The Minimalist Program and Germanic Syntax

A Reply to Gärtner and Steinbach

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In volume 53 of *Working Papers in Scandinavian Syntax*, a paper by Hans-Martin Gärtner and Markus Steinbach was published, entitled 'Economy, Verb Second and the SVO-SOV distinction'. It contains a detailed discussion of the analysis of Germanic verb second phenomena presented in Zwart (1993a) (henceforth referred to as *DS*) and earlier work.

Scattered throughout Gärtner and Steinbach's paper are a number of interesting problems for the analysis of DS. Some of these are problems for *any* analysis of verb second, and all of them present excellent material to work on if we wish to further our understanding of the intricacies of Germanic syntax.

Gärtner and Steinbach, however, do not appear to have had such constructive goals in mind when writing their paper. Their single aim appears to have been to show that the analysis in DS is 'objectionable on conceptual as well as on empirical grounds'. In trying to do so, they fail to recognize that an analysis that generates problems is not necessarily wrong.

Their is no doubt in my mind that the analysis in DS will turn out to be wrong in many respects. This reply, however, is the place to defend that it is both consistent within the theoretical framework adopted and conceptually pleasing. Gärtner and Steinbach are wrong both in denying the former and in ignoring the latter.

1. The Analysis of DS

Let me first show what is at stake.

The facts illustrating the Germanic verb second phenomenon are well known:

(1) a. **Jan leest de krant**
John reads the newspaper
b. * **Jan de krant leest**

John the newspaper reads

(2) a. **..dat Jan de krant leest**
thatJohn the newspaper reads

b. * **..dat Jan leest de krant**
thatJohn reads the newspaper

(3) a. **Iedere dag leest Jan de krant**
every day reads John the newspaper

b. * **Iedere dag Jan leest de krant**
every day John reads the newspaper

c. * **Iedere dag Jan de krant leest**
every day John the newspaper reads

The finite verb in the relevant languages (Dutch, Frisian, German, Mainland Scandinavian) occupies the second position in main clauses (1,3). In embedded clauses, the finite verb appears further to the right (2). (1) and (3) differ in that the subject appears to the left of the verb in (1) and to the right of the verb in (3). We will call the former *subject-initial main clauses* and the latter *inversion constructions*. Main clause questions pattern with (3).

There is evidence that shows that in inversion constructions, the finite verb moves to the exact position that is occupied by the complementizer *dat* in embedded clauses (cf. (2)) (Den Besten 1977). There is no evidence that shows that this is also the case in subject-initial main clauses like (

There is also evidence that shows that the verbal position further to the right (occupied by the verb in (2)) is more basic than the verbal position further to the left (Koster 1975). Hence, the proper analysis of inversion constructions appears to be that the verb moves to the complementizer position, C (Den Besten 1977). In the theoretical framework of generative grammar in the 1970s, this movement was formulated as a *rule*:

(4) Move V to C

In (2), C is occupied by the complementizer, and rule (4) is blocked.

Den Besten (1977) argued that rule (4) suffices as the only verb movement rule to describe Germanic verb second if we assume that the finite verb in (1) occupies the C-position as well. To get the word order facts right, an additional rule is needed to ensure that the subject precedes the verb in (1):

(5) Move XP to the first position

The XP in rule (5) can be the subject, yielding (1), or something else, yielding (3).

Together, rules (4) and (5) suffice to describe verb second in Germanic. The description is called *symmetrical*, since it treats subject-initial main clauses and inversion constructions in the same way (cf. Vikner and Schwartz 1992). Recall that no *empirical* arguments for the symmetrical analysis have been presented. The symmetrical analysis is supported only because it yields the simple rule system consisting of (4) and (5). An asymmetrical analysis would require an additional verb movement rule for (1).

A description consisting of rules was common in the early days of transformational grammar. Rules, however, are by nature language specific and/or construction specific elements of the analysis. They tend to mirror the description of the phenomena closely, and obstruct an analysis that seeks to derive the phenomena from language independent and construction independent features of language. Hence, the concept of rule has become obsolete in later stages of generative grammar, starting with the publication of *Lectures on Government and Binding* (Chomsky 1981).

For the analysis of Germanic verb second phenomena, this implies that the rules in (4) and (5) have to go. The effects these rules yield (the pattern in (1)-(3)) now has to be *derived* from a system consisting of language independent movement processes and language specific parameters. The former account for the existence of movement phenomena in the first place, the latter make sure that the movement processes yield the right surface word order.

At this point, the absence of empirical evidence in support of verb movement to C in subject-initial main clauses becomes relevant again. There is no a priori reason why the parameters in Germanic would be set in such a way that the finite verb always ends up in C. This is just one of the many possible parameter settings that could be underlying the pattern in (1)-(3). As Travis (1984) has shown, another parameter setting could have the verb moving to a position to the *right* of the subject in (1), and moving on to a position to the *left* of the subject in (3).

The analysis proposed by Travis has the advantage that the grammar needs to contain no special provisos that would yield the effect of rule (5). The subject just has a fixed position, and the verb moves around it, depending on the presence of other fronted material. A (potential) disadvantage of this analysis is that an explanation must be provided for the absence of verb movement to the position to the right of the subject in embedded clauses (cf. (2b)). Travis (1986) attempted to derive this effect

from independent principles of the grammar, but Schwartz and Vikner (1989) have argued that this attempt fails.

Nevertheless, Travis' work managed to leave a stick in the mud of Germanic syntax. What Travis (1984) showed was that there is a *factual* asymmetry between subject-initial main clauses and inversion constructions: only the former can have a weak pronoun as the first constituent (cf. Kruisinga 1938, Koster 1978):

(6) a. **Ze/Zij** **komen**
they-weak/strong come
b. ***Ze/Hen** **ken ik niet**
they-weak/strong know I not

The symmetrical analysis (which involves verb movement to C in both (6a) and (6b)) now not only has to provide a mechanism for getting the subject in the position to the left of C in subject-initial main clauses, but in addition has to present an explanation for the fact that only weak *subjects* can move to this position. Hence, rule (5) cannot simply be encapsulated in a Government and Binding approach: fronting of a subject is different from fronting of an object.

The asymmetrical analysis (which involves verb movement to C in (6b) only) does not suffer from this problem. It can simply bar weak elements from the position to the left of C (i.e. the relevant movement process does not apply to weak elements).

At this point, the neutral observer might take the position that the asymmetrical analysis of verb second is slightly favored, leaving the absence of verb movement in embedded clauses as an interesting problem to work on. This was the starting point for the research reported in DS.

There were good reasons to undertake this research. Not so much because the question of the symmetrical versus the asymmetrical analysis had to be settled, but because a principles and parameters account of the verb second pattern in (1)-(3) was still waiting to be established. So although the research seems to center around the question of the exact position of the verb in subject-initial main clauses, the real questions are: what drives the movement processes, and how are the parameters set?

In order to address these questions, assumptions had to be made about *structure* and about the nature of *grammatical licensing relations*. The analysis in DS starts from the

hypothesis that the verb second pattern can be explained by assuming for the syntax of the relevant languages both a universal structure and a universal format of licensing relations.

Regarding structure, the first question that had to be answered was the following: is there a landing site for the finite verb to the immediate right of the subject in (1), assuming that the subject is itself to the right of the C-position? If the answer to this question is negative, the symmetrical analysis must be correct. If the answer is positive, the decision between the two analyses depends on the system of licensing relations involved.

