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A PROPOSAL FOR SENTENCE QUALIFYING VERBS

The verb "scheinen" like the other sentence qualifying verbs (beginnen, brauchen, drohen, pflegen, versprechen) exhibits a pattern like (1).

(1)

    a. weil es scheint [dass die Gänse nach Lappland fliegen]$_S$,

* b. weil die Gänse scheinen [nach Lappland zu fliegen]$_S$,

    c. weil die Gänse nach Lappland [zu fliegen scheinen]$_V$

Sentence qualifying "scheinen" may have a +tense/finite complement like in (1)a. , or a verb cluster construction like in (1)c. , but not an extraposed tenseless sentence like in (1)b. This is remarkable since most infinitival structures · have all three possibilities.

(2)

    a. weil die Gänse glauben [dass sie nach Lappland fliegen]$_S$,

    b. weil die Gänse glauben [nach Lappland zu fliegen]$_S$,

    c. weil die Gänse nach Lappland [zu fliegen glauben]$_V$

Pattern (1) is characteristic for infinitives without 'zu', cf. (3).

(3)

    a. weil er sieht [dass die Gänse nach Lappland fliegen]$_S$,

    b. weil er die Gänse sieht [nach Lappland fliegen]$_S$,

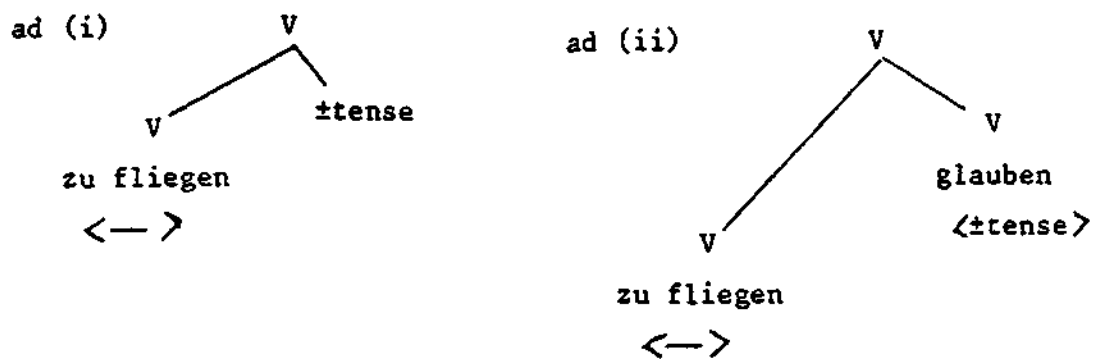   c. weil er die Gänse nach Lappland [fliegen sieht]$_V$

Last year at this conference (Evers 1981) I proposed a principle of Aux-government. This principle allowed the derivation of V-cluster constructions by means of "Move V". At the same time the principle seemed to me to reveal a deep and universal property of natural language.

    (A) Aux - government

        Verbs have to be aux-indexed, i.e. they have

        (i)   either to be governed by ±tense,

        (ii) or to be governed by an aux-indexed verb.

For Dutch, Frisian and German the aux-government relation has to be strengthened to unique and minimal C-government.

ad (i)

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        V
       / \
      /   \
     V     ±tense
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zu fliegen

$\langle - \rangle$

ad (ii)

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        V
       / \
      /   \
     /     V
    /     glauben
   V      〈±tense〉
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zu fliegen

$\langle - \rangle$

In addition to (A) language specific principle (B) was stipulated.

(B) "zu" interpretation.
   (i) The prefix "zu" enables an infinitive to carry the aux-index '-tense', but not neccessarily so,
   (ii) 'zu' may remain empty and not count as an aux-index.

The principles (A) and (B) imply that a V-cluster is obligatory for infinitives without 'zu' and optional for infinitives with 'zu'.
At last years conference Reuland (1981a) stressed that infinitival complements have to be extraposed if they are not subject to V-Raising.
I now propose to derive this observation from (C).

(C) Tense-coïndexing.
   (i) The 'zu/-tense' of an object sentence is obligatory controlled, i.e. it has to be co-indexed with the tense of the verb that governs its maximal projection.
   (ii) The tense-coïndexing can apply only within the configuration that results from Extraposition.

