ECONOMY, VERB SECOND, AND THE SVO-SOV DISTINCTION

HANS-MARTIN GÄRTNER & MARKUS STEINBACH
MPG BERLIN & FRANKFURT/MAIN UNIVERSITY[1]

1 INTRODUCTION

Recent developments within generative syntax (Chomsky 1992; Kayne 1993) seem to suggest a considerable shift in the field of Germanic syntax. Thus, the famous Verb Second (V2) phenomenon as well as the SOV-status of Dutch, German, and affiliated languages may turn out to be just epiphenomena. At least, this point of view has been advocated by Jan-Wouter Zwart (1991, 1992a-e, 1993).[2]

The apparently uniform V2-effect, accordingly, derives from a structural asymmetry. Subject-initial V2-clauses require the finite verb (from now on: V°) to move no further than I°[3] whereas V° finds itself in C° in operator-initial V2-clauses.[4]

This difference follows from an economy-theoretical minimization of

[1] We thank the following people for having contributed to this paper by commenting on earlier versions of it or by discussing various of its aspects with the authors: Damir Cavar, Kathrin Cooper, Günther Grewendorf, Katharina Hartmann, Paul Kiparsky, Thomas Köhn, Young-Me Park, Christer Platzack, Joachim Sabel, Sten Vikner, Ralf Vogel, Chris Wilder, Ilse Zimmermann, and the participants of the Frankfurt colloquium. All remaining shortcomings must of course be attributed to ourselves.

[2] The reason for concentrating on Zwart's theories in such detail lies in the fact that right now they constitute the most far-reaching approach to the phenomena in question explicitly subscribing to Chomsky's minimalist framework. Alternatives will be discussed as we go along.

[3] I°/IP will be used in the usual way as a cover term for the inflectional bestiary as long as further differentiation only hampers discussions.

[4] For the sake of argument we are going to adopt Zwart's (1992a) term "operator", meant to cover WH-phrases and topicalized non-subjects, unless indicated otherwise. Subjects can be topicalized in an asymmetry-analysis. By default, however, they are not treated as 'topics'. (cf. Zwart 1991; and our discussion under 2.4.) The term "asymmetry-analysis", in the sense it is used here, was introduced by Vikner & Schwartz (1992) - for an earlier usage see Reis (1985). They also deal with an earlier paper by Zwart and argue against Travis' version of an asymmetry-theory. We are not going to reiterate what they had to say on adjunction to IP and sentence-initial expletives although those points are still valid.

verb- and XP-movement. Additionally, an I°-position to the left of VP in SOV languages receives support on the conceptual level, if UG only permits a single linearization of Specifier>Head>Complement. SOV-languages must then be derived from an underlying SVO pattern.[5]

The aim of this paper is the attempt to show that the asymmetry-analysis, at least in its current shape, does not offer a more economical derivation of the V2 phenomenon. Indeed, its special interpretation of the "fewest steps" requirement must be considered ad hoc. At the same time, the abolishment of the "shortest steps" requirement, along with the adoption of the "strict cycle condition" on "generalized transformations" leads to a certain kind of "derivational dilemma". This calls for the introduction of an extrinsic rule-order, a classically descriptive device. Thus, we question the arguments against "shortest steps".

Secondly, the V2-trigger used by Zwart (1993), the [+/-accessible]-specification of functional heads is not even able to derive all of the data usually covered by the more traditional approaches to V2 phenomena. (Sections 2.1. - 2.3.)

In section 2.4. we argue that a subject vs. operator distinction does not warrant an IP/CP-asymmetry, when it comes to accounting for Germanic V2. Problems arise for an analysis of (extraction from) embedded V2-constructions. We are then trying to show, that clause-initial unstressed and reduced pronouns do not furnish the kind of solid evidence for an asymmetry-analysis they are sometimes claimed to do. Additionally, we will suggest that complementizer-agreement cannot be adduced in favor of the asymmetry-analysis either.

Section 3 points out a number of difficulties an SVO account of SOV-languages is likely to run into. First of all, we have to seriously question whether object-clitics in Dutch really provide evidence for an I° position left of VP (3.1.). Secondly, we sketchily survey a number of German word-order phenomena that seem to resist a minimalist SVO-approach (3.2.). Section 3.3. draws attention to German "do-insertion", which - especially from a minimalist perspective - constitutes an argument in favor of an I°-position to the right of VP.

---

5 As will be apparent from our discussion in section 3, the real issue is whether SOVI can be analyzed as SIVO.

2 ECONOMY AND VERB SECOND

2.1 The V2-Trigger

Den Besten (1977/1983) dealt with the leftward verb- and XP-movement to the clausal periphery characteristic of the V2 phenomenon by positing a "Complementizer Attraction Rule". Although developed in the framework of transformational grammar, this approach has since been adopted by most researchers because of its elegant and simple explanation for the interaction of complementizers and the finite verb. Disagreement usually arises when it comes to tracking down the factor responsible for the content of C°. Is it one and the same for complementizers and finite verbs[6] or do they realize different properties of C°?[7]

In order to unify the account of general and residual V2 phenomena[8] the V2-trigger can be seen as a precondition on licensing certain XP-movements.[9]

This latter approach is the one favored by Zwart (1992a /1993), who claims this to be most in keeping with Chomsky's minimalist program. Without landing sites having to be categorially specified, V2 effects result 'in a natural way' - that is, without recourse to any V2-property whatsoever - under the following assumptions:

---

6 E.g. "finiteness": Holmberg & Platzack (1988), "nominative assignment": Koopman (1984), Platzack (1984).

7 E.g. "argument" vs. "predicate" status of CP: Kayne (1982), Holmberg (1986), Taraldsen (1986), Rizzi (1990). v.Stechow & Sternefeld (1988) discuss the difference between projected categories and positional ones. Haider (1993a) abstracts away from properties of C° by calling it F. For an overview see Vikner (1990, to appear).

8 Rizzi (1991). Residual V2 arises in languages that limit V2-movement to certain root transformations such as Wh-movement and Neg-preposing (English/French). For a discussion see also Weerman (1988).

9 It is likely that some kind of parametrization will have to account for the difference between general and residual V2-languages. Thus, Rizzi's wh-criterion could be 'trivially' satisfied in general V2 languages.

(i) Overt syntactic movement only occurs if PF-visible ("strong") morphological features have to be checked.
(ii) Checking occurs in specifier-head configurations.
(iii) Checking the features of a specifier requires lexicalization/accessibility[10] of the respective functional head.
(iv) Specifier>head>complement is the invariable order of all projections.[11]

2.2 Economy and Asymmetry

Let us now have a closer look at Zwart's (1993) V2-theory. The following structure is assumed to underlie both general and residual V2-languages.[12]

(1) $[_{WhP}$ Wh° $[_{TopP}$ Top° $[_{AgrSP}$ AgrS° $[_{TP}$ T° $[_{AgrOP}$ AgrO° $[_{PredP}$ Pred° $[_{VP}$ XP $[_{V'}$ V° YP]]]]]]]]

[N]-features in AgrS° are strong. Therefore, the subject has to move to AgrSP-spec overtly.[13]

At the same time, [V]-features in AgrS° are weak. Because of PROCRASTINATE the verb has to remain in situ. Crucially, condition (iii)(see 2.1. above) requires that functional heads be accessible for the features of their specifiers to be checkable. The mechanism which renders functional heads accessible is head movement.

(v) α is [+accessible] if (and only if) the [V]-features of α have been removed. (Zwart 1993, p.282)[14]

[10] "Lexicalization" is an earlier and less technical version (Zwart 1992a) of "accessibility" (Zwart 1993)
[11] No adjunction to X' is allowed, of course.
[12] We will occasionally use the terminology of Zwart (1992a) if technical detail isn't called for. Wh/Top(P) will be referred to as C(P) as long as further differentiation is not required. For Pred(P) see 3.2.
[13] The Chomskian solution is somewhat more complicated. (1992, p.10f., p. 44) AgrS° and AgrO° are meant to have an identical [strong/weak] specification. In languages like English, which lack object-shift, [N]-features should be weak. Nevertheless, English subjects raise overtly to AgrSP-Spec, but only after T°- to-AgrS° has formed the complex [AGR T]. The same should apply to the Mainland Scandinavian languages.
[14] The "and only if" part applies to V2-languages.

Given (v), one might expect V°-to-AgrS° to be obligatory because of its capacity to eliminate the [V]-features of AgrS°.[15]

Indeed V°-to-AgrS° is what we find in subject-initial V2-clauses.

(2) $[_{AgrSP}$ Luise $[_{AgrS°}$ hat$_i$] gestern ein Haus gekauft t_i]
Luise has yesterday a house bought
"Luise bought a house yesterday"

The C° projection, lacking operator-features, is inert (radically empty) or missing. Moving the subject and the verb into the C°-system could not serve any obvious purpose. This entirely redundant operation is therefore ruled out by economy-principles. A welcome result. The V2 effect arises without any V2 property having to be attributed to C .[16]

Mainland Scandinavian complementizer-initial clauses, however, generally do not seem to allow verb movement to the highest inflectional head.[17] (Neither do their Dutch and German counterparts under structure (1), which is meant to cover SOV languages too. We will come back to this.) Crucially, Zwart assumes that the Germanic V2-languages displaying a "root/embedded"-asymmetry w.r.t. the position of V° possess an AgrS°-to-C° mechanism. This, then, is a second way to fulfill the accessibility requirement (v). AgrS°-to-C° *removes* the [V]-features from AgrS° and thereby allows the subject to check its [N]-features.

(3) ...$[_{CP}$ daß-AgrS°$_i$ $[_{AgrSP}$ Luise t_i ein Haus gekauft hat]]
that Luise a house bought has

AgrS°-to-C° seems even to be the more economical derivation causing (4) to be ruled out as a violation of PROCRASTINATE.

(4) * ...$[_{CP}$ daß $[_{AgrSP}$ Luise $[_{AgrS°}$ hat$_i$] ein Haus gekauft t_i]]

[15] PROCRASTINATE does not prevent this kind of movement if no other more economical derivation is available (=last resort). GREED on the other hand limits "early altruistic" movement to environments where the verb sooner or later would have to check its own features anyway. (cf. Wilder & Ćavar 1993)
[16] Zwart (1993, p.182f, p.195fn8); see 2.4. below.
[17] I.e. a head bearing L-features; cf. Chomsky(1992)

Operator-initial V2-clauses (5)-(7), finally, possess a strong [topic]- or [WH]-feature in C°. C° therefore functions as a target for AgrS°-to-C° movement, which - being the cheapest option - has to apply.

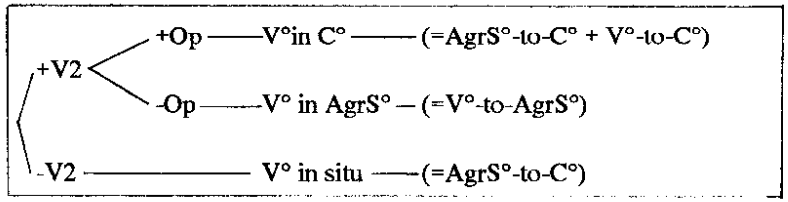
(5) $[_{CP}$ Ein Haus $[_{C°}$ hat$_i$-AgrS°$_j]$ $[_{AgrSP}$ Luise t$_j$ gestern gekauft t$_i]]$

(6) $[_{CP}$ Gestern $[_{C°}$ hat$_i$-AgrS°$_j]$ $[_{AGRSP}$ Luise t$_j$ ein Haus gekauft t$_i]]$

(7) $[_{CP}$Was $[_{C°}$ hat$_i$-AgrS°$_j]$ $[_{AgrSP}$ Luise t$_j$ gestern gekauft t$_i]]$
What has Luise yesterday lought
"What did Luise buy yesterday?"

Obviously, the question arises as to why direct, i.e. non-successive-cyclic, V°-to-C° has to take place in addition to AgrS°-to-C°. Again, the answer crucially relies on (v). The [V]-features, being removed from AgrS°, end up in C° where they cause the [+accessible] specification of C° to turn into [-accessible]. Thus, the operator-feature can't be checked and last-resort V°-to-C° has to occur in order to eliminate the [V]-feature in C°. As a result, C° becomes [+accessible] again and operator-features will be checkable.

At first sight, therefore, Zwart (1993) elegantly derives a double verb-movement asymmetry (8) of the Germanic V2-languages (Mainland Scandinavian, Dutch, German) by merely adding the maximally general conditions (iii) and (v) to an otherwise purely minimalist framework.

(8)


2.3 The AgrS°-to-C° mechanism

2.3.1 Minimalism and economy

Since Zwart's V 2 analysis first and foremost capitalizes on its minimalist economy-theoretical assumptions, it is above all on the conceptual level that the analysis has to prove its consistency and feasibility. Given the principles

of derivational and representational economy, surface V2-phenomena have to result from a consistent application of triggers. Additional stipulations should, of course, be kept to a minimum. Let us therefore first look at the way economy-principles are invoked to derive the verb-movement asymmetries.

The position of V° in complementizer-initial embedded (3) and subject-initial V2-clauses (2) seems to follow straightforwardly from the PROCRASTINATE principle. In the former case, AgrS°-to-C° renders V°-to-AgrS° superfluous so that PROCRASTINATE can be obeyed. (Recall that [V]-features in AgrS° are weak)[18] The latter case presupposes that there is no alternative to overt V°-to-AgrS° (cf however 2.3.3.). Consequently, PROCRASTINATE has to be violated in order to eliminate the strong [N]-features of AgrS°.

When it comes to operator-initial V2-clauses (5)-(7), however, more serious questions arise. What exactly forces AgrS° and V° to move to C° independently and how can this be derived from economy-principles?

We have already seen that accessibility of functional heads plays an important role in triggering AgrS°-to-C°. We will further analyze that mechanism in 2.3.2.. From a more intuitive perspective, though, one might wonder how successive-cyclic V°-to-AgrS°-to-C°-movement - option 9B) - can be precluded.[19]

(9) Head movement in operator-initial V2 clauses:
A) AgrS°-to-C° + V°-to-C°
B) * V°-to-AgrS° + [AgrS° V°]-to-C°

Zwart (1993) assumes that what actually counts in measuring the number of derivational steps is *verb-movement steps*. Thus, he concludes that B involves "more verb-movement steps" (1993, p.182).

(vi) Derivational economy counts only verb-movement steps

So B, violating economy of derivation, must be ruled ungrammatical. Since no "shortest steps" requirement exists in Zwart's system V°-to-C° as

---

[18] Similar notions had been implicit in Haider (1984), which provoked Grewendorf (1988) to speak of the "inertia of base-elements".

[19] Empirical arguments in favor of independent AgrS°-to-C° and direct V°-to-C° will be dealt with in 2.4.1. and 3.1.

such cannot be found fault with (c.f. 2.3.3. for discussion). [V]-features having been transported to C° by AgrS°-to-C°, V°-to-C° also obeys GREED.

