Appendix 2. Additional theoretical issues

This appendix focuses on two issues of theoretical import. The first one concerns alternative analyses for Hungarian. The second one involves a theoretically possible (yet unattested) degree morpheme. With regard to the first issue, while the discussion in Section 3.2.4 has proposed a particular analysis for Hungarian, there are, in principle, alternative analyses for this language. Here I explore two possibilities. I will further discuss why the analysis in Section 3.2.4 is to be preferred. The first alternative analysis involves having an event maximalizer that also does degree maximalization. Under the approach adopted in this paper, this would mean that the only degree morpheme in Hungarian is POS_i, and, crucially, that the event maximalizer (and its counterpart, which remains neutral regarding event maximalization) makes references to degrees (a detail in this regard is that degree morphemes would not existentially close the degree variable that is involved in the comparison with the standard). Possible denotations for NM and EM would be as in (1) (they would still be lexical alternatives in competition). Note that these denotations make reference to degrees. Specifically, these items take a degree achievement as argument (represented with Δ), which would be of type $\langle d, \langle e, st\rangle\rangle$ (not of type $\langle e, st\rangle$, as discussed in Section 3.2.4; s is the type of events), and will existentially close the relevant degree variable. Additionally, EM would incorporate the restriction that the degree reached at the end of the event be maximal (if such a degree is available).

(1) a. $[\![\text{NM}]\!]^{c,g} = \lambda\Delta\lambda x\lambda e\exists d[\Delta(x,d,e)]$

b. $[\![\text{EM}]\!]^{c,g} = \lambda\Delta\lambda x\lambda e : \exists d[max_E(\Delta(x,d))](e).$
$\exists d : \forall s_\delta \in dom(\Delta)[s_\delta \text{ is top-closed} \wedge d \leq_H s_\delta \rightarrow d = max^l_{s_\delta}].[\Delta(x,d,e)]$

Although Hungarian does not seem to have overt means for degree maximalization, as Aymara does, I prefer an analysis that assumes this kind of element in Section 3.2.4 for at least two reasons. The first one is that such an analysis follows naturally from what we know we need independently based on the analysis of other languages (Aymara for degree maximalization and Polish for event maximalization). The second reason is that having entries as those in (1) involves introducing additional complexity in the cross-linguistic picture: not only would there be degree maximalizers and event maximalizers, but there would also be mixed elements that perform event maximalization and degree maximalization (the latter being performed partially, as there would still be a need for POS_i, at least under some analyses of degree achievements, including the one assumed in the paper). In this sense, the analysis for Hungarian adopted in Section 3.2.4 is more economical and more constrained than the one suggested above.

There is yet another possible analysis, which would involve having NM and EM conflated with POS_i and DM_i respectively, so their denotations are also conflated, i.e., these would be elements that turn a gradable predicate into a predicate of events, are involved in determining the value of the standard and determine whether there is event maximalization. I find this alternative analysis unlikely based on what we know about Hungarian: not only are particles involved in event maximalization, but the latter is also possible in the presence of expressions such as resultatives (see footnote 13; see Kardos 2016). I find it difficult to see how a resultative expression (e.g., a PP) would be involved in turning a gradable predicate into a predicate of events; rather, we would expect that a resultative will combine with an element of the relevant type already. More generally, this would suggest that becoming a predicate of events is a task that would be performed by an element that is distinct from another element involved in event maximalization. This is the view that is taken in Section 3.2.4, where degree morphemes are assumed.

The second issue I discuss here regards a kind of element, a degree morpheme, that has not been attested thus far, but that could also have an effect in determining whether the typology discussed in this paper (which has focused on degree and event maximalization) is exhaustive. Specifically, the element to be considered

is a degree maximalizer that requires that the standard equals the maximum, but remains underspecified as to whether such a degree must be lexical or contextual—the relevant cases are, mainly, degree achievements with top-closed scales. The denotation of this kind of element, which I label DM'_i, would be as in (2).

(2) $[\![\text{DM}'_i]\!]^{c,g} = \lambda s_\delta : g(i) = max_{s_\delta}.\lambda x \lambda e \exists d[\theta(x, s_\delta, e) \wedge \gamma(d, s_\delta, e) \wedge g(i) \leq d]$

In this paper, we haven seen two kinds of effects. The first one was found in English and Polish: either the standard equals the lexical maximal degree or the contextual maximal degree if some extra cues are given. Both values are possible, but there is a preference based on general economy considerations. The second one was found in Aymara and Hungarian: the standard can only equal the lexical maximal degree if such a degree is available (the standard's value could be contextual only if the scale lacks a lexical maximal degree). What these cases show is that the principle of Interpretive Economy (or some version of it) (see (26) in the paper), which is conceived of as pragmatic in nature (Kennedy & Levin 2008), applies more generally in language in that the preference (or requirement) of lexical means holds across the board, either pragmatically, as in English and Polish, or semantically (i.e., as a result of the calculation of the truth conditions) (see Martínez Vera 2018a), as in Aymara and Hungarian.

This suggests that it would not be expected that an element like (2) can truly remain underspecified regarding the value of the standard. Perhaps what would be feasible is to find a language with an element like (2) that is nonetheless subject to Interpretive Economy in a pragmatic sense (as discussed for English and Polish). This language would have to be, in principle, an intermediate case between English and Aymara. Specifically, it would be a language with two degree morphemes (POS_i and DM'_i) that does not have marked forms for event maximalization. Otherwise, by having POS_i only, the relevant effect would be achieved, which is the case of Polish, where contextual maximal degrees can in fact be used even if the scale is top-closed if the relevant cues are given. If a language with this kind of element is found, the typology discussed in this paper would have to be revised and the consequences of the existence of such an element would have to be further explored in connection to the cross-linguistic picture. To finalize, let me also point out that this discussion should be deepened further when additional research is done regarding the interaction of the cases discussed here with other phenomena that may have an effect in the determination of maximal degrees (e.g., interaction with focus) (Kardos 2016; Martínez Vera 2018b).

References

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