COMP IN BAVARIAN SYNTAX*

JOSEF BAYER

0. INTRODUCTION

It has often been noticed that the southern variant of German that is spoken in Bavaria differs in a number of properties from Colloquial Standard German. One can find quite striking differences not only in the phonology or the lexicon, but also in the syntax of the two dialects.¹ A remarkable fact is that in many non-Bavarian dialects of German extraction from a finite clause with a complementizer leads to ungrammaticality. Bavarian, on the other hand, allows for this kind of movement operation unrestrictedly. Consider the following examples:

(1) *Standard German*

- a. Wer_i glaubst du [t_i liebt Emma]?
who think you loves Emma
- b.*Wer_i glaubst du [daß t_i Emma liebt]?
who think you that Emma loves
- c.*Wen_i glaubst du [daß Emma t_i liebt]?
whom
(acc)

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(2) *Bavarian*²

- a. Wer_i moanst du [t_i mog d'Emma]?
- b. Wer_i moanst du [daß t_i d'Emma mog]?
- c. Weam_i moanst du [daß d'Emma t_i mog]?

Both dialects differ from English. In English, the corresponding sentences are:

(3) *English*

- a. Who_i do you think [t_i loves Emma]?
- b. *Who_i do you think [that t_i loves Emma]?
- c. Who_i do you think [that Emma loves t_i]?

German (or at least the variant to be discussed here) seems to be very restrictive as far as extraction from finite complementizer-clauses is concerned. It does not even allow to extract from object position. Like in English, the trace in (1)c. is governed by the verb *liebt*. Let us assume that (3)b. can be ruled out by some surface filter (cf. Chomsky/Lasnik (1977)) or by a violation of the Empty Category Principle which says that an empty category must be properly governed.³ The question is now why Bavarian, a subdialect of German, is so different with respect to extraction. In fact, it is more on a par with Romance languages like Italian (cf. Rizzi (1982)) or Spanish (cf. Jaeggli (1982)). In Italian, subject extraction as well as extraction of other constituents is possible just like in Bavarian:

(4) *Italian*

- Chi_i credi [che t_i verrà]?
 who believe(2sg) that comes
 'Who do you think will come?'

The next aspect which makes Bavarian a remarkable dialect of German is one which suggests again the comparison with Romance: Bavarian seems to be - at least partially - a pro-drop language. As is well known, Italian and Spanish omit subject pronouns in the unmarked case (and probably according to the Avoid Pronoun Principle, Chomsky (1981)):

- (5) a. Non parlo Italiano (unmarked)
- b. Io non parlo Italiano }
- c. Non parlo Italiano io } (marked, e.g. with stress on *io*)

In Bavarian declarative sentences this is generally not possible:⁴

- (6) *In Bayern redt [NP e] Bairisch
 in Bavaria speaks(3sg) Bavarian
 'In Bavaria, he speaks Bavarian'

Although, notice the following grammatical example:

- (7) Kummst [NP e] noch Minga, dann muaßt [NP e]
 come(2sg) to Munich then must(2sg)
 me b'suacha
 me visit
 'If you come to Munich you must visit me'

In the corresponding Standard German sentences the subject pronoun *du* could under no circumstances be left out. It might be argued that in (7) the pronoun appears as a clitic that has been phonetically absorbed into the verbs *kummst* and *muaßt*. As a consequence, the phonological representation would have to be something like /kum + st + d/ and /mua + st + d/. Although this is probably the historically correct analysis, I will argue in section 4 that modern Bavarian is indeed partially a pro-drop language. It remains to be shown then that despite of its being a pro-drop language, Bavarian patterns in its essential properties with German and not with, say, Romance or Celtic. My concern is, however, not typology. Instead, a major point will be to show that Bavarian conforms to the rules and principles that have been proposed to belong to Universal Grammar and that long movement, pro-drop and a number of other peculiarities follow from some minor deviations from Standard German. Beyond that, the analysis of the COMP-position adjacent to the S-bracket will provide striking evidence in favor of theories which assume this position to be the landing site for the finite verb in German. Furthermore it suggests that in general two virtual COMP-positions should be assumed for German. This is, I believe, fully compatible with the German grammatical tradition. It will turn out in this presentation that in root sentences the position which I will call COMP1 is identical with what has been called "linke Satzklammer" by the German grammarians; my COMP2 in root sentences is identical with the traditional "Vorfeld"; (see Reis (1980) for a similar proposal).⁵

One can hardly look at COMP in Bavarian without looking at relatives. Some major differences between Standard German and Bavarian are directly related to the fact that Bavarian has a special complementizer for relatives. Since this complementizer happens to be the word *wo*, meaning also 'where', one might be tempted to take it for a *w*-word that undergoes *wh*-movement.⁶ This is wrong.⁷ This incorrect impression sometimes arises because in Bavarian, like English, relative pronouns can be deleted in COMP under certain conditions. In section 2 we give empirical

motivation for certain processes of COMP-indexing which circumvent ECP-violations and guarantee the recoverability of deleted relative pronouns via morphological matching.

The article is organized as follows: In section 1, the basic properties of COMP in Bavarian and German will be introduced. In section 2, we will deal with Bavarian relative clauses with respect to the ECP and deletion in COMP. Section 3 is devoted to the study of full and clitic pronouns in Bavarian. There, an interesting asymmetry in the clitic system will be observed that can solve a number of apparent irregularities. Section 3 provides the basis for the argumentation in section 4 that Bavarian is (partially) a pro-drop language. The facts about pro-drop and the structure of COMP can be shown to give new evidence for an analysis of German phrase structure where INFL is inside the VP and where it moves from there to the COMP-position adjacent to S. In section 5 a subdialect of Bavarian will be discussed which extends the domain of agreement in COMP and pro-drop. Section 6 concludes this investigation with a comparison between Bavarian and Standard German. It will follow from my theoretical account that the apparent dissimilarities of the two dialects derive from some minor parametric and diachronic variations, while the core grammar for Bavarian and Standard German will turn out to be identical.

1. A FIRST LOOK AT COMP

Bavarian shows in a most consistent way what is referred to in the recent literature as the 'doubly filled COMP'. This property distinguishes Bavarian markedly from Standard German, (though not from a number of other German dialects). The Standard German equivalents to the following examples would be all ungrammatical:

- (8)
- a. I woäß ned wer daß des tōa hod
I know not who that this done has
'I don't know who has done that'
 - b. I woäß ned was daß -ma tōa soin
what that-we do should
'I don't know what we should do'
 - c. I woäß ned wann daß da Xaver kummt
when that the Xaver comes
'I don't know when Xaver will come'
 - d. I woäß ned wiavui daß -a kriagt
how-much that-he gets
'I don't know how much he will get'

One can see that the complementizer *daß* remains constant while a w-word gets attached to its left side. I assume that we are dealing here with wh-movement in the sense of Chomsky (1977). Thus, the corresponding S-structures for (8) would be, omitting details:⁸

- (9) a. I woaß ned [$\overline{S}$ wer_i daß [S t_i des tōa hod]]
 b. I woaß ned [$\overline{S}$ wo_i daß [S -ma t_i tōa soin]]
 c. I woaß ned [$\overline{S}$ wann_i daß [S da Xaver t_i kummt]]
 d. I woaß ned [$\overline{S}$ wiavui_i daß [S -a t_i kriagt]]

So much for V (or VP) complementation. Let us look now at relative clauses. Again we find data which deviate from Standard German. The most striking thing here is the word *wo* which in German means 'where', but which functions in Bavarian beyond that as a complementizer introducing relative clauses:

- (10) a. Der Hund der wo gestern d'Katz bissn hod
 the dog which that yesterday the-cat bitten has
 'The dog that has bitten the cat yesterday'
 b. Die Frau dera wo da Xaver a Bussl g'gem hod
 the woman whom(dat) that the Xaver a kiss given has
 'The woman who Xaver has kissed'

The pattern is just what we proposed for V-complementation above: *wo* is a fixed complementizer, and the d-words (i.e. the relative pronouns) can be assumed to move to its left side. The corresponding S-structures are then:⁹

- (11) a. Der Hund [$\overline{S}$ der_i wo [S t_i gestern d'Katz bissn hod]]
 b. Die Frau [$\overline{S}$ -dera_i wo [S da Xaver t_i a Bußl g'gem hod]]

In topicalized finite sentences with an overt complementizer, any main constituent of S can be moved towards the left of the complementizer, as the following data show:

- (12) a. Da Xaver daß an Mantl kaffd hod hod neamt glaubt
 the Xaver that a coat bought has has nobody believed
 'Nobody believed that XAVER bought a coat'
 b. An Mantl daß da Xaver kaffd hod hod neamt glaubt
 a coat that the Xaver bought has has nobody believed
 'Nobody believed that Xaver bought a COAT'
 c. Kaffd daß da Xaver an Mantl hod hod neamt glaubt
 bought that the Xaver a coat has has nobody believed
 'Nobody believes that Xaver has BOUGHT a coat'

As indicated by writing the moved constituent in capital letters, these sentences serve mainly to make contrastive or emphatic statements. It is the consequence of the presence of a second COMP-position that such constructions are possible. As in the cases of movement of a *w*- or a *d*-constituent, in (12)a.-c. a subject-NP, an object-NP and a non-finite verb have respectively been moved into the second COMP-position. Standard German lacks such constructions entirely.

This, together with the data presented in (1) and (2), indicates that a major difference between Standard German and Bavarian is that the latter has two COMP-positions, while the former has only one. This would, at least partially explain why Bavarian allows for extraction from finite clauses introduced by a complementizer, whereas the variety of German discussed here contrastively allows for such extractions only when no complementizer is in COMP. Compatible with this assumption is the way in which the data pattern in (1) and (2). The S-structures corresponding to the German examples in (1) would be:¹⁰

- (13) a. Wer_i glaubst du [$\bar{S}$ [COMP t_i] [S t_i liebt Emma]]
 b. *Wer_i glaubst du [$\bar{S}$ [COMP daß] [S t_i Emma liebt]]
 c. *Wen_i glaubst du [$\bar{S}$ [COMP daß] [S Emma t_i liebt]]

Only in (13)a. Subjacency is observed. (13)b.,c. violate it - at least if one assumes that *S* and not $\bar{S}$ is a bounding node for Subjacency in German. With the independently motivated second COMP-position for Bavarian, the grammatical data in (2) could be explained as follows:¹¹

- (14) a. (structure is identical with the structure in (13)a.)
 b. Wer_i moanst du [$\bar{S}$ [COMP₂ t_i] [COMP₁ daß]
 [S t_i d'Emma mog]]
 c. Weam_i moanst du [$\bar{S}$ [COMP₂ t_i] [COMP₁ daß]
 [S d'Emma t_i mog]]

Here, of course, the principles mentioned above are observed, because *wh*-movement can work in a cyclic fashion. It will turn out, however, that this analysis would predict a larger gap between the grammars of Standard German and Bavarian than is likely to exist. We will return to this issue with an alternative proposal in section 6. There are further open questions, - especially in connection with English (cf. (3)). In order to deal with them adequately, we must broaden our data base and set up the theoretical background in more detail. To do this, let us turn to a more detailed inspection of Bavarian relative clauses.

