

Derivation versus Representation: Evidence from Minimality Effects in Adverb Movement

The dominant trend in recent generative linguistics has been to abandon representational models of constraints on movement in favor of strictly derivational ones (e.g. Chomsky 1995, Epstein & Seely 2002). Some researchers, however, have argued that the grammar must include at least some representational conditions (Lasnik 2001, Aoun & Li 2003, Boeckx & Lasnik 2006). This paper provides new data on adverb movement in support of the latter view.

In Russian and Japanese, long-distance scrambling of adverbs gives rise to Relativized Minimality (RM) effects when the movement crosses an intervening adverb (1-2) (Aleksey Maljutin and Yasuhiro Sasahira, respectively, p.c.). This is expected given Cinque's (1999) hierarchy of adverbs. However, some instances of local adverb scrambling can cross an intervener unscathed. This is true for frequency (3-4) and epistemic interveners (not shown). Given (1-2), the shorter movement clearly cannot feed the longer movement, although it was during the shorter movement that the intervener was crossed. It is not clear how this could be captured in a purely derivational approach. In a derivational approach each step is evaluated independently, and the presence of an intervener in a previous step should not have an effect on subsequent steps. A representational approach, by contrast, evaluates a particular configuration (presumably LF), at which it simultaneously has access to information about the presence of interveners anywhere along the chain as well as the ultimate distance between the head and tail of the chain. This simultaneous access to information that was created during different steps of the derivation is precisely what is required in order to account for the data in (1-4).

Additionally, speakers reject local scrambling sentences in which an adverb has moved across a higher intervener from the evaluative (5-6) or evidential classes (not shown). According to Iljoo Ha, p.c., the same pattern holds in Korean as well. The generalization that arises is that epistemic, frequency, and manner adverbs occupy a domain within which they can move without being subject to RM, but that RM asserts itself when they attempt to move farther. I therefore propose that RM is not a condition on movement in general, but only on movement that moves "far enough."

The specific implementation I propose is a modification to Rizzi's (2001) representational definition of RM. This revised RM expands Rizzi's notion of Minimal Configuration (MC) by adding the disjoint condition in (A) below. Assume that manner and frequency adverbs are adjoined to some phrase XP. I propose that XP is the **licenser** of these adverbs, in the sense that they must adjoin to this node in the base. Short scrambling to an adjoined position within the next highest phrase above XP creates a chain $[\alpha \beta]$ whose head α is still within the m-command domain of the node that β originally adjoined to (7). In exactly this case, I claim, the head and tail are automatically in a MC and need not meet the no intervener requirement of standard RM.

Revised Relativized Minimality Condition (additions in bold):

β is in a Minimal Configuration (MC) with α iff **either**

(A) α is located within the m-command domain of the licenser of the chain $[\alpha \beta]$;

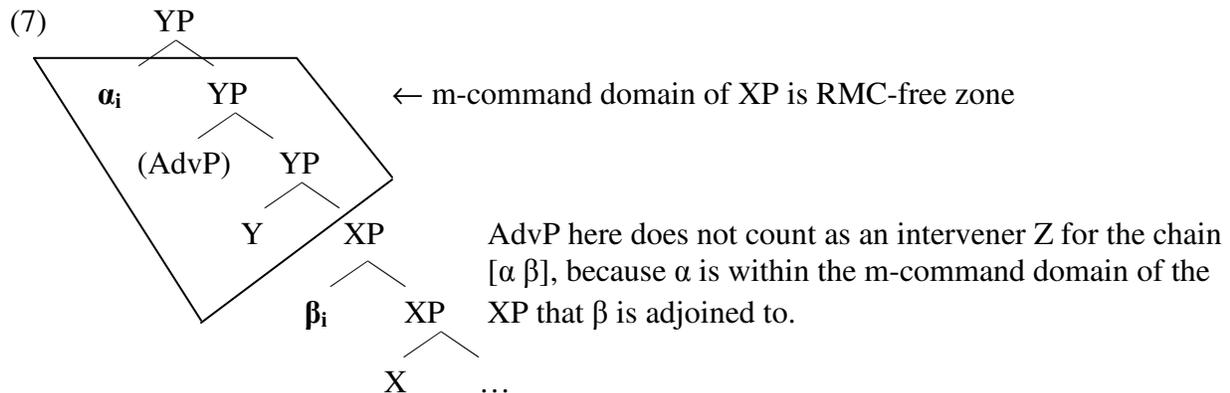
or (B) there is no Z such that

(i) Z is of the same structural type as α

(ii) Z intervenes between α and β

The representational proposal above expanded the empirical coverage of RM at the expense of a non-trivial complication to the grammar, a disjoint condition on the definition of MC. However, a derivational analysis with the same empirical coverage appears to be simply impossible.

- (1) Ja **bystro**_i xochu [chtoby ona (***chasto**) t_i zavodilas’].
I **quickly**_i want [that she (**often**) t_i started]
‘I want it to (often) start quickly.’
- (2) **Hayaku**_i, boku-wa [Peter-ga (***hinpan-ni**) t_i kuruma-o unten-suru to] sinjite-iru.
Fast_i I-TOP Peter-NOM (**frequently**) t_i car-ACC drive that believe
‘I believe that Peter (frequently) drives fast.’
- (3) a. Ona **chasto bystro** zavodilas’.
She **often quickly** started
‘It often started quickly.’
b. Ona **bystro chasto** t_i zavodilas’.
She **quickly often** t_i started
- (4) a. Sore-wa **hinpan-ni subayaku** hassinsu-ru
It-TOP **frequently quickly** start-NonPast
‘It frequently started quickly.’
b. Sore-wa **subayaku**_i **hinpan-ni** t_i hassinsu-ru
It-TOP **quickly**_i **frequently** t_i start-NonPast
- (5) * On **gromko**_i **neozhidanno** t_i vsem rasskazal.
He **loudly**_i **unexpectedly** t_i everyone.DAT told
‘He unexpectedly told everyone loudly.’
- (6) ??kare-wa **oo-goe-de**_i **fui-ni** t_i min’na-ni it-ta
He-TOP **big-voice-in**_i **unexpectedly** t_i everyone-DAT said
‘He unexpectedly told everyone loudly.’



Aoun, Joseph, & Yen-hui Audrey Li. 2003. *Essays on the representational and derivational nature of grammar: The diversity of wh-constructions*. Cambridge, Mass.: MIT Press. Boeckx, Cedric, and Howard Lasnik. 2006. Intervention and repair. *Linguistic Inquiry* 37:150-155. Chomsky, Noam. 1986. *Barriers*. Cambridge, Mass.: MIT Press. Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press. Cinque, Guglielmo. 1999. *Adverbs and functional heads*. New York: Oxford. Epstein, Samuel David, & T. Daniel Seely, eds. 2002. *Derivation and explanation in the Minimalist Program*. Oxford: Blackwell. Lasnik, Howard. 2001. Derivational and representation in modern transformational syntax. *The Handbook of Contemporary Syntactic Theory*, Mark Baltin and Chris Collins, eds. Oxford: Blackwell. 62-88. Rizzi, Luigi. 2001. Relativized Minimality effects. *The Handbook of Contemporary Syntactic Theory*, Mark Baltin and Chris Collins, eds. Oxford: Blackwell. 89-110.