

On a movement paradox in Verb Projection Raising:

In favor of base-generation and covert verb movement

1. Introduction: an opacity paradox. The analysis of Verb Projection Raising has focused to a large extent on the an opacity paradox first discussed in Haegeman & van Riemsdijk (1986): On the one hand, the raised constituent (the complement of the modal, henceforth VPR-constituent) is transparent for extraction:

- (1) Was₁ hät er wele [₁ für Buecher] läse? (Zurich German)
 What has he wanted for books read

On the other, the VPR-constituent is opaque for scopal interactions: While in Verb Raising a negative existential can have wide or narrow scope with respect to the modal, only narrow scope is possible in VPR:

- (2) a) dass de Hans **kä Fläisch** wil ässe
 that the John no meat wants eat VR: no meat > want; want > no meat
 b) dass de Hans wil **kä Fläisch** ässe
 that the John wants no meat eat VPR: *no meat > want; want > no meat

2. Previous analyses. Haegeman & van Riemsdijk have analyzed VR and VPR-constructions as involving different types of reanalysis processes leading to multidimensional representations. Since the VPR-constituent is a complement, nothing bars extraction. The opacity for scope follows from the reanalysis: Since the modal asymmetrically c-commands the negative existential in both dimensions, only wide scope of the modal is possible. This successfully accounts for the paradox. However, since reanalysis processes of this kind are no longer taken to be permitted, this approach has been abandoned (cf. Haegeman 1992).

Haegeman (1992) analyzes VPR as VP extraposition. As discussed extensively in den Dikken (1994), this fails to explain the opacity paradox: For (1) to be possible, Haegeman posits that extraction precedes extraposition. For the scopal opacity in (2)b, Haegeman suggests that QR is blocked from extraposed position. Den Dikken has convincingly shown, however, that the argument does not go through. Furthermore, *positive* indefinites can scope out of islands so that one would expect this to be possible under extraposition as well, contrary to fact. Positive indefinites cannot outscope the modal under VPR (cf. Haegeman & van Riemsdijk 1986).

Den Dikken (1995) proposes a VO analysis of VR and VPR so that extraction as in (1) is unproblematic. He derives the scope facts by means of the following scope principle:

- (3) X has scope over Y if X c-commands a member of the chain containing Y

Den Dikken then proposes that the differences with respect to scope in (2) result from different ways of case checking in VR and VPR, respectively. In VR, where the complement of the modal is only a VP, case checking takes place above the projection of the modal, in SpecAgrOP. This leads to a chain that crosses the modal so that scope ambiguity results according to (3):

- (4) [_{AGROP} Obj₁ [_{AGRO'} AgrO [_{VP1} V_{modal} [_{VP2} V2 ₁]]]]] VR

In VPR, whose complement can be shown to be a TP, case checking takes place inside the VPR-constituent. Consequently, the resulting chain does not cross the modal so that the negative XP only has narrow scope:

- (5) [_{VP1} V_{modal} [_{TP} [_{AGROP} Obj₁ [_{AGRO'} AgrO [_{VP2} V2 ₁]]]]]]]

3. A movement paradox. Although den Dikken's approach is very elegant, there are both theoretical as well as empirical arguments against den Dikken's implementation: First, it is unattractive to posit movement operations for case checking in languages like German and, crucially, Zurich German where DPs can be ordered freely. Second, scope ambiguities do obtain with VPR if the object occurs above the modal:

- (6) Er hät **käm Schüeler** wele es Buech schänke. VPR: no student > want;
 he has no.DAT student wanted a book give want > no student

According to den Dikken such examples involve additional scrambling of the object out of the VPR-constituent after having undergone movement to AgrOP in the embedded TP. Again, since the scrambling chain of the object crosses the modal, scope ambiguity results. However, there is strong evidence that scrambling cannot be at work here because the putatively displaced XPs do not display the properties familiar from scrambling: First, the set of elements that can appear in a higher projection includes some that are normally thought not to scramble, e.g. predicative adjectives:

