focused, while the direct one can not. While both sentences in (3) are acceptable answers to the question 'Who did Hans give the money to?', only (3a) is acceptable as an answer to 'What did Hans give to the cashier?'. According to Lenerz (1977), this is evidence that the direct object in (3b) undergoes the requirement of being defocused.

(3) a. daß Hans dem Kassierer das Geld gegeben hat
that H. the cashier(dat) the money(acc) given has
H. gave the money to the cashier
b. daß Hans das Geld dem Kassierer gegeben hat
that H. the money(acc) the cashier(dat) given has

Webelhut (1989) characterizes scrambling positions precisely as [-focus] positions. The direct object in (3b) has scrambled to a position in front of the indirect object, where it cannot be focused.

Crucially, the presence of negation does not affect this asymmetry. If nominal arguments which precede sentential negation occupy scrambling positions, we would expect that both sentences in (4) require their direct objects to be defocused. However, this is not the case. Just as (3a), (4a) is an acceptable answer to the question 'What did Hans not give to the cashier?'; (4b) is not:

(4) a. daß Hans dem Kassierer das Geld nicht gegeben hat
that H. the cashier(dat) the money(acc) not given has
H. didn't give the money to the cashier
b. daß Hans das Geld dem Kassierer nicht gegeben hat

With respect to focus, the direct object in (4a) does not display the behavior of an

element in a scrambling position. The same argument can be construed for the examples in (1) and (2). A direct object which precedes sentential negation, as the one in (1a), can be focused, while, it must be defocused, if it precedes 'wohl', as in (2a). (2b), where the direct object is not scrambled, is an acceptable answer to the question 'What did Hans buy?', but not (2a). (1a), where the direct object precedes 'nicht', is acceptable as an answer to 'What did Hans not buy?'. Thus, we conclude that nominal expressions preceding sentential negation are not necessarily scrambled.

2.1.2 A-movement

One of the basic problems of the account discussed in 2.1.1. lies in the fact that adverbs like 'wohl' and sentential negation are analyzed as being adjoined to VP. But these elements occupy quite different positions. First, 'wohl' can only precede (5a) but not follow (5b) sentential negation.

(5) a. daß Hans wohl nicht gekommen ist
that H. probably not come is
H. probably did not come
b. *daß Hans nicht wohl gekommen ist

Second, nominal arguments can intervene between 'wohl' and 'nicht' (6). A direct object has to precede sentential negation, but it can either follow (6a) or precede (6b) the adverb 'wohl'.

(6) a. daß Hans wohl das Auto nicht verkauft hat
that H. probably the car not sold has
H. probably did not sell the car
b. weil Hans das Auto wohl nicht verkauft hat

Munaro (1991), in the spirit of Mahajan (1990), analyzes German scrambling as a complex movement composed by: (a) obligatory A-movement at S-structure to the specifier of the appropriate agreement projection, where case is assigned/checked, and (b) subsequent (optional) A'-movement. If the agreement projections dominate the negative projection, the contrast in (1) is predicted: the direct object has to raise to a position which precedes 'nicht'. Since subsequent movements are optional, the fact that objects can either precede of follow 'wohl' (2,6) can be accounted for, assuming that such adverbs are generated in a position higher than this agreement projection but lower than the landing site for scrambling.

The trigger for the first step is supposed to be 'Case Assignment'. The direct object raises to the specifier of AGRO, in order to be assigned accusative case. This assumption has two welcome consequences. First, we expect constituents which are not assigned (structural) case, such as PPs, to be able to follow 'nicht'. We will discuss the distribution of PPs with respect to sentential negation in the following section. Second, since the movement to the specifier of AGRO is related to case rather than to focus, the contrast in (4) can be accounted for. A focused constituent can precede sentential negation.

According to Webelhut (1989), existential indefinites are marked [+focus], therefore they cannot undergo scrambling. Under the scrambling hypothesis we would expect them to follow sentential negation. But this is not the case. Just as definite ones, indefinite nominal arguments must precede sentential negation (7a). If negation precedes an indefinite object (7b), it is interpreted as contrastive negation. Munaro's

'short-step' hypothesis, on the other hand, can account for the distribution of indefinite direct objects.

(7) a. daß Hans ein Buch nicht gekauft hat
that H. a book not bought has
H. did not buy a book
b. #daß Hans nicht ein Buch gekauft hat

Notice that the indefinite argument in (7a) is interpreted with wide scope with respect to the negative element. This fact straightforwardly follows from its syntactic position: the indefinite c-commands the negative element.[0]

2.2. Negation and PPs

2.2.1 Definite PPs

In contrast to nominal arguments, PPs can follow sentential negation. PPs differ whether they can or must follow sentential negation. While selected PPs can either follow (8a) or precede (8b) sentential negation, directional PPs have to follow it (9).

(8) a. daß Hans auf seinen Freund nicht gewartet hat
that H. for his friend not waited has
H. did not wait for his friend
b. daß Hans nicht auf seinen Freund gewartet hat

(9) a. #daß Hans auf den Berg nicht gestiegen ist
that H. on the mountain not climbed has
H. did not climb on the mountain
b. daß Hans nicht auf den Berg gestiegen ist

While the negative element in (8a) can function either as sentential negation or as constituent negation with scope over the constituent which contains the past participle, the one in (9a) can only function as contrastive negation of the past participle (10).

(10) daß Hans auf den Berg nicht gestiegen, sondern geflogen, ist
that H. on the mountain not climbed, but flown, has
H. did not climb but flew on the mountain

The short step hypothesis as formulated in the preceding section accounts for this fact: since PPs are not assigned structural case, they can follow the negative marker. Furthermore, this hypothesis correctly derives that those PPs which have to follow 'nicht', such as directional PPs, also have to follow nominal arguments (11).

(11) a. Hans hat den Stein auf den Berg getragen
H. has the stone on the mountain carried
H. carried the stone on the mountain
b. *Hans hat auf den Berg den Stein getragen

Let's now consider the position of some types of PPs with respect to the negative marker. Bodypart PPs, PPs which are complements of spray-load verbs and modal PPs

---

0 The 'short-step' hypothesis can account for these facts, only if we assume that the position relevant for the intepretation of the indefinite is the S-structure one (cf. section 3.7).

behave like directional PPs. They cannot precede 'nicht', as exemplified in (12), (14) and (16). Moreover the negative marker always follow nominal arguments as in (13) and (15).

(12) a. Hans hat den Schrank nicht auf den Schultern (*nicht) getragen
H. has the wardrobe not on the shoulders not carried
H. did not carry the wardrobe on his shoulders
b. Hans hat Maria nicht auf den Mund (*nicht) geküßt
H. has M. not on the mouth not kissed
H. did not kiss Mary on the mouth

(13) a. *Hans hat auf den Schultern den Schrank getragen
H. has on the shoulders the wardrobe carried
H. carried the wardrobe on the shoulders
b. *Hans hat auf den Mund Maria geküßt
H. has on the mouth M. kissed
H. kissed M. on the mouth

(14) a. Hans hat die Wand nicht mit grüner Farbe (*nicht) bemalt
H. has the wall not with green color not painted
H. did not paint the wall with green color
b. Hans hat die Kisten nicht auf den Lastwagen (*nicht) geladen
H. has the boxes not on the truck not loaded
H. did not load the boxes on the truck

(15) a. *Hans hat mit grüner Farbe die Wand bemalt
H. has with green color the wall painted
H. painted the wall with green color
b. *Hans hat auf den Lastwagen die Kisten geladen
H. has on the truck the boxes loaded
H. loaded the boles on the truck

(16) Hans hat nicht mit guter Aussprache (*nicht) vorgetragen
H. has not with good pronunciation not declaimed
H. did not declaim with good pronunciation

Selected PPs (17), as already mentioned in (10), complex directional PPs (18) and local PPs (19) can precede and follow sentential negation.

(17) a. Hans kann sich (nicht) an seine Frau (nicht) erinnern
H. can himself not to his wife not remember
H. cannot remember his wife
b. Hans hat (nicht) an seiner Aussage (nicht) gezweifelt
H. has not about his declaration not doubted
H. was not in doubt about his declaration

(18) daß Hans (nicht) auf den Berg (nicht) hinauf (*nicht) gegangen ist
that H. not on the mountain not thereon not climbed has
H. did not climb on the mountain

(19) Hans hat (nicht) in Wien/auf dem Fest (nicht) getanzt
H. has not in Vienna/at the party not danced
H. did not dance in Vienna/at the party

Causative PPs, in (21), as well as temporal PPs (22) can only precede the negative marker.

(21) a. daß Hans wegen des Essens nicht erschienen ist
that H. because of the meal not appeared is
H. did not appear because of the meal
b. #daß Hans nicht wegen des Essens erschienen ist

(22) a. Hans hat vor zwei Tagen nicht getanzt
H. has ago two days not danced
H. did not dance two days ago
b. #Hans hat nicht vor zwei Tagen getanzt

If the PP follows the negative element, the latter does not have scope over the VP but only over the PP. As such it can be considered as an instance of contrastive negation.

3.2.2. Indefinite PPs

Like definite PPs, also indefinite PPs can follow sentential negation. According to their syntactic position, they take different scopes. While the indefinite PP in (23a) has scope over the negative element, the one in (23b), which follows 'nicht', can be interpreted with narrow scope. (23b) can be paraphrased with: 'there is no x, such that John waited for x'.

(23) a. daß Hans auf einen Freund nicht gewartet hat
that H. for a friend not waited has
H. did not wait for a friend
b. daß Hans nicht auf einen Freund gewartet hat

As exemplified in (24), indefinite directional PPs have to follow 'nicht'.

(24) a. #daß Hans auf einen Berg nicht gestiegen ist
b. daß Hans nicht auf einen Berg gestiegen ist
that H. not on a mountain climbed is
H. did not climb on a mountain

2.3 Summary

The hypothesis discussed in section 2.1.2. easily accounts for the distribution of nominal arguments and prepositional phrases with respect to sentential negation. A direct object precedes sentential negation because it has to raise to an agreement position preceding 'nicht' for case reasons (25a). Prepositional phrases, which do not take structural case can follow the negative element at S-structure (25b).

(25) a. daß Hans [AGROP das Auto$_i$ [NEGP nicht [VP t_i verkauft hat]]]
b. daß Hans [AGROP [NEGP nicht [VP auf den Berg gestiegen ist

2.4 Subjects and Datives

Indirect objects behave like direct objects with respect to sentential negation. They have to precede 'nicht' (26a). The negation preceding the indirect object in (26b) is interpreted as contrastive negation.

(26) a. daß Hans dem Präsidenten nicht geholfen hat
that H. the president(dat) not helped has
H. did not help the president

b. #daß Hans nicht dem Präsidenten geholfen hat

The assumption of an AGRO-position for direct objects imposes an analogous position 'AGRIO' for indirect objects. As we have already discussed (cf: section 2.1.1.), the unmarked order of indirect objects and direct objects is the first preceding the second. Therefore we assume that AGRIO precedes AGRO. Sentential adverbs such as 'wohl', precede AGRIO (27a). In (27b), the indirect object has been scrambled further to a position preceding the adverb. The observations regarding scrambling that we made for the direct object in section 2.1.2. are also valid for the indirect object: AGRIO, like AGRO, is not a [-focus] position.

