## The uniform treatment of adverbials hypothesis Benjamin Slade and Aniko Csirmaz

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**Overview.** We propose a unified approach to aspectual adverbials (AAs), positing a basic templatic structure. These AAs include the various time/event-related senses of Hungarian *még, megint, már, mégis*; English *again, still, al-ready, not yet*, and equivalents from Romance, German, Hindi and Nepali. While unified approaches to particular subsets of AAs have been proposed (e.g. Beck 2018, Ippolito 2007 for *still* and *again*), these unify meanings for elements with a stable phonological form (but see Ippolito 2007). Our approach is novel in unifying several superficially distinct elements, including particles. In addition, we propose a new account of *already*, address the role of additives in some AAs (e.g. Hungarian concessive *még-is* (still+too)) and discuss the issue of focus-sensitivity of AAs.

**Morphology across languages.** A unified account of is supported by crosslinguistic evidence, including the existence of multiple senses of certain AAs in some languages. Some examples are given in ((1)).

		"before					"(not)	"(not)
(1)		that"	"then"	"again"	"still"	"already"	yet"	anymore"
	Romanian mai			Х	Х	Х		Х
	Italian ancora			Х	Х	Х	Х	
	Spanish ya, Hebrew kvar					Х		Х
	Spanish todavia, Hebrew 'adayin				Х		Х	
	Jamaican patois aredi					Х	Х	
	Hindi ab tak, Nepali ahile samma				Х		Х	
	Hindi phir, Nepali pheri		Х	Х				
	Hungarian már					Х		Х
	Hungarian még	Х			Х		Х	
	German noch	Х			X		X	

For a given language, the data support (a) unifying AAs which have distinct phonological realisations in some languages and (b) establishing differences between senses of the same element. For (a), consider Hungarian még (temporal "still" and of the reverse of ordering "then") or Italian *ancora*, which is multiply ambiguous (*again, still* and comparative interpretations). For (b), concessive *still* is a complex form in Hungarian (még+is "yet+too"), just as in Hindi, Nepali and Spanish equivalents, which all involve an additive particle (*is* in Hungarian).

**Templatic definition and specific AAs.** We propose that many AAs, shown in ((1)), share the basic templatic definition in ((2)). Here  $\mathcal{P}$ ,  $\mathcal{Q}$  are predicates; x and x<sup>\*</sup> are scalar entities (times, degrees, etc) s.t. x<sup>\*</sup> precedes x on scale S; FA is a set of focus alternatives to  $\mathcal{P}(x,...)$  which differ in the elements under focus (times, degrees, or subconstituents). Instantiations of AAs may vary parametrically in (i) the identity of S and the scalar entities x, x<sup>\*</sup>; and (ii) restrictions on the identity of focused constituents (e.g. repetitives like *again* require the time argument to be focused).

(2) 
$$\lambda S \lambda x \lambda \mathcal{P} : \exists x^* \begin{bmatrix} \mathcal{Q}(x^*, \dots) \& \\ \mathcal{Q}(x^*, \dots) \in FA(\mathcal{P}(x, \dots)) \& \\ x^* \prec x \& \\ x, x^* \in S \end{bmatrix} . \mathcal{P}(x, \dots)$$

**Already.** Löbner (1989, 1999; cp. Krifka 2000) suggests that *already*, *still*, *not yet*, *not anymore*, and their counterparts in German/ Hebrew are related via internal and external negation. The negative components of *not yet/ not anymore* are obvious in English and other languages; however, the negative presuppositional component of *already* has no obvious source. Further, the negative presupposition is problematic, since it does not hold in ((3)).

(3) Kim is already a citizen because she was born here. (NOT PRESUPPOSED: she wasn't a citizen before)

We propose that *already* resembles *still*, but combines with an inverted scale of times. Thus it follows that Romanian *mai* and Italian *ancora* can occur with the senses of "still" and "already". This view also more easily predicts the typical implicature of *already*, i.e. that something happened earlier than expected.

**Compositionality.** Equivalents of concessive *still* can be complex (Hungarian *mégis*, Hindi *phir <u>bhī</u>, Spanish <i>aunque*), additive elements underlined). The scalar elements are sets of worlds consistent with the common ground s.t. a certain predicate (when saturated) is true in that world, ranked according to summed likelihood (= $\Sigma(\Lambda(...))$ ).

(4) 
$$\lambda S \lambda x \lambda \mathcal{P} : \exists x^* \\ \exists \mathcal{Q} \\ \begin{cases} \mathcal{Q}(x^*, ...) \& \\ \mathcal{Q}(x^*, ...) \in FA(\mathcal{P}(x, ...)) \& \\ \{w' | \mathcal{P}(w', ...)\} \prec \{w'' | \mathcal{Q}(w'', ...)\} \& \\ \{w' | \mathcal{P}(w', ...)\}, \{w'' | \mathcal{Q}(w'', ...)\} \in S, \\ where S ranks elements according to \Sigma(\Lambda(...))) \end{cases}$$
. $\mathcal{P}(x, ...)$ 

Concessives involve verum focus, so  $\mathcal{Q}(...)$  is  $\neg \mathcal{P}(...)$ , and the presupposition thus involves a requirement that  $\neg \mathcal{P}(...)$  is more likely than  $\mathcal{P}(...)$ , while asserting  $\mathcal{P}(...)$ . The additive contributes an additional presuppositional requirement

that  $\mathcal{R}$ , some contextually salient alternative to  $\mathcal{P}(...)$ , also be true. Effectively this supplements the ranking above from  $\{w'|\mathcal{P}(w',...)\} \prec \{w'|\neg \mathcal{P}(w'',...)\}$  to  $\{w'|\mathcal{P}(w',...) \land R(w',...)\} \prec \{w''|\neg \mathcal{P}(w'',...) \land R(w'',...)\}$ . The meaning of concessive *still* can thus be derived from the proposed templatic base, with the additional complexity involved being due to interaction with an additive.

Additional claims. We also show that some particles (e.g. Spanish *ya* as "since"/"because", with *ya* also having the meaning of temporal "already") are consistent with the template and derive the homogeneity (atelicity) requirement of temporal *still*. In addition, we present evidence for treating AAs as focus-sensitive (contra Beck 2018).