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## Verb (Projection) Raising, Scope, and Uniform Phrase Structure

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### 1. Introduction\*

OV-based approaches to Verb Raising (VR) and Verb Projection Raising (VPR) — illustrated by West Flemish (1a,b), respectively — either locate these processes entirely outside the realm of syntax (Broekhuis 1993a) or analyse them in terms of operations that are not obviously compatible with the restrictive theory of syntax that has been developed over the last decade or so. Haegeman & Van Riemsdijk's (1986) reanalysis approach is conceptually and empirically unattractive; an analysis of VPR involving adjunction of the embedded verb's projection to the higher verb, or of the NP *geen vlees* 'no meat' in (1b) to *eten* 'eat' (cf. Haegeman 1988), is incompatible with the *Barriers* theory of adjunction; and a VPR analysis

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featuring rightward adjunction of the lower verb's projection to some higher maximal projection (cf. e.g. Den Dikken 1989, Rutten 1991, Haegeman 1992) is questionable in the light of the minimalist programme, since it is difficult to conceive of rightward VP-movement as being *triggered* by feature-checking considerations. Moreover, any OV-based account featuring rightward movement is excluded by Kayne's (1993) proposals to the effect that phrase structure is uniformly of the basic form Specifier-Head-Complement and that the grammar prohibits right-adjunction.

- (1) a. da Jan geen vlees wilt eten (Verb Raising)  
       that Jan no meat wants eat  
       b. da Jan wilt geen vlees eten (Verb Projection Raising)

From a theoretical perspective, then, there are good reasons to attempt a novel approach to the syntax of VR and VPR constructions, this time built on an underlying VO-structure and making use of minimalistically sound operations only. Empirically, too, OV-based extraposition accounts of VR and VPR are in need of replacement. This conclusion ensues from a detailed investigation of the properties of V(P)R constructions with respect to scope. It is these scope properties of V(P)R constructions that are the focal point of this paper.

Quantified expressions are standardly assumed to acquire or assign their scope at LF as a result of the application of an adjunction operation known as Quantifier Raising (QR). From a minimalist perspective, QR is suspect for several reasons. QR (like VP-extraposition) is not obviously a uniformly feature-driven process (although Stowell & Beghelli 1994 argue that at least some QP types do undergo feature-checking movement). Secondly, QR's failure to license parasitic gaps is enigmatic with the abolition of the S-structure/LF dichotomy — in the minimalist framework there no longer is room for statements of the sort 'parasitic gaps are only licensed at S-structure'. And what is more, if LF reconstruction to an A-position is 'obligatory if syntactically possible' (Chomsky 1993), QR would be pointless, its effects effectively being undone prior to semantic interpretation (as Pica & Snyder 1994 point out). Such considerations suggest that the account of scope relationships also needs fundamental rethinking.

We shall see that West Flemish Verb Raising and Verb Projection Raising constructions provide us with empirical evidence for an analysis that avails itself of (i) a VO-based, minimalist and antisymmetric approach to V(P)R, and (ii) a QR-less theory of scope interactions of the type outlined in Kitahara (1992). The account that I shall present exploits and supports the minimalist locality theory (rooted in the notion of *equidistance*) and the role played by AgrOP in syntax.

## 2. A paradox: the opacity/transparency of the VPR cluster

Haegeman & Van Riemsdijk (1986) observe that (1a) is scopally ambiguous between a reading in which *geen* is in the scope of the modal verb *wilt* (most lucidly paraphrasable as ‘what Jan wants is to eat no meat’) and one in which *geen* takes scope over the modal verb (‘what Jan does not want is to eat meat’); the VPR construction in (1b), on the other hand, only has the reading in which the negation is in the scope of the modal. The two readings are even more clearly distinguishable in the example pair in (2):

- (2) a. da Jan geen toelating hee durven geven (*geen toelating* > / < *durven*)  
           that Jan no permission has dare give  
       b. da Jan hee durven geen toelating geven (*geen toelating* \* > / < *durven*)

The VR example in (2a) can mean both ‘what Jan dared to do was to give no permission’ and ‘what Jan did not dare to do was to give permission’; but the VPR construction in (2b) only has a reading in which *geen toelating* ‘no permission’ is in the scope of *durven* ‘dare’, hence can only mean ‘Jan was so daring as to give no permission’.