At this point, it is useful to recall that when the research for DS was started, the current assumptions on syntactic structure were, that the position of the inflectional head(s) (INFL, later split up in AgrS, T, AgrO) varies with the canonical position of the verb in the VP. Thus, SVO languages like English were assumed to have a structure like (7a), whereas SOV languages like Dutch and German were assumed to have a structure like (7b):

(7) a.

```
CP
spec   C'
       C      IP
       subject    I'
                  I      VP
                         V'
                         V      complement
```

b.

```
CP
spec   C'
       C      IP
       subject    I'
                  VP     I
                         V'
              complement V
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If these assumptions are correct, languages like Dutch and German simply lack an appropriate landing site for the finite verb to the immediate right of the subject (in the Spec,IP). On these assumptions, the asymmetrical analysis of verb second fails.

However, the assumptions in (7) fall short of meeting the requirement that the structure be kept as universal as possible. Since we know that there are languages (like English) that have the inflectional heads to the left of the VP (as in (7a)), the null hypothesis is that verb second languages will conform to this pattern. This hypothesis is furthermore supported by the observation that C is located to the left of its complement, IP, as well.

(Zwart (1991a) in addition tried to establish empirical evidence for the presence of an inflectional head to the left of VP in Dutch, based on the behavior of object clitics. But this is not crucial, since it is the null hypothesis that Dutch has the universal structure in (7a).)

Interestingly, the hypothesized structure in (7b) is not supported by empirical evidence (Reuland 1990). It is merely based on the conceptual notion that the position of the inflectional head varies with the position of the verb. But clearly it is impossible to link the verb second pattern to the structure in (7b), since half of the Germanic languages showing the verb second pattern are VO-langua

The idea of sticking with the structure in (7a) for verb second languages is supported by Kayne (1992), who demonstrates that languages that are supposedly head-final quite generally do not display the phenomena that go with head-final structure.

In short, the most desirable assumptions on syntactic structure do provide a landing site for the finite verb in subject-initial main clauses, other than C. This means that the asymmetrical analysis of verb second is at least possible. Whether it is also correct depends on the assumptions regarding the licensing relations that are involved in the verb second pattern.

In the approach to syntax initiated by *Lectures on Government and Binding*, it is assumed that elements move in order to get licensed. Verbs move to an inflectional head in order to establish a link between the verb itself and the inflectional features represented in the inflectional head. In the recent past, these inflectional features were equated with inflectional affixes, and the link between the verb and the inflectional features was established by adjoining the verb and the affix to each other. More recently, it has been assumed that the inflectional heads merely contain features, and the link between the verb and the inflectional head is established by checking the verb off against these features (Travis 1984, Chomsky 1992).

Phrases, such as subjects, may move to a specifier position to get licensed. In the early stages of Government and Binding theory, there were various other ways in which phrases could be licensed

(most notably, government by a lexical head). Optimally, these other licensing mechanisms should make way for one single licensing mechanism. It has been argued that this single licensing mechanism should be *specifier-head agreement* (Chomsky 1991, 1992).

Ideally, then, a given category is universally licensed in the same position, through the same licensing relation. The designated licensing position for subjects is generally considered to be Spec,IP (later: Spec,AgrSP).

Turning to the verb second pattern in (1)-(3) again, the position of the subject in (2) and (3) conforms to the hypothesis that the subject occupies the Spec,IP position. If we now assume that the subject occupies Spec,IP in (1) as well, no further statements about the position of the subject have to be made. Thus, it is the same criterium of conceptual economy that led Den Besten (1977) to the symmetrical analysis of verb second that leads us to pursue the asymmetrical analysis of verb second now.

Of course, we cannot exclude that additional movements take place in (1), to the extent that (1) has to be equated with (3), but precisely the pattern in (6) tells us that such additional movements do not always take place.

These considerations make the question why the verb does not move to INFL in embedded clauses (cf. (2b)) all the more poignant. But here, again, concentrating on the licensing relations involved suggests a solution.

A standardly held view in generative grammar is that movements can be overt or covert. This view makes it possible to relate differences in word order to universal movement processes. A parameter is a descriptive device which tells us whether a certain movement is overt or covert in a given language. Parameters gain explanatory force if they can be kept constant in a certain language and if parameter settings can somehow be related.

In Chomsky (1992), parameters are expressed in the 'strength' of the features represented in the functional heads. A strong feature requires overt movement, a weak feature does not. A separate principle, Procrastinate, ensures that weak features allow movement only as a 'last resort'. Chomsky distinguishes N-features, triggering movement of phrases, and V-features, triggering movement of heads.

The absence of verb movement in embedded clauses (cf. (2)) shows that the V-feature of INFL (AgrS) must be considered weak in the languages that show the verb second pattern in (1)-(3). Consequently, not the absence of verb movement in (2) is problematic, but the presence of verb

movement in (1) and (3). If the asymmetrical analysis of verb second is correct, (1) in particular poses a problem: how can the verb move to INFL (AgrS) if the V-feature of INFL (AgrS) is weak?

Inspection of verb movement patterns in many languages suggests that the problem posed by (1) is not an isolated problem. It is not uncommon, crosslinguistically, that a verb appears to move only in combination with movement of a phrase. This type of verb movement cannot be described as the effect of a strong V-feature: the movement must have something to do with the movement of the phrase, hence with the presence of a strong N-feature.

DS contains a proposal to describe these 'conditional verb movements' in terms of a universal system of licensing relations. The proposal is that licensing relations universally require a configuration of *sisterhood*. Spec-head agreement can easily be redefined as a sisterhood relation, if it is decomposed in a mother-daughter relation (in terms of tree structure configurations) and a sister-sister relation (Zwart 1992a):

(8)

	XP		
spec	<-sisters->	X'	<-mother
	X		<-daughter

Licensing of heads (9) and complements (10) also requires a sisterhood configuration:

(9)

	X	
verb	<-sisters->	X

(10)

	V'	
V	<-sisters->	complement

Assuming binary branching structures, X in (8) can no longer have *spec* as its sister, since X already has a complement (not indicated in (8)). Hence, the position of sister of X' is the closest one can get to being a sister of X (in DS, following Hoekstra 1991, X' is notated as XP, but this is irreleva

The hypothesis in DS is that not X, but X' actually licenses the element in the spec-position. However, the N-feature that triggers movement of a phrase to the spec-position is represented in X itself. This N-feature, therefore, has to be carried over to X' via the mother-daughter relation indicated in (8).

This makes it possible to analyze conditional verb movement (to a functional head X) as a verb movement that allows X to carry its N-features over to X'. In other words, the features of the daughter in (8) are not accessible to the mother node unless the verb moves to X. Hence we can say that functional heads in conditional verb movement languages are [-accessible], and that verb movement makes them [+accessible].

