

**The Special Implicatures of Optional Past Tense: The Tlingit Decessive and ‘Discontinuous Past’**

**1. Introduction** Many languages contain a morpheme that appears to combine the meaning of past tense with a number of additional implications, the nature of which depends upon the grammatical aspect of the predicate. Morphemes exhibiting these properties have been referred to as ‘discontinuous past’.

(1) **The Additional Implications of ‘Discontinuous Past’ (Plungian & van der Auwera 2006)**

a. With Non-Perfective Predicates:

The past event/state does not extend into the utterance time (‘Cessation’)

b. With Perfective Predicates:

(i) The result of the event does not extend into the utterance time (‘Cancelled Result’), *or*

(ii) An expected/natural result of the event failed to occur (‘Unexpected Result’)

Prior authors have viewed the inferences in (1) as semantic in nature, and have proposed analyses where they are directly encoded in the lexical entry of the morpheme (Leer 1991; Copley 1995; Plungian & van der Auwera 2006; Kagan 2011). Though in-depth field investigation of one such morpheme in the Tlingit language (Na-Dene; Alaska), I show that, to the contrary, the inferences in (1) are defeasible pragmatic implicatures, and that in its lexical semantics, a so-called ‘discontinuous past’ is purely an (optional) past tense. I provide a formal semantic-pragmatic analysis deriving the inferences in (1) from (a) the optionality of the past tense markers in question, and (b) a special principle relating to the topicality of the Utterance Time. The empirical and analytic results support a highly restrictive cross-linguistic theory of tense, under which the only true tenses are past, present, and non-future (Matthewson 2006, Cable 2013).

**2. Discontinuous Past in Tlingit** In the Tlingit language, there is a verbal suffix exhibiting the properties in (1), which specialists refer to as the ‘decessive’ (DEC). With non-perfective verbs, the suffix forces a past interpretation, and also contributes the ‘Cessation’ implication in (1a).

(2) a. Kuwak’éi.

IMPFV.good.weather

*The weather is/was nice.*

b. Kuk’éiyen.

IMPFV.good.weather.DEC

*The weather was nice (but turned bad)* (Leer 1991: 464)

With perfective verbs – which already entail ‘past-ness’ of the event/state – the decessive contributes either the ‘Cancelled Result’ implication (1bi) or the ‘Unexpected Result’ implication (1bii).

(3) a. Cancelled Result Implication:

I tláa áwé xwasháayin.

your mother FOC 3sgO.PFV.1sgS.marry.DEC

*I married your mother (but we’re not married any more)* (Leer 1991: 468)

b. Unexpected Result Implication:

Yéi iyaxwsakaayín “líl lítaax eeshéek.”

thus 2sgO.PFV.1sgS.say.DEC NEG knife 3O.2sgS.reach.OPT

*I told you “don’t touch a knife” (but you did anyway)* (Leer 1991: 468)

I show that strikingly parallel data hold for the cases of ‘discontinuous past’ discussed by Plungian & van der Auwera (2006), supporting the use of Tlingit decessive as an exemplar of the phenomenon in (1).

**3. Difference from ‘Cessation Implicatures’ in English** At first blush, the cessation inference in (2b) is rather similar to the ‘cessation implicature’ of past-tense verbs in English, as illustrated in (4).

(4) **Cessation Implicature (Altshuler & Schwarzschild 2013, 2014; Musan 1997; Magri 2011)**

a. *Dialog:* Q: Tell me something about Dave.

A: **Well, he spoke French.**

b. *Implicature:* Dave does not currently speak French. (either he’s dead, or changed lang’s)

I show, however, that there are several important differences between the phenomena in (2b) and (4b). Most importantly, English-style cessation implicatures can be cancelled in conjunction structures like (5).

(5) Dave has spoke French his whole life. He **spoke** it in his childhood, and he still **speaks** it now.

However, parallel structures in Tlingit are rejected as contradictory (6), showing that the cessation implication in (2b) cannot be cancelled in the same way as an English cessation implicature.

(6) # Yá ts’ootaat ch’a kuk’éiyin.

this morning just IMPFV.good.weather.DEC just still IMPFV.good.weather

*(Intended: ‘The weather was nice this morning, and it’s still nice now.’)*

**4. Defeasibility of The Inferences in (1)** Despite the impossibility of structures like (6), I show that the inferences in (1) are indeed defeasible, and so are pragmatic (not semantic) in nature. First, I provide examples from naturally produced Tlingit texts where a verb bears the decessive (discontinuous past) suffix, but where the inferences in (1) are inconsistent with the surrounding context. More importantly, I show that the inferences in (1) can be cancelled by explicit statements of ignorance regarding the present.

- (7) Yeisú dziyáak táayin. Héł xwasakú ch'a yeisú tá.  
 still earlier IMPFV.3sg.sleep.DEC NEG 3O.PFV.1sgS.know just still IMPFV.3sgS.sleep  
*He was sleeping earlier. I don't know if he is still sleeping.*

I also show that the inferences in (1) are cancelled in contexts where the present is explicitly irrelevant.

**5. Formal Analysis** As shown by (2a), Tlingit is a 'superficially tenseless' language (Matthewson 2006), where unmarked verbs can describe either past or present event/states. Crucially, the same holds for *all* languages reported to contain a 'discontinuous past' (Plungian & van der Auwera 2006). I therefore develop an analysis that ties the inferences in (1) to the optionality of the past tense markers in question.

**5.1 Main Ingredients** I assume a pronominal semantics for tense and relational semantics for aspect, akin to those proposed by Kratzer (1998) and Matthewson (2006). Following Matthewson (2006), I assume that 'superficially tenseless' languages have a phonologically null non-future tense (9), which restricts the topic time  $g(i)$  to times that do not lie in the future of the evaluation time  $t$  (i.e., present Utterance Time).

- (9)  $[[ [\text{Tense NFUT}]_i ] ]^{w,t,g} = g(i)$ , **only if  $\neg(t < g(i))$ ; undefined otherwise**

Given the facts in Section 4, I assume that the Tlingit decessive – and all putative cases of 'discontinuous past' – are simply past tenses (10), restricting the topic time  $g(i)$  to times preceding the evaluation time  $t$ .

- (10)  $[[ [\text{Tense PST}]_i ] ]^{w,t,g} = g(i)$ , **only if  $g(i) < t$ ; undefined otherwise**

Under this analysis, the 'optionality' of these past tenses is simply due to the fact that either (9) or (10) can be used for past topic times. Most importantly, languages with non-future (9) allow the topic time to be an interval encompassing *both* the present Utterance Time and a past time. Matthewson (2006) shows that this holds for Lillooet, and I show that parallel data hold for Tlingit. Finally, I propose the special (universal) principle in (11), requiring the topic time to contain the Utterance Time whenever (a) the latter is contextually relevant, and (b) the resulting proposition is entailed by the speaker's knowledge:

- (11) If all the following conditions hold, then the speaker *must* use sentence S1, and not S2:  
 a. Sentences S1 and S2 are identical except for their T(ense)-heads (T1 and T2).  
 b. Both the Utterance Time  $t$  and some past time  $t' < t$  are salient and relevant.  
 c.  $[[ T1 ] ]^{w,t,g}$  contains both  $t'$  and  $t$ , while  $[[ T2 ] ]^{w,t,g} = t'$ .  
 d. Both S1 and S2 are 'assertable' (i.e., speaker's knowledge entails them).

**5.2 Deriving 'Cessation' (1a)** The following summarizes the derivation of the 'cessation implication' (1a): (i) *Speaker has used a sentence S containing past tense, whose topic time is past time  $t'$* ; (ii) *Speaker did not use sentence S' containing non-future, whose topic time contains  $t'$  and  $t_{now}$* ; (iii) *Given (11), it must be that either (a) Utterance Time  $t_{now}$  is not salient and relevant, or (b) S' is not assertable by speaker, and so either (b1) speaker doesn't know whether the past eventuality extends into  $t_{now}$ , or (b2) speaker knows that it doesn't*. Thus, this analysis correctly predicts that (1a) can be cancelled when the present is explicitly irrelevant (11b), or by explicit statements of ignorance regarding the present (11d). The analysis also correctly predicts the impossibility of sentences like (6); the assertion of the second conjunct establishes that both (11b) and (11d) hold, and so the utterance inescapably conflicts with (11).

**5.3 Deriving 'Unexpected/Cancelled' Result (1b)** I show that the 'unexpected' and 'cancelled result' implications (1b) follow from the fact that so-called 'perfective' verbs in Tlingit allow for an interpretation as (present or past) perfects. Following Kamp *et al.* (2013), I assume a 'result state' analysis of the perfect (12), whereby it places the topic time within a state resulting from the event in question.

- (12)  $[