One might be tempted to think at this point that the scope difference between the a- and b-examples in (1) and (2) is a straightforward indication of the *opacity* of VPR-clusters. That this would be a rash conclusion, however, is evident from the fact that VPR-clusters are fully transparent to overt A'-extraction. This is shown by the Swiss German *was für*-split case in (3) and by the West Flemish R-extraction examples in (4). Apparently, the VPR-cluster is transparent to *wh*-extraction and R-movement, but opaque to scope interactions, which are commonly treated, in any event in the pre-minimalist literature, in terms of LF A'-movement of a type similar to *wh*-extraction. This looks like a surprising paradox, which is caused by adopting a QR approach to scope relations.

- (3) *was* hät er wele *e* für büecher läse?  
       what has he want for books read  
       ‘what kind of books did he want to read?’  
 (4) a. dan-ze *doa* willen een besprekinge *e* van moaken  
           that they there want a review of make  
           ‘that they want to make a review of that’  
       b. *woa* dan-ze willen een besprekinge *e* van moaken  
           where that they want a review of make  
           ‘of which they want to make a review’

At this point one might take either of two tacks — one might call the significance of (1b)/(2b) or (3)/(4) into question, or one might adopt a different approach to scope interactions. Haegeman (1992:120–21) takes the former approach, trying to explain away the evidence that (3)–(4) appear to constitute against the alleged opacity of the VPR-cluster. She seeks to account for the scopal rigidity of

(1b) and (2b) with the aid of an analysis of VPR in terms of rightward adjunction of VP to some higher maximal projection. The extraposed VP is taken to constitute a barrier by lack of L-marking, and is assumed to obstruct QR of the negatively quantified phrases in the b-examples at LF. Haegeman then goes on to suggest that the overt A'-extraction cases in (3) and (4) involve extraction *while VP is still in its base position*, VP extraposition obtaining after extraction has taken place. VPR then affects the VP containing the trace of the *wh*-moved or R-moved element.

Haegeman does not develop this account any further; it can easily be seen not to work. Of course the trace inside the extraposed VP will have to be licensed, also — and crucially — *after* VP-extraposition. In (4) we might perhaps want to invoke lexical government (by the preposition *van* 'of') to save the construction, but such an account is unlikely to carry over to the *was für*-split case in (3), since the trace of *was* is presumably not lexically governed. Besides, given a conjunctive formulation of the ECP we would need antecedent government of the traces left in VP anyway. So the question is: can the VP-internal traces in (3) and (4) be antecedent governed at LF?<sup>1</sup> If the answer is affirmative, then the examples in (3) and (4) fall out right. But then, by parity of reasoning, the scope facts in (1b) and (2b) do not follow, given that the ECP unquestionably applies at LF. If, conversely, antecedent government of the VP-internal traces should somehow be impossible, the scope facts are readily predicted. But in that case, of course, we are at a loss accommodating the transparency of the VPR-cluster to *wh*-extraction and R-movement. All in all, it seems that no integrated account of (1b)/(2b) and (3)/(4) can be formulated — given a QR approach to scope interactions, that is.

In view of the problems that a QR poses in the domain of (1b) and (2b), then, let us try and find a theory of scope interactions dispensing with LF A'-movement of quantified expressions, and see if it fares any better. The particular theory that I would like to consider is Kitahara's (1992), which (far from rendering LF superfluous) capitalises on the role played with respect to scope relationships by Case-feature checking movement to SpecAgrP (also cf. Hornstein 1994 and Pica & Snyder 1994 for the role of movement to AgrP in scope relations).

### 3. Scope without QR

Kitahara (1992) develops a theory of scope interactions built on Aoun & Li's (1991) Scope Principle (which I have stated as in (5)) and his own hypothesis in (6):

- (5) *Scope Principle* (Aoun & Li 1991)  
X has scope over Y if X c-commands a member of the chain containing Y

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<sup>1</sup> While in the case of (4) one might assume that the trace of the R-pronoun is  $\gamma$ -marked in overt syntax (the VP-adjoined antecedent governor being deleted at LF; cf. Lasnik & Saito 1984, Chomsky 1986), the trace of *was* in (3) presumably cannot be  $\gamma$ -marked any sooner than at LF given that it is unlikely to be an argument trace.