Now we have an answer to the question why the verb moves to INFL (AgrS) in (1): this serves to make INFL (AgrS) [+accessible], so that the subject can be licensed in Spec,IP (Spec,AgrSP). Something similar may be going on in (3), if we replace 'INFL' by 'C' and 'subject' by 'topic'. But now, (2) becomes problematic again: we know that verb movement does not take place because the V-feature of INFL (AgrS) is weak. However, we might expect verb movement to occur as a last resort operation, to turn INFL (AgrS) [+accessible].

This problem is solved in DS by assuming that INFL (AgrS) becomes accessible in (2) as a consequence of the presence of the complementizer. It has been argued many times that in Germanic INFL (AgrS) moves to C (cf. Stowell 1981, Hoekstra and Marácz 1989). In some Germanic dialects, this may have a morphological reflex in the guise of complementizer inflection (Hoekstra & Marácz 1989, Zwart 1993b). DS hypothesizes that this INFL-to-C movement makes INFL (AgrS) [+accessible].

Assuming that the V-features are taken along with the movement of INFL to C, it is possible to generalize over verb movement to INFL (AgrS) and INFL (AgrS)-to-C movement: in both cases the V-features of INFL (AgrS) are removed from IP (AgrSP). Cf. Chomsky (1992) for the idea that feature checking is actually the elimination of features. So, the analysis of DS comes down to this statement:

(11)*Accessibility parameter*

The presence of V-features in X
blocks checking of the N-features of X (yes/no)

Conditional verb movement languages have the positive value for the parameter in (11). Together with the independently established INFL-to-C movement in Germanic, this yields the verb second pattern in (1)-(3).

If this solves the problem posed by the absence of verb movement in (2), the asymmetrical analysis of verb movement can be maintained. At the same time we can maintain a language-independent syntactic structure and a language-independent system of licensing which yields movement processes. Finally, the parametrization of the movement processes is done by exclusive

reference to the properties of functional heads (which are [±strong] and [±accessible]), as required in the present stage of generative syntactic theory (cf. Fukui and Speas 1986, Chomsky 1991, Chomsky 1992).

2. The Objections of Gärtner and Steinbach

Gärtner and Steinbach's paper is basically a defense of the traditional analysis of the verb second pattern in (1)-(3).

The defense consists of a positive, constructive part, and a negative, critical part.

In the positive part, an empirical argument is presented in support of the structure (7b) for German. In particular, Gärtner and Steinbach argue that the position of the auxiliary verb *tun* 'do' in substandard en dialectal German presents evidence for the position of INFL in German. Since *tun* appears in sentence-final position in embedded clauses, it is argued that INFL is positioned to the right of the VP in German.

The negative part basically contains three points. First, it is argued that the asymmetrical analysis of verb second presented in DS is not more economical than the traditional analysis consisting of the rules in (4) and (5). Second, it is argued that the analysis in DS is inconsistent with various parts of the minimalist program, especially the application of economy of derivation and the condition on strict cyclicity. Third, it is argued that various constructions that belong to the verb second pattern cannot be derived in the system of DS.

The positive part strikes one as rather weak. The argument is based on the assumption that *tun* in the relevant grammars must be treated as an inflectional element, generated in INFL, on a par with *do* in English. It does not take into account, however, the obvious alternative, according to which *tun* is a genuine verb featuring in a periphrastic construction. It would have to be established that *tun* has the same features as *do* in English. Note however that the analysis that *do* is a lexical verb has also been proposed for English (Ross 1967).

It is regrettable that the authors present a single out-of-the-blue argument in support of their position, instead of discussing the existing arguments against their position, for instance as presented in Reuland (1990). More disturbing, however, is that the authors avoid to take a stand on the conceptual side of the issue: they fail to acknowledge that adopting a consistent order of elements

across the Germanic languages (C to the left of IP, I to the left of VP, etc.) is an attractive position which should be taken if no convincing evidence to the contrary presents itself.

The negative part takes up most of the paper. It suffers from the same lack of perspective as the positive part. The authors do not address the major issues outlined above. They address technicalities of the implementation of the analysis, without discussing the big picture. They apparently assume that if fault can be found with any of the technicalities, the entire approach is discredited. They also assume that the symmetrical analysis of the verb second pattern is right if anything can be found wrong with the asymmetrical analysis, confusing *problems* with *refutations*. Apparently, the symmetrical analysis is taken to be beyond the requirements of serious argumentation. The detailed argumentation in DS against the symmetrical analysis is not discussed or even mentioned. In addition, the negative part is so riddled with misunderstandings and misrepresentations, that we cannot but provide a detailed reply. This we will attempt to do in the next section.

3. Reply to Gärtner and Steinbach

In this section we will first discuss the issue of the asymmetrical vs symmetrical analysis of the verb second pattern. Then we will take up the point of consistency of the DS analysis with the minimalist approach. Finally, we will discuss the derivation of certain constructions in the verb second pattern which appear to be puzzling to Gärtner and Steinbach.

3.1 Symmetry vs Asymmetry

Gärtner and Steinbach (henceforth *G&S*) declare that the aim of their paper is "to show that the asymmetry analysis, at least in its current shape, does not offer a more economical derivation of the V2 phenomenon" (page 2). G&S proceed by arguing that many aspects of the DS analysis are ad hoc, stipulative, unsuccessful, or inconsistent. Consequently, G&S conclude that "[t]he number of stipulated principles necessary to supplement a less than optimal analysis of V2 contrasts sharply with a traditional system, that basically uses only two rules [(4) and (5)] to derive the same data. Under that perspective, Den Besten's treatment of V2 within the transformational framework must be called more economical" (page 21).

It will be clear from section 1 that there is just no way of comparing the transformational and the minimalist treatment of verb second, because the two approaches have completely different objectives. The (metatheoretical) economy criterium refers to the number of rules in the TG-treatment. In the minimalist approach it refers to the number of phenomena that do not fall out from the general system. G&S compare the number of rules in the TG-system with the number of statements about the general system.

The difference, of course, is that the two rules of the TG-treatment are language specific and construction specific. However economically formulated, they remain descriptive devices. The principles and mechanisms that figure in the minimalist treatment are hypotheses about the universal system of grammar. Economy (still used in a metatheoretical sense) does not refer to the formulation of these principles and mechanisms, but to the extent in which the phenomena can be described in terms of the universal system.

Suppose it is part of the system that subjects are formally licensed in the specifier position of INFL (AgrS). This assumption has remained constant (mutatis mutandis) in the TG-approach, the GB-approach, and the minimalist approach. Then the position of the subject in subject-initial main clauses in verb second languages (cf. (1)) immediately falls out from the system, if we are willing to assume that the subject is in the Spec,IP (Spec,AgrSP) in these constructions. Since there is no a priori reason not to assume this, the asymmetrical analysis of verb second must be correct, precisely on grounds of economy of description.

Recall that Den Besten (1977) provided empirical arguments for assuming that in inversion constructions the finite verb is in C. In the TG-approach, applying economy of description leads to the conclusion that the finite verb is in C in all verb second constructions (see (4)), leading to a symmetrical analysis of verb second. In the GB-approach and the minimalist approach, Den Besten's empirical arguments still stand. But since economy of description now forces us to start from the assumption that the subject is in Spec,IP (Spec,AgrSP) in all verb second constructions, the arguments lead to an asymmetrical analysis of verb second. In hindsight, we can say that Den Besten (1977) proves that the asymmetrical analysis of verb second is correct.