The remaining doubt, of course, concerns AgrS°-to-C°. How could the derivational algorithm fail to register this movement? A + B should each consist of two steps. This problem is defused by the following (informal) principle:

> **(vii)** "...in choosing the most economical derivation we are not interested in the global number of steps, but in the question whether each step is necessary or superfluous." (ibid.;fn.7)[20]

Since both A and B have as their result the checking of all relevant features ([N]-features of AgrS°/ [V]-features of AgrS°/ operator-features of C°), it can only be the *order* of application that might rule one or the other step superfluous *locally* (This will be further scrutinized in 2.3.2.).

Reviewing the B case, we might also wonder whether [AgrS° V°]-to-C° can be counted as verb-movement in the strict sense. Recall the way Chomsky (1991), taking up an idea of Lasnik & Saito, capitalizes on the fact that movement of [AgrO° V°] across Neg° leaves only an AgrO° trace which subsequently deletes at LF. Similarly, Chomsky (1992) considers movement of [AgrO° V°] - forming a new chain - no longer dependent on the relation of V° to its trace in VP.[21] It is therefore safe to conclude that the derivational algorithm for [AgrS° V°]-to-C° does not affect a V° but an AgrS°, which happens to contain a V°. We end up with one verb-movement step for each A and B respectively. *Global* economy of derivation would consequently be unable to make a choice between A or B.

Things get even trickier when we consider the case of topicalized subjects. This time successive-cyclic V°-to-AgrS°-to-C° is required (Zwart 1993, p.183, fn.8).[22]

---

[20] Interestingly, this informal principle exactly reproduces the characterization of so called "greedy algorithms":
"A ***greedy algorithm*** always makes the choice that looks best at the moment. That is, it makes a locally optimal choice in the hope that this choice will lead to a globally optimal solution." (Corman, Leiserson, & Rivest 1990, p.329)

[21] Thus the computation of domains yields different results for V°,t and $[V^{\circ}\ AgrO^{\circ}],t$. Chomsky (1992), p.26

[22] The reasons for this are empirical and do not concern us here; but cf. 2.4.1.

(10) $[_{CP}$ LUISE$_i$ hat$_j$ $[_{AgrSP}$ t'$_i$ t'$_j$ $[_{TP}$ t$_i$ gestern ein Haus gekauft t$_j$]]]

Such a derivation should, of course, immediately fall prey to economy of derivation. It is unclear what it is that could prevent derivation A from overruling B. The feature make-up being the same as in operator-initial V2-clauses ([N]-features + [V]-features in AgrS°/ operator-features in C°).

We must conclude from this that economy of derivation does not straightforwardly count in favor of Zwart's asymmetry-analysis of V2. First, it does not select the non-successive-cyclic derivation of operator-initial V2-clauses. Secondly, abolishing the "shortest steps" requirement as well as global computation of number of steps (vii), combined with the assumption, that only verb-movement steps have to be counted, must be considered *ad hoc* unless these measures can be shown to be independently motivated. Thirdly, it cannot derive V2 in the desired fashion when it comes to topicalization of subjects.

2.3.2 *Economy, Feature Checking, Rule Order, and the Accessibility of Functional Heads*

In order to be able to analyze the feature- checking mechanism of Zwart (1993) we must introduce the notion of "Generalized Transformations" (GT), which Zwart fully adopts from Chomsky (1992). (Zwart 1993, p.6ff)

GT is a substitution operation which essentially comprises 5 subparts.

(11) Generalized Transformations

(a) target K	/e.g. V°
(b) add Δ	/V° Δ
(c) take K'	/e.g. NP
(d) substitute K' for Δ	/V° NP
(e) form K*	/$[_V$, V° NP]

The output of GT has to conform to X'-theory. K' can be an independent element inserted into K (binary GT), or consist of a subpart of K (singulary GT = move-α).

We can now turn to the exact mechanisms of feature-checking. Features are eliminated as a result of *feature matching*:

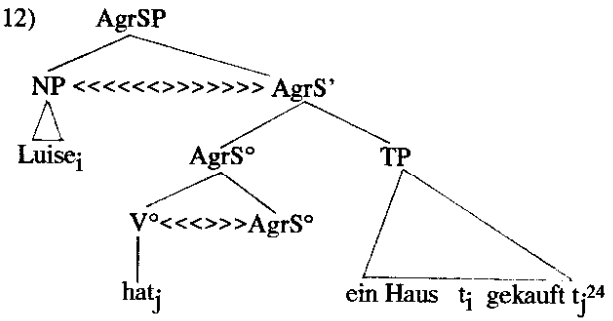
(viii) Feature Matching

Matching features of α and β takes place only if α and β are sisters (Zwart 1993; p.28)

XPs check their features as sisters to an X', heads check their features as sisters to heads.[23]

Thus, in subject-initial V2-clauses the following checking structure arises:

(12)



Recall that to derive V°-to-AgrS° AgrS° was supposed to be [-accessible]. This has the effect that the [N]-features of AgrS° *are not present at the AgrS'-node* (ibid., p.178). The subject can therefore not check its features against AgrS' under sisterhood. Something must happen to make AgrS° [+accessible] for the subject [N]-features to be checkable. In (12), of course, it is V°-to-AgrS° which serves this purpose.

Things get somewhat more complicated when one tries to retrace the microscopic order of an actual derivation. Given principle (i)

(i) Overt syntactic movement only occurs if PF-visible ("strong") morphological features have to be checked.

[23] Zwart (1993) redefines a number of structural relations in order to make X'-projections superfluous, so that his system becomes compatible with Kayne (1993). In the present case a head counts as sister to the head it is adjoined to. For ease of exposition we will stick to traditional terminology and transfer discussion of crucial differences to footnotes. The adoption of Kayne (1993) is not without its problems either, because Zwart (1993) has to allow exceptions to the Linear Correspondence Axiom. A move that certainly is not in the spirit of Kayne (1993).

[24] It is not clear to us whether V° right- or left-adjoins to AgrS°. Only where there is a clitic in the same functional head, V° *must* right-adjoin to the clitic (Zwart 1993, p151ff; see 2.4.1 below).

checking the [N]-features of the subject is a non-trivial undertaking. Assume GT has arrived at stage (13) where AgrS' is projected. (AgrS° is combined with its TP complement.)

(13) $[_{AgrS'}$ AgrS° $[_{TP}$ Luise ein Haus gekauft hat]]][25]

AgrS° being [-accessible] [N]-features are not available at the AgrS' level so that there is no reason for the subject to move to AgrSP-Spec. In fact, this movement would violate GREED.

For complementizer-initial clauses the next step must be to combine AgrS' with C° to form C':

(14) $[_{C'}$ **daß** $[_{AgrS'}$ AgrS° $[_{TP}$ Luise ein Haus gekauft hat]]]

Next AgrS°-to-C° has to occur in order to make AgrS° [+accessible].

(15) $[_{C'}$ daß-**AgrS°$_i$** $[_{AgrS'}$ **t_i** $[_{TP}$ Luise ein Haus gekauft hat]]]

[V]-features have thus been removed from AgrS° ((v)). AgrS° becomes [+accessible] The [N]-features are available at AgrS' and the subject is allowed to move to AgrSP-Spec.

(16) $[_{C'}$ daß-AgrS°$_i$ $[_{\mathbf{AgrSP}}$ **Luise$_j$** $[_{AgrS'}$ t_i $[_{TP}$ **t_j** ein Haus gekauft hat]]]][26]

We are now equipped to find out about how economy principles constrain the derivation of verb-placement. Given that

(vii) "...in choosing the most economical derivation we are not interested in the global number of steps, but in the question whether each step is necessary or superfluous."

It is unclear what notion of *locality* it is that makes the derivational

[25] We ignore the internal structure of TP.

[26] Cf. Appendix I, where it is demonstrated that step (16) should be ruled out by the "Strict Cycle Condition" on GT.

algorithm judge a step necessary or superfluous.

Obviously, stage (13) is not obligatorily followed by V°-to-AgrS°, although this would seem to be the *only* way to remove [V]-features immediately, and thus locally, and additionally have [N]-feature checking proceed. Of course, finite V° could never remain in situ in the V2-languages in question, but would have to appear in the highest I°. (A problem at least for Mainland Scandinavian) Thus, *not* being *global*, the economy measure can't be *strictly local* either.

The derivational algorithm is apparently able to temporarily ignore the necessity of the strong [N]-features to be checked and observe PROCRASTINATE. Next, C° is introduced, which might or might not contain an operator-feature. Step (15) above, however, must be economy-driven again. AgrS°-to-C° removes [V]-features from AgrS° and makes checking of the strong [N]-features possible in a *globally* more economical fashion, that is, outweighing the possibility of "last resort" V°-to-AgrS°, (PROCRASTINATE for V° being observed).

AgrS°-to-C° can be called necessary if GT is able to look ahead one step. A slight reformulation would give something like:

(ix) PROCRASTINATE V°-movement as long as possible

If we look at operator-initial V-2 clauses, however, the "as long as possible" part of (ix) must be constrained again.

Introducing a C° with a strong [+accessible] operator-feature results in another intricate interaction of economy principles.

(17) $[_{C'}\ C^{\circ}_{\mathbf{[+topic]}}\ [_{AgrS'}\ AgrS^{\circ}\ [_{TP}$ Luise ein Haus gekauft hat]]]

We have seen above, (5)-(7), that AgrS°-to-C° transports the [V]-features of AgrS° to C°. Therefore, C° becomes [-accessible] and V°-to-C° is required to make operator-features checkable. V2 in operator-initial clauses follows.

AgrS°-to-C°, being a precondition on the rest of the derivation, seems to be the only possible option. It must be considered necessary in the sense of principle (vii). If, however, the derivation were able to again look ahead one step, principle (ix) could be obeyed and overt verb-movement could be done without completely. Since operator-features in C° are [+accessible] the topic could make the first move and eliminate them.

(18) $[_{CP}$ **ein Haus$_k$** $[_{C'}\ C^{\circ}\ [_{AgrS'}\ AgrS^{\circ}\ [_{TP}$ Luise **t$_k$** gekauft hat]]]]

Next, AgrS°-to-C° removes [V]-features from AgrS°, such that [N]-features become checkable in AgrSP-Spec.

(19) $[_{CP}$ ein Haus$_k$ C°-**AgrS°$_i$** $[_{AgrS'}$ **t$_i$** $[_{TP}$ Luise t$_k$ gekauft hat]]]

The [V]-features arrived at C° are, of course, weak. Neither do they interfere with operator-feature checking any longer, nor do they require pre-Spell-Out V°-movement. Looking ahead twice would save one application of GT (move-α) and observe PROCRASTINATE for V°. V° could remain in situ in operator-initial matrix clauses. Recall that Zwart assumes verb-movement steps to be what determines the cost of a derivation (2.3.1.).

(vi) Derivational economy counts only verb-movement steps

No verb-movement at all would appear to be cheaper than one. Global economy predicts (19) to be grammatical. Obviously, something must be wrong with this kind of economy if verb-movement in operator-initial clauses of Dutch, German, and Mainland Scandinavian should be ruled out. Economy being not strictly local, has to be local enough to rule out step (18). This is done in Zwart (1993) by assuming that

(x) L-related features must be checked before non L-related features (ibid. p.276).

Given (x), AgrS°-to-C° has to occur before the topic moves to CP-Spec, so that the subject [N]-features can be eliminated first. Innocuous as (x) may appear, it introduces an extrinsic rule-order, a notoriously descriptive device (cf. Pollock 1993, p.29, fn.26).

This move, though, seems to be necessary in Zwart's asymmetry-account, which considers an independent AgrS°-to-C° the crucial property of Dutch, German, and Mainland Scandinavian.

It is exactly operator-initial V2-clauses, assumed to exhibit independent AgrS°-to-C° and V°-to-AgrS°, which pose the heaviest problems for an economy-driven derivation. The following quotes from Zwart (1992a) illustrate an earlier struggle with that dilemma.

"Since Agr has moved to Comp, the [V]-features of Agr can be checked in Comp. Therefore there is no need for the verb to move through AgrS°." (p.40, fn.32)

"Given the fact that there are two possible derivations, one involving movement through AgrS° and one involving movement directly to Comp, the latter one is more economical because it takes care of all checking operations in one swoop." (ibid. fn31)

AgrS°-to-C° was driven by a lexicalization requirement in that system. (i.e. association with C° or V°; see principle (iii) above). The dilemma of such a system consists in the fact that

(a) direct V°-to-C° can only occur (i.e. can only be more economical than short movement V°-to-AgrS°/ can only check its [V]-features in C°) if AgrS°-to-C° has already occurred,

and

(b) AgrS°-to-C° is driven by a lexicalization requirement which it can only obey if a lexical element (V° in this case) is already present in C°.

To prevent an algorithm confronted with such a dilemma from breaking down, an extrinsic rule order has to be introduced. In Zwart (1992a) this was left implicit. Zwart (1993) openly resorts to extrinsic rule-ordering through principle (x). This, of course, also means abandoning the pure "greedy algorithm" which seemed to follow from principle (vii).

Returning to the grammatical derivation of (17) (repeated as (20)),

(20) $[_{C'}\ C^{\circ}\mathbf{[+topic]}\ [_{AgrS'}\ AgrS^{\circ}\ [_{TP}$ Luise ein Haus gekauft hat]]]]

we can learn more about the V2-trigger employed. Given principle (x), AgrS°-to-C° will occur and subject [N]-features can be checked in AgrSP-Spec.

(21) $[_{C'}\ C^{\circ}_{[+topic]}\text{-}\mathbf{AgrS^{\circ}_i}\ [_{AgrS'}\ \mathbf{t_i}\ [_{TP}$ Luise ein Haus gekauft hat]]]]

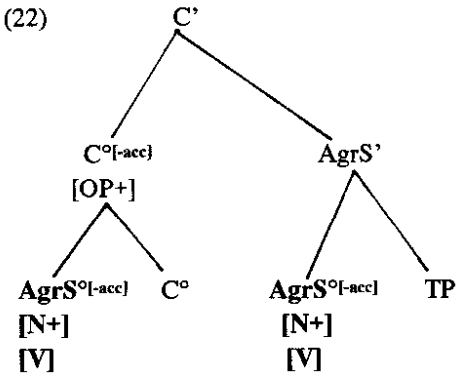
The ingenious assumption that [V]-features occurring in C° make C° [-accessible] indeed provides an elegant V2-trigger.

(v) α is [+accessible] if (and only if) the [V]-features of α have been removed. (1993, p.282)

The operator-features are strong but cannot be checked without [V]-features being removed from C°. This time elimination via verb-movement can't be avoided.

If we look at the structural realization of that idea, however, further questions arise.[27]

(22)



Assuming the "copy-theory" of movement (Chomsky 1992) we might wonder, first, why (a) [V]-features must here be checked in C°, whereas (b) [N]-features continue to be checkable in AgrSP-Spec and, secondly, why (c) [V]-features cause C° to become [-accessible] whereas (d) AgrS°, or, strictly speaking, the copy of AgrS°, becomes [+accessible].

