

## *Exceed comparison and A/B numeral modifiers in Czech*

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**Introduction.** In this talk, we investigate semantic properties of two classes of Czech *exceed* verbs (thence ExVs): i) prefixed deadjectival *pře-vyš-ovat* ('exceed'; lit. 'over-high'; AExVs) and ii) prefixed non-deadjectival *pře-krač-ovat* ('exceed'; lit. 'over-step'; non-AExVs). To this goal, we will integrate two largely independent strands of theoretical research: i) formal semantic treatment of Slavic prefixes and prepositions as expressions that are lexically associated with scales (e.g., Filip 2000, 2008; Kagan 2013) and ii) Nouwen's (2010, 2015) approach to numeral modifiers as degree quantifiers of two types: a) class A modifiers are comparative modifiers that compare two definite cardinalities, e.g., *more/fewer than 100*; *under/over 100*, and b) class B modifiers are maxima and minima indicators that relate a range of values to a certain boundary, including superlatives, e.g., *at least/most/from/up to/maximally 100*. This twin theoretical framework will provide us with tools to explore Slavic prefixes, and also prepositions to which the former are closely related, from a novel perspective of a particular type of comparative structure, namely the *exceed* comparison (Stassen 1985), hence furthering their understanding, which is still elusive despite a large body of research.

**Data and analysis.** The comparative nature of ExVs is corroborated by the fact that they are compatible with differentials, as in (1).

- (1) Katedrála pře-vyš-uje radnici o 20 metrů.  
cathedral over-high-ipf.3.sg town-hall by 20 meters  
'The cathedral is 20 meters higher than the town hall.'

Moreover, AExVs are derived from comparative forms of As, as witnessed by the *s/š* alternation in *vys-oký* ('high') vs. *vyš-ší* ('higher') and suppletive morphology in examples such as *po-lepšit* ('improve'; lit. 'PO-better'), and not *\*po-dobřit* (lit. 'PO-good'). The prefix seems to be an obligatory part of the derivation, since, as far as we know, all Czech AExVs are prefixed, as evidenced by the ungrammaticality of primary imperfectives like *\*výšit*. The key observation here is that sentences with ExVs involving the prefix *pře-* lack ignorance effects (Nouwen 2015) as indicated by the context in (2-a), whereas sentences with directional Ps, such as (2-b), do not (meta-linguistic use aside). However, the ignorance effects with directional Ps disappear when they are in the scope of certain modals or in so-called variation readings as in (3).

- (2) a. Cena toho bytu byla 120.000 €, takže pře-kročila 100.000 €.  
price of-this flat was 120.000 € so over-reached.pf 100.000 €  
b. Cena toho bytu byla 120.000 €, #takže byla od 100.000 do 200.000 €.  
price of-this flat was 120.000 € so was from 100.000 to 200.000 €
- (3) a. Cena toho bytu může být od 100.000 do 200.000 €.  
price of-this flat can be from 100.000 to 200.000 €  
b. Ceny bytů tu jsou od 100.000 do 200.000 €.  
prices of-flats here are from 100.000 to 200.000 €

Such behavior is recognized as a diagnostics for the class A versus B modifiers, following Nouwen (2010, 2015). Inspired by Nouwen, we recast the core scalar contribution of Slavic verbal prefixes (e.g., Filip 2000, 2008; Kagan 2013) in terms of a type A (locative P) vs. type B (directional P) modifiers. Specifically, the *pře-* in ExVs, such as such as (1), is now analyzed as a comparative degree quantifier with a built-in MIN operator:  $\llbracket pře- d \rrbracket = \lambda M. \text{MIN}_d(M(d')) > d$  (cf. also Hackl 2001), i.e., type A. Given this, we propose that the adjectival positive stem lexically introduces an appropriate scale, as is standardly assumed, while its comparative form the comparative semantics, i.e., a definite description of a maximal degree and the  $>$  relation (von Stechow 1985, Heim 1985). The MIN operation introduced by *pře-* operates 'on top of' the comparative semantics (introduced by the the adjectival comparative stem). That is, the MAX operator associated with the comparative adjectival stem yields the maximal degree within an interval on a scale, associated with

