

## Decomposing the ‘experiential’ perfect: The view from Atayal and Javanese

**Overview.** The perfect aspect has been argued to have at least three readings—experiential, resultative, and universal—as well as pragmatic effects such as current relevance. Dahl (1985) shows that a number of languages, including Indonesian, Javanese and Sundanese, overtly encode experiential perfect readings; he proposes that experiential perfect is a grammatical category that overlaps in its use with the perfect. Through a comparative case study on Javanese (WMP) and Atayal (Formosan), we argue for an alternative: a marker with a dominant experiential perfect reading is not a subcategory of perfect aspect but an existential past tense. We first show that although Javanese *tau* and Atayal *-in-* have experiential readings, they do not share any other common properties that define a perfect. We then provide evidence for an existential past tense analysis based on interactions with negation and compatibility with past time adverbials.

**Not a perfect.** Both Javanese *tau* and Atayal *-in-* have experiential perfect readings but lack resultative or universal perfect readings, (1-3) (illustrated with *tau* for reasons of space).

(1) EXPERIENTIAL CONTEXT: *Chatting about which soap operas you have seen.*

Sinetron-e *tau* pok-delok!  
soap.opera-DEF TAU 2SG-see  
‘You have seen this soap opera!’

(2) Potential resultatives lack restrictions with manner adverbs

Yeni *tau* alon-alon melayu.  
Yeni TAU RED-slow run  
‘Yeni has run slowly.’ (cf. # ‘She has sealed the window quickly.’ (Mittwoch 2008))

(3) UNIVERSAL CONTEXT: *You moved to Jember in 2014 and you still live there now.*

# Aku *tau* manggon nek Jember sampai 2014.  
1sg TAU live in Jember since 2014  
‘I lived in J. until 2014.’ / ‘I was in J. in 2014.’ / ≠ ‘I have lived in J. since 2014.’

These markers do not exhibit any other defining properties of the perfect. Unlike a perfect, *tau* and *-in-* do not locate the event time relative to a reference time (cf. Klein 1994); past perfect readings are infelicitous, (4). Moreover, they have no restrictions against definite past adverbials, (5); instead, they are *only* compatible with past reference times, (6).

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

(5) Aku *tau* mangan rajungan *telo-ng wulan kepungkor.*  
1SG TAU AV.eat crab three-LNK month ago  
‘I ate crab 3 months ago.’

(6) # Aku *tau* mangan rajungan *sa’iki / sesok.*  
1SG TAU AV.eat crab now / tomorrow  
‘(I ate crab now/tomorrow.)’

The two markers can also be used for events that bear no current relevance to the context, as in (7), which resembles a simple past rather than a perfect. (7) also shows that *tau* (as well as *-in-*) does not induce ‘lifetime’ effects (Inoue 1979, McCawley 1971), often characterized by a ‘repeatability’ condition on the situation, which implies the subject is alive. While repeatability has been used to define experiential perfect readings, both *tau* and *-in-* may modify events that by nature can happen only once, e.g., being young in (8).

(7) CONTEXT: *You teach history. You tell the students about Kartini (1879-1904).*

Kartini *tau* nulis surat bab kondisi wong wedhok nok jawa.  
Kartini TAU AV.write letter about condition person woman in Java  
‘Kartini wrote letters about women’s conditions in Java.’

- (8) Pak Wanan umur-e suwidak limo. Wanan *tau* enom.  
 Mr. Wanan year-DEF sixty five Wanan TAU young  
 ‘Mr. Wanan is 65 years old. Wanan was once young.’

**Proposal: An existential past tense.** Given that *tau* and *-in-* are temporally restricted to past reference time and an ‘experiential perfect’ reading, we propose that the semantics of *tau* and *-in-* involves an existential quantifier over past times, (9). *Tau/-in-* takes a predicate of times and a time *t*, and asserts that there is a time *t*’ preceding *t* at which *P* holds.

$$(9) [[\textit{tau/-in-}]^{g,w,c} = \lambda P_{\langle i, st \rangle} \lambda t. \exists t' [t' < t \ \& \ P(t')]]$$

Evidence for a quantificational analysis comes from interactions of *tau/-in-* with negation. Without any temporal modification, negation overtly scoping over *tau/-in-* gives rise to a reading that the event has not occurred at any point in time up to the present (i.e., ‘never’) (note that inverse scope is not available in Javanese and Atayal), (10-11). While Atayal *-in-* is always in the scope of negation, Javanese *tau* can scope over negation, (12). Both languages contrast in this respect with the referential past tense of English (Partee 1973).

- (10) wong londo *gak tau* mangan sego. (11) *iyat=saku* m-<*in*>hikang.

person foreigner NEG TAU AV.eat rice NEG=1S.ABS AV-<AV>slim  
 ‘White people have never eaten rice.’ ‘I have never been slim.’

$\neg \exists t [t < UT \ \& \ [\textit{whites eat rice at t}]]$   $\neg \exists t [t < UT \ \& \ [I \textit{ be slim at t}]]$

- (12) Context: *Mr. Wanan eats rice every day. But maybe he hasn’t eaten rice once or twice.*

Pak Wanan *tau gak* mangan sego.

Mr. Wanan TAU NEG AV.eat rice

‘Pak Wanan has not eaten rice before.’  $\exists t [t < UT \ \& \ \neg [\textit{Wanan eat rice at t}]]$

With a temporal adverb or in context with a salient time interval, *tau/-in-* gives rise to a reading akin to a referential past tense (13). This referential reading is only apparent, as *tau* and *-in-* do not share other properties of a referential past. (13) can be explained by restricting the domain of the existential quantifier to a specific past time, either by a contextual variable *C* or by the denotation of a past time adverbial (Ogihara 1996, von Stechow 1995, 2009) (14).

- (13) Context: *Seeing a student dozing off in class, the teacher asks:*

*Iyat=su* m-<*n*>’abi’ shira’?

NEG=2S.ABS AV-<IN>sleep yesterday

‘You didn’t sleep yesterday?’

- (14)  $[[\textit{(13)}]] = \exists t [t < UT \ \& \ t \subseteq \textit{yesterday} \ \& \ \neg [\textit{you sleep at t}]]$

Crucially, the ability to receive domain restriction distinguishes an existential past tense from an (experiential) perfect. While experiential perfects also involve existential quantification (McCawley 1971, Mittwoch 2008), the interval being quantified over must include the present time. If *tau* and *-in-* were experiential perfects, they would not be used in examples like (13). We propose that the default interpretation of *tau/-in-* (without domain restriction) is experiential, but *tau/-in-* is not subject to the pragmatic/present tense conditions observed for perfects, and this explains its flexible use in referring to a past event. We also present data for *tau/-in-* in embedded clauses; they only allow back-shifted readings but no simultaneous readings, as correctly predicted by the proposal in (9).

**References.** Dahl, Ö. 1985. *Tense and Aspect Systems* | Inoue, K. 1979. An analysis of the English present perfect. *Linguistics* 17:561-589 | McCawley, J.D. 1971. Tense and time reference in English. In *Studies in Linguistic Semantics* | Mittwoch, A. 2008. The English resultative perfect and its relationship to the experiential perfect and the simple past tense. *L & P* 31:323-351 | Ogihara, T. 1996. *Tense, Attitudes and Scope*. | Partee, B.H. 1973. Some structural analogies between tenses and pronouns in English. *J. of Phil.* 18:601-609. | von Stechow, A. 1995. On the proper treatment of tense. *SALT* 5 | von Stechow, A. 2009. Tenses in compositional semantics. In *The Expression of Time*.