- (6) *Chain Formation* (Kitahara 1992:56)  
Each feature-checking operation creates a *distinct* chain

Adopting Chomsky's (1993) checking approach to movement, he accounts for the scope contrast in (7) with the aid of the structural representations in (8) and (9).

- (7) a. someone loves everyone (someone > / < everyone)  
b. who loves everyone? (who > / \* < everyone)
- (8)  $[_{IP} \text{ someone}_i \text{ I } [_{\text{AgrOP}} \text{ everyone}_j \text{ AgrO } [_{\text{VP}} t_i \text{ loves } t_j ]]]$
- (9)  $[_{\text{CP}} \text{ who}_i [_{\text{IP}} t_i^x \text{ I } [_{\text{AgrOP}} \text{ everyone}_j [_{\text{VP}} t_i^y \text{ loves } t_j ]]]]$

Scopal ambiguity arises in (8) due to the fact that *someone* c-commands *everyone*, and *everyone* c-commands a member of the chain containing *someone* (viz. the trace  $t_i$  of *someone*). In (9), on the other hand, while *who* c-commands *everyone* and can accordingly take scope over the universal QP, *everyone* cannot have scope over *who*. This is so because *everyone* does not c-command a member of *the chain containing who* — *everyone* does c-command  $t_i^y$ , but this trace is a member of the chain  $(t_i^x, t_i^y)$ , a chain that does not contain *who*; *who* is a member of the chain  $(\text{who}, t_i^x)$ , which is a separate chain (since it involves a different feature-checking operation — viz. checking of the *wh*-feature) of which no member is c-commanded by *everyone*. The combination of (5) and (6) thus leads us conclude that the only reading that (9) can yield is one in which *who* takes scope over the universal quantifier — a prediction that is borne out by the facts.<sup>2</sup>

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<sup>2</sup> The Dutch rendition of (7a) is scopally more like (7b) — i.e. a wide scope reading for the object quantifier is virtually impossible to get in Dutch (ia). This can be made to follow from Kitahara's approach to scope interactions if it is assumed that the highest A-position in the functional structure of Dutch is SpecTP (the position where, in Dutch, nominative Case is checked; cf. Jonas & Bobaljik 1993 for related suggestions regarding Icelandic); movement of the subject to a position higher than SpecTP involves *scrambling* (see also section 6), not Case-driven A-movement. Scopal rigidity then follows given that at no point does the object c-command a member of the chain containing the subject, as (ib) shows. If the subject does not move further upwards after checking its Case-feature in SpecTP, as in the expletive construction in (iia), scopal ambiguity does arise, as in English (7a). This also follows straightforwardly from Kitahara's theory; cf. (iib). (Pica & Snyder 1994 outline a scope theory similar to Kitahara's, accounting for scope *preferences* (e.g. (7a) strongly prefers a wide scope reading for *someone* even in English). Such preferences can be made to follow from an Aoun & Li type approach if it is assumed that an X taking scope over Y *preferentially* c-commands every member of the chain containing Y.)

- (i) a. dat iemand van iedereen houdt (iemand > / \* < iedereen)  
that someone of everyone loves  
b.  $[_{\text{AgrSP}} \text{ iemand}_i [_{\text{TP}} t_i^x \text{ T } [_{\text{AgrOP}} \text{ van iedereen}_j \text{ AgrO } \downarrow_{\text{P}} \text{ ? houdt } \text{ ? } ]]]]$
- (ii) a. dat er iemand van iedereen houdt (iemand > / < iedereen)  
that there someone of everyone loves  
b.  $[_{\text{AgrSP}} \text{ er } [_{\text{TP}} \text{ iemand}_i \text{ T } [_{\text{AgrOP}} \text{ van iedereen}_j \text{ AgrO } \downarrow_{\text{P}} t_i \text{ houdt } t_j ]]]]$

#### 4. The QR-less scope theory and the modal scope facts

To see how Kitahara's (1992) theory of scope assignment accommodates the scope facts in (1) and (2), we need to construct minimalist representations of these examples containing an AgrOP. In order to make the scope contrasts follow from this theory, we should ensure that the AgrOP into whose specifier position the quantified object moves finds itself outside the modal's projection in the VR examples (i.e. (1a) and (2a)), and below the modal in the VPR cases (the b-examples). Let us not prejudice the discussion with respect to the OV/VO distinction, and present such structures for both an OV-based and a VO-based approach, as in (10) and (11), respectively.