The patterns (2) and (3) follow from (A), (B), and (C). Extraposition paves the way for tense-coïndexing according to (C) in pattern (2).
In (3) such a coïndexing would cause ungrammaticality because there is no 'zu' to carry the index. If Extraposition does not apply there is but one way to satisfy aux-government. The V-cluster must appear, ⁻ː cf. (A) ii.
The presence of a lexicalized complement subject in (3) and its absence in (2) will follow from case-theory. This theory was proposed by Rouveret and Vergnaud (1980) for French and English. It should be born

in mind that these are configurational languages. Frisian, Dutch and
German are of a design that certainly is less configurational. I pro-
pose the principles (D), (E) and (F) to adapt case theory.

(D) Each theta role automatically provides case.

(E) The case of the subject position is changed into a nominative
if the verb is +tense.
The case of the subject position is absorbed if the verb is
marked by 'zu'.

It must be possible to establish a relation between the subject position
and the +tense/zu factor in order to get the appropiate distribution
of empty places, dummy subjects and nominatives. Nevertheless I share
the general misgivings about the assumption of a VP configuration in
German or Dutch, cf. Haider (1981) and references cited there. I have
no specific suggestion how to identify the subject position.

(F) NP positions without case can not be lexicalized in surface   .
structure.
NP positions with case have to be lexicalized in surface
structure.

Following (E) and (F) the crucial property of the passive construction
would be absorbtion of the subject theta role and not the absorbtion
of the object case. This differs from Chomsky (1981, 124).
Finally I assume (G), accepting arguments from Koster (1980) and Haider
(1981).

(G) The dictinctions between t_{NP} / t_{wh} / PRO may follow from their
different structural positions. As such they are identical as
non lexicalized NP positions.

It now follows that the complement subject position in pattern (2) is
non lexicalized as it is governed by 'zu'. The complement subject of
pattern (3) is lexiclized, it simply preserves its theta derived case,
cf. (D).

Suppose that all of this were true (A), (B), (C), (D), (E), (F), and

(G). Then pattern (1) would be doubly anamalous. Its complement subject is lexicalized although governed by 'zu'. This contradicts (E) and (F). Granting the lexicalized complement subject, the extraposed complement should have allowed a regular tense-coïndexing according to (C).
It would be rude to claim a marked 'zu', since that would not explain why the marked 'zu' is bound to appear in all sentence qualifying verbs that happen to have a 'zu' complement, nor would it explain why the marked 'zu' fails in both its functions (tense-coïndexing and case absorbtion) or why th² marked 'zu' will never show up in other object sentences. In order to derive pattern (1) from general non construction specific principles, I need a last stipulation (H).

(H) The principle of sentencehood.
   (i)   The feature ±tense is a property of the V projection line.
   (ii) A +V-projection line marked by the feature ±tense, defines a minimal governing category.
         A +V-projection line not marked by the feature ± tense does not define a minimal governing category.
         The maximal projection is transparent.

In as far as the complements of the 'sehen/lassen' group seem to preserve a certain opacity, this may be explained by a Locality constraint in the sense of Koster (1978). A lexicalized subject can be a bound anaphor if its case position is not due to a tense factor.
If there is a suject, empty or lexicalized, it will be the first NP to bind anaphors within the construction it is the subject of. This construction may be transparent or an opaque.
Suppose that sentence qualifying verbs, e.g. 'scheinen', may have an aux-marked V-projection in their object position, but define no theta role for the subject position.
Then the 'scheinen' complement may be +tense/finite or zu/infinitival. In the latter case I will consider two variations.

(4)
   (i)   the 'zu' complement is or is not extraposed
   (ii) the complement subject is or is not lexicalized

These two variations will produce the four constructions in (5).