Of course, the question whether the asymmetrical analysis is correct or not is in itself not very interesting. It is somewhat surprising, then, to find that G&S have made it their expressed goal to disprove the asymmetrical analysis (in its current shape). More interesting is the nature of the system that yields verb movement patterns. A more adequate critique of DS would involve an argumentation that certain aspects of the system proposed (most of which is standard minimalist) should be changed.

It is quite possible that this would yield a symmetrical analysis of the verb second pattern again. The important point, however, would remain that the verb second pattern is *always* epiphenomer

3.2 Consistency

Let us now turn to G&S's critique of the 'current shape' of the asymmetrical analysis of verb second.

Three aspects of the analysis are under heavy fire. First, the application of principles of *economy* and *cyclicity*. Second, the abolishment of the *shortest move* requirement. Finally, the assumptions on *phrase structure* and *feature checking*.

I will explain these points in the following subsections.

3.2.1 Economy and Cyclicity

The derivation of an embedded clause like (2a) in the DS analysis can be considered as a stepwise procedure. As in Chomsky (1992), the procedure involves both structure building processes and movement processes. The two go hand in hand. Thus, creating a Spec,AgrSP-position, moving a subject to Spec,AgrSP, and creating an AgrSP-node immediately dominating the newly created Spec,AgrSP-position are parts of one indivisible process.

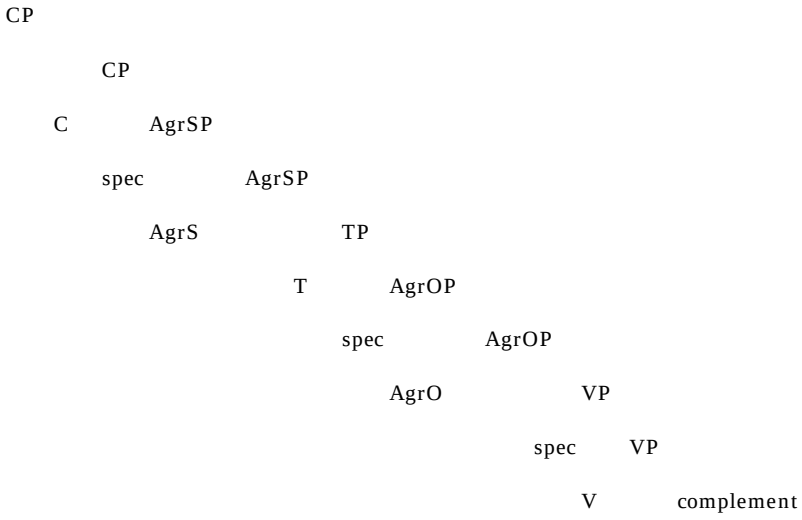
The economy principle Chomsky calls *Greed* holds that movement can only take place if it contributes to the elimination of features of the moved element, where features are eliminated by checking them (as part of the formal licensing of phrases and heads). The principle of *Cyclicity* holds that structure building cannot take place *inside* already existing phrase structure. Consequently, movement (which involves structure building) is always an externalization process: elements are moved out of the maximal projection that contains them, and are then adjoined to that maximal projection. (Chomsky (1992) makes a distinction between substitution and adjunction, but that is irrelevant here.)

Next to Greed, the system outlined in Chomsky (1992) contains an economy condition on derivations, according to which derivations should be as short as possible. Shortness can be expressed in terms of the number of steps and in terms of the length of steps. This conception of economy of derivation potentially involves a trial and error procedure. In DS, this is avoided by stating that it

must be decided at each step whether that step is necessary or not (*local economy*). Consequently, it is no longer possible in DS to compare entire completed derivations (*global economy*). (For the shortest steps requirement, see section 3.2.2.)

In DS, embedded clauses of the type in (2a) are assumed to have the following structure (see section 3.2.3 for the replacement of X' by XP):

(2a) **..dat Jan de krant leest**
thatJohn the newspaper reads

(12)


The complementizer *dat* in (2a) occupies the C-position in (12). The subject *Jan* in (2a) occupies the Spec,AgrSP position in (12). The object *de krant* in (2a) occupies the Spec,AgrOP position in (12). The verb *leest* in (2a) is assumed to be in V in (12).

The relevant steps yielding (2a) are the following:

(13)1. AgrS combines with TP, yielding AgrSP
2. The subject is moved to Spec,AgrSP, yielding AgrSP
3. C combines with AgrSP, yielding CP
4. AgrS moves to C, making checking of the N-feature of AgrS possible

G&S argue (on page 11) that the subject could not move to Spec,AgrS in step 2, because in the DS-analysis, the subject can only check its features with the N-features of AgrS after step 4 has occurred. They therefore assume that step 2 follows step 4, and continue to represent the derivation in this contorted way.

However, step 2 (the movement of the subject) is technically not dependent on N-feature checking taking place rightaway. The subject movement is a blind consequence of the circumstance that the N-feature of AgrS is strong. The actual movement of the subject, however, is nothing more than a prerequisite for N-feature checking. The movement is allowed to the extent that it contributes to this feature checking. Put differently: if it did not take place, the derivation would not converge, therefore it has to take place. It is irrelevant whether the N-feature of AgrS has actually been carried over to AgrSP or not.

(This is really a technicality of the analysis, not touching on any real issues. If we would make the process of subject licensing slightly more explicit, the problem (if it is a problem) would disappear. Suppose subject licensing involves the elimination of *two* features: a feature of the subject and the N-feature of AgrS. These features must be checked against each other, but since two features are involved, there are actually two checking operations. The feature of the subject is checked against AgrSP, and the N-feature of AgrS is checked against the subject. Both checking operations require sisterhood.

We can now state that only N-feature checking is dependent on AgrS-to-C movement (i.e. on the absence of V-features in AgrS). Checking of the subject features is independent of AgrS-to-C movement. In this way, the order of steps in (13) can be maintained without problems.)

According to G&S, step 4 (also) violates Greed (page 20). This, however, is not correct, since AgrS moves to C in order to make checking of its own N-features possible. The movement, therefore, serves to eliminate features of the moved element.

Hence, contrary to what G&S assert, the analysis involving the steps in (13) does not violate the economy principle Greed of Chomsky (1992).

G&S also argue that the analysis in (13) violates the fewest steps requirement of economy of derivation (page 11ff). This hinges on the question why verb movement in embedded clauses is blocked (see (2b) and section 1).

The question is why step 4 in (13) is chosen over the alternative in (14):

(14)4. V moves to AgrS, making N-feature checking of AgrS possible

Recall that in the DS-analysis, both AgrS-to-C movement and V-to-AgrS movement have the effect that the V-features of AgrS (which block N-feature checking) are removed from AgrS (removing the block on N-feature checking).

The answer to this question is quite simple. Since the V-features of AgrS are weak, step 4 in (14) can only occur as a last resort movement. The availability of step 4 in (13) makes it unnecessary to resort to verb movement.

This answer also applies in the derivation of inversion constructions, like (3a):

(3a) **Iedere dag leest Jan de krant**
every day reads John the newspaper

In the analysis in DS, *iedere dag* in (3a) occupies the Spec,CP (relabeled *TopP*) in (12), and the finite verb *leest* occupies the C-position (Top).

The verb is analyzed as moving *long distance* to C, i.e. without landing in AgrS first. This is unproblematic, since AgrS has moved to C in step 4 of (13), and checking of the V-features of AgrS by the finite verb can take place in C. Thus, for the derivation of (3a), (13) must be expanded with two more steps:

(13)5. *Iedere dag* moves to Spec,CP, yielding CP
6. The verb moves to AgrS in C, checking the V-features of AgrS

The question then arises whether in the derivation of (3a), step 4 in (13) could not be replaced by step 4 in (14). This would have the effect that the verb moves to AgrS first, checking the V-features of AgrS and making checking of the N-features of AgrS possible, and then moves on to C.

One way to decide this would be to count the number of steps involved. But replacing (13.4) by (14.4) does not affect the number of steps. Besides, this would involve global economy, which is excluded in DS. In DS (page 182), it is suggested that in determining the most economical verb movement, one should count the number of verb movement steps. But this meets with the same problem of involving global economy.

(G&S are seriously in error by concluding that in DS "derivational economy counts only verb-movement steps" (pages 7, 13). This holds for the most economical *verb* movement only. They are

right, however, in pointing out that a system involving V-to-AgrS and V+AgrS-to-C involves only one verb movement step, since V gets a free ride to C in the V+AgrS-to-C step.)

