Verb position, verbal mood and the anchoring (potential) of sentences*

Abstract

In this article the main focus is on German complex sentences where a subordinate clause appears in the shape of a matrix CP, i.e. showing verb second. Furthermore, a glance is thrown at related phenomena in other languages: so-called root transformations in English and the licensing of verbal mood in Romance. A formal treatment will be proposed: in case a subordinate clause is used by the speaker to trigger a discourse new reading, conveying information the speaker intends to assert, the sentence is raised to a position such that the initially hypotactic structure is transformed into a quasi-paratactic construction. This move, which can be conceived of as an instance of quantifier raising for CPs, puts subordinate sentences into a position directly in the scope of a speech act operator, which results in the desired reading. The technical devices that are used for this step are not different from proposals such as Stowell's relative clause attachment to achieve the independent tense construal, or Farkas' binding approach to account for the reading of indefinites. The idea is that a subordinate sentence with obvious main clause characteristics is interpreted twice: in the base and in the derived position, resulting in a double access reading.

1.   Verb second in German subordinate sentences

The standard approach to German word order in canonical declarative sentences with respect to the position of the (finite) verb is that in subordinate clauses the verb occupies the very last position (rechte Satzklammer 'right sentence bracket'), which is commonly considered the base position.

In matrix clauses the finite verb occupies the derived, so-called second

position (henceforth V2). In addition it has been shown that under the right conditions a subordinate clause may appear in the shape of a matrix sentence, exhibiting V2.

(1) *Ich glaube, er hat recht.*   (Reis 1977)
I   believe, he has right.
'I think he's right.'

(2) *Es ist besser, du kündigst ihm.*
It is better you fire   him.
'It would be better for you to fire him.'

There is a debate on as to whether the dependent V2 clause is indeed a subordinate sentence. Several researchers claim that these sentences are examples of parataxis, being actually a sort of conjunction of two (more or less) independent sentences. I do not want to discuss the question of parataxis versus hypotaxis here.

   Several arguments speak for the embedded status: (i) there is a
thematic relation between the matrix predicate and the CP under debate, (ii) the phonological shape is such that there is a rising tone at the end of the matrix predicate, signalizing that the sentence is not finished, but asking for completion. The most convincing argument (iii), however, seems to be provided by binding facts.

(3) <u>*Jeder*</u>   *denkt,* <u>*er*</u> *kommt zu kurz.*
Everybody thinks he comes to short.
'Everybody thinks he comes off worst.'

(4) <u>*Fast jeder Tenor*</u> *behauptet,* <u>*er*</u> *käme ohne   Probleme   zum*
Almost every tenor   claims   he came without problems to-the
high-C
hohen C.
'Almost every tenor claims to reach the high C without any difficulties.'

This binding is impossible across a sentence boundary (with obscure exceptions in modal contexts). The pronoun '*er*' can get the bound reading only if it is c-commanded by the quantifier, which is possible only if the sentence is embedded deeper then the matrix subject.

The article is organized as follows. In the next section, predicates and grammatical constructions are discussed that allow for verb second order in subordinate clauses. These predicates and constructions are compared to their English and Romance counterparts. It is shown that some unexpectedly unrelated phenomena turn out to be quite alike (XP-movement into the left periphery, verbal mood selection and licensing). In the third section the similarities are put forward. Section 4 recalls an old proposal: main clause phenomena (verb second, constituent preposing to mark informational status, obligatory indicative mood) signal assertive potential. In the following two sections (5 and 6) a formal solution is sketched: QR for CPs. Section 7 tries to show related problems that are likely to be treated in the same vain.

2. The predicates

2.1. German Verb second (V2)

Although V2 is possible in adjunct sentences (relative clauses, *weil*-Sätze and so on, see Gärtner 2001, 2001a), it is a common phenomenon in subordinate complement sentences. Past research has classified predicate groups that allow for embedded V2 (Reis 1977, 1997; Helbig and Kempter 1974, Butulussi 1991, Romberg 1999). Despite some degree of variation in the actual classes established, there is, by and large, a consensus as far as the results are concerned.

The clearest cases are (i) verbs of communication (verba dicendi) and certain perception verbs (ii), related to evidential predicates. One also finds V2 relatively frequently with (iii) verbs of thinking (doxastic predicates).

Class (i)   *sagen, antworten, behaupten, bemerken, berichten, bestätigen,...*
(say, respond/answer, claim, remark, report, confirm...)

Class (ii)   *ahnen, bemerken, entdecken, erfahren, erkennen, feststellen, finden, herausbekommen, hören, merken, sehen, spüren, ...*
(suspect, realize, discover, learn, recognize, find (out), hear, feel, see,...)

Class (iii)   *annehmen, argumentieren, begreifen, berechnen, beschul-
               digen, sich besinnen, beweisen, denken, einsehen, fürchten,
               glauben, meinen, überlegen, unterstellen, verstehen, vor-
               aussetzen, wissen*
               (think, argue, realize, calculate, prove, believe, be afraid,
               see, understand, presuppose, know...)

Less clear is a forth class (iv), which will be argued to be misplaced here
(for examples and discussion see below): volitional predicates, preferential
expressions, verbs of desire and command.

Class (iv)   *wollen, wünschen, hoffen, empfehlen, überreden, das bes-
               te/besser/lieber sein, lieber haben (hätte...), vorziehen, be-
               lehren, bitten, verlangen...*
               (want, wish, hope, recommend, convince, be better, prefer,
               show, teach, ask/command /demand...)

As for verbs that do not allow V2 order in their complements, a satisfactory
classification cannot be found. The reason is simply that verb-last is the
canonical case for subordinate sentences, thus the default case needs no
special treatment and description.
     However, one can find some vague listing of predicates that ban V2
order. Reis 1997 and Romberg 1999 list 'Berücksichtigungsprädikate'
(predicates of consideration = group (i)), semantically complex, inherently
negative predicates (ii) and emotive verbs (iii).

Group (i)   *vernachlässigen, ignorieren, bedenken, beachten...* (ne-
               glect, ignore, consider, bear in mind...)
Group (ii)   *verdrängen, vergessen, verheimlichen...*
               (repress/suppress, forget, hide/conceal...)
Group (iii)   *bedauern, bereuen, übelnehmen, beklagen,...*
               (regret/feel remorse, take offense, amiss, deplore...)