(5)

   *a. weil es scheint $\big[$die Gänse nach Lappland zu fliegen$\big]_{S'}$

   *b. weil es scheint $\big[$ PRO$_{arb}$ nach Lappland zu fliegen$\big]_{S'}$

   *c. weil es   nach Lappland $\big[$zu fliegen scheint$\big]_V$

   d. weil die Gänse nach Lappland $\big[$zu fliegen scheinen$\big]_V$

In the grammatical variant (5)d. the subject complement has been
lexicalized and the complement has not been extraposed. The zu +
infinitive can not get an tense-index because Extraposition has
not been applied, cf. (C). Consequently the infinitive must be
raised into the V-cluster in order to satisfy Aux-government,
cf. (A). The complement subject had originally no case since it was
governed by 'zu'. This pernicious configuration has been changed by
the V-Raising. The complement subject may now arrive in the matrix
subject position and acquire a nominative. The new status of the
complement subject will follow

       — either because the matrix-tense defines a subject nominative
          position and the complement subject moves into it;

       — or because the nominative effect of the matrix tense enters
          the complement structure because this structure is transparent;

       — or because the removal of the complement verb by V-Raising
          leaves no empty place and causes a reinterpretation of the
          structure in which the whole projection line of the comple-
          ment disappears and the former complement subject happens
          to occupy the matrix subject position after the pruning of
          the complements labels has taken place.

Since the complement subject position was a non case position, it might
have stayed non lexicalized. In view of the stars on (5)b and (5)c this
should lead to ungrammaticality, whether Extraposition does apply as
in (5)b or does not apply as in (5)c.
Following Williams (1980) I assume that the empty subject of a comple-
ment in the accusative position is subject to obligatory control. It
carries a theta role and must find a reference carrying NP as its
antecedent in the matrix construction. Arbitrary reference is not
allowed and the matrix construction contains no NP that could function
as a controller. Supposes that this is true and that the free dative
NP in the matrix for some good reason could not funtion as a con-
troller of the complement, cf (6), then there is an explanation for
the ungrammaticality in (5)b and (5)c.

(6)

    a. weil es mir scheint[dass die Gänse nach Lappland fliegen]$_{S'}$

   *b. weil es mir$_i$ scheint [PRO$_i$ nach Lappland zu fliegen]$_{S'}$

    c. weil mir die Gänse nach Lappland [zu fliegen scheinen]$_V$

Finally (5)a. The complement has been extraposed and will get a tense-index according to (C). The index will turn the maximal V projection into a minimal governing category according to (H). The complement subject has a theta role and reference but no case since it is governed by 'zu'. This should cause the ungrammaticality of (5)a. If the complement subject is moved into the matrix subject position, construction *(1)b will appear. In the matrix subject position the constituent will have case and reference, but no theta role. The empty complement subject position will have a theta role, but that is a position in a different minimal governing category. It can not transmit its theta role to an argument position in another governing category.

(1)b. weil die Gänse scheinen [nach Lappland zu fliegen]$_{S'}$

ad (1)b.

Minimal
Governing
Category
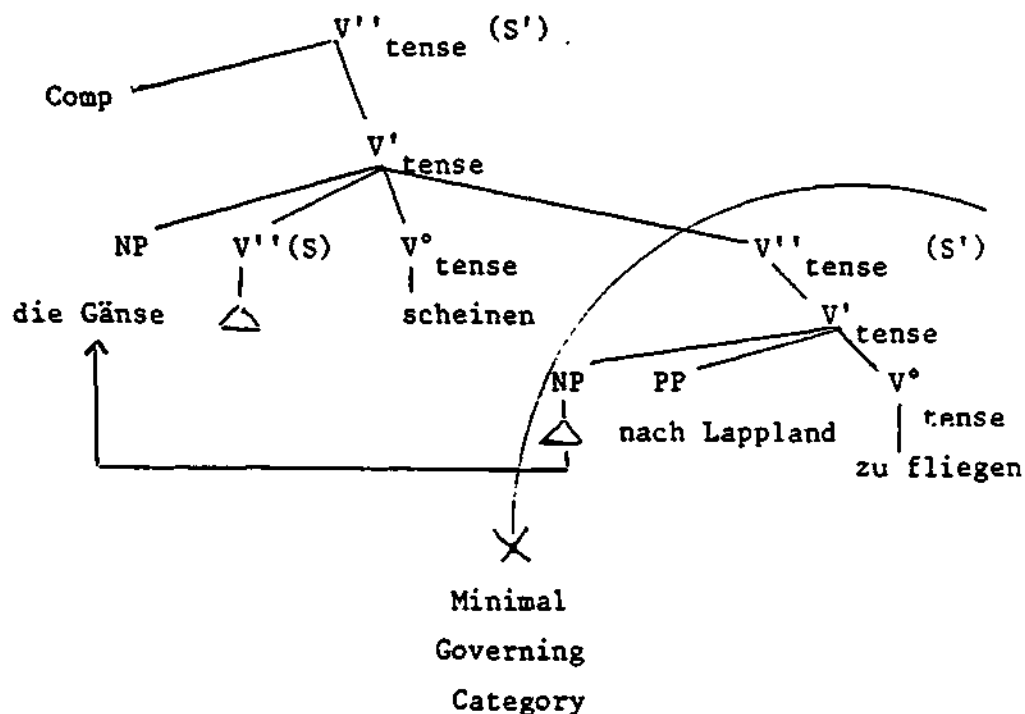
Pattern (1) has now been derived from principles that are not construction specific. This is an advantage but not a decisive one. It is desirable to