- (10) a. [<sub>AgrOP</sub> OB<sub>i</sub> [<sub>AgrO'</sub> [<sub>VP1</sub> [<sub>VP2</sub>  $t_i$  V2] Vmodal] AgrO]] (OV-based)  
 b. [<sub>VP1</sub> [<sub>AgrOP</sub> OB<sub>i</sub> [<sub>AgrO'</sub> [<sub>VP2</sub>  $t_i$  V2] AgrO]] Vmodal]
- (11) a. [<sub>AgrOP</sub> OB<sub>i</sub> [<sub>AgrO'</sub> AgrO [<sub>VP1</sub> Vmodal [<sub>VP2</sub> V2  $t_i$ ]]]] (VO-based)  
 b. [<sub>VP1</sub> Vmodal [<sub>AgrOP</sub> OB<sub>i</sub> [<sub>AgrO'</sub> AgrO [<sub>VP2</sub> V2  $t_i$ ]]]]]

The a-structures in (10) and (11) yield ambiguous scope of the negation with respect to the modal, given Kitahara's scope theory — the moved object c-commands the modal, and the modal c-commands the trace of the moved object. The b-structures, by contrast, allow only a wide-scope reading of the modal — at no point does the object c-command the modal auxiliary since it never raises to a position c-commanding the modal.

So far, I have looked at the structures in (10) and (11) only abstractly; the difference between them has not played any role yet. But notice what happens when we put concrete lexical items into these structures, taking those of the sentences in (1) as our example. Placing the object *geen vrees* under OB in SpecAgrOP and inserting the modal and main verbs under their respective V-nodes yields the surface outputs in (12) and (13) for the structures in (10) and (11), respectively:

- (12) a. \*... geen vrees eten wilt (OV-based)  
 b. \*... geen vrees eten wilt
- (13) a. ... geen vrees wilt eten (= (1a)) (VO-based)  
 b. ... wilt geen vrees eten (= (1b))

It is plain to see now that the VO-based account in (11) immediately accommodates not just scope but also *word order* in V(P)R constructions without any further ado — moving the object overtly to SpecAgrOP and leaving the verbs *in situ* yields precisely the surface word-order patterns reflected in (1) and (2) if we employ the structures in (11). An OV-based account along the lines of (10), by contrast, will in addition continue to need some sort of rightward movement operation to accommodate word order — a kind of movement operation which, moreover, has a rather problematic status in the minimalist and antisymmetric theory, as I pointed out in section 1. This gives us an initial argument for the VO approach to word order in the West Germanic verbal cluster (also cf. Zwart 1994:391ff.). Other scope facts, to be discussed in

section 6, strengthen the case for a minimalist and antisymmetric approach to V(P)R. But before turning to these, I must first develop the structure of V(P)R constructions further.

## 5. The structure of Verb (Projection) Raising constructions

### 5.1. Verb Projection Raising: TP complementation

My first-attempt VO-based structure of VPR constructions, given in (11b), incorporates Kaan's (1992) and Zwart's (1993:345) proposal that the complement of a VPR verb is a 'bare' AgrOP, no additional functional projections intervening between V1 and VP2. There are, however, both empirical and technical considerations that plead for an elaboration of this overly simplistic structure.

Empirically, the AgrOP complementation analysis is discredited by Q-Float facts of the type in (14c) (cf. Haegeman & Van Riemsdijk 1986:445) and especially also by the transitive expletive construction in (15b) (Liliane Haegeman, p.c.).