Ad (a): [V]-features must be checked in C° because they cannot be checked in (the copy of) AgrS°. This is guaranteed by the well-known principle (xi).

(xi) No adjunction to traces[28]

Ad (b): [N]-features are checkable in AgrSP-Spec even after AgrS°-to-C° has occured because [N]-features cannot be checked in CP-Spec. This results

---

[27] We adopt the notation of Wilder & Ćavar (1993) marking strong features by attaching + behind the feature e.g. [F+].

[28] Zwart (1993, p.235) This seems (by stipulation?) not to apply to clitics adjoining to movement-traces. (ibid. p.240, fn.34)/cf. Vikner & Schwartz (1992), see also 3.1. below)

from the fact that an XP in CP-Spec will not be in the required sisterhood relationship (cf. principle (viii)) (to a projection of AgrS°, i.e. AgrS').

Ad (c): C° becomes [-accessible] because of the following feature-sharing principle (xii)[29]

(xii) φ is a feature of α if
(i) φ is present on β, and
(ii) α does not exclude β (Zwart 1993, p.282)

C° does not exclude AgrS° in (22). So [V]-features are *present* on C°. Principle (v) then ensures that C° turns into a [-accessible] functional head.

Ad (d): The copy of AgrS° will have to be specified [+accessible] after AgrS°-to-C° movement applies because of principle (xiii):

(xiii) Economy of Representations
Use as few symbols as possible

[V]-features being checkable in C° but uncheckable in the copy of AgrS° don't have to be represented twice. (xiii) will thus cause the superfluous [V]-feature in the copy of AgrS° to be deleted, so that it follows from (v) that (the copy of) AgrS° is [+accessible].

Returning to (b), we could assume that (xiii) also deletes [N]-features of AgrS° in C°. Recall, however, that (xii) was invoked to make C° share the [V]-feature of AgrS°. By (v) the [V]-features of AgrS° must be [V]-features of C° as well for the [+/-accessible]-specification of C° to be affected. Thus, (xiii) seems to force C° to also share the [N]-features of AgrS°. In principle, thus, the subject [N]-features should be able to project to C' and should, therefore in principle be checkable in CP-Spec. The answer to (c) is still incomplete. [N]-features cannot be checked in CP-Spec at the moment where a derivation reaches stage (21), repeated as (23).

(23) $[_{C'}\ C^{\circ}_{[+topic]}\text{-}\mathbf{AgrS^{\circ}_i}\ [_{AgrS'}\ \mathbf{t_i}\ [_{TP}$ Luise ein Haus gekauft hat]]]

If V°-to-C° were to apply next, [V]-features in C° could be eliminated, subject [N]-features would be available in C°, and subject and topic might compete for CP-Spec.

[29] For the sake of simplicity we assume this principle to be restricted to heads in head-adjunction configurations.

(24) $[_{C'}\ C^{\circ}_{[+topic]}\text{-}AgrS^{\circ}_i\text{-}\mathbf{hat_k}\ [_{AgrS'}\ t_i\ [_{TP}$ Luise ein Haus gekauft $\mathbf{t_k}]]]$

Since this is an unwelcome result we must assume that (xiii) applies immediately and deletes [N]-features of AgrS° in C° as well as [V]-features in the copy of AgrS°.

We have dwelled so long on the analysis of (22), in order to bring to the fore the crucial role the [+/-accessible]-property of functional heads plays in the system of Zwart (1993).

Without it, no verb-movement would have to take place before Spell-Out at all, because all XP features could be checked in their own right. Moreover, AgrS°-to-C° would be able to transfer checking of the subject [N]-features to CP-Spec, given principle (xii).[30]

It is therefore to be considered less than optimal[31] that the mechanism predicts embedded WH-constructions to be either impossible in Dutch, German, and Mainland Scandinavian, or to require additional machinery. Consider the derivation of an embedded question at the point where AgrS°-to-C° has just occurred and [N]-features have been checked by the subject in AgrSP-Spec.

(25) $[_{C'}\ C^{\circ}_{[+WH]}\text{-}AgrS^{\circ}_i\ [_{\mathbf{AgrSP}}\ \mathbf{Luise_j}\ [_{AgrS'}\ t_i\ [_{TP}\ \mathbf{t_j}$ was gekauft hat]]]]
Luise what bought has

Given that C° has turned [-accessible], the operator can't move to CP-Spec before [V]-features have been removed from C°. Verb-movement to C°, of course, is notoriously absent from embedded WH-constructions, in a wide variety of languages. See (26) for just one example.

[30] Note, incidentally, that the mechanisms required to allow for checking of the subject's [N]-features in AgrSP-Spec,
(i) AgrS°-to-C° movement and
(ii) deletion of [N]-features in C° and [V]-features in the copy of AgrS°, and the consequence that
(iii) V° has to LF-check its features in AgrS° in C°
do not look more elegant than traditional nominative assignment under government from C° to IP-Spec. Indeed, the unification of case-assignment in specifier-head configurations only, which is one of the advantages of the checking-model over the traditional government-approach, appears to have been lost.

[31] This has been pointed out in Zwart (1993, p.283).

(26) Es fragt sich, [$_{CP}$ was **(*hat)** [$_{IP}$ Luise gekauft ***(hat)**]]
It asks itself what has Luise bought has
"One might wonder, what Luise bought."

No straightforward solution suggests itself at this point, assuming that AgrS°-to-C° movement cannot be given up in Zwart's asymmetry-analysis of V2 (see also 2.4.) and taking into account the important role of the [+/-accessible]-specification just outlined.

A further problem arises, when embedded subject-initial V2-constructions are analyzed. The asymmetry-analysis crucially assumes that subject-initial V2-clauses do not possess any operator-features. The C°-system must therefore be inert or missing. (Zwart 1993, p.290) Thus embedded subject-initial V2-constructions come in two varieties.

The Mainland Scandinavian (and colloquial Dutch/ibid.) version obligatorily requiring an overt complementizer above the V2-clause (27)[32] and the German version, not allowing complementizers immediately above the V2-clause (28). (Recall that Mainland Scandinavian V2 can only be discerned by considering the relative position of V° to sentence adverbials.)

(27) Hon sade ***(att)** [$_{IP}$ August var inte galen] (Sw.)
She said that August was not crazy
(28) Wir glaubten **(*daß)** [$_{IP}$ Luise habe ein Haus gekauft]
We believed Luise has-subj. a house bought

It is especially unclear what it is that prevents AgrS°-to-C° from applying in (27). To say that an inert C° between 'att' and IP on the one hand blocks AgrS° to move across it but on the other hand cannot itself serve as a target for AgrS°-to-C° (enough to block the costly V°-to-AgrS° movement) is counterintuitive. What's more, it is striking that Mainland Scandinavian subject clitics can appear in embedded constructions like (27) although they do not appear there in root-clauses, because of their enclitic nature. (Vikner & Schwartz 1992; p.5)

[32] This has been analyzed as CP-recursion, on the basis, of course, of a traditional V2-account. Vikner (1990, to appear); cf also Authier (1992), Iatridou & Kroch (1992). Christer Platzack (p.c.) considers obligatoriness of complementizers too strong a requirement for Swedish.

(29) * **A** har ikke bodd her (No)
She has not lived here
(30) Vi vet at [**a** har ikke bodd her]
We know that she has not lived here[33]

Zwart (1993) assumes subject clitics to be base-generated as heads in AgrS° and able to move on to C° (p.153f.) - the criterion for adjunction to C° being strict adjacency, which also applies in the Mainland Scandinavian cases. Subject-clitic-to-C° appears, thus, to be structurally equivalent to AgrS°-to-C°. To save the AgrS°-to-C° account of asymmetric V2, one might first have to give up the syntactic cliticization account of reduced subject pronouns. Secondly, one has to resort to some kind of principle that disallows AgrS°-to-C° in just the desired construction (27).[34]

Turning to (28), we are confronted with a slightly more complicated situation. It would be necessary again to know how exactly principle (vii) has to be interpreted.

> **(vii)** "...in choosing the most economical derivation we are not interested in the global number of steps, but in the question whether each step is necessary or superfluous."

In order to save one costly verb-movement step, AgrS° could - exactly as it can wait for a C° to be introduced by GT - look out for a target in the matrix-clause to which to adjoin and thereby remove the [V]-features from the embedded AgrS°. The matrix of (28) itself being a V2-clause the embedded AgrS° could not immediately adjoin to V° because it would cause the matrix AgrS° to become [-accessible] after matrix V°-to-AgrS°, so that overt embedded V° to matrix AgrS° would also be necessary to check matrix [N]-features:

(31) [$_{AgrS'}$ glaubten$_j$-**AgrS°$_i$** [$_{TP}$ wir t_j [$_{AgrSP}$ Luise **t_i** [$_{TP}$ ein Haus gekauft habe]]]]

(31) should be followed by (32).

[33] The results can be replicated for Danish (Vikner & Schwartz 1992) and Swedish (Platzack 1986, p.c.).

[34] Cf. section 2.4.2 for a more detailed discussion of embedded V2-clauses.

(32) [AgrS' glaubten$_j$-AgrS°$_i$-**habe$_k$** [TP wir t_j [AgrSP Luise t_i [TP ein Haus gekauft **t_k**]]]]

If, however, the matrix subject checks its features first, subsequent AgrS°-to-matrix V° (in AgrS°) can do no harm.

(33) [**AgrSP Wir$_i$** [AgrS' glaubten$_j$ [TP **t_i** t_j [AgrS' AgrS° [TP Luise ein Haus gekauft habe]]]]]

(34) [AgrSP Wir$_i$ [AgrS' glaubten$_j$-**AgrS°$_k$** [TP t_i t_j [AgrS' **t_k** [TP Luise ein Haus gekauft habe]]]]]

LF-movement of the embedded V° to its displaced AgrS° should be unproblematic. Alternatively, any other functional head in the matrix would do as a target for the embedded AgrS° as long as hypothetical XP-features of that head are checked before the embedded AgrS° is adjoined. Principle (x)

(x) L-related features must be checked before nonL-related features

does not apply since there are no nonL-related features to be checked in the case in question. Moreover, neither a "shortest steps" condition nor any other type of syntactic barrier constraining minimalist derivations can be invoked to rule out something like (34). (discussion section 2.3.3.) Also, no adequate version of a "strict cycle condition" on GT is left (see above and Appendix) to do likewise.[35] German embedded subject-initial V2 isn't predicted to display V°-to-AgrS° either.

Summing up, we see the following shortcomings built into the feature checking mechanism of Zwart (1993):

A) AgrS°-to-C° as such violates GREED.

B) Independent AgrS°-to-C° and V°-to-C° cannot be considered more economical than successive-cyclic V°-to AgrS°-to-C°.

C) Principles (vii) and (viii) are not only ad hoc but also applied in an arbitrary fashion.

D) Principle (x) constitutes the introduction of an extrinsic (descriptive) rule order

[35] We leave it to the reader to spell out consequences for all the other types of embedded contexts. Problems with (25)/(26) could in fact be circumvented by the proposed extension of AgrS° movement. Additional problems, however, arise with embedded topicalizations and extractions from German embedded clauses that exhibit V°-to-C° movement. See 2.4.2. below.

E) Topicalization of subjects, embedded WH-constructions and embedded subject-initial V2-constructions can no longer be straightforwardly or can not at all be derived.

F) The number of stipulated principles necessary to supplement a less than optimal analysis of V2 contrasts sharply with a traditional system, that basically only uses two rules to derive the same data. Under that perspective, den Besten's treatment of V2 within the transformational framework must be called more economical.[36]

2.3.3 Minimality

The following section deals with the question whether V°-to-C° across the trace of AgrS° in operator-initial V2-clauses (see above 2.3.1.) constitutes a violation of the head movement constraint (HMC).

(35) [CP Ein Haus [C° **hat$_i$**-AgrS°$_j$][AgrSP Luise **t_j** gestern gekauft **t_i**]]
A house has Luise yesterday bought

Chomsky & Lasnik (1993) and Chomsky (1992) suggested that derivational economy could capture all those cases that look like violations of Rizzi's relativized minimality condition. Chomsky & Lasnik (1993; p.58) called this derivational principle "Minimize chain links" (cf. Chomsky, 1992, p.20/p.48). "Minimize chain links" requires derivations to use the *fewest* as well as the *shortest* steps possible. That this seems to put almost contradictory conditions on derivations has been noted and dealt with in Chomsky (1992).[37]

Zwart (1993), however, argues that no "shortest steps" condition is needed in minimalist syntax. Consequently, direct V°-to-C° across the trace of AgrS° as such cannot pose any problem to the asymmetry-analysis of V2.[38]

In fact, he offers four arguments to show that "shortest steps", can be dispensed with. First, one of the constructions apparently most in need of a "shortest steps" condition is superraising, also discussed in Chomsky (1992).

[36] See den Besten (1977/1983) and Wilder (1993).

[37] For the sake of simplicity, we refrain from discussing Chomsky's (1992) "Form Chain" solution to this problem.

[38] Cf. Chomsky (1992), fn.17, where the possibility of moving the [V° AgrO°]-complex successive-cyclically through the trace of T° is mentioned.

(36) * John$_i$ seems [it is likely t_i to win]

Assuming that cyclicity is not an issue here (cf. however Appendix / Chomsky 1992), we should still be able to somehow syntactically rule out moving 'John' across 'it' into the matrix clause.

Zwart's solution without recourse to the "shortest steps" requirement, i.e. without something like the assumption that 'John' could and therefore must check its [N]-features in the embedded AgrSP-Spec, lies in treating the expletive 'it' as a complement to raising verbs and the associated clause as adjoined to it.[39]

(37) [seems [[it] [is likely John to win]]]

In (37) 'it' cannot reach the lower AgrSP-Spec and would not be able to check its [N]-features if (36) were to be derived from (37). Whatever the merits of such an analysis might be, treating the clause associated with 'it' as an adjunct predicts that extraction from that adjunct-clause should exhibit some kind of opacity effect. Extraction however - even adjunct extraction - appears to be fine.

(38) How$_i$ did you say that it seemed [that John was likely to repair his bicycle t_i]

(39) Who$_i$ did you say that it seemed [that John was likely to talk to t_i]

Even simpler constructions like (40)/(41) should constitute an adjunct-island violation, which, however, they don't.

[39] Cf Zwart (1993, p.21). Unfortunately, this crucial argument is hard to evaluate, because no detailed structure is given and bracketing is deficient.

(40) How$_i$ does it seem [that John will repair his bicycle t_i][40]

(41) Who$_i$ does it seem [that John will talk to t_i]

Moreover, there exist constructions which look similar to (36), so called superpassives, but which have to be analyzed differently.[41]

(42) * John$_i$ seems [that [it was told t_i [that [Mary is a genius]]]]

In this case, raising the object 'John' across an intermediate AgrSP-Spec is not affected by any hypothetical adjunction of the sentential complement of 'tell' to 'it'. Still, superraising has to be excluded. The "shortest steps" condition would seem to be a suitable mechanism for this if more traditional tools can no longer be resorted to.[42] Thus, superraising, if anything, provides an argument *for* keeping the "shortest steps" condition on derivations, not against it.