show how the principles (A) - (H) apply to other languages, especially
the better analyzed ones. Cf. Evers (1982) for an attempt to analyze the
French Faire-construction along these lines. I have no specific proposals
for English at the moment, but variants of Aux-government like those in (7)
may turn out to be useful.

(7)

  a. In some languages infinitives may be more 'nouny' / +N . Such
     infinitives will react like predicative nouns or adjectives.
     They will not be subject to Aux-government and not restructure.
  b. the V' or the V'' are to be aux-indexed rather than the V°.
  c. Not all verbs can function as aux-governors but only a small
     grammaticalized set can do so. Such languages are marked, they
     have auxiliary verbs.
  d. The interpretation of the infinitive as not aux-indexed is only
     possible for certain complements. E.g. in Spanish V-Raising
     seemsto be an option for 'subjunctive' complements but not for
     'indicative' complements.

The less variants the better, of course. The notion aux-index is aimed to
be a universal that turns a maximal V-projection into a sentence. The
variations in (7) do not neccessarily weaken that point of view. The grammars
differ in what may count as an aux-index, but not in the function as such.
The verbs in (8) are increasingly limited to a function of Aux-government.

(8)

  a. Clause-union verbs   : may exercise Aux-government over the
                                complement verb.
  b. Sentence qualifying verbs: assign no theta role to their subject.
  c. Semi-auxiliaries   : always exercise Aux-government.
  d. Auxiliary verbs   : exhibit restriction on the verbal para-
                                digm that follow from their use as
                                standard aux-index.
  e. Grammatical formatives   : have no lexical content or morphological
                                paradigm of their own.

German 'scheinen' as well as English 'seem' are sentence qualifying verbs.
Both show restrictions as mentioned in (8)d.

(9)a. Er sah dass die Gänse nach Lappland zu fliegen schienen
   *b. Er sah   die Gänse nach Lappland zu fliegen scheinen

(9)c. Er sah dass es schien dass die Gänse nach Lappland flogen

x d. Er sah es scheinen dass die Gänse nach Lappland flogen

e. Es hat den Anschein gehabt dass die Gänse nach Lappland flogen

x f. Es hat geschienen dass die Gänse nach Lappland flogen

(10)a. He saw that the geese seemed to fly to Lapland

x b. He saw the geese seem to fly to Lapland

c. He saw that it seemed that the geese flew to Lapland

x d. He saw it seem that the geese flew to Lapland

e. The geese have made the impression to fly to Lapland

x f. The geese have seemed to fly to Lapland

g. It has made the impression that the geese flew to Lapland

x h. It has seemed that the geese flew to Lapland

German 'scheinen' as well as English 'seem' evade positions that receive
aux-government from another verb. It is as if they contain an inherent
+/- tense. I have no more to offer than a speculation. Suppose that
certain lexical items of the category verb contain a feature +M , that
deictically marks an epistemic attitude. A morphological rule might
require that once there is a locus for a deictic marker the verb has
to contain +/- tense as well. It is not clear though why the feature +M
has such a marked preference for impersonal verbs. Pattern (1) has
been explained in what seems to me a promising way. Pattern (9) remains
a problem. Note that the same verbs take part in both patterns.

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