Reducing "stativizing negation" to an LF scope configuration

Overview: It has been proposed that negation stativizes eventive predicates as an aspectual operator (cf. de Swart 1996), based on data like (1). Negation appears to render a durative adverbial (DUR) compatible with a telic predicate, henceforth "HighDUR Effect". We show that a) the HighDUR Effect does not arise from negation operating on ES, b) the effect is limited to LF configurations where DUR outscopes negation (i.e. is outside TP), and c) other exhaustive operators in the TP domain (focus, universals) also give rise to the HighDUR Effect. We claim that DUR in this configuration is referential: it identifies a portion of the reference time about which TP gives a complete description (which is neither a state, nor homogeneous, contra e.g. Csirmaz (2008)). We discuss predicative (VP-internal) vs. referential (TP-external) uses of duratives, and draw conclusions that bear not only on "stativizing negation" but also on the "until-debate". We argue against treating until as an NPI, and relate the "switch reading" attributed to "eventive until" to the HighDUR Effect.

DURs taking part in the HighDUR Effect are located outside TP: Like DURs, bare duratives (BareDUR) are incompatible with telic predicates (2a). Unlike with DURs, negation has no effect in (2b). Consider a structural difference between the two as well, shown by the *do so* construction: DUR is fine (3a), while BareDUR is out (3b). If negation operated on the ES properties of the predicate, we would expect it to license BareDURs since these are low in the VP (as shown by (3b)) where the ES properties are located (cf. Travis (1991), MacDonald (2008)), measuring the runtime of the event (Morzycki 2004). In contrast, (3a) shows that DURs are outside ν P, supporting analyses that treat the HighDUR Effect (a.k.a. "stativizing negation") as basically a scope effect (cf. Mittwoch 1977).

High DURs are referential: DURs contrast with BareDURs structurally and semantically. BareDURs resist a referential interpretation and are temporal predicates indicating *total event runtime*. DURs specify a *contiguous stretch of reference time* that, however, need not be covered by the event. Deictic modification confirms this (4). Negated eventives are only compatible with such referentially interpreted duratives, as in (5), which can only be interpreted as referring to a particular two-hour period during which no guests arrived. An amount-of-time interpretation, where altogether there were two hours during which nobody came, is unavailable (compare: *The guest danced two hours*.)

TP must give an exhaustive description of the reference of DUR: HighDUR Effect requires not only that DUR be referential, but also that the complement of DUR contain a suitable operator: (6a) negation, (6b) focus, or (6c) a universal. These data (and more elaborate examples not shown) cast doubt on semantic characterizations that rely on homogeneity or the "subinterval property". We argue that the crucial property these examples share is *exhaustivity* whereby there is a (sometimes implicit) restriction constraining the events to be looked at throughout the period specified by DUR, where the assertion is to be evaluated. For example, (6b) is evaluated in each instance where John locked anything at all, and holds true if what John locked was the gate every time. We give a formal account of this semantic intuition that also explains the sense of "expectation" typical of examples like (6a).

The DUR>OP scope order must obtain at LF: When independent factors (islands, reconstruction constraints) permit, the right configuration can obtain at LF even across clause boundaries (e.g. (7)). We discuss Neg-raising constructions to demonstrate the syntactic restrictions on the HighDUR Effect. In particular, we argue that, in Slavic and Romance, negation in *until*-clauses does not "stativize" (shown by the grammaticality of the punctual adverb in (8)) simply because it scopes higher than its surface position at LF. We show that the LF position of negation in these constructions is higher than the punctual Adv in the embedded clause but lower (cf. Ürögdi forthcoming, contra Abels 2005) than the matrix Neg position. We also propose that the "switch reading" (Giannakidou 2002) in *until*-constructions (e.g. (9)) is due to the HighDUR Effect: it is an implicature that the assertion is no longer true for the part of the reference time not identified by *until*. This implicature can be made obligatory via focusing of the *until*-phrase, and in fact a similar contrastive interpretation is preferred with *for*-adverbials as well (observe the two examples in (6a)).

Conclusions: (a) Negation does not affect the ES properties of the predicate, (b) the HighDUR Effect involves a referential DUR that, unlike predicative BareDURs, does not require a durative predicate in its scope because the event need not cover the duration of the DUR, rather (c) the DUR specifies a subpart of the reference time (a bounded time period) that, like other referential expressions, can form the basis of implicit or explicit contrast, leading to effects like the "switch reading" in *until*-clauses.

- (1) a. John dropped the book #for ten minutes / #until three.
 - b. John didn't drop the book for ten minutes / until three.
- (2) a. John dropped the book #an hour.
 - b. John didn't drop the book #an hour.
- (3) a. John ran for an hour / until 5PM and Bill did so for three / until 6PM.
 - b. # John ran an hour and Bill did so three.
- (4) John danced *(for) those thirty minutes.
- (5) The guests didn't arrive for two hours.
- (6) a. John didn't arrive for two hours / until 5.
 - b. John locked (only) the <u>GATE</u> for two weeks / until Monday.
 - c. <u>Everyone</u> failed the test for two years / until last week.
- (7) London is the only place that John thinks/*resents that Mary has visited for two years.
- (8) a. Pričali dok od iednom nije nestalo smo svetlo. spoke Aux until suddenly Neg-Aux went-out light "We talked until, all of a sudden, the lights went out."
 - b. *Od jednom nije nestalo svetlo.
 suddenly Neg-Aux went-out light (Serbo-Croatian)
- (9) John didn't arrive until 5. (implies: John arrived at 5.)

References: Abels, K. 2005. Expletive negation in Russian: A conspiracy theory. In: Journal of Slavic Linguistics 13(1): 5-74. Csirmaz, A. 2008. Homogeneity and flexibility in temporal modification. In *Merging features* JM. Brucart, A. Gavarró, and J. Solà (eds.) Oxford: OUP. de Swart, H. 1996. Meaning and use of *not...until. Journal of Semantics* 13:221-263. Giannakidou, A. 2002. UNTIL, aspect and negation: a novel argument for two untils. In Brendan Jackson (ed.) *Semantics and Linguistic Theory (SALT) 12*, CLC Publications, Ithaca, NY. MacDonald, J.E. 2008. Domain of aspectual interpretation. *Linguistic Inquiry* 39 (1): 128-147. Mittwoch, A. 1977. Negative sentences with *until.* Chicago Linguistic Society 13: 410-417. Mittwoch, A. 2001. Perfective sentences under negation and durative adverbials. In J. Hoeksema, H. Rullmann, V. Sanchez-Valencia és T. van der Wouden (szerk.), *Perspectives on Negation and Polarity Items*. Amsterdam: John Benjamins. 265-282., Morzycki, M. 2004. Measure DP adverbials: Measure phrase modification in VP. ms, UQAM. Travis, L. 1991. 'Inner Aspect and the Structure of VP.' Ms., McGill University, Toronto, Canada. Ürögdi, B. forthcoming. Temporal adverbial clauses with or without operator movement. In: K. É. Kiss (ed.) *Adverbs and Adverbials at the Interfaces*. Amsterdam: John Benjamins.