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THE POSITION OF THE FINITE VERB IN AFRIKAANS

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1 Afrikaans as an SOV language[1)]

The Afrikaans finite verb occupies different surface structure positions in root and embedded sentences. This difference is comparable to that found in cognate languages like Dutch and German.

In embedded sentences the finite verb appears at the end of the sentence, either before or after other verbal forms:

(1) (a) *Ons vermoed* [$_{\bar{S}}$ *dat die berig waar IS*]
we suspect that the report true is

(b) *Dit is iets* [$_{\bar{S}}$ *wat nog bevestig moet WORD*]
it is something which still confirmed must be

(c) *Hy wil weet* [$_{\bar{S}}$ *of dit gou KAN gebeur*]
he wants know whether it soon may happen

In root sentences the finite verb takes the second position:

(2) (a) *Die berig IS waar*
the report is true

(b) *Wat IS waar?*
what is true

(c) *Sulke berigte HOOR ons nie*
such reports hear we not

In both sentence types there are exceptions to this general rule. These will be discussed in §4.

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Since (Bach 1962) it has been argued that the underlying order in German and Dutch is that of the embedded sentence, i.e. what is generally known as the SOV order. In most cases the arguments hold for Afrikaans as well, and it is generally accepted that Afrikaans is to be considered an SOV language.

2 V-movement and Constituent Preposing rules

An underlying SOV order calls for a transformational rule or rules to describe the surface position of the finite verb. For Dutch, Koster, in his well-known article (Koster 1975), proposes that two classes of rules come into play here. I will refer to them as the V-movement and Constituent Preposing rules respectively.

Koster (1975:131) has the V-movement rule (3):

(3) [57]

	X	-	COMP	-	Y	-	V	-	Z	
S.D.	1		2		3		4		5	obl.
S.C.	1		2		4+3		Ø		5	⟶

This rule moves the finite verb to a fixed position at the front of S. The position directly to its left, linearly the first in the sentence, is filled by application of a Constituent Preposing rule such as WH-movement, Adverb Preposing, Topicalization or Subject Formation. The latter rules are all considered to be COMP-substitution rules. Application of V-movement and one Constituent Preposing rule (here Subject Formation) gives the correct Verb Second surface order as in (4):

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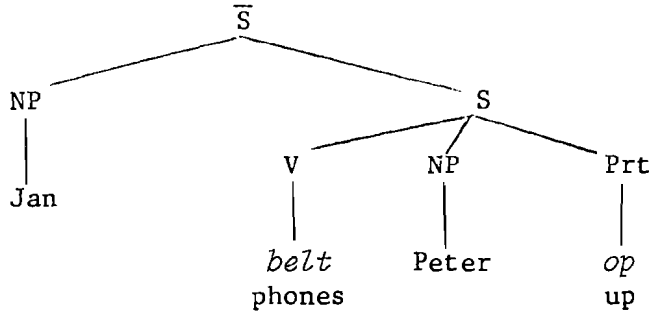
(4) [56]



Koster's V-movement rule makes no direct mention of the second position of the sentence. This has the advantage of obviating the need for extrinsic ordering of V-movement and Constituent Preposing rules. However, judged against the goal of explanatory adequacy, the rules proposed here still have too much descriptive power.

If one accepts, following Chomsky (1981), that the transformational component consists of the rule Move-α, it is not possible to formulate individual transformations or place conditions on them. The rule (3), however, is marked obligatory and, moreover, is qualified by two further conditions (Koster 1975:131):

(5) "This is a root transformation (3 and 4 belong to a root S). The V of term 4 has to be tensed."

A condition restricting the application of a rule to root sentences offers no explanation for the word order phenomena in root sentences; it merely states them.

Implicit in this criticism is the assumption that a description of the position of the finite verb should comply with the following requirements:

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(6) (a) V-movement and all Constituent Preposing rules should have the form Move-α.

(b) General conditions, of a universal nature if possible, should govern the applicability of the rules and the choice of landing sites. These general conditions should be part of the non-syntactic, i.e. the phonological or interpretive, components. They should also provide an explanation for the position of the verb.

3 Two proposals for describing the position of the finite verb

Two different proposals implementing the programme outlined in (6) have been made by Evers (1981a, 1981b) and by Safir (1981) respectively.

Evers takes up and further develops the ideas of Koster (1975) and especially of Den Besten (1977). Den Besten differs from Koster on the question of the position of the finite verb in root sentences. He argues that the finite verb and complementizers occupy the same position in COMP. In support of his conclusion he cites the fact that complementizers and the finite verb cannot both appear to the left of S, while both are preceded by the WH-constituent and followed by the clitic subject:

(7)