(5)   *Ich bereue, dass ich es nicht sofort   gekauft habe.*
        I   regret that I   it not immediately bought have

(6)   *Ich bereue,   ich habe es nicht sofort   gekauft habe.*
         I   regret   I   have it not   immediately bought both:
        'I regret that I did not buy it right away.'

One can easily see that this classification is not very sophisticated. The predicate classes are merely tentative. Cross-classification, hence ambiguity, is inevitable. Group (i) and (ii) are not very distinct. However, the verb classes suggest that the factor of factivity seems to play a key role. All the listed verbs can be considered factive predicates (Kiparsky and Kiparsky 1971, and the discussion in Karttunen 1971).

A discovery by Romberg 1999 is also relevant here, namely the identification of another group of verbs that does not allow for V2. These are of the so-called causative class (or as will be argued later implicative verbs (Quer 1998; Karttunen 1971 again)) (iv).

Group (iv)   *verursachen, bewerkstelligen, vermeiden, bewirken, vermeiden, unterlassen, berücksichtigen, erzwingen, schaffen, hinkriegen, gebacken kriegen, forcieren, verhindern*[1]...
(cause, get sth realized, prevent, give rise to, omit, neglect, force....)

(7)   *Hans hat verursacht, dass Peter nach Hause geht.*
Hans has caused   that Peter to   home goes.

(8)   **Hans hat verursacht, Peter geht nach Hause.*
Hans has caused   Peter goes to   home.
'Hans caused Peter to go home.'

The next phenomenon to be discussed is the fact that those predicates that do, in principle, allow for V2 in subordinate sentences, do so only under specific conditions, namely almost exclusively in positive, simple assertions. An old observation – dating back at least to Blümel 1914 – is that negation blocks V2.

(9)   *Ich glaube nicht, *er hat recht /*[ok]*dass er recht hat.*
I believe not, **he has right / that he right has
'I don't believe he's right.'

Certainly, there is something to this observation, and the contrast between (1) and (9) is striking.

However, there is no blind mechanism that stipulates that V2 is ruled out under negation. Butulussi 1991 conducted some excellent corpus research and came up with a considerable list of (apparent) counter examples:

(10)   *Glauben Sie nicht, ich fürchtete mich vor der süßen Last.*
       Believe you not, I   fear   me of the sweet burden
       'Don't believe I would be afraid of this sweet burden...'

(11)   *Freilich solltest du nicht denken, dieser gute Glaube sei eine Ent-*
       schuldigung oder...
       Surely   should you not   think   this   good faith be   an
       apology or...
       'Of course: you should not think that this belief would be an apol
       ogy.'

(12)   *Das war so schön,   dass er nicht glaubte, es könnte etwas*
       That was so beautiful, that he not believed, it could something
       Schöneres auf der Welt geben.
       nicer   on this world give
       'That was so gorgeous that he could not believe that there would be
       something more beautiful on earth'

(13)   *Ich will   nicht sagen,.kein Erwachsener halte sich an die Regeln.*
       I   want not   say,... no adult   keep   on the rules
       'I do not want to claim no adult would obey the rules.'

(14)   *Sie   dürfen nicht glauben, das Gericht hätte leichtfertig*
       You may   not   believe, the court   had   carelessly
       entschieden.
       decided
       'You should not believe the court took the decision carelessly.'

(15)   *Sagtest du   nicht eben, die Doktrin,..., sei Ausdruck des Blutes?*
       Said   you not   just, the doctrine,..., be expression of-the blood
       'Didn't you just say the doctrine... was an expression of blood...?'

Three things must be said about these examples. The first is that only a
subgroup of the listed V2 licensers have this option: verba dicendi and
some cognitive verbs. Excluded are all semi-factives, which are not listed
in the relevant research as a class of their own and hence do not appear in
the classification above. The relevant verbs such as '*wissen*' (to know),
'*herausfinden*' (find out, '*beweisen*' (prove) are mentioned, but they do not

appear as a homogenous group (as I would suggest), but they appear in an unrelated fashion distributed across different groups.

Secondly, in each of Butulussi's examples, the verb form in the subordinate sentence appears in conjunctive (subjunctive form). That this is not merely an accident can be shown by the degraded grammaticality of these examples if put into indicative mood.

(10')   a.   *?/*Glauben Sie nicht, ich fürchte mich vor der süßen Last*
              ((10) in indicative)

(11')   a.   *?/*Freilich solltest du nicht denken, dieser gute Glaube ist eine Entschuldigung.*

Even more important and, for me, the crucial observation is the third point: no single matrix clause is a canonical indicative sentence. None of the V2 embedding matrix clauses can be considered an assertion. We have questions, imperative sentences, or embedded – hence illocutionless sentences. Even in formally indicative sentences, the matrix must not be interpreted as an assertion, but must be interpreted as a command to give up a certain belief:

(16)   *Sie   glauben doch nicht, ich hätte   etwas   mit der*
        You believe prt   not,   I   would-have something with the
        Sache zu tun.[2]
        thing   to do
        'You don't seriously believe that I could be involved in this...'

In this light, the old observation is still valid. Negation blocks V2. Only subjunctive mood can sometimes save a subordinate V2 clause under negative elements.

If one chooses semi-factives, which do not allow for subjunctive in their complements, one can see, furthermore, that not only negation blocks V2, but also interrogative and imperative mood.

(17)   **Wissen Sie, die Gruberova kommt / käme / komme nicht mehr*
         know you, the Gruberova comes / would-come   not   more
         to   F'''?

zum F'''?
'Do/would you know (that) the Gruberova can't reach the F '''
anylonger?'

(18)   *Finde mal heraus, Edita singt / sänge   noch einmal eine*
         Find prt out,   Edita sings / sing-conj still once   a
        Mozart opera!
        Mozart-Oper!
        'Find out that Edita sings a Mozart opera (again).'

Before turning to a related phenomenon in English, let me give a short
overview concerning licensors and blockers of V2 in subordinate sentences.