- (14) a. k peinzen dan *al* de studenten goan moeten een boek  
van Conscience lezen  
I think that all the students go have-to a book  
by Conscience read
- b. k peinzen dan de studenten *al* goan moeten een boek van Conscience lezen
- c. k peinzen dan de studenten goan moeten *al* een boek van Conscience lezen
- (15) a. dan-der *vee studenten* dienen boek zoun moeten kopen  
that there many students that book should have-to buy
- b. dan-der zoun moeten *vee studenten* dienen boek kopen

The floating (i.e. stranded; Sportiche 1988) quantifier *al* in (14c) and the indefinite subject in (15b) are part of the VPR-cluster, but do not find themselves in the base position of the subject, since the object, which is moved to SpecAgrOP prior to SPELL-OUT, follows them. We are thus led to conclude that either *al/vee studenten* adjoins to AgrOP, or *al/vee studenten* finds itself in the specifier of a functional projection outside AgrOP. While the adjunction approach might perhaps be feasible in the case floating quantifiers (cf. Doetjes 1992), it certainly does not seem likely that the indefinite subject of (15b) finds itself in an adjunction (hence A'-)position. After all, transitive expletive constructions like (15) in all likelihood can be analysed only in terms of expletive (*der*) replacement. Expletive replacement is LF movement of the 'associate NP' to SpecAgrSP (which is an A-position), and hence the position from which the 'associate NP' is moved at LF must be also an A-position (for otherwise 'improper movement' would result).

In the light of especially (15b), then, we are led to conclude that there must be a position for the subject outside the landing-site of the moved object in VPR constructions. I shall assume that this position is the specifier position of an embedded TP, and that the structure of VPR constructions hence reads as in (16):



- (16) [VP1 V1 [TP Spec [T, T [AgrOP Spec [AgrO, AgrO [VP2 SU [V, V2 OB ]]]]]]]

West Flemish provides some empirical support for this particular labelling of the additional functional projection. Haerberli & Haegeman (1992:fn. 5) agree with me that the structure of VPR-complements must be larger than 'bare VP', showing that it can contain a projection of the negative head, NegP. The evidence they present concerns the fact that the example in (17) has a so-called negative concord reading (in contrast to a double negation reading). On Haegeman's assumptions this is indicative of the presence of NegP.

- (17) da Valère durft tegen niemand nieks nie zeggen  
 that Valère dares against no one nothing not say  
 'that Valère dares not to tell anything to anyone'

Studies of negation have shown that there is a close relationship between NegP and TP (cf. Zanuttini 1991), such that NegP is generable only in the presence of Tense. Given this interrelationship between NegP and T, facts of the type in (17) may be taken as evidence for our conclusion that the complement of VPR verbs is a TP, as reflected in (16).<sup>3</sup>

We have so far encountered a range of empirical evidence for an enlargement of the initial structure in (11b). There is also a technical reason why (11b) is inadequate, given the theory of locality developed in Chomsky (1993). Suppose that the structure of a VPR construction were to read as in (18) (cf. (11b)):

- (18) [VP1 V1 [AgrOP Spec [AgrO, AgrO [VP2 SU [V, V2 OB ]]]]]

In order that the subject (SU) can reach the matrix subject position (not pictured) in agreement with the minimalist locality theory, its first available landing-site (SpecVP1) should be *equidistant* from the position crossed in the process of movement (SpecAgrOP, OB's landing-site). This is possible only if AgrO incorporates into V1. I have argued elsewhere (see Den Dikken 1994b) that the verb *be* is the only verb that can incorporate the Agr head of its complement. Now, since V1 in the VPR constructions under discussion is a modal verb, and not *be*, AgrO incorporation will be excluded, and hence a grammatical derivation of a VPR construction built on (18) (cf. (11b)) is impossible.

The extended structure in (16), by contrast, does cater for a well-formed derivation of VPR constructions. The relevant ingredients of the derivation are summarised in (19):

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<sup>3</sup> At the end of the paper I shall return to the TP status of the additional functional projection in (16).

- (19) a. OB-to-SpecAgrOP, contingent on V-to-AgrO  
(not necessarily overt; Den Dikken 1994a)  
b. SU-to-SpecTP, contingent on AgrO-to-T

AgrO-to-T movement is not lexically restricted, unlike AgrO incorporation into V. SpecTP and the SpecAgrOP position which is skipped in the movement operation that the subject of VP2 undergoes can thus be rendered equidistant from SU's extraction position, as required.

