

Wolfgang Sternefeld

Government and V/2 in German*

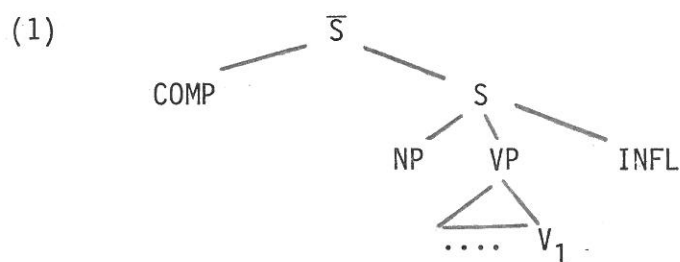
Since Bierwisch's pioneering work on German syntax, it is commonly agreed that German is SOV in deep structure. The position of the inflected verb at the end of subordinate clauses is taken as its D-structure position, the second position of the inflected verb in matrix-sentences is its S-structure position derived by a movement-rule.

Within the theory of Government and Binding, we may hope to find an explanation for this matrix-subordinate asymmetry. In this paper, I want to investigate to what extent such an explanation is feasible and which principles and parameters should be adopted in it.

In § 1 we present Safir's recent proposal to derive V/2 in terms of Inflection-Government Theory. A first criticism concerning the intuitive validity of his regulating principles is formulated at the end of the paragraph. In the course of developing an alternative approach in § 2, we will reject Safir's main thesis, namely that the inflected verb must be governed, and assume the opposite: the inflected verb cannot be governed. The alternative theory will be shown to be superior on both conceptual and empirical grounds. Having explained the core data in § 2, we extend the analysis to more remote areas in § 3. Although I am exclusively concerned with German, I will nevertheless draw upon "cross-linguistic evidence" that can be gained from the Bavarian dialect.

§ 1. Assuming a SOV-base in D-structure, Thiersch (1978) derives V/2 in main-clauses in two successive steps: first, fronting the finite verb to S-initial position (R1), and then fronting any X-double-bar category to the COMP-position of \bar{S} (R2).

In order to derive (R1) and (R2) from the principles of Government-Theory, Safir proposes the D-structure (1),



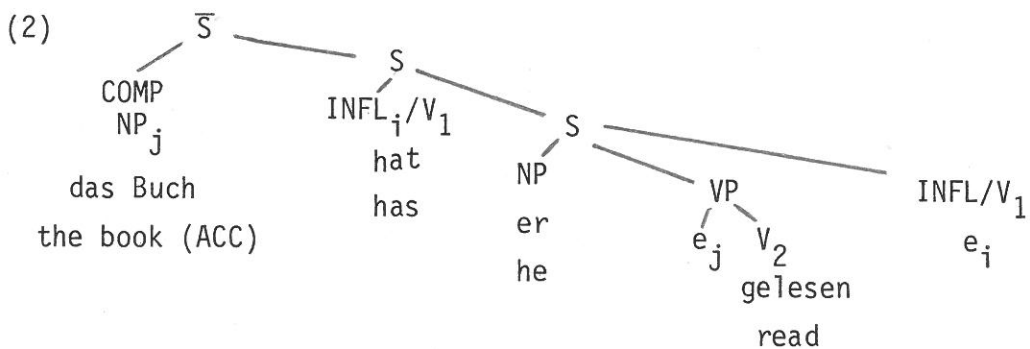
a subsequent restructuring rule attaching V_1 to INFL without leaving a trace to the effect that the tense feature of INFL can be spelt on a verbal phonological base, and the Head-Uniqueness Principle (HUP):

(HUP) \bar{S} must have a unique governed head.

Taking INFL to be the head of \bar{S} , \bar{S} is governed in subordinate clauses, INFL is governed by percolation (cf. Chomsky GB p. 300, Kayne 1981) and the (HUP) is satisfied. If further a lexically filled COMP counts as a governor of an adjacent node, V/2 can be derived in the following manner:

"Since INFL/V is ungoverned in its base position in a matrix sentence, INFL/V must move to a position where it is governed in order to satisfy (HUP). The only available governor for