2. RELATIVES

Consider the following grammatical variant of (10)a. which is semantically equivalent to (10)a.:

- (15) Der Hund wo gestern d’Katz bissn hod
 the dog that yesterday the-cat bitten has

The difference between (10)a. and (15) is that in (15) the relative pronoun is missing. Here are some more examples where it makes no difference whether the d-word is present or absent:

- (16) a. Der Mō (der) wo uns g’hoifa hod
 the man who that us helped has
 (nom) (nom)
 ‘The man who has helped us’
 b. Die Frau (die) wo am Xaver a Watschn g’gem hod
 the woman who that to-the X. a slap given has
 (nom) (nom)
 ‘The woman who has given Xaver a slap’
 c. Des Kind (des) wo uns kennd
 the child who that us knows
 (nom) (nom)
 ‘The child who knows us’

Consider now the following variant of (10)b. where again the d-word is missing:

- (17) *Die Frau wo da Xaver a Bussl g’gem hod
 the woman that the Xaver a kiss given has

This expression is ungrammatical. The same holds for the following NP’s when the d-word is missing:

- (18) a. Der Mō *(dem) wo mir g’hoifa hom
 the man whom that we helped have
 (nom) (dat)
 ‘The man whom we have helped’
 b. Die Frau *(dera) wo da Xaver a Watschn g’gem hod
 the woman whom that the X. a slap given has
 (nom) (dat)
 ‘The woman whom Xaver has given a slap’

- c. Des Kind *(dem) wo mir an Apfe schenka
 the child whom that we an apple donate
 (nom) (dat)
 'The child whom we give an apple'

The reason for the difference between (15)/(16) on the one hand and (17)/(18) on the other seems to be that in (15)/(16) the head NP as well as the deletable d-pronoun are Nominatives, whereas in (17)/(18) the head NP is Nominative while the (undeletable) d-pronoun is Dative. Thus there arises a Case conflict in the latter set of examples if the d-word is missing. Note however, that no Case conflict arises when the head NP is Dative and the deleted pronoun is Nominative:

- (19) a. I sog's dem Mō (der) wo im Gartn arwat
 I say-it the man who that in-the garden works
 (dat) (nom)
 'I'll tell it to the man who works in the garden'
- b. I gib's dera Frau (die) wo d'Muich bringd
 I give-it the woman who that the-milk brings
 (dat) (nom)
 'I'll give it to the woman who brings milk'
- c. I schenk's dem Kind (des) wo mid da Katz spuid
 I donate-it the child who that with the cat plays
 (dat) (nom)
 'I'll give it to the child who plays with the cat'

Obviously, a Nominative d-pronoun has a privileged status compared with the oblique d-pronouns. In Bayer (1984) I argued along these lines. Note, however, what happens when we delete Accusative d-pronouns in COMP. As the following examples show, the results are mixed:¹²

- (20) a. Der Mantl *(den) wo i kaffd hob wor z'rissn
 the coat which that I bought have was torn
 (nom) (acc)
 'The coat which I bought was torn'
- b. Die Lampn (die) wo i g'seng hob wor greißlich
 the lamp which that I seen have was ugly
 (nom) (acc)
 'The lamp that I saw was ugly'
- c. Des Auto (des) wo i mecht is z'teia
 the car which that I like is too-expensive
 (nom) (acc)
 'The car which I like is too expensive'

- d. Die Mantl (die) wo i kaffd hob worn z'rissen
 the coats which that I bought have were torn
 (nom) (acc)
 'The coats that I bought were torn'

The difference between (20)a. and (20)b.-d. shows clearly that Case alone cannot explain what is going on here. Throughout, the head NP is Nominative while the verb in the relative clause assigns Accusative to the d-pronoun. The solution of the problem can be found in the German/Bavarian pronominal system. Only the masculine singular has different forms for Nominative and Accusative. The paradigm is for Bavarian.¹³

(21)		masc	neut	fem	plur
	NOM	<i>der</i>	<i>des</i>	<i>die</i>	<i>die</i>
	ACC	<i>den</i>	<i>des</i>	<i>die</i>	<i>die</i>
	DAT	<i>dem</i>	<i>dem</i>	<i>der(a)</i>	<i>dene(n)</i>

Let us call the d-pronouns which are morphologically identical with the Nominative forms [-oblique]. The other forms are [+oblique]. Then we get the following distributions:

(22) a. *Singular*

	NOM	ACC	DAT
masc	-	+	+
fem	-	-	+
neut	-	-	+

b. *Plural*

	NOM	ACC	DAT
masc/fem/neut			

The distinction made by the feature [$\pm$ oblique] captures exactly the distribution of the data in (15) - (20). The underlying principle seems to be that in case of deletion of a relative pronoun in COMP2, the complementizer *wo* (in COMP1) can adopt the feature [- oblique]. The grammaticality differences in (15) - (20), thus, depend on the effects of morphological matching. To give an example, (20)a is ungrammatical with a deleted d-word, because for the masculine form the Accusative (*den*) is different from the Nominative or non-oblique *der*. (20)d, on the other hand, is grammatical even with the d-word deleted because, as (21)

shows, the masculine forms for Nominative and Accusative are identical in the plural; they are both *die*.¹⁴

2.1 *The empty category principle*

Chomsky (1981) states the Empty Category Principle (ECP) in the following way:

- (23) ECP
 $[\alpha e]$ must be properly governed
- (24) α *properly governs* β iff
 - (i) α governs β and
 - (ii) $\alpha = [\pm N, \pm V]^0$ or
 - (iii) α is coindexed with β
- (25) α *governs* β in a structure $[\gamma \dots \beta \dots \alpha \dots \beta \dots]$ if
 - (i) $\alpha = X^0$
 - (ii) where ϕ is a maximal projection, if ϕ dominates β , then ϕ dominates α
 - (iii) α c-commands β

It will turn out that (25) is too restrictive for Bavarian. Bavarian has governors which do not belong to the $[\pm N, \pm V]$ -system.¹⁵ Let me therefore drop (i) from (25). This gives us a definition of government which looks more or less like the definition of 'minimally c-command'.¹⁶

Note now, what happens with the trace left behind by moving the d-pronoun into COMP2 in, say, (19)a; the structure is:¹⁷

(26)a is no problem because here the trace t_i is properly governed by der_i . (26)b, however, is a problem because here the only governor for the empty category is missing. Even if $[_N Mo]$ is coindexed with t_i we face an ECP-violation, because (25) is not fulfilled: There is a maximal node between $[_N Mo]$ and t_i .¹⁸

Pesetsky (1982) proposes a rule of COMP-contraction to handle the parallel problem of *that*-relatives in English.

(27) *COMP-contraction* (Pesetsky)

$$[_{COMP} WH_i \text{ complementizer}] \rightarrow [_{COMP} \text{ complementizer}_i]$$

Pesetsky assumes (27) to apply after *wh*-movement and before semantic interpretation. Though (27) looks like an ad hoc-mechanism, it seems independently motivated at least by Norwegian and French, as Pesetsky argues.¹⁹

I would like to propose a similar rule for Bavarian, which guarantees that the ECP can account for the facts. In addition, we have to take care that the phenomena observed in (20) – (22) can be captured. Note, that other than in (26)b., in (20)c. there will be no ECP-violation if no indexing-mechanism in the sense of Pesetsky is available, since the trace of the d-pronoun is properly governed by the verb *mecht* ‘like’:

(28)

For cases like (26)b, the case where the d-word in COMP2 is missing, we need a mechanism, however, which guarantees that the subject-NP-trace is properly governed. Let us assume the following rule which is supposed to apply after move- α .

(29) [-oblique]-Transmission in COMP (-OT) (obligatory)

$wo \rightarrow wo_i / [COMP2 \left[\begin{smallmatrix} \bar{X} \\ \text{-obl} \end{smallmatrix} \right]_i] [COMP1 \text{ ____}]$
(cf. (22) above)

After (29), an optional deletion rule can delete a d-pronoun before *wo*. Let us state this rule as follows:²⁰

(30) Deletion in COMP (DC) (optional)
d-pronoun $\rightarrow \emptyset / [COMP2 \text{ ____}] [COMP1 \text{ } wo]$

If this deletion rule applies after (29), no ECP-violation will arise. If the application of the two rules is reversed, the homophonous output violates the ECP, because the trace of $\bar{X}_i$ would be unbound. Since the output is

again checked by an independent principle of Universal Grammar, we can assume an intrinsic ordering relation between -OT and DC. Note that DC can also get rid of [+oblique] pronouns; in that case the output may be grammatical or not, depending on the environment in which the rule operates. We will turn to such cases in 2.2 below. I want to emphasize, however, that language-specific rules like DC may overshoot a great deal as long as Universal Grammar has means to control the rule's output.

2.2 Specifying wo

We turn now to a new observation, namely that in Bavarian deleted [+oblique] relative pronouns do not necessarily cause ungrammaticality. We have seen in 2.1 that they sometimes do. Note, however, the following example (31) which is similar to (20)a. (which I repeat for convenience):

- (20) a. Der Mantl *(den) wo i kaffd hob

Merkle (1975) observes that under certain conditions the d-pronoun can be deleted. His example is:

- (31) den Mantl (den) wo i kaffd hob
the coat which that I bought have
(acc) (acc)
'The coat I have bought'

Merkle believes that Accusative d-pronouns can be missing, but not Dative d-pronouns. This is wrong, as the following variations of (18) show:

- (32) a. Sie gem's dem Mo (dem) wo mir g'hoifa hom
they give-it the man whom that we helped have
(dat) (dat)
'They give it to the man who we have helped'
- b. Sie häifa dera Frau (dera) wo da Xaver
they help the woman whom that the Xaver
(dat) (dat)
a Watschn g'gem hod
a slap given has
'They help the woman whom Xaver has given a slap'
- c. Dem Kind (dem) wo mir an Apfe schenka
the child whom that we an apple donate
(dat) (dat)
song mir nix
say we nothing
'We say nothing to the child to whom we give an apple'

[illegible]

(33) a.' *...[NP a Birn_i] [$\bar{S}$ [COMP₂∅] [COMP₁wo_i] [S_{mir} t_j g'hoifa
hom]]
< i = Accusative >
< j = Dative >

(34) *Case-Transmission* (CT)²² (obligatory)
 $wo \rightarrow wo_j / [NP_j] [COMP1 \text{ —}]$
 $\langle j = \text{Case} \rangle$

It is obvious that the rules -OT, DC and CT act together. As long as DC has not yet applied, CT cannot apply, because there will be a violation of the adjacency-requirement. The three rules are intrinsically ordered: If DC applies first, -OT cannot apply, because its environmental condition is not met. CT, however, can apply. If the head, i.e. NP_j in (34), is such that $j = [-oblique]$, the output will be grammatical; in that situation wo will receive an index which agrees with the index of the trace that is left by the later on deleted pronoun. If the head happens to be such that $j = [+oblique]$, of course, a $[-oblique]$ -trace will be unbound, since wo_j cannot bind it.

The interaction of -OT, DC and CT predicts the following patterning of the data:

- (35) a. Mir song-s dem Mō̃ (der_i) wo t_i krank is
 we say-it the man who that ill is
 (dat) (nom)
 'We tell it to the man who is ill'
- b. Mir song-s dem Mō̃ *(den_i) wo da Hund t_i bissn hod
 we tell-it the man whom that the dog bitten has
 (dat) (acc)
 'We tell it to the man whom the dog has bitten'
- c. Mir song-s dera Frau (die_i) wo da Hund t_i bissn hod
 we tell-it the woman whom that the dog bitten has
 (dat) (acc)
 'We tell it to the woman whom the dog has bitten'
- d. Mir meng de Frau *(dera_i) wo da Xaver t_i wos
 we like the woman whom that the Xaver something
 (acc) (dat)
 g'gem hod
 given has
 'We like the woman to whom Xaver has given something'
- e. Mir song-s dene Menner (die_i) wo da Hund t_i bissn hod
 we tell-it the men whom that the dog bitten has
 (dat) (acc)
 'We tell it to the men whom the dog has bitten'

In (35)a., c., e., the input conditions for the rule -OT are met, because a $[-oblique]$ -pronoun appears in COMP2 and assigns its feature to wo . Thus, wo can bind the respective traces. If DC applies before -OT there will be an ECP-violation in (35)a. If the order of rule application is $DC < -OT < CT$, the output will be ungrammatical throughout, because none of the traces is bound by an operator in COMP: The relevant Case-marked

operators which could bind the traces would be missing, while the complementizers would be specified as operators that cannot do any work because they carry indices distinct from the indices of the traces.²³ If the order of rule application is $-OT < DC < CT$, however, neither an ECP-violation nor a violation of the Binding Theory arises. By coindexation of *wo* with the $[-oblique]$ -feature (i) the subject-trace in (35)a. is properly governed (cf. (24) i., iii.), (ii) *wo* in (35)a., c., e. acquires the status of an operator which can bind the d-traces.²⁴

Let us now turn to the ungrammatical examples of deletion in COMP, (35)b., d.: *wo* cannot acquire an index before DC (optionally) applies, since the moved d-word is marked $[+oblique]$. If DC applies, the input conditions of CT are met and *wo* acquires whatever Case-index appears at the adjacent noun. Naturally, this will lead to violations of the Binding Theory, as we have already seen.²⁵

Let me finally point out at which stage of derivation $-OT$, DC and CT will apply. We have already found that they have to follow move- α . Since the indices are needed for semantic interpretation they cannot apply on the “lefthand” side of the T-model, i.e. they must feed LF. On the other hand, since deletion has an effect on the phonetic form of an expression, they cannot apply on the “righthand” side of the T-model, i.e. they must feed PF.²⁶ This reasoning gives us the following localization within the T-model:

With the system developed so far, I can see no way to have DC apply in PF. An alternative which comes to mind is that DC is non-existent and that the presence or absence of a d-pronoun is a matter of choice at lexical insertion. Such a proposal has serious consequences, however: First, we would have to make the assumption that *wo* carries a Case feature from the very beginning, namely the feature $[-oblique]$. Under this assumption one could argue that *wo* can bind the empty category *e* in examples like *der Mann [wo [e] kommt]*. Since one also has to account for

the more interesting cases where *wo* is marked [+oblique], one would, secondly, have to allow for *wo*_(-obl) to become *wo*_(+obl). Evidently, this would lead to a revision of Case theory, as certain elements could be Case-marked more than once. In this way, we could get rid not only of DC, but of -OT as well, because *wo* would be [-oblique] automatically. CT would have to be modified in such a way that it applies only if there is a mismatch between the Case feature of *wo* and the empty category in the c-commanded clause. Although this alternative seems quite reasonable I will not pursue it further here.