But again, the solution is that (14.4) is excluded, simply because a last resort movement is not yet called for. This follows from the interpretation of economy of derivation as a stepwise process, in which it is decided at each step whether that step is necessary or not (DS, page 182, footnote

Consequently, G&S assert that this interpretation of economy of derivation (taking it as a stepwise process, excluding global economy) is "ad hoc unless [it] can be shown to be independently needed" (page 9; I have eliminated here G&S's reference to the assumption that only verb movement steps have to be counted in determining economy of derivation, which is labeled ad hoc in the same breath. But this assumption is not in DS.). However, it is clearly the other way around. Local economy compares options, whereas global economy compares sets of options. The former is at the heart of the concept of economy. Whether we want to expand this to include global economy is not at all clear. Hence, if there is any concept that is in need of independent argumentation, it is global econ

3.2.2 The 'shortest move' requirement

Step (13.6), verb movement to C, involves non-local head movement. On its way to C, the verb does not land in AgrS. This violates the Head Movement Constraint of Travis (1984):

(15) *Head Movement Constraint* (Travis 1984:131)
An X° may only move to a Y° which properly governs it

It follows from the definition of government (cf. Chomsky 1986, Baker 1988), that the Head Movement Constraint blocks movement of a head across another head.

In the minimalist approach, the Head Movement Constraint is adopted as a part of economy of derivation: movement across a potential landing site violates the shortest move requirement (Chomsky 1992:21).

It is clear, however, that many cases of non-local head movement are blocked independently of the shortest move requirement. For example, a verb cannot move across AgrS, because this would leave the V-features of AgrS unchecked.

It would be interesting to see whether the shortest steps requirement can be reduced to independently established feature checking requirements entirely. This would be an attractive development, since the feature checking requirements, unlike conditions of derivational economy, relate to 'bare output conditions' (cf. Chomsky 1994).

This question is addressed in DS and in Zwart (1994). It is argued there that the three cases that seem to call for a shortest move requirement can all be explained by independently established principles and conditions, without reference to economy of derivation.

For the case at hand, it is easy to see that non-local head movement does not lead to any violation of output conditions. Since AgrS has moved to C (step (13.4)), the finite verb can check the V-features of AgrS (and its own features) in C. Landing in AgrS on the way to C would even be uneconomical, since there are no features in the AgrS-position left to check. (G&S (page 24) represent this as a 'principle' introduced in DS, but it is really just a standard feature of the minimalist approac

G&S state that "none of the arguments against the 'shortest steps' condition on derivations bears up to scrutiny. (...) The 'shortest steps' requirement has to be retained in the absence of good reasons to do away with it." (page 25).

The logic of this conclusion is a bit unclear. Surely, it is desirable from the minimalist point of view to reduce the shortest move requirement to bare output conditions. So even if the arguments presented in DS fail to prove the point, the 'good reasons to do away with it' are already part and parcel of the minimalist approach itself.

But G&S's critique of the argumentation in DS does not stick either. The constructions that seem to call for a shortest move requirement are listed below:

(16) *Head Movement*

a. Who did John not think I could help?

b. * Who could John did not think I help?

(17) *Superraising*

a. It seems that John was told that Bix lives

b. * John seems that it was told that Bix lives

(18) *Wh-island*

a. How did John say that Bill fixed the car?

b. * How did John wonder why Bill fixed the car?

In (16b), the 'lower' auxiliary *could* is raised to C, across several intervening heads. In (17b), *John* is raised to Spec,AgrS across the intermediate Spec,AgrS position occupied by *it*. In (18b), *how* is raised out of the embedded clause across the Spec,CP position occupied by *why*. In all these cases, the moved element could have made a shorter move to a closer position, had that position not been occupied.

G&S conclude from the attempts in DS to explain these shortest move violations away, that "locality no longer is an inviolable property of syntax" (page 24). However, the argumentation in DS implies nothing of the sort. Locality still exists, is inviolable, and plays a role in many areas of syntax; it just does not include a shortest move requirement.

If we look at (16)-(18) in detail, it appears that we have to distinguish two classes of locality violations. The first class, including (16) and (17), yields radically ungrammatical sentences. The second class, including (18), yields a range of grammaticality judgments. As is well known, island violations may be less severe, depending on the element moved and the configuration it is moved out of (Cinque 1990, Manzini 1992). A way to account for this pattern would be to say that long distance movement in (18) is always 'grammatical' (i.e., converging), but not always interpretable (Chomsky, class lectures 1991). For some reason, this does not apply to (16)-(17).

The radical ungrammaticality of (16) and (17) suggests that the non-local movement has the effect that some feature remains unchecked. What (16) and (17) have in common, is that an element is moved out of a tensed clause to an A-position (assuming head movement to be A-movement, cf. Chomsky 1986).

Head movement out of tensed clauses can be blocked if tense is associated with C (as in Den Besten 1989, Stowell 1981, etc.), and if a tensed verb must therefore move to C in covert syntax (as in Law 1991). Moving the tensed verb *could* in (16b) out of the embedded clause would leave the tense features in the embedded C unchecked.

Noun phrase movement out of a tensed clause can be blocked if all noun phrases are already licensed inside the tensed clause. This explains the ungrammaticality of (19):

(19) * John seems [t won]

Since *John* checks its features inside the embedded clause, in the position indicated by the trace, the principle of Greed no longer allows it to move on to a similar position in the main clause.

This does not exclude (17b), however, in which *John* would remain unlicensed in the embedded clause. This can be concluded from the ungrammaticality of (20):

(20) * It was told John that Bix lives

If (20) is embedded under *seem*, as in (17), there is a licensing position for John external to the embedded clause. Why then is (17b) excluded?

The solution attempted in DS seeks to restrict the number of possible 'basic' constructions from which constructions like (17) could be derived. In DS this is attempted for Superraising constructions like (21), by stipulating that *it* cannot be combined with an infinitival clause:

(21)a. It seems John is likely to win
b. * John seems it is likely to win

Here I will try to show that a similar solution could work for (17b).

Verbs like *tell* display the so-called dative alternation:

(22)a. I told John the story
b. I told the story to John

Assuming binary branching, the structures underlying (22) must involve a Small Clause (or a Larsonian shell structure, which is comparable to a Small Clause structure in the relevant respects). Let us furthermore assume that the dative alternation results from *John* being able to function both as a subject (in (22a)) and as a predicate (in (22b)) of the Small Clause. (Alternatively, there is no Small Clause in (22b), and *to John* is an adjunct PP in this case.)

If we then consider passivization, it turns out that only the subject of the Small Clause can be passivized (ignoring phenomena like Locative Inversion):

(23)a. John was told the story
b. The story was told *(to) John

In earlier approaches, the presence of the preposition *to* in (23b) was considered to be the result of a last resort insertion rule, needed for licensing of *John* in the absence of a different Case assigner

(cf. Chomsky 1981). It is not clear what status such an insertion rule would have in the minimalist approach. In the analysis of the dative alternation entertained here, no insertion is needed: the preposition *to* is there because it is an integral part of the predicate (or adjunct) *to John*.

Bennis (1986) and Moro (1993) have demonstrated that *it* in raising constructions has the same status as *the story* in (22)-(23): it is not a dummy subject but an element of the complement domain of the raising verb. Consequently, (23b) and (24) have the same status (cf. (20)):