INFL is COMP. Move α can chomsky-adjoin INFL above in a position where COMP governs INFL/V, ... This is insufficient to satisfy HUP, however, as COMP is only a governor if it is lexically filled. Thus some \bar{X} element must move to COMP to fill it in order that the COMP node can govern the moved INFL/V (I am assuming that the complementizer dass is not a sufficient governor)." (Safir, p. 426f) Accordingly, we can generate the following S-structure:



On the other hand, "if INFL/V is fronted and adjoined to S in a subordinate clause, then both it and its trace will be percolation - governed. Since there is not a unique governed head of \bar{S} , but rather two, the HUP is violated." (i bid. p 428)

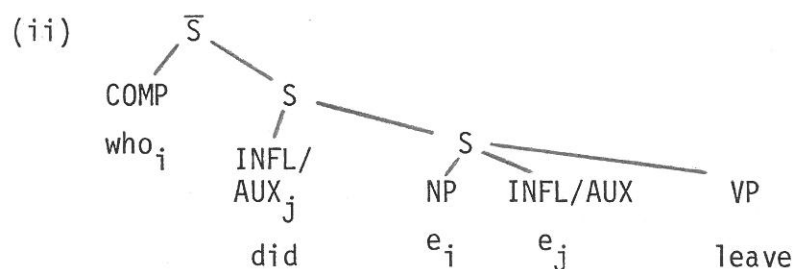
For the argument to go through we had to postulate a number of principles and rules, which seem to be at least dubious and should be dispensed with in the more restrictive theory to be developed in § 2:

1. The HUP as a universal principle is questionable, since English declarative sentences have to be made exempted from HUP(cf. Safir, p. 438). Rather, we should expect that the finite verb cannot be governed, at least not in matrix sentences.
2. Making COMP a governing category is a deviation from classical theory in two respects: if we assume, as Safir does, that the material dominated by COMP governs INFL, we have to admit non-heads as governors as well as non- X^0 categories. Thus the NP Hans in Hans kommt will govern kommt in S-structure, but kommt will govern Hans in D-structure. There seems to be no independent motivation for this distort except the derivation of V/2; moreover, it tends to undermine the conceptual clarity of the concept of government.
3. Since Safir is forced not to count trace for adjacency with respect to inflection-government in order to generate Who₁ t₁ left?, we are left with an unexpected asymmetry with respect to subject-verb and subject-verb-object-sentences in German: In the latter, movement of INFL/V is obligatory, whereas in Hans kommt it is impossible, since otherwise both Hans (= COMP) and kommt(= INFL/V) would govern the trace of INFL/V thereby violating HUP (compare Safir, p. 434f.). Moreover, in Hans weiß, wer kommt both the matrix-verb and COMP govern INFL/V, admitting again a structural position to be governed twice, which

contradicts an otherwise plausible principle implicit in many definitions of government, namely that a position may be governed by at most one element in a structure.

4. Safir explains the ungrammaticality of (3)(i) without the marked emphatic reading

(3)(i) *Who did leave?



by the assumption, that e_j is governed by did across the subject-trace, thus contradicting HUP, whereas in

(iii) Who₁ did she t₁ leave?

government is blocked by adjacency. Accordingly, in

(4)(i) Wen₁ verließ₂ sie t₁ t₂ ?

adjacency must be required for inflection-government to prevent INFL/V to govern its trace. In contrast, INFL must govern the subject NP in the subordinate clause

(ii) daß sie ihn verließ

to admit case-assignment to the subject, thus violating the adjacency-requirement. It is obvious that some further ad-hoc moves are necessary to eliminate the contradiction.

5. Verb-raising to INFL does not leave a trace. As a simple consequence, ihn in (4) b. cannot be governed in S-structure. Even if case is assigned at D-structure, the trace of wen in

(5) Hans weiß, wen sie t liebt

is not governed in S-structure. Again, specific conventions are necessary to save the theory.

6. There are a lot of phenomena, especially in the Bavarian dialect of German, that require two initial positions in subordinate clauses. As it will turn out, Safir's approach has to fail in view of the fact, that one of them can be identified with an inflected position (see the discussion of the inflected COMP-node in Bavarian, p. 000).

Some additional shortcomings will be revealed in the course of developing an alternative approach.