(27) a. daß Hans wohl dem Präsidenten nicht geholfen hat
that H. probably the president(dat) not helped has
H. probably did not help the president
b. daß Hans dem Präsidenten wohl nicht geholfen hat

Subjects, like indirect objects and direct objects precede sentential negation (28). Since they can follow sentential adverbs (29a), we assume a subject agreement projection 'AGRSi' between the position occupied by class I adverbs and the agreement projections of the objects, which is distinct from AGRS, the position of English preverbal subjects.

(28) a. daß Hans nicht getanzt hat
that H. not danced has
b. #daß nicht Hans getanzt hat
(29) a. daß da wohl ein Mann getanzt hat
that there probably a man danced has
a man probably danced there
b. *daß da wohl der Präsident getanzt hat
that there probably the president danced has
the president probably danced there

Note that the specifier of AGRSi is subject to the so called 'definiteness restriction': it can not be occupied by definite subjects (29b).

The question arises whether all arguments with inherent case behave like datives. In addition to dative, arguments can be inherently case marked by genitive and, in some cases, by accusative. Let's first consider certain German verbs which assign genitive case. These genitive arguments have to precede sentential negation. If they follow, as in the (b)-examples, the negation is interpreted as contrastive.

(30) a. daß wir dieses Mannes nicht gedachten
that we this man(gen) not commemorated
we did not commemorate this man
b. #daß wir nicht dieses Mannes gedachten
(31) a. daß Maria sich des Mannes nicht erinnerte
that M. herself the man(gen) not remembered
M. did not remember the man
b. #daß Maria sich nicht des Mannes erinnerte
(32) a. daß Hans sich seines Vaters nicht schämte
that H. himself his father(gen) ashamed was

H. was not ashamed of his father
b. #daß Hans sich nicht seines Vaters schämte

These examples are taken from Moltmann (1990). Note, however, that her judgements differ from ours. According to Moltmann, genitive arguments can both precede and follow sentential negation. Since it is rarely instructive simply to announce one's contradictory intuitions, we will embed the sentences above in contexts which are incompatible with contrastive negation.

The verb 'brauchen' (need) can select a clausal complement and have a modal meaning only in contexts with negation. Hence, if the negative marker is omitted, (33) becomes ungrammatical.

(33) daß Hans *(nicht) zu kommen braucht
that H. not to come need
H. need not come

As we saw in section 2.1.1, if negation is followed by a direct object, it is contrastive. As shown by the contrast in (34), modal 'brauchen' cannot be licensed by contrastive negation. Modal 'brauchen' is possible only if the direct object precedes the negative marker (34a), but not if it follows it (34b). Note that a PP following 'nicht' is compatible with modal 'brauchen, since this configuration does not give raise to contrastive negation (34c).

(34) a. daß Hans das Auto nicht zu verkaufen braucht
that H. the care not to sell need
H. need not sell the car
b. *daß Hans nicht das Auto zu verkaufen braucht
c. daß Hans nicht auf den Berg zu steigen braucht
that H. not on the mountain to climb need
H. need not climb on the mountain

There is a striking similarity between accusative arguments and genitive arguments with respect to modal 'brauchen': Only if the genitive argument precedes negation, as in the (a)-examples, but not if it follows, as in (b), modal 'brauchen' is possible.

(35) a. Du brauchst dieses Mannes nicht zu gedenken
You need this man not to commemorate
You need not commemorate this man
b. *Du brauchst nicht dieses Mannes zu gedenken
(36) a. Maria braucht sich dieses Mannes nicht zu erinnern
M. need herself this man not to remember
M. need not remember this man
b. *Maria braucht sich nicht dieses Mannes zu erinnern
(37) a. Hans braucht sich seines Vaters nicht zu schämen
H. need himself his father not to ashamed be
H. need not be ashamed of his father
b. *Hans braucht sich nicht seines Vaters zu schämen

If modal 'brauchen' is incompatible with contrastive negation, these contrasts constitute an argument in favor of our assumption, that genitive arguments have to precede

sentential negation.

Let's now consider inherent accusatives. There are a few verbs that take two accusative objects in standard German: 'lehren' (teach) (38), 'abhören' (question) and 'abfragen' (question) (39). Both accusative objects have to precede 'nicht'.

(38) a. daß der Mann den Jungen diese Sprache nicht gelehrt hat
that the man(nom) the boy(acc) this language(acc) not taught has
the man did not teach the boy the language
b. #daß der Mann den Jungen nicht diese Sprache gelehrt hat

(39) a. daß Maria ihren Sohn diese Vokabeln nicht abgefragt/abgehört hat
that M. her son(acc) these words(acc) not questioned has
M. did not question her son these words
b. #daß Maria ihren Sohn nicht diese Vokabeln abgefragt/abgehört hat

Moltmann's (1990, p.27) judgements differ from our's. According to her, the second accusative object can follow the negative marker. But again, as the following contrasts show, the second accusative object behaves just like direct objects and genitive arguments with respect to modal 'brauchen'. Modal 'brauchen' is possible only if both accusative objects precede the negative marker.

(40) a. Hans braucht den Jungen diese Sprache nicht zu lehren
H. need the boy(acc) this language(acc) not to teach
H. need not teach the boy the language
b. *Hans braucht den Jungen nicht diese Sprache zu lehren
c. *Hans braucht diese Sprache nicht den Jungen zu lehren

(41) a. Maria braucht ihren Sohn diese Vokabeln nicht abzufragen
M. need her son(acc) these words(acc) not to question
M. need not question her son these words
b. *Maria braucht ihren Sohn nicht diese Vokabeln abzufragen
c. *Maria braucht diese Vokabeln nicht ihren Sohn abzufragen

If these observations are correct, nominal expressions with inherent genitive or accusative case surface in positions to the left of sentential negation. Hence they behave like datives rather than like PPs. Hence additional assumptions have to be made regarding the surface position of these expressions.

2.5. Argument positions between NEGP and VP

2.5.1. Specific and non specific direct objects

Considering the distribution of nominal arguments and prepositional phrases with respect to sentential negation and sentential adverbs we assumed a German Mittelfeld of the kind in (42).

(42) [AGRS...[XP wohl [AGRSi [AGRIO [AGRO [NEGP [VP PP]]]]]...]

In section 2.1.2. we assumed that the short step from the VP internal base positions to the agreement positions is triggered by case assignment in S-structure. Therefore nominal arguments precede sentential negation, while prepositional phrases can follow it. Even when NEGP is not realized, nominal arguments cannot surface in positions which are lower than NEGP, e.g. positions internal to VP, because of case checking. Under this view, specific and non specific direct objects can surface in the same

position, i.e. the specifier of AGRO.[1]

Sportiche (1992) proposes a structure different from (42) for the Dutch Mittelfeld. He assumes that specific and non specific direct objects surface in different positions. Non specific direct objects move to the specifier of AGROP (43), where accusative case is checked. Specific direct objects, on the other hand, move further to the specifier of Accusative Voice 'ACCVP', where the specificity feature is checked.

(43) [AGRS... [ACCVP (adverbs) [AGROP [VP]]]]

Sportiche (1992) notes that, in Dutch, specific and non specific direct objects differ in their distribution with respect to certain adverbs. Specific objects must occur higher than the negative marker 'niet' and may occur higher or lower than adverbs such as 'waarschijnlijk' (probably) (44a, his (84)). Non specific objects, on the other hand, must follow, sentential adverbs such as 'waarschijnlijk' (probably) or particles such as 'maar' (but) (44b, his (85c)).

(44) a. Hij heeft (Jan) waarschijnlijk (Jan) niet (*Jan) gezien
he has Jan probably Jan not Jan seen
b. Pak maar een boekje/(*een boekje maar)
take 'maar' a book

Sportiche (1992:65) proposes that these adverbs can intervene between ACCVP and AGRO. In this way the fact that non specific direct objects surface to the right of these adverbs is accounted for.

Before we discuss the problems of this approach, note that German shows the same contrasts. While specific direct objects can precede and follow sentential adverbs such as 'wohl', they cannot follow sentential negation (45), as we have already seen in section 2.2. Non specific direct objects (46) must follow sentential adverbs.

(45) daß Hans (das Auto) wohl (das Auto) nicht *(das Auto) verkauft hat
that H. the car probably the car not the car sold has
H. probably did not sell the car

(46) a. daß Hans wohl ein Auto verkauft hat
that H. probably a car sold has
H. probably sold a car
b. #daß Hans ein Auto wohl verkauft hat
that H. a car probably sold has

Sportiche's approach, however, displays a number of problems. First, he assumes that sentential negation is generated between ACCVP and AGRO. This assumption correctly predicts that specific direct objects, which surface in ACCVP, precede sentential negation, but it wrongly predicts that non-specific direct objects, which are realized in AGRO, surface to the right of sentential negation. As we have already discussed in section 2.1.2, this is not the case in German.[2]

---

1 Structure (42) is not complete, since it ignores potential positions for PPs preceding NEGP and the scrambling positions, which are higher then the sentenial adverbs.

2 This generalization that German nonspecific nominal arguments cannot follow sentential negation is not undisputed. According to Moltmann (1990, p.27), for instance, nonspecific indefinite direct objects can follow sentential negation. Note, however, that her examples do not involve the marker for sentential negation 'nicht', but the negative adverbial quantifier 'nie' (never). As we will see in section 3.5.2, these elements behave very differently

(47) a. daß Hans das Buch nicht gekauft hat
that H. the book not bought has
H. did not buy the book
b. #daß Hans nicht ein Buch gekauft hat
that H. not a book bought has
H. did not buy a book

Second, indirect objects can precede specific direct objects, even if they are non-specific, as in (48a). For this reason, Sportiche (1992) assumes that AGRIO not only precedes AGRO but also ACCVP (48b).

(48) a. daß er jemandem das Buch gegeben hat
that he someone(dat) the book(acc) given has
he gave someone the book
b. [AGRS... [AGRIO [ACCVP (neg) [AGROP [VP]]]]]

This structure predicts a distinct distribution of non specific indirect objects and non specific direct objects with respect to negation. The former, which surface in AGRIO, should precede sentential negation, while the latter should follow it. Therefore the sentences in (26) are expected to contrast. But they don't.

(49) a. #daß Hans nicht jemanden gesehen hat
that H. not somebody(acc) seen has
b. #daß Hans nicht jemandem geholfen hat
that H. not somebody(dat) helped has

Third, Sportiche (1992) assumes that sentential adverbs such as 'waarschijnlijk' (probably) and particles such as 'maar' (but) can be generated between ACCVP and AGRO (43). Although this hypothesis correctly predicts that non specific direct objects cannot precede these elements, it wrongly predicts that non specific indirect objects have to precede them. The latter follow the sentential adverb 'wohl' (50) and the particle 'doch' (51).[3]

(50) a. daß Hans wohl jemandem geholfen hat

---

and occupy very different positions in the syntactic structure. Moltmann further assumes that also some nonspecific definite nominal expressions can follow sentential negation. We will discuss these expressions and their syntactic position in footnote 9.