(24) It was told *(to) John that Bix lives

In (24), *it* is the Small Clause subject (and can be passivized), and *to John* is the Small Clause predicate (or an adjunct).

If we now embed (24) under *seem*, it becomes clear that *John* is not available for occupying the subject position of the matrix clause (cf. (17b)):

(25) * John seems that it was told (to) that Bix lives

If *to* is present in (25), *John* is already licensed as part of the PP, and Greed prohibits further A-movement. And *to* cannot be absent either, because if *it* is to raise to the subject position of the embedded clause, *it* and not *John* has to be the Small Clause subject. Therefore *John* must appear as part of the predicate (or adjunct) PP *to John*.

(17a), on the other hand, is grammatical, because it starts from a basic structure in which *John* is the subject of Small Clause embedded under *tell*. In that case, *it* must be generated in the immediate complement domain of *seem*, just like in (26):

(26) It seems that Bix lives

If this is correct, Superraising violations like the one in (17b) will not occur for independent reasons.

G&S's critique of the analysis of Superraising in DS focuses on the analysis of *it* as an element of the complement domain of the raising verb. This part of the analysis is extensively argued for in Bennis (1986) and Moro (1993), and seems sufficiently strong to be adduced here. G&S are correct, however, in arguing that the tensed clause associated with *it* cannot always be considered as an adjunct. This is evidenced by the extraction contrast in (27):

(27)a. How does it seem that Mary repaired the bike?

b. * How do you regret it that Mary repaired the bike?

The transparency of the embedded clause in (27a) suggests that the clause is not an adjunct. I would like to refer to Moro (1993) for discussion of these extraction facts. In (27b), the embedded clause must be regarded as an adjunct (Bennis 1986).

An alternative analysis of superraising would involve a return to the conception of NP-traces as anaphors (Chomsky 1981). In trying to account for superraising phenomena, the attention has shifted from the Binding Theory to movement theory, apparently on the strength of the argumentation in Lasnik (1985).

Lasnik (1985) discusses cases like (28), in which *John* is in a chain with the NP-trace, which is bound by the pronoun *he*, coindexed with *John* and the NP-trace:

(28) * $John_i$ is believed that he_i likes t_i

If raising is only subject to the condition that the NP-trace be locally bound, (28) should be grammatical.

This argument rests on the notational device of coindexing. A different notational device, such as provided by the copy theory of movement in Chomsky (1992), might yield different results. Suppose NP-trace is a non-overt copy of an R-expression, having the features [+anaphoric,-pronominal] (as in Chomsky 1981). Then *binding* can be defined as c-command by the overt counterpart of the non-overt copy. Since the copy is [+anaphoric], the binding relation is subject to principle A of the Binding Theory. But Principle A requires binding within a local domain, which everybody will agree does not exceed the embedded IP in (28).

Crucially, *he* cannot be the binder of the NP-trace, unless the NP-trace is a non-overt copy of *he*. But in that case, *John* can no longer be the binder of the non-overt *he*, on the present definition of binding, and *John* will remain without a theta-role. (The copy-requirement is absent in binding of lexical anaphors because in that case there are two independent lexical items, each with its own theta-role, whereas in the raising case we could speak of a single discontinuous lexical item. The binding theory, however, works the same in both cases.)

It seems, then, that there are many ways of analyzing (17) without taking recourse to conditions on movement.

G&S refrain from a discussion of the analysis of wh-island phenomena in DS (cf. (18)). (Their footnote 46 is again based on a misrepresentation of the notion of cyclicity entertained in DS.) But since wh-island phenomena give rise to a range of grammaticality judgments, economy violations cannot be involved.

More research is needed if we wish to fully eliminate the shortest move requirement from the theory of grammar. However, I fail to see that this line of research is not in keeping with the objectives of the minimalist program.

3.2.3 Phrase structure

The system of feature checking of DS starts from the hypothesis that licensing relations require sisterhood configurations. This hypothesis was introduced in Zwart (1992a) to account for the properties of Locative Inversion in the minimalist approach. It builds on a theory of phrase structure that distinguishes only two levels of X-bar structure: the head and the phrase. This conception of phrase structure had been explored earlier by Stuurman (1985), Zwart (1988) and Hoekstra (1991), and has gained prominence through the distribution of Kayne (1993).

G&S apparently are not aware of the history of the assumptions regarding phrase structure and feature checking in DS. They call the sisterhood requirement on feature checking ad hoc (page 20), and conjecture that "Zwart (1993[a]) redefines a number of structural relations *in order to* make X'-projections superfluous, *so that* his system becomes compatible with Kayne (1993)" (page 10, footnote 23, my emphasis).

It comes as no surprise, then, that DS does not follow Kayne (1993) in every aspect. Certain technicalities in the definitions in Kayne (1993) might be altered, yielding slightly different results, but not deviating from the general research program. This is not in itself problematic or 'not in the spirit of Kayne (1993)" (G&S, page 10, footnote 23; see also page 40, footnote 64).

Similarly, the arguments in DS in support of the hypothesis that Dutch is an SVO language antedate the distribution of Kayne (1993), although they are certainly inspired by the research program initiated by Kayne (1992) (see Zwart 1992b). (Kayne (1992), however, did not address the structure of lexical projections explicitly.) G&S do not seem to realize that developments in linguistics more often result from various researchers addressing the same questions from a similar perspective than from many researchers slavishly imitating one or two authorities.

At the same time, it is clear that more work needs to be done before the analysis of Dutch as an SVO language (or any analysis of Dutch) can be more or less completed. Both the analysis as presented in DS and the critique of G&S on it must be considered preliminary, therefore.

3.3 Derivations

Further technicalities are at stake in the derivation of inversion constructions and subject-topicalizations, and in the proper analysis of complementizer agreement dialects. I will discuss these problems one by one, and refer to them by the name of the linguists who first brought them to my attention.

3.3.1 Haeberli's Problem

Consider again the derivation of inversion constructions like (3). This derivation involves the following steps:

(3a) **Iedere dag leest Jan de krant**
every day reads John the newspaper

(13)1. AgrS combines with TP, yielding AgrSP
2. The subject is moved to Spec,AgrSP, yielding AgrSP
3. C combines with AgrSP, yielding CP
4. AgrS moves to C, making checking of the N-feature of AgrS possible
5. *Iedere dag* moves to Spec,CP, yielding CP
6. The verb moves to AgrS in C, checking the V-features of AgrS

In DS, the movement of the verb to C (step (13.6)) is not forced by V-features in C, but by the V-features in AgrS (which has moved to C). It is assumed that C, being 'non-L-related', has no V-features of its own. Since the V-features of AgrS are weak, step 6 is again a conditional verb movement, needed to make a [-accessible] head [+accessible].

It is assumed in DS that C itself is always [+accessible], since it has no V-features. C becomes [-accessible], however, when the V-feature of AgrS moves along in the AgrS-to-C movement. Verb movement to C, then, is again needed to remove the V-feature of AgrS from C, rendering C [+accessible] and making N-feature checking in Spec,CP possible.

Eric Haeberli has pointed out to me, that this derivation yields the following problem (which is also noted by G&S on page 12). Suppose step (13.5) takes place before step (13.4). That is, the topic is moved to Spec,CP before AgrS moves to C. Since C only becomes [-accessible] after AgrS-to-C movement, the topic could immediately check the N-features of C. Furthermore, AgrS-to-C movement would make N-feature checking in AgrSP possible, and verb movement would not have to take place to AgrS or to C at all. How can this derivation, which yields the ungrammatical (3c), be exclu