§ 2. To begin with D-structure, a perhaps unusual feature of my account of German syntax is due to the observation that the order of arguments within the projection of V^0 is fairly free, but restricted by thematic structure, the definite-indefinite distinction, cohesion with negative elements, the identity of certain verbs ("psych-movement") and numerous other factors. In reaction to this, our non-configurational base-rules will freely generate phrases like (6):

- (6)(i) es ihm nur ein Idiot glauben wird
it ACC him DAT only an idiot believe will
- (ii) ihm niemand so etwas glauben wird
him DAT nobody NOM such a thing believe will
ACC
- (iii) Herrn Schmidt die Sache nicht interessiert
Herr S. DAT the thing not interests
NOM
- (iv) ihn keiner kommen hört
him ACC nobody NOM come hears
- (v) getanzt wird (impersonal passive)
danced is

An appropriate theory of case, government and grammatical functions has been developed elsewhere (Sternefeld 1982) as an extension of Chomsky (1981). For the present purposes it is sufficient to note that

- a. there is no INFL - position in (6); the subject is governed by the morphology of the finite verb instead (cf. Marantz 1981)
- b. there is no VP-node in (6); the entire phrases in (6) are the maximal projections of V instead.

The relevant configurational part of the base consists of the following rules:

- (7)(i) $\bar{S} \rightarrow X \quad S$
[PreF]
- (ii) $S \rightarrow V^0 \quad V^{max}$
[LSB]

The features [PreF] = prefield and [LSB] = left sentence bracket are drawn from traditional terminology (cf. Reis 1980)¹; we will refer to their nodes as the COMP or peripheral positions of S. The feature [LSB] is compatible only with the finite verb and the complementizers daß, ob, ..., \emptyset (the empty complementizer of infinitive-sentences).²

We will assume the following principles:

- (A) LSB is the head of \bar{S} .
- (B) The landing sites of move- α are peripheral positions only.
- (C) the COMP-positions are subject to a specific version of ECP (see below).
- (D) Government-percolation: a governor of \bar{S} governs the head of \bar{S} (= LSB).
- (E) The inflected verb cannot be governed.
- (F) All maximal projections of V, N, P, A are bounding nodes for subjacency.
- (G) Traces in COMP must be governed.

The matrix-subordinate asymmetry is immediately accounted for by (C)-(E): Both COMP-positions must be filled in matrix-sentences (C); in subordinate sentences, LSB is governed (D) and, as a consequence of (E), movement of the inflected verb to LSB is impossible.

We will discuss the other principles subsequently; before doing so, we note that cases of "exceptional inversion" as in (8)

- (8) Hans sagte, er habe Maria gesehen
 Hans said, he has-subjunctive Maria seen

are treated exactly parallel to Safir's theory: sagte can act as a 'weak' selector that governs \bar{S} but not LSB, thus movement to LSB is obligatory in these contexts.

Turning now to the concept of government and to the announced qualification of (C), we observe an obvious distinction between government in D-structure and in S-structure. The requirement that trace must be governed applies in S-structure after movement, government of \bar{S} and its LSB applies in D-structure and has to be preserved after movement of \bar{S} to the postfield by extraposition. Likewise a moved V still governs its complements via its trace:

- (9) Aufhängen₁ sollte₂ man ihn t₁ t₂
 Hang ought one-NOM him ACC

Aufhängen base-governs ihn, the tense-morphology of sollte base-governs man, both verbs in (9) govern by projection from D-structure.³

Let us further assume that an element in LSB governs PreF. Employing the distinction between base-government and government after movement, a complementizer in LSB base-governs PreF whereas a verb in LSB cannot base-govern PreF, since it governs PreF only in S-structure. We now reformulate (C) as

- (C') Base-generated empty elements must be base-governed.

Accordingly, the surface-phenomenon that PreF is governed in a matrix clause is not sufficient to leave PreF empty. An empty LSB of a moved \bar{S} is permissible if and only if it is base-governed by projection, i.e. governed in D-structure. Consider (10):

- (10)(i) Fritz₁ sagte₂ er t₃t₂ [_S t₁ sei₄ t₁ krank t₄]
 PreF LSB be-sub. ill
- (ii) [Fritz sei krank]₁ sagte₂ t₁ er t₂
 PreF LSB PreF
- (iii) *Fritz₁ sei₂ er sagte [t₁ t₂ t₁ krank t₂]
 PreF LSB PreF LSB

(iii) is illformed, since the trace in LSB is not governed; in (i) the trace in PreF is governed, the sentence is grammatical. In (ii) the embedded clause in PreF is configurationally governed by sagte in S-structure, its LSB is not base-governed and therefore non-empty.