	Matrix-$\overline{S}$	WH-constituent	Finite Verb/ Compl.	Variable	Clitic subject	Variable	Final position
(a)	---	*Over wie*	*heeft*		*ie*	*gisteren gesproken*	---
		about whom	has		he	yesterday spoken	
(b)	*Ik vraag mij af*	*over wie*	*dat*		*ie*	*gisteren gesproken*	*heeft*
	I ask myself	about whom	that		he	yesterday spoken	has
(c)	---	*Over wie*	**dat heeft*		*ie*	*gisteren gesproken*	---
		about whom	that has		he	yesterday spoken	---
(d)	*Ik vraag mij af*	*over wie*	*dat*	**gisteren*	*ie*	*gesproken*	*heeft*
	---	*Over wie*	*heeft*	**gisteren*	*ie*	*gesproken*	---

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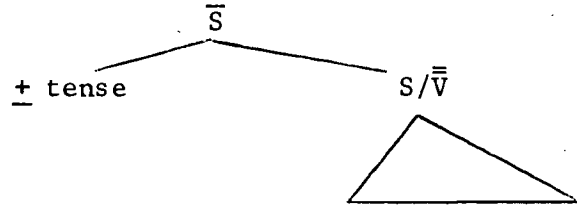
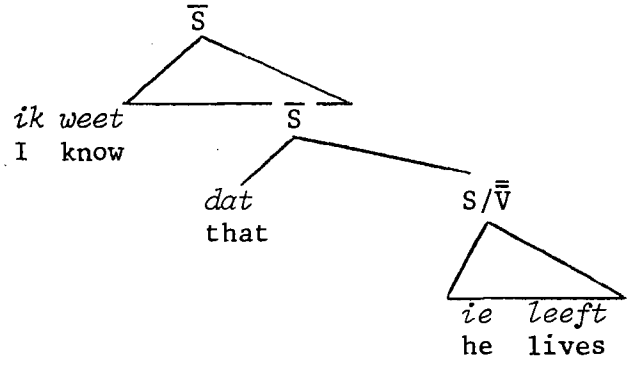
Evers (1981a:4) proposes that the common position of the complementizer and the finite verb "is characterized by a sentential tense index <± tense> in a structure like (8)":

(8) [8]



If S̄ is governed by a c-commanding lexical item, that is by a matrix verb or by the nominal head of the phrase which serves as antecedent to a relative clause or complement clause, the index is absorbed by the complementizer:

(9)



In infinitival clauses or where COMP contains a WH-constituent, the tense index may be deleted:

(10) (a) *Hij belooft* [$_{\bar{S}}$ Ø [$_{S}$ PRO *te komen*]]
he promises to come

(b) *Ik geloof* [$_{\bar{S}}$ *wat*$_i$ Ø [$_{S}$ *hij* t$_i$ *zegt*]]
I believe what he says

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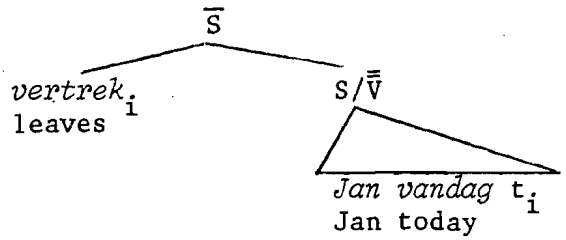
If there is no lexical item which c-commands $\overline{S}$, i.e. in a root sentence, the finite verb absorbs the tense index:

(11)



If the tense index is not absorbed or deleted, it will appear in the phonetic representation, causing the sentence to be marked ungrammatical. By postulating the tense index it thus becomes possible to have a V-movement rule of the form Move-α. No special conditions are needed. The rule applies obligatorily in root sentences, where a complementizer does not fill the tense position, and the finite verb "finds" its landing site by being co-indexed with it. (See 12 below.)

Like Koster and Den Besten, Evers assumes that the first position in root sentences is filled by a constituent moving into COMP. The moved constituent obviously takes up a position to the left of the tense index. He also suggests that in WH-questions the position to the left of the tense index is marked by another sentential index, namely WH, which indicates the scope of the question word and is coindexed with it. On this analysis, (12)(a) would have the underlying structure (12)(b):

(12) (a) *Boven welke berg zag je de maan?*
above which mountain saw you the moon

(b) $[_{\overline{S}}\ WH_j\ T_i\ [_S$ *Jij* $[_{PP}$ *boven welke berg*$_{PP_j}]$ *de maan*
you above which mountain the moon
$[_V$ *zag*$_{V_i}]]]$
saw

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Since the WH-index must be absorbed by a constituent for the appropriate conditions on phonological form to be met, WH-movement becomes obligatory. What remains unexplained is the fact that in non-questions there must always be a constituent preceding the finite verb which occupies the tense index position. In other words, the fact that Constituent Preposing rules are obligatory in root sentences must be stated explicitly as a condition on a small class of rules.

Direct questions, of course, also pose a problem for this analysis. Unlike WH-questions, they can have no sentential index indicating the scope of the question, as in their case there is no constituent to absorb the index. This fact remains unexplained within the present proposal. The Evers proposal, therefore, cannot be said to achieve all the goals set out in the programme (6), in that it fails to explain some basic facts about Dutch.