- (7) dass er sis Bier [hät **küelt** wele mitnee]
 that he his beer has cooled wanted take.with

Second, as opposed to normal scrambling, DPs that occur in higher positions do not prevent focus projection (as long as they occur in normal order):

- (8) Er hät s **Buech vom Chomsky** [wele de MUETTER schänke].
 he has the book of.the Chomsky wanted the.DAT mother give

Third, a fact hitherto unnoticed, extraction from objects is possible not only if the object is inside the VPR-constituent, but also if it occurs outside it. This means that there are no freezing effects:

- (9) a) Was₁ hät de Hans [___ **für Lüüt**] [wele vo siine Idee überzüüge]?
 what has the John for people wanted of his ideas convince?
 b) Was₁ hät de Hans [wele [___ **für Lüüt**] vo siine Idee überzüüge]?
 what has the John wanted for people of his ideas convince?

We conclude from these facts that elements that belong to the lowest VP, but occur outside its projection must be base-generated in their surface position. While a base-generation analysis directly accounts for the possibility of extraction in (1) and the non-movement effects in (7)–(9), it is not obvious how it can account for the movement effects in (6): Since the scopal element has never occupied a position in the c-command domain of the modal, it is unclear how the wide-scope reading of the modal can be obtained.

4. The solution: base-generation + covert verb movement. We would like to propose that an adaptation of the base-generation approach in Fanselow (2001) not only accounts for the anti-movement effects, but also automatically captures the scope facts:

4.1. Accounting for the anti-movement effects. In this approach, arguments can be freely merged; theta-role assignment is mediated via feature checking of formal features. Crucially, this does not happen until LF where V and v incorporate into T: The v-V-T complex then c-commands all arguments and V can attract their features. Since the MLC is taken to be indifferent to specific case values, the arguments can occur in free order in languages like German where case features are weak. We propose to extend the approach to constructions with complex verbs like VR or VPR: At LF the lexical verb incorporates into the modal and finally the verbal complex incorporates into T, so that V ends up c-commanding arguments that have been merged outside its projection: LF-incorporation thus extends the theta-marking domain.

4.2. Accounting for the scope facts. The base-generation analysis proposed here derives the scope facts in (6) as a side-effect: At LF the modal is in T and thus c-commands the negative existential. Narrow scope follows from optional reconstruction. The same account holds for VR in (2)a. Crucially, the non-ambiguity in (2)b follows from the fact that the negative XP does not c-command the modal at any point of the derivation.

5. The importance of reconstruction of adverbials. Hinterhölzl (2006) has pointed out the importance of the reconstruction of adverbials. In the following sentence, the adverb *morn* ‘tomorrow’ modifies the lexical verb, but occurs above the modal:

- (10) Er hät s geschter no **morn** [wele de Muetter bringe].
 he has it yesterday still tomorrow wanted the.DAT mother bring

The present approach can handle these facts with the following extension: Suppose that adverbs are licensed in specifiers of functional heads. Suppose further that in an example like (10), such a functional head is merged in the embedded clause. Verb movement at LF will pick up the functional head selecting the adverb. It then ends up in matrix T as part of the verbal complex where it can license the adverb (presupposing, as with arguments, that the features to be checked are weak).

6. Against a similar alternative. Sternefeld (2006) proposes a base-generation approach based on theta-role percolation that accounts for the non-movement facts in (8) and (9). For the scope facts in (6) he also proposes LF-verb movement, but in his system this has to be stipulated while in our implementation it follows automatically. Furthermore, since projection of elements related to the embedded verb in higher projections is limited to arguments in Sternefeld (2006), the facts in (10) remain unexplained.

7. Conclusion. We have proposed a novel analysis of VPR that relies on base-generation. Scope ambiguities are not the result of XP-movement, but rather follow from covert head-movement of the complex verb, thereby providing additional evidence for the syntactic nature of head movement (cf. e.g. Lechner 2007).

References

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