Apart from exceptional-inversion-sentences we have to examine relative clauses and indirect questions. In German, the relative pronoun agrees with its head-NP in number and gender. We therefore assign to the \bar{S} -node of a relative clause a feature REL(number, gender) which does not percolate to the head, but to governed node:

(13)(i) [_S Mit wem bist du t₁ gekommen?]
 +WH +WH

(ii) [_S Mit Hans₁ bin ich t₁ gekommen]

Both sentences are derived by the same movement-rules (Thiersch's (R1) and (R2), and the traces behave exactly alike.

We may strengthen this outcome by the requirement that no distinction can be drawn with respect to move α . This is formulated in (H), which correctly predicts, that (14)(ii) and (iii) are ungrammatical:

(H) +WH-elements cannot be fronted.

(14)(i) Er glaubte, er habe wen gesehen ?

he believed he has-subj. whom seen (echo-question)

(ii)*Er glaubte, wen habe er gesehen ?

(iii)*Er weiß, wen daß Maria gesehen hat

Further support for our base rules (7) can be gained by the observation that (14)(iii) is grammatical in Bavarian. The deviation from standard-German is captured merely by lexical properties of the verb wissen: In Bavarian, wissen can simultaneously select the complementizer daß and the anti-head feature +Q.-

Unfortunately, there is still a problem with (15):

(15)(i) *Hans weiß, Maria₁(Nom) daß/ob t₁ ihn gesehen hat.

(ii)*Hans weiß, Maria₁(ACC) daß/ob er t₁ gesehen hat.

not by movement. So far, (I) is the only language-specific parameter that has no inherent plausibility in itself and is dictated purely by descriptive adequacy. Nevertheless it seems to be justified to take (I) as a parameter. Trying to derive (I) from more substantial principles might conflict with violations of (I) in Bavarian; here we find examples like the following (cf. Merkle, p.192f):

(17)(i) An Fünfa_{preF} daß_{LSB} i griag, häd i need gmuoand
 A five that I get, have-subj I not thought
 I wouldn't have thought that I get a five.

(ii) Säng_{preF} wamma_{LSB} wäs daad, na waar dees Deadda
 seen if something did, then be-subj. the theatre
 glei nõ vui scheena.
 even still much nicer.

If we could see anything, the play would be even more fun.

The exact nature of (G)-violations has still to be investigated more closely.

§ 3. Persuing our analysis still further, we are content to find other phenomena accessible to our treatment of positional fields; at the same time we have to admit, however, that at least one case of overgeneration remains unexplained. We do not try to give an explanation for it, but simply present the relevant examples, and note in advance that none of the grammatical examples in this

For the time being, we may fall back upon a classical device to get rid of examples like (15), we simply state a restricted and modified version of the doubly filled COMP filter:

- (I) * [-WH, +complementizer]
 PreF LSB

We will come back to this later on.

Thus far we have shown that our base-rules and conditions on government provide for a descriptively adequate account of V/2 and related phenomena in German. Moreover, condition (A) is the only choice for a head available in (7); (B) is virtually a logical consequence of the non-configurational V-projection; (C), (D) and (G) are widely accepted parameters or principles in GB-theory; (F) is a rather natural parameter, since it admits the unspecified variable in (7)(i), (consequently, (9) and (15)(i) are grammatical) but it blocks preposition-stranding and (16)(ii):*

- (16)(i) Geliebt₁ haben wir ihn [sehr t₁]
 loved have we him much
- (ii)*schön₁ war er [sehr t₁]
 beautiful was he much

(E) is close to the opposite of HUP and explains what has to be explained. (H) simply reflects and reinforces that PreF gets its +WH features by feature-percolation,

paragraph would conform to Safir's theory⁴, though many of the ungrammatical examples would be ruled out correctly.