Secondly, violations of the HMC like (43) are considered to be ruled out by feature-checking requirements. (Zwart, 1993, p.19)

(43) * Who kiss$_j$ John will t_i

Moving 'kiss' to C° deprives the auxiliary of its possibility to check its own (tense/finiteness)- features in C°. Therefore the derivation must crash at LF.

However, if we look closely at the V2-theory analyzed in 2.3.1. and 2.3.2. we have to ask what kind of mechanism would be able to rule out violations of the HMC in V2-languages.

[40] Zwart (1993, p.21, fn.26) considers an alternative to (37) which treats '[John is likely to win]' as the "subject of a Small Clause to which *it* is the predicate". This solution has identical shortcomings, since small clause subjects are standardly assumed to constitute islands for extraction as well.
(i) * Who$_i$ did you consider [SC [the uncle of t_i] smart]
Thanks to Joachim Sabel for helping us with these examples.

[41] Lasnik & Saito (1992), p.129; cf. also Rizzi (1990), Cinque (1990). Thanks again to Joachim Sabel for pointing out these constructions to us.

[42] Cf. Chomsky (1992, p.32) and our Appendix for a SCC approach to these constructions, which , again, Zwart (1993) suggests cannot apply.

(44) * Du kaufst$_i$ sagt [daß Luise ein Haus t_i]
You buy says that Luise a house

Let's have a closer look at the structure of (44) before long head-movement occurs.

(45) [$_{AgrS'}$ AgrS° [$_{TP}$ Du sagt [$_{CP}$ daß-AgrS°$_i$ [$_{AgrSP}$ Luise$_j$ [$_{TP}$ t_j ein Haus kaufst]]]]][43]

The matrix AgrS° being [-accessible] V°-to-AgrS° has to occur in order to make [N]-features in AgrSP checkable. Without any "shortest steps" requirement, it is unclear why it could not be the embedded V° that plays this role.

(46) [$_{AgrS'}$ **kaufst$_k$**-AgrS° [$_{TP}$ du sagt [$_{CP}$ daß-AgrS°$_i$[$_{AgrSP}$ Luise$_j$ [$_{TP}$ t_j ein Haus **t_k**]]]]]

However, Zwart (1993) provides a principle that potentially excludes this.

(xiv) "If a lexical head α moves to a functional head β, across an intervening functional head γ, the derivation will not converge if γ contains [V]-features that must be checked by α." (p.181)

On the other hand, it is an open question which features *must* be checked by which heads if locality no longer is an inviolable property of syntax. Suppose that the agreement features of (46) - as indicated - are generated in a way that the matrix ones match with the embedded V° and the embedded ones with the matrix V°. (47) would be ruled out.

(47) * **Du** sagt, daß **Luise** ein Haus kaufst.
You say-3sg, that Luise a house buy-2sg

Of course, (xiv) could mean that [V]-features cannot be moved across at all by verbs. This would seem especially plausible for strong [V]-features given (vii). When it comes to weak [V]-features, (xiv) can't have that strict interpretation since the verb can skip AgrO° (ibid., p.152).[44] The [V]-features

[43] As before, we ignore the internal structure of TP.
[44] Apparently, some functional heads move to V° in C°/AgrS° covertly. See 3.2. below.

of AgrS° being weak, only ad hoc measures could prevent (42).[45] Thus the HMC does not follow from the asymmetry-analysis of V2 as proposed in Zwart (1993).[46]

In sum, we can say that none of the arguments against the "shortest steps" condition on derivations bears up to scrutiny. Long V°-to-C° across the trace of AgrS° (and skipping of AgrO° by V°) do not seem to be allowed in minimalist syntax as it stands. These movements must therefore be shown to be licit on independent grounds in spite of their violating the HMC. The "shortest steps" requirement has to be retained in the absence of good reasons against it.

2.4 XP-Fronting

The central innovation of the asymmetry-analysis of V2 is its treatment of subject-initial V2-clauses as AgrSPs. A general "Constituent Preposing Rule" (den Besten 1977/1983), responsible for XP-fronting to Comp in the V2-languages, apparently has to be rejected. According to Zwart (1993), Wilder & Ćavar (1993), and Wilder (1993), sentence-initial subjects normally lack "topic properties". (cf. Zwart 1992a, p.6; 1992b, p.76 fn.6) They therefore remain in AgrSP-Spec.

On the conceptual level, subject- vs. non-subject (=topic/=operator)-initial V2-clauses cannot be straightforwardly distinguished in the Germanic V2-languages.[47] If one assumes that SOV-languages possess an I°-position to the left of VP, it is the ban on vacuous movement that can be invoked to construct an economy-theoretical argument in favor of an asymmetry-analysis (cf. Wilder 1993). If, on the other hand, one questions that postioning of I°, the decision for or against the asymmetry-analysis has to be made on independent empirical grounds.

[45] The embedded AgrS° will have to move to the matrix V° "sagt" in VP for the embedded [N]-features of the subject to become checkable. Nothing seems to be able to rule this out. In effect, V°-movement of "sagt" could then be wholly dispensed with. Economy of derivation is predicted to consider this preferable (see 2.3.2. above).
[46] The third argument against the necessity of a "shortest steps" condition on derivations is based on a version of SCC on GT (Zwart 1993, p.22f) which is incompatible with Zwart's own modification of the same principle discussed in our Appendix. The fourth argument turns on the assumption that island violations resulting from A-bar movement can be dealt with in an interpretive component of the grammar and therefore cannot give rise to ungrammatical (=crashing) syntactic derivations. See however 2.4.2. below.
[47] Haider (1984), Jacobs (1993)

In the following, we will review the major empirical arguments adduced in favor of the asymmetry-analysis, namely, complementizer-agreement (2.4.1.) and fronted reduced pronouns (2.4.3.). Both these phenomena are found to be inconclusive. Additionally, we have to discuss extraction from embedded V2-constructions, extraction-phenomena being one of the (few?) areas of syntax that permit and justify interesting structural solutions (2.4.2.). Significantly, the asymmetry-analysis as proposed by Zwart (1993) isn't able to deal with this area of syntax in any illuminating way.

2.4.1 Complementizer-Agreement

Complementizer-agreement data are presented by Zwart (1992a-e/1993) as empirical evidence for AgrS°-to-C° movement. This goes back to an idea by Hoekstra & Marácz (1989).[48]

(48) ...[$_{CP}$ dat-**te** [$_{IP}$ wij speul-t]] (East Netherlandic)
that-1plc we play-1plv

The inflection showing up on the complementizer can be elegantly explained if the inflectional element (AgrS°) has to move to C° in overt syntax. Interestingly, there exist dialects like East Netherlandic which exhibit two different kinds of inflection depending on which syntactic position the inflectional element occupies. The morphology for 1st plural present tense indicatives is different in C° (1plc) from 1st plural present tense indicative morphology on the finite verb in situ (1plv) (48).

Significantly, V2-clauses in East Netherlandic show an asymmetry w.r.t the subject- vs. operator-initial variants.

(49) [$_{IP}$ Wij speul-t/*-e]
1plv/1plc

[48] Formerly, complementizer-agreement had been taken as evidence for INFL in COMP. cf. Bayer (1984) and Grewendorf (1988).

(50) [$_{CP}$ Waar speul-e/*-ti [$_{IP}$ wij ti]]
Where play-1plc/1plv we
"Where do we play?"

(51) [$_{CP}$ Vandaag speul-e/*-ti [$_{IP}$ wij ti]]
today play-1plc/1plv we

If we accept Zwart's structural assumptions about SOV-languages, the agreement facts about East Netherlandic can be schematically represented as follows. (A=1plc/B=1plv/ the traditional "V2 outside IP" (Vikner & Schwartz, 1992) analysis is added in parentheses)

(52)		C°		AgrS°	V°	
(a)		A	Subject		B	(=46)
(b)	(Subject	B)	Subject	B		(=47)
(c)	Operator	A	Subject			(=48/49)

Moving the subject and V° into the C-system in subject-initial V2-clauses would obviously blur a distinction that can be made under the asymmetry-analysis. Inflection A can only show up in C° and B shows up elsewhere. Direct V°-to-C° accordingly requires an inflection different from V°-to-AgrS°.

However, if we look at Lower Bavarian (Bayer 1984) a different generalization suggests itself.[49]

(53) ...daß-**ma** mir noch Minga fahr-**n**/*fahr-ma
that-1plA we to Munich drive-1plB/1plA

(54) Mir fahr-**ma**/*-n noch Minga
1plA/ 1plB

(55) Wohi fahr-**ma** /*-n mir
Where drive-1plA/1plB we

(56) Noch Minga fahr-**ma**/*-n mir
1plA/1plB

Schematically, this would look like (57):

[49] Thanks to Günther Grewendorf for drawing our attention to this fact. The examples are slightly adapted from Bayer (1984).

(57)		C°		AgrS°	V°	
(a)		A	Subject		B	(=53)
(b)	(Subject	A)	Subject	A		(=54)
(c)	Operator	A	Subject			(=55/56)

This time the asymmetry-analysis introduces an unnecessary distinction. The generalization that A always occurs in C° (and that B turns up elsewhere) would be lost. We must therefore conclude that complementizer-agreement facts cannot be adduced in favor of the asymmetry-analysis of V2 as long as it is meant to cover the entire range of V2-languages displaying the relevant asymmetry of verbal positions.[50]

Example (61) below seems to be the crucial datum for showing that the Lower Bavarian facts should not be treated as clitic-doubling. Contrast the clear clitic-doubling cases in West Flemish:

(58) Ze komt zie.
she-cl comes she (Haegeman 1992) (West Flemish)

(59) Zie komt.

50 (See 2.2. above) In order to maintain the asymmetry analysis for the Mainland Scandinavian languages, Zwart has to attribute abstract AgrS°-to-C° to these as well. This move, however, cannot be backed up by similar morphological data, agreement morphology being notoriously sparse (if not absent) there. In fact, complementizer agreement seems to be limited to SOV-languages. (cf. Platzack 1992)
Vikner (p.c.) provided the following example from the dialect of Westfalia (attributed to H.T.Tappe) which is meant to show that complementizer-agreement is not reliable enough to draw too far-reaching conclusions from it.
(i)...[CP wenn-st daß [IP du kumm-st]]
when-2sg that you come-2sg
In this dialect the inflection does not even show up on C°, the alleged landing site of AgrS°-to-C°, but somewhere higher up. Zwart (1993) uses the complementizer-agreement facts as a powerful diagnostics for the behavior of V°. This forces him to analyze topicalization of subjects as requiring successive-cyclic V°-to-AgrS°-to-C° movement because there the verb shows inflection B (2.3.1.). We have not been able to verify agreement facts in subject-initial Wh-questions in East Netherlandic. Our guess, though, is that it also shows inflection B. In order not to have to place operators in IP-Spec, the asymmetry-analysis has to resort to uneconomical derivations for such clauses (see section 2.3.1.). The alternative, however, which means treating the agreement facts as mere serialization phenomena, would divest them of their empirical power. The resulting explanatory dilemma is obvious.

(60) * Zie komt ze
(61) * Ma fahrn mir
(62) * Mir fahrn
(63) Mir fahr-**ma** (Lower Bavarian)

We follow Bayer (1984) in considering the Lower Bavarian cases to exemplify inflectional complementizer-agreement. If Platzack (1992) is correct, agreeing complementizers are the result of clitic movement from I°-to-C°. As a consequence, clitic-doubling and complementizer-agreement would be hard to tell apart anyway.

Incidentally, Zwart (1993) could not straightforwardly unify both the West Flemish and the Lower Bavarian cases under clitic-doubling, given the following principles responsible for clitic placement:

a) When a clitic α moves to a functional head β, α adjoins to the right of β.
b) When a verb α moves to a clitic β, α adjoins to the right of β. (Zwart, 1993, p. 151)

Subject-clitics are assumed to be base-generated in AgrS°. (58) is derived by moving the verb to clitic 'ze' in AgrS°, 'zie' occupying a specifier further down. (63) could then be expected to show V°-to-C° movement followed by clitic movement to C°. This is the way operator-initial V2 clauses with subject-clitics have to be derived. e.g. (64)

(64) Gisteren ee'ze zie't gekocht
Yesterday has she-cl she it-cl bought (ibid., p.145)

Of course, this means that (63) has the full subject-pronoun in CP-Spec. The traditional "V2 outside IP" analysis would thus follow for Lower Bavarian, regardless of whether one analyzes Lower Bavarian as displaying complementizer-agreement or clitic-doubling.

2.4.2 Extraction from embedded V2

It has already been pointed out by Vikner & Schwartz (1992) that the strict ungrammaticality of extraction from embedded V2 with a fronted XP ("topic islands") poses unsurmountable problems to the asymmetry-analysis

of Travis. We will now argue that the facts remain a mystery under the analysis of Zwart (1993) too. The most striking contrast to be explained by an asymmetry-analysis of V2 is constituted by (65) and (66) (Holmberg 1986, p.111).

(65) Ryska ubåtar$_i$ sa Hasse [att [han faktiskt är rädd för t$_i$]]
Russian submarines said H. that he actually is afraid of

(66) * Ryska ubåtar$_i$ sa Hasse [att [han är faktiskt rädd för t$_i$]]

(66) as opposed to (65) displays V°-movement in the embedded clause. The asymmetry-analysis would have to assign identical structures to both clauses such that the complement of 'att' is an AgrSP. At first sight, nothing can rule out extraction from (66) if extraction from (65) is fine. However, it has been argued that embedded V2-constructions show some peculiarities which distinguish them from normal embedded clauses.

Crucially, Mainland Scandinavian embedded V2-constructions (obligatorily) require an overt complementizer. Secondly, to account for cases like (67) CP-recursion has been postulated. (Vikner 1990/ to appear; Authier 1992; Iatridou & Kroch 1992)

(67) Selma sade [$_{CP}$ att [$_{CP}$ denna bok$_i$ hade [$_{AgrSP}$ August inte
Selma said that this book had August not
skrivit t$_i$]]]
written

(68) * Varför$_j$ sade Selma [$_{CP}$ att [$_{CP}$ denna bok$_i$ hade [$_{AgrSP}$ August
Why said Selma that this book had August
inte skrivit t$_i$ t$_j$]]]
not written

CP-recursion was assumed to occur only when the upper C° is radically featureless. (Iatridou & Kroch 1992). Zwart (1993) considers the lack of complementizer-agreement and the absence of subject-clitics in such constructions to confirm this.[51] No AgrS°-to-C° is possible in this case and V°-to-AgrS° or C° has to ensue in (66) and (67) respectively. It can therefore be argued, that the featureless C° disallows intermediate traces to occupy its specifier, given that intermediate traces can only be inserted where there is an

[51] As for the latter assumption, we have already pointed out that it seems to be false (2.3.2. above). For the sake of argument we will disregard this here.

operator-feature to be checked.