2.3 Long movement

We have found evidence that Bavarian has two COMP positions and an indexing-mechanism for relative clause complementation which guarantees that no violations of the ECP and the Binding Theory occur when certain relative pronouns get deleted in COMP. These principles predict that we can expect all effects of long COMP-to-COMP movement. This prediction is borne out as the following example shows:

- (37) a. Mir kenna den Mo wo d'Leid song daß an Ochsn
 we know the man that the-people say that an ox
 aafhem kō
 lift can
 'We know the man ($\left\{ \begin{smallmatrix} \text{who} \\ \text{that} \end{smallmatrix} \right\}$) people say can lift an ox'
- b. Mir ham den Ochsn g'seng wo d'Leid song daß
 we have the ox seen that the-people say that
 s'G'mias zamtret'n hod
 the-vegetables .trampled has
 'We saw the ox (that) people say had trampled the vegetables'

- (40) Des is der Mō̃ [S̄ dem_i [S̄ wo [S̄ d'Leid song [S̄ t_i'
 this is the man whom that the-people say
 [S̄ daß [S̄ da Hans t_i an Apfe g'gem hod]]]]]
 that the Hans an apple given has
 'This is the man who people say Hans gave an apple to'

As predicted by CT, deletion of the d-pronoun *dem_i* leads to ungrammaticality. If the head of the relative, however, agrees with the d-pronoun in a common [+oblique]-feature, the sentence is fully acceptable:

- (41) Mir schenka dem Moj [S̄ wo_j [S̄ d'Leid song [S̄ t_j'
 we donate the man that the-people say
 (dat) (dat)
 [S̄ daß [S̄ da Hans t_j an Apfe g'gem hod]]]] an Radi
 that the Hans an apple given has a radish
 'We give to the man, who people say that Hans gave an apple to,
 a radish'

Summarizing, we have demonstrated that Bavarian must have some indexing convention in COMP which allows the complementizer *wo* (i) to play the role of a governor for the ECP and (ii) to function as a binder in the sense of the Binding Theory. A major difference between Bavarian *wo*-relatives and English *that*-relatives seems to be that *wo* is coindexed with respect to Case-morphology, whereas *that* is coindexed freely. Compare:

- (42) i. *English*
 a. The coat [that_i [t_i is torn]]
 b. The coat [that_i [I have t_i torn]]
 ii. *Bavarian*
 a. Der Mantl [wo_i [t_i z'rissn is]]
 b. *Der Mantl [wo_i [i t_i z'rissn hob]]
 c. Die Hosn [wo_i [i t_i z'rissn hob]]

In the Accusative, ii.b., c., *Mantl* (masc) 'coat' is [+oblique] but *Hosn* (fem) 'pants' is [-oblique].

3. CLITICS

More than Standard German, Bavarian has a tendency to attach clitic pronouns to the COMP1-position: As the following examples show, chains of clitics seek complementizers and finite verbs in COMP1 as their hosts:

- (43) a. Wenn - a - s - ma gibt
 if he it me gives
 (acc) (dat)
 ‘If he gives it to me’
 b. Wenn - a - ma - s gibt
 (dat) (acc)
 c. Gibt - a - s - ma ?
 gives he it me
 (acc) (dat)
 ‘Does he give it to me?’
 d. Gibt - a - ma - s ?
 (dat) (acc)

The sequence of clitics forms together with the complementizer *wenn* or with the verb *gibt* a unit which might be phonologically represented as

- (44) # ven + ʌ + s + mʌ # etc.

Note, however, that structures like (44) are always syntactically perspicuous as far as word order is concerned. The corresponding uncliticized sentences of Standard German show that the word order there is basically the same. (As an enclitic, *es*, of course, has to seek a host to its left side).

- (45) a. Wenn er es mir gibt
 b. Wenn er $\left\{ \begin{smallmatrix} ?\text{mir es} \\ \text{mir-s} \end{smallmatrix} \right\}$ gibt
 c. Gib er es mir?
 d. Gibt er $\left\{ \begin{smallmatrix} ?\text{mir es} \\ \text{mir-s} \end{smallmatrix} \right\}$?

Although with the full pronouns we can get alternative marked word orders, e.g.

- (46) Wenn es mir ER gibt

which are not available in clitic sequences, e.g.

- (47) a. *Wenn - s - ma - a gibt
 b. *Wenn - ma - s - a gibt

we can conclude that, in spite of their word-like character, Bavarian clitic sequences roughly follow the least marked word order that holds for the full pronouns.²⁸

This is not the place to go into the details of the clitic system in general. For the present discussion it is sufficient to concentrate on the Nominative, because we will find remarkable phenomena related to the subject position. Since one of my goals is to show that Bavarian differs syntactically from Standard German only by some minor parametrical variation, I will mostly present comparative paradigms. The following lists can be found in Altmann (1981). The forms in slashes are supposed to be the underlying representations.

(48) Full pronouns / Nominative²⁹

	s i n g u l a r		p l u r a l	
	Bavarian	Stand. Germ.	Bavarian	Stand. Germ.
1 pers	i	ich	mir	wir
2 pers	du	du	ihr,es	ihr
3 pers, masc	er,der	er	sie,die	sie
3 pers, fem	sie,die	sie	-	-
3 pers, neut	es,des	es	-	-

(49) Clitic pronouns / Nominative³⁰

	s i n g u l a r		p l u r a l	
	Bavarian	Stand. Germ.	Bavarian	Stand. Germ.
1 pers	-a,-e	-	-ma	-wa
2 pers	-(s) t	-de	-(t) s	-a
3 pers, masc	-a	-a	-s	-se
3 pers, fem	-s	-se	-	-
3 pers, neut	-s	-s	-	-

where the kind of "resumptive-pronoun" strategy required for (50)b., e. is overgeneralized. It is not possible to present a hard argument from language acquisition, because as far as I know there are no relevant studies on Bavarian. I would predict, however, that at the time children have mastered the essentials of the rule Move- α , errors of type (51) and (52) will not occur at all.

The paradigm given in (49) together with the grammaticality distributions given in (50) - (52) make it at least plausible that such errors would occur. We will see in section 3.3 what an alternative analysis might look like, which in fact predicts that they not occur.

3.2 The phonology-problem³¹

The clitic pronouns of Standard German are linked by phonological rules to their non-clitic counterparts. Consider the clitic [zə] which derives roughly as follows from the full form /zi/ 'sie':

$$(53) \quad /zi/ \rightarrow zu \rightarrow [zə]$$

Obviously, the same thing cannot be said about Bavarian. For convenience I will repeat the full and clitic pronouns of Bavarian by giving the approximate underlying forms:

(54) *Bavarian full and clitic pronouns / Nominative*

singular			plural	
	full form	clitic	full form	clitic
1 pers	i	e/Λ	mir	mΛ
2 pers	du	st	ir/εs	ts
3 pers, masc	er	Λ	si	s
3 pers, fem	si	s	-	-
3 pers, neut	es	s	-	-

Again it is obvious that some forms are related by phonological processes. But what would be required to convert *du* into *-st*? May be this:³²

$$\begin{array}{llllll}
 (55) \text{ a.} & u & \longrightarrow & e & / \# d \text{ ____ } \# \\
 & b. & e & \longrightarrow & \emptyset & / + d \text{ ____ } \# \\
 & c. & [+stop] & \longrightarrow & [+tense] & / \text{ ____ } +
 \end{array}$$

(55)a., b. are needed to get rid of the vowel; then *s* has to be inserted

The phonology-problem outlined in 3.2 too will disappear, because the two critical cases, namely 2nd person / sg. and pl. no longer have to be derived. All the other forms display the ordinary phonologically traceable relationship between weak and strong forms in German.

Let us assume that 2nd person morphemes are in COMP1 at D-structure. Since Bavarian 2nd person morphemes appear obligatorily on COMP, one can derive support for not assuming a rule of free deletion in the COMP's of relative clauses (see section 2.1 and footnote 20). Although speakers of the dialect who are rather unaffected by Standard German use the pattern (pronoun) +*wo* (where the brackets indicate optionality) regularly, there are many speakers who can leave away either the pronoun or the complementizer *wo*, e.g.

- (58) a. Des Auto [COMP2 des] [COMP1 wo] kabudd is
 the car which that out-of-order is
 b. Des Auto ——— wo kabudd is
 c. Des Auto des ——— kabudd is

Since inflections have to appear at COMP1 in 2nd person, we get

- (59) a. Des Auto [COMP2 des] [COMP1 wo-ts] $\left\{ \begin{smallmatrix} \text{ihr} \\ \text{es} \end{smallmatrix} \right\}$
 the car which that-(2pl) you
 kaffd hab-ts
 bought have-(2pl)
 b. Des Auto [COMP2 $\emptyset$] [COMP1 wo-ts] $\left\{ \begin{smallmatrix} \text{ihr} \\ \text{es} \end{smallmatrix} \right\}$ kaffd hab-ts

But note that the inflectional morpheme has to appear in addition to the d-pronoun which is already in COMP2. If we assume a rule of free deletion in COMP which can remove the complementizer, say at S-structure, the consequence for examples of type (58)c. would be that affixation of the agreement-morpheme is a late process, following deletions; otherwise these obligatory elements could be deleted with the complementizer. This would lead to ungrammaticality; and there would be no independent principle that could explain this ungrammaticality. A much more attractive solution is that *wo* (as well as *daß*) are optionally inserted at D-structure in COMP1. If these complementizers are not inserted, any element moving to COMP will land in COMP1. Inflectional morphology that has to appear anyway in this position can be assumed to be already present in D-structure.³⁸ If this is correct, the inflected analog to (58)c. must be:

- (59) c. Des Auto [COMP2 $\emptyset$] [COMP1 des-ts] $\left\{ \begin{smallmatrix} \text{ihr} \\ \text{es} \end{smallmatrix} \right\}$ kaffd hab-ts

before *d* (c). Finally, morpheme-final devoicing applies to give the output [-st]. It is imaginable that (55) (or something more general incorporating it) shows the way in which the form *-st* developed diachronically. This is even clearer in the case of 2nd person plural: /ir/ cannot be the source of /ts/. Then it must be /ɛs/, the old dualis. But note that there are no present day speakers of Bavarian who know about the original use of the dualis form. As a result, /ɛs/ and /ir/ as well as the reduced form *-ts* can be used interchangeably for the 2nd person plural.³³ This strongly suggests that it cannot be synchronic phonology which links the 2nd person plural weak form with the strong form. The rules of (55) do not seem to be independently motivated in synchronic phonology either.³⁴ I conclude that the 2nd person forms are in fact synchronically unrelated. It is very likely that they are diachronically related. But this is not at issue here.³⁵

3.3 An alternative

The alternative to the list given in (49) as well as to the inconsistent move- α picture in (50) and the phonological problem in 3.2 is to assume that Bavarian has no 2nd person/Nominative clitics.

When we look at the verb paradigm we can see that the suspected clitics are identical with the 2nd person verbal endings:

(56)	singular	plural
1 pers	wenn-e kumm	wenn-ma kumm-a(n)
2 pers	wenn- <u>st</u> kumm- <u>st</u>	wenn- <u>ts</u> kumm- <u>ts</u>
3 pers	wenn-a kumm-t etc.	wenn-s kumm-a(nt)

Apparently, in 2nd person the COMP-element *wenn* 'if' inflects like the verb.³⁶

This analysis solves the problems raised in 3.1 and 3.2: The cases which seemingly contradicted a wh-analysis in (50) namely (50)b., e., can be assumed to have the following S-structures:

- (57) a. [$\bar{S}$ [$COMP_2$ du_i] [$COMP_1$ bis daß -st] [S t_i kummst]] ...
 b. [$\bar{S}$ [$COMP_2$ $\left\{ \begin{smallmatrix} i_{hr} \\ es \end{smallmatrix} \right\}_i$] [$COMP_1$ bis daß -ts] [S t_i kummst]] ...

The acquisition-problem mentioned in 3.1 is predicted to not exist.³⁷

This is, in fact, the only correct form for dialect speakers who do not use the complementizer *wo*. I conclude that the previously introduced rule DC is the correct one and should be kept as it was stated.