3 Sportiche (1992:66) illustrates his claim with the following contrast in Dutch. According to him the dative indefinite 'jemand' must precede the particle 'maar'.

i) a. Verzoek iemand maar uit te strappen
b. ?*Verzoek maar iemand om uit te strappen
ask someone to get off

German does not show this contrast in an analogous construction. The unmarked order of 'doch' and the indefinite dative is the order shown in (iib).

ii) a. *Bitte jemanden doch aufzustehen
ask someone prt to get off
b. Bitte doch jemandem aufzustehen
ask prt someone to get off

The reversed order of 'doch' and 'jemand', as in (iia), could be marginally possible, but the meaning differs: the adverb is focalized and seems to be interpreted as modifying the embedded verb. Note, however, that (iib) is perfectly possible, in contrast to (ib).

that H. probably someone(dat) helped has
H. probably helped someone

b. *daß Hans jemandem wohl geholfen hat

(51) a. daß es Hans doch jemandem geschenkt hat
that it H. prt. someone(dat) given has
H. gave it to someone

b. *daß es Hans jemandem doch geschenkt hat

Contrary to Sportiche (1992), sentential adverbs and particles therefore cannot be generated between ACCVP and AGRO. Rather, it has to be assumed that they occupy positions which precede AGRIO[4]. Sportiche's structure (43) has to be substituted by a structure like the one in (52), which correctly predicts that nonspecific direct and indirect objects can surface after sentential adverbs and particles.

(52) [AGRS...(adverb)...[AGRIO [ACCVP [AGRO [VP]]]]]...]

Therefore, sentential adverbs and particles do not constitute an empirical test for the hypothesis that there are two distinct syntactic positions for specific and nonspecific direct objects. In addition, we saw that sentential negation is not a test either, since it follows neither specific nor nonspecific direct objects. In principle there are two possibilities to account for this fact. Either, as we proposed in section 2.1.2, sentential negation is generated in a position that follows AGRO. Or, if sentential negation is generated between ACCVP and AGRO, an independent stipulation has to be formulated to account for the absence of nonspecific direct objects after negation.

In the following section we will see whether there are any other elements distinct from negation which can appear between specific and nonspecific direct objects. As we will see, there is no such elements which may constitute empirical evidence for the second option in German. Hence we will reject the second option and assume that sentential negation follows AGRO.

2.5.2 Low adverbs

In this section, we will consider adverbs which occupy structurally low positions, and see whether those distinguish between specific and nonspecific direct objects. Let's consider manner adverbs, such as 'gut' (well), 'richtig' (correctly), 'schlecht' (badly), 'schnell' (quickly), 'gerne' (with pleasure). As shown in (53), they follow sentential adverbs and particles as well as sentential negation

(53) a. daß Hans es wohl/doch nicht gut/richtig/schlecht/schnell/gerne gemacht hat
that H. it probably/prt. not well/correctly/badly/quickly/with pleasure done has
H. probably did it well/correctly/badly/quickly/with pleasure

b. *daß Hans es wohl/doch gut/richtig/schlecht/schnell/gerne nicht gemacht hat

c. *daß Hans es gut/richtig/schlecht/schnell/gerne wohl/doch nicht gemacht hat

Under the assumption that sentential negation intervenes between ACCVP and AGRO, one could assume that they are generated below sentential negation but still higher than

---

4 More precisely, as we saw in section 2.4, sentential adverbs and particles precede also AGRSi, the position of nonspecific subjects.

Sportiche's AGRO for nonspecific direct objects.

(54) [AGRS...[AGRIO [ACCVP (neg) (low adverbs) [AGRO [VP]]]]...]

In absence of sentential negation, according to (54), we expect that low adverbs follow specific direct objects but precede nonspecific ones. As shown in the following examples, they do not. The direct object in (55) has to precede the the manner adverb, independently of specificity.

(55) a. *daß Hans gut/schlecht das/ein Auto gewaschen hat
b. daß Hans das/ein Auto gut/schlecht gewaschen hat
that H. the/a car well/badly washed has
H. washed well/badly the/a car

The indefinite pronouns like 'was' is typically nonspecific. For instance, it cannot undergo scrambling: the direct object 'was' cannot precede an indirect object (56). As shown in (57), it cannot follow manner adverbs.

(56) a. daß Hans jemandem was gesagt hat
that H. somebody something said has
H. said something to somebody
b. *daß Hans was jemandem gesagt hat
(57) a. daß Hans endlich einmal was gut/richtig machen soll
that H. finally for one time something well/correctly do should
H. should finally do something well/correctly
b. *daß Hans endlich einmal gut/richtig was machen soll

These contrasts show that, contrary to (54), nonspecific direct objects precede manner adverbs[5, 6, 7].

---

5 'Alles' (all) behaves in a parallel way:
i) a. *daß Hans immer schlecht alles macht
b. daß Hans immer alles schlecht macht
that H. always everything badly does
H. does always everything badly

6 Note that also the remainder of 'was für split' and 'quantifier split' precedes manner adverbs. We will discuss this construction in section 3.3.2 in more detail.
i) a. *Was hat er richtig für Aufgaben gelöst
b. Was hat er für Aufgaben richtig gelöst
What has he for tasks correctly solved
Which tasks did he correctly solve
ii) a. *Aufgaben hat er richtig viele gelöst
b. Aufgaben hat er viele richtig gelöst
tasks has he many correctly solved
He solved correctly many tasks
iii) a. *Die Aufgaben hat Hans gut alle gelöst
b. Die Aufgaben hat Hans alle gut gelöst
the tasks has H. all correctly solved
H. solved all the tasks correctly

7 Further examples of manner adverbs that behave in this way are 'vorsichtig' (carefully), 'aufmerksam' (attentively), 'umständlich' (circumstantially), etc. Analogously, adverbs like 'vollständig', 'komplett', 'ganz', 'gänzlich', 'völlig' (completely). They follow sentential negation (i), and specific and nonspecific direct objects (ii).
i) a. daß Franz die Stromleitung nicht vollständig zerstört hat

Some of the manner adverbs in (55) can precede and follow direct objects. Consider the examples in (58). The adverb 'schnell' can be followed and preceded by the indefinite direct object. The meaning of 'schnell' differs whether it precedes or follows the direct object. (58a) means that the manner in which John solved the problem was quick. (58b) means that the act of John's solving the problem as well as his decision of solving the problem was quick (cf Moltmann 1990, p.9). Let's call 'schnell' with the second interpretation 'schnell2'.

(58) a. daß Hans ein Problem schnell gelöst hat
that H. a problem quickly solved has
H. solved a problem quickly
b. daß Hans schnell ein Problem gelöst hat
that H. quickly a problem solved has
H. quickly solved a problem

As shown in (59), the negative marker 'nicht' has to precede 'schnell2'.

(59) a. *wenn du schnell nicht ein Problem löst, dann...
b. wenn du nicht schnell ein Problem löst, dann...
if you not quickly a problem solve, then
if you do not quickly solve a problem, then...

This contrast, however, cannot be taken as an argument for the structure in (54), because 'schnell2' can also precede specific direct objects (60a), as well as indirect objects (+47b) and indefinite subjects (+47c).

(60) a. Jetzt muß ich noch schnell das Problem lösen
now must I yet quickly the problem solve
Now I must quickly solve the problem
b. nachdem er das Problem schnell jemandem erklärt hat
after that he the problem quickly somebody(dat) explained has
after that he quickly explained the problem to somebody
c. Es ist dann noch schnell wer abgefahren
it is afterwards yet quickly who left

---

that F. the circuit line completely destroyed has
F. destroyed the circuit line completely
b. *daß Franz die Stromleitung vollständig nicht zerstört hat

ii) a. daß Hans die/eine Zeitung ganz gelesen hat
that H. the/a newspaper completely read has
H. read the/a newspaper completely
b. *daß Hans ganz die/eine Zeitung gelesen hat

A certain class of temporal adverbs differ from temporal adverbs such as 'gestern', 'morgen' etc. in that they must follow sentential negation: 'spät' (late), 'früh' (early), 'zeitig' (early), etc (iii). Also these adverbs cannot be followed by direct objects, independently of specificity (iv).

iii) a. daß Hans nicht spät angekommen ist
that H. not late arrived has
H. did not arrive late
b. *daß Hans spät nicht angekommen ist

iv) a. daß Hans den/einen Brief spät lesen wird
that H. the/a letter late read will
H. will read the/a letter late
b. *daß Hans spät den/einen Brief lesen wird

Afterwards somebody quickyl left

We conclude that 'schnell2' differs from the other use of 'schnell' in that it is a high adverb[8]

In this section we saw that low adverbs do not distinguish specific from nonspecific direct objects.[9] Neither specific nor nonspecific direct objects can be preceded by a low adverb. Assuming that low adverbs are generated to the right of AGRO, this fact follows in a natural way. If this is correct, there is no empirical evidence for the hypothesis that specific and nonspecific direct objects surface in distinct syntactic positions to the right of indirect objects. Hence, we assume that structure (42), section 2.5.1, is correct and that there is only one position for direct objects (AGRO) to the right of AGRIO.

3. Bavarian double negation

---

8 A similar ambiguity is shown by the adverb 'gerne' (with pleasure). Although it cannot precede the negative marker (55), it can precede specific and nonspecific direct objects in (ia) and indirect objects (ib). However, this option is restricted to specific contexts such as conditionals and generic contexts. As shown in (ii), specific and nonspecific direct objects and indirect objects cannot follow 'gerne', when indicative mood is used.

i) a. daß ich gerne das/ein Buch lesen würde
that I with pleasure the/a book read would
I would like to read the/a book
b. daß ich gerne jemandem helfen würde
that I with pleasure somebody help would
I would like to help somebody

ii) a. daß ich gestern gerne das/ein Buch gelesen hätte/*habe
that I yesterday with pleasure the/a book read had(subj)/have(ind)
b. daß ich gestern gerne jemandem geholfen hätte/*habe
that I yesterday with pleasure somebody helped had(subj)/have(ind)

9 As we have already mentioned in footnote 3, Moltmann (1990) assumes that nonspecific nominal expressions can follow sentential negation. According to her, definite NPs which are headed by nouns like 'Ende' (end), 'Wohnsitz' (residence), or 'Lösung' (solution) are typically nonspecific and can both follow and precede sentential negation. But also in this case, our intuitions differ from Moltmann's. We think that, if these nominal expressions follow the negative marker, the negation is contrastive. As shown by the following contrasts, modal 'brauchen' is licensed only if 'nicht' follows them.

i) a. Hans brauchte das Ende des Buches nicht zu kennen
H. needed the end of the book not to know
H. did not need to know the book
b. *Hans brauchte nicht das Ende des Buches zu kennen

ii) a. Hans brauchte die Lösung dieser Aufgabe nicht herauszubekommen
H. needed the solution of the problem not to get
H. did not need to get the solution of the problem
b. *Hans brauchte nicht die Lösung dieser Aufgabe herauszubekommen

If we assume, contrary to Moltmann, that these nominal expressions have to precede sentential negation at surface structure we correctly predict that they, just as indefinite direct objects, cannot follow low adverbs.

iii) a. daß Hans das Ende des Buches gut kannte
that H. the end of the book well knew
H. knew the end of the book well
b. *daß Hans gut das Ende des Buches kannte

iv) a. daß Hans die Lösung dieser Aufgabe richtig herausbekam
that H. the solution of this problem correctly got
H. got the solution of this problem correctly
b. *daß Hans richtig die Lösung dieser Aufgabe herausbekam

3.1. The position of 'nit'

In this section it will be shown that Bavarian 'nit' and Standard German 'nicht' occupy the same position. Bavarian sentential negation follows sentential adverbs and particles (61) and precedes low adverbs (62).