(19)   Verbs / constructions that allow for V2:
        a.   verbs of saying
        b.   verbs of thinking
        c.   verbs of wanting
        d.   semi-factives (verbs of 'discovery' and '*wissen*')
                that do not:
        a'.   factive verbs (emotive, truly factive predicates)
        b'.   semantically complex, negative verbs
        c'.   under negation, questions, imperatives
        d'.   causative, implicative verbs

2.2. Root transformations in English

Hooper and Thompson 1973 are concerned with a quite related problem in
English: root transformations in subordinate sentences. Their main point is
to show that Emonds 1969 is not quite correct in postulating the non-
applicability of so-called root transformations in non-matrix contexts.
Emonds claimed that a collection of transformation (see below) can be
applied to matrix sentences only. For example, VP preposing: (20) is con-
trasted with (21) to show that whereas a VP can be fronted in matrix sen-
tences, it is blocked if applied in subordinated clauses. The same pattern
emerges with negative constituent preposing, which is another instance of a
root transformation (22, 23) vs. (24).

VP preposing

(20)   (Marry plans for John to marry her, and) marry her, he will.

(21)   *(Sally plans for Gary to marry her, and) I regret that marry her he will.

Negative Constituent Preposing

(22)   Never in my life have I seen such a crowd.

(23)   I have never in my life seen such a crowd.

(24)   *I resent that never in my life did I do something like that.

The same can be observed with the following transformation in the same vein:

(25)

Directional Adverb Preposing:	Up the street trotted the dog.
Preposing around *be*:	More significant would be the development of a semantic theory.
Participle Preposing:	Standing next to me was the president of the company.
Prepositional Phrase Substitution:	On the wall hangs a portrait of Mao.
Subject Replacement:	That Henry forgot the key irritated Carmen.
Direct Quote Preposing:	"I won first prize," Bill exclaimed.
Complement Preposing:	Syntax and semantics are related, I think.
Adverb Dislocation:	The thief sneaked away in time, evidently.
Topicalization:	This book you should read.
Left Dislocation:	This book it has the recipe in it.
Right Dislocation:	You should go to see it, that movie.

Hooper andThompson's merit consists in showing that things are more intricate, and that certain verb classes allow for embedding of transformations that Emonds claims to be root-only phenomena. The examples in (26) through (29) seem to be fully grammatical.

(26)   I found out that never before had he had to borrow money.

(27)   Thinker Bell said that Wendy opened the window and in flew Peter Pan.

(28)   I expect that speaking at today's luncheon will be our congresman.

(29)   It appears that this book he read thoroughly.

Hooper and Thompson depart from a verb classification based on the famous factivity criterion (Kiparsky and Kiparsky 1971; Karttunen 1971):

(30)   Nonfactive

A	B	C
say	suppose	be (un)likely
report	believe	be (im)possible
exclaim	think	be (im)probable
assert	expect	doubt
claim	guess	deny
vow	imagine	
be true	it seems	
be certain	it happens	
be sure	it appears	
be obvious		

Factive

D	E
resent	realize
regret	learn
be sorry	find out
be surprised	discover
bother	know
be odd	see
be strange	recognize
be interesting	

In the end Hooper and Thompson show that the split between those predicates that allow for root transformation and those that do not is not the factive : non-factive distinction. They show that the split between root trans-

formation licensors cuts across this table and groups together C and D on the one hand, and A, B, and E on the other. They argue furthermore that the decisive factor is not factivity, but assertion, i.e. potential of assertivity: root transformations are legitimate where the embedded sentence conveys an assertion (for a concrete illustration and an implementation of this idea see below). Verbs of group A and B can easily introduce an assertion, in most cases these verbs are also known as bridge verbs. Verbs of group E have been called semi-factives by Karttunen. Under certain conditions these verbs may loose the defining property of presupposition (i.e. in counterfactual conditionals) and can be used (according to Thompson and Hooper) as assertive predicates, contrary to true factives (D). The new classification that emerges is given in (31)

(31)   Verbs that allow for root transformations:
      a.   verbs of saying
      b.   verbs of thinking
      c.   semi-factives (verbs of 'discovery')
      that do not:
      a.'   factive verbs (emotive, truly factive predicates)
      b.'   semantically complex, negative verbs
      c.'   adjectival-like expressions like 'possible'

The affinity with German V2 is evident for V2 is the canonical 'root transformation' in German. This has been recognized from Dunbar 1979 to Gärtner 2001.

2.3. Subjunctive mood in Romance

The similarity of embedded root phenomena with the phenomenon of verbal mood – especially the licensing of subjunctive – in the Romance languages has not been recognized in the literature before. This will be addressed in this paragraph. A look at any grammar of any Romance language will reveal that the (verbal) predicates that are listed in the subjunctive session correspond very much to the predicates (and constructions) discussed above. By and large my claim is the following:

(32)   Correspondence alignment:

> Those predicates and grammatical phenomena that block V2 in German subordinate clauses trigger subjunctive mood in Romance.

The work on subjunctive in Romance is as broad as the work on V2 in Germanic. The choice of the following works by Kempchinsky 1987, Quer 1998, 2001, Farkas 1992, 1997 is rather accidental. However, Kempchinsky, working on Spanish, gives a suitable classification of subjunctive licensing predicates. She reduces the numerous and often very vague partitions that can be found in traditional grammars to three main classes: volitional verbs, verbs of doubt and denial and factive emotive predicates[3].

(33)   *Ana$_i$ quiere que [pro]$_j$ ayude a los refugiados.*   (Spanish)
        Ana wants that s/he help-subj   the refugees.
        'Ana wants to help the refugees.'

(34)   *Ana$_i$ duda   que [pro]$_{i/j}$ sea la persona más apta para el puesto.*
        Ana doubts that s/he is-subj the best person for the job.
        'Ana has doubts about her(self) being the best candidate for the job.'

(35)   *Ana$_i$ lamenta que [pro]$_{i/j}$ tenga tanto trabajo.*
        Ana regrets   that s/he has-subj so much work.
        'Ana regrets to have too much work / that (s)he has too much work.'

Interestingly, she seems to miss a hidden class: causative, or better implicative, predicates. These are discussed in Quer 1998. The omission of the causative/implicative verbs in the Romance literature is interesting because precisely this class of verbs has also been omitted/neglected in discussion of V2 in German; with the notable exception of Romberg 1999. Quer, working on Catalan, lists: *forçar* 'force', *impedir* 'prevent', *evitar* 'prevent', *aconseguir* 'manage'.

(36)   *Ens van forçar que abandonéssim l'edifici.*   (Catalan)
        'They forced us to abandon-subj the building.'

The second merit of Quer's work is the differentiation of intensional vs. polarity subjunctive. Intensional refers to lexically governed subjunctive, triggered by predicates. Polarity subjunctive in the subordinate is triggered

by grammatical phenomena in the matrix. These phenomena are negation or non-indicative, non-assertive sentential mood.