There are various ways of getting around this problem. In DS, it is assumed that AgrS moves to C *as soon as* C becomes available. This is not in violation of Procrastinate, since AgrS has strong N-features which are eliminated via AgrS-to-C movement.

In the system of DS, this idea that AgrS moves to C as soon as possible can be seen as part of a principle with larger scope. This principle states that L-related features (such as the N-features of AgrS) must be eliminated before non-L-related features (like the N-features of C). This principle derives, among other things, the phenomenon that non-L-related projections are always generated outside L-related projections. It also derives improper movement, which involves movement from a non-L-related position to an L-related position.

G&S (page 13) rule this principle out, saying that "it introduces an extrinsic rule order, a notoriously descriptive device". But this criticism is not ad rem, since the steps in (13) are not rules. If there is a principle governing the ordering of these steps, that is not a descriptive device, but a discovery about language.

There is, however, another way of solving Haeberli's problem that does not involve ordering of checking of L-related and non-L-related features. This solution again builds on the idea that checking of the features of the element in the specifier position (in this case, the topic) and checking of the N-features of the head (in this case, C) should be kept apart.

Suppose that non-L-related functional heads may be specified as being [±accessible], just like L-related heads, and that both L-related and non-L-related functional heads have V-features (the V-features of non-L-related heads may relate to tense rather than to the verb - assume in what follows that T is incorporated in AgrS).

Let us assume that in verb second languages, both L-related and non-L-related functional heads are [-accessible]. Consider then what happens in step 5 (now ordered before step 4). By moving the topic to Spec,CP, the features of the topic are checked against CP. But this does not imply that the N-features of C are also checked against the topic. We might assume that for this N-feature checking to take place, C has to be made [+accessible] again. This can be done by moving AgrS to C, AgrS checking the V-features of C. But since AgrS carries unchecked V-features with it, these also have to be checked before C becomes [+accessible]. The finite verb, then, moves to C to check the V-features of AgrS (adjoining in fact to AgrS in C).

As in the system of DS, AgrS-to-C movement makes checking of the N-features of AgrS possible, and V-to-C movement makes checking of the N-features of C possible. In short, if we look more closely at the licensing relations involving phrases (i.e. checking of the features of the phrase and checking of the N-features of the head), Haeberli's problem disappears.

In the next section, we will see that the order of steps that Haeberli's problem suggests (i.e., with 14.5 preceding 14.4) must actually be considered correct.

3.3.2 Platzack's Problem

Another tricky question that the analysis in DS raises concerns topicalization of subjects. As the discussion of conjunction reduction in Zwart (1991b) indicates, we cannot exclude the possibility that subjects topicalize (i.e., move from Spec,AgrSP to Spec,CP). It follows from the system in DS that in that case the verb moves to C *via* AgrS.

Hence, (1a) could in fact be a CP. This does not affect the asymmetrical analysis of verb second, however, since the paradigm in (6) shows that not *all* subjects topicalize.

DS contains an empirical argument, based on subject-verb agreement, that supports the asymmetrical analysis. In Dutch, the second person singular of the present tense verb has two forms, one ending in *-t*, and one without visible ending. The second form is used in inversion constructions, the first form in all other constructions:

(29)a. **Jij leest/*lees de krant**
you read the newspaper

b. **..dat jij de krant leest/*lees**
thatyou the newspaper read

c. **Iedere dag lees/*leest jij de krant**
every day read you the newspaper

In DS, the bare stem form in inversion constructions (29c) is taken to indicate that the verb moves to C directly, without stopping in AgrS.

The question now arises, what happens when the topicalized element is the subject. In principle, the relevant constructions could be derived as in (13), with the subject replacing *iedere dag* in step 5. This would have the result that the verb in C shows the bare stem form, even though it does not precede the second person singular pronoun. In other words, (29a) should have the variant in (30), which it does not:

(30) * Jij lees de krant

This problem was first brought to my attention by Christer Platzack, and by many after him. G&S address it on page 8 of their paper.

As noted in DS (page 183, footnote 8), the correct derivation of (29a) must involve verb movement to AgrS before the subject moves to Spec,CP. Since the V-feature of AgrS is weak, this verb movement must be a last resort movement.

This can be achieved if step 5 (movement of the topic to Spec,CP) precedes step 4 (AgrS-to-C movement). Since AgrS-to-C movement makes checking of the N-features of AgrS possible, movement of the *subject* to the topic position *before* AgrS-to-C movement would yield a crashing derivation: the subject would be gone before it could serve to eliminate the N-features of AgrS.

Notice that this is in a way the inverse of Haeberli's problem. The solution of that problem in DS (involving an ordering of checking of L-related features before checking of non-L-related features) required step 5 to follow step 4.

This paradox generated by Haeberli's problem and Platzack's problem suggests that something is wrong with the way conditional verb movement is described in DS. But the solution to Haeberli's problem suggested here (in which step 5 is ordered before step 4) makes Platzack's problem disappear. The steps we had to take to reach that solution involve a separation of N-feature checking and XP-

feature checking, and the assumption that non-L-related heads are subject to the accessibility parameter and, in connection with that, carry V-features.

It remains to be seen whether these are necessary extensions of the analysis. At any rate, it is not clear that a serious analysis of verb movement should seek to avoid such problems.

3.3.3 Hoeksema's problem

A final problem for the analysis in DS to be discussed here concerns complementizer agreem

In DS, complementizer agreement is analyzed as a reflex of AgrS-to-C movement (cf. already Hoekstra and Marácz (1989)). In most dialects, the complementizer agreement morphology is identical to the subject-verb agreement morphology. But Van Haeringen (1958) reports on East Netherlandic dialects in which the two types of agreement differ.

In those cases, complementizer agreement replaces subject-verb agreement on the verb in inversion constructions. (The distribution of verbs carrying complementizer agreement in these dialects matches the distribution of the bare stem second person singular verb forms in Standard Dutch, discussed above.) This is taken to provide evidence in support of the hypothesis that the verb is in C in inversion constructions only, and is in a lower functional head in subject initial main clauses.

Jack Hoeksema has pointed out to me that certain German complementizer agreement dialects show a slightly different pattern (cf. Bayer (1984), and G&S, page 24). In these dialects, among which Lower Bavarian, verbs carry complementizer agreement in subject-initial main clauses also.

G&S conclude from this that "complementizer agreement facts cannot be adduced in favor of the asymmetry-analysis of verb second as long as it is meant to cover the entire range of V2-languages displaying the relevant asymmetry of verbal positions" (page 28).

However, the relevant facts must be considered as presenting a problem rather than constituting a refutation. The fact that the Lower Bavarian facts do not lend themselves to the same explanation does not detract from the fact that the East Netherlandic facts support the asymmetrical analysis of the verb second pattern.

This, then, is one of the interesting problems raised by G&S that we would be interested to see some constructive work done in.

3.4 Remaining points

It would carry us too far afield to refute each and every minor point G&S mention. Suffice it to say here that those points which seem to me to be well taken, or to present interesting problems, have been discussed in the above.