Safir (1981) agrees with Evers in so far as his description of the position of the finite verb involves the same two classes of transformation rules, Verb-movement and Constituent Preposing. The gist of his Inflection Government Theory (henceforth IGT) is that a single requirement, namely that inflection must be governed in the proper way, determines where the transformations will apply and what the landing sites will be.

Inflection (INFL) in IGT is a sister node of S; it absorbs an adjacent V, which is the finite verb in tensed sentences. (See (17) below.) If INFL shifts its position in order to find a governor, the finite verb is automatically moved.

The definition of government which Safir adopts as his point of departure is the one proposed by Sportiche and Aoun and quoted in Chomsky (1981: 164):

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(13) CORE GOVERNMENT

α governs γ in a structure

$[\beta \ldots \gamma \ldots \alpha \ldots \gamma \ldots]$ where

(i) $\alpha = X^0$

(ii) where φ is a maximal projection, φ dominates α if and only if φ dominates γ.

The definition represents the core notion of government; a head governs its complements and a maximal projection forms a barrier to government.

Safir extends the core notion in two ways. Firstly, COMP, which in his theory is not the head of $\overline{S}$, can also be a governor if it is lexically filled. Secondly, INFL, which is taken to be the head of $\overline{S}$, is considered to be governed if its maximal projection is governed. The principle of percolation (14) is introduced to allow for this:

(14) PERCOLATION

If X^m is a maximal projection of X, And X^m has the feature $[+ F]$ then for all SPEC X^n and X^n, $n \leq m$, X^n and SPEC X^n are also $[+ F]$.

In addition to extending the core notion of government, Safir argues that the following "adaptor condition" is necessary in IGT:

(15) ADJACENCY

α is adjacent to β if there is a proper analysis of A γ B such that A = α^0, B = β, and γ is not non-null.

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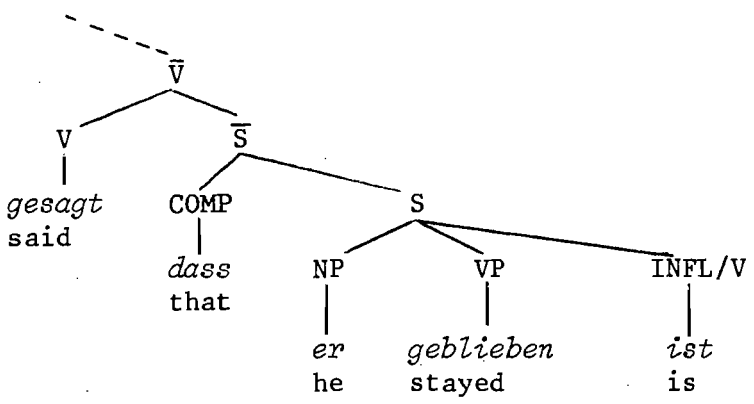
Finally, a condition is needed to filter out all sentences in which INFL is not governed in the proper way:

(16) HEAD UNIQUENESS PRINCIPLE (HUP)

$\overline{S}$ must have a unique governed head.

The interaction of the various principles of IGT is best illustrated by some of Safir's own examples from German.

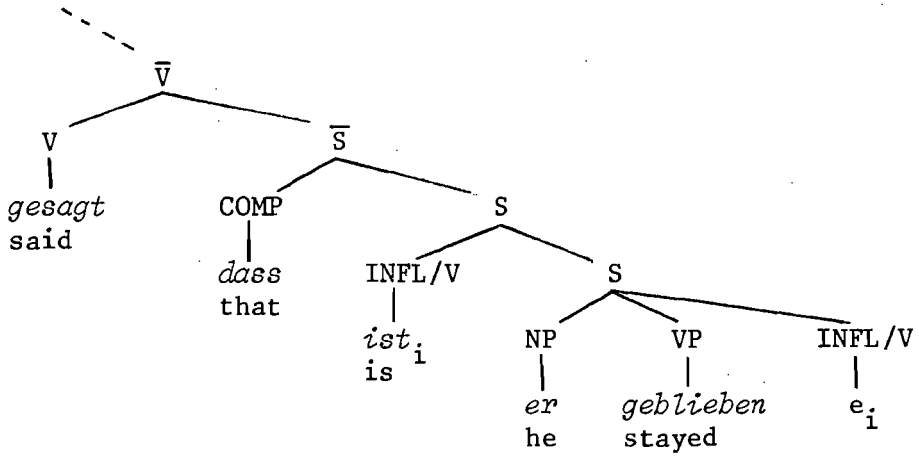
(17) (a)



The matrix verb *gesagt* governs the embedded $\overline{S}$ and, through percolation, the node INFL. The HUP is therefore satisfied.

Suppose that INFL shifts, as in (17)(b) below.