(37)   *Creun [que en Miquel treballa]*
        they-believe [that the M. works-ind]
        'They believe that Miquel is working / works.'

(38)   **Creun [que en Miquel treballi]*   *SUB
        they-believe [that the M. works-subj]

(39)   No creuen [que en Miquel treballi]   ^okSUB

The similarity with German is striking (compare to the discussion in section 2.1, especiially the examples (9), (17) and (18)). Subjunctive under an indicative licensing predicate becomes possible if the matrix contains a negation. The same happens in questions and related contexts. The summery is illustrated below.

(40)   No subjunctive, i.e. indicative:
        a.   verbs of saying
        b.   verbs of thinking
        c.   semi-factives
        Subjunctiv with:
        a.   volitional predicates
        b.   semantically complex, negative verbs
        c.   causative, implicative verbs
        d.   factive verbs (emotive, truly factive predicates)
        e.   adjectival-like expressions like 'possible'

3.   The apparently problematic case: volitional predicates

A possible reason why the relatedness of subjunctive and V2 licensing has been missed up to now seems to me to be the mysterious case of the class of volitional or optative predicates. They are the canonical predicates requiring subjunctive. Given my correspondence alignment in (32) one would expect them to be among the predicated disallowing V2 in their subordinates. Nevertheless the leading experts (Helbig and Kempter 1974; Reis 1977, 1997) list them among the V2 licensors. This classification is fatal(ly

misleading). In the next section, I will elaborate my conviction that volitional predicates should ideally be given a separate treatment to all the other V2 licensors.

The first reason is that the prototypical verbs of wanting (*wollen* and *mögen/möchten*) do never allow for V2 complements, neither does *bitten*.

(45)   *Ich will/möchte,   du kommst mit mir.*
        I want/ would-like, you come   with me.
        'I want you to come with me.'

(46)   *Meine Tante bittet, man bringt ihr eine Ledertasche*
        My   aunt   asks, one   brings her a   leather-bag
        aus Indien mit.
        from India with
        'My aunt whishes that one bring her a leather bag from India.'

The *dass*-counterparts are fine.

(47)   *Ich will/möchte,   dass du   mit mir kommst.*
        I want/ would-like, that   you with me come.

(48)   *Meine Tante bittet, dass man ihr eine Ledertasche*
        My aunt   asks, that one her a   leather-bag
        aus   Indien mitbringt.
        from India with-brings

The examples from the literature with V2 are similar to (49), (50).

(49)   *Ich wünschte, du wärst   immer so aufmerksam.*
        I   wished,   you would-be always so considerate.
        'I only wished you were always this considerate.'

(50)   *Er wünscht sich,   du wärst   immer so bescheiden.*
        He wishes himself, you would-be always so modest.
        'He wishes you'd be always so modest.'

These are only good with conjunctive/subjunctive mood in the subordinate. Indicative would render these examples ungrammatical, unless the sen-

tences surface in the canonical verb-final subordinate pattern, which improves them considerably.

(51)   *Ich wünschte, *du bist immer so aufmerksam /* ^{ok}*dass du immer so*
        I wished,   * you are always so considerate / ^{ok}that you always so
        aufmerksam bist.
        considerate are
        'I whish you were always this considerate.'

(52)   *Er wünscht sich, *du bist immer so bescheiden / dass du immer so*
        He wishes,   * you are always so modest / ^{ok}that you always so
        aufmerksam bist.
        modest   are
        'He whishes you would always be so modest.'

Furthermore, we have Reis' so-called 'Präferenzprädikate'.

(53)   *Es ist besser, du gehst jetzt.*
        It is better, you go   now.
        'It would be better for you to go now.'

(54)   *Es wäre mir lieber, du hättest   Unrecht.*
        It would me dearer, you would-have wrong
        'I would prefer for you to be wrong.'

(55)   *Meine Frau und ich zögen (es) vor,   du gingest jetzt / würdest*
        My   wife and I   would-prefer (it) prt, you went   now / would
        now go
        jetzt gehen.
        'My wife and I would prefer for you to leave now.'

Other constructions to be listed here are: '*hätte es gern/lieber', 'wäre günstiger'/'ist gescheiter...*' (would prefer..., would be more advantageous, cleverer...) Again, conjunctive mood in the subordinate plays an important role. Two things, however, are more important here. In these examples there is no optionality of V2 and the verb-final version introduced by the C°-element '*dass*'. Here the appropriate complemtentizer is (conditional)

'*wenn*'. In combination with this, indicative emerges as grammatical. This is a clear signal to treat these cases differently from the other V2 predicates.

(56)   Es ist besser, wenn du   jetzt gehst.
           It is better,   if   you now go.   (= 53)

(57)   Es wäre mir lieber, wenn du Unrecht hättest.
           It would me dearer, if   you wrong would-have.   (= 54)

(58)   Meine Frau und ich zögen (es) vor, wenn du jetzt gingest / gehen
           würdest.   (=55)

Additionally, in all these cases the form of the matrix clause is special. These Präferenzprädikate', as a subtype of volitional predicates, are grammatical only if the matrix clause carries conjunctive mood, or contains a comparative[4]. Both can co-occur, but indicative and positive together can not embed a V2 clause.

(59)   *Es ist gut, du   gehst jetzt.*
           It   is good, you go   now.
           #'It would be good for you to go now.'

(60)   *Es ist mir lieb, du   hast / hättest   Unrecht.*
            It   is me dear, you have / would-have wrong
           #'I would prefer for you to be wrong.'

Both types of grammatical phenomena refer to models that differ from the actual world. They introduce possible worlds (mostly buletic) and can never trigger the feeling that the speaker wants to convey an assertion about the real world. These sentences are counterfactual wishes or sometimes commands/directives. Again, transformation into an obviously hypotactic structure requires that the subordinate be headed by the complementizer 'wenn'. This sets this class apart from the other predicates that allow for V2. We are far from an explanation for why one can have V2 with these sentences. But it seems to be clear that volitional predicates require some sign of embedding. Thus, if V2 (as matrix phenomenon) is possible, the subordinate character of the relevant proposition must be made explicit by a subjunctive/conjunctive verbal form. In this light, it seems appropriate to

treat volitional predicates differently from the other V2 licensors and to group them together with the categorical embedders.