First compare (18) to (19):

(18)(i) [_{NP}die Vorschriften [_{S₀} [_{S₁} die₂ φ PRO t₂ zu beachten] [e]]
 the regulations which of respecting
 er t₁ nicht müde wurde]]
 he not tired became

(ii) .. er ... kam in ein (Stadt-)Viertel, [_{S₀} das₂ [e]]
 he came to a town area which
 er sich t nicht entsinnen konnte : [_{S₁}=PostF₀ t'₂ φ PRO]
 he refl not remember could PreF LSB
 je t₂ gesehen zu haben]]⁵
 ever seen having

(iii) [_{NP}der Vortrag, [_{S₀} den₂ [e] ich im März 1950]
 the talk which I in March 1950
 ... [_{S₁} t'₂ φ PRO t₂ zu halten] die Ehre hatte]]
 to present the honor had

(19)(i)* [_{NP}die Vorschriften [_{S₀} [_{S₁} die₂ daß er t₂
 PreF LSB
 the regulations which that he
 beachtet] [e] sie erwarteten]
 respects LSB they expected

(ii) (??) Wir suchen uns die Gruppen aus,
 we choose [refl] the groups (verb. part.)

[_{S₀} mit denen₂ [e] wir t₁ glauben
 PreF LSB
 with whom we think

[_{S₁} t'₂ daß wir t₂ gemeinsame
 PreF LSB
 that we common

Sache machen können]] (quoted by Kvam (1980))
 thing do can

We choose the groups that we think we cooperate with.

(iii) * [_{NP}die Vorschriften [_{S₀} die₂ [e] sie
 PreF LSB
 the regulations which they
 [_{S₁} t'₂ daß er t₂ beachtet] erwarteten]
 that he respects expected

The structures of (18) and (19) are exactly parallel in the relevant respects; the only difference concerns the choice of the complementizer ϕ in (18) and daß in (19). The ungrammaticality of (19)(iii) is due to the base-structure position of a tensed clause within the sentence-bracket. This might be an effect of condition (E), assuming that base-government of a verbal element is so powerful as to evoke the feeling that the embedded finite verb is governed by the matrix-verb.⁶

(19)(ii) represents an extraction from a tensed \bar{S} the head of which is governed. In standard German this process seems to be heavily restricted by conditions on the choice of a governor and the category of the moved element. Many speakers do not accept it at all: they strictly conform to principle (I). Some dialects of German, however, are less restrictive in this respect, leaving further room for parametric variation. We have seen that Bavarian permits violations of (I), and, indeed, it is the least restrictive dialect with respect to extractions from tensed \bar{S} :

(20) Da Sepp₁ ham's g'sagt [t₁ daß t₁ g'storbn is]
 Joseph have they said -WH that died has

(19)(i) however, is ungrammatical in all dialects; this does not fall out of our principles and might be described by a *[+ REL, daß] -filter, as long as no other explanation is readily at hand.

15

Two further observations should be mentioned, which are apt to refute Safir's theory. Safir explicitly denies the possibility of a doubly filled COMP in German (cf. p. 426). Apart from the data discussed so far, we first point out that Bavarian has an optional relative clause complementizer wo, which may coexist with a relative pronoun in Pref:

(21) dea Breiss, dea wo gjodld had
 the Prussian who COMP yodeled has

The pronoun can be deleted up to certain recoverability conditions (cf. Merkle, p. 148f)⁷.

Secondly, we draw attention to a morphological reflect of the identification of the complementizer-position and the INFL-position in LSB: In Bavarian, all subordinating conjunctions have to agree with a second person subject in the subordinated clause:

(cf. Merkle,
 p. 189)

(22)(i) Mia san alloans hoamganga,
 we have alone gone home

weis	ees	need	kema	seids
because+2.pers.pl.	you(pl)	not	come	have

(ii) ... obwoisd grad du aiwei dageng
 although+2.pers.sg.exactly you always against it

gredd	hasd
talked	have

Conceptually, it seems to be preferable to generate a complementizer/INFL-position directly in the base, rather than

move INFL to a position adjacent to COMP. (22) would require a doubling of INFL in Safir's approach; according to my suggestions, we simply have to state a Janus-faced agreement rule.

Although many problems have not been discussed so far (and even more might have been overlooked), we feel that the presented data do not leave much room for manoeuvre; they simply suggest that our analysis is on the right track.