(61) a. daß da Hons woi/do nit angruafn hot
that the H. probably/prt. not called has
H. probably did not call
b. *daß da Hons nit woi/do angruafn hot

(62) a. daß da Hons nit schnö gschriebm hot
that the H. not quickly written has
H. did not write quickly
b. *daß da Hons schnö nit gschriebm hot

Specific direct (63) and indirect (64) objects precede 'nit', while prepositional arguments (65) follow it.

(63) a. daß da Hons in Traktor nit kaputtgmacht hot
that the H. the tractor not destroyed has
H. did not destroy the tractor
b. *daß da Hons nit in Traktor kaputtgmacht hot

(64) a. daß da Hons sein Freind nit ghoifn hot
that the H. his friend(dat) not helped has
H. did not help his friend
b. *daß da Hons nit sein Freind ghoifn hot

(65) a. daß da Hons nit aufm Untersberg gstiegn is
that the H. not on the Untersberg climbed is
H. did not climb on the Untersberg
b. *daß da Hons aufm Untersberg nit gstiegn is

Just as specific ones, also non specific nominal arguments can not follow 'nit' (66b), if they precede (66a), they have a specific, wide scope interpretation. Non specific prepositional arguments can follow 'nit' (67).

(66) a. #daß da Hons an Trekka nit kaputtgmacht hot
that the H. a tractor not destroyed has
H. did not destroy a tractor
b. *daß da Hons nit an Trekka kaputtgmacht hot

(67) a. daß da Hons nit auf an Berg gstiegn is
that the H. not on a mountain climbed is
H. did not climb on a mountain
b. *daß da Hons auf an Berg nit gstiegn is

So we will assume that standard German 'nicht' and Bavarian 'nit' occupy the same position.

3.2. The position of k-words

In section 2.1.2 we have seen that indefinites cannot have narrow scope with respect to negation, since they have to shift to the respective agreement position to check case

before spellout. In this position they have scope over negation. The narrow scope reading is obtained by using a k-word, such as 'kein' in (68) or 'niemand' in (69).

(68) a. *daß Hans nicht ein Auto gekauft hat
that H. not a car bought has
b. daß Hans kein Auto gekauft hat
that H. no car bought has
H. did not buy any car

(69) a. *daß Hans nicht jemanden gesehen hat
that H. not somebody seen has
b. daß Hans niemanden gesehen hat
that H. nobody seen has
H. did not see anybody

In standard German a k-word and the negative marker 'nicht' cannot cooccur.

(70) a. daß Hans (*nicht) kein Auto (*nicht) gekauft hat
that H. not no car not bought has
H. did not buy any car
b. daß Hans (*nicht) niemanden (*nicht) gesehen hat
that H. not nobody not seen has
H. did not see anybody

In Bavarian, differently from standard German, negative concord is possible, i.e. k-words and the negative marker 'nit' can cooccur. Note that negative concord is optional.

(71) a. daß da Hons koa Buach (nit) glesn hot
that the H. no book(acc) not read has
H. did not read any book
b. daß da Hons koan Freind (nit) ghoifn hot
that the H. no friend(dat) not helped has
H. did not help any friend
c. daß eam koa Mensch (nit) gseng hot
that him no man(nom) not seen has
nobody saw him

Furthermore, k-words only precede 'nit'

(72) a. *daß da Hons nit koa Buach glesn hot
that the H. not no book(acc) read has
b. *daß da Hons nit koan Freind ghoifn hot
that the H. not no freind(dat) helped has
c. *daß eam nit koa Mensch gseng hot
that him not no man(nom) seen has

The distribution of k-words with respect to 'nit' can directly be derived by structure (42). The k-word moves to the appropriate AGR position in order to check case. However, this hypothesis faces a problem: it would predict that PPs containing k-words surface to the right of 'nit', but, as shown in (16), this is not the case.

(73) a. daß da Hons auf koan Freind nit gwoat hot
that the H. for no friend not waited has
H. did not wait for any friend
b. *daß da Hons nit auf koan Freind gwoat hot

Remember that certain kinds of PPs, e.g. directional PPs, only surface to the right of the negative marker, as discussed in section 2.2 (9), repeated below. As shown in (75), even those PPs precede 'nit' when they contain a k-word, in contexts of negative concord.

(74) a. daß Hans nicht auf den Berg gestiegen ist
that H. not on the mountain climbed is
H did not climb on the mountain
b. *daß Hans auf den Berg nicht gestiegen ist
(75) a. daß da Hons auf koan Berg nit gstiegn is
that the H. on no mountain not climbed is
H. did not climb on any mountain
b. *daß da Hons nit auf koan Berg gstiegn is

Therefore, the relative order of k-words with respect to 'nit' can not be accounted for by case. A further assumption is necessary. A possible solution to account for the distribution of Bavarian k-words might be the hypothesis put forth by Zanuttini (1991). She assumes that negative elements occupy the specifier of NEGP in logical form in Romance, to check the negative feature (Zanuttini 1993). In Bavarian, checking of the negative feature has to take place in S-structure.

(76) k-words move to the specifier of NEGP
a. in LF in Romance
b. in SS in German

What we said so far is compatible with two possibilities: 'nicht' could be treated as a medial head, as a specifier or as an adjunct. However, if we assume the analysis in (76) 'nicht' must be considered the head of the negative projection.

In section 2.2, we saw that selected PPs can either follow or precede sentence negation. The question arises as to in which positions PPs can surface with respect to low adverbs. As shown in (77) and (78), they can follow and precede low adverbs.

(77) a. daß ich mich an seine Freundin gut erinnern kann
that I myself to his girlfriend well remember can
I can remember his girlfriend well
b. daß ich mich gut an seine Freundin erinnern kann
(78) a. daß Hans auf seine Frau lange gewartet hat
that H. for his wife for a long time waited has
H. waited for a long time for his wife
b. daß Hans lange auf seine Frau gewartet hat

Selected PP may either precede (79a) or follow (79c) both the negative marker and low adverbs elements. But they cannot intervene between them (79b). Hence we assume that there is no position available for PPs between negation and low adverbs:

(79) a. daß ich mich an seine Freundin nicht gut erinnern kann
that I myself to his girlfriend not well remember can
I cannot remember his girlfriend well
b. *daß ich mich nicht an seine Freundin gut erinnern kann
c. daß ich mich nicht gut an seine Freundin erinnern kann

(80) a. daß Hans auf seine Frau nicht lange gewartet hat
that H. for his wife not for a long time waited has
H. did not wait for his wife for a long time
b. *daß Hans nicht auf seine Frau lange gewartet hat
c. daß Hans nicht lange auf seine Frau gewartet hat

Crucially, as shown in (81) and (82), if the PP contains a k-word, it has to precede the low adverb. (77b) and (78b), in which the PPs do not contain any k-word, contrast with (81b) and (82b), respectively.

(81) a. daß Hans sich an niemanden gut erinnern kann
that H. himself to nobody well remember can
H. cannot remember anybody well
b. *daß sich Hans gut an niemanden erinnern kann

(82) a. daß Hans auf niemanden lange gewartet hat
that H. for nobody for a long time waited has
H. did not wait for anybody for a long time
b. *daß Hans lange auf niemanden gewartet hat

These contrasts show that PPs containing k-words move in S-structure also in standard German. Hence we assume that (76b) applies to standard German as well.

In the following sections we will discuss some problems for Hyp (76).

3.3. Extraction from nominal expressions

There are three different types of extraction from nominal expressions that have been taken as a diagnostics of whether an argument is in a VP-internal position or whether it has scrambled out: quantifier split, 'was für' split, and extraction of relative clauses.

3.3.1. 'Was für' split

'Was für' split is discussed for German and Dutch in den Besten (1984). It consists in the extraction of the wh element 'was' of a nominal expression of the form 'was für NP'. Den Besten assumes that 'was für' split is possible only from VP-internal positions, as shown by the contrast in (83). In (83), the wh-element *was* is extracted from the direct object *was für Frauen*, and moved to the specifier of CP. It the remainder, consisting of the trace of the wh-element and *für Frauen*, follows the subject at S-structure (83a), extraction is allowed. If it is scrambled to a position in front of the subject (83b), extraction is disallowed. (Example from Kratzer 1989)

(83) a. Was haben die Ameisen [t fuer Frauen] gebissen
what have the ants(nom) for women(acc) bitten
Which women did the ants bite
b. *Was haben [t für Frauen] die Ameisen gebissen
what have for women(acc) the ants(nom) bitten

According to den Besten (1984), 'was für' split can apply only to accusative objects and nominative NPs that are subjects of unaccusative predicates. But as shown by Kratzer (1989) and Moltmann (1990) also indirect objects (84) and subjects of unergative predicates (85) can undergo 'was für' split under certain conditions.[10]

(84) a. Was hat Hans für Leuten geholfen
what has H. for people(dat) helped
Which people did H. help
b. Was hast du deinen Aufsatz für Leuten geschickt
what have you your essay for people(dat) sent
To which people did you send your essay

(85) a. Was haben den Leuten für Studenten geholfen
what have the people(acc) for students(nom) helped
Which students helped the people
b. Was haben die Mutter für Ameisen gebissen
what have the mother(acc) for ants(nom) bitten
Which ants bit the mother

In section 2.5.2, we assumed that low adverbs are adjoined to VP. Nominal arguments have to shift to their appropriate agreement positions, which precede these adverbs. The following contrasts show that also the remainder of 'was für' split precedes these adverbs.

(86) a. Was hast du für einen Turm vorsichtig aufgebaut
what have you for a tower carefully built up
Which tower did you build up carefully
b. *Was hast du vorsichtig für einen Turm aufgebaut

(87) a. Was hast du für ein Buch aufmerksam/ganz gelesen
what have you for a book attentively/completely read
Which book did you read attentively
b. *Was hast du aufmerksam/ganz für ein Buch gelesen

---

10 The constituent which undergoes extraction can not be followed by an accusative or dative NP. In (84b) and (85b), the direct object, in (85a) the indirect object, has scrambled to a position preceding the remainder of 'was für' split. If scrambling does not take place, 'was für' split is less acceptable (i) (Moltmann 1990, Brugger 1993, Kratzer 1989). As shown in (id), this restriction does not apply to PPs.

i) a. ??Was hast du für Leuten deinen Aufsatz geschickt
what have you for people(dat) your essay(acc) sent
c. ??Was haben für Studenten den Leuten geholfen
what have for students(nom) the people(dat) helped
b. ??Was haben für Ameisen die Mutter gebissen
what have for ants(nom) the mother(acc) bitten
d. Was hast du für Steine auf den Berg getragen
what have you for stones on the mountain carried
Which stones did you carry on the mountain

Since the order of the constituents in the examples above mirror the unmarked order 'unergative subject - indirect object - direct object', the generalization that scrambled nominal expressions cannot undergo 'was für' split does not account for these contrasts. Note, however, that the sentences in (i) are still much more acceptable than the (83b) and (ii) where scrambled nominal expressions underwent 'was für' split.

ii) *Was hat für Leuten Hans geholfen
what has for people H. helped

On the other hand, 'was für' split is not allowed from positions preceding sentential adverbs (89) and particles (88).

