

Circumstantial Evidence for Syntactic Head Movement

Introduction. Recently, a number of analyses have advanced a thesis that syntactic heads are immobile and that head movement does not exist in grammar (e.g. Koopman and Szabolcsi 2000, Mahajan 2001, Müller 2004, a.o.). According to this thesis, dislocation of a head X^0 is always an instance of a remnant movement of an XP-constituent, preceded by vacating movements of other members of the XP. Detrimental to the claim that head movement does not exist is a scenario in which a dislocation of X^0 is *followed* by a remnant movement of the XP-constituent. Such a derivational scenario is outlined in (1). The only possibility of dislocating the head X^0 before remnant XP-fronting (as in (1c)) is by X^0 -movement (as in (1b)).

Goal. We argue that the derivational scenario in (1) is attested in Polish and it allows us to explain the interpretive contrast between (2abc) and (2d). In (2a), the basic S-V-IO-DO word order is modified by a preverbal adverb *znowu* ‘again’, which receives a repetitive reading. When either the IO (in (2b)) or the DO (in (2c)) is scrambled to a preverbal position and is preceded by *znowu* ‘again’, the adverb retains the repetitive reading. In contrast, when both objects are scrambled to a preverbal position and are preceded by *znowu* ‘again’ (in (2d)), the adverb receives a restitutive reading. We argue that (2d) does not involve scrambling of individual objects, but a remnant VP-fronting preceded by the V^0 -to- v^0 movement. In this way, (2d) is an instantiation of the derivational scenario in (1).

Polish vP-internal scrambling. Polish is a consistent head-initial language. Witkoś (2003, 2007) on the basis of binding, reconstruction, and idioms argues that the basic word order in Polish is S-V-IO-DO (as in (2a)) and the vP-structure is as in (3) with the lexical verb in V^0 raising overtly to v^0 . As shown in (2bc), either the IO or the DO can optionally scramble to a preverbal position. Scrambled objects follow V-modifying adverbs like *szybko* ‘quickly’, which are located in Polish at the left edge of the vP. Therefore, we take scrambling to target Spec-vP, as in (4ab).

The semantics of *again*. *Znowu* ‘again’ in Polish can receive a repetitive or restitutive reading, depending on the position it occupies. When *znowu* ‘again’ immediately precedes the verb (as in (2a) or (5a)), it receives a repetitive reading. When *znowu* occupies a position between the verb and the object (as in (5b)), it receives a restitutive reading. The repetitive (“outer”) reading of (5a) presupposes that John himself had opened the window before. The restitutive (“inner”) reading of (5b) presupposes that the window had been opened before, but not necessarily by John or any other agent. Von Stechow (1996) and Beck and Johnson (2004) argue that the two readings of *again* depend on the projection it modifies. When *again* is adjoined to the projection of the CAUSE-functor (attributed to the vP), it c-commands and takes scope over the Agent merged in Spec-vP and, hence, receives a repetitive reading (cf. (6a)). When *again* is adjoined to the projection of the BECOME/STATE-functor (attributed to the VP), it does not c-command the Agent and, hence, receives a restitutive reading (cf. (6b)).

Remnant VP-fronting. The analysis in (6ab) explains the parallelism between the distribution of *znowu* ‘again’ and its different readings in (2abc, 5a) and (5b). However, *znowu* in (2d) receives a restitutive reading, despite the fact that it is immediately followed by both objects scrambled to a preverbal position (identified as Spec-vP in (4)). This fact can be explained if (2d) instantiates the scenario in (1). According to this scenario, (2d) involves two independent movement steps, outlined in (7). The underlying representation of (2d) is as in (7a), with *znowu* adjoined to the VP. First, the verb in V^0 undergoes a syntactic V^0 -to- v^0 movement to derive the basic S-V-IO-DO word order (in (7b)). Second, the remnant VP with the trace of the verb undergoes fronting to a preverbal position (presumably Spec-vP) (in (7c)). The repetitive reading of *znowu* is unavailable in (2d)/(7c), since the adverb adjoined to the VP does not c-command the Agent in Spec-vP.

Conclusion. The contrast like in (2) can be accounted for if the V^0 -movement precedes the VP-fronting, but no other element than the V^0 itself vacates the VP. For this to be possible, a syntactic head must be mobile.

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Key words: the semantics of *again*, head movement, remnant movement

Examples:

- (1) a. $[_{YP} Y^0 [_{\Sigma P} \Sigma^0 [_{XP} X^0 ZP]]]$
 b. $[_{YP} Y^0 [_{\Sigma P} X^0 + \Sigma^0 [_{XP} t_{X^0} ZP]]]$
 c. $[_{YP} [_{XP} t_{X^0} ZP] [_{Y'} Y^0 [_{\Sigma P} X^0 + \Sigma^0 t_{XP}]]]$
- (2) a. Jan *znowu* posłał Marii książkę (repetitive reading)
 John_{nom} again sent Mary_{dat} book_{acc}
 b. Jan *znowu* Marii posłał książkę (repetitive reading)
 John_{nom} again Mary_{dat} sent book_{acc}
 c. Jan *znowu* książkę posłał Marii (repetitive reading)
 John_{nom} again book_{acc} sent Mary_{dat}
 d. Jan *znowu* Marii książkę posłał (restitutive reading)
 John_{nom} again Mary_{dat} book_{acc} sent
- (3) ... $[_{vP} v^0 [_{VP} IO [_{V'} V^0 DO]]]$
- (4) a. Jan $[_{vP}$ szybko $[_{vP}$ Marii_i $[_{v'}$ posłał $[_{VP}$ t_i $[_{V'} t_{V^0}$ książkę]]]]
 John_{nom} quickly Mary_{dat} sent book_{acc}
 b. Jan $[_{vP}$ szybko $[_{vP}$ książkę_j $[_{v'}$ posłał $[_{VP}$ Marii $[_{V'} t_{V^0} t_j$]]]]
 John_{nom} quickly book_{acc} sent Mary_{acc}
- (5) a. Jan *znowu* otworzył okno. (repetitive reading)
 John_{nom} again opened window_{acc}
 b. Jan otworzył *znowu* okno. (restitutive reading)
 John_{nom} opened again window_{acc}
- (6) a. $[_{vP}$ **again** $[_{vP}$ Agent $[_{v'}$ v.CAUSE $[_{VP}$ V.BECOME Theme]]]] = repetitive reading
 b. $[_{vP}$ Agent $[_{v'}$ v.CAUSE $[_{VP}$ **again** $[_{VP}$ V.BECOME Theme]]]] = restitutive reading
- (7) a. $[_{vP}$ Jan_{subj} $[_{v'}$ v⁰ $[_{VP}$ **znowu** $[_{VP}$ Marii $[_{V'}$ posłał_{v⁰} książkę]]]]
 John_{nom} again Mary_{dat} sent book_{acc}
 b. $[_{vP}$ Jan_{subj} $[_{v'}$ posłał_{v⁰+v⁰} $[_{VP}$ **znowu** $[_{VP}$ Marii $[_{V'}$ t_{v⁰} książkę]]]] (restitutive)
 John_{nom} sent again Mary_{dat} book_{acc}
 c. $[_{vP}$ $[_{VP}$ **znowu** $[_{VP}$ Marii $[_{V'}$ t_{v⁰} książkę]]] $[_{vP}$ Jan_{subj} $[_{v'}$ posłał_{v⁰+v⁰} t_{VP}]]] (restitutive)
 again Mary_{dat} book_{acc} John_{nom} sent

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