4. Toward a proposal: the role of double assertion

Now the issue is what unifies predicates and constructions with respect to the realization of the dependent clause. The picture that emerges seems to suggest that it is the group of matrix shape licensors that share the relevant property contrary to the rather heterogeneous pool of predicates and constructions that block matrix phenomena in subordinate sentences. This idea goes back to Hooper and Thompson (1971), namely that it is the (potential) assertive character of the embedded proposition. Usually subordinate sentences have no assertional force([5]see below). However, for the sentences under discussion this axiom seems debatable. Hooper and Thompson argue that a sentence like (61) can be interpreted as the two assertions (direct (62a.) and indirect (62b.)).

(61)   He said it's just started to rain

(62)   a.   He said X.
        b.   It's just started to rain.

They explicitly say than that, under one reading, the main assertion isb., being the 'assertion under consideration,... whose truth is at stake in the discourse.' (p. 475). This claim cannot be justified here completely[6]. A formal implementation of this theory will be given below. What is important here is to acknowledge that there is indeed a difference. Whereas there is something assertion-like under the relevant predicates discussed above, such an option of interpretation is completely impossible with factives, implicative and volitional predicates, as well as under negation and non-assertive mood. Factives (emotives, negatives, implicatives in a certain sense) are defined as presuppositional. They presuppose the proposition contained within their complement, hence the propositional content cannot be asserted (and presupposed simultaneously)[7]. Similar things apply with negation and discourse-old sentences[8]. These belong to the background and are hence infelicitous candidates to make an assertion.

Volitional and optative predicates on the other hand do not subcategorize for presupposed material. They embed clauses that do not report about

the real word, i.e. they make no assertions either. Only in this respect do they form a class with factives: sharing the feature '-assertion'.

5. Parallels with the syntax of tense

Assuming that assertion plays a crucial role, a combination of two theories can provide a fruitful base for a technical treatment of the state of affairs discussed thus far. The first pool of ideas and devices is taken from Stowell's syntax of tense (1993, 1995). The other source is the work by Farkas on subjunctive as well as on specificity and the role of anchoring (Farkas 1992, 1997).

In slightly simplified terms, for Stowell the tempus morpheme is a predicate with two arguments. It takes two referential expressions, a reference time and an event time and orders these. The tense morpheme itself is a head in the functional domain of a clause with a meaning comparable to that of a preposition. For the sake of illustration, consider the tree in (63).
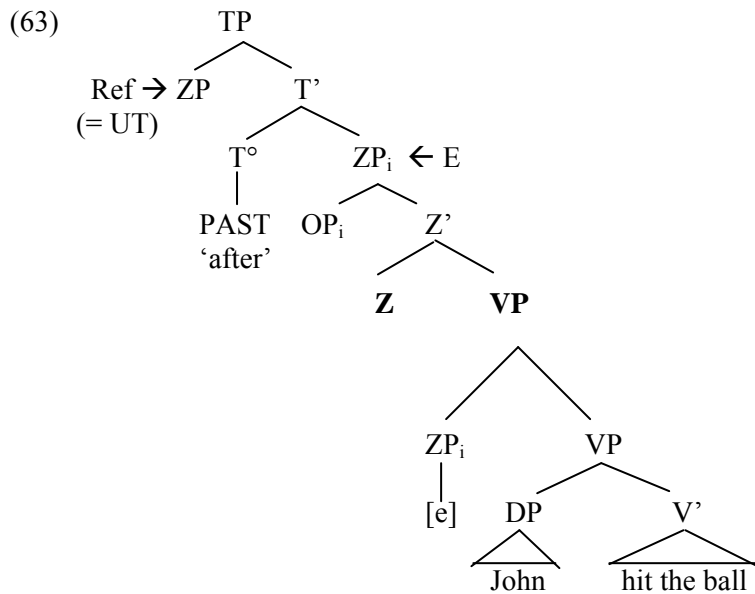
The past morpheme sits in T° and means something like 'after'. It orders the two time points Ref (reference time, in case of an independent matrix

clause usually the utterance time) in its specifier with the event time [e], which originates in the VP (c-commanded be T° and tight to the predicate[9]).

In this way the tree tells us that the utterance time is after the event time, thus the hitting event is to be located in the past. Things are more complicated in complex sentences. If (63) is embedded under 'Peter said that _ ', the sequence of time comes out as in (64). In such a construction (63) would be embedded under the *say*-VP. Then the embedded reference time, Ref-time2, acts like PRO. It cannot get identified by the utterance time, but must take the closest controler, which in this case, would be the event time of the matrix saying event. Then the past morpheme does its ordering job in the same way and as a consequence the temporal interpretation of (64) is such that, first, John hit the ball, then this was reported by Peter (sometime before the actual utterance (64)).