What is puzzling about the asymmetry-analysis of Zwart (1993),however, is the fact, that extraction phenomena are no longer to be treated in the syntax proper. Instead, island violations are said to give rise to more or less "felicitous interpretation" depending on whether or not antecedents can be linked to their extractions sites (ibid. p.276f).

However, so called "topic islands" like (66)/(68) tend to be very strict. No argument-adjunct contrasts seem to arise. Extraction of topics is blocked alongside Wh-extraction[52]. This suggests that some kind of a strong syntactic constraint is involved.[53]

Even if a purely interpretive account is envisaged, this account has to have recourse to explanatory principles that unambiguously sort out the facts. Attributing the deviant status of (66)/(68) to the absence of intermediate traces implies that intermediate traces do in principle have to be inserted. This, however, cannot straightforwardly be stated in morpho-syntactic terms if such traces are needed for (post-)LF- operations only. In fact, the *syntactic* principle (xiii)

(xiii) Economy of Representations
Use as few symbols as possible

which has been invoked above (2.3.2.) should disallow intermediate traces for the following reasons. First, there being no shortest steps requirement movement can (and must!) reach its target position directly. Second, there are derivations that must be able to work without intermediate traces giving rise to "mild" deviance only. This strongly suggests that intermediate traces as such cannot be obligatory.

(69) Which car did John tell you [how to fix t] (Chomsky, 1986, p.37)

It is against the spirit of minimalism to suppose that interpretive requirements could interfere with syntactic derivations.

[52] The fact that topic-extraction from WH-islands is better than WH-extraction from the same structures made Müller & Sternefeld (1991), (1993) introduce the split-COMP-analysis. Their analysis differs in crucial details from Zwart (1993). For the present argument, the split-COMP-analysis can be ignored.

[53] See Müller & Sternefeld (1991) and (1993) for a detailed account of these non-trivial facts.

> "Derivations are driven by the narrow mechanical requirement of feature-checking only, not by a "search for intelligibility" or the like". (Chomsky, 1992, p.47/cf. also p.38)

This would indeed count as another strong argument against abolishing the "shortest steps" requirement (cf. above 2.3.3. and fn43), although the feature composition of intermediate A-bar specifier positions would still have to be addressed.[54]

Zwart (1993) also mentions the notion of "barriers" as a potential instrument in dealing with extraction phenomena at the appropriate level of grammar. Adjuncts apart, however, the only kind of barrier left in his theory is the one defined by Chomsky & Lasnik (1993).

(xv) Only nonL-related heads turn their sisters into barriers (Zwart 1993, p.280)[55]

The complementizer 'att' of (66)/(68) disallowing AgrS°-to-C° to occur should indeed turn its sister, AgrSP and CP respectively, into a barrier. The degraded status of extractions could thus somehow be derived.

Unfortunately, facts are even more complicated. German embedded V2-constructions crucially ban complementizers.

(70) Wir glaubten **(*daß)**[Luise habe ein Haus gekauft]
(71) Wir glaubten **(*daß)**[ein Haus habe Luise gekauft]

To explain the strict opacity of (70)/(71), a covert featureless complementizer would have to be resorted to.

[54] That certain island-violations cannot be ruled out by a "shortest steps" condition must also be envisaged. Inner islands seem to be a case in point:
(i) It is in this way that I (*don't) think that John fixed the car

[55] The exact formulation has to refer to "heads without L-features" because Chomsky & Lasnik (1993, p.58) explicitly and unconditionally state that (all) " heads and adjuncts are non-L-related." Chomsky (1992) slightly modifies this: "Heads are not narrowly L-related." (p.65, fn.34). This modification is necessary because a head X adjoined to another head Y is in the checking domain of Y. Being adjoined, it presumably is "broadly L-related" like adjuncts. Crucially, heads in their base-positions cannot be straightforwardly captured in that system as long as L-relatedness is defined relative to just heads and their minimal domains. C° has no L-features as long as V° or I° hasn't moved to C° (cf. Chomsky 1992, p.65, fn.33).

(72) * Was$_i$ glaubten wir [CP ∅ [AgrSP Luise habe t_i gekauft]]
(73) * Wann$_i$ glaubten wir [CP ∅ [CP ein Haus habe [AgrSP Luise t_i gekauft]]]

It would then be predicted that extraction from embedded V2 in German is ruled out in general. This is, however, not the case.

(74) Ein Haus$_i$ glaubten wir [$_{CP}$ ∅ [$_{CP}$ t'$_i$ habe [$_{AgrSP}$ Luise t_i gekauft]]]

It would be arbitrary to suppose that ∅ doesn't have its blocking capacity in (74) or that it doesn't even appear there although it has to appear in (72)/(73). The hypothetical covert featureless complementizer, which induces a barrier, seems therefore to be unable to deal with the German facts.[56]

What's more, there is good reason to suppose that the barrier type (xv) creates more problems than it solves in the asymmetry-analysis. If we have a closer look at the CP region on Zwart's split-COMP analysis, even straightforward short Wh-movement should lead to some kind of degraded structures. (Zwart,1993, p.265; bracketing added)

(75) Ik vraag [$_{WhP}$ wat$_i$ **of** [$_{TopP}$ **dat** [$_{AgrSP}$ Jan gedaan t_i heeft]]]
I ask what if that Jan done has
"I'm asking what John did"

AgrS°-to-C° movement having to go no further than Top°, Wh° 'of' will remain "nonL-related" and TopP, the sister of 'of' should constitute a barrier, and (75) should be ruled out on a par with (66).

Finally, a contradiction arises when it comes to the analysis of movement from raising infinitives. (ibid., p.280)

(76) Jan$_i$ schijnt [t_i intelligent te zijn]
Jan seems intelligent to be

The embedded infinitival in (76) is said to lack a CP-level, which is the reason why it does not contain a barrier (there is no nonL-related head) and thus is transparent. The same reasoning should, of course, apply to German

[56] The same is true of a WhP-shell, which in principle is available in Zwart's split-COMP analysis. It cannot deal with both (72)/(73) and (74) at the same time.

subject-initial embedded V2 clauses.

(77) * Was$_i$ glaubst du [$_{AgrSP}$ Luise habe t_i gekauft] [57]

These are assumed not to be "expanded beyond the AgrSP level". (ibid., p.290). The opacity of this kind of AgrSP therefore remains a mystery under the asymmetry-analysis.

In sum, extraction from embedded V2 cannot be derived from the asymmetry-analysis of Zwart (1993). Moreover, closer inspection of extraction data again casts serious doubt on the ban on the "shortest steps" condition on syntactic derivations as well as on the interpretive approach to extraction phenomena, which has recourse only to barrier-type (xv). Pending convincing proposals to the contrary, we have to consider "traditional" treatments[58] of extraction from "topic islands" to be adequate. These treatments, however, crucially assume that subjects occupy the same position as topicalized non-subjects in (embedded) V2-clauses, namely, a specifier outside IP.

2.4.3 Fronting reduced pronouns

One of the major advantages of an asymmetry-analysis of V2, it seems, is that it captures the following contrast.

(78) K'zie hem
I see him

[57] As it stands, Zwart's theory makes correct predictions for Zurich German, which shows exactly the asymmetry one might naively expect when it comes to extractions out of embedded V2-complements. Thus, only non-subjects (i) as opposed to subjects (ii) create a topic-island. (bracketing has been adapted to the argument in the text.)
(i)*I dem Kino$_i$ meinsch [$_{CP}$ de Film$_j$ well [$_{AgrSP}$ si t_i t_j go luege]]
In that cinema think (you) the film wants she go watch
"In that cinema you think that the film she wants to go and watch."
(ii) I dem Kino$_i$ meinsch [$_{AgrSP}$ si well t_i de Film go luege]
Of course, other extraction phenomena might complicate the picture again. For a thorough treatment of Zurich German see Cooper (forthcoming).

[58] Cf. Vikner & Schwartz (1992) and Müller & Sternefeld (1990), (1993) among many others.

(79) * m' zie ik (Zwart, 1992a)
him see I

(80) Ze zullen'r toch niet laten vallen
They shall her yet not let fall

(81) * Ze zullen wij toch niet laten vallen
her(obj.) shall we yet not let fall[59]

(82) Es hat den Kohl gefressen.
It has the cabbage eaten.
"Something ate the cabbage."

(83) * Es hat der Wolf gefressen.
It has the wolf eaten.
"The wolf ate it." (cf. Haider 1984;Vikner & Schwartz 1992; p.3, Wilder 1993, p.27[60]; Zwart 1993, p.235)

Reduced or unstressed object pronouns seem to be prohibited in clause-initial position, whereas reduced or unstressed subject pronouns are allowed there. The ready-made explanation for this asymmetry would be to state that objects, by and large, need to be stressed in order to be able to undergo topicalization. Adjuncts and (nominative) subjects, on the other hand, do not require this (Haider 1984).

Adherents of an asymmetry-analysis, however, claim that it is a structural asymmetry that is at stake here. Topicalization is movement to CP-Spec - an operator position - and it requires topics to bear stress. Subjects, on the other hand, need move no further than IP-Spec in order to be fronted in V2-clauses. Crucially, they do not have to be *topicalized* and thus do not require any particular stress.

Obviously, this account is still inadequate, given that clause-initial adjuncts would be ignored completely. Secondly, it can be shown, that even topicalized objects - pronominal or other - do not obligatorily carry stress. (e.g. Lenerz 1993)

[59] Weerman (1988, p.62). The choice of "ze" is meant to show that purely phonological rules cannot straightforwardly account for the difference. The German counterparts to examples (78)-(81) are considered ungrammatical in Standard German, but you will find them in many German dialects. Significantly, the same contrasts arise.

[60] Wilder (1993) uses the same arguments as the asymmetry-analyses in order to differentiate subject- and operator-initial V2-clauses. His analysis cannot, however, be called an asymmetry-analysis in the strict sense because he treats subject-initial V2-clauses as hybrid IP/CP-categories. He can therefore avoid a number of problems arising for a pure asymmetry-analysis and resort to quite a few of the traditional V2 mechanisms.

It is therefore advisable not to formulate the constraint responsible for the subject-object asymmetry in (78)-(83) with reference to the topic position itself, but to have a closer look at the fronted elements.

Turning to (78)-(83) first, it may be noted that Dutch 'k'',''m', and 'ze' have often been called clitics. Thus, their status depends on a theory of cliticization - syntactic or phonological. Interestingly, Zwart (1993) proposes to treat Dutch clitics as syntactic X°-categories, so that they can no longer be considered relevant to the question as to what the properties of elements in the specifiers of IP or CP are.

For this reason, the burden of proof rests on examples (82)/(83). The pronoun 'es' (Dutch 'het') can be analyzed as an inherently unstressed element, which makes it possible to propose the following principle.

(xvi) Inherently unstressed elements cannot be topicalized

This seems to be the only way an asymmetry-analysis can be maintained. Subject 'es' in (82), being inherently unstressed, has moved to IP-Spec, a non-topic (non-operator) position. Object 'es' in (83) has to be topicalized (to CP-Spec) in order to reach the clause-initial position. This, however, is ruled out by (xvi).

The way (xvi) has to be formulated, i.e. relative to the elements to be fronted *not* relative to the fronting position, it seems that it can best be implemented in the lexicon. Inherently unstressed elements must be incompatible with the [+topic]-feature. They will, therefore, be unable to be inserted into syntactic structures as topics. Consequently, no such thing as (83) can arise. The stressable counterpart of 'es', 'das', can be assigned [+topic] and will be able to appear in CP-Spec.

(84) Das hat der Wolf gefressen.
That has the wolf eaten.

Note, however, that new problems arise with this version of a subject-"topic" asymmetry. Inadequate predictions are made for German indefinite WH-pronouns. Consider (85)/(86).

(85) Für dich hat wer angerufen.
For you has who called.
"Somebody has called for you."

(86) * Wer hat für dich angerufen.
Who has for you called
"Somebody has called for you."

In (86), the WH-element cannot have the same reading as in (85), although the asymmetry-analysis allows 'wer' to occupy the same position in (85) and (86), namely IP-Spec, a non-topic, non-operator position, requiring neither stress nor operator properties of clause-initial subjects. (86) could, of course, be interpreted as a direct question. In this case, however, 'wer' is an operator and bears stress. The lexicon, it seems, has to treat both types of WH-elements separately. The indefinite pronouns have to be inherently unstressed.[61] It is thus surprising, that their nominative forms do not pattern with nominative 'es', given that they should be able to reach IP-Spec for the

---

61 The German pronoun 'einer' ("one") allows a somewhat more subtle version of the same argument. In its obligatorily unstressed variant, which only occurs in the accusative or dative case, this pronoun can mean generic "one" ("you"/"people"). In its stressable version it means "someone" or "a certain". Interestingly, 'einer' seems to obey principle (xv). Whenever 'einer' occupies CP-Spec, it has to have the latter interpretation.

(i) Einen$_i$ kennen sie nicht t$_i$
a certain person-ACC/*one know they not
"There is a certain person they don't know"
(not: They don't know you")

(ii) Einem$_i$ helfen sie nicht t$_i$
a certain person-DAT/*one help they not
"There is a certain person they don't help"
(not: They don't help you")

For 'einer' in situ, both interpretations are possible.

(iii) Sie kennen einen nicht.
(can mean: "They don't know you")

(iv) Sie helfen einem nicht.
(can mean: "They don't help you")

If, however, - as suggested in the text - the inherently unstressed variant of 'einer' cannot be assigned the [+topic]-feature, it is again surprising, that there are cases, where it can occur in topicalized position under the required interpretation:

(v) Einem wird hier alles geklaut.
One-DAT is here everything stolen
"Everything is stolen from you here."

sole purpose of [N]-feature checking, not requiring any operator-features.[62]

Indeed, it seems to be the morphological structure rather than semantic properties like indefiniteness that rule out (86). Compare (87)/(88):

(87) Für dich hat irgendwer/jemand angerufen.
(=somebody)

(88) Irgendwer/Jemand hat für dich angerufen.

Intuitively, it is clear that an asymmetry which, first of all, is based on a single lexical item, and which, secondly, has to be treated in the lexicon anyway - principle (xvi) translating into a constraint on feature-assignment - cannot motivate a general structural IP/CP-asymmetry of subject vs. operator-initial V2-clauses. If, additionally, even the lexical treatment is insufficient - as we argue is the case for (85)/(86) - and, if - as has been pointed out by Vikner & Schwartz (1992, p.11) - the paradigm case of an asymmetrical V2-clause, (82)+(89), gives rise to the "topic island" problem discussed in section 2.4.2.,

---

(fn 61 cont.) One could consider treating (78)-(81) under principle (xv) instead of attributing X°-clitic status to reduced pronouns in German. In that case, however, the fronted reduced object pronouns of (vi)/(vii) would have to be claimed not to constitute inherently unstressed elements. A rather arbitrary move.

