

Perfectivity as maximization over event stages

1. Introduction. We propose that *perfectivity* amounts to a MAXIMAL STAGE requirement that is satisfied when event stages either ‘culminate’ or ‘cease to develop’ in the world of evaluation. This requirement is needed to account for predicates that don’t describe an event’s culmination, but are formally perfective (Hindi, Russian) or behave like telic/quantized predicates, despite failing to be quantized in isolation (English). Two important consequences of our analysis are: (a) there is a typology of distinct perfective operators that all encode the MAXIMAL STAGE requirement, and (b) the ‘stage-of’ relation underlies the semantics of different members of grammatical aspect.

2. Description of Data. Formally perfective forms exhibit an apparent variability of meanings, within a particular language and across distinct languages, and this, to the best of our knowledge, has not been explained. Take, for instance, the Hindi perfective (PFV_{HINDI}). The result of applying it to achievement-predicates is a quantized predicate that has *culminated events* in its denotation. However, when PFV_{HINDI} is applied to accomplishment-predicates, the resulting sentence may be true even if events in its denotation do not culminate (Singh 1991, 1998), but instead merely *cease to develop*. In contrast, when the Russian perfective (PFV_{RUSSIAN}) is applied to accomplishment-predicates, the result must be a quantized predicate with culminated events in its denotation. When PFV_{RUSSIAN} combines with activity-predicates, the resulting predicate may denote events that merely cease to develop in the world of evaluation (Filip 2000).

3. Analysis. We adopt Landman’s (1992, 2008) ‘stage-of’ relation, but with a new twist. We distinguish: (a) stages that stand in the ‘part-of’ relation ‘ \leq ’ to their continuations and (b) stages that require the stricter ‘proper-part-of’ relation ‘ $<$ ’. This is necessary to account for similarities and differences between the English progressive (*PROG*) and PFV_{HINDI} . By quantifying over event stages, PFV_{HINDI} is *partitive* just like *PROG*, but unlike *PROG* (which, on our account, involves the proper-part-of relation ‘ $<$ ’), PFV_{HINDI} encodes ‘ \leq ’ and imposes the MAXIMAL STAGE requirement which is satisfied if an event stage in the extension of the VP it combines with is maximal in the world of evaluation relative to the VP description, effectively ruling out any more developed event stage

PFV_{RUSSIAN} and PFV_{HINDI} share the MAXIMAL STAGE requirement, but PFV_{RUSSIAN} encodes the identity relation ‘ $=$ ’ between event stages, rather than ‘ \leq ’. This correctly predicts that PFV_{RUSSIAN} always yields the largest possible stage in the extension of the VP that it combines with. In the case of an activity VP, the MAXIMAL STAGE requirement is satisfied assuming that such VPs are cumulative (Krifka 1989).

One of the positive outcomes of this analysis is that the MAXIMAL STAGE requirement allows us to solve the well known puzzle (Zucchi and White 1996, 2001) posed by vague predicates like *a sequence (of x)*, *at least 3/a lot of/a few/most x* that fail to be quantized when analyzed in isolation, nevertheless behave like quantized/telic predicates in Incremental-Theme argument-slots in aspectual composition in so far as they yield quantized/telic predicates.

4. References.

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