(64) TP1

```
(64)        TP1
         ┌────┴─────┐
      Ref-t1        T1'
        │        ┌───┴────┐
     PRO_arb    T1        ZP_i
      (=S)       │      ┌───┴───┐
              PAST    OP_i      Z'
                            ┌────┴────┐
                            Z         VP
              controller →      ┌─────┴─────┐
                             ZP_i          VP
                              │         ┌───┴────┐
                             [e]       DP       V'
                                        │     ┌──┴───┐
                                      John   V       CP
                                            │     ┌──┴────┐
                                          say    C       TP2
                                                 │    ┌────┴─────┐
                                               that Ref-t2      T2'
              controlled →                          │        ┌───┴────┐
                                                  PRO_i      T2       ZP_i
                                                             │     ┌───┴───┐
                                                          PAST   OP_j      Z'
                                                                       ┌────┴────┐
                                                                       Z         VP
                                                                             ┌───┴────┐
                                                                           ZP_j      VP
                                                                            │      ┌──┴──┐
                                                                           [e]    DP    V'
                                                                                  Bill  hit the ball
```
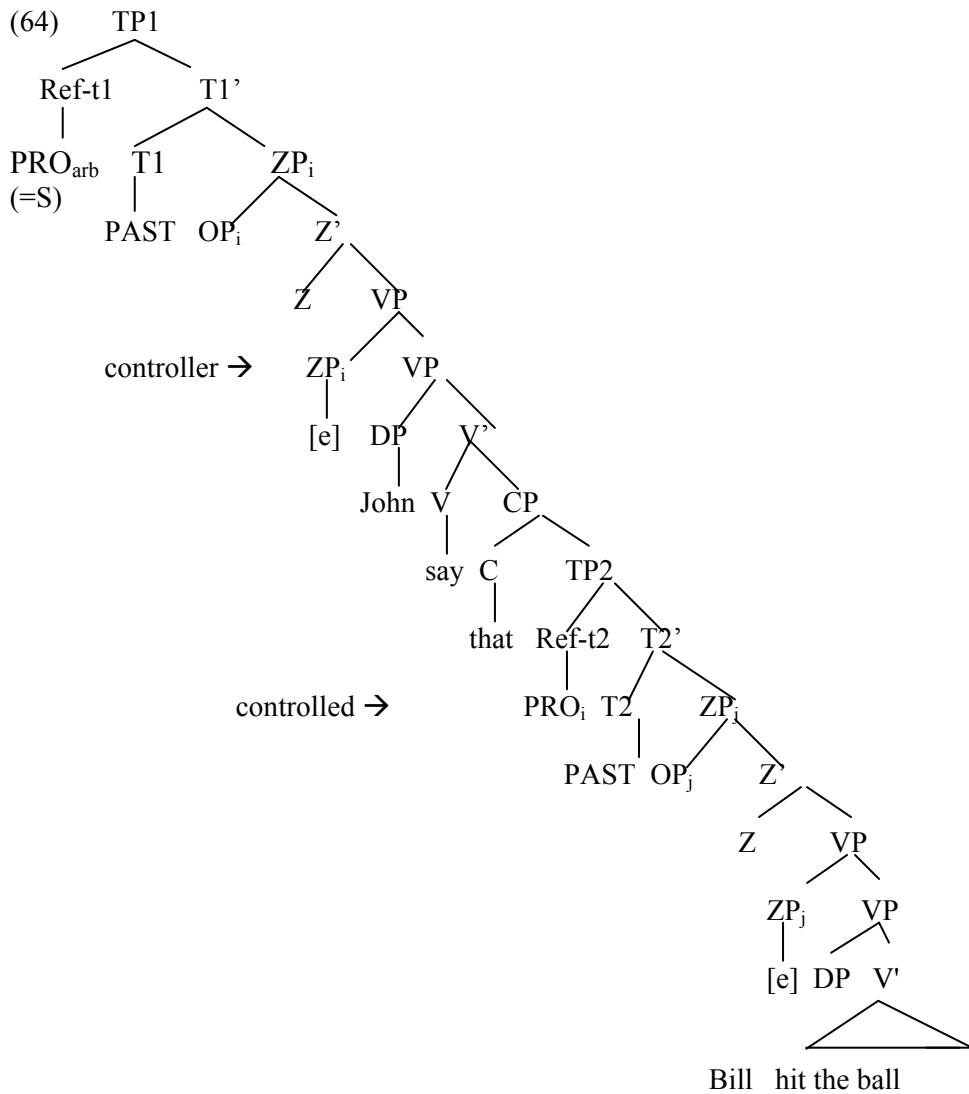
Things are even more intricate when the embedded predicates are not eventive, but stative and if other languages are taken into account. This cannot be done here. What will be done here, however, is to use a Stowell-like version for the temporal interpretation that he develops for relative clauses and to apply it to our purposes. Look at a sentence like in (65).

(65)   John gave a book to the boy [who hit the ball]

According to Stowell this sentence is ambiguos with respect to the temporal interpretation of the relative clause[10]. Two interpretations are possible. Either John gave the book to the boy who had previously hit the ball.

This reading can be achieved in the way sketched above. The relative clause remains attached in situ to the object noun phrase. In this case, RRO in the specifier of the relative, i.e. embedded TP looks for the closest binder, which is the event time of the matrix verb 'gave'. The other reading, which is as easily available, is the independent one (maybe even the only one) that identifies the boy as someone who hit the book sometime in the past, but not necessarily before the giving event. Thus, John may have given the book to the boy five months ago, who hit the ball a second before the speaker utters the sentence. For this reading, Stowell assumes relative clause attachment. The relative clause adjoins above TP of the matrix clause. This way PRO cannot be bound by any linguistic antecedent, but is identified arbitrarily as in independent clauses by the utterance time (PRO$_{arb}$), just shifting the giving event before the time point the sentence is being uttered.

(66) $[_{CP1}$ UT=RefT1=PRO$_{arb}$ ...$[$T1°=past $[$ET1 $[$Peter gave the book to
             $[$the boy
        $[_{CP2base\_position}]$ $]$ $]$ $]$ $]$
        $[_{CP2after\_raising}$ RefT2=PRO,RefT1=UT   T2°=pres $[$ET2 hit the
             ball$]]]$
        (UT=utterance time, ET=event t., ReftT=reference t.)

This is the idea that I will exploit for embedded sentences in general. The claim will be that under certain circumstances (see below and above) embedded sentences can and do leave their base position and attach very high in the structure; so high that the interpretation of variables and open expressions depends on the context rather than on c-commanding expressions.

The consequence is that the formerly embedded sentence acts as if it is a matrix clause. Thus, instead of following Stowell in his sophisticated, but over-complicated treatment of sequence-of-tense phenomena with embedded stative propositions, my claim for the temporal interpretation of a complex sentence containing a present tense verb under a past tensed matrix clause like (67) is simply as in (68).

(67)   John said that Bill is sick.   (double access reading)   =

(68)   [UT [[John [PRO1 $_{arb}$ said t]] [that Bill PRO2$_{arb}$ is sick]]].

The so-called double access reading (Enç 1987) emerges through complement clause attachment to a very high position in the matrix. The temporal anchoring of the embedded predicate (be sick) is evaluated twice: (i) first in the base position. Here the embedded PRO gets bound by the event time of the matrix predicate 'said'. In this way, Bill's sickness is shifted into the past. After complement clause raising, the formerly embedded sentence is outside the scope of the matrix TP. Now the reference time of the sentence [that Bill is sick] is the utterance time. Thus, after raising, the complement clause behaves is if it were an independent, matrix sentence. Such a analysis of 'present under past' seems to be a straightforward treatment of the phenomenon. It captures the facts very elegantly such that in some sense Abusch's de-re interpretation (Abusch 1997) of embedded present tensed clauses is implemented in a very simple manner.

6.   The anchoring potential of propositions

Now let us turn to the work of Farkas 1992, 1997. Among the majority of linguists, it is assumed that a (matrix) clause can be split into a radical, i.e. propositional content on the one hand, and an illocution on the other. Farkas 1992 argues that propositions are anchored to worlds and those in turn are anchored to individuals. This idea is revived in her work on the interpretation of indefinites 1997.

