In Support of Relative Tense: The Existential Past in Atayal and Javanese
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Overview. ‘Relative/anterior tense’ is a disputed category; it is defined as a special tense category in Comrie (1985) but assimilated to perfect aspect in Klein (1994). Bohnemeyer (2014) argues that relative tense cannot be conflated with perfect aspect based on the cross-linguistic fact that languages can have marking that is used solely for the ‘past-in-the-past’ reading and excludes an aspectual reading. He proposes instead that tense is relative in the sense of the reference time being shifted backward from a perspective time that can be either the utterance time or a reference time. This paper draws on evidence from two Austronesian languages in support of this claim. We show that the markers -in- in Atayal (Formosan) and tau in Javanese (Western Malayo-Polynesian) possess a range of readings that overlap with the English perfect and past tense, which can be unified by a backshift effect. We argue that -in- and tau are existential past tenses with the perspective time determined covertly.

Not a perfect. Atayal -in- and Javanese tau are not comparable to the English present perfect. They allow only experiential perfect readings (1) but lack resultative (2) or universal perfect readings, as well as associated pragmatic effects such as current relevance (also (2)), lifetime effects, or a repeatability condition. (Examples are given in either language due to space; the facts are the same. Parallel examples will be provided in the presentation.)

(1) Context: People don’t believe Z met SBY. (2) Context: You are breaking up with s.o. now.
Pak Zaini tau ketemu Presiden SBY Awakmu mbek aku (wes) (#tau) putus!
Mr. Zaini tau meet Presiden SBY 2SG with 1SG already tau break.off
‘Mr. Zaini once met President SBY.’ ‘You and I are done!’

Similarly, in a past context, -in- and tau do not allow the aspectual reading of the perfect (i.e., perfect-in-the-past), which would either use a plain form, ‘already’ (3), or another marker. (Tense in these languages is not morphologically marked.)

(3) Pas adik-ku muleh wingi, aku (wes) (#tau) metu
   when yg.sibling-my come.home yesterday 1SG already tau go.out
   ‘When my younger brother/sister got home yesterday, I had already left.’

(2) and (3) thus falsify the hypothesis that the markers locate the reference time inside the post-time of the described event (Klein 1994; ‘pure perfect’ in Bohnemeyer’s terms). In fact, -in- and tau entail or at least strongly imply that the state in question ceases to hold, a property opposite to that of the perfect but similar to the so-called cessation effect of past tense (Musan 1997, Althshuler and Schwarzschild 2013, Cable 2016):

(4) Context: Mrs. Siti is now slim. Bu Siti tau lemu
   Mrs. Siti tau fat
   ‘Mrs. Siti was fat.’

Obligatory back-shifted readings. A distinctive feature that -in-/tau share is obligatory back-shifted readings across aspect and tense domains. First, matrix clauses that contain the marker are often translated with the past tense (e.g. (1)), and other temporal readings are not possible. The use as a past tense, however, cannot be equated to what is typically considered referential tense, since with a contextual salient reference time, -in-/tau are judged to be infelicitous, (5). A parallel fact is that both markers are banned from a narrative where the reference time keeps getting updated to a time just after the current reference time (Partee 1984, Hinrichs 1986), (6). In this respect, -in-/tau contrast with English past tense, which has been argued to be a pronoun that carries presuppositional features (Heim 1994, Kratzer 1998).

(5) Context: Driving on the highway after leaving (6) m-zyup ngasal qu Tali’,

the house, you realize (from Partee 1973):
# iyat=maku’ n-uyut gasu’. ru m-#<in>tama’ ru …
NEG=1.S.ERG in.PV-put.off gas CONJ AV-<in>sit CONJ
Intended: ‘I didn’t turn off the gas.’
‘Tali’ entered the house, he sat down, and …’
Instead, -in- and tau trigger the narrative regression that is observed for the English pluperfect (i.e., past-in-the past readings) (Kamp and Reyle 1993):

(7) m-zyup ngasal qu Tali’. m<-in>nbuq qwaw hiya’.
    AV-enter house ABS Tali’ AV<-in>drink wine 3S.N

‘Tali’ came into the house. (Looked like) he had drunk wine.’

Furthermore, when -in- and tau are embedded under an attitude or report verb, they cannot receive simultaneous but only backshifted interpretations; this classifies Atayal and Javanese as a non-Sequence-of-Tense language (Ogihara 1996, Sharvit 2003, Mucha 2016, a.o.).

(8a) Simultaneous Context: Agus promised to meet with Eko at 10am yesterday. But at 1pm, Eko was still not there. Agus called me because he was angry. Then, I told my neighbour:

(8b) Backshifted Context: Agus was angry last week but now he is not anymore. Agus called me yesterday afternoon to tell me that he was angry.

Pak Agus ngomong deke tau nesu. = [8a / √ 8b]
Mr. Agus AV.say 3SG tau angry
‘Mr. Agus said that he was angry.’

Analysis. We propose that the semantics of tau and -in- encode an existential quantifier over past times, following Ogihara (1996), von Stechow (1995), and Mucha (2016). As shown in (9), -in-/tau takes a property of times and a time t, and asserts that there is a time t’ preceding t at which P holds. Moreover, t’ is true of a contextually determined property of times C, assuming domain restriction for quantifiers. The argument t of -in-/tau is then saturated by a time variable determined by the most salient time in the context, (10).

(9) $[\text{in/tau}]^{g,c} = \lambda C_{<i,gb>} \lambda P_{<i,gb>} \lambda t \lambda w \exists t’ [t’ < t & C(t’) & P(t’)(w)]$

The denotation in (9), conditioned by the domain restriction of the asserted past t’ and the value of the argument t, correctly accounts for the observed readings of -in-/tau. Without context or temporal modification, t’ is within an interval extending backward from tc, and hence -in-/tau gives rise to an experiential reading. When t’ is restricted to a contextually-relevant past interval, (9) either yields a reading equivalent to a simple past if tc is the utterance time (cf. (1)), or a past-in-the-past reading if tc is a salient past time, (11) (cf. (7)). We propose that tc is determined covertly in Atayal and Javanese, both of which lack morphological tense; whereas in languages like English, tc is restricted by present/past tense.

(11) $[\text{(7)}]^{g,c} = \exists t’ [t’ < tc & he drink wine at t’ in w]$

Note that the past reading yielded by -in-/tau is still existential; this explains the infelicity in (5-6) above: -in-/tau always asserts a past time rather than referring to an earlier introduced reference time in context. Last, this analysis also predicts that when -in-/tau is embedded under an unmarked verb or one that is itself marked with -in-/tau, the sentence only allows a backshifted reading (8b), since the event must hold at a time preceding the time argument t, which is abstracted and coincides with the time argument of the matrix event; the LF and truth conditions of (8) are given in (12).

(12) $[\text{tp} \ \text{Agus (-in-/tau) say} [\text{tp} \ \lambda t \ he -in-/tau is angry}]$
    $[\text{(8)}]^{g,c} = \exists t’ [t’ < tc & \forall w’ [w’ say-MB(\text{Agus},w,t’) \rightarrow \exists t” [t” < t’ & he is angry at t” in w’]]]$

Finally, concerning the typology of tense/aspect, this proposal shows that the category of ‘experiential perfect’ proposed by Dahl (1985) for, e.g., Javanese tau, is not necessary.