Footnotes

1) The other topological positions are the middlefield, the right sentence bracket and the post(verbal) field, as illustrated in (i)

(i) Hans schaltete das Licht aus, das
PreF LSB middlefield RSB PreF
Hans switched the light off which

e ihn blendete
LSB middlef. RSB
him dazzled

post(verbal)field

1/4
2) We hereby implicitly identify the position of the complementizer (Safir's COMP) with the potential position of the finite verb (Safir's INFL/V). The same identification can be found in Reis (1980), but without detailed justification. -

The effect of generating an analogue of INFL/V directly in the base dispenses with an explanation of the fact that German has V/2 in main clauses: we would not expect an explanation for the fact that English is SVO in D-structure either, the matrix-subordinate-asymmetry, however, has still to be accounted for.

3) It seems therefore plausible to require a trace for V-movement exempt from ECP, but since government is non-configurational in (6) and government-relations are in any case recoverable from S-structure, the question whether trace or not does not seem very important to us.

4) Neither would (16), (15)(i), the grammatical analogue of (14)(i), (9), (6), and presumably (10)(i) or (iii). With respect to (10)(iii), we required that traces must be governed, in (10)(i), however, the trace would not be governed in Safir's approach.

5) We assume that the extraposed sentence is adjoined to the projection of V^0 . Note that in many cases the trace of an extraposed sentential verb-complement can be spelt out as an anaphor (es or dessen; cf. Ulvestad/Bergenholtz (1979)) bound in V^{\max} ; the trace of an \bar{S} in PreF, however, cannot be realized as an overt anaphor. We conclude that V^{\max} is a relevant minimal governing category for binding theory. The peculiarity of constructions like (18)(ii) can be seen in the fact that the trace t_1 cannot be realized as an anaphor, since it has been crossed over by the REL-pronoun. This phenomenon still calls for an explanation.

6) Note that the subordinate clause

(i) (weil) wir _{pp} daran, daß Ede
because we of it that Ede
Geburtstag hatte] nicht gedacht haben
birthday had not thought have

is marginally acceptable, indicating that the force of government is weakened or blocked by additional maximal projections.

Since government of this kind can be eluded by extraposition, it suggests itself that the optional postfield of a sentence remains ungoverned. This might also explain, why successive cyclic extraposition from a postfield-position of \bar{S} is impossible: a trace in this position would not be governed.

7) I have been told that NPs like (i) are grammatical in Swabian:

(i) das Haus, wo ich den Mann kenne,
the house such that I the man know
wo es besitzt
such that (he)it owns

Assuming that Swabian has a resumptive pronoun strategy triggered by a deletion of trace in PreF, these cases do not present any difficulty in our approach. An intermediate structure of (i) is (ii):

(ii) das Haus [das_{REL₁} wo ich den Mann

φ

kenne [t₁' wo NP₂ t₁ besitzt]]
REL₂

In order to derive (i), the trace t₁' is deleted, t₁ is spelt out as a resumptive pronoun, NP₂ is moved to REL₂ in order to provide the morphological feature REL₂ with a phonetic matrix (= der), and the REL-pronouns are deleted.

References

- Bierwisch, M. (1963), Grammatik des deutschen Verbs.
Studia Grammatica II, Berlin.
- Chomsky, N. (GB), Lectures on Government and Binding.
Dordrecht 1981.
- Kayne, R.S. (1981), 'ECP Extensions', LI 12.1.
- Kvam, S. (1980), Noch einmal Diskontinuierliche Infinitiv-
phrasen. In: Deutsche Sprache 1980, 8. Jahrgang,
pp. 151-156.
- Marantz, A.P. (1981), On the Nature of Grammatical Relations.
M.I.T.-diss.
- Merkle, L. (1975), Bairische Grammatik. Heimeran, München.
- Reis, M. (1980), On Justifying Topological Frames: 'Posi-
tional Fields' and the Order of Nonverbal Elements
in German. (to appear in dslav-papers 22, 1980).
- Safir, K. (1982), Infection-Government and Inversion.
In: The Linguistic Review Vol. 1, No 4, June 1982.
- Thiersch, C.L. (1978), Topics in German Syntax. MIT-diss.1978.
- Ulvestad, B. and Bergenholtz, H. (1979), Es als "Vorgreifer"
eines Objektsatzes. In: Deutsche Sprache, Vol. 7, 1979,
pp. 97-116.
- Sternefeld, W. (1982), Konfigurationelle und nicht-konfigu-
rationelle Aspekte einer modularen Grammatik des
Deutschen. Papiere des SFB, Konstanz.