(69)   [John believes [that [a friend of mine]$_{wJ}$ is a crook]$_{wJ}$]$_{w0}$
        (narrow scope)

(70)   [John believes [that [a friend of mine]$_{w0}$ is a crook]$_{wJ}$]$_{w0}$
        (wide scope)

In (69) the indefinite is trapped in its base position. It is to be interpreted within the belief world of John's, represented by the indexed binding $_{wJ}$. This gives the narrow scope reading. In (70) on the other hand the indefinite is bound from outside. It is linked to the actual world $_{w0}$, hence to the speaker. The same can be done with propositions

(71)   [John believes [that Mary is sick]$_{wJ}$]$_{w0}$

Under this indexing, Mary's sickness is just a part of John's belief-world. Analogously, one could choose to put the $_{w0}$ index to link the proposition to the actual world and to the speaker. This is basically what I would suggest. The only thing that comes in addition to the indexing is movement. This, however, is a minor difference – as in the case of indefinites.
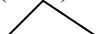
   The proposal is thus the following: matrix sentences are an illocution-proposition complex. The illocutionary force is considered to be an integral part of the linguistic structure. Semantically, I will assume an approach that makes use of illocutionary operators, as developed in Jacobs 1984, according to which these operators take structured propositions as their complements. Syntactically, I will assume that these illocutionary operators are the highest elements in the tree of a sentence, a position from which they c-command and take scope over the proposition(al content).
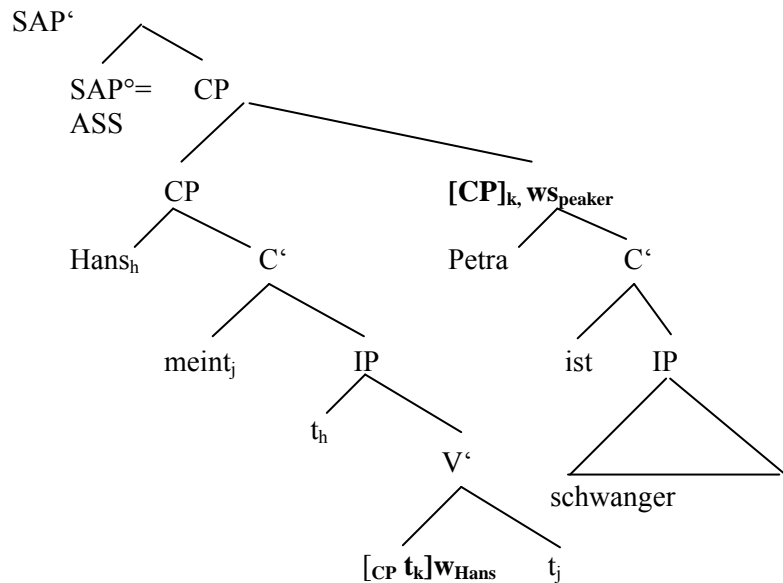
   Two additional assumptions will figure in my analysis. The first is (something like) Green's ban on embedded illocution.[11]

(72)   Green's Embedded Force Exclusion:
         If φ is either a part of speech or a sentence, and φ contains
         some indicator *f* of illocutionary force, then φ does not embed.

The second assumption is that in German, the ASSERT operator takes an ordinary indicative V2 clause (compare all this to a very similar treatment with respect to a mood phrase (MP) as the highest functional layer responsible for verb second in Lohnstein (2000), see also the contributions by Bayer and Brandner in this volume). Together these assumptions lead to the claim that in a complex sentence with an embedded V2 clause, this embedded clause undergoes movement from its base position to one in which it finds itself in the immediate scope of the illocutionary operator. In this way, a sentence like (73) can be analyzed as in (74):

(73)   Hans meint, Petra ist schwanger.
         Hans claims/believes, Petra is pregnent
         'Hans claims/believes that Petra is pregnant.'

(74)   SpeechActP (SAP)

SAP'
SAP°= ASS   CP
CP
Hans$_h$ C'
meint$_j$ IP
$[CP]_{k,}$ ws$_{speaker}$
Petra   C'
ist   IP
t$_h$
V'
schwanger
$[_{CP}\ t_k]$w$_{Hans}$ t$_j$

The tree expresses a double-access reading with respect to the worlds to which the proposition '*Petra ist schwanger*' (Petra is pregnant) is evaluated. Accordingly, the proposition holds (i) with respect to Hans's belief-world, and (ii) as a speaker assertion. (74) is thus a formal implementation of Hooper and Thompson's claim about double assertion (see below). The two assertions are, respectively, those associated with the main clause '*Hans meint _*', which we might take to be degraded to an evidential parenthetical; and '*Petra ist schwanger*', which is turned into the basic statement that the speaker makes.

Such an operation is impossible with volitional predicates and so-called 'Präferenzprädikate', neither of which can embed a potential assertion. These predicates explicitly refer to (sets of) buletic worlds different from the actual world of speaker and hearer. No assertion is made either when true factives are used or when the propositional content of the embedded predicate is negated or under discussion (as the topic of the discourse). In these cases, the embedded proposition cannot be used to make a felicitous assertion. The propositions under discussion are presupposed and hence cannot become the argument of an ASSERT operator.

Sentences like (73), however, are still ambiguous. They do not obligatorily give rise to the double-assertion reading, since one can also interpret

them as (75), (see v. Stechow (this volume and previous work) for a very sophisticated and carfully elaborated analysis)

(75)   *Hans meint,   Petra sei / wäre   schwanger.*
        Hans claims/believes, Petra is-subj/conj pregnant
        (?)'Hans claims/believes that Petra is pregnant.'

Here the use of conjunctive / subjunctive triggers a reading where the speaker wants to give to the embedded proposition a flavor of unlikelihood. In this interpretation, complement clause raising is prohibited. The claim here, then, is that sentences like (73) are ambiguous because of what appears to be a potential 'subjunctive in disguise'. In cases where a transformation, i.e. rephrasing, like the one from (73) into (75) is possible, double assertion is not obligatory.

There are cases, however, where the assertion of the embedded proposition does appear to be obligatory. This is the case with matrix verbs of the semi-factive type. These verbs do not (easily) allow for subjunctive / conjunctive in their complements; (78) shows that a non-indicative form leads to ungrammaticality. The same is true with performative verbs of saying: in a sentence with a verb in 1st person singular, present tense, a non-indicative form is impossible.[12] Here it is very obvious that the speaker is asserting the subordinate clause. In these cases, then, complement clause raising in the sense of (74) is obligatory. The embedded sentences are (also) speaker assertions (77)-(81).