(17) (b)



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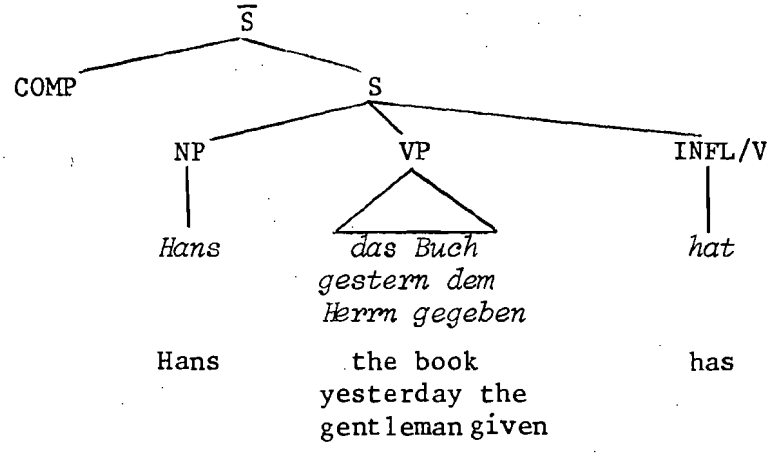
Here INFL as well as its trace is governed by percolation and the sentence is ruled out by the HUP which requires a unique governed head. Thus V-movement becomes impossible in embedded sentences, without a condition being necessary which explicitly mentions the root/embedded sentence distinction.

The deep structure of a root sentence like (18)(a) is represented as in (18)(b) within the framework of IGT.

(18) (a) *Hans hat das Buch gestern dem Herrn gegeben*
Hans has the book yesterday the gentleman given

(b)



INFL is ungoverned in (18)(b); only COMP can govern here, but it has to have lexical content and INFL must be adjacent to it. The latter requirement is fulfilled by applying V-movement, the former by preposing a constituent. If, for example, the subject is preposed, we get the structure (19):

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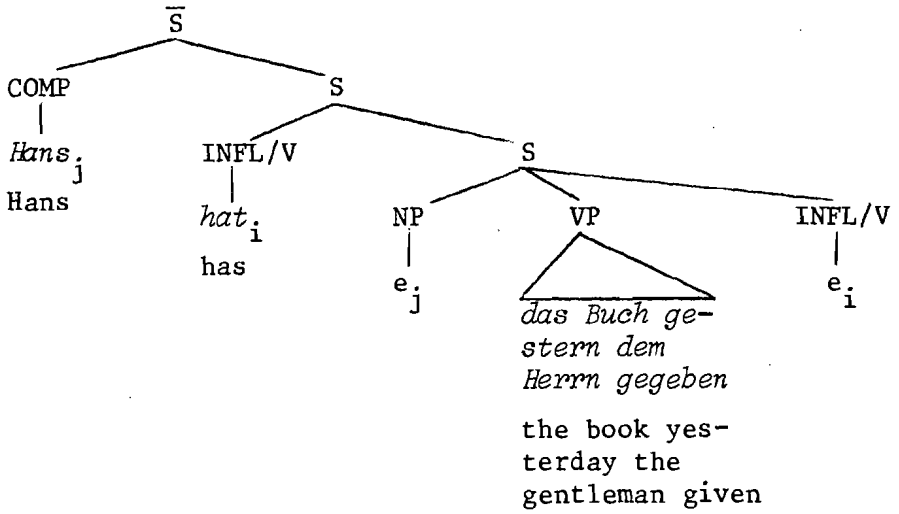
(19)



INFL is governed by COMP containing the subject *Hans*. The trace of INFL is ungoverned, because $\bar{S}$ has no governor. $\bar{S}$ therefore has a unique governed head.

In terms of IGT, COMP can also be lexically filled by application of WH-movement, as in (20)(a), and by an "abstract question element", as in (20)(b). The "abstract question element" is presumably generated in COMP:

(20) (a) $[_{\bar{S}}$ *Wann*$_j$ $[_S$ *hat*$_i$ $[_S$ *Hans das Buch* e$_j$ *dem Herrn*
when has Hans the book the gentleman
gegeben e$_i$ $]]]$
given

(b) $[_{\bar{S}}$ Q $[_S$ *hat*$_i$ $[_S$ *Hans das Buch dem Herrn gegeben* e$_i$ $]]]$
has Hans the book the gentleman given

As the examples show, the IGT requirement that COMP must be lexically filled in order to govern, takes care of the first position and makes a Constituent Preposing transformation obligatory, except in direct questions. In this respect it is superior to the Evers proposal.

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There are, however, some points which can be raised against the IGT. As Evers (1981a:11) notes, IGT requires that the notion of government be extended arbitrarily to include COMP, which is not, like other governors, a terminal category which defines X^n projections. In addition, the notion of lexically filled COMP is interpreted rather broadly, allowing an abstract element to count as lexical material. These extensions naturally diminish the value of government as a principle which explains word order phenomena.

4 The position of the verb in Afrikaans

4.1 Embedded sentences

Abstracting from the objectionable extension of the notion 'governor' to include COMP in IGT, it can be said that both IGT and the Evers proposal distinguish between root and embedded sentences in the same way: an embedded sentence is lexically governed whereas a root sentence is ungoverned. This distinction is intuitively attractive, especially in the case of complements of nouns and verbs, and I will use it as a working hypothesis.

Embedded sentences governed by a noun are those which form part of an NP, i.e. relative clauses such as (21)(a) and complements such as (21)(b). In the examples the finite verb and the governor are capitalized.