### 5.2. Verb Raising: VP complementation

While VPR constructions involve TP complementation, the complement of VR verbs cannot be any larger than VP2. To see this, consider the structures in (20) and (21):

(20) [<sub>AgrOP</sub> Spec [<sub>AgrO'</sub> AgrO [<sub>VP1</sub> SU [<sub>V'</sub> V1 [<sub>VP2</sub> V2 OB ]]]]]]

(21) [<sub>AgrOP</sub> Spec [<sub>AgrO'</sub> AgrO [<sub>VP1</sub> V1 [<sub>TP</sub> Spec [<sub>T'</sub> T [<sub>VP2</sub> SU [<sub>V'</sub> V2 OB ]]]]]]]]

The structure in (21) does not yield a well-formed derivation of a VR construction, for OB can never reach SpecAgrOP crossing both SU and SpecTP. A derivation built on (20), on the other hand, is grammatical if V1 is moved to AgrO.

The structure in (21) incorporates a theoretical assumption that deserves some comment. Notice that I assume that the subject of V2 is base-generated in the specifier position of VP1 in this structure, not in SpecVP2 (cf. Den Dikken 1994a for a brief discussion of this issue in connection with perfective constructions). This can be motivated in the following way. In the structure in (21), we find two VPs stacked immediately on top of each other. I assume that in such a structure, the two projections in a sense 'merge' into one, sharing a single set of domains and properties, as is codified in (22):

- (22) In a structure of the type in (i), where  $X1 = X2 \in \{A, N, P, V, F\}$  (F = some functional head), X1 and X2 project together and share a single set of domains:

(i) [<sub>XP1</sub> ... X1 [<sub>XP2</sub> ... X2 ...]]

One of the consequences of this hypothesis for the specific structure of VR constructions in (21) is that the external  $\theta$ -role assigned by V2 can find its way (via uninhibited percolation) to the specifier position of VP1 (which is headed by a verb that does not assign an external  $\theta$ -role of its own). With respect to external  $\theta$ -role assignment, then, V2 is the head of the [<sub>VP1</sub> ... V1 [<sub>VP2</sub> V2 ...]] structure. We shall encounter other instances of this 'stacked structure' (to which Broekhuis 1993b refers with the label 'lexical chain') later in the paper.



positions involved. Instead of (24b'), then, the analysis must avail itself of (24b). In this structure the two objects both have their Case features checked in SpecAgrOP positions *below* the modal (just as in (24c)); the indirect object subsequently *scrambles* out of the modal's complement. The thing to note with respect to (23b), then, is that the step that the indirect object takes to end up to the left of V1 in the surface string is *not* a case of Case-driven NP-movement.

With the aid of the structures in (24), the minimalist QR-less scope theory expounded in section 3 now correctly guarantees a wide-scope-only reading for IO in (23b). DO in the structure in (24b) c-commands  $t_i^y$ , but this is not a member of the chain containing IO; instead, it is a member of the chain  $(t_i^x, t_i^y)$ . IO is a member of the *scrambling* chain  $(IO_i, t_i^x)$ , but no member of this chain (which involves a distinct feature-checking operation) is c-commanded by DO at any point in the derivation. In (24a,c), by contrast, both DO and IO move only once, in a 'crossing paths' fashion. As a result, the Scope Principle predicts that there will be scope ambiguity in these examples, which is in perfect agreement with the empirical facts.

The scopal properties of the paradigm in (23) thus follow from a minimalist analysis of the word order of VR and VPR constructions, in combination with the Scope Principle (based on Aoun & Li's 1991 work) and Kitahara's (1992) Chain Formation condition in (6), both of which are independently supported. An additional important result of this discussion is that (23b) presents an argument for the existence of *scrambling* as a movement operation distinct from Case-driven NP-movement to SpecAgrOP.

### 7. The link with Romance clitic (non-)climbing

There are several other respects in which the minimalist and antisymmetric approach to the syntax of the West Germanic OV-languages yields a better account of Verb (Projection) Raising than does the traditional OV-based analysis. Of these I can only mention one here — the parallel between Verb (Projection) Raising and clitic (non-)climbing in Romance in the domain of so-called 'auxiliary switch' phenomena (see also Haegeman 1994).