(vi) t' hebben we'm gisteren nog verteld
that-cl have we him-cl yesterday still told (Weerman 1988, p.62)

(vii) s'/ds' hab isch net gewußt (Hessian)
that-cl have I not known
"I didn't know that"

62 Indefinite WH-pronouns have recently been discussed by Haider (1993) and Rosengren (1993).
It might be claimed that German indefinite WH-pronouns are not able to leave their base-position within VP at all. Consequently, (86) would be ruled out in principle. This move, however, is not available to an approach like Zwart (1993) that assumes objects in Dutch and German to originate to the right of V°. Structures like (i) have then to be derived by moving the object into its checking-position, AgrOP-Spec.

(i) weil Hans selten [was$_i$ von ihm leiht t$_i$]
because Hans seldom something from him borrows
"because Hans seldom borrows anything from him"

Non-adjacency between V° and the accusative is adduced in favor of a movement-analysis for object-placement in Dutch and German. If, however, the object 'was' can reach AgrOP-Spec, there is no reason to suppose that subject 'wer' in (85)/(86) cannot reach AgrSP-Spec. The argument against the asymmetry-analysis is thus fully valid.

(89) * Was$_i$ glaubst du [$_{IP}$ es hat t$_i$ gefressen]
What think you it(subj.) has eaten

the optimal assumption is, that subject-initial V2-clauses are treated as CPs (in V2-languages), i.e., V° occupies C° and the subject - pronominal or other - finds itself in CP-Spec.

Summing up, we have argued in section 2.4. that there is no reason to mistrust a general "Constituent Preposing Rule" (den Besten 1976/1983) for the V2-languages. Indeed, the difference between subject- vs. operator-initial V2-clauses has been found to be insufficiently motivated. Complementizer-agreement and fronted reduced or unstressed pronouns cannot be considered to support the asymmetry-analysis. Extraction from embedded V2-clauses must count as evidence against the asymmetry approach.

If this is correct, the central argument for an asymmetry-analysis of V2 which implies the IP-status of subject-initial V2-clauses can no longer be maintained.

2.5 Conclusion

Section 2 has been devoted to showing that an economy-theoretical derivation of the V2-phenomenon under the assumptions of Zwart (1993) leads to substantial inconsistencies. Consequently, the asymmetry-analysis as it stands must be rejected.

In particular, we have argued that the asymmetry-analysis applies economy-principles in an ad hoc way. The V2-trigger, on the one hand, does not even suffice to derive all the verb placements, while, on the other hand, it is not restrictive enough to rule out overgeneration. Crucially, we have argued against the abolishment of the "shortest steps" condition on syntactic derivations. Furthermore, we have pointed out problems that arise from the adoption of the "strict cycle condition" on "generalized transformations".

Finally, we have argued that a subject- vs. operator distinction does not warrant an IP/CP-asymmetry for the analysis of Germanic V2-clauses.

3 An SVO-Analysis of SOV-Languages

Up to now, we have argued that the asymmetry-analysis of V2 does not constitute an adequate alternative to the traditional V2 outside IP approach. It has been shown to lack motivation and consistency on the conceptual as well as on the empirical level.

Still, one objection against the traditional theories remains potentially valid, namely, that the subject in subject-initial V2 seems to require "vacuous movement" to CP-Spec, at least in SVO-languages like Mainland Scandinavian.[63]

Of course, trying to found an asymmetry-analysis on this theoretical point obliges an adherent to independently defend an I°-position to the left of VP for the SOV-languages. Zwart (1993) considers the success of his V2-analysis as an argument in favor of universally head-initial projections, and, thus in favor of an initial I°-position in particular (ibid. p.292). As must be obvious from the argument sofar, we sharply disagree on this point.

However, arguments for an I°-position to the right of VP in SOV-languages are not unproblematic either (cf. Haider 1993). An independent discussion of this issue is therefore still relevant. Kayne (1993) proposed a highly formal derivation of universally head-initial projections. At this stage, this proposal is very difficult to evaluate in any depth.[64] This leaves the possibility that empirical arguments are advanced in favor of I° to the left of VP in SOV-languages. Indeed, Zwart (1992a, 1993) considers object-clitics in Dutch to be a case in point.

In the following we will first challenge exactly this argument based on Dutch weak object pronouns (3.1.). Next, we adduce a number of word order phenomena from German that seem to resist a minimalist SVO-treatment (section 3.2.). Finally, we are going to call attention to German "do-insertion", which, as we suggest, makes it possible to motivate an I°-position to the right of VP, especially from the point of view of minimalism (3.3.).

---

63 Wilder (1993). See also den Besten (1977/1983) who had already noted this problem.

64 But cf. Sternefeld (1994). It is easy to see that Kayne's ban on SOV-structures does not immediately follow from his LCA. Otherwise, of course, numerous empirical issues remain unresolved. Zwart (1993) cannot be called an application of Kayne (1993) in the strict sense, because definitions have to be altered and exceptions - e.g. right adjunction of clitics - have to be admitted.

3.1 Head Movement and the Status of Object- Clitics

Zwart (1992a, 1992e, 1993) uses Dutch object- clitics situated between the subject and VP in complementizer-initial clauses as an unfailing indicator of at least one I°-position to the left of VP. If these object-clitics have to be analyzed as X°-categories which have to syntactically cliticize to functional heads, the existence of such an I°-position follows directly. It has, however, already been pointed out by Vikner & Schwartz (1992) that interaction of the alleged clitic heads with V°-movement is problematic. Contrary to their Romance counterparts the Dutch clitics do not move along with the verb to C°,e.g. in yes/no questions.

(90) [$_{IP}$ Je [$_{I°}$ heb-t] gezien]
You have it seen

(91) [$_{CP}$ [$_{C°}$ heb][$_{IP}$ je't gezien]]

(92) * [$_{CP}$ [$_{C°}$ heb-t][$_{IP}$ je gezien]]

Although the grammaticality of (91) at first sight follows from the fact that the verb skips I° and moves to C° directly, it has of course to be taken into account that AgrS° moves to C°. It is assumed that clitics adjacent to the subject must be adjoined to AgrS°. They must, therefore, violate principle (x),

(x) No adjunction to traces

which according to Zwart (1993, p.240, fn.34) they are entitled to do. In terms of the X°-status of these clitics, of course, nothing much has been gained, since one of the crucial criteria, i.e., interaction with verb-movement has to be put aside by stipulation. Since violations of the HMC have to be questioned as well (see 2.3.3. above) doubts arise w.r.t. the assumptions on object-clitics in Dutch.

Let us turn, therefore, to the fundamental intuition behind the assumption that object-clitics should be treated as X°-categories in the first place. Indeed, the issue

> "...should be decided on the basis of word order phenomena. The crucial test must demonstrate that the weak pronouns occupy positions that cannot be occupied by noun phrases." (Zwart 1993, p.123)

Close scrutiny of the facts reveals that the only clear case of a position apparently available to Dutch object-clitics while at the same time unavailable to full NPs is to the left of ECM-subjects.

(93) ...dat Piet 'r Jan heeft zien kussen
that Pete her John has see kiss
"...that Pete saw John kiss her"

(94) * ...dat Piet **Marie** Jan heeft zien kussen (ibid. p.124)

Unfortunately, structures like (94) are said to be grammatical under a special intonational pattern, arising from a phenomenon somewhat provisionally called "focus scrambling" (ibid. p.53. fn.31). Similar data have recently been adduced by Lenerz (1993) for German.

(95) ...wenn du **das Buch** eine Kundin lesen siehst, die dir verdächtig if
if you the book a female customer read see, who to you suspicious
vorkommt, dann...
appear, then...
"...if you observe a customer who appears suspicious to you
reading that book, then..." (Lenerz 1993, p.142)

We have to conclude, therefore, that weak object-pronouns and full NPs show the same distribution in Dutch. No argument in favor of the clitic status of these object pronouns follows. Calling the grammatical version of (94) "focus scrambling" blurs an important issue. No doubt, full NPs and weak pronouns obey divergent intonational constraints. But intonation must be disregarded as long as identical syntactic positions are available in principle. Otherwise, the word order criterion is open to highly arbitrary interpretations.

Summing up, Dutch weak object pronouns do not provide evidence for an I°-position to the left of VP.[65]

[65] The particular treatment of clitic-placement forces Zwart (1993) to resort to the mechanism of rule ordering. (ibid, p.155) We have already pointed out (section 2.3.2 and Appendix) that we consider this strategy to be descriptive. This point further discredits the emipirical status of object clitics in motivating an I°-position in Dutch.

3.2 SOV equals SVO

The idea of deriving SOV-languages from underlying SVO-patterns indirectly goes back to Kayne, who conjectured that syntactic movement is invariably leftward. It follows from this that functional projections exhibit a universal order. Specifiers precede their heads and heads precede their complements. Zwart (1992d, 1993) applies this unifying principle to lexical projections (see structure (1) above). A further radical restriction follows from the fact that Chomsky's minimalist program in its strictest version does not allow for optional movements. One of the most interesting aspects of Zwart's analysis is to unify Chomsky's and Kayne's approach.

3.2.1 Short Verb-Movement to Pred°

An immediate advantage of an SVO analysis of SOV-languages is the treatment of NP- vs. CP-complements of the verb. Given that direct objects do not have to be adjacent to their verbs, (96)/(97), it is concluded that direct objects have to leave their base position to the right of the verb and obligatorily move to AgrOP-Spec,[66] where they have to check strong [N]-features.

(96) dat Jan Marie gisteren kuste
that Jan Mary yesterday kissed

(97) dat Jan gisteren Marie kuste (Zwart, 1992d)

The adverb is able to adjoin to VP (96) or to AgrOP (97). In addition, CP-complements of the verb do no longer have to be extraposed in Dutch and German. It follows immediately that their "unmarked" position is to the right

[66] Chomsky (1992, p.26), basing his theory on Vikner (1990), assumes that objects can only move to AgrOP-Spec before Spell Out if the verb itself has moved to AgrO° overtly. Zwart (1993) has to deny such an interdependence. Given (v)
(v) α is [+accessible] if (and only if) the V-features of α have been removed
we have to assume that AgrO° itself has to leave its base-position in analogy with AgrS° at least in complementizer-initial embedded clauses.

of V°.[67] Dutch CPs apparently do not have to check [N]-features and can, therefore, remain in situ.

Note, however, that at least in German CP-complements can leave their alleged base-position and "optionally" appear left of their selecting verb.

(98) Der Student hat mir [daß es regnet]$_i$ zu spät mitgeteilt t_i
The student has me that it rains to late told

(99) weil Hans [$_{CP2}$ [$_{CP3}$ daß er die Schandtat nicht begangen hat]
because Hans that he the crime not committed has
beweisen zu können] hofft.
prove to can hopes
"because Hans hopes to be able to prove that he didn't commit the crime."

(Grewendorf 1988, p.154+104)

This cannot straightforwardly be explained, given the obligatoriness of principle (i) and the assumption, that the morphological features of CPs do not change whenever they occupy different positions.

What's more, even clause-final CP-complements do not necessarily have to be adjacent to their verb.

(100) Wat wil je [$_{CP}$ dat ik **[$_{V°}$ zeg]** [op de vergadering] [$_{CP}$ **dat** ik von
What want you that I say at the meeting that I of
je voorstel vind]]
your idea find
"What do you want that I say at the meeting that I think of your idea."

(Zwart 1992d, p.18)

In order to avoid extraposition of CP in (100), short movement to Pred° is proposed (cf. above structure (1)). The specifier of PredP below AgrOP and immediately above VP is assumed to host small-clause predicates.

[67] Zwart (1992d, 1993) considers the fact that clause-final CP-complements of the verb allow for WH-extraction as evidence against extraposition. It is, however, insufficient to simply point to the opacity of clause-final PPs, relative clauses, and adjunct clauses, which follows from independent reasons . Müller & Sternefeld (1990), for example, attempt to derive the transparency of extraposed complement CPs within a theory of barriers, without giving up the difference between complements and adjuncts.

(101) ...dat [$_{AgrSP}$ Jan [$_{PredP}$ [$_{SC}$ de deur rood] verft$_i$ [$_{VP}$ t_i]]]
...that Jan the door red paints

(102) ...dat [$_{AgrSP}$ Jan [$_{PredP}$ [$_{SC}$ de sloot in] springt$_i$ [$_{VP}$ t_i]]]
...that Jan the ditch in jumps

(Zwart 1992d, p.21)

These elements tend to be strictly adjacent to their selecting verb. Short V°-to-Pred° movement is thus motivated. If, however, the verb 'zeg' is in Pred° in (100), PredP must be present as a landing-site, regardless of whether or not a predicative element has to be licensed there. This assumption is clearly ad hoc. PredP cannot carry [N]-features in (100), otherwise the derivation necessarily crashes. If Pred° carries a [V]-feature, this has to be independently motivated as a property of the verb. Of course, none of the known INFL-features suggests itself. Agreement can only be postulated if there is an element the verb could be in an agreement relation with. Being entirely featureless, PredP should be *inert* or *missing* in minimalist syntax (Chomsky 1992, p.13).

Unfortunately, this is not the only objection against the PredP-solution. Pred°, if it exists, cannot, like AgrS° and AgrO°, move to a higher head itself, the necessity of which follows by the analogy from principle (v) at least for (101)/(102).

(v) α is [+accessible] if (and only if) the [V]-features of α have been removed.

On the contrary, such movement would have detrimental consequences for an SVO-analysis of SOV-languages under (1), given that the [V]-feature in Pred° is strong and, thus, has to eliminated before Spell-Out (Zwart 1993, p.330, fn 22). V° should end up in T° at the least in all Dutch and German constructions.

Secondly, it is unclear which verb it is that should eliminate [V]-features in Pred°. It is claimed that the Predicate Phrase is occupied at LF by the small-clause predicate and the verb *selecting* the small clause (ibid., p.327). For (103) this means, that 'geverfd' has the appropriate feature to be checked in Pred°.

(103) ...dat hij [$_{PredP}$ [$_{SC}$ de deur rood]$_j$ [zal]$_i$ [VP t_i hebben geverfd t_j]]

However, the actual derivation looks different. "We do not have to assume any movements, other than the short verb movement of V_1 [=zal] to Pred." (ibid., p.337). This way of dealing with (103) is highly problematic. First, if 'geverfd' doesn't move at all the adjacency facts of (100) cannot be derived. (104) should be ruled out or require rightward extraposition of CP if 'gezegt' still occupies ist base-position.

(104) Wat wil je [$_{CP}$ dat hij [$_{Pred°}$ zal]$_i$ [$_{VP}$ t_i hebben gezegt [op de vergadering] [$_{CP}$ dat hij van je voorstel vindt]]]

The introduction of PredP is therefore not even adequate for the - independently (and especially minimalistically) doubtful - purpose of providing a landing site for the derivation of adjacency facts.