(21) (a) (i) *Hulle ken* $[_{NP}$ *die PERSOON* $[_{\bar{S}}$ *wat skielik verdwyn HET* $]]$
they know the person who suddenly disappeared has

(ii) **Hulle ken* $[_{NP}$ *die PERSOON* $[_{\bar{S}}$ *wat HET skielik verdwyn* $]]$
they know the person who has suddenly disappeared

(iii) **Hulle ken* $[_{NP}$ *die PERSOON* $[_{\bar{S}}$ *Ø skielik verdwyn HET* $]]$
they know the person suddenly disappeared has

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(b) (i) *Ons glo* $[_{NP}$ *die GERUG* $[_{\overline{S}}$ *dat hy skielik verdwyn HET*$]]$
we believe the rumour that he suddenly disappeared has

(ii) **Ons glo* $[_{NP}$ *die GERUG* $[_{\overline{S}}$ *dat hy HET skielik verdwyn* $]]$
we believe the rumour that he has suddenly disappeared

(iii) **Ons glo* $[_{NP}$ *die GERUG* $[_{\overline{S}}$ *Ø hy skielik verdwyn HET*$]]$
we believe the rumour he suddenly disappeared has

When there is a governing noun, COMP must contain a relative pronoun (*wat*) in relative clauses, and a complementizer (*dat*) in complements, as is clear from the ungrammaticality of (a)(iii) and (b)(iii) in (21). The finite verb is always sentence final.

Embedded sentences governed by a verb are complements, as in (22) below.

(22) (a) *Jy WOU HÊ* $[_{\overline{S}}$ *dat ek hom in jou plek MOET aanstel*$]$
you wanted (to) have that I him in your place must appoint
(You wanted me to appoint him in your place.)

(b) **Jy WOU HÊ* $[_{\overline{S}}$ *dat ek MOET hom in jou plek aanstel*$]$[2)]
you wanted (to) have that I must him in your place appoint

(c) *Jy WOU HÊ* $[_{\overline{S}}$ *ek MOET hom in jou plek aanstel* $]$
you wanted (to) have I must him in your place appoint

(d) **Jy WOU HÊ* $[_{\overline{S}}$ *ek hom in jou plek MOET aanstel* $]$
you wanted (to) have I him in your place must appoint

The most important difference between (21) and (22) is this: in (22), where the governor is a matrix verb belonging to the class of so-called "bridge verbs",[3)] the complementizer *dat* need not appear in the sentence. In that case, the finite verb has to occupy the second position in the embedded sentence, as is shown by the ungrammaticality of (22)(d) as against the grammaticality of (22)(c). Where the complementizer does

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appear, the finite verb obligatorily takes up the position at the end of the sentence, as shown in (22)(a) and (b).

Afrikaans complements introduced by a WH-question word add some more variations to the pattern. Although not common, a WH-question word may be used together with the complementizer *dat*. The presence of the complementizer makes the sentence final position obligatory for the finite verb.

(23) (a) *Jy WEET* [$_{\overline{S}}$ *wie dat ek in jou plek MOET aanstel*]
you know who that I in your place must appoint
(You know who I have to appoint in your place)

(b) **Jy WEET* [$_{\overline{S}}$ *wie dat ek MOET in jou plek aanstel*]
you know who that I must in your place appoint

When there is only a WH-question word in COMP, the finite verb may be either in the second position or at the end of the sentence:

(c) *Jy WEET* [$_{\overline{S}}$ *wie ek in jou plek MOET aanstel*]
you know who I in your place must appoint

(d) *Jy WEET* [$_{\overline{S}}$ *wie MOET ek in jou plek aanstel*]
you know who must I in your place appoint

It was mentioned in §3 that the Evers proposal optionally allows the complementizer to be deleted in embedded questions after it has absorbed the tense index. This could explain (23)(c) but, apart from being a rather ad hoc stipulation, it offers no solution for (22)(c) and (d) or for (23)(d). On Evers's theory the embedded clause in all these sentences is governed by the matrix verb and the tense index is therefore absorbed by a complementizer, which may of course be deleted. In this

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way it is predicted that (22)(c) and (23)(d) should be ungrammatical, because the finite verb has absorbed the tense index. By constrast, (22)(d) should be grammatical, its tense index having been absorbed by a deleted complementizer. The actual facts are the other way round: (22)(c) and (23)(d) are grammatical, whereas (22)(d) is ungrammatical.

The Evers proposal also makes wrong predictions in the case of sentences in which a WH-question word has been moved out of a clause to the front of the matrix sentence.

(24) (a) $[_{\bar{S}}$ *Wie*$_i$ *WIL* $[_S$ *jy* *HÊ* $[_{\bar{S}}$ t_i *dat* $[_S$ *ek* t_i *in* *jou*
who want you (to) have that I in your
plek *MOET* *aanstel* $]]]]$
place MUST appoint
(Who do you want me to appoint in your place?)