There are two issues, however, which G&S discuss in some detail, and which merit careful consideration. These issues are: the syntax of embedded verb second constructions, and the empirical basis of the asymmetry analysis.

3.4.1 Embedded verb second

In DS, embedded verb second is analyzed in exactly the same way as verb second in independent clauses. The central hypothesis making this possible is that the complementizer introducing the embedded verb second clause is, for some reason, cut off from its 'complement'. This has the effect that the 'complement' of the complementizer behaves like an independent construction.

The independence of the embedded verb second clause has two main consequences. First, AgrS-to-C movement to the complementizer is not possible. As a result, the embedded verb will have to move to AgrS as a last resort, in order to make checking of the N-features of AgrS possible. Second, the embedded clause, like all independent clauses, constitutes an inviolable barrier for movement. Consequently, head movement or XP-movement out of embedded verb second clauses is not attested.

Contrary to what G&S (page 31) suggest, the radical impossibility of XP-movement out of embedded verb second clauses (except in German) supports the analysis of embedded verb second proposed in DS. In DS, embedded verb second clauses (except in German) are independent clauses. These are always islands, and it does not make a difference whether the moved category is an argument or an adjunct, and whether the embedded clause is a subject-initial construction or an inversion construction. In the analysis of embedded verb second defended by G&S (cf. Vikner and Schwartz 1992), the impossibility of extraction out of embedded verb second constructions is treated as a standard island effect. This predicts that embedded verb second constructions display a standard island effect pattern, with arguments being more easily extractable than adjuncts. But this is not the case. Hence, there must be a radical barrier shielding off the embedded verb second clause, as provided by the analysis in DS.

The generalizations above apply to the type of embedded verb second found in the Mainland Scandinavian languages, Frisian, and colloquial Dutch. Embedded verb second in German appears to be of a different type. For one thing, embedded verb second clauses in German cannot be introduced by a complementizer. For another, embedded verb second clauses in German permit wh-extraction (SUBJ = subjunctive mood):

(30)a. **Ich glaube (*daß) er habe die Zeitung gelesen**
I think that he has-SUBJ the newspaper read
b. **Was glaubst du habe er gelesen?**
what think you has-SUBJ he read

Therefore, embedded verb second in German cannot be analyzed in the same way as embedded verb second in Mainland Scandinavian, Frisian, and colloquial Dutch (nor is this claimed in DS). Since G&S's discussion of embedded verb second almost exclusively addresses the German type of embedded verb second, it has no bearing on the analysis in DS.

Nevertheless, the embedded verb movement in (30a) suggests that AgrS-to-C movement is not available. The explanation, however, must be different from the Mainland Scandinavian-Frisian-colloquial Dutch type, in which C is present, but cannot be reached by AgrS. In the German type, it looks like C is just not present (at least in (30a)). Verb movement to AgrS again takes place as a last resort. (G&S erect a straw man-analysis in which the embedded AgrS moves to the matrix V in (30a), obviating the need for embedded verb second. Not much is known, however, about the possibility of raising embedded functional heads to matrix lexical heads, so that this analysis cannot be seriously discussed.)

Assuming this much, the syntax of embedded verb second constructions in German can be described as any other verb second construction. Although CP is absent in the embedded clause in (30a), nothing blocks the creation of an embedded CP in (30b), in which the CP is needed to accommodate long distance XP-movement (cf. Zwart 1993b).

G&S mention one fact that is well known from the literature, namely that weak subjects in the Mainland Scandinavian languages which cannot appear in subject initial main clauses do appear in subject initial embedded verb second clauses (cf. Platzack 1986, Vikner and Schwartz 1992). This could be taken to suggest that embedded verb second clauses are not completely independent from

the embedding clause. Since Mainland Scandinavian differs from Frisian and colloquial Dutch in this respect, this is an interesting topic for further research.

3.4.2 The asymmetry of weak subjects and weak objects

Recall that the asymmetry analysis of the verb second pattern is based on two assumptions:

(31)1. In the default case, the subject occupies its licensing position, Spec,AgrSP.
2. In topicalization constructions, the subject may be the topic and may move to Spec,CP.

The asymmetry analysis then follows from the fact that not all clauses are topicalizations in verb second languages.

This analysis explains immediately the asymmetry between weak subjects and weak objects discussed in Travis (1984), and for that reason has to be preferred over competing analyses:

(6) a. **Ze/Zij** **komen**
they-weak/strong come
b. ***Ze/Hen** **ken ik niet**
they-weak/strong know I not

However, if the pattern in (6) would not exist, the asymmetry analysis would still be the stronger analysis. This follows simply from the fact that the asymmetrical analysis requires no further stipulations regarding the position of the subject. The position of the subject just falls out from the minimalist assumptions regarding phrase structure and feature checking.

Attempts in the literature to explain the pattern in (6) away miss this point (Holmberg 1986, Rizzi 1991, Vikner and Schwartz 1992). G&S's discussion of this pattern (page 34) is no exce

We agree with G&S, therefore, that the existence of the pattern in (6) alone "cannot motivate a general structural IP/CP-asymmetry of subject vs. operator-initial V2 clauses" (page 38). After all, many things could be going on in (6) that make both analyses ultimately coextensive. However, we fail to see how this makes the symmetrical analysis superior.

One thing that interferes with the pattern in (6) is that the weak pronouns involved may very well all have to be analyzed as clitics (including*ze*, which G&S, for unclear reasons, refuse to analyze as a clitic). In DS, clitics are taken to be heads, generated in functional head positions and interacting with verb movement in a way that has not been very well worked out.

But taking this rudimentary analysis to be correct, we must assume that subject clitics are generated in AgrS, and object clitics in AgrO. It is also assumed in DS (deviating from Kayne 1993) that when a verb moves to AgrS, the subject clitic will become proclitic on the verb, whereas a clitic, moving to a complementizer or a verb will become enclitic on its host. (It is assumed here that Kayne's generalizations on word order pertain to licensing relations only.)

It follows from these assumptions that (6b) will never occur, since clitics are not subject to XP-movement, and end up enclitic when undergoing head movement. (6a) is the more interesting case, however. In the DS-analysis, the finite verb moves to AgrS, yielding a proclitic subject. However, if the verb were to move to C (as in rule (4)), the clitic would have to move to the verb and end up in enclitic position:

(32) * **Komen-ze**
come they

This is excluded, unless (32) is taken to be a yes/no-question. In that case, however, verb movement to C is independently motivated (cf. Den Besten 1977).

In short, if the pronouns in (6) are taken to be clitics, the pattern in (6) continues to fall out from the asymmetrical analysis of verb second, under the assumptions of DS.

4. Conclusion

In closing, I would like to return to the question of the default analysis of Germanic. What kind of analysis should we adopt if all empirical argumentation proves fruitless?

In DS, the position is adopted that such an analysis should contain the following points:

a. The subject invariably occupies the specifier position of AgrSP (IP), known to be the surface subject position in the tradition of generative grammar.

b. Branching and headedness is consistent in all projections.

Point *a.* leads to an asymmetric analysis of verb second in Germanic. Point *b.* to an analysis in which all projections in Dutch and German (as in English) are head-initial.

Adoption of these points may lead to an analysis that deviates in part from what is traditionally held true of Germanic syntax. However, given the exciting developments in grammatical theory of the past fifteen years, I fail to see how this can be a cause of major concern.

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