

An Anti-Locality Constraint on Specifiers

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We suggest the generalization in (1) and provide empirical support for it w.r.t. *vP* subjects.

(1) *Anti-Locality Constraint on Specifiers*: The Spec of a head *H* cannot move to a Spec of *H*

An observation along the lines of (1) goes back to at least Lasnik and Saito (1992: 110, ex.19), who suggest that (vacuous) subject topicalization from Spec, TP to TP is unavailable. We note that (1) is justified on configurational grounds. In set-theoretic terms, movement of an element *X* can be defined as the ordered set in (2a), where *B* and *A* are *X*'s sisters before and after movement, respectively. In Bare Phrase Structure (Chomsky 1995) terms, the chain precluded by (1) would be represented as in (2b) and it would be non-distinguishable from a trivial, non-movement chain. In other words, such a movement cannot even be stated non-vacuously. Rather than a stipulation, which it would be from the perspective of *X'*-theory, (1) falls out as a consequence of the tenets of Bare Phrase Structure.

(2) a. $\langle \{X, A\}, \{X, B\} \rangle$ b. $\langle \{X, H\}, \{X, H\} \rangle$

The anti-locality constraint in (1) complements the prohibition against movement of complements to specifiers in the same maximal projection (Grohmann 2000, Abels 2003, a.o.)

Empirical evidence for (1) comes from the syntax of phrasal comparatives. Polish phrasal comparatives (3a) are degraded when the *more*-DP is a transitive subject (Pancheva 2009). The corresponding clausal comparatives (3b) are fully acceptable, and so are phrasal comparatives in which *more* is not part of the subject DP.

- (3) a. ^{??/}*Więcej uczniów zwiedziło Czechy *od* Słowacji. Polish
 more students visited Czech R. from Slovakia-GEN
 b. Więcej uczniów zwiedziło Czechy *niż* Słowację.
 more students visited Czech R. than Slovakia-ACC
 ‘More students visited the Czech Republic than Slovakia.’

Pancheva (2009)'s explanation, which we adopt, is that *od* ‘from’/‘than’ has a non-overt small clause complement, whose subject it ECMs. There is *wh*-movement in both *od*-clauses and *niż*-clauses from a position parallel to that of the matrix *more*. But whereas in *niż*-clauses the *wh*-movement is to Spec, CP (4c), in the absence of a *wh*-probe in *od*- small clauses, the *wh*-operator moves to the edge of the *vP* only. The movement creates a degree predicate, as in Heim and Kratzer (1998). Importantly, in phrasal comparatives, movement of the whole subject out of Spec, *vP* targeting *vP*, as in (4a) is precluded as too-local. The alternative in (4b) involves sub-extraction of the degree *wh*-word from the subject, and thus it involves an island violation. The clausal comparative (4c) is grammatical, as no sub-extraction is required, given that movement of the *wh*-subject to Spec, CP is not precluded as too-local.

- (4) a. *od* [_{PredP} Slovakia₃ [_{vP} *wh-many students*₂ [_{vP} *x*₂ visit *x*₃]]]] (violation of Anti-locality)
 b. *od* [_{PredP} Slovakia₃ [_{vP} *wh*₂ [_{vP} *d*_{2-many students} visit *x*₃]]]] (vP-subject island violation)
 c. *niż* [_{CP} *wh-many students*₂ [_{TP} Slovakia₃ [_{TP} [_{vP} *x*₂ visit *x*₃]]]]]

We tested Pancheva (2009)'s account in 3 acceptability-rating studies in Polish, comparing phrasal and clausal comparatives with *more*-DP transitive subjects to phrasal and clausal comparatives with *more*-DP objects (Exp. 1,2), adverbs (Exp. 2), and degree questions with or without sub-extraction from subjects (Exp. 3). (See (5) for an example of experimental items). Participants rated the sentences on a scale from 1 (bad) to 7 (good).

- (5) a. Tego wieczoru więcej par zatańczyło tango *od* poloneza.
 b. Tego wieczoru więcej par zatańczyło tango *niż* poloneza.
 This evening more couples danced tango than polonaise
 c. Zespół Impresja zatańczył więcej latynoskich tańców *od* zespołu Tęcza.
 d. Zespół Impresja zatańczył więcej latynoskich tańców *niż* zespół Tęcza
 group Impresia danced more Latin dances than group Tęcza
 e. Wszystkie pary zatańczyły tango lepiej *od* poloneza.
 f. Wszystkie pary zatańczyły tango lepiej *niż* poloneza.
 all couples danced tango better than polonaise
 g. *Ile* tego wieczoru *par* zatańczyło poloneza?
 how-many this evening couples danced polonaise
 h. *Ile* *par* tego wieczoru zatańczyło poloneza?
 how-many couples this evening danced polonaise

In Exp.1&2 repeated measures ANOVAs yield sign. main effects of type of *than* (*od* vs. *niż*) and position of *more* (subject vs. object (vs. adverb)), and, most importantly, sign. interactions (6a,b). This suggests that (5a)'s lowest mean is not just a cumulative effect of the two main factors but an additional effect, which we attribute to the island violation. Underscoring this point, the main effects remain significant when the subject conditions are not included in an ANOVA but there is no interaction (Exp.2: $F(1,25)=0.77$, $p=0.39$); i.e., the lower mean of (5e) relative to (5c,d,f) is entirely cumulative. In Exp.3 a repeated measures ANOVA also yields significant main effects of type (comparative vs. question) and of type of *wh*-movement (sub-extraction from subject vs. movement of the whole subject) ($F(1,55)=110.79$, $p < .0001$), as well as an interaction (6c). The results of Exp.3 confirm the analysis of (3a) in terms of sub-extraction from the subject, as a last resort, given that movement of the whole subject violates anti-locality.

(6)	Subj <i>od</i> (5a)	Subj <i>niż</i> (5b)	Obj <i>od</i> (5c)	Obj <i>niż</i> (5d)	Adv <i>od</i> (5e)	Adv <i>niż</i> (5f)	Sub- extr. <i>Q</i> (5g)	Subj <i>Q</i> (5f)	interactions b/n main effects
a. Exp1	4.38	5.48	5.18	5.78	na	na	na	na	$F(1,34)=6.26$, $p=0.017$
b. Exp2	3.93	5.53	5.38	6.34	5.09	5.73	na	na	$F(2,25)=3.99$, $p=0.025$
c. Exp3	4.07	5.67	na	na	na	na	4.99	5.92	$F(1,55)=7.08$, $p=0.010$

Several additional aspects of our findings are notable, beyond their relevance for anti-locality. Sub-extraction from *vP*-subjects (5a) is significantly degraded, relative to *wh*-movement of the whole subject (5b), suggesting that *vP*-subjects are islands, in support of Chomsky (2008) and Gallego & Uriagereka (2007) and contrary to Stepanov (2007). There is a significant variability among speakers in rating violations of *vP*-subject islands, with individual mean averages ranging 1.17-7 (Exp.1), 1.5-5.75 (Exp.2), and 1-7 (Exp.3). Similar variability is observed with overt sub-extraction in questions, with individual means in the range of 1.17-7 (Exp.3). In contrast, the ungrammatical fillers are rated uniformly low: e.g., mean 1.17, range 1-2 (Exp.3) and similarly for Exp. 1&2. Clearly, there are Polish speakers for whom *vP*-subjects (and possibly TP subjects as well, given the question data in (5g)) are not strong islands.

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