Note that affixation takes place with whatever appears in COMP1-position. Authors not working in a generative framework are sometimes puzzled by the fact that even nouns, adjectives, adverbs etc. can inflect like the verb in 2nd person:³⁹

- (60) a. Du sollst song [$\bar{S}$ [COMP2 $\emptyset$] [COMP1 [an wäichan
you should say the which-one
Schuah]_i -st] du t_i wui-st]
shoe-(2sg) you want-(2sg)
'You should say which one of the shoes you want'
- b. [$\bar{S}$ [COMP2 $\emptyset$] [COMP1 [wia oit]_i -ts] {_{es}^{ihr}} t_i sei-ts]
how old-(2pl) you are-(2pl)
is mir wurscht
is for-me not-important
'How old you are makes no difference to me'
- c. [$\bar{S}$ [COMP2 $\emptyset$] [COMP1 [wia schnäi]_i -ts] {_{es}^{ihr}} t_i fahr-ts]!
how fast-(2pl) you drive-(2pl)
'How fast you drive!'

In (60)a. it is an N which is affixed, in b. an A, and in c. an adverb. It is easily seen that all these examples are explained by pied-piping in wh-movement: *an wäichan Schuah* is a constituent which moves as a whole; the result is that *Schuah* becomes the rightmost element in the COMP-string. As we argued above, it is always this part of COMP which carries agreement-morphology, if there is any. The analysis of COMP presented so far is supported by the fact that without exceptions the critical morphemes *-st* and *-ts* are suffixed to *daß* if the two COMP-positions are filled at S-structure. In that case, instead of (60)a. we predict the following grammatical sentence:

- (61) Du sollst song [$\bar{S}$ [COMP2 [an wäichan Schuah]_i] [COMP1
daß -st] [_S du t_i wui-st]]

An early predecessor in viewing *-st* and *-ts* not as clitic pronouns but as verb suffixes is Pfalz (1918). Pfalz says:

"In Danube Bavarian the amalgamation of the personal pronouns used as enclitics with the accented word has progressed further in the second person Nominative pronouns in singular and plural than in pronouns of the first and third person. When they are cliticized to the accented word, only *du* and *es* have lost their meaning as autonomous words to such an extent that they have only the value and function of a suffix and can be used as such syntactically. Their role as a suffix is most clearly demonstrated by the fact that it is possible to have the enclitic form together with the accented full form and this is not felt as a pleonasm by the speaker. [...] the enclitic forms *-d* from *du* and *-s* from *es* pattern phonetically with the group of old verbal suffixes, while the clitic forms ending in vowels, *-Λ*, *-e/-Λ*, *-mΛ* of the pronouns *er*, *i*, *mir*, do not fit into the system of the suffixes ending with consonants. Even on purely phonetic grounds the latter do not belong to the group of the old suffixes."⁴⁰

The singular form *-st* appeared already in Old High German at the verb. Pfalz remarks that suffixation to other categories is not exemplified in the Middle High German literature. They are, however, found regularly in the dialect literature of the 18th century. The earliest source of the plural from *-ts* was found by Pfalz in a drama of 1480. It is most likely that here again suffixation to COMP-elements emerged much later. This indicates that there was a gradual reanalysis of the 2nd person clitic pronouns over the centuries, which resulted in a complete overlap of these forms with the corresponding inflectional forms of the verb which have become opaque as to their referential nature much earlier.

It is not essential for my further argumentation whether Pfalz' analysis is historically sound. What is important is that the two morphemes *-st* and *-ts* have entirely lost their referential force even when they appear cliticized to categories where the still transparent clitics appear. The striking characteristic of present day Bavarian is that elements in COMP1-position obligatorily inflect for 2nd person with the finite verb. Aside from these considerations and especially with respect to data from Lower Bavarian (cf. section 5) the more abstract notion that is at issue here is 'agreement', i.e. an unambiguous marking for person and number.⁴¹

My conclusion for clitic strings like in (62)

- (62) Wenn - ts - ma - n $\left\{ \begin{smallmatrix} \text{ihr} \\ \text{es} \end{smallmatrix} \right\}$ z'ruckbring-ts ...
 if (2pl) me him you back-bring(2pl)
 (dat)
 'If you bring him back to me, ...'

is that there is a radical syntactic difference between the inflectional morpheme (here *-ts*) and the real enclitic pronouns. More evidence for this will be presented in the next section.

- c. *[COMP1 Kumm - t] [_S *pro* noch Minga]?
 come(3sg) to Munich
 ‘Will he/she/it come to Munich?’
- d. *[COMP1 Kumm] [_S *pro* noch Minga] ...
 come(1sg)
 ‘If I come to Munich, ...’

In(68)a.,b. COMP1 is not specified for person and number. Therefore it cannot be expected to work as a proper governor. In (68)c.,d., however, the finite verb appears in COMP1; and there is the required specification. We must ask why *pro*-drop works only for 2nd person in Bavarian and why it works only under restricted configurational conditions.

Let us turn to the first question. It is easy to see that the restriction of *pro*-drop to 2nd person is no accident here. In the inflectional paradigm, 2nd person singular and plural are the only two forms which encode person and number uniquely. This is shown by the following table:

(69) *Bavarian verbal suffixes*

form	semantics
-∅	1sg; 2sg imp
-st	2sg
-a	1pl; 2sg hon; 2pl hon; 3pl
-ts	2pl; 2pl imp
-t	3sg masc; 3sg fem; 3sg neut

(imp=imperative; hon=honorific)

Only *-st* and *-ts* encode unambiguously person and number, *-ts* including the imperative form for 2nd person plural. One should not put too much emphasis on such a finding, because counterexamples are found easily. If one wants to argue that unique determination of the properties of a dropped pronoun is a sufficient condition for *pro*-drop one would run into problems with Standard German, where *-st* encodes 2nd person singular unambiguously – like in Bavarian – but without the option to drop a c-commanded pronoun. On the other hand, the Romance languages suggest that unique determination of *pro* is not a necessary condition for *pro*-drop. In Italian it is, for example, never clear by virtue of morpho-syntactic conditions which genus a form like *canta* encodes. Without the intention to make claims about Universal Grammar at this point, we can observe, however, that in Bavarian only 2nd person forms uniquely determine the content of a c-commanded pronoun and that this might be a strong reason why Bavarian has *pro*-drop only for 2nd person.

Let us now turn to the second question: Why does *pro*-drop work

On the other hand, any analysis based on the assumption that there is

no maximal V-projection different from S in German will be confronted with the same dilemma. If the structure of (11)a. is:

(where $\bar{V}$ is a non-maximal projection of V/INFL and where perhaps S is $V^{\max}$) we miss again a convincing reason why the examples in (71) are ungrammatical. The finite verb would govern *pro* through its projection(s) in the same way as it governs its objects or PP's.⁴³

From this I conclude that the place of INFL in German V/end sentences is inside a maximal V-projection and that the correct structure for (71)a. is

Only under this analysis the ungrammaticality of examples like (71) is explained without further stipulations: *ob* is not specified with uniquely determining morphology, and the word on which the appropriate morphology appears is inside a maximal projection from where it cannot govern the subject-NP.

I conclude that in (71) (and, of course, also in (70)), *pro* is not in a properly governed position and that this is due to the fact that it is neither coindexed with a c-commanding element nor does the appropriately specified element c-command it.

In order to derive the pro-drop parameter it is plausible to go back to the definition of proper government which contained the pro-drop parameter, namely:

- (76) α *properly governs* β iff
 α *governs* β [and $\alpha \neq \text{AGR}$]

This definition appears in Chomsky (1981). Chomsky claims there that the bracketed condition is missing in pro-drop languages. Although we would not like to identify proper government in Bavarian with government, we should notice that Bavarian pro-drop draws heavily on the specification of AGR. We will turn to AGR in more detail in the next paragraph. Let us now reformulate proper government in the following way:

- (77) α *properly governs* β iff
 (i) α *governs* β and
 (ii) a. α is coindexed with β or
 b. $\alpha = \text{AGR}$

Bavarian makes the difference between government and proper government very perspicuous here: (71) violates the ECP because the complementizer governs *pro* without governing it properly (in the sense of (77)). Bavarian seems to be a partial pro-drop language by virtue of the morphological properties listed in (69), i.e. it has the option of adopting (77) (ii)b. within the domain of 2nd person morphology. Examples like those in (71) are excluded now because - given the configuration of German phrase structure is as in (75) - neither of the conditions listed under (77) (ii) is fulfilled.

One aspect that could make phrase-structures like in (72) or (74) still attractive is Nominative assignment. Chomsky (1981) derives the ungrammaticality of examples like

- (78) *He tried [_S he to win]

by assuming that a feature [+tense] in INFL is the assigner of Nominative Case. Since INFL in (78) is marked [-tense], the pronoun *he* does not get Case; therefore the sentence is ruled out by the Case Filter. In my following remarks I would like to show what the situation of Nominative assignment is like and that a theory of strictly local Nominative assignment is probably oversimplified. First, we have to point out the most crucial word order differences between German and English, - namely that in embedded sentences with a complementizer, German places the finite verb at the end, but in root-sentences after the first constituent:

- (79) a. ... weil Karl nach Hause ging
 because K. to home went
 '... because Karl went home'

- b. Karl ging nach Hause
'Karl went home'

The following sentences are not possible:

- (80) a. *Karl nach Hause ging (as a root-sentence)
b. *Er sagte, Karl nach Hause ging
he said
'He said that Karl went home'

If the finite verb (INFL) appears in COMP1, the sentence is interpreted as a question:

- (81) Ging Karl nach Hause?
'Did Karl go home?'

These data suggest quite strongly that the finite verb (V/INFL) and the complementizer can, to a certain extent, do the same job: They govern the subject-NP and assign it Nominative Case. Let us assume that the basic constituent structure for German sentences is:⁴⁴

The ungrammaticality of (80)a. can be explained because *Karl* is un-governed. Since $\bar{S}$ is a maximal projection, an embedding verb cannot be expected to break in and govern the subject-NP at any time. In (80)b. this is especially so because *sagen* 'say' does not subcategorize for a Nominative complement. Otherwise the same explanation as before applies: (79)b. is grammatical because V/INFL has to move to COMP1 in order to govern the subject NP; it can move only when COMP1 is not lexically filled. The subject NP is governed in this position; (cf. (81)). Since it is

moved in (79)b. into COMP2, the so-called "Vorfeld", its trace will be governed by V/INFL:

Under the standard assumption that Case gets assigned at S-structure, *Karl* is assigned Case via chain-government, i.e. *Karl* receives Nominative Case via its governed trace t_j . This (widely accepted) analysis predicts that the examples in (80) are ungrammatical and that (81) and, for example,

- (84) Er sagte, Karl ginge nach Hause
 he said K. go to home
 (subj.)

are grammatical. The structure of (84) is:⁴⁵

- (85) Er sagte [$\bar{S}$ [COMP2 Karl_j] [$\bar{S}$ [COMP1 ginge_i]] [_S t_j [VP nach
 V/INFL
 Hause t_i]]]]]

It must be noted, however, that a theory which claims that the Nominative is exclusively assigned by some element (INFL of some designated complementizers) cannot be adequate. In German there are examples available where the Nominative appears in clauses without INFL:⁴⁶

- (86) a. Der ein Schreiner? Das kann nicht sein!
 he a carpenter that can not be
 (nom)
 'He can never be a carpenter!'
 b. Wir heimgehen? Das könnte euch so passen
 we home-go that could you ? please
 (nom)
 'It would please you if we go home (...but we won't)

- c. Alle mal herhören!
 all once listen
 (nom)
 'Listen everybody!
- d. Schöner Garten zu verkaufen
 pretty garden to sell
 (nom)
 'Pretty garden to sell'

These data suggest that Nominative assignment cannot exclusively be handled locally, i.e. along the lines of the assignment of oblique Case in configurational languages. There must be either a way to assign the Nominative by some other element or a way to have the Nominative as a kind of default Case. Although I cannot go into this here, I believe that the latter solution is the more promising one.⁴⁷

In spite of the questions that remain in connection with Nominative assignment, the conclusion of this discussion of the Bavarian data is that in sentences introduced by a complementizer, AGR is not in a configuration which c-commands the subject-NP, if it is not explicitly spelt out at the complementizer-word. This indicates that German employs a phrase-structure with a maximal V-projection dominating INFL(AGR). A weaker conclusion which, however, agrees with the analyses of other authors, e.g. Platzack (1983), is that German has a set of complementizers which serve as governors and Case-assigners for the subject-NP. We will come back to this again in the next section.

