On the scalar representation of total and partial adjectives: Evidence from Reduplication

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We present novel data showing that (i) there is a *structural* difference between partial and total adjectives (Yoon, 1996; Rotstein & Winter, 2004), namely, only total adjective have their standard value represented in the derivation, and that (ii) the relation between partial and total adjectives must be defined with respect to the standard value of the total adjective represented as the lower bound of its partial counterpart (Rotstein & Winter, 2004). Consequently, antonym adjectives must be at least sometimes represented by overlapping scales (contra Kennedy & McNally 2005; Kennedy 2007). Evidence comes from morphophonological processes in Czech, namely, from adjectival reduplication (Marantz, 1982; Inkelas & Zoll, 2005).

Puzzle Czech has a productive system of a semantically driven morphophonological reduplication. For instance, reduplication of the verbal habitual morpheme *-va-* encodes iterativity, as in (1). Reduplication occurs also in adjectives where it applies to a degree morpheme corresponding (roughly) to English 'very'. The resulting meaning of the adjective may be paraphrased as 'very, very... (clean)'. Native speakers characterize the resulting interpretation as that of reaching the absolute degree of adjectiveness. Interestingly, only total adjectives may undergo reduplication, as in (2)–(3). This restriction is puzzling because it does not apply to its semantically closest variant, i.e., modification by *velmi* 'very', (4). Similarly, the closest English paraphrase (the repetition of 'very') is compatible with both total and partial adjectives as well, (5).

Proposal Following Rotstein & Winter (2004), we argue that total and partial predicates must be semantically represented by a scale and a standard value (cf. Kennedy & McNally 2005). Crucially, the scales are partially overlapping and the impression of their antonymous interpretation (not clean ⊩ dirty) comes from an interaction of their interval boundaries and the standard values. While the standard value of partial adjectives is determined contextually and as such has no structural representation ($d_P \in \overline{S_P}$; $\overline{S_P}$ … closure of the partial scale), the standard value of the total member of the adjectival pair is defined as the lower bound of its partial counterpart ($d_t = P_{min} \in \overline{S_T}; \overline{S_T}$ … closure of the total scale). We argue that the denotation of the reduplication corresponds to a limit function where the limit is defined as the standard value of the total adjective ($\| -li-li- \| \approx d_T$). The resulting denotation corresponds to approaching the standard value of the adjective.

Since reduplication is a morphophonological process parasitic on material present in the derivation, it applies only if the standard value is structurally represented. Consequently, reduplication applies only to total adjectives since only total adjectives have their standard value structurally represented. That the difference must be defined in structural terms is further supported by examples in which the standard value of a partial adjective is contextually fixed: even then reduplication fails to apply, (6).

If this argumentation is on the right track it has consequences for the correct structural representation of degree adjectives. We argue that antonym adjectives cannot be represented by adjacent scales but they must be allowed to partially overlap (in agreement with Rotstein & Winter 2004 and contra Kennedy & McNally 2005; Kennedy 2007).

[*w o r d s = 4 9 4*]

(1) a. praco-**va**-l
he worked
b. praco-**vá-va**-l
he used to work
c. praco-**vá-vá-va**-l
he used to regurally/repeatedly worked

(2) *čistý* ‘clean’ vs. *špinavý* ‘dirty’

a. čistý → čist’ou**li**nký → čist’ou**lili**nký… √ reduplication

b. špinavý → špinavou**li**nký → *špinavou**lili**nký… *reduplication

(3) *zavřený* ‘closed’ vs. *otevřený* ‘open’

a. zavřený → zavřeňou**li**nký → zavřeňou**lili**nký √ reduplication

b. otevřený → otevřeňou**li**nký → *otevřeňou**lili**nký… *reduplication

(4) a. velmi čistý
very clean
b. velmi špinavý
very dirty

(5) a. very very very clean

b. very very very dirty

(6) [modeled after Rotstein & Winter (2004)]:

a. This glass is certainly not clean, since it has several big spots on it and I am not willing to drink from it even if you insist. The glass is simply…
*špinavou**lili**nká ‘very very dirty’

b. This class is certainly not dirty, since it has absolutely no dirty spots on it. The glass is simply… √ čist’ou**lili**nká ‘very vert clean’

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