(b) *$[_{\bar{S}}$ *Wie*$_i$ *WIL* $[_S$ *jy* *HÊ* $[_{\bar{S}}$ t_i Ø $[_S$ *ek* t_i *in* *jou*
who want you (to) have I in your
plek *MOET* *aanstel* $]]]]$
place must appoint

(c) $[_{\bar{S}}$ *Wie*$_i$ *WIL* $[_S$ *jy* *HÊ* $[_{\bar{S}}$ t_i *MOET* $[_S$ *ek* t_i *in*
who want you (to) have must I in
jou *plek* *aanstel* $]]]]$
your place appoint

The sentence (24)(b) with a "deleted" complementizer should be grammatical in terms of Evers's proposal, while (c) in which the finite verb has absorbed the tense index should be ungrammatical. Again the reverse is true.

The IGT embodies a proposal which apparently offers a solution for (23) and (24). Consider the following German sentences that are comparable to

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(23) and (24) respectively:

(25) (a) *Hans SAGTE* $[_{\overline{S}}$ *er*$_i$ $[_S$ *HABE*$_j$ $[_S$ t_i *Maria gesehen* t_j $]]]$
Hans said he has Maria seen

(b) $[_{\overline{S}}$ *Wen*$_i$ $[_S$ *SAGT*$_k$ $[_S$ *Hans* t_k $[_{\overline{S}}$ t_i $[_S$ *SEHT*$_j$
who says Hans sees
$[_S$ *er* t_i t_j $]]]]]]$
he

Safir postulates that some verbs in German, e.g. *sagen*, are optional weak selectors; i.e. they may select opaque $\overline{S}$'s in which government does not percolate. As a result INFL is ungoverned in such sentences and the finite verb has to move into the position adjacent to COMP, which must be lexically filled in order to govern. In (25)(a) COMP is filled by the subject *er* and in (b) by the trace t_i.

The notion 'weak selector' may be invoked to explain (22)(c) and (23)(d). The embedded clause is opaque, hence ungoverned, and the finite verb has moved to the front. In the former the subject *ek* serves as governor in COMP and in the latter the WH-question word *wie*.

What remains unexplained is the ungrammaticality of (22)(d) and (24)(b). If being a weak selector is a purely optional property of the verbs in question, the embedded clauses of these sentences could be either governed or ungoverned. If governed, the finite verb should be able to remain in its underlying position. This is clearly not the case.

Sentences in which a relative pronoun has been moved to the front of the matrix clause also pose a problem for IGT.

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(26) (a) *Dit is* $[_{NP}$ *die MAN* $[_{\overline{S}}$ *wat*$_i$ $[_S$ *jy nog WOU HÊ*
this is the man that you still wanted (to) have
$[_{\overline{S}}$ t_i *dat* $[_S$ *ek* t_i *in jou plek MOET aanstel*]]]]]
that I in your place must appoint

(This is the man that you still wanted me to appoint in your place.)

(b) *Dit is* $[_{NP}$ *die MAN* $[_{\overline{S}}$ *wat*$_i$ $[_S$ *jy nog WOU HÊ*
this is the man that you still wanted (to) have
$[_{\overline{S}}$ t_i $[_S$ *ek* t_i *in jou plek MOET aanstel*]]]]]
I in your place must appoint

(c) *?Dit is* $[_{NP}$ *die MAN* $[_{\overline{S}}$ *wat*$_i$ $[_S$ *jy nog WOU HÊ*
this is the man that you still wanted (to) have
$[_{\overline{S}}$ t_i $[_S$ *ek* t_i *MOET in jou plek aanstel*]]]]]
I must in your place appoint

(d) **Dit is* $[_{NP}$ *die MAN* $[_{\overline{S}}$ *wat*$_i$ $[_S$ *jy nog WOU HÊ*
this is the man that you still wanted (to) have
$[_{\overline{S}}$ t_i $[_S$ *MOET*$_j$ $[_S$ *ek* t_i *in jou plek* t_j *aanstel*]]]]]]
must I in your place appoint

That *wil hê* is an optional weak selector in the intended sense is illustrated in (22) and (24). The theory therefore fails to predict that the root word order is impossible in the complement of *wil hê*, in a construction such as (26). Note that (26)(d) does not lack lexical material in COMP, as a trace can serve this purpose.

Apparently the IGT, just like the Evers proposal, fails to give a satisfactory account of the position of the finite verb in embedded sentences in Afrikaans. Both theories, however, contain some ideas which seem insightful, and I would like to propose, very tentatively, a solution which makes use of them.

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Following Evers to a certain extent, I assume that COMP contains two sets of features: [± Q] and [± Tense] . The [± Q] feature is something like Chomsky's rewriting rule expanding COMP as [± WH]: it denotes the difference between an interrogative and a non-interrogative clause. I avoid using the symbol WH since the feature [+ WH] is also used for non-interrogative elements such as relative pronouns.