4.2 *Properties of INFL in COMP*

In his discussion of Dutch and German root-phenomena, den Besten (1982) proposes a rule which is supposed to replace the old rule of verb-preposing. Whereas V-preposing just moved the finite verb into COMP or some other pre-S-position, den Besten's rule *Move Tense* is designed in such a way that the landing site for the finite verb is predetermined by a feature that links the two positions that are involved in the transformation:

(87) *Move Tense*

X -	[-tense]	-	Y -	[_V [+tense]]	-	Z
1	2		3	4		5
1	4		3	∅		5

Of course, as we have said above in 4.1, (87) can only apply when the left [+tense]-position is not blocked by a lexical complementizer.

Den Besten presents examples from non-standard dialects of Dutch and German which are supposed to back his idea of a morphological link between the two positions involved in (87):

(88) *Non-standard Dutch*

- a. dat(t) - e ze kom(m) - e
that (pl) they come (pl)
- b. dat ze kom - t
that(sg) she come (sg)
- c. *dat(t) - e ze kom - t
that (pl) they come (sg)

(89) *Non-standard German*

- a. ...wenn - st - (d)e komm - st
when (2sg) you come (2sg)
'... when you come'
- b. ...ob - st - (d)e komm - st
whether(2sg) you come (2sg)
'... whether you come'

One may add to these somewhat scattered data the findings of Bennis/Haegeman (1983) about West-Flemish (cf. Fn. 41) which show that the complementizer *dat* always agrees with the finite verb: If the personal ending of the verb contains a nasal, the complementizer will also contain it. In Bavarian the same thing is found in certain cases of interjection-inflection, e.g.:

- (90) Gell - n - s Sie sa - n a Araber?
(interj.) ↑ you (hon) are ↑ an arab
'You are an Arab, aren't you?' (honorific form)

Richter (1979) reports that in Polish complementizers can optionally pick up the feature for person from the finite verb:⁴⁸

- (91) a. gdzie byłem? - gdzieś był?
where was(1sg) where(1sg) was
'Where was I?'
- b. gdzie byłeś? - gdzieś był
(2sg) (2sg,masc)
- c. gdzie byłaś? - gdzieś była? etc.
(2sg) (2sg,fem)

- c. ...um ins Bett zu kommen
 in order into bed to come(-fin)
 ‘... in order to get to bed’
- d.*...um ins Bett kommt
 (+fin)

Agreement between V/INFL, COMP1 and the subject-NP then works as follows: a [+tense]-verb selects a [+tense]-complementizer. If there is one available, V/INFL and the complementizer will be co-superscripted. Then the complementizer has to be co-superscripted with the subject NP. In this way we can account for the fact that the subject NP has to agree with the finite verb in person and number in German:⁵⁰

- (95) a. weilⁱ die Mädchenⁱ einen Hund habenⁱ
 because the girls a dog have
 b. *weilⁱ die Mädchen^j einen Hund hatⁱ
 < i = [3sg], j = [3pl] >

Turning to pro-drop again, Bavarian developed historically AGR in such a way that, as opposed to Standard German, COMP1 was audibly coindexed with V/INFL for 2nd person. Thus, there is not only agreement between the indexed complementizer and the coindexed subject NP; the referential content of the subject NP can be identified by the complementizer.

We will assume the following co-superscription conventions for German:

- (96) a. complementizer → complementizerⁱ / [COMP1 ____]
 ...[V/INFL[+tense]]ⁱ
 b. NP → NPⁱ / [COMP1 complementizerⁱ] [S ____ ...]

In addition to this, Bavarian employs a kind of linking rule. Recall that in section 4, (69), it was said that only 2nd person suffixes can uniquely determine *pro* in Bavarian. Let us propose the following features for person and number:

(97) *Features for Person and Number*

	ich I	du you(sg)	er/sie/es he/she/it	wir we	ihr/(es) you(pl/du)	sie they
1st	+	-	-	+	-	-
2nd	-	+	-	-	+	-
sing	+	+	+	-	-	-

Then the dialect-specific linking rule will be:

(98) *AGR-in-COMP*

$$\text{COMP1} \longrightarrow \left[\begin{array}{c} -1\text{st} \\ +2\text{nd} \\ \alpha\text{sing} \end{array} \right] / - \dots \left[\text{V/INFL} \left[\begin{array}{c} -1\text{st} \\ +2\text{nd} \\ \alpha\text{sing} \end{array} \right] \right]$$

These features will be spelled out morphologically as follows:

(99)

a.	$\left[\begin{array}{c} -1\text{st} \\ +2\text{nd} \\ +\text{sing} \end{array} \right]$	$\longrightarrow$	$-\text{st}$	/	—	...	[COMP1 —]
b.	$\left[\begin{array}{c} -1\text{st} \\ +2\text{nd} \\ -\text{sing} \end{array} \right]$	$\longrightarrow$	$-\text{ts}$				

Since in modern Bavarian the dualis form *es* and the plural form *ihr* have semantically collapsed, any element in COMP1 that is specified along (98)/(99) can identify an empty pronominal in subject position. That this is no cogent reason for pro-drop, as many linguists assume at the moment, is shown by the fact that there are pro-drop languages with a fairly poor inflectional system.⁵¹

To conclude the discussion of pro-drop, I would like to draw attention to two problems that might be thought to arise from my analysis.

A problem could be suspected in the fact that Bavarian and the non-Standard German mentioned in den Besten's work (cf. 89) look very much alike in the critical 2nd person singular: *venste* versus *venst*. Both forms are probably linked to V/INFL by (98). Despite their phonological similarity, however, there are crucial syntactic differences with respect to pro-drop. Bavarian allows for pro-drop, but it can as well retain the full pronoun:

- (100) a. wenn-st kumm-st
 b. wenn-st du kumm-st
 c. kumm-st?
 d. kumm-st du?

This is not at all possible in the dialect mentioned by den Besten:

- (101) a. wenn-st-~~de~~ komm-st
 b. *wenn-st-~~de~~ du komm-st

- c. komm-st-~~de~~?
 d. *komm-st-~~de~~ du?

This shows quite convincingly that besides the noticeable agreement with V/INFL, there is still a clitic pronoun attached to COMP1. The difference between this and Bavarian is therefore not so much a phonological, but rather a syntactic or functional one. In modern Bavarian, the 2nd person affixes are no more clitic pronouns than are the verb-endings.⁵² As Pfalz (1918) correctly observed, they have turned entirely into agreement morphemes. The morpho-phonological closeness of Bavarian and the other *st*-dialects without *pro*-drop indicates again that *pro*-drop is hardly an effect of rich verbal morphology alone. As we have said already, Standard German has fairly rich verbal morphology but no *pro*-drop. One might speculate, however, about the question whether some other German dialects are on the way to developing *pro*-drop.

A final issue that needs some clarification is the fact that the classification of complementizers along a [$\pm$ tense] distinction is not as obvious as I suggested above. We have said that *ob* 'whether' is [+tense], but notice the following example:

- (102) Er wußte nicht ob lachen oder weinen
 he knew not whether laugh or weep
 'He didn't know whether he should laugh or weep'

Since examples like these construe very much like control, it is reasonable to assume the following structure:

- (103) Er_i wußte nicht [$\bar{S}$ ob [S PRO_i lachen oder weinen]]

PRO cannot be *pro* because insertion of the pronoun *er* instead of an empty category leads to ungrammaticality. The only way out seems to be to assume that *ob* can exceptionally be [-tense], just like *um*, which cannot be a governor, as the following grammatical example shows:

- (104) Sie_i gab es mir [$\bar{S}$ um [S PRO_i mich zu erfreuen]]
 she gave it me in-order me to please
 'She gave it to me in order to please me'

This concludes our discussion of the main issues of *pro*-drop in Bavarian. We have seen that this phenomenon arises only under special conditions, namely with a designated morphology and when the subject position is properly governed. It turned out that *PRO*, as assumed in Chomsky (1981) and Jaeggli (1982), cannot be the empty category which is relevant for

pro-drop. Instead *pro*, as defined in Chomsky (1982), was shown to fit exactly the pro-drop paradigm of V/2-languages (but possibly not only these; see McCloskey/Hale (1983)). The Bavarian peculiarities of a partial pro-drop system could be shown to support theories which locate INFL inside a maximal V-projection and/or in the COMP-position adjacent to S.

5. LOWER BAVARIAN

The tendency of Bavarian towards overt agreement morphology in COMP is still more advanced in the sub-dialect spoken in Lower Bavaria, especially in and around the town of Landshut.⁵³ In Lower Bavarian the COMP-inflection system covers not only the 2nd person but also the 1st person plural, although the requirement of affixing COMP does not seem to be as obligatory as for the 2nd person:

- (105) a. *daß-ma* (mir) noch Minga fahr-n
 that-(1pl) we to Munich drive(1/3pl)
 ‘That we drive to Munich...’
 b. *Fahr-ma* (mir) noch Minga?
 drive-(1pl) we to Munich
 ‘Do we drive to Munich?’
 c. *Warum daß-ma* (mir) noch Minga fahr-n
 why that-(1pl) we to Munich drive-(1/3pl)
 ‘... why we drive to Munich’
 d. *Mir fahr-ma* (*mir) noch Minga
 we drive-(1pl) we to Munich
 ‘We drive to Munich’

The situation is almost the same as before: *-ma* appears at COMP1 and the full pronoun can optionally follow. (105)d., of course, does not allow the full pronoun to follow the properly governing COMP1, because then we would have double pronouns. The empty category following *fahr-ma* in (105)d. must be a trace which is bound by the moved full pronoun. The S-structure will be analogous to (57):

- (106) [$\bar{S}$ [_{COMP2} mir_i] [_{COMP1} fahr_i-ma] [_S t_j [_{VP} noch Minga t_i]]]

The following graphic shows that the distribution of *-ma* in COMP1 is fully regular:

(107)	COMP2	COMP1 (COMP/INFL)		V/INFL
a.		warum-ma	<i>pro</i> noch Minga	fahr-n
b.		fahr -ma	<i>pro</i> noch Minga	
c.	wohĩ	fahr -ma	<i>pro</i>	
d.	noch Minga	fahr -ma	<i>pro</i>	
e.	warum	daß -ma	<i>pro</i> noch Minga	fahr-n

The difference between this and the 2nd person morphemes *-st* and *-ts* is that *-ma* does not appear on V/INFL in V/end-sentences:

- (108) *Warum-ma *pro* noch Minga fahr-ma
 why -(1pl) to Munich drive-(1pl)

Since *-ma* (phonetically [ma]) is the clitic form of *mir* 'we' throughout Bavarian, and since other sub-dialects of Bavarian (like my own) do not allow the alleged "double-pronoun" constructions of Lower Bavarian, we have to conclude that *-ma* is functionally an entirely different morpheme in the two dialects: in the dialects which do not allow for the double construction *warum-ma mir*, *-ma* is a clitic pronoun like the others in 1st and 3rd person. In these dialects the examples in (107) sound just alike; their underlying structure, however, must be different: There will be no *pro*.

(109)	COMP2	COMP1 (COMP/INFL)		V/INFL
a.		warum	-ma noch Minga	farn-n
b.		fahr	-ma noch Minga	
c.	wohĩ	fahr	-ma	
d.	noch Minga	fahr	-ma	
e.	warum	daß	-ma noch Minga	fahr-n

The correctness of this analysis is borne out by the fact that (i) under marked accentuation, where *mir* receives primary stress, *-ma* does not remain:

(110) *Non-Lower-Bavarian*

- a. warum MIR noch Minga fahrn
 b. *warum-ma MIR noch Minga fahrn

(ii) in case of wh-movement of the full pronoun into COMP2, *-ma* does not remain either:

(111) *Non-Lower-Bavarian*

- a. Mir fahr-n noch Minga
- b. *Mir fahr-ma noch Minga

For most speakers who have not been exposed to Lower Bavarian or closely related dialects for a longer time, the forms in (110)/(111)b. sound as odd as, for instance, the generally unacceptable doubling of the 3rd person singular masculine pronoun:

- (112) *warum-a er noch Minga fahr-t
 | |
 (+clit) (-clit)

My conclusion is that one and the same morpheme, *-ma*, plays a crucially different role in Lower Bavarian than in the rest of Bavarian. The same process which led to a weakening of the second person pronouns and finally to a reanalysis as a personal ending has begun to affect the clitic pronoun *-ma* in Lower Bavarian. From the fact that the speakers are still able to leave away *-ma* in COMP1 without feeling strong ungrammaticality, one can see that the decay of this clitic is not as advanced as in 2nd person.⁵⁴

An issue that is completely excluded in this study of COMP in Bavarian is the functional aspect. One might ask why the process that converted clitics into pure agreement morphemes affected the 2nd person in Bavarian generally plus the 1st person plural in Lower Bavarian. Why not the 3rd person singular? Why not 1st person singular? At least the outline of an answer to this question might be that 2nd person and 1st person plural are classical imperative forms.⁵⁵ In fact, in Bavarian there is a 1st person imperative:

- (113) a. Gem-ma!
 go we
 'Let's go!'
 b. Pack-ma-s!
 take we it
 'Let's start!'