(88) a. Was hast du denn für einen Turm aufgebaut
what have you prt. for a tower built up
Which tower did you build up
b. *Was hast du für einen Turm denn aufgebaut

(89) a. Was hat er wohl für ein Buch gelesen
what has he probably for a book read
Which book did he probably read
b. *Was hat er für ein Buch wohl gelesen

There are two slightly different possibilities to explain the distribution of the remainder constituent of 'was für split'. The remainder surfaces in its appropriate agreement projection. Either the agreement projection itself is a governed position (90a); the constituent 'was für NP' shifts to an appropriate agreement projection, where extraction is licensed. Or the VP-internal base position is a governed position (90b); 'was für' split takes place inside the VP, but the remainder has to shift to an appropriate agreement position at S-structure where case is checked.

(90) a. Agreement positions are governed positions.
b. VP-internal positions are governed positions.

Note that it is commonly assumed that a constituent which undergoes 'was für' split has to surface in a governed position (traditionally its base position inside VP). Therefore it cannot undergo further movement such as scrambling or raising to the specifer of IP. (90b), however, allows movement of the remainder to an ungoverned position, i.e. an agreement position. Further movement has to be excluded by an additional condition (perhaps specificity and/or focus).

3.3.2. Quantifier split

Quantifier split can be considered as movement of a subpart of a nominal expression, leaving a weak determiner behind, to a topic position (e.g. the specifier of CP) (with subsequent regeneration and relexification of the determiner position Riemsdijk (1989)). Alternatively it can be viewed as basegeneration of N' in topic position with empty operator movement (Fanselow 1987) (cf. also Giusti's (1993) account without regeneration and assumptions of operations on the N' level). Quantifier split exhibits the same syntactic restrictions as 'was für split'.

The remainder can not surface in a scrambled position. It can neither precede the subject (91), nor particles (92) or sentential adverbs (93).[11]

(91) a. Frauen hat mein Freund viele/wenige geküßt
woman has my friend many/few kissed

---

11 Also indirect objects (ia) and subjects of unergative predicates (ib) can undergo quantifier split.

i) a. ?Frauen hat Hans vielen/wenigen geholfen
women has H. many/few(dat) helped
H. helped many/few women
b. Frauen haben meinen Freund viele/wenige geküßt
women have my friend many/few(nom) kissed
Many/few women kissed my friend

b. *Frauen hat viele/wenige mein Freund geküßt

(92) a. Türme hat Hans doch viele/wenige aufgebaut
towers has H. prt. many/few built up
H. built up many/few towers

b. *Türme hat Hans viele/wenige doch aufgebaut

(93) a. Bücher hat Hans wohl viele/wenige gelesen
books has H. probably many/few read
H. probably read many/few books

b. *Bücher hat Hans viele/wenige wohl gelesen

Low adverbs, on the other hand, follow the remainder (94,95).[12]

(94) a. Türme hat Hans viele/wenige vorsichtig aufgebaut
towers has H. many/few carefully built up
H. built up many/few towers carefully

b. *Türme hat Hans vorsichtig viele/wenige aufgebaut

(95) a. Bücher hat Hans viele/wenige aufmerksam/ganz gelesen
books has H. many/few attentively/completely read
H. read many/few books attentively/completely

b. *Bücher hat Hans aufmerksam/ganz viele/wenige gelesen

Also k-words can undergo quantifer split in exactly the same way as nominal expressions introduced by other weak quantifiers such as 'viele' or 'wenige'. In (96) a direct object introduced by a k-word underwent quantifier split. The remainder follows the subject (96a), sentential adverbs and particles (96b) and precedes low adverbs (96c).

(96) a. Frauen hat (*keine) mein Freund keine geküßt
women has no my friend no kissed
My friend did not kiss any woman

b. Türme hat Hans (*keine) doch/wohl keine aufgebaut

c. Türme hat Hans keine vorsichtig (*keine) aufgebaut

Further, stranded k-words precede sentential negation in contexts of double negation in Bavarian.

(97) a. Biacha hot a koane nit glesn
books has he no not read
He did not read any books

b. *Biacha hot a nit koane glesn

A problem arises regarding the position of the split k-word in (97a). (90a) and (90b), which account for the surface position of nominal expressions which underwent 'was für' split or quantifier split are incompatible with (76). According to (76), k-words surface in the specifier of NEGP (76), but according to (90a) and (90b), the k-word in (97a) surfaces in the specifier of AGRO. Note, that this contradiction cannot be

12 Note that the adverb 'ganz' in (95b) can be interpreted as modifying the direct object, forming a constituent with it. In this case it means 'very' rather than 'completely'. The crucial fact is that in (95b), in contrast to (95a), 'ganz' cannot be interpreted as meaning 'completely'.

resolved assuming that the k-word in (96a) first moves to the specifier of NEGP for negative concord and subsequently to the specifier of AGRO, since the specifier of NEGP is an A'-position.

If either (90a) or (90b) is correct, we have to give up the assumption that k-words surface in the specifier of NEGP. We therefore substitute (76) with (98).

(98) k-words shift to AGR-positions, but not through the specifier of NEGP.

On the basis of this argument we conclude that negative concord can not be defined as SPEC/HEAD agreement, at least for German. A different syntactic notion of negative concord has to be developed.[13] Let's now discuss further arguments against (76) and in favor of (98).

3.4. More problems of (76)

As (100) shows it is possible to have more than one k-word preceding the negative marker. Multiple k-words respect the unmarked word order, just as positive nominal arguments. In (101), the nominative k-word has to precede the accusative one; in (102), the dative k-word as to precede the accusative one. (103) shows that multiple k-words asymmetrically c-command each other.

(100) a. daß woi neamt koa Buch nit glesn hot
that probably nobody no book not read has
nobody probably read any book

b. daß neamt koan Madl koa Bussl nit gem not
that nobody no girl(dat) no kiss(acc) given has
nobody gave any girl a kiss

(101) a. #daß koa Buch neamt nit glesn hot
that no book(acc) nobody(nom) not read has

b. daß neamt koa Buach nit glesn hot
that nobody(nom) no book(acc) not read has
nobody read any book

(102) a. daß da Hons neamt koa Bussl nit gem hot
that the H. nobody(dat) no kiss(acc) not given has
H. did not give a kiss to anybody

b. *daß da Hons koan Bussl neamt nit gem hot

(103) a. daß koa Madl koan Freind von si nit busslt hot
that no girl no friend of herself not kissed has
no girl kissed any friend of herself

---

13 PPs containing a k-word could still be analyzed as occupying the specifier of NEGP at surface structure, since they follow direct object k-words (ia).

i) a. daß da Hons koa Buach auf koan Berg nit tragn hot
that the H. no book on no mountain not carried has
H. did not carry any book on any mountain

b. *daß da Hons auf koan Berg koa Buach nit tragn hot

But this assumption cannot account for multiple PPs with k-words, which appear in fixed order (ia,ii).

ii) a. daß da Hons mit koana Frau auf koan Berg nit gstiegn is
that the H. with no woman on no mountain not climbed has
H. did not climb with any woman on any mountain

b. *daß da Hons auf koan Berg mit koana Frau nit gstiegn is

Hence, additional assumptions have to be made regarding the surface position of PPs which contain k-words.

b. *daß koan Freind von si koa Madl nit busslt hot
that no friend of herself no girl not kissed has
no friend of herself kissed any girl

Assuming that k-words check their negative feature in the specifier of NEGP does not explain (100), where more than one k-word surfaces at the left of 'nit'. Moreover since k-words respect the unmarked of nominal expressions and because of asymmetric c-command, it is not possible to assume that the specifier of NEGP can be filled by more than one constituent. One could suppose that there is more than one specifier of NEGP. However, the following example shows that it is possible to interrupt the sequence of k-words and 'nit'.

(104) a. daß neamt sei Frau nit mitgnumma hot
that nobody his wife not took along has
nobody took along his wife
b. daß neamt sei Madl nit busslt hot
that nobody his girlfriend not kissed has
nobody kissed his girlfriend

This clearly shows that k-words do not occupy the specifier of NEGP.

Summarizing, we have seen that the hypothesis (76) of spec-head relation between the negative head and k-words is not tenable for German. On the contrary, if we assume that k-words do not surface in a specifier of NEG, but in the respective agreement positions (cf 98), the data discussed above follows straightforwardly.

3.5. Inverse licensing

The question we will now deal with concerns the syntactic relation between k-words and the negative head.

3.5.1. Individual level predicates

In German, the external argument of a predicate can surface in at least two positions inside IP. The specifier of AGRS (105a), and the specifier of AGRSi (105b).

(105) a. daß Hans wohl angerufen hat
that H. probably called has
H. probably called
b. daß wohl ein Mann angerufen hat
that probably a man called has
A man probably called

Diesing (1992) and Kratzer (1989) argue that whether an external argument can surface in the lower position depends on whether the predicate is a stage level predicate or an individual level predicate, following a distinction introduced by Carlson (1977). Stage level predicates, such as 'available', 'present', etc., describe properties which are perceived as holding of entities only temporarily; individual level predicates, such as 'intelligent', 'altruistic', 'tall', etc., on the other hand, describe properties which are perceived as holding of entities permanently. Diesing and Kratzer note, that the subjects of these predicates differ with respect to extraction. While subjects of stage level predicates allow quantifer split (106a) and 'was für' split (107a), subjects of individual level predicates do not (106b,107b).

(106) a. Texaner sind viele anwesend
Texans are many present
Many Texans are present
b. *Texaner sind viele groß
Texans are many tall
Many Texans are tall

(107) a. Was sind für Texaner anwesend
What are for Texans present
Which Texans are present
b. *Was sind für Texaner groß
What are for Texans tall
Which Texans are tall

From this data it appears that the subject of a stage level predicate may be realized in a governed position, whereas the subject of an individual level predicate must be realized in an ungoverned position.[14]

Now consider the following contrast. The stage level context (108a) allows double negation, but the individual level context in (108b) does not. (108b) is ungrammatical, if 'nit' is realized.

(108) a. daß koa Texana (nit) do is, is schod
that no Texan not here is, is a pitty
it is a pitty that no Texan is here
b. daß koa Texana (*nit) groß is, woaß ajeda
that no Texan not tall is, knows everybody
Everybody knows that no Texan is tall

This contrast suggests that there is an upper boundary for negative concord below the specifier of AGRSP. Hence, the subject of the individual level predicate in (108b) which is realized in the specifier of AGRSP, is outside the domain of negative concord. The subject of the stage level predicate in (108a), on the other hand, may surface in the specifier of AGRSi and is therefore in the domain of negative concord. Negative concord applies to AGRO, AGRIO, AGRSi, but not to the specifier of AGRS.