Secondly, if the finite verb checks the strong [V]-feature in PredP, we might wonder what kind of feature the verb selecting the predicate in (103) is going to check at LF. Apparently, the feature to be checked by short verb-movement is not the same as the one that motivates PredP in the first place. This makes it even harder to believe in the explanatory qualities of PredP.

On the other hand, agreement facts indicate that it is indeed the finite verb that moves to Pred° if this should be required.

(105) ...dat het [$_{PredP}$ kooplieden zijn/*is] (cf.ibid. p.330)
that it merchants are /is

(106) daß es Kaufleute sein müssen/*muß
that it merchants be must-pl/-sg

It follows from this, thirdly, that in German (107) an entire verbal cluster has to move to PredP, given that the finite verb appears to the very right.

(107) ...daß er [$_{PredP}$ [$_{SC}$ die Tür rot] [$_{Pred°}$ färben können muß]]
that he the door red paint be able must

Moving the verbal cluster into the functional domain for the checking of a single [V]-feature immediately raises the question as to why that cluster can't also eliminate the [V]-feature of AgrS in V2-clauses.

(108) * Er [$_{AgrS}$ färben können muß] die Tür rot

This has sometimes been used as evidence against an I° position to the right of VP in German, given that the verbs cluster on the right edge in German embedded clauses (Haider 1993a+b). Ironically, the same problem now arises under a minimalist SVO-analysis of SOV-languages if PredP has to be introduced as a landing-site for verb-movement immediately to the left of VP.

As it stands, the derivation of adjacency conditions on the verb and its complements within a minimalist SVO-analysis of Dutch and German must simply be rejected.

3.2.2 Morphological Licensing and Infinitives

(109) weil der Lehrer versucht [PRO das Theorem zu beweisen][68]
because the teacher tries the theorem to prove

(110) weil der Lehrer [PRO das Theorem zu beweisen] versucht

(111) weil der Lehrer [das Theorem]i versucht [PRO ti zu beweisen]
(Grewendorf 1988)

(109)-(111) is designed to illustrate that 'versuchen' allows for different structural realizations of its complement. Under a strict SVO-analysis, (109) should show the base position of the infinitival complement. It seems to be licensed without overt movement, i.e., it does not possess strong morphological features that force it to move leftward to a functional specifier. The fact that (110) exists as an alternative appears, therefore, to have to be derived by some kind of stipulative parametrization. The same is true of (111), given that the object 'das Theorem' must be in its licensing position (AgrOP-Spec) in (109) already.

It is not more than descriptively adequate to optionally generate AgrOPs in higher clauses when needed. (Zwart 1992d, p.11; 1993, p.325 + p.345)

3.2.3 VP-Topicalization

Assuming that Dutch and German objects obligatorily move to AgrOP-Spec in a uniform head-initial structure like (1) makes it hard to analyze the

[68]The object 'das Theorem' of course originates to the right of 'beweisen' under an SVO-analysis.

following case of VP-topicalization.

(112) [den Hans fragen [ob er noch einmal so einen Aufsatz schreiben
(the) Hans ask whether he once more such an article write
würde]]$_i$ wird er wohl kaum wollen t_i
would will he presumably hardly want
"Presumably, he will hardly want to ask Hans, whether he would write such an article once more."

'Wollen' cannot have reached any position higher than Pred°. 'Den Hans' should not be able to check its [N]-features as long as AgrOP is generated to the left of PredP, since the extracted structure originates from the right of Pred°. If, however, AgrOP had been topicalized, 'wollen' could not have been stranded.[69]

(113) weil er wohl kaum [$_{AgrOP}$ den Hans fragen **wollen** wird [ob er noch einmal so einen Aufsatz schreiben würde]]

3.2.4 Focusing-particles and directionality

A surprising asymmetry between SVO- and SOV-languages can be read off the distribution of focusing-particles and their associated CPs.

[69] For a more thorough treatment of these and related matters see Büring & Hartmann (1994). For a number of reasons, VP-topicalization should not (again pace Zwart 1993) be treated as base-generated Left-Dislocation with an obligatorily phonetically empty d-pronoun in CP-spec. To name just one, consider the following asymmetry between VP-topicalization and LD:
(i) [Bücher lesen] tut der Hans
books read does the Hans
(ii) * [Bücher lesen] macht der Hans ("makes")
(iii) [Bücher lesen], das tut der Hans
(iv) [Bücher lesen], das macht der Hans
For do-insertion in German see 3.3. below.

(114) weil Hans **nur** gesagt hat [$_{CP}$ daß der Kanzler zu dick sei]
because Hans only said has that the chancellor too fat be
(115) John **even** asked me yesterday [$_{CP}$ whether I would lend him my TOOTHBRUSH]

(116) weil Hans **nur** [$_{CP}$ daß der Kanzler zu dick sei] gesagt hat
(117) * John **even** [$_{CP}$ whether I would lend him my TOOTHBRUSH] asked me yesterday

(118) **nur** [$_{CP}$ daß der Kanzler zu dick sei] hat Hans gesagt
(119) **even** [$_{CP}$ whether I would lend him my TOOTHBRUSH] did John ask me yesterday

(120) * weil Hans gesagt hat **nur** [$_{CP}$ daß der Kanzler zu dick sei]
(121) John asked me yesterday **even** [$_{CP}$ whether I would lend him my TOOTHBRUSH] (Bayer 1990)

Whereas in German the focusing particle and its CP cannot remain in their alleged base-position together, (120), the same complex cannot be moved to a position between subject and verb in English. The latter fact, however, can neither be attributed to focusing-particles being excluded in that position, (115), nor to an absence of pied piping as (119) shows. On the other hand, pied piping is not obligatory in German (114). Given that a general SVO-analysis has to attribute similar properties to English and German CPs - they have no intrinsic reason to move anywhere - the contrast strikes one as surprising.[70]

[70] Directionality has been invoked so often in the literature that consequences of hypothesizing universally head-initial structures are hard to assess. Eliminating directionality as a possible area of parametrization is, of course, one of the important results of Kayne (1993). Haider (1993a) agrees with Kayne (1993) insofar as the direction of branching should be uniform across languages. However, he retains head-final structures for German VPs. Cf, also Haider (1993b) for a treatment of extraposition and right adjunction in German. See Platzack (1992) for a recent application of a directionality parameter. Assimilating SOV-languages like Dutch and German to SVO-languages, of course, means that an explanation has to be given for the fact that none of the massive reorderings within the verbal complex observable in Dutch and German dialects seem to ever occur in Mainland Scandinavian, English or Icelandic - the latter possessing very rich inflectional morphology at that.

3.3 German Do-Support and the Position of I°

In the following, we are going to present evidence which sheds some light on the question of the position of I° in SOV-languages. Haider (1993a+b) presented arguments against the very existence of I° in German and against I° to the right of VP in particular (cf. also Zwart 1992d, 1993). Because of the tendency of verbs to cluster at the right in Dutch and German, clear-cut evidence in favor of an I°-position to the right of VP is hard to come by.

In the wake of minimalist syntax, however, analyses of English 'do-support' (Watanabe 1993/Wilder & Ćavar 1993) have been proposed, that allow a straightforward interpretation of dummy do-insertion in Germanic.

Both Watanabe (1993) and Wilder & Ćavar suggest that do-support has to do with the overt checking of strong inflectional features.[71]

Watanabe (1993, p.4) introduces the following principle, not to be confounded with principle (xiii) above.

(xvii)Economy of Representation
Expletive elements can be inserted into structure only if insertion leads directly to satisfaction of some feature checking.

This makes it possible to explain the rapid rise and demise of do-support in Middle English affirmative declaratives. Middle English possesses strong [V]-features in T° which can be checked by the main verb.

(122) John spoke not to Mary[72]

General do-support gave rise to structures in Middle English that no longer required the main verb to leave VP.

[71] Wilder & Ćavar (1993) do not treat 'do' as a pleonastic element but as a genuine auxiliary verb, which checks a strong feature of I°, even if it remains phonologically invisible in most affirmative declaratives. - This idea , of course, goes back to Pollock's (1989) null-do-analysis. - Our emphasis lies on the fact that strong features must be present.
"...we take do-insertion to be an indication of the presence of a strong V-feature somewhere in the Infl-region of the English clause. This may seem a reasonable hypothesis given the analogy with the strong N-feature (Nominative) given as the motivation for pleonastic insertion in there is a man in the garden." (p.51)
Haider (1993a) ,too, appeals to the existence of expletives as indicators of syntactic positions.

[72] For the sake of brevity, we present the examples in Modern English following Watanabe (1993).

(123) John did speak to Mary (no emphasis)
(124) John did not speak to Mary.

(122), however, is supposed to be the trigger for the acquisition of strong [V]-features in T°. The rise of structures like (124) makes that trigger unavailable. [+strong] [V]-features in T° becomes an "unlearnable parameter setting". The next generation will therefore be unable to assign that value to T° and make do-support superfluous in affirmative declaratives. V° in situ becomes the only option available in Modern English.

(125) John *did speak/spoke to Mary. (no emphasis)

Do-support is limited to the checking of strong [V]-features in negative clauses and matrix questions.

Now, German has been assumed to possess strong [V]-features in I° (=AgrS°) (Vikner 1990). In complementizer-initial embedded clauses the finite verb is supposed to check these features by raising to an I°-position to the right of VP.

(126) ...weil Luise ein Haus gekauft hat

Interestingly, dialectal and colloquial German allows the insertion of the dummy verb 'tun'. Most often, it occupies the V2/V1-position.

(127) Was tut die Luise kaufen?
What does (the) Luise buy
(128) Tut die Luise ein Haus kaufen?
(129) Die Luise tut ein Haus kaufen.

In complementizer-initial embedded clauses, however, 'tun' appears to the right of the verbal complex.

(130) ...weil die Luise ein Haus kaufen tut.

(131) I sog da no, obs heid kemma dan
I tell you yet whether (they) today come do
(Bavarian) (Eroms1984, p.130)

If something like principle (xvii) is correct, we now have economy-theoretical evidence for an I°-position to the right of VP in German.[73] It would be less straightforward to have to say that a light verb is inserted in order to LF-check [V]-features, given that LF-movement of full verbs is considered not to result in any additional derivational cost.

To support this view one can adduce facts from Swedish VP-topicalization. This appears to be the only case of do-support in that language.[74]

(132) [Läser boken] gör han nu
reads the book does he now
(133) [Läste boken] gjorde han
read the book did he

The V2-position being the only overt checking position for V° in Mainland Scandinavian, clause-internal do-support is predicted not to exist.

[73] Interpreting this I°-position as situated to the left of VP would require the obligatory emptying of the entire VP in German. Triggers for this would have to be invented ad hoc. Incidentally, Kayne (1993) envisages exactly this kind of reordering for SOV-languages.
It seems to be possible to demonstrate that German do-support is optional and does not lend itself to enlightening pragmatic or semantic interpretations. (cf. Hausman 1974/ Eroms 1984/ Grimm, 1898, p.104/) Saltveit's (1983) proposal in that direction can easily be refuted. If anything, do-support can be considered the outcome of laziness. A light verbal element does the obligatory checking in I° and C° while the main verb can retain a single (infinitival) morphology.
Moreover, German expletive 'tun' cannot be embedded under auxiliaries and modals, i.e. it only occurs in its finite form.

[74] Christer Platzack (p.c.) informs us of the following Swedish datum:
(i) [Läser boken]kanske Allan inte gör
Reads the book maybe Allan not does
Here 'gör' must be analyzed as appearing VP-internally. This would then probably be on a par with English VP-substitute 'do (so)', which can be shown to differ from the 'do' of do-support since it cannot reach the checking positions I° and C° but requires do-support itself.
(ii) John didn't *(do) so.
(iii) Why did he *(do) so

(143) * eftersom han gjorde inte läsa boken
because he did not read the book

Watanabe (1993) also tries to explain the optionality of do-support during the crucial Middle English period by reference to bilingualism or code switching (p.6). This is exactly what Eroms (1984) concludes for the German case. German do-insertion apparently is in a state of permanent "latency", presupposing, crucially, that some inflectional features in Standard German are consistently strong.

We have to conclude, therefore, that it is not unreasonable - given the status of economy-principles in syntax - that German possesses an I°-position to the right of VP. Standard German should either exhibit overt V°-to-I° in complementizer-initial clauses or possess a phonologically empty 'tun'. This result would again be in keeping with our rejection of an asymmetry-analysis of V2, that has to postulate an AgrS°-position to the left of VP in SOV-languages (section 2). It would also be in keeping with our sketchy rejection of an SVO-analysis of Dutch and German (section 3).

4 Conclusion

In this paper, we have been concerned with the question whether Chomsky's minimalist program and Kayne's antisymmetric syntax imply radical shifts for the analysis of Germanic V2-languages. In particular, we have argued that neither an asymmetry-analysis of V2 nor an SVO-treatment of SOV-languages must be adopted under these conceptual frameworks, contrary to what Zwart (1992a-e, 1993) and (in a certain sense) Wilder (1993) suggest.

Zwart's (1993) minimalist asymmetry-analysis of V2 has been shown to exhibit considerable shortcomings on conceptual as well as empirical grounds. Furthermore, independent evidence for an asymmetry-analysis has been found lacking (section 2).

The question whether SOV-languages have to be dealt with on a par with SVO-languages has only been discussed superficially. As it stands, however, many problems w.r.t. word order arise, especially if minimalist assumptions on feature checking have to be appealed to.

Finally, we have suggested that German do-support constitutes an economy-theoretical argument in favor of an I°-position to the right of VP.

Appendix

In the system of Chomsky (1992), substituting the subject before Spell-Out into a specifier of a phrase (AgrSP) that has already been embedded (under C') causes a straightforward violation of the "Strict Cycle Condition" (SCC) on GT. (Chomsky 1992, p.32). The idea behind SCC is, that each application of GT should extend the targeted phrase-marker. This could prevent GT from producing violations of "relativized minimality" by inserting potential antecedent-governors into the c-command domain of an actual antecedent-governor. The exact restriction seems to be that GT cannot target a node that is dominated by any other node. Introducing adjuncts, head-movement (=adjunction), and post-Spell-Out operations, however, are exempt from SCC (Chomsky 1992, p.33/p.52). Zwart (1993), adopting Kayne (1993) considers specifiers as adjoined to XP. He therefore reformulates Chomsky's SCC in a way that step (b), actually constituting an adjunction to AgrSP, is not affected by his SCC. (Zwart 1993, p.26)

(a) $[_{C'}$ daß-AgrS°$_i$ $[_{AgrS'}$ t_i $[_{TP}$ Luise ein Haus gekauft hat]]]

(b) $[_{C'}$ daß-AgrS°$_i$ $[_{AgrSP}$ **Luise$_j$** $[_{AgrS'}$ t_i $[_{TP}$ **t_j** ein Haus gekauft hat]]]]

Of course, superraising will then have to be ruled out in a different manner. This, we claim, can no longer be done with the mechanisms available.