Burzio (1986) has noted that in Italian 'restructuring' constructions involving modals such as *volere* 'want', the auxiliary of the perfect can be selected either by the modal itself (which normally selects *avere* 'have') or by the verb embedded under the modal (which, if it is an ergative verb, commonly selects *essere* 'be'):

- (25) a. Gianni *ha* voluto venire  
Gianni has wanted come  
b. Gianni *è* voluto venire  
Gianni is wanted come

In constructions featuring the locative clitic *ci*, the position of the clitic turns out to influence auxiliary selection. Thus, as Burzio notes, (26a), without clitic climbing, must feature *avere*, while (26b), with clitic climbing, can only feature *essere*:

- (26) a. Gianni *ha/\*è* voluto *venirci*  
 Gianni has/is wanted come-here  
 b. Gianni *ci è/\*ha* voluto *venire*  
 Gianni here is/has wanted come

West Flemish also has ‘aux switch’ phenomena in modal constructions. Interestingly, its V(P)R constructions pattern almost as neatly with respect to auxiliary switch as do the Italian clitic (non-)climbing cases in (26). Haegeman (1994) notes the facts in (27):

- (27) a. da Valère nie no t schule *eet/is* willen goan  
 that Valere not to school has/is want go  
 b. da Valère nie *eet/\*is* willen no t schule goan  
 c. da Valère nie *eet/\*is* no t schule willen goan  
 (28) da Valère nie nor us willen kommen *is/eet*  
 that Valère not to house want come is/has

What (27)/(28) show is that whenever there is Verb Projection Raising, ‘aux switch’ (or aux selection by the verb embedded under the modal) is strictly impossible. This suggests, as seems likely anyway, that the VPR construction patterns with the Italian non-climbing construction illustrated in (26a). West Flemish differs slightly from Italian in that it displays optionality of aux selection in the Verb Raising construction. In Italian clitic climbing constructions of the type in (26b), *have* selection is not possible, but in the VR examples in (27a) and (28) it is. I shall return to this at the end of this section.

The parallel between West Flemish V(P)R and Italian clitic (non-)climbing is striking, and calls for an explanation. I have argued that in VPR constructions the modal takes a TP complement while in VR constructions the modal’s complement is no larger than VP. Let us now base ourselves on Kayne’s (1991) head-movement analysis of clitic placement. Let us furthermore assume that clitic climbing is obligatory if the complement of the modal does not contain a functional head to which the clitic might attach, and excluded otherwise. Whenever the modal takes a ‘bare’ VP complement, then, the clitic must climb into the matrix. The parallel between VR and clitic climbing is hence that in both construction types, the modal takes a VP complement. In non-climbing constructions, on the other hand, the modal will select a functional projection (TP), and the clitic will stay downstairs. VPR and clitic non-climbing constructions are thus similar in that they both feature a functional projection (TP) in the modal’s complement.

With respect to the analysis of ‘aux switch’, I can now generalise that it obtains in modal constructions in which the projections of the modal and the ergative verb embedded under it are immediately contiguous, not separated by any functional projection; in other words, whenever the modal and the motional verb form what I have called a ‘stacked structure’ (cf. (22)). In such cases, properties of the lower verb are visible on the projection of the higher verb. These properties include the lower

verb's  $\theta$ -grid; let us suppose that its auxiliary selection specifications are among them as well. Then we can understand why precisely in this structural configuration the lower verb determines the choice of the auxiliary in perfective constructions. Although clearly a fuller analysis of 'aux switch' remains to be executed, the account sketched here seems promising.

The link with Romance clitic (non-)climbing constructions is interesting in another respect as well. The facts of Romance supply further empirical evidence for my earlier conclusion that in VPR/non-climbing constructions, the complement of the modal verb is a TP, while in VR/climbing constructions the modal verb takes a bare VP complement. In clitic non-climbing constructions the modal and the embedded verb can each independently be modified by temporal adverbs; in the corresponding clitic climbing constructions, however, such double temporal modification is impossible (cf. Napoli 1981, Rosen 1990 and Rooryck 1993, among others). This is illustrated in (29). The contrast in pairs like this is expected on my assumptions — (29a), which is analysed along the lines of West Flemish VPR constructions, contains *two* TPs (one in the matrix inflectional domain and one in the complement of *vorrei* 'wanted'); but in (29b) there is only one TP, since *vorrei* takes a bare VP complement in this clitic climbing construction (whose analysis runs parallel to that of West Germanic VR). Evidence of this sort shows that the presence or absence of a TP in the modal's complement is not just motivated on structural grounds, but also has a direct semantic correlate; it thus further strengthens my analysis of V(P)R and clitic (non-)climbing, and the relationship between the two.

