The Position of Incorporated Heads in the Verbal Complex

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In this paper, I focus on the distribution of incorporated heads (P, N and A) within the verbal complex in Dutch, assuming a head initial analysis for Dutch throughout. I present an argument in favor of optional leftward movement of auxiliaries and modals, and sketch an analysis that accounts for the distribution of incorporated heads.

Traditional descriptions recognize two positions for incorporated heads: immediately preceding the governing verb (1a) or immediately preceding the verbal complex (1b):

(1)  a. dat ik Jan de doktor heb willen laten opbellen
    b. dat ik Jan de doktor op heb willen laten bellen

Under a classical OV analysis, (1b) derives from raising the verb to the right, stranding the particle, while (1a) involves pied-piping of the particle under verb raising. Under a head initial analysis, the derivation in (1a) is quite straightforward: the P is incorporated to the verb it belongs with. The derivation of (1b) is more problematic, however, since the X₀ can be separated from the V it depends on by intervening verbal heads. A head movement analysis over the verbal complex would violate the Head Movement Constraint. Intermediate heads cannot be used as “escape hatches”. A direct head movement analysis is therefore excluded.

In my dialect, the traditional description illustrated in (1) only partially covers the distribution of incorporated heads. In addition to the positions in (1), incorporated heads also occur in a third position, immediately following the finite verb as in (2c). Any other position within the verbal complex is excluded (2d). (All examples have to be read with focal stress on the incorporated head).

(2)  a. dat ik Piet de doktor heb willen laten opbellen
    b. dat ik Jan de doktor op heb willen laten bellen
    c. dat ik Jan de doktor heb op willen laten bellen
    d. *dat ik Jan de doktor heb willen op laten bellen

The same distribution holds for incorporated As and Ns as well:

(3)  a. dat Marie Jan het huis heeft willen laten schoon maken
    b. dat Marie Jan het huis schoon heeft willen laten maken
    c. dat Marie Jan het huis heeft schoon willen laten maken
    d. *dat Marie Jan het huis heeft willen schoon laten maken

(4)  a. dat zij graag had willen komen piano spelen
    b. dat zij graag piano had willen komen spelen
    c. dat zij graag had piano willen komen spelen
    d. *dat zij graag had willen piano komen spelen
My dialect differs in this respect from the one described in Bennis (1993), who assumes that P can be anywhere in the verbal complex, as long as it is preverbal. The difference between the b and c examples can be accounted for in terms of the distribution of the finite verb, which can not only precede, but also immediately follow the incorporated element. This suggests that the c examples involve optional movement of the finite verb to some higher functional head position, rather than an analysis which postulates a different landing site for the incorporated head. The inflected verb in the examples above is the auxiliary *hebben*. This raises the question if optional verb movement is a property of all finite verbs, or rather a property of a particular subclass of verbs, the auxiliaries and modals. (5) shows that the auxiliary *zijn* and modals participate in the alternation:

(5)  
  a. dat Jan *zijn dochter* (is) **op** (is) komen halen  
  b. dat Jan *zijn dochter* (moet/zal/zou/kan/mag) (**op**) (moet/zal/zou/kan/mag) komen laten halen  
  c. dat Jan *zijn dochter* (??kan) (**op**) kan komen laten halen

(6) shows that the order *main verb* $X^0 \ V \ V$ is impossible:

(6)  
  a. omdat zij haar dochter haar kamer zelf (*laat*) **schoon** (laat) proberen te houden  
  b. omdat Jan *zijn dochter* (*blijft*) (**op**) (blijft) kunnen halen

The examples in (5) and (6) thus strongly support an analysis in terms of optional local movement of the auxiliary or modals. This leads us to the following description:

(7)  
  a. Auxiliaries and modals may optionally undergo (some short) head movement  
  b. Main verbs may not undergo this short movement  
  c. Incorporated heads either immediately precede the position of the main finite verb or their governing verb.  

The optional local movement of modals/auxiliaries to the left lends further support to a head initial analysis of Dutch, and provide further insight into the clausal architecture of Dutch.