Lexical elements that can appear in COMP, either by insertion, like the complementizers, or by WH-movement, like WH-question words and relative pronouns, are assigned one feature from each set plus a feature [+ COMP] :

(27)

Complementizers :	*dat* (that)	:	[- Q] [+ Tense] [+ COMP]
	of (whether)	:	[+ Q] [+ Tense] [+ COMP]
WH-question words:	*wat* (what)	:	[+ Q] [+ Tense] [+ COMP]
	wie (who)	:	[+ Q] [+ Tense] [+ COMP]
Relative pronouns:	*wat* (who, that)	:	[- Q] [+ Tense] [+ COMP]

In Afrikaans the features [± Q] and [± Tense] have to be represented by a lexical element in phonological form. [± Q] is obviously represented by an element with the corresponding feature. If the sentence is ungoverned, [+ Tense] has to be filled by the finite verb, while a governed clause requires a [+ COMP] element for [± Tense] . I further assume that there does not have to be a one-to-one correspondence between features and lexical elements. For instance, a WH-question word could satisfy both [+ Q] and [+ Tense] .

In addition to the feature analysis I accept the IGT idea that some verbs can be weak selectors, i.e. may or may not govern their complements. I realize that this idea has to be worked out more fully and that it must eventually be expressed in terms of some syntactic or semantic mechanism,

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but even without that I do not think that it can be termed ad hoc. The verbs concerned have certain very distinctive characteristics such as allowing cyclical WH-movement and not allowing a *that*-complementizer, which makes it plausible to say, informally, that they "relinquish" government over their complements.

The assumptions made so far immediately account for the sentences (22).[4] In (a) *wil hê* governs the complement and *dat* represents [- Q] and [+ Tense], giving a grammatical sentence. In (c) *wil hê* does not govern, the finite verb represents [+ Tense], while the subject corresponds with [- Q]. Sentences (b) and (d) are both ill-formed. In the former, both *dat* and the finite verb represent [+ Tense], with the result that the sentence is both governed and ungoverned. In the latter there is no lexical element representing the feature sets in COMP at all.

In (23) the matrix verb *weet* may also optionally relinquish government. It does govern in (a) and (c), where the embedded COMP may be represented as follows:

(28) [(23)(a)] [+ Q] [+ Tense]
wie *dat*
[(23)(c)] *wie*

Sentence (b), with COMP as in (29), again has to be both governed and ungoverned and is therefore ungrammatical:

(29) [(23)(b)] [+ Q] [+ Tense]
wie *dat*
ek *moet*

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Sentence (23)(d), which is grammatical, has an ungoverned embedded sentence and COMP is as shown in (30):

(30) [(23)(d)] [+ Q] [+ Tense]
wie *moet*

The COMP of the embedded sentence in (24)(b) seems to be the same as that of (23)(c) above, except that it contains a trace instead of an actual WH-question word. This fails to explain the ungrammaticality of the sentence, because I assume that trace can also represent a feature. Sentence (24)(c), for instance, has a trace representing the feature [- Q] .

I think an explanation for (24)(b) can be given along the following lines. The [+ COMP] element representing the [+ Tense] feature somehow indicates subordination to the governing verb in the matrix sentence. In (24)(b), the antecedent of t_i is not subordinate to the matrix verb; the latter actually falls within the scope of the WH-question word. Thus the trace of the question word cannot be the element representing [+ Tense] and the only way to derive a grammatical sentence is for the finite verb to move to COMP.

Sentence (26) represents the opposite case. The finite verb cannot satisfy [+ Tense] in the most deeply embedded sentence, hence the ungrammaticality of (c) and (d). The COMP of this embedded sentence contains the trace of the relative pronoun wat_i, which itselfs appears in the COMP of the sentence governed by the head noun *man*. Since nouns cannot optionally relinquish government --- as is clear from the examples of embedded sentences with noun heads in (21) --- wat_i must represent [- Q] and [+ Tense] . This requirement seems to carry over to the trace of *wat*, causing (26)(d) to be ungrammatical.

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Sentence (26)(c) is less unacceptable than (26)(d). This can be explained by assuming that the relative trace gets "pushed away", allowing the subject to fill the [- Q] slot and the finite verb to move into the [+ Tense] position.

Although much has been left vague, the proposed feature analysis of COMP offers some kind of explanation for sentences which seem intractable under both Evers's proposal and the IGT. In the next section I will take a brief look at the ability of the feature analysis to handle root sentences.

4.2 Root sentences

Root sentences for which the general rule of Verb Second holds, are unproblematic under the proposed analysis:

(31)

	[- Q]	[+ Tense]				
$[_{COMP}$	*die berig*$_i$	*is*$_j$	$[_S$ t_i	*waar*	t_j	$]]$
	the report	is		true		
$[_{COMP}$	*sulke berigte*$_i$	*hoor*$_j$	$[_S$ *ons*	t_i	*nie*	t_j $]]$
	such reports	hear	we		not	

	[+ Q]	[+ Tense]				
$[_{COMP}$	*wat*$_i$	*is*	$[_S$ t_i	*waar*	t_j	$]]$
	what	is		true		