An important remark is necessary. Note that in (108b) is grammatical without 'nit'. This means that k-words can move to the specifier of AGRS only if the head of the negative projections is missing. The relation between the negative marker and the k-word is syntactically limited by a locality restriction, only when 'nit' is present.

But remember that the syntactic distribution of k-words is not completely free if 'nit' is absent. As we have shown in section 3.2, k-words always precede the negative marker at S-structure.

We conclude that negative concord is syntactically limited within the space between NEGP and a position below AGRSP, while k-words which do not undergo negative concord are only submitted to the lower limit: they stay to the left of NEGP. In the following we try to define the upper boundary of negative concord more precisely.

---

14 Diesing (1992) and Kratzer (1989) suggest that subjects of individual level predicates are generated in the specifier of IP, i.e. AGRS, an ungoverned position. Subjects of individual level predicates, on the other hand, are generated inside VP.

3.5.2. High adverbs

In this section we will set the upper limit of negative concord with respect to high adverbs. K-words can precede temporal (109a) and sentential adverbs (109b). But in this case negative concord is blocked, as shown in (110): the k-word has to follow the adverb.

(109) a. daß kein Texaner gestern angerufen hat
that no Texan yesterday called has
No Texan called yesterday

b. daß kein Texaner wohl seinen Bohrturm sprengen wird
that no Texan probably his drilling derrick blast will
No Texan probably will blast his drilling derrick

(110) a. *daß koa Schauspiela gestan nit auftredn is
that no actor yesterday not performed has

b. daß gestan koa Schauspiela nit auftredn is
that yesterday no actor not performed has
No actor performed yesterday

Therefore the upper boundary of negative concord has to be set below the position of these adverbs.

Weak pronouns precede sentential and temporal adverbs (111). Therefore they cannot intervene between 'nit' and k-words (112).

(111) a. daß Hans ihn wohl/gestern gesehen hat
that H. him probably/yesterday seen has
H. probably saw him yesterday

b. *daß Hans wohl/gestern ihn gesehen hat

(112) a. daß da Hons eam nit gseng hot
that the H. him not seen has
H. did not see him

b. *daß koa Mensch nit eam gseng hot
that no man not him seen has

c. daß eam koa Mensch nit gsegn hot
that him no man not seen has
Nobody saw him

Another interesting clue can be given by the adverb 'nie' (never), which follows sentential adverbs (113), but precedes indefinite and definite objects and indefinite subjects (114).

(113) a. daß Hans wohl nie auf das Matterhorn steigen wird
that H. probably never on the Matterhorn climb will
H. probably will never climb on the Matterhorn

b. *daß Hans nie wohl auf das Matterhorn steigen wird

(114) a. daß Hans nie eine Frau küssen wird
that H. never a woman kiss will
H. will never kiss a woman

b. daß Hans nie den Präsidenten gesehen hat
that H. never the president seen has
H. never saw the president

c. daß mich nie ein Marokkaner angerufen hat
that me never a moroccan called has
No moroccan ever called me

We suppose that the position of this adverb is the one indicated in (115).

(115) [AGRS...[XP wohl [YP nie [AGRSi [AGRIO [AGRO [NEGP [VP PP]]]]]]...]

If k-words occupy AGR positions we expect them to follow the negative adverb and precede 'nit'.

(116) a. daß da Hons nia koa Madl nit busslt hot
that the H. never no girl not kissed has
H. never kissed any girl
b. daß mi nia neamt nit angruafn hot
that me never nobody called has
Nobody ever called me

(117) a. #daß da Hons koa Madl nia nit busslt hot
that the H. no girl never not kissed has
b. #daß mi koa Mensch nia nit angruafn hot
that me no man never not called has
Nobody ever called me

(118), as (116), illustrates that negative concord is possible also between 'nie' and 'nit'.

(118) daß da Hons nia nit gsunga hot
that the H. never not sang has
H. never sang

Now we are in a position to define exactly the syntactic domain of negative concord: first, k-words surface in their respective agreement positions and second the domain extends from NEGP to YP.

3.6. Adverbial quantifiers

Adverbial quantifiers can be classified into three groups regarding their syntactic position relative to negation. First, adverbial quantifiers like 'meistens' (mostly), 'manchmal' (sometimes), 'mehrmals' (several times), 'für gewöhnlich' (usually), etc. (119), and numeral adverbials such as 'dreimal' (three times) (120) only precede 'nicht'. If the negation precedes 'dreimal (120b), it is contrastive. Second, 'oft' (often) and 'selten' (seldom) can both precede and follow 'nicht' (121). Third, the adverbial quantifer 'immer' (always) only follow the negation (122).

(119) a. daß Hans meistens/manchmal/mehrmals/für gewöhnlich nicht singt
that H. mostly/sometimes/several times/usually not sings
H. mostly/sometimes/several times/usually doe not sing
b. *daß Hans nicht meistens/manchmal/mehrmals/für gewöhnlich singt

(120) a. daß Hans dreimal nicht gesungen hat
that H. three times not sang has
H. did not sing for three times

b. daß Hans nicht dreimal gesungen hat *(sondern viermal)
that H. not three times sang has but four times
H. did not sing for three times but for four times

(121) a. daß Hans oft/selten nicht singt
that H. often/seldom not sings
H. often/seldom does not sing

b. daß Hans nicht oft/selten singt

(122) a. *daß Hans immer nicht singt
that H. always not sings

b. daß Hans nicht immer singt
that H. not always sings
H. does not sing always

Apparently, there seem to be two syntactic positions for adverbial quantifiers: A position which precedes sentential negation and which can be filled by 'meistens', 'oft', etc., but not by 'immer', and a second one, which follows sentential negation and which can be filled by 'oft' and 'immer', but nut by 'meistens', etc.

(123) [oft/meistens [AGRSi...[AGRO [neg [oft/immer...]]]]]

The structure in (123) correctly predicts that adverbs which can occupy the higher position, such as 'oft', 'meistens', 'manchmal', etc. can also precede nominal arguments. In (124) they precede the direct object in the specifier of AGRO, in (125) the subject in the specifier of AGRSi. In addition, the surface order 'quantificational adverb -negation - nominal argument' is excluded (126).

(124) a. daß Hans meistens/manchmal ein gutes Buch liest
that H. mostly/sometimes a good book reads
H. mostly/sometimes reads a good book

b. daß Hans oft ein gutes Buch liest
that H. often a good book reads
H. often reads a good book

(125) a. daß gestern meistens/manchmal ein Marokkaner angerufen hat
that yesterday mostly/sometimes a moroccan called has
mostly/sometimes a moroccan called yesterday

b. daß gestern oft ein Marokkaner angerufen hat
that yesterday often a moroccan called has
often a moroccan called yesterday

(126) a. *daß Hans meistens nicht ein gutes Buch liest
that H. mostly not a good book reads

b. *daß gestern oft nicht ein Marokkaner angerufen hat
that yesterday often not a moroccan called has

The structure (123), however, is not correct. In the following, we will see evidence that there is only one syntactic position for adverbial quantifiers.

According to (123) 'immer' in (127a) occupies the lower adverb position. Quantificational adverbs such as 'oft', on the other hand, which can surface in both positions, occupy the lower position, if they are preceded by negation, as in (127b). But, nevertheless, as shown in (127), they can be followed by nominal arguments. This fact is not predicted by (123).

(127) a. daß Hans immer ein gutes Buch liest
that H. always a good book reads
H. always reads a good book
b. daß Hans nicht oft ein gutes Buch liest
that H. not often a good book reads
H. does not often read a good book

Note that the string 'nicht - adverbial quantifier' can form a constituent. As shown in (128), it can be topicalized.

(128) a. Nicht oft hat Hans gesungen
not often has H. sang
H. did not sing often
b. Nicht immer hat Hans gesungen
Not always has H. sang
H. did not sing always

The string 'nicht oft' in (127b) can occupy, as a constituent the higher adverb position. In this way, the grammaticality of (127b) can be accounted for. A string of the form 'nicht -adverbial quantifier' can therefore be analyzed in two different ways. Either the adverbial quantifier occupies the lower adverb position and the negative element occupies the position of sentential negation, or the adverb modified by the negation occupies the higher adverb position.

Bavarian double negation shows that for a string of the form 'nicht -adverbial quantifier' only the second option is available. Let's consider the example in (129). The k-word correctly precedes 'nit'. The adverbial quantifier follows 'nit', according to (123) they occupy the lower adverb position. Although the surface order respects the structure in (123), the sentence is ungrammatical (no negative concord):

(129) #daß koa Schauspiela nit oft auftredn is
that no actor not often performed has
No actor often performed

If we assume that there is only one syntactic position for adverbial quantifiers, i.e. the higher one, 'nit oft' in (129) must occupy this position as a constituent. Hence, the k-word is outside the domain of negative concord, and negative concord cannot take place. Hence, we substitute (123) with (130).

(130) [adverbial quantifiers [AGRSi...[AGRO [neg [VP...]]]]]

If there is no position for adverbial quantifiers to the right of sentential negation, a string of the form 'nicht - adverbial quantifier' always forms a constituent. In the following we will discuss a further argument for this corollary.

According to Berman (1989), Diesing (1992), Heim (1982), a.o., adverbial quantifiers undergo QR and adjoin to IP in logical form. In this position they can bind free variables inside their scope. Heim (1982) analyzes indefinite nominal expressions in the singular as free variables, which can be bound by adverbial quantifiers. The adverbial quantifier 'oft' in (131a) adjoins to IP and binds the indefinite subject (131b). This interpretation of (131a) can be paraphrased with (131c).

(131) a. daß ein Texaner oft groß ist
that a texan often tall is
A Texan is often tall
b. [oft(x) [Texaner(x)] [groß(x)]
c. Many Texans are tall

In the terminology of Heim (1982), 'groß(x)' constitutes the nuclear scope of (131b). In (132), the negative marker takes scope over the nuclear scope.

(132) a. daß ein Texaner oft nicht groß ist
that a Texan often not tall is
b. [oft(x) [Texaner(x) ¬ [groß(x)]]

In (133a), differently to (132a), the adverbial quantifier follows the negation in S-structure.

(133) a. daß ein Texaner nicht oft groß ist
that a Texan not often tall is
A Texan is not often tall
b. [¬ oft (x) [Texaner(x) [groß(x)]]
c. *[oft (x) [Texaner(x) ¬ [groß(x)]]

(133a) can be paraphrased with 'not many Texans are tall', but not with 'many texans are not tall'. Therefore (133b), but not (133c) is an adequate logical representation for (133a). The negative element undergoes QR with the adverbial quantifier. Crucially, it must be excluded that the adverbial quantifer undergoes QR alone and that the negation takes scope only over the nuclear scope. The assumption on the position of adverbial quantifers in (130) excludes this possibility. According to (130), the string 'nicht oft' in (133a) must be analyzed as a constituent and the interpretation (133c) cannot be derived.