(76)   *Hans meint, Petra wäre / sei   schwanger.*
        Hans think, Petra be-conj/subj pregnant.
        'Hans claims/thinks that Petra is pregnant.'

(77)   *Du weißt doch, die Gruberova hat die   Mozart-Opern*
        you know prt,   the Gruberova has-ind the Mozart operas
        aufgegeben.
        <# semi-factive>
        given-up
        'You know (pretty well) that the Gruberova gave up to sing in Mozart operas.'

(78)   **Du weißt doch, die Gruberova habe / hätte   die Mozart-Opern*
         you know prt,   the Gruberova has-subj/conj the Mozart operas

aufgegeben.
given-up

(79)   *Ich behaupte/denke, du bist   zu   schüchtern.*
        I   claim / t   hink, you are-ind too shy.
        'I claim / think you are too shy.'

(80)   **Ich behaupte/denke, du seist / wärst   zu   schüchtern.*
        <# 1. Ps. Sg. Präsens>
        I   claim /   think, you are-subj/conj too shy.

(81)   *Ich habe behauptet / dachte, du   bist zu schüchtern.*
        I   have claimed /   thought, you are too shy
        'I claimed / thought you are / would be too shy.'

7.   Possible extensions

Such an approach might also be fruitfully re-imported back into the English
tempus/modus syntax. As stated below, the possibility of present-tensed
verbs under past matrix verbs seems to be describable in terms of comple-
ment-clause raising. This means that in a certain sense present under past
can be interpreted as an indicator of a double assertion, i.e. an evaluation of
the originally embedded sentence with respect to the speaker and the actual
world. In this respect the core idea of complement-clause raising is a syn-
tactic implementation of Abusch's idea of the de re interpretation of em-
bedded clauses (Abusch 1997). To push this line of inquiry further: past
under past in sentences like (82) is not an instance of 'present in disguise',
but of 'subjunctive in disguise'.

(82)   Peter said he was happy.

(82) has a reading where the speaker has doubts about Peter's actual, i.e.
present (and perhaps past), happiness. In this case the German translation
would be something like (83) or (84), which makes use of an irrealis form
(see also v. Stechow (this volume).

(83)   *Peter hat gesagt, er wäre / sei glücklich.*
        Peter has said, he be-subj/cond happy be-subj/cond

(84)   *Peter hat gesagt, dass er glücklich sei / wäre.*
       Peter has said, that he happy be-subj/cond

The conclusion is thus that past in English is not a true tense morpheme, which specifies a past time (a conclusion to which Stowell reaches independently from a different angle), but rather a morpheme that expresses 'non-actualness', the concrete interpretation of which comes from the context. The subjunctive interpretation emerges in the c-command domain of a past evidential matrix, or interestingly under a c-commanding complementizer like 'if'.

(85)   If I had more money, I would go to Milan.

   The same holds for French: the French past tense behaves exactly like its English counterpart, showing the same sequence of tense effects as well as the same behavior under the complementizer '*si*'(where (86) correponds to (82), (83) and (87) to (85))

(86)   *Pierre a   dit qu' il était heureux.*
       Pierre has said that'he was happy

(87)   *Si j'avais plus d' argent, j'irais   à Milan.*
       If I had   more of'money, I would-go to Milan.

German must use the conjunctive mood under complementizers like '*wenn*' (if).

(88)   *Wenn ich mehr Geld *hatte / /ᵒᵏ hätte,   würde ich*
       If   I   more money *had-ind / ᵒᵏ have-cond, would I
       nach Mailand gehen.
       to   Milan   go

8.   Summary

German subordinate, (obligatorily) indicative V2 clauses are assertions. They are interpreted twice: (i) in their base position (to receive theta-roles,

permit the licensing of binding relations and anchoring to relevant individuals, being in the scope of a quasi-evidential etc.), and (ii) in a derived position in the immediate scope of the matrix assert operator, where they license their assertive illocutionary force.

Notes

1. Again, many of the verbs of this class could also be grouped into other classes, especially those with a negative sem in their semantic represen-tation.
2. Witnessed in a 'Tatort' emission from March, 24, 2002 by tv program ARD ('Zahltag'). The translation into English is difficult. The sentence expresses the speaker's outrage about the suspect of the listener. It is to be understood as a command to the detective to give up the believe expressed in the proposition of the subordinate clause.
3. Lists with verbs of all classes can be found in ordinary grammars. The examples are strikingly similar to their German counterparts, which are partly listed in (Group (i) through (iv) on page 2 and in (19). For the discussion concerning optative, volitional predicates see section 3.
4. Or sometimes a superlative, in any case a non-positive degree of comparison.
5. See for example Green's Embedded Force Exclusion below in (71), and also the discussion in Gärtner (2001, 2001a), who takes this issue very seriously and finally speaks of 'proto-force.'
6. Arguments that speak in favor of the assertive potential are refutability by negation in discourse, scope of question tags, interpretation of elliptical constructions and so on.
7. This line of reasoning is the same as in Wechsler 1991, who is concerned with V2 in Swedish. In his work he argues for a very similar claim is about the role of illocutionary force in general and assertion in the concrete case as the decisive factors for V2.
8. For negation, see the discussion in Butulussi 1991 referring to Givón 1979. For the factor of old and new information, and the felicity conditions in discourse see Romberg 1999.
9. For Stowell, [e] under VP-internal ZP is co-indexed with an operator in upper Spec,ZP. This, however, complicates the matters and can be neglected here.
10. I myself do not believe in an ambiguity here. The interpretation of this sentence is rather underspecified and therefore vague. However, Stowell's treatment seems to be a fruitful one if carried over to the interpretation of some complement clauses and other problems. See below.
11. This is contra new proposals by Krifka (2001), where the embedding of speech acts and illocution plays a key role. See also Gärtner 2001, 2001a for his arguments in favor of proto-assertion.
12. (80) vs. (79) shows that the ban on subjunctive holds only for present tense. If the matrix verb is in the past tense, the speaker may well diverge from his former beliefs, claims, opinions, and hence express his non-

accordance with the relevant proposition by choosing irrealis, non-indicative mood.

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