Take the following derivation of a Swedish raising-construction. We have reached the point at which AgrS° and TP are combined.

(c) $[_{AgrS'}$ AgrS° $[_{TP}$ verkar [August vara galen]]
seems August be crazy

AgrS° being [-accessible], the subject can't move to AgrSP-Spec. We therefore target C° and combine it with AgrS'.

(d) **$[_{C'}$ att** $[_{AgrS'}$ AgrS° $[_{TP}$ verkar [August vara galen]]]]

There doesn't seem to be any principle which could force AgrS°-to-C° to happen immediately. Certainly not SCC. Hcad-movement being adjunction, it can occur at any time in the derivation. GT may thus continue to add

elements above C'. Assume that GT adds an almost identical structure.

(e) **$[_{AgrS'}$ AgrS° $[_{TP}$ sägs** $[_{C'}$ att $[_{AgrS'}$ AgrS° $[_{TP}$ verkar [August vara galen]]]]]
is said that...

Next assume that GT moves the matrix V° 'sägs' to AgrS° like in standard subject-initial V2-clauses.

(f) $[_{AgrS'}$ sägs$_i$-AgrS° $[_{TP}$ t_i $[_{C'}$ att $[_{AgrS'}$ AgrS° $[_{TP}$ verkar [August vara galen]]]]]

V°-to-AgrS° removes [V]-features from AgrS° by eliminating them. Thus, AgrS° becomes [+accessible] and the [N]-features will be available at the AgrS'-level. Now, "violating no "shortest move" condition" (Chomsky 1992; p.32) , the embedded subject can check its [N]-features in AgrSP-Spec of the matrix clause.

(g) $[_{AgrSP}$ **August$_j$** sägs$_i$-AgrS° $[_{TP}$ t_i $[_{C'}$ att $[_{AgrS'}$ AgrS° $[_{TP}$ verkar [**t_j** vara galen]]]]]

Next embedded AgrS°-to-C° occurs such that the embedded [N]-features are available at the embedded AgrS'-level. They can now be checked by inserting an expletive into the adjoined embedded specifier-position exempt from SCC. We are left with exactly the kind of superraising construction meant to be ruled out by Chomsky's SCC.

(h) $[_{AgrSP}$ August$_j$ sägs$_i$-AgrS° $[_{TP}$ t_i $[_{C'}$ att-AgrS°$_k$ $[_{AgrSP}$ **det** t_k $[_{TP}$ verkar [t_j vara galen]]]]]
"August is said that it seems (to) be crazy"

To prevent (h) Zwart(1993) provides no mechanisms. The "shortest steps" condition is assumed not to exist (see section 2.3.3. for discussion). Principle (ix)

(ix) L-related features must be checked before nonL-related features

can't apply, because there are no Non-L-features to be checked.

An 'informal' principle such as "features have to be checked as soon as they can be checked" doesn't seem to apply either, because AgrS°-to-C° as such doesn't check any features but only makes features available.[75]

That the embedded AgrS' at stage (f), being sister of C°, a head not associated with an L-feature, might constitute a barrier to extraction cannot be invoked either.

First, extraction phenomena are no longer assumed to cause any derivation to crash as long as feature-checking mechanisms and economy principles are observed. Island violations are treated as triggering "deviant interpretation", if anything. Secondly, at LF, the embedded C° is associated with AgrS°. Therefore the sister of C° won't be a barrier any longer (cf. sections 2.3.3. + 2.4.2.).

Thus, whatever principle may be adduced to rule out derivation (c)-(h), it will arguably have to look like an ordering condition. This would confirm our conclusion, that introduction of the [+/- accessible] feature, *one "ordering condition on N-feature checking"* (Zwart 1993; p.282), makes it necessaray to resort to a *more elaborate extrinsic rule-order*. If true, this implies a return to TG-like grammars.

References

Authier, Jean-Marc (1992) "Iterated CPs and Embedded Topicalication", *Linguistic Inquiry 23*, 329-336.

Bayer, Josef (1984) "Comp in Bavarian Syntax", *The Linguistic Review*, 209-274.

Bayer, Josef (1990a) *Directionality of Government and Logical Form*, Habilitationsschrift, University of Konstanz.

Bayer, Josef (1990b) "Interpretive Islands", in: Grewendorf, G. & W. Sternefeld (eds.) *Scrambling and Barriers*, Amsterdam: John Benjamins, 341-422.

Besten, Hans den (1983) "On the Interaction of Root Transformations and Lexical Deletive Rules", in: Abraham, Werner., *On the Formal Syntax of the Westgermania*. Amsterdam: John Benjamins, 47-132.

Büring, Daniel & Katharina Hartmann (1994) "Doing the Right Thing - Extraposition as a Movement Rule." in *Sprachwissenschaft in Frankfurt*, Arbeitspapier Nr.13.

Chomsky, Noam (1986) *Barriers*, Cambridge/Mass: MIT-press.

---

75 The treatment of AgrOP might be relevant here.
"...not every clausal constituent needs to be expanded up to the AgrOP level, as long as an AgrOP is eventually created." (Zwart 1993, p.346)

Chomsky, Noam (1991) "Some Notes on Economy of Derivation and Representation", in: Robert Freidin (ed.) *Principles and Parameters in Generative Grammar*, Cambridge/Mass: MIT-press, 417-454.

Chomsky, Noam (1992) "A Minimalist Program for Linguistic Theory", *MITWPL*.

Chomsky, Noam & Howard Lasnik (1993) "Principles and Parameters Theory",in Joachim Jacobs et.al.(ed.), *Syntax: An International Handbook of Contemporary Research*, Berlin: de Gruyter, 506-569.

Cinque, Guglielmo (1990) *Types of A'-Dependencies*, Cambridge/Mass.

Cooper, Katrin (forthcoming), Dissertation University of Edinburgh.

Corman, Thomas H., Leiserson, Charles E. & Ronald L.Rivest (1990) *Introduction to Algorithms*, Cambridge/Mass.:MIT-press.

Drubig, Hans-Bernhard (1992) "On Topicalisation and Inversion", in: Tracy, Rosemarie, *Who Climbs the Grammar Tree*. Tübingen: Niemeyer, 375-422.

Eroms, Hans-Werner (1984) "Indikativische Periphrastische Formen Mit *Doa* Im Bairischen Als Beispiel Für Latente Und Virulente Syntaktische Regeln", in: *Göppinger Arbeiten zur Germanistik Nr. 409*. 123-135.

Grewendorf, Günther (1988) *Aspekte der deutschen Syntax*. Tübingen: Narr.

Grewendorf, Günther (1990) "Verb-Bewegung und Negation im Deutschen", in: *GAGL 30*, 57-125

Grewendorf, Günther & Joachim Sabel (1993) *Long Scrambling and Incorporation*, to appear in Linguistic Inquiry 25.

Grimm, Jacob (1898) *Deutsche Grammatik, Vierter Theil*, Gütersloh: Bertelsmann.

Haegeman, Liliane (1992) *Theory and Description in Generative Syntax*, Cambridge: Cambridge University Press.

Haider, Hubert (1984) "Topic, Focus and V-Second", in: *GAGL 25*, 72-120.

Haider, Hubert (1990) "Topicalization and other Puzzles of German Syntax", in: Grewendorf, Günther & Wolfgang Sternefeld (eds.) *Scrambling and Barriers*, Amsterdam: John Benjamins, 93-112.

Haider, Hubert (1993a) *Deutsche Syntax Generativ*, Tübingen: Narr.

Haider, Hubert (1993b) *Detached Clauses - The Later The Deeper*, Ms. Stuttgart.

Hausmann, Robert B. (1974) "The Origin and Development of Modern English Periphrastic DO", in: J. M. Anderson & C. Jones (eds.) *Historical Linguistics I* Amsterdam: North Holland, 159-189.

Hoekstra, J. & L. Marácz (1989) "On the Position of Inflection in West Germanic", *WPSS 44*, 75-88.

Holmberg, Anders (1986) *Word Order and Syntactic Features in the Scandinavian Languages and English*, Stockholm.

Holmberg, Anders & Platzack, Christer (1988) "On the Role of Inflection in Scandinavian Syntax", *WPSS 42*, 25-42.

Iatridou, Sabine & Anthony Kroch (1992) "The Licensing of CP-Recursion and its Relevance to the Germanic Verb Second Phenomenon", *WPSS 50*, 1-24.

Jacobs, Joachim (ed.) (1993) *Informationsstruktur und Grammatik*, (Linguistische

Berichte. Sonderband.) Opladen: Westdeutscher Verlag.

Källgren, Gunnel & Ellen Prince (1988) "Swedish VP-Topicalization and Yiddish Verb-Topicalization", *WPSS 42*, 81-93.

Kayne, Richard S. (1982) "Predicates and Arguments, Verbs and Nouns", paper presented at the GLOW colloquium, Paris.

Kayne, Richard S. (1993) *The Antisymmetry of Syntax*, ms. CUNY.

Lasnik, Howard & Mamoru Saito (1992) *Move _*, Cambridge/Mass: MIT-press.

Lenerz, Jürgen (1993) "Zu Syntax und Semantik deutscher Personalpronomina", in: Marga Reis (ed.) *Wortstellung und Informationsstruktur*, Tübingen: Niemeyer, 117-154.

Müller, Gereon (1993) *On Deriving Movement Type Asymetries*, PhD Dissertation, University of Tübingen.

Müller, Gereon & Sternefeld, Wolfgang (1990) *Improper Movement*, Ms. Konstanz

Müller, Gereon & Sternefeld, Wolfgang (1993) "Improper Movement and Unambiguous Binding", in: *Linguistic Inquiry 24.3.*

Platzack, Christer (1986) "Comp, Infl, and Germanic Word Order" in: Hellan, Lars & Kirsti Koch-Christensen (eds.) *Topics in Scandinavian Syntax*, Dordrecht: Reidel, 185-234.

Platzack, Christer (1992) "Complementizer Agreement and Argument Clitics", in: *WPSS 50*, 25-54.

Pollock, Jean-Yves (1989) "Verb Movement, Universal Grammar, and the Structure of IP", *Linguistic Inquiry 20*, 365-424.

Pollock, Jean-Yves (1993) *Notes on Clause Structure*, ms. Amiens.

Reis, Marga (1985) "Satzeinleitende Strukturen im Deutschen", in: Werner Abraham (ed.) *Erklärende Syntax des Deutschen*, Tübingen: Narr, 271-312.

Rizzi, Luigi (1989) "Speculations on Verb Second", in J. Mascaro & M. Nespor (eds.) *Grammar in Progress*, Dordrecht: Foris, 375-386.

Rizzi, Luigi (1990) *Relativized Minimality*, Cambridge/Mass: MIT-press.

Rizzi, Luigi (1991) "Residual Verb Second and the WH-Criterion", in: *Technical Reports in Formal and Computational Linguistics No 2*, Genf.

Rizzi, Luigi & Ian Roberts (1990) "Complex Inversion in French", *Probus 1.*

Roberts, Ian (1993) *Verbs and Diachronic Syntax*, Dordrecht: Kluwer.

Rosengren, Inger (1993) "Wahlfreiheit mit Konsequenzen - Scrambling, Topikalisierung und FHG im Dienste der Informationsstrukturierung", in: Marga Reis (ed.) *Wortstellung und Informationsstruktur*, Tübingen: Niemeyer, 251-312.

Sabel, Joachim (1993) "W-Infinitive, Nominativsubjekte und das Wh-Criterion", *Sprachwissenschaft in Frankfurt*, Arbeitspapier Nr. 11.

Saltveit, Laurits (1983) "Anlage der Modussysteme in den deutschen Dialekten", in: W. Besch et. al. (eds.) *Dialektologie 1.2.: Ein Handbuch zur deutschen und allgemeinen Dialektforschung*, Berlin: de Gruyter, 1220-1232.

Stechow, Arnim von & Wolfgang Sternefeld (1988) *Bausteine syntaktischen Wissen*, Opladen Westdeutscher Verlag.

Sternefeld, Wolfgang (1991) *Syntaktische Grenzen*, Opladen: Westdeutscher Verlag.

Sternefeld, Wolfgang (1994) *Subjects, Adjuncts, and SOV-Order in Antisymmetric Syntax*, ms. University of Tübingen, to appear in GAGL.

Taraldsen, Knut Tarald (1986) "On Verb Second and the Functional Content of Syntactic Categories", in: Haider, Hubert & Martin Prinzhorn, *Verb Second Phenomena in Germanic Languages*. Dordrecht: Foris, 7-26.

Vikner, Sten (1990) "Verb Movement and the Licensing of NP-positions in the Germanic Languages", Dissertation, University of Geneva.

Vikner, Sten (to appear) *Verb Movement and Expletive Subjects in the Germanic Languages*, Oxford: Oxford University Press.

Vikner, Sten & Bonnie D. Schwartz (1991) "The Verb always leaves IP in V2 Clauses", to appear in: Belletti, Adriana & Luigi Rizzi (eds.) *Parameters and Functional Heads*, Oxford: University press.

Watanabe, Akiro (1993) 'Unlearnable Parameter Setting: The Role of Triggers', ms. MIT., to appear in *Studia Linguistica*.

Wilder, Chris (1993) *Derivational Economy and the Analysis of V2*, ms. Berlin.

Wilder, Chris & Ćavar, Damir (1993) "Word Order Variation, Verb Movement, and Economy Principles", *Sprachwissenschaft in Frankfurt*, Arbeitspapier Nr. 10.

Zwart, Jan W. (1991) "Subject Deletion in Dutch: A Difference between Subjects and Topics", in: M. Kas, E. Reuland, & C. Vet (eds.), *Language and Cognition 1*, University of Groningen.

Zwart, Jan W. (1992a) *Verb Movement and Complementizer Agreement*, Ms. Groningen & MIT.

Zwart, Jan W. (1992b) "Subject Initial Verb Second in West Flemish", in: *GAGL 35*, 72-91.

Zwart, Jan W. (1992c) "Clues from Dialect Syntax: Complementizer Agreement", in: Bayer, Josef (ed.) *Dialektsyntax*. (= *LB Sonderheft*), Opladen: Westdeutscher Verlag, 246-270.

Zwart, Jan W. (1992d) *SOV Languages are Head Initial*, Ms. Groningen.

Zwart, Jan W. (1992e) *Notes on Clitics in Dutch*, Ms. Groningen.

Zwart, Jan W. (1993) *Dutch Syntax*, Groningen. Dissertation.

Hans-Martin Gärtner
Max Planck Gesellschaft
Arbeitsstelle Strukturelle Grammatik
Jägerstr. 10/11
10117 Berlin

Markus Steinbach
J. W. Goethe Universität
Institut für Deutsche Sprache und Literatur II/Abt. Linguistik
Gräfstr. 76/II
60054 Frankfurt am Main

e-mail: gaertner@skyline.asg.ag-berlin.mpg.de