Let's now go back to the observations we made at the beginning of this section regarding the distribution of several classes of adverbial quantifiers and negation. First, let's consider the adverbial quantifiers 'meistens', 'manchmal', 'mehrmals', 'für gewöhnlich', etc., which only precede 'nicht'. This fact can be accounted for by assuming that they differ from adverbs like 'oft' and 'immer', in that they cannot form a constituent with 'nicht' (134a).

(134) a. *Nicht meistens/manchmal/mehrmals/für gewöhnlich singt Hans
not mostly/sometimes/several times/usually sings H.
b. #Nicht dreimal hat Hans gesungen
not three times has H. sang

Second, we saw in (120b), that numeral adverbials differ from adverbial quantifiers like 'meistens' in that they can be preceded by 'nicht'. Hence, numeral adverbs can form a constituent with 'nicht' (134b), just like 'oft' and 'immer'. But numeral adverbs differ from the latter in that a string 'nicht - numeral adverb' is necessarily contrastive. At this moment we do not have an explanation for this.

Third, the adverbial quantifier 'immer' can only be preceded but not followed by 'nicht'. This means, according to (130), that 'immer' can only be modified by 'nicht', but it is incompatible with sentence negation. Note that the ungrammatical string 'immer -

nicht' is logically equivalent with 'never'. And in fact, the intended meaning of the ungrammatical sentence (122a), repeated below in (135a) can only be expressed by (135b).

(135) a. *daß Hans immer nicht singt
that H. always not sings
b. daß Hans nie singt
that H. never sings

In order to account for this contrast, we have to stipulate two assumptions. First, we assume that the position of adverbial quantifiers proposed in (130) is in the domain of negative concord, and second, that 'immer' is an anti negative polarity item. As an anti negative polarity item, it cannot be found inside the domain of negative concord.

7. Lowering of k-words

In this section, we will consider certain aspects of the interpretation of indefinites and k-words. In section 2.1.2, we assumed that all nominal arguments of a verbal predicate have to shift to the appropriate agreement position at S-structure in order to check case. Since the position of sentential negation follows all agreement projections, all nominal arguments precede it, and c-command it at S-structure. Hence, the fact that indefinite nominal expressions, as the one in (136a), are interpreted with wide scope (136b), but not with narrow scope (136c), with respect to sentential negation can be accounted for by their position in S-structure.

(136) a. daß Hans ein Buch nicht gekauft hat
that H. a book not bought has
H. did not buy a book
b. E(x) [book(x)] ¬ [bought(h,x)]
c. * ¬ E(x) [book(x)] [bought(h,x)]

In order to exclude interpretation (136c,) it has to be assumed that German indefinites cannot lower to a position inside the scope of sentential negation at logical form. This assumption, however, cannot be considered as holding for all nominal expressions, since, as we will see in the following, there are some nominal expressions which have to be lowered.

Consider (137a), which is three ways ambiguous. The nominal expression 'keinen Fisch' can have wide scope relative to the modal operator: "There isn't any fish such that John must eat it" (137b). Second, the modal operator can intervene between the negation and the existential quantification: "It is not necessary that there is a fish that John eats" (137c). Third, the modal can have wide scope with respect to 'keinen Fisch': "It is necessary that John eats no fish" (137d)

(137) a. daß Hans keinen Fisch essen muß
that John no fish eat must
b. ¬ E(x) [fish(x)] necc. John eats x
c. ¬ necc. E(x) [fish(x)] John eats x
d. necc. ¬ E(x) [fish(x)] John eats x

As shown by (138), 'when'-clauses are adjoined to a projection outside the scope of the modal. In order to bind the pronoun 'er' in the 'when'-clause the k-word in (138a) has to be interpreted with scope over the modal operator (138b). Otherwise binding is impossible (138c,d).

(138) a. daß Hans keinen Fisch$_i$ essen muß, wenn er$_i$ stinkt
that H. no fish eat must, if it stink
b. ¬ E(x) [fish(x)] necc. John eats x [if x stinks]
c. * ¬ necc. E(x) [fish(x)] John eats x [if x stinks]
d. * necc. ¬ E(x) [fish(x)] John eats x [if x stinks]

The k-word 'keinen Fisch' in (138a) is interpreted in logical form in a position c-commanding both the 'when'-clause and the position where the modal is interpreted. Bavarian shows that this position is also outside the domain of negative concord.

Although the Bavarian example (139a) is identical to (137a) except for negative concord, it shows only one of the interpretations of (137a). (139a) only has reading (137c), where the modal intervenes between negation and existential quantification. The readings (137b) and (137d) are not available.

(139) a. daß da Hons koan Fisch nit essn muaß
that the H. no fish not eat must
b. ¬ necc. E(x) [fish(x)] John eats x

Negative concord blocks the possibility for the k-word to have scope over the modal. Hence, the k-word in (140a) cannot bind the pronoun in the 'when'-clause, since 'when'-clauses are outside the scope of the modal operator. Binding is possible only if the negative marker 'nit' is absent (140b).

(140) a. *daß da Hons koan Fisch$_i$ nit essn muaß, won a$_i$ stinkt
that the H. no fish not eat must if it stinks
b. daß da Hons koan Fisch$_i$ essn muaß, won a$_i$ stinkt
that the H. no fish eat must if it stinks
H. need not eat a fish if it stinks

If the k-word is interpreted outside the scope of the modal operator (137b), it is interpreted in a position outside the domain of negative concord where it can c-command a 'when'-clause.

Let's now consider the logical representation of interpretation (137c), which is the only interpretation available in (139a).[15] Note first that sentential negation has scope over the modal operator (141) in standard German as well as in Bavarian.

(141) a. daß Hans nicht essen muß
that H. not eat must

15 Negative quantifiers can be semantically analyzed as negated existential quantifiers of the form 'not exists (x) P(x)' or as negated universal quantifiers of the form 'for all(x) not P(x)'. The second option has been proposed by Zanuttini (1991) for Romance n-words. Interpretation (137), however, is incompatible with an analysis of k-words as negated universal quantifiers, since '¬_ E(x) P(x)' is not equivalent with '_ A(x) ¬P(x)' or 'A(x)_¬P(x)'.

b. daß da Hons nit essn muaß
that the H. not eat must
c. ¬ necc. John eats

If the scope of negation is determined by the position of NEGP, it must be assumed that the modal is interpreted in a position in the c-command domain if NEGP.

According to our assumptions on the surface position of k-words in contexts with negative concord, the direct object of the predicate 'eat' in (139a) surfaces in its agreement projection, which precedes NEGP. Hence both the k-word and the negative marker in (139a) c-command the interpretation position of the modal at S-structure. The S-structure of (139a) is sketched in (142).

(142) [AGROP [koan Fisch] [nit [VP modal [XP essn t]]]]
|-------------------------|

If we assume that k-words in contexts with negative concord are pure negative polarity items without negative force, rather than negative existential quantifiers, the k-word in (139a) only has existential force. In this view the semantic content of negation is carried by NEGP filled by the negative marker 'nit'. In order to get the correct semantics of (139a), the movement of the k-word at S-structure to the specifier of AGRO has to be undone at logical form. A trace or copy of the direct object is interpreted inside the scope of the modal operator.

Note that under these assumptions the same mechanism has to be applied to k-words in contexts without a modal operator as in (143). If the negative marker 'nit' carries the semantic content of negation, the k-word 'koa Buach', as a pure negative polarity item' only has existential force. Since the existential quantification is in the scope of negation, it has to be assumed that the k-word lowers also in this context.

(143) a. daß da Hans koa Buach nit kaft hot
that the H. no book not bought has
b. ¬ E(x) [book(x)] [John bought x]

Crucially, it must be assumed that lowering of the k-word is obligatory in contexts of negative concord (144). The k-words in (139a) and (143a) must obligatorily move to the specifier of AGRO at S-structure and obligatorily lower at logical form.

(144) K-words in contexts with negative concord lower at LF

Note that indefinites in the singular differ from k-words in this respect. They must move in S-structure but they do not lower at logical form, since they cannot be interpreted in the scope of negation neither in contexts with modals (145a), nor in contexts without modals (145b). Both indefinites in (145) have to be interpreted with wide scope with respect to negation. Hence for indefinites lowering to a position in the scope of negation at logical form has to be excluded.

(145) a. daß da Hons an Fisch nit essn muaß
that the H. a fish not eat must
b. daß da Hons a Buach nit kaft hot
that the H. a book not bought has

There are two possible solutions to the problem that negative polarity k-words must be in the scope of sentential negation: (a) NEGP is head-final and its structural position is higher than the positions in which k-words surface. (b) The NEGP which hosts the negative head at S-structure does not determine the scope of sentential negation, which is given by a higher NEGP situated above YP but below TP.

4. Comparison with Romance languages

In this section we will compare the distribution of negation in German and Bavarian discussed so far with negation in Romance languages. In order to do so it is necessary to present a brief summary of the distribution of negative markers in Romance. We will discuss Zanuttini (1991), who proposes a comparative analysis for various Romance languages (as Italian, French, Spanish, Catalan, Portuguese, Romanian, Occitan varieties, Walloon and Northern Italian Dialects). Zanuttini convincingly shows that there are two distinct types of negative markers in Romance:

Preverbal negative markers are always heads as they block V to C movement and clitic climbing (cf. Zanuttini (1991):20) (146) and trigger obligatorily negative concord in their scope (147).

(146) a. Non parla (Standard Italian)
not (she) speaks
she is not speaking
b. Voglio non vederlo
(I) want not see-him
I do not want to see him
c. *Lo voglio non vedere
him (I) want not see
I want to not see him

(147) a. Non parla nessuno (Standard Italian)
Not speaks noone
Noone is speaking
b. *Parla nessuno

Postverbal negative markers are always specifiers which do not block verb or clitic movement and can move to the SPECC position (148), and do not obligatorily sho negative concord: some tolerate it, some do not (149).

(148) a. A parla nen (Piedmontese)
b. A-m lo da nen
c. A l'ha fait parej per nen ch'a se stofieissa

(149) a. Ai pas vist degun (Valdotain)
b. #Ce n'est pas rien (Standard French)

Zanuttini (1991) proposes to treat this partition inside Romance as the consequence of a syntactic difference in encoding the negative projection: some languages realize negation above TP and AGRSP, some others realize it lower in the structure. The two Romance types are represented in (150)

(150) a [CP...[NEGP1[AGRSP[TP....]]]]
b [CP...[AGRSP[TP...[NEGP2]]]]

Thus, in Romance there are two different positions where NEGP can be realized: the one of NEGP1 in (150a), and the one of NEGP2 in (150b). In order to explain why negative concord is obligatory only in languages of the first type Zanuttini proposes that negative concord is licensed in a Spec-head relation with a negative head. In languages of the (b) type, in which the specifier of NegP is already filled by the negative marker, negative quantifiers cannot move to SPECNEGP, and never enter the Spec-head relation. Hence, no negative concord is possible.

However, some languages of the (b) type permit (but do not require) negative concord, as (149a) shows: Zanuttini treats these cases as instances of recategorization, since elements such as Valdotain 'pas' are specifiers at S-structure but heads at LF.

