

Adverbs of quantity: Entities of different kinds

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Adverbs of quantity: basic differences. The adverbs which express quantity include multiplicatives (*three times*), frequency adverbs (freq-adverbs, e.g. *frequently, daily*) and adverbs of quantification (Q-adverbs, such as *often*). These adverb types are not always clearly distinguished. Ernst 2002, for example, treats them as instances of quantificational adverbs, with Q-adverbs (largely corresponding to 'habitual adverbs' in his terms) preceding freq-adverbs because the former must modify longer time intervals than the latter. Cinque 1999 gives an intuitive definition of adverb types which roughly correspond to freq-adverbs and Q-adverbs. However, he treats them in a highly similar fashion, and assumes that Q-adverbs and freq-adverbs must appear in the specifier positions of one of the two the appropriate functional projections of Asp_{HAB} and Asp_{FREQ}, respectively. I argue against both positions.

Building on (and revising) the diagnostics in van Geenhoven 2004, 2005 and Johansdottir 2005, I argue that freq- and Q-adverbs can be clearly distinguished. Ultimately, the difference among all adverbs of quantity reduces to clear contrasts among the modifiers: (a) *multiplicatives* count the occurrence of specific situations; (b) *freq-adverbs* establish the frequency of situations within a longer time interval; and (c) *Q-adverbs* quantify over situations (de Swart 1993, 1996, a.o.).

Furthermore, I show that this characterization predicts the distribution of these adverbs in Hungarian, a highly discourse-configurational language (É. Kiss 2002, 2007), where the order of constituents is determined by their discourse properties (1). The boldfaced VP contains the (trace) of all arguments of the verb and can also contain adjuncts. In effect, I argue, the VP is the minimal situation description in Hungarian. (Non-boldfaced) constituents outside of VP have surface scope.

(1) [topics [*quantifiers* [focus / negation [_{VP} **V** ... **XP** ...]]]]

Countability. Multiplicatives can modify any countable situation description. Accordingly, they can modify the VP or any constituent containing the VP, if they denote a countable situation description. In all positions, they exhibit surface scope, which is consistent with the generalization noted above.

Times and situations. As noted above, freq-adverbs determine the frequency of certain situations inside a larger time interval. I argue that this follows from an obligatory time interval argument of these adverbs. Q-adverbs, in contrast, are simply quantifiers over situations, and lack time arguments.

Adverb distribution. This view of adverbs of quantity straightforwardly derives the distribution of adverbs of quantification in Hungarian. *Multiplicatives*, as noted above, have a flexible distribution, since they can modify any countable situation description. *Freq-adverbs* are restricted to positions where a time interval argument is available. I show that the requirement restricts these adverbs to the VP and negation/focus positions, since time arguments are only available in this domain. Support for this claim is provided by the interaction of focus and finiteness. Finiteness is located in T, which is also the position where speech time – the structurally highest time interval – is found. Finiteness affects the position of particles, which must follow the verb and the focused *csak Feri* 'only Feri' in the finite (2a). In a nonfinite clause (2b), the particle can appear in either pre- or postverbal position.

- (2) a csak Feri jött el_P / *el_P jött
only F-nom came part part came
'Only Feri came'
- b Fontos csak Ferinek jönne el_P / el_P jönne
important only F-dat come-inf,3sg part part come-inf,3sg
'It is important that only Feri comes'

T must then appear lower than focus, forcing all time intervals to appear below focus as well. It follows that freq-adverbs must follow foci, and take narrow scope with respect to these:

- (3) csak Feri jött el *sűrűn* / (**sűrűn*) csak Feri (**sűrűn*) jött el
only F-nom came part frequently frequently only F-nom frequently came part
'Only Feri came frequently' (only Feri > frequently, *frequently > only Feri)

Q-adverbs, in contrast, pattern with other quantifiers. They either precede or follow focus, and display surface scope (quantifiers in general can appear either preverbally or among the XPs in (1)).

- (4) *gyakran csak Feri jött el / csak Feri jött el gyakran*
 often only F-nom came part only F-nom came part often
 'Often only Feri came' (often > only F) / 'Only Feri came often' (only F > often)

Extensions. The distribution of adverbs of quantity follows straightforwardly from the properties noted above. In the talk I (a) extend the discussion to coercion facts (which can yield marked countable interpretations); (b) motivate the preferred preverbal position for Q-adverbs and multiplicatives; and (c) consider the predictions for adverb ordering and position in other languages.

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