It is very likely that in Bavarian *-ma* in 1st person plural imperatives is an agreement morpheme and not a clitic pronoun, because alternative forms like

- (114) a. *Genga mir!
 b. *Packa-s mir!

and in Lower Bavarian

- (115) a. *Gem-ma mir!
b. *Pack-ma-s mir!

are unacceptable as imperatives. There are two counter-arguments to this functional interpretation of the domain of pro-drop: First, the 2nd person singular in Bavarian (and German) is not the singular imperative. Second, Pfalz (1918) reports that in the North-Italian Germanic language areas agreement and pro-drop can be found even in 3rd person singular:

- (116) Baz tütär (ear)?
what does(3sg) he
'What does he do?'

I will leave this open to further speculation and research.

6. A FILTER FOR STANDARD-GERMAN

We have started this investigation of Bavarian syntax with the observation that Standard German deviates considerably from Bavarian with respect to extraction from finite clauses which are introduced by a complementizer. For convenience, the examples are repeated here:

(1) *Standard German*

- a. Wer_i glaubst du [t_i liebt Emma]?
b. *Wer_i glaubst du [daß t_i Emma liebt]?
c. *Wen_i glaubst du [daß Emma t_i liebt]?

(2) *Bavarian*

- a. Wer_i moanst du [t_i mog d'Emma]?
b. Wer_i moanst du [daß t_i d'Emma mog]?
c. Weam_i moanst du [daß d'Emma t_i mog]?

The striking thing is that Standard German does not even allow - as opposed to English - extraction from the object-position if a complementizer is present, whereas Bavarian allows all extractions. On the other hand, we have seen that Bavarian is "real German"; it is not a language which is in its underlying rules and principles deeply different from Standard German or other non-Bavarian German dialects. Most of the time speakers of Bavarian who exclusively use their dialect in spoken

language are as able as any other speaker of German to write according to the standard grammar. Comprehension, too, is no problem at all. An approach which goes beyond the description of the different phenomena should explain why there are such differences while at the same time the underlying syntactic organization seems to be the same.

We have found overwhelming evidence for Bavarian to have two COMP-positions. There was no reason to adopt something different from the COMP2-position as a landing-site for the main constituents that have to appear before the finite verb (which is in COMP1 or "CONFL"). Thus, we can assume (82) the canonical tree for German. In spite of the critique of the two-COMP-analysis brought forward in Reis (1983), I assume that the analysis of German given in Thiersch (1978) is basically correct. This analysis says that one rule moves V/INVL to COMP1 and another rule can move any major constituent into the so-called "Vorfeld" (= my COMP2).⁵⁶

It must be considered, however, that (82) predicts doubly-filled COMP to be the unmarked case. This might be thought to be a deficit of the theory, because we know that doubly-filled COMP (in the narrow sense of a complementizer following a constituent $\bar{X}$) does not exist in Standard German.⁵⁷ Furthermore, two COMP-positions, one c-commanding the other, as in (82) predict that there will be free extraction from [+complementizer, +tense]-clauses. As (1) shows, this is falsified by Standard German. I would like to argue now that despite these immediate objections there are good arguments not to stipulate that the canonical trees of German and Bavarian are different, e.g. by assuming that German lacks one COMP-position.⁵⁸ To see this, consider COMP-to-COMP-movement over more than one COMP. There is no reason to believe that grammar provides a threshold as to how many COMP's might be crossed in cyclic wh-movement. (117), however, turns out to be odd in German:

- (117) a. ? Wer_i [glaubst du [meint Frieda [sagt Franz [t_i liebt Emma]]]]?
 'Who do you believe thinks Frieda says Franz loves Emma?'
 b. ? Wen_i [glaubst du [meint Frieda [sagt Franz [liebt Emma t_i]]]]?
 'Who do you believe thinks Frieda says Franz Emma loves?'

The tree corresponding to (117)a. shows that under the assumption of only one COMP/INFL-position, (117)a. will be blocked by a violation of Subadjacency:

It is easy to see that this way of blocking (117)a. will not do. It would predict that the fully grammatical sentence (1)a. is ungrammatical, too. Thus, under the well motivated assumption that COMP in German is the landing site of V/INFL, we are forced to assume for German globally a second COMP-position which stores the trace binding the empty category in the bottom-clause:

The question at issue now is why the examples in (117) are of dubious grammaticality. I believe an answer to this cannot be found in the system of core grammar. As a matter of fact, acceptability deteriorates quickly if we insert more clauses between filler and gap or if we disturb the symmetry that exists between the verba dicendi and their subject-NP's:

- (120) a. ??Wer_i [glaubst du [meinte Frieda [sagte Franz
[dachte Renate [t_i liebt Emma]]]]]?
'Who do you believe Frieda thought Franz said
Renate thought loves Emma?'
b. ??Wer_i [dachte die Mutter [sagte der Vater zu Franz
[t_i liebt Emma]]]]]?
'Who did mother think father said to Franz loves Emma?'
c. ??Was_i [glaubte Franz [sollte der Vater gegenüber Erna
behauptet haben [hat Fritz t_i seiner Freundin geschenkt]]]]?
'What did Franz believe father should have claimed to Erna
Fritz has given to his girlfriend?'

All that is mysterious about these sentences is that they are hard to parse. If the arrangements of the bridge verb and the subject NP are strictly monotonous as in (117) and in (120)a., and if the speaker's intonation assists, it is still likely that on-line processing can be performed with success. Generally processing will be inhibited, however, in correspondence with

increased embeddings and distortion of symmetry. It is interesting to imagine what complementizers could do for the hearer in such a situation. Let us assume with current theories of sentence processing (e.g. Fodor (1979)) that the parser will proceed along the lines of the analysis of least effort, if nothing else is required, in order to derive some interpretable S-structure. In (120)c., this would mean that the parser expects the gap corresponding to the filler *was* after the occurrence of the NP *Franz*, i.e.:

(121) Was_i [glaubte Franz t_i]

This hypothesis gets rejected in (120)c. as soon as the verb *sollte* enters. There must be a shift in the analytic procedure, because now the parser must hold the information that a possible gap for the filler is not yet found. In complex multiple-embedding sentences like in (120), this has to be repeated a couple of times; obviously, the locations for the intervening traces have to be determined at every $\bar{S}$ -bracket. Under this view, it is clear that lexical complementizers might be of great help to determine the place at which the parser can locate an intervening trace.

The conclusion of this reasoning is that with long movement speakers of Bavarian will not face as many parsing problems as those speakers of German who cannot extract out of [+complementizer]-clauses at all. It is interesting to see that non-Bavarian speakers sometimes switch over quite naturally to using complementizers towards the end of a long-movement-construction, e.g.⁵⁹

(122) Wer_i [glaubst du [meinte Frieda [daß t_i Emma liebt]]]?

For most of the German “non-extractors”, however, sentences like (122) are still of dubious grammaticality. Since we have found enough evidence for V/INFL to occupy the COMP₁-position in German and since extraction is possible in (1)a., we must conclude that for these speakers there exists a filter which blocks the derivation of sentences like (122).⁶⁰ For obvious reasons, this filter cannot be the *that*-t-filter of Chomsky/Lasnik (1977): This filter would not rule out cases of object-extraction like (1)c. The required filter has to take care of the fact that it is the t-complementizer sequence which is not permitted in Standard German.⁶¹ We may state this filter as follows:

(123) [t-daß]-Filter

*[[COMP₂ t] [COMP₁ complementizer] ...]

Another filter which applies for non-Bavarian (or non-Southern) speakers of German is the doubly-filled-COMP-Filter of Chomsky/Lasnik (1977):

(124) *Doubly-Filled-COMP-Filter*⁶²

*[[COMP₂ $\bar{X}$] [COMP₁ complementizer] ...]

(123) and (124) can be collapsed as follows:

(125) *COMP-Filter*

*[COMP₂ α] [COMP₁ β]

where (i) α = t or $\bar{X}$

(ii) β = a lexical complementizer

It is easy to see how some major differences between Standard German and Bavarian can be derived now:

- (i) Since Bavarian lacks the COMP-Filter (125), all the effects of long movement out of *daß*-clauses etc. follow. In the same way, constructions of the *wann-daß*- or *der wo*-type are permitted, while all of these are not permitted in Standard German.
- (ii) Since Bavarian has a complementizer for relatives which Standard German lacks, namely *wo*, together with the probably not so idiosyncratic rules -OT, CT and DC (see sections 2.1, 2.2), sentences can be derived as grammatical which would be rejected in Standard German as ECP-violations or as violations of a general recoverability principle.
- (iii) Since Bavarian has a rule that links COMP₁ and INFL not only abstractly but rather by audible morphemes (see (98)), COMP₁ becomes a governor for the ECP. Unlike Standard German, Bavarian becomes a partial pro-drop language. Standard-German has not developed something like (98); therefore, pronoun-drop leads to an expectable ECP-violation.

As far as I can see, all of the rules and principles introduced in this study of Bavarian (and German) syntax lie outside core grammar: Languages are not compelled to have this or that complementizer; they are not compelled to develop strange "clitics" etc.; they should, however, observe the Binding Theory, the ECP, some reasonable Theory of Government etc. Although Bavarian differs from Standard German considerably with respect to its superficial syntactic make-up, we have demonstrated that the two dialects are very homogeneous with respect to (i) principles which

are expected to be principles of Universal Grammar, and (ii) the V/2-constraint that is shared by other Germanic SOV-languages and -dialects. We found no reason for assuming that Bavarian has developed a parameter which is radically different from other SOV-languages with inversion. In fact, it turned out that Bavarian represents a highly unconstrained system of German.

With respect to finite clauses it is more symmetrical than German, because it has complementizers both for N- and for V-complementation. And since it does not obey the COMP-Filter (125), all effects of extraction from [+complementizer]-clauses follow naturally without leading to severe parsing problems:

We have observed that Lower Bavarian differs from other Bavarian dialects in extending the pro-drop-schema to the 1st person plural. For Lower Bavarian therefore AGR-in-COMP is enriched in the following way:

(126) *AGR-in-COMP / Lower Bavarian*

(i) AGR-in-COMP (= 98)

(ii) $\text{COMP1} \rightarrow \begin{bmatrix} +1\text{st} \\ -2\text{nd} \\ -\text{sing} \end{bmatrix} / \text{---} \dots \begin{bmatrix} \text{V/INFL} \\ \begin{bmatrix} +1\text{st} \\ -2\text{nd} \\ -\text{sing} \end{bmatrix} \end{bmatrix}$

While the features in (i) are spelt out regularly (cf. 99), the features in (ii) are spelt out as follows:

(127) $\begin{bmatrix} +1\text{st} \\ -2\text{nd} \\ -\text{sing} \end{bmatrix} \rightarrow -ma / [\text{COMP1} \text{ ---}]$

The syntactic differences between Standard German, Bavarian and Lower Bavarian can be assumed to follow largely from the following distribution:

(128)

	Standard German	Bavarian	Lower Bavarian
V-complementizer	+	+	+
N-complementizer	-	+	+
COMP-Filter	+	-	-
AGR-in-COMP ⁶³	-	+	+
AGR-in-COMP/LB	-	-	+

7. CONCLUSION

In this study of COMP in Bavarian it was shown that Bavarian conforms in important respects to the general syntactic pattern of German, although it allows for such striking deviations as extraction from finite [+complementizer]-clauses, doubly-filled COMP and pro-drop. The differences could be shown to derive from such marginal variations as the presence or absence of certain complementizers and inflectional morphemes, and from a surface filter which Standard German, but not Bavarian, obeys.

The investigation of Bavarian relatives has led to the conclusion that the structure of COMP in German must be such that in the absence of a complementizer, movement always goes to the position which is adjacent to S, namely COMP1. Deletion in COMP, which occurs in Bavarian, can only delete material in COMP2. It was found that Bavarian has an interesting mechanism of indexing in COMP which seems to be controlled by Case-morphology.

