Comparison Based on POS

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1 Introduction

The goal of our study is to develop a semantic analysis of degree constructions in two typologically unrelated languages that display similar phenomena and present difficulties for the standard English-based analysis of comparatives, e.g. von Stechow (1984). We aim to identify the source of cross-linguistic variation that may affect a larger group of languages.

2 Data

One of the basic types of degree constructions that motivate most approaches to the semantics of comparison is the measure phrase construction (MP) in which a measure expression occupies the degree argument slot of the gradable predicate, cf. (1a). In Russian and Guaraní, MPs are not possible, (1b-c). Neither do these languages allow true degree questions (DQ) that are standardly analysed as involving abstraction over the degree argument of the adjective that is passed to the question operator, (2). Finally, Russian and Guaraní ban subcomparatives of degree (SC) that are also based on the abstraction over the degree arguments of the involved adjectives, cf. (3). These three phenomena are not predicted under the standard analysis of degree constructions and suggest that the realisation of the degree argument is subject to cross-linguistic variation.

(1) a. The journey was 6 days long.
   b. *Puteshestvie bylo 6 dney dolgim.
      journey   was 6 days long
   c. *Pe juguata kuri potei ara ipuku.
      this journey past six days long

(2) a. How old is Peter?
   b. *Kakoj Petja staryi?
      how   P.   old
   c. *Mba'eita i-tuja Pedro
      how   kop-old Pedro

(3) a. The table is higher than the door is wide.
   b. *Stol vyshe chem dver' shirokaja.
      table taller than door wide
   c. *Pe mesa i- jyvate- ve pe oke i- pe- gui.
      this table kop high- more this door kop wide- than

3 Evaluativity in Russian

We argue that the ungrammaticality of MP, DQ and SC in the Russian variants of (1)-(3) is related to the evaluativity of degree constructions. Evaluativity is observed in English only in certain contexts, e.g. with negative pole adjectives, and refers to the 'comparison with the norm' meaning component present in the positive construction, cf. (4). We show that Russian sentences with gradable adjectives are always evaluative unless the adjectives are morphologically marked for comparative, (5)-(8).

(4)   Peter is as tall as Mary is. ⇏ Peter and Mary are tall.
        Peter is as short as Mary is. ⇒ Peter and Mary are short.

(5)   ??*Petja nizkogo rosta, on takoj zhe vysokij kak i Masha.*
         P.   short   height he so   part. tall   as also M.
        'Peter is short. He is as tall as Mary.'

(6)   *??Eta mashina malen'kaja, no dostatochno bol'shaja dlja chetveryx.*
         this   car   small   but enough   big   for four
        'This car is small, but big enough for four people.'

(7)   ??*Vse deti   nizkogo rosta. Iz   nix Petja samyj vysokij.*
         All children short   height Among them P.   most tall
        'All children are short. Peter is the tallest among them.'

(8)   a. ??*Petja nizkogo rosta, on bolee vysokij chem Masha.*
            P.   short   height he more tall   than M.
        b. *Petja nizkogo rosta, on vyshe   chem Masha.*
            P.   short   height he tall-ER than M.
        'Peter is short but he is taller than Mary.'

The empirical generalisation is the following: the absence of the degree morphology on the Russian adjective triggers comparison with the implicit standard, e.g the average height. In this sense, Russian seems to lack true superlatives, equatives and intensional comparison constructions (*too* and *enough*-constructions).

4 POS-Hypothesis

We hypothesise that the following parameter is responsible for the observed variation:

(9)   POS-Parameter
        The absence of comparative morphology {does/does not} trigger the binding of
        the degree argument by the POS operator.

If we assume that Russian and Guaraní have the positive setting of the POS-Parameter, we expect that all constructions involving bare adjectives are evaluative in these languages. This seems to be borne out at least for Russian and is currently investigated in Guaraní. We also predict the ungrammaticality of MP, DQ and SC, whose analyses cannot accommodate the presence of the POS-operator at LF. POS binds the degree argument and is therefore in complementary distribution with meas-

ure phrases and the question operator. The obligatory insertion of POS in the subordinate clause of a SC deprives this type of the comparative of the appropriate standard of comparison argument for the comparative operator: the comparative clause fails to denote an interval, cf. (10a) vs. (10b).

(10) a. English: $[\![COMP]\!](\lambda d.\text{door } d\text{-wide})(\lambda d.\text{table } d\text{-high})$
    $= \max (\lambda d.\text{table } d\text{-high}) > \max (\lambda d.\text{door } d\text{-wide})$
  b. Russ/Guar: $*[\![COMP]\!] (POS \lambda d.\text{door } d\text{-wide})(\lambda d.\text{table } d\text{-high})$

(11) a. $[\![COMP]\!] = \lambda D. \lambda D'. \max(D') > \max(D)$
  b. $[\![POS_I]\!]^g = \lambda D. \forall d' \in g(I): D(d')$ von Stechow (2006)
    where I is a contextual variable ranging over intervals that is assigned the neutral span on the relevant scale ('neither short nor tall') by default.

5 Evaluative degree constructions

Comparatives that feature the comparative suffix are analysed as involving COMP and receive the standard analysis. Other kinds of degree operators are not available. To account for the various constructions that are based on POS, we assume that POS, like COMP, takes a differential argument, cf. (12). Under this assumption, the equative and other degree constructions receive the interpretations sketched in (13). The main ingredient is the abstraction over the differential argument of POS.

(12) $[\![POS_I]\!]^g = \lambda d.\lambda D. \max(D) = \max(I) + d$

(13) *Petja takoj zhe vysokij kak i Masha.* = (5)
    'The maximal degree by which Peter's height exceeds the average height equals the maximal degree by which Mary's height exceeds it.'

(14) *Petja bolee vysokij chem Masha.* = (8a)
    '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.'

(15) *Petja samyj vysokij.* = (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 salient in the context'

To conclude, we develop an analysis for degree constructions in Russian that utilises abstraction over the differential argument of the POS operator. By considering Guaraní, we propose that the empirical pattern displayed by the degree constructions in Russian may be due to a fundamental variation between languages that affects the distribution of the POS-operator depending on the presence of overt degree morphology.

References

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