

## Comparison Based on POS

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**Introduction** We observe that gradable predicates in Russian that are not morphologically marked for comparison trigger the so called *Evaluativity* effect: the gradable property holds to the same extent as in the positive construction (Bierwisch, 1989, Rett, 2007). This *E* pattern is argued to follow from a restriction on the binding of the degree argument and to have two consequences for the system of gradation in *R*: 1. The lack of *Measure Phrase* constructions, *Degree Questions* and *Subdeletion Comparatives*; 2. The positive-based interpretation of equatives, superlatives, *more*-comparatives and *too-/enough*-constructions.

**Data** *R* comparatives follow the well-studied pattern of the English ones: the comparative interacts with modal operators in the matrix (Heim 2001) and comparative clauses are subject to negative island effects and apparent scope effects in the presence of embedded quantifiers (Heim 2006). This calls for a standard degree operator analysis of the *R* comparative coupled with a relational approach to the semantics of gradable adjectives. However, two sets of data do not fit into this picture. First, *R* bans *MP*, *DQ* and *SC* whose standard analysis is based on the abstraction over the degree argument, (1)-(2).

- (1) a. How tall is the tree? (*DQ*) The tree is 5m tall. (*MP*)  
 b. \*Kakoe vysokoe derevo? \* Derevo 5m vysokoe.  
     how tall tree tree 5m tall
- (2) a. The table is higher than the door is wide. (*SC*)  
 b. \*Stol vyshe chem dver' širokaja.  
     table taller than door wide

Second, *R* degree constructions are evaluative unless the adjectives are morphologically marked for comparison. In contrast, *E* in English is observed only in certain contexts, e.g. with negative pole adjectives (3). As (4)-(7) show, negating the morphologically unmarked form in the preceding or the following context results in deviancy.

- (3) Peter is as tall as Mary is.  $\nRightarrow$  Peter and Mary are tall.  
 Peter is as short as Mary is.  $\Rightarrow$  Peter and Mary are short.
- (4) (\*Petja nizkogo rosta.) On takoj zhe *vysokij* kak i Masha,  
 Peter short height he that emph tall how also Mary  
 (\*no/xotja on ne vysokij).  
 but/though he neg tall  
 '(Peter is short), he is as tall as Mary, (but he is not tall).'
- (5) (?Eta mashina malen'kaja no) ona dostatočno *bol'shaja* dlja chetveryx,  
 this car small but it enough big for four  
 (??no ona ne bol'shaja).  
 but it neg tall  
 '(This car is small, but) it is big enough for four people, (but it is not big).'
- (6) a. (\*Petjane vysokij), on bolee *vysokij* chem Masha,  
 Peter neg tall he more tall than Mary  
 (\*no on ne vysokij).  
 but he neg tall  
 b. (Petja ne vysokij no), on *vyshe* chem Masha.  
 Peter neg tall but he tall-ER than M.  
 (no on ne vysokij).  
 but he neg tall  
 '(Peter is not tall, but) he is taller than Mary, (but he is not tall).'
- (7) (Petja nizkogo rosta.) On samyj *vysokij* sredi detej,  
 Peter short height he most tall among children  
 (??no on ne vysokij).  
 but he neg tall  
 '(Peter is short.) He is the tallest among the children, (but he is not tall).'

Note, that in (7) the context-setter ‘among children’ can modulate the context to remove the contradiction. To draw a descriptive conclusion, the absence of the comparative suffix on the *R* adjective, triggers comparison with the implicit standard, e.g. the average height. In this sense, *R* lacks true superlatives, equatives and intensional comparatives.

**POS-Hypothesis** To account for the *E*-pattern, we stipulate that the degree argument of unmarked *R* adjectives is obligatorily bound by POS, introduced in (von Stechow, 2006):

- (8)  $[[\text{POS}_N]^g = \lambda d. \forall d' \in g(N): D(d')$   
 where *N* is a contextual variable ranging over intervals that is assigned the neutral span on the relevant scale (‘neither short nor tall’).

This explains the ungrammaticality of *MP*, *DQ* and *SC* whose analyses cannot accommodate the presence of POS at LF. POS binds the degree argument and is therefore in complementary distribution with measure phrases and the question operator. *SC* realises the unmarked degree predicate of the subordinate clause overtly. This triggers the obligatory insertion of POS and deprives *SC* of the appropriate standard-of-comparison argument for the comparative operator: the comparative clause fails to denote an interval, (9).

- (9) a. English:  $[[\text{COMP}](\lambda d.\text{door } d\text{-wide})(\lambda d.\text{table } d\text{-high})$   
 $= \max(\lambda d.\text{table } d\text{-high}) > \max(\lambda d.\text{door } d\text{-wide})$   
 b. Russian:  $*[[\text{COMP}](\text{POS } \lambda d.\text{door } d\text{-wide})(\lambda d.\text{table } d\text{-high})$   
 c.  $[[\text{COMP}] = \lambda D. \lambda D'. \max(D') > \max(D)$

**Evaluative constructions** Morphologically marked comparatives are analysed as involving COMP. Further on, we assume that a) POS, like COMP, can take a differential argument, cf. (10); b) *N* is assigned the same value within one sentence. Examples (4)-(7) are based on abstracting over the differential of POS, see (11)-(13). In *more*-comparatives, COMP, overtly realised on *much*, relates differential degrees of two POSs (strictly, COMP binds the degree argument of *much*; (11) is simplified). In equatives, the differential degree is anaphorically picked by the demonstrative *takoj* ‘that’ from the *how*-clause, (12).

- (10)  $[[\text{POS}_N]^g = \lambda d. \lambda D. \max(D) = \max(g(N)) + d$   
 (11)  $\text{COMP } [\lambda_4 [\text{POS}_N 4] [\lambda_3 \text{Mary } 3\text{-tall}]] [\lambda_2 [\text{POS}_N 2] [\lambda_1 \text{Peter } 1\text{-tall}]] = (6a)$   
 ‘The maximal degree by which Peter’s height exceeds the average height is greater than the maximal degree by which Mary’s height exceeds it.’  
 (12)  $\text{POS}_N [\max \lambda_3 [\text{POS}_N 3] \lambda_2 \text{Mary } 2\text{-tall}] [\lambda_1 \text{Peter } 1\text{-tall}] = (4)$   
 ‘The maximal degree by which Peter’s height exceeds the average height equals the maximal degree by which Mary’s height exceeds it.’  
 (13)  $\text{Peter } \text{most}_C [\lambda_2 \lambda x [\text{POS}_N 2] [\lambda_1 x 1\text{-tall}]] = (7)$   
 ‘The maximal degree by which Peter’s height exceeds the average height is greater than the maximal degree by which *x*’s height exceeds it, for any *x* from *C* different from Peter.’

**Conclusion** Drawing on the *E* pattern, we argue that COMP and POS are the only available options to bind the degree argument of the *R* adjective. Cross-linguistically, the correlation between the *E* pattern and the availability of *MP*, *DQ* and *SC* is supported by the facts in Bulgarian/Polish vs. Russian/Ukrainian. Further research should show whether the lack of the cluster consisting of *MP*, *DQ* and *SC* that has been attested in many other languages is related to some kind of restriction on the realisation/binding of the degree argument, as proposed here.

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