

A low relative future marker in Atchan

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This work focuses on the semantics of the marker *bá* in Atchan (also called Ebrié, ISO: ebr; Kwa, Côte d’Ivoire). Cognate markers in other Kwa languages have been analyzed as both future tense (Osam 2008) and prospective aspect (Lecavelier et al. 2021) by different authors, but neither of these analyses can quite capture the Atchan patterns. I propose an analysis on which *bá* introduces a new set of events that precede the *vP*-described event.

Properties. Atchan *bá* co-occurs with the progressive, is necessary for future interpretation, and is compatible with past event times.

The first two properties can be seen below:

- (1) Context: Describing a video in which the door opened/will open, with Julianne reading behind it.
- a. [ási ka kĕ́ a p̄fwa ěmp^{hi}] ʒulian e-ká hró
 door time REL 3SG.INAN open one.day.away Julianne PROG-read book
 ‘When the door opened yesterday, Julianne was reading a book.’
- b. [ási ka kĕ́ †á [bá] p̄fwa ěmp^{hi}] ʒulian e-*([bá]) ká hró
 door time REL 3SG.INAN BA open one.day.away Julianne PROG-BA read book
 ‘When the door opens tomorrow, Julianne will be reading a book.’

Accordingly, I propose that the Atchan TP introduces a time variable (which I label t_R throughout) that, crucially, is restricted to non-future times (Matthewson 2006). Thus, *bá* is required with events whose run time follows the utterance time.

However, *bá* is not a future tense. This can be seen below, where it is used in a past-time *before*-clause:

- (2) Context: We are discussing what Moya did yesterday evening.
- [lo ka kĕ́ mɔja e-[bá] ná ndu (ěmp^{hi})] ě nt^ha cõ
 DEF time REL Moya PROG-BA drink water one.day.away 3SG.PFV eat fish
 ‘Before Moya drank water (yesterday), she ate fish.’

In (2), the embedded clause (with the temporally-later event) includes *bá*; Lecavelier et al. (2021) note similar behavior in the Kwa language Akan. This suggests that *bá* is not an indexical future tense that situates a clause’s eventuality time in relation to the sentence’s utterance time; here, plausible RTs and ETs all precede UT. Instead, *bá* marks the relative precedence of Moya’s eating time before her drinking time; here, *bá* is behaving like a prospective aspect.

To capture these data (and, as a possible extension, account for modalized uses of *bá*), I propose the denotation in (3) for *bá*:

- (3) $[[bá]] = \lambda P_{\langle v, st \rangle} \lambda e' \lambda w. \exists e [\tau(e') < \tau(e) \wedge P(e')(w)]$

On this account, *bá*, like the lexical verb *come*, introduces a new set of events e' that precede the *vP* event description (cf. Eckhardt (2012) on English *be going to*). This introduction of a new event allows PROG to non-contradictorily co-occur with *bá*, as PROG relates t_R and $\tau(e')$. Accordingly, $\text{PROG}(\text{BA}(e))$ can be true at t_R if e' has not begun by t . (By contrast, we would obtain a contradiction if *bá*, treated fully as a prospective, requires that $t_R < \tau(e)$ and PROG requires that $t_R \subset \tau(e)$.) The account developed here, combined with a treatment of *ka kĕ́*-clauses as definite descriptions of times, accounts for the data seen here and also for the presence of both *before*- and *after*-interpretations with future-time *ka kĕ́*-clauses.