- (29) a. oggi, vorrei finirlo domani  
 today (I) would-like finish-it tomorrow  
 b. ?oggi, lo vorrei finire domani  
 today (I) it would-like finish tomorrow

The facts of temporal adverbial modification in West Germanic are less straightforward; this ties in, as I shall show, with something that I observed earlier on — the fact that 'aux switch' in superficial VR constructions like (27a) and (28) is not obligatory. Consider (30):

- (30) a. *vandoage* zou-ze [<sub>V</sub> willen [<sub>TP</sub> [<sub>Agrop</sub> eur kleed *oensdag* kuopen]]]  
 today would-she want her dress Wednesday buy  
 b. *vandoage* zou-ze eur kleed<sub>i</sub> [<sub>V</sub> willen [<sub>TP</sub> [<sub>Agrop</sub> *t<sub>i</sub>* *oensdag* kuopen]]]  
 today would-she her dress want Wednesday buy  
 'today she would like to buy her dress on Wednesday'

The acceptability of (30b) (with the object outside the verb cluster) is surprising when viewed from an Italian perspective (cf. (29b)). It can be readily understood, however, when we bear in mind that West Flemish features *scrambling* — a movement operation which I have shown independently to be different from Case-driven NP-movement to SpecAgrOP (cf. the account of (23b), above). Let us assume, then, that (30b) is derived from the VPR construction in (30a) via *scrambling* of the object *eur kleed* 'her dress' to a position outside the VPR-cluster, as is indicated in the

structure of (30b). Then the possibility of double temporal modification in this example follows, given that there are two TPs in the structure: one inside and one outside the projection of the modal *willen*.

Given the independent existence of scrambling, surface VR constructions are often structurally ambiguous between ‘genuine’ VR constructions and ‘covert’ VPR constructions with scrambling. This allows us to capture (30b), and also yields us an explanation for the fact, noted earlier in this section, that ‘aux switch’ is *not* obligatory in surface VR constructions in West Flemish, as (27a) and (28) showed. The surface optionality here is the result of independently motivated structural ambiguity — the variants of (27a) and (28) with *is* involve ‘genuine’ VR, while those with *eet* are TP-complementation structures of the VPR type, involving additional scrambling.

Facts of this sort complicate the straight and simple picture that Italian clitic (non-)climbing constructions present. But the disturbance is not alarming; it only highlights the role played in the grammar of West Flemish by *scrambling* — a process that hence continues to exist in the AgrOP era, as a movement operation distinct from Case-feature checking NP-movement to SpecAgrOP.

## 8. Concluding remarks

I have presented the outlines of a minimalist analysis of Verb (Projection) Raising constructions built on a VO structure (cf. Kayne 1993), and centred around the structures in (16) and (20). The basic difference between VR and VPR constructions comes down to the absence or presence of an additional TP below the auxiliary verb. This difference is both structurally and empirically motivated. An analysis of V(P)R along these lines explains the intricate scope properties of V(P)R constructions, vindicates Kitahara’s (1992) QR-less theory of scope interactions, and *en passant* establishes that West Germanic *scrambling* is a movement operation distinct from Case-driven NP-raising to SpecAgrOP. It also readily carries over to the Italian clitic (non-)climbing construction and manages to capture the ‘aux switch’ parallel between the two data sets.

One interesting feature of the analysis developed here that seems worth drawing some attention to is that it relies crucially on Chomsky’s (1993) theory of locality (in terms of the notion of equidistance). Ever since its inception, this theory has been under attack from scholars either wishing to abandon it entirely (cf. e.g. Zwart 1993) or proposing substantial changes to it (cf. most recently Ferguson & Groat 1994). The success that it has, though, in the analysis of V(P)R, and also in the domain of participial agreement, auxiliary selection (Den Dikken 1994a) and the distribution of the copula (Den Dikken 1994b), suggests that Chomsky’s (1993) original minimalist locality theory may not be far off the mark after all.

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