The parallelism with the distribution of auxiliaries and main verbs in French infinitivals is quite remarkable: movement is optional, and main verbs may not undergo it. (I have nothing to add to this, except that it is of course another instance of a well-documented problem.) There are interesting differences as well. These concern clause type (French infinitivals versus Dutch tensed clauses) and landing site: in French infinitivals, the landing site for the auxiliary is quite high within the clausal architecture, higher than Negation (*n’avoir pas*) and AgrO. In Dutch, however, the landing site appears to be quite low: the finite auxiliary must follow *niet*, stranded prepositions, as well as other elements which traditionally have been analyzed as being within the Dutch VP:

(8)  
  a. dat Jan *zijn dochter* (*is*) niet (is) **op** (is) komen halen  
  b. dat hij het daar (*heeft*) niet mee (heeft) **schoon** (heeft) kunnen krijgen  
  c. wat denk je dat hij (*is*) voor kinderen (is) **op** (is) komen halen
The landing site for the auxiliary can therefore be at most Neg or AgrO. In fact, as I will show in (9), the landing site must even be lower, since auxiliaries must always follow small clauses, which I assume with Koster (1993) to be in Spec, PredP.

I next turn to the problem of deriving the distribution of the incorporated head. As discussed above, a major problem for the head initial V analysis concerns the manner in which the incorporated head ends up to the left of the verbal cluster. This cannot be a straightforward case of direct head movement, because it would violate locality. The only possibility is therefore that it is some case of phrasal movement, or a combination of both. I discuss two possible analyses here. The first one I will reject, and the second one I will tentatively adopt.

Suppose that incorporated heads are not really treated in a uniform way but that different types of movement derive the two positions in which incorporated heads can appear: (1a) would be derived by local head movement (since the position immediately preceding the verb in this case can only accommodate bare heads) whereas (1b) could arise from phrasal movement. This would be possible if the bare head was in fact contained within a phrasal projection, akin to the smallest level of a small clause. The head could then either undergo local head movement, or the entire phrase could undergo phrasal movement to some designated Spec position. A natural candidate for this landing site would be Spec, PredP, which Zwart 1993 and in particular Koster 1993 propose as landing site for small clause predicates. This analysis predicts phrasal small clauses and heads preceding the verbal complex to have the same distribution, by virtue of their moving to the same position. This prediction is not borne out, however, since incorporated heads in front of the verbal complex behave differently from phrasal small clauses with respect to local verb movement: the modal/auxiliary can never precede a phrasal small clause predicate, although it can precede an incorporated head:

(9) a. dat hij de trui (*heeft) erg schoon (heeft) gekregen (DegAP)
    b. dat hij de trui (heeft) schoon (heeft) gekregen (bare A)

Two conclusions: first, bare heads do not behave as phrases, and should therefore be treated as incorporated heads. And second, small clause predicates occur to the left of the landing site of the modal/auxiliary: this lends support to Zwart’s and Koster’s proposal that they are in a Spec position outside of the VP.

If bare heads cannot have undergone direct head movement across the verbal complex, and are not hidden phrases, what then is the correct analysis? I will adopt the following analysis which features are schematically represented in (10) below.
The incorporated head always adjoins to the same host V; it ends up in different positions depending on whether it moves with the V, and undergoes V-raising out of the VP (yielding (1a)), or whether it is stranded in the VP by V raising to some position, call it V*. The VP itself undergoes phrasal movement to the Spec position of a projection containing the finite verb; all other elements, including small clauses, move out of the VP (basically, adopting a proposal from Koopman, 1993, because the preposed VP may not contain lexical material on right branches). The sole element that tags the presence of a VP is the stranded incorporated X⁰ as in (1b).

The problem this analysis poses is that the preposed VP contains a trace in the head position, but the antecedent doesn’t c-command it, and we would expect an ECP violation (see Koopman, 1994 for more discussion).

The analysis sketched in (10) is quite close to the traditional OV analysis: it assumes some kind of verb-raising; it assumes that a head preceding the verbal complex is within a VP, stranded there by excorporation of the head; it assumes that the order Vf VV X⁰ V arises via pied-piping of the X⁰ with the verb under V-raising. It differs from the traditional analysis, though, in that it assumes phrasal movement of the VP leftward. At this point, it might be appropriate to raise the question what we have gained by a head initial analysis. Although I have presented additional evidence for the head initial character of Dutch functional projections, based on the optionally leftward movement of the auxiliary, and found supporting evidence for the specific Spec position in which small clauses occur, I have not provided any new empirical evidence for the head initial character of the Dutch VP. Apart from theoretical assumptions, this evidence, I believe, should come from how well the analysis accounts for crosslinguistic differences within the verbal complex, including differences with respect to incorporated heads, as well as for verb projection raising constructions in the OV languages. These should fall out from the features of the analysis in (10).

Bibliography