On the contrary in languages of the (a) type, in which the negative marker is a head, the specifier of NEGP is always empty, so that negative quantifiers move to this position at LF, instantiating negative concord.

However, in this type of languages the negative projection is higher than TP, so negative quantifiers which appear lower than TP at S-structure have to cross TP to reach SPECNEGP. As TP, being an operator of the same type as negation, acts as a barrier to the movement of a negative quantifier, it needs to be L-marked in order to void barrierhood. The negative marker in preverbal position l-marks TP, so that the movement of the negative quantifier to SPECNEGP at LF is possible (cf. (147)).

Negative quantifer which surface at S-structure in a position higher than TP, as the subject position, do not need the negative marker:

(151) Nessuno ha mangiato qui (St. Italian)

Notice that in a framework where the subject is also generated inside VP and then raises to SPECAGRS to get case, it is necessary to assume that TP is a barrier only at LF but not as S-structure.
Moreover, a negative quantifier in preverbal position licenses a postverbal one even when no negative head is present.

(152) Nessuno ha visto niente (St. Italian)

In (152), there is no double negation, the reading is that of negative concord.
This means that not only a head can l-mark TP, but also a negative quantifier via Spec-head agreement.

In this case, where more than one negative quantifier is present, Zanuttini assumes that more than one n-word can occupy the SPECNEG position. In other words, at LF the constraint that no more than one element occupies a specifier position is not valid.

In more recent work, Zanuttini (1993) proposes that the negative projection is always lower than TP, and that the position corresponding to NEGP1 in (150a) is not a negative projection but the syntactic position where the truth value of a sentence is checked, namely TRUTHP. In the languages where the negative marker is a head, it must raise to the head of TRUTHP in order to check its features, while in languages where the negative marker is a specifier it does not need to move at S-structure and can check its negative features at LF.

This revision does not seem to change the analysis of negative concord, as it could still be treated as the interpretive consequence of the structural relation of Spec-head agreement in TRUTHP. At LF, the specifier of this projection would be empty in type (a) languages, where negative markers are heads, while it would be filled by the negative marker in type (b) languages, thus preventing raising of the negative quantifier to SPECTRUTHP and negative concord.

The problem of negative concord in Romance is far from solved, but what is important for our concerns is that it seems to be described by the structural condition of c-command: when a negative quantifier is realized at S-structure in a position lower than TP, there must be a negative element (a quantifier or the negative marker) in a position higher than TP, while this is not permitted when the negative quantifier is realized higher than TP at S-structure.
Moreover, there is no structural requirement of proximity between the negative quantifier and its licenser. Notice that the licenser of a negative quantifier can be found even in an upper clause: (if the embedded clause is an infinitive or a subjunctive clause)

(153) Non gli ho detto di fare niente

Let's now turn to a comparison with German and Bavarian negation:

4.2 The X' status of the negative marker

If the arguments given in section 3 is correct, negation is relatively low in the structure in German and Bavarian, as it follows sentential adverbs, the negative adverb 'nie' and nominal arguments. Therefore, it is not a head of the type of standard Italian 'non', which surfaces higher in the structure. 'Nicht/nit' is thus an instance of NEGP2. As such, it could be either a head or a specifier. There is at least one argument in favor of considering 'nicht' as a head, namely, the fact that the negative marker does not does not appear in SpecC in V2 sentences:

(154) a. Nie hat er das getan
b. *Nicht hat er das getan
c. *Nit hod-a-s ton

As (154a) shows, a negative adverb such as 'nie' can appear in first position in a V2 sentence, this is not the case of 'nicht"nit', which is excluded (cf.(154b)). If nicht/nit is analyzed as a head, the contrast in (154) is immediately explained. A principled solution to the ungrammaticality of (154b) cannot be advocated. Scandinavian languages, which are also V2, permitt the negative marker to move to the specifier of CP. The same can be observed in old romance languages which according to Benincà & Renzi & Vanelli (1985) are V2 languages. (cf: also (148c))

(156) No li la vouse tochar (Lio Mazor)
not him it wanted give
He did not want to give it to him

Note that 'nicht/nit' cannot be analyzed as a light specifier, since 'nicht/nit' can be focused, while light specifiers cannot.

The assumption that 'nicht' is a head raises the following problem. The negative head should block head movement, e.g. the movement of the verb to higher functional projections. In principle there are some possibilities to treat this problem. First, one can

assume that the verb can skip the negative head. Belletti (1992) for instances proposes that in Italian the verb can skip the negative head 'non', which then clitisizes to the verb. Analogously the same could be proposed for German at LF. Alternatively, the verb may incorporate into the negative head, and excorporate as happens with prepositions. Third, one may propose that negative heads and the verbs may be of different nature with respect to the head movement constraint. Zanuttini (1993, fn32) proposes that only strong negative heads block V to C movement in Romance. Strong negative heads are characterized by the fact that they need to move to a position which precedes the auxiliary at S-structure. German 'nicht' is obviously not strong in this sense, because it occupies a relatively low position in S-structure. Hence from this point of view it does not block verb movement.

However, note that the analysis of negative concord we proposed is neutral with respect to the X'-status of 'nicht/nit'.

a) West Flemish 'en' needs to be licensed by another negative element (the negative marker 'niet' or a negative quantifier):

(157) a. *da Valere dienen boek en-eet
b. da Valere diene boek nie en-eet
c. da Valere niemand en-kent

b) West Flemish 'en' is clitic on the inflected verb, and it moves to C with it:

(158) Valere en klaapt tegen geen mens

Bavarian 'nit' differs from West Flemish 'en' in that it is not clitic on the verbal head, therefore it does not move to C and it does not need to be licensed by another negative element.

At this point it could be plausible to derive the difference between West Flemish and Bavarian as a consequence of the different type of negative marker. Haegemann & Zanuttini (1993) propose that West Flemish 'en' is an instance of NEGP1 (or else TRUTHP) while Bavarian 'nit' is clearly a case of NegP2. Here we will not speculate any further on this argument. It is sufficient to note that in German, negative concord does not seem to be instantiated by a Spec-head relation inside the negative projection.

In section 3 we saw that Bavarian negative concord is limited to a certain portion of the 'Mittelfeld', namely between 'nit' and 'nie'. Bavarian negative concord is also submitted to a structural requirement of proximity, so that k-words must be realized inside the domain between 'nie' and 'nit' in order for negative concord to be possible. If this proximity condition is not met, the interpretation is that of double negation. In addition the structural condition of negative concord are reversed in Romance and in Bavarian. Bavarian k-words are not c-commanded by the negative marker, but they c-command it. Apparently, there seem to be two unrelated syntactic systems for negative concord. However, since Romance n-words undergo LF-raising, it could be proposed that Romance LF is similar to Bavarian S-structure.

Haegemann & Zanuttini (1993) in fact assume exactly that in West Flemish negative concord must apply at S-structure. They propose that the negative projection in West Flemish is realized as NEGP1, i.e. the higher one. K-words surface in the specifier of NEGP1 and therefore they precede adverbials as 'doavuaren' (159).

(159) a. da Valere niets doavuoren gedoan en-eet West Flemish
b. *da Valere doavuoren niets gedoan en-eet

As Bavarian k-words clearly do not occupy the specifier of NEGP, but surface in the specifier of agreement projections immediatly above NEGP, it is plausible to think that the target of Romance LF- and West Flemish SS-movement is not the specifier of NEGP but a group of functional projections.

5. Conclusion

In this paper, we have shown that all NPs assigned structural case must move to Agreement positions which are lower than scrambling positions in the structure. Moreover, in German there is no argument to distinguish a particular position for indefinite objects, while there is clear evidence for supposing that there are two subject positions, and that the lower one is accessible only to indefinite subjects.

We have considered the respective position of the negative marker and of some classes of adverbial elements, which occupy different positions. The structure of the sentence which our data point to is the following:

(160) [AGRSP...[XP wohl [YP nie [AGRSiP [AGRIOP [AGROP [NEGP [ZP gut [VP]]]]]]]]]

The syntactic space of negative concord in Bavarian is between NEGP and YP. In section 3 we have seen that it is not possible to analyze Bavarian negative concord as an instance of Spec-head agreement inside the negative projection. On the contrary negative concord must be analyzed as a relation extending over a wider structural domain, limited by to negative elements: the negative marker 'nit' and the negative adverb 'nie'.

References

Belletti, A. (1992), "Verb positions, NP positions. Evidence from Italian.", ms., University of Geneva.

Benincà, P., L. Renzi, and L. Vanelli (1985), "Topologia dei pronomi soggetto nelle lingue romanze.", *Quaderni Padovani di Linguistica,* 5, 49-66.

Brugger, G. (1993), "Generic Interpretations and Expletive Determiners", distributed as *University of Venice Working Papers in Linguistics*, University of Venice, III, n.1.

Carlson, G.N. (1977), *Reference to Kinds in English*, Phd Disseration, University of Massachusetts, Amherst, MA.

Chomsky, N.(1992), "A Minimalist Program for Linguistic Theory", *MIT Occasional Papers in Linguistics*, 1.

Den Besten, H. (1984), "The Ergative Hypothesis and Free Word Order in Dutch and German", in J. Toman (ed.) *Studies in German Syntax*, Foris, Dordrecht.

Diesing, M. (1992), "Bare Plural Subjects and the Derivation of Logical Representations", in *Linguistic Inquiry* 3, 358-80.

Fanselow, G. (1987), *Konfigurationalitaet*, Niemeyer, Tuebingen.

Giusti, G. (1993), *La sintassi dei determinanti*, Unipress, Padova.

Haegemann, L. and R. Zanuttini (1993), ms., Georgetown University, Washington.

Heim, I. (1982), *The Semantics of Definite and Indefinite Noun Phrases*, Phd Dissertation, University of Massachusetts, Amherst, MA.

Kratzer, A. (1989), "Stage-Level and Individual-Level Predicates", in M. Krifka (ed.) *Genericity in Natural Language*, University of Tübingen, 247-284.

Lenerz, J. (1977), "Zur Abfolge nominaler Satzglieder im Deutschen", in *Studien zur deutschen Grammatik*, 5, Narr, Tübingen.

Mahajan, A. (1990), *The A/A-bar Distinction and Movement Theory*, PhD Dissertation, MIT.

Moltmann, F. (1990), "Scrambling in German and the Specificity Effect", ms, MIT.

Munaro, N. (1991), *Zur Stellung nominaler Ergänzungen im Mittelfeld des deutschen Satzes*, MA Thesis, University of Venice.

Riemsdijk, H. van (1989), "Movement and Regeneration", in P. Benincà (ed.), *Dialectal Variation and the Theory of Grammar*. Foris, Dordrecht.

Sportiche, D. (1992), "Clitic Constructions", ms., UCLA.

Webelhut, G. (1989), *Syntactic Saturation Phenomena and the Modern Germanic Languages*, PhD Dissertation MIT.

Zanuttini, R. (1993), *Syntactic Properties of Sentential Negation. A Comparative Study of Romance Languages*. PhD Dissertation, University of Pennsylvania.