Even if it is assumed that a topicalized constituent such as *sulke berigte* is dominated by a node TOP(IC), the analysis is not seriously affected. We merely have to accept that the requirement that [- Q] be filled can be satisfied by an element such as PRO.[5)]

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Exceptions to the rule of Verb Second are conditional sentences such as (32)(a), direct questions such as (32)(b) and commands such as (32)(c):

(32) (a) *KRY hy dit, dan sal hy bly wees*
gets he it, then will he glad be

(b) *SAL hy dit kry?*
will he it get

(c) *BLY jy tuis!*
stay you at home

Direct questions have a COMP with the feature [+ Q], just like WH-questions. In their case, however, there is no constituent which can represent this feature. The requirement that [± Q] must be represented by a lexical element therefore has to be modified so that it can apply only if the sentence contains a constituent with the required feature. This modification is also necessary to handle conditionals and commands. In their case, additional features have to be introduced which can appear in the place of [± Q], let's say [+ COND] and [+ IMP]. Since sentences do not contain any constituents similarly marked, COMP with a "bare" [+ COND] or [+ IMP] will not cause ungrammaticality.

5 Conclusion

The proposal made in §4 with a view to attaining the goals of the programme set out in (6) has two parts:

(a) COMP contains one feature taken from a set of Sentence Type Features such as [± Q], [+ COND] and [+ IMP], and one feature taken from the set [± Tense].

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(b) The features are represented by a lexical element if the sentence contains a constituent with the corresponding features.

It seems necessary to assume that part (a) is a universal condition, though there may be other Sentece Type Features apart from the ones mentioned. Languages could differ with respect to part (b), which would explain variations in word order found amongst cognate languages.

English, for instance, does not seem to require [- Q] always to be lexically represented, and the [± Tense] feature is only filled if [± Q] contains a scope-bearing element like a WH-question word or a negative phrase:[6)]

(33) (a) WHAT DID you hear?

(b) UNDER NO CIRCUMSTANCES WILL I comply with the request.

One would not like to claim, however, that languages simply make arbitrary choices with respect to these features and it is tempting to point out apparent correlations between the way a language treats COMP features and other word order phenomena.

SOV languages require the [+ Tense] feature to be represented and any verb can be moved to COMP; in English [+ Tense] is "covered" only under certain conditions and movement is restricted to auxiliaries and the copula. Also, in SOV languages, which require lexical representation for [- Q], topicalization is much more common than in English, which tolerates a bare [- Q].

Consider also the behaviour of existential *daar* (there) and *dit* (it) in Afrikaans. These "dummy elements", which appear in a subject noun phrase without a θ-role, can be deleted if some other constituent represents

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[± Q]. Compare (34) with (35), and (36) with (37):

(34) [- Q] [+ Tense]

(a) *In die hoek staan DAAR nou 'n groot kas*
in the corner stands there now a large cupboard

(b) *In die hoek staan* Ø *nou 'n groot kas*

(35) [- Q] [+ Tense]

(a) *DAAR staan nou 'n groot kas in die hoek*
there stands now a large cupboard in the corner

(b) * Ø *staan nou 'n groot kas in die hoek*

(36) [- Q] [+ Tense]

(a) *Nou blyk DIT dat hy vertrek het*
now appears it that he left has

(b) *Nou blyk* Ø *dat hy vertrek het*

(37) [- Q] [+ Tense]

(a) *DIT blyk nou dat hy vertrek het*
it appears now that he left has

(b) * Ø *blyk nou dat hy vertrek het*

Such loose observations, of course, do not prove anything and are hardly more than mere speculation. They are mentioned only to indicate some aspects of sentence structure which may be relevant in further study aimed at finding a more principled base for the variations that have been noted.

Naturally the "universal" part of the proposal has to be tested against data from languages not considered here. As this paper has shown, short-

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comings in a proposal put forward for one language can be revealed by considering data from another language which is as closely related to it as Afrikaans is to Dutch.

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NOTES

1. This paper is based on work done during a seminar on Verb Second phenomena held at the Rijksuniversiteit Utrecht, The Netherlands, in the winter of 1981. I would like to express my thanks to the leader, dr. G.J. de Haan.

2. This type of sentence does occur in spoken Afrikaans, although it is generally avoided in the written language. In note 4 below, I suggest a possible explanation within the framework of the analysis I am to propose.

3. Cf. Chomsky 1981:303 and Erteschik 1973.

4. One can argue that (22)(b) becomes acceptable in the following way: the embedded sentence is ungoverned and *dat* here does not represent [+ Tense], which is filled by the verb *moet*, but only shares the [- Q] feature with the subject *ek*.

5. Cf. Chomsky 1981:116-117 and Koster 1978.

6. I differ here from Evers and Safir who assume that in English root sentences the finite verb generally also moves to COMP. An unwanted consequence of their position is that they are forced to explain away differences between English and SOV languages in ways which do not all seem acceptable. For instance, whereas bridge verbs allow cyclical WH-movement and complementizer absence in both English and German (and Afrikaans), Safir is forced to hold that it is only in German that these verbs relinquish government over their complements.

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