Chronos 11: Main Session. Formal semantics, aspect, tense, evidentiality.

Aspect and temporal relations in Evidentials.

It has been proposed ([2 /3/ 5/ 7/8 /10/11] a.o.) that Evidentials involve a tense encoding the time the evidence is acquired. Based on Bulgarian, Měbengokre, and Matses ([3]), we argue that Viewpoint Operators ([1/12]) interacting with Evidential Operators can dispense for the need to postulate a specific tense for Evidentials. Adding Viewpoint also allows a unified cross-linguistic perspective on apparently unrelated evidential systems.

Within Kratzer-style situation semantics ([6]), we propose that in the **Bulgarian** evidential system partially encoded in imperfective or perfective participles (**pišel** in (2a) vs. **pisal** in (2b)), (a) participles signal a modal evidential operator EV ([4]), (b) EV scopes over Viewpoint, (c) imperfective participles encode Viewpoint IMPF, and (d) perfective participles encode Viewpoint PERF:

- (1) [EV [viewpoint Aspect IMPF/ PERF [......]]]
- As (2a) shows, imperfectives are compatible with past, present, and future temporal locations (disambiguated by adverbs); perfectives as in (2b) can only be past.
- (2) a. (Spored dobre osvedomeni iztočnitsi,) Ivan **pišel** kniga včera /dnes /utre.
 - '(According to well.informed sources) I. was.writing a.book yesterday/today/ tomorrow.'
 - b. <u>Ivan **pisal** kniga (*utre)</u>. '(Apparently), Ivan wrote a.book (*tomorrow).'

The temporal flexibility of the imperfective in (2a) depends on readings independently available to IMPF (e.g. ongoing, generic, inertia) ([1], [9]); an inertia analysis gives rise to the 'was-supposed-to-happen-in-the-future' reading: (3a-b).

- (3) a. [EV [IMPF [Ivan pišel kniga utre]]]
 - b. $[[(3a)]]^c = 1$ iff $\forall s$ ': s' is compatible with the knowledge available in s*, $\exists s$: s < s' & $\forall s$ '': $MB_{Prep-inertia}(s)(s'') = 1$, $\exists e$: e is an event of I. writing a book tomorrow in s''.

In contrast with (2a), <u>pisal</u> in (2b) embeds perfective past-oriented aspect, with semantic composition leading to a past reading (omitted for space reasons). Our proposal contrasts with the view ([10/11]) that participles in (2a-b) encode a temporal relation specific to Evidentials, which orders Event/Reference-Time (RT) with Evidence-Acquisition-Time (EAT) instead of Speech-Time: i.e. **pišel** (PRES: RT=EAT), **pisal** (PAST: RT<EAT).

<u>Mēbengokre</u> evidential marking is morphologically independent from Viewpoint ([1]). Evidential <u>we</u> combines with all aspectual auxiliaries: (4). Evidentiality is independent from tense, and always anchored to Speech-Time: (5). Claims about the future / present depend on <u>we</u> combined with specific Viewpoints (imminent, prospective, etc.), (4). Adverbs shift Event-Time: (5). Thus, Mēbengokre morphology transparently displays the semantic composition behind multiple readings in Bulgarian (2a), which depend on IMPF with a unitary participial morphology.

- (4) a. We bôx 'ŷr / mã.

 WE arrive IMM/PROSP

 'He is (I am told) about to arrive /arriving.'

 b. We kabên o=nhỹ.

 WE speak APL=be.sitting.V

 'He is (I am told) speaking.'
- (5) Amrêbê /on /kryràm we bôx.
 Long.ago /now /morning WE arrived
 'He (I am told) arrived long ago /now / tomorrow.morning.'

For <u>Matses</u> evidentials, we propose that EV anchored to Speech-Time scopes over a 'past perfect' aspectual configuration where Event-Time precedes Topic-Time; a similar aspectual relation is found in 'past perfect' evidential constructions in Bulgarian.

In sum, aspectual operators interacting with evidential operators may account for complex temporal relations, raising doubts about the need for an extra evidential tense.

- References: Aspect and temporal relations in Evidentials.
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