It was argued that Bavarian syntax offers striking support to analyses of German which propose COMP (i.e. here, COMP1) to be the landing-site for V/INFL. It could be shown that in case a [+tense]-complementizer occupies COMP, this complementizer is a governor and might be a Case-assigner. In Bavarian we found a special pattern according to which COMP can even become a proper governor. In that case pro-drop may occur without causing an ECP-violation. The facts about pro-drop support the recent Chomskyan analysis according to which the null-pronoun of pro-drop languages must be [-anaphor, +pronominal], i.e. *pro*. Since *pro* must be properly governed and since sentences with *pro* in subject position which do not find a proper governor in COMP are ungrammatical in Bavarian, we could deduce that in finite German SOV-sentences INFL (AGR) must be inside a maximal projection which is different from S. This is an important finding, because there are considerable problems with VP in German, which have led some linguists to suggest that the maximal projection of V might be S.

In conclusion, I would like to observe that dialects can be an interesting testing ground for linguistic theory, in particular the study of parameters which vary between languages (dialects), as dialects are not under the pressure of prescriptive linguistic norms. A natural requirement for pursuing this study is a rich but restrictive linguistic theory, which offers a sound framework against which the data can be tested; otherwise one falls into the trap of "butterfly-collecting": the indiscriminant collection of data without regard for its relevance to determining how human cognition functions. I have chosen the GB theory as a basis for this investigation, as I believe it provides just such a plausible yet restrictive framework.

NOTES

1. I will, for convenience, refer to Bavarian and Standard German as 'dialects', although it is evident – for Standard German probably more than for Bavarian – that these two varieties of German are not as homogeneous as one might expect if they are called 'dialects'.
2. Since Bavarian is not a written language and therefore has no standard orthography, the examples will be presented in an impressionistic transliteration which attempts to be fairly close to German. I will be more careful only when it is necessary for the argumentation. Note that in Bavarian proper names appear obligatorily with the definite article. The article is usually a proclitic which agrees in place of articulation with the following phoneme, e.g. *die Emma* → *d'Emma*, *die Frieda* → *d'Frieda* → *b'Frīeda*, etc.
3. For details see Chomsky (1981), (1982), and section 2.1.
4. In exceptional cases, German shows something like pro-drop; many people can write in a letter

bin/sind gut angekommen
am are good arrived
'(I/we) arrived safely'

This is an interesting phenomenon by itself, although I do not believe that it has much to do with pro-drop. Craig Thiersch (personal communication) suspects it to be a kind of "Vorfeld" deletion, because **gut bin/sind* — *angekommen* is ungrammatical.

5. Note that in the generative literature on German my COMP1 is usually called COMP2, while my COMP2 is called COMP1. This seems plausible as far as the left-to-right order is concerned. It will turn out in the course of my argumentation, however, that a more functional view suggests that the element which is immediately to the left of the S-bracket is the primary COMP-position of German; therefore, the order in my presentation will always be COMP2 COMP1 S.
6. For details on wh-movement see Chomsky (1977). I will use the notion 'wh-movement' in a technical sense; of course, German question pronouns are not wh-words; they are w-words.
7. Henk van Riemsdijk (pers. comm.) suggested – with respect to Swiss German – that *wo* must be moved to COMP in cases where it actually has the locative meaning. A sentence like

- (i) Das Dorf wo wir wohnen
the village where we live
'The village where we live'

has the following structure

- (ii) [_{NP} das Dorf [_S wo_i [_S wir t_i wohnen]]]

Note that a non-coindexed complementizer could not bind the trace; (cf. § 2 of this article).

8. Throughout we follow the well-motivated assumption that German (and Dutch) is underlyingly an SOV-language, such that verbs govern to their left. For argumentation on the question of basic word order in German and Dutch see Evers (1975), Koster (1975), Thiersch (1978) and the references cited therein.

9. From a universal point of view it is an idiosyncrasy of Bavarian to have different complementizers for N and for V. The following expression is impossible:

- (i) *Der Hund der daß gestern d’Katz bissn hod

Reinhart (1981) mentions data from Hebrew which show that complementizer systems exist where no difference is found between complementizers following V and complementizers following N:

- (ii) ani yodea eifo she+Dan sam et ha+sefer
 I know where that Dan put the book
- (iii) Shoshana ma she+ovedet basalon shel David Azura
 Shoshana what that works in the salon of David Azura

The same is, I think, true for Arabic.

10. Some people have thought that there is nothing like wh-movement in German and that cases like (1)a, are to be analyzed as parentheticals. Tappe (1981) presents a number of arguments which reject this proposal. One further argument is that wh-movement usually involves the subjunctive mood in the embedded clause, e.g.

- (i) Er, sagten sie wäre krank
 he said they is (subj) sick

If *sagten sie* were a parenthetical insertion it could be deleted without grammaticality being affected. This is wrong, however:

- (ii) *Er wäre krank

11. Henk van Riemsdijk (pers. comm.) observes that Zurich German relative clauses cannot have both the relative pronoun and the complementizer *wo*, while at the same time long wh-movement is allowed. I think that such facts should be accounted for with surface filters. Even closely related dialects may vary a great deal in this respect. The assumption of a parameter change, of course, cannot be justified on a basis like that: (cf. §6 for related discussion).

12. I am particularly indebted to Therese Torris at this point, because she drew my attention to certain examples by the Bavarian author Ludwig Thoma where Accusative pronouns in COMP are deleted. This finding proves that the approach suggested in Bayer (1984) is not entirely correct.

13. Basically, Bavarian has only three Cases. There are residues of the Genitive in other parts of the pronominal system. The possessive is mostly expressed synthetically by Dative + poss. pronoun + N, as in

dem Franz sein Vater
 the Franz his father
 (dat)
 ‘Franz’ father’

14. Groos/van Riemsdijk (1981) observe the same morphological matching effect in German free relatives. Since *was* ‘what’ is both Nominative and Accusative, the following example is grammatical despite there being two conflicting abstract Cases involved:

- (i) Was du mir gegeben hast ist prächtig
 what you me given have is wonderful
 (nom/acc)
 'What you have given to me is wonderful'

geben assigns Accusative to *was*, while *ist prächtig* requires Nominative. In the following example involving *wen* 'whom', a morphological mismatch can be observed which arises from the fact that *wen* cannot be a Nominative:

- (ii) *Wen du mir geschickt hast ist ein Esel
 whom you me sent have is a donkey
 (acc)
 'The one you have sent to me is a donkey'

15. I will discuss this in more detail in section 4.

16. Bennis/Groos (1982) state the minimal c-command relation as follows

α minimally c-commands β iff

- (i) α c-commands β
 (ii) there is no γ such that
 a. α c-commands γ
 b. γ c-commands β
 c. γ does not c-command α

17. By $\bar{S}$, I mean at this point simply the maximal projection of S, without specifying further details.

18. Note that we do not assume an INFL that could possibly govern the subject NP. The reason for this will become clear in section 4.

One TLR-reviewer has suggested a Vergnaud-raising solution for cases like (26). There, the head NP is moved from the t_i -position to COMP2 where it is subject to an interpretation like a relative pronoun of a free relative. Unfortunately, I do not see how to handle the intricate matching problems with this approach. One cannot raise the Nominative NP [_{NP} *der Mö*] into a position where it ultimately will receive Dative. This would violate the Case theory, which says that each NP can be assigned Case only once.

19. In Norwegian, there is a complementary distribution between the complementizers *at* and *som*, *som* being required to govern a subject trace. (cf. Taraldsen (1983)). A similar thing seems to happen in French where *que-t* is ungrammatical, but not *qui-t*; Pesetsky proposes rules such as

- (i) [_{COMP} WH_i *at*] → [_{COMP} *som*_i]
 (ii) [_{COMP} {_{t_i}^{WH_i}} *que*] → [_{COMP} *qui*_i] / — {_S X [_{+nom}^{t_i}] Y}

which indicates that coindexation in COMP can be accompanied by morphological changes in the complementizer system.

20. Note that the complementizer *wo* may be missing. Then the *d*-word moves into COMP1. Why exactly this holds rather than a rule of free deletion in COMP like in English will become obvious in section 3. In COMP1, the pronoun cannot be deleted. We will see that *wo* plays a rather crucial role in the syntax of Bavarian.

21. Matching effects like these are discussed extensively with respect to free relatives in Groos/van Riemsdijk (1981).

22. Henk van Riemsdijk (pers. comm.) finds that CT might be an automatic consequence of Vergnaud-Raising. Note, however, that -OT (=29) would not conform to it; under the adoption of a different kind of rule we would arrive at a more heterogeneous picture; I leave the matter open.

23. The principles of the Binding Theory are:

- A. An anaphor is bound in its governing category
- B. A pronominal is free in its governing category
- C. An R-expression is free

Anaphors are NP-traces, reflexives and reciprocals; pronominals are pronouns and the empty element PRO; they can have an independent θ -role; R-expression are names and variables, the latter being empty elements which are bound by an operator, i.e. by an element in $\bar{A}$ -position.

The violation in (35)a., given a "wrong ordering" of our rules, thus would be a violation of principle C.

For details on the Binding Theory see Chomsky (1981), (1982); For a recent critique of this approach, see Koster (1982).

24. Note that the head-NP's cannot be binders; they are in A-positions, but outside the relevant binding domains; (cf. Chomsky 1981: § 3.2.3).

25. It is interesting to see, however, that there is for some speakers of Bavarian a difference in acceptability between (35)b. and (35)d.; for such speakers (35)b. would be acceptable, but not (35)d. The reason for this becomes clear with a look at table (21): *den* (masc, sg, acc) and *dem* (masc, sg, dat) are phonologically very similar. The only difference is that in the first form the nasal consonant is dental, while it is labial in the latter. The other forms, *die* (fem, sg, acc), *der(a)* (fem, sg, dat) and *des* (neut, sg, acc), *dem* (neut, sg, dat) are phonologically and phonetically more distinct. An explanation of the acceptability of (35)b., but not of (35)d., could be that the class of speakers who accepts (35)b. was subject to a partial neutralization of the Case-system. This neutralization has the effect that the system of abstract Case is given up in favor of a system of concrete, i.e. morphonological Case. Bavarian seems to be affected by such a process anyway. We have seen that -OT follows morphological classes rather than abstract Case. Speakers who accept (35)b. and related examples have adopted a similar strategy instead of CT.

Independent evidence in favor of this explanation comes from the fact that for many speakers of Bavarian there is no distinction between *wen* 'whom' (acc) and *wem* 'to whom' (dat). Both forms have collapsed into the Dative-form [vɛam]. It is obvious in which way our rule CT could be changed in order to account for this kind of "reduced" Case-system.

26. For their clarifying comments on this point in an earlier version of this article I am indebted to Probal Dasgupta and Hans den Besten.

27. On the other hand, such sentences with so-called "resumptive" pronouns raise many difficult theoretical issues which we are not able to discuss here.

28. For relevant details about German in general see Lenerz (1977) and Höhle (1982); a discussion of Bavarian clitics is found in Altmann (1981).

29. In the 3rd person, there are either the usual personal or demonstrative pronouns. The conditions of the appropriate use of these are obscure to me. Note that 2nd person plural *es* (in some other notations also *ös*) is an old dualis form which is nowadays synonymous with the "real" plural *ihr*. *es* sounds, however, much more Bavarian than *ihr*.

30. 1st person singular *-e* appears mostly word-finally; *-a* appears mostly when other clitics follow, e.g.

(i) dann how-e druckt
then have-I pressed | (ii) dann how-a-de druckt
then have-I-you pressed |
|---|--|

Table (49) deviates insofar from Altmann's proposal as 2nd person is not *-s*, but rather *-(t)s*. Personally I know only of dialects where 2nd person singular and plural are respectively *-st* and *-ts*. This is of some importance for my argumentation in the sequel.

For more morphological details on German inflection the reader is referred to Kloeke (1981).

31. For a discussion of the issues raised in this section I have to thank Wus van Lessen Kloeke

32. # is the word-boundary, + is the morpheme-boundary.

33. Examples like *weil-ts*, *ob-ts* suggest that the *t* does not emerge synchronically as an epenthetic element by rules which for instance insert *t* in English [prints] 'prince'. I owe this example to Craig Thiersch.

34. An argumentation against rule (55)c. can be found in Pfalz (1918) on page 13.

35. Hans den Besten and Marina Nespôr (personal communication) argue that universally it is not essential for clitics to be phonologically related to their corresponding strong forms. Marina Nespôr mentions Latin *-que* versus *atque*, the strong form. It seems, however, that in German we can still observe a close relationship between strong and weak forms. As we have seen, the Bavarian 2nd person forms do not conform to this general pattern.

36. Marina Nespôr drew my attention to Zwicky/Pullum (1983) where six tests are offered which should determine which morphemes are clitics and which are inflections. Although the main issue in the article is to show that English *n't* is inflectional rather than clitic, the tests are thought to apply generally. In particular, these tests are:

- A. Clitics can exhibit a low degree of selection with respect to their hosts, while affixes exhibit a high degree of selection with respect to their stems.
- B. Arbitrary gaps in the set of combinations are more characteristic of affixed words than of clitic groups.
- C. Morphophonological idiosyncracies are more characteristic of affixed words than of clitic groups.
- D. Semantic idiosyncracies are more characteristic of affixed words than of clitic groups.
- E. Syntactic rules can affect affixed words, but cannot affect clitic groups.
- F. Clitics can attach to material already containing clitics, but affixes cannot.

As Maria Nespôr (personal communication) observes, test A. suggests that Bavarian *-st/-ts* are more clitic-like, because they attach to whichever category appears as the rightmost element in COMP1. One should notice, however, that (i) these morphemes certainly derive from true clitics, and (ii) that they might have changed their status only recently. We will come back to this in a discussion of Lower Bavarian (cf. section 5). Coming to B., if we assume the 2nd person forms to be inflections, both the inflectional and the clitic system show arbitrary gaps. This again indicates that the 2nd person forms are not yet fully inflectional. C. and D. do not seem to be applicable in this case in Bavarian. E. again is not applicable, because person/number marked words in COMP1 cannot be moved at all. F. seems at first sight to support inflectionhood, because of impossible sequences such as

42. That *pro* is the empty category relevant for Null-Subject-Languages is also the conclusion of McCloskey/Hale (1983) in their study of person number inflection in Irish. The authors observe that in Irish and in other Celtic languages prepositions can inflect for person and number. Aside from Bavarian and the Romance pro-drop languages, there is an absolute incompatibility in Irish between an inflected form and an overt pronominal NP. If the null-subject were PRO, as suggested by Chomsky (1981) and Jaeggli (1982), it would follow that either PRO is governed or that it has to be prevented from being governed by some ad-hoc mechanism like "lowering" AGR inside PP's. McCloskey and Hale conclude that *pro* is a more likely candidate to appear in such positions in Irish. In the same way, Bennis/Haegeman (1983) propose *pro* to be the null-subject in Flemish.

43. Especially in the work of Hubert Haider the non-existence of a VP in German is assumed and argued for. Haider claims that in German subjects and objects are in the same maximal projection, i.e. S. (cf. Haider (1983)); for some argumentation in favor of a VP, see Thiersch (1982).

44. Note that INFL has to appear finally if we assume German to have SOV-order at some abstract level of representation.

45. For a rather different view of V/2 see Safir (1982). In Safir's theory just the opposite is argued to be the case: The finite verb, which is construed with the INFL-node, a daughter of S, moves to COMP1 in search of a governor in root-sentences. An $\bar{X}$ -element in COMP2 is supposed to do this job. If, as Safir assumes, INFL is the head of S, it remains unclear what to do with V/1-sentences where there is no governor for INFL. One of the most important principles of the theory, namely the "Head Uniqueness Principle" ($\bar{S}$ must have a unique governed head!) would be violated.

46. For discussion of Nominative as a Null-Case, see Fanselow (1982), chapter 4.1 and the literature mentioned there.

47. Odijk (1983) proposes something like this for Icelandic. In Icelandic, there are *seem*-constructions without raising where the NP remaining in situ appears in the Nominative.

- (i) Mer virdhist/virdhast dheir (vera) veikir
to-me seem(sg) seem(pl) they be sick
(nom)

'They seem to me (to be) sick'

- (ii) Mer finnst hun (vera) god
to-me seems she be good
(nom)

'She seems to me (to be) good'

Odijk assumes that in the absence of a Case-assigner, an NP with phonetic content will be Nominative automatically; he proposes the following Default-Case rule:

NP → Nominative if not governed by a Case-assigner

Craig Thiersch (personal communication) notices that there must be further conditions, however; otherwise examples like

- (iii) *Er glaubte Fritz zu sterben
he believed Fritz to die
(nom)

'He believed that Fritz would die'

- (iv) *Er versprach mir der Junge den Hund zu füttern
 he promised me the boy the dog to feed
 (nom)
 'He promised me that the boy would feed the dog'

would wrongly be predicted to be grammatical.

48. Note, however, that not only complementizers can do that in Polish, but other elements as well. The following example was provided by Greg Dogil:

- (i) Gdzie to zrobił-eś?
 where it did (2sg)
 'Where did you do it?'
 (ii) Gdzie to-ż zrobił?'
 'Where did you do it?'

It should be clear that any statement in this area is highly dependent on the postulated phrase structure and that I cannot exclude the option of *to* being part of COMP.

49. In (92) it is important to see that *-n* is a clitic which attaches directly to the inflected element on COMP1. We can either assume that clitics are no barriers to proper government or that the clitic is – other than indicated in (93) – to the right of the empty category. Since the empty category might be trace as well as *pro* (cf. the examples in (57)), we would face counterexamples to the cases of *wanna*-contraction, where it was argued that an intervening trace blocks contraction of *want* and *to* in English. (cf. Chomsky/Lasnik (1977)), Chomsky (1981), and the critique in Postal/Pullum (1978)).

An interesting point in the relation between COMP1 and V/INFL in Bavarian is that 2nd person morphology is absent in COMP1 of comparative clauses when the finite verb is deleted:

- (i) D'Resl is gresser [als wia - st du bist]
 the-Therese is taller than what -(2sg) you are(2sg)
 'Therese is taller than you are'
 (ii) *D'Resl is gresser [als wia-st du Ø]
 (iii) D'Resl is gresser [als wia-Ø du Ø]

50. One might expect a problem for German examples which lack a Nominative-NP, e.g.

- (i) Weil mir graut ...
 because me frightens
 (dat)
 'Because I am frightened...'

In this case there exists the option to insert the Nominative *es*:

- (ii) Weil es mir graut ...

The structure of (i) might be

- (iii) weilⁱ *pro*ⁱ mir grautⁱ

Note, however, the following problem which was pointed out to me by Craig Thiersch:

- (iv) weil (*es) getanzt wurde ...
 because there danced was

51. I would not like to make strong claims about the uniqueness of AGR in allowing *pro*; (cf. Bennis/Hægeman (1984)). In Bangla, for example, we can observe pro-drop while at the same time AGR is not specified for all pronominal features; thus, we face certain ambiguities when *pro* is used:

- (i) { *pro*
 ami / amra } af-bo
 I we come-(1sg/pl)
 'I/we will come'
- (ii) { *pro*
 tumi / tomra / je / tara } af-be
 you(sg) you(pl) he/she they
 'You/he/she/they will come'

If verbal morphology by itself were the trigger for pro-drop, either German should be a pro-drop language or Bangla should not be a pro-drop language, depending on what one considers to be a "rich" system: Both languages have four different morphemes available, Bangla employing three of them to build more or less honorific forms in 2nd and 3rd person. But Bangla shows regular pro-drop and Standard German does not. So not much can be gained from the "rich morphology" argument. I have to thank Probal Dasgupta for a discussion of this issue. In many respects pro-drop in Bangla seems to be governed by the same principles as Malayalam; (see Mohanen (1983)). McCloskey/Hale (1983), too, note that Irish has pro-drop without having an especially rich system of verbal person/number marking. Craig Thiersch informs me that the same is true for Japanese.

52. I want to thank Hans den Besten for a discussion of his and my own observations about clitics in German and Dutch.

53. I wish to thank my friends Christine and Paul Guth who allowed me to explore their native speaker competence of Lower Bavarian on several occasions.

54. Previously I had thought that the Lower Bavarian *-ma* might be a form which was retained from Old High German. The following paradigm which is found in Weinhold (1867) shows that a predecessor of *-ma* might be found in the OHG personal endings:

	Old High German 8th-11th cent.	later forms
1st,sg	-u,-o	-e
2nd,sg	-is	-es(t)
3rd,sg	-it	-(e)t
1st,pl	-ames,-emes,-imes	-en
2nd,pl	(-at),-et	(-ent), -et(s)
3rd,pl	-ant,-ent	-en(t)

Note that Lower Bavarian is especially archaic in that it retains the 3rd person plural form *-ant*, e.g. in *sie kemm-ant* 'they come', *sie sing-ant* 'they sing'.

One might speculate whether the *-ma* in COMP1 was never a personal pronoun in Lower Bavarian and went right from OHG into an inflectional COMP-paradigm, while there was the usual decay of the old verbal ending *-ames*. It seems that most of the directly observable processes around *-ma* do not support this hypothesis. First of all, in OHG the 2nd person morphology was certainly not yet linked to COMP1. Why then should the 1st person plural have been linked to it? Secondly, Weinhold reports that in the middle of the 19th century, *-ma* in COMP was still optional:

- (i) gebe mer versus (ii) gemme / mer gemme
 give we give(1pl)

This suggests that *-ma* (or *-me*) has not yet become a pure agreement morpheme at that time.

It is interesting to see, however, that in Lower Bavarian comparatives, the occurrence of *-ma* is strictly bound to the presence of a corresponding V/INFL:

- (iii) De san g'scheider [(als) wia-ma mir san]
 they are more-intelligent than what-(1pl) we are
 'They are more intelligent than we are'

(iv) *De san g'scheider [(als) wia-ma mir ∅]

(v) De san g'scheider [(als) wia-∅ mir ∅]
 (see also Fn. 49)

55. Probal Dasgupta drew my attention to the fact that there are 1st person imperatives in French, Italian etc., forms like *allons*, *andiamo*.

56. In fact, I speak of two rules only in a metaphorical manner; the ultimate goal in a description of German should be to comprise them within a single rule Move- α .

57. See however the analysis of Dutch root-sentences that is offered in Koster (1978). Koster assumes that the underlying structure of Dutch V/2 sentences is what has traditionally been called 'left dislocation', e.g.

Die man (die) ken ik
that man that know I
'That man, I know'

Thus, the phrase structure that Koster considers basic for Dutch (and probably German) has two COMP-positions, although Koster does not call them "COMP".

58. This was erroneously suggested in Bayer (1984) in order to explain away (1)b.,c.

59. Note that towards the end of the sentence there might be chains of complementizers which must be continuous, e.g.

- (i) Wer_i [glaubst du [meinte Frieda [$da\beta$ Franz sagte [$da\beta$ t_i Emma liebt]]]]?

(ii) Wer_i [glaubst du [meinte Frieda [sagte Franz [$da\beta$ Heinrich denkt [$da\beta$ t_i Emma liebt]]]]]]?

(iii) *Wer_i [glaubst du [$da\beta$ Frieda meinte [sagte Franz [denkt Heinrich [$da\beta$ t_i Emma liebt]]]]]]?

The only explanation that comes to my mind is that the location of an $\bar{A}$ -trace is still more difficult if the assisting landmark, i.e. the complementizer, is once present and then again absent. Since V/INFL moves obligatorily to COMP1 if this position is not occupied by lexical material, word order gets seemingly "wild" in such multiple embeddings. For obvious reasons, (iii) should not be excluded by core grammar.

60. It must be emphasized that there is a way to circumvent long movement while retaining its advantages. This is rather interesting by itself. The construction is such that in the first COMP from top the question morpheme *was* 'what' appears which indicates that the whole should be interpreted as a question; *was* blocks the position to which the "real" wh-item would move:

- (i) *Was* [glaubst du [hat der Vater gesagt [wer kommt]]]?
 what think you has the father said who comes
 'What do you think what father has said who comes?'

It is important to see that *was* is not moved away from any A-position. In order to make the chain from top to bottom complete, it is possible to insert *was* repeatedly:

- (ii) *Was* [glaubst du [*was* der Vater gesagt hat [wer kommt]]]?

It is even possible to repeat the "real" wh-word from bottom to top:

- (iii) *Wer* [glaubst du [wer zum Essen kommt]]?
 who think you who to dinner comes
 'Who do you think will come for dinner?'

It appears to me that this is considerable support for my argument that complementizers can function as landmarks which make parsing easier.

61. For some recent discussion of [t-*that*] see Chomsky (1981), §4.3, and Sternefeld (1982). It must be observed that if the phrase structure of Standard German is identical with the phrase structure of Bavarian that was argued for here, trace would in any case c-command an empty subject, i.e. *[t-*da*!] in German would be purely a surface filter. In Chomsky's work on English, trace is prevented from c-commanding the subject-trace.

62. By $\bar{X}$ I mean any constituent that gets by Move- α into an $\bar{A}$ -position.

63. Since COMP-Filter and AGR-in-COMP are in complementary distribution, it can be assumed that they are directly related.

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Abteilung Neurologie
Forscherguppe "Aphasie und kognitive Störungen"
Klinikum der Rhein. Westf. Techn. Hochschule Aachen
5100 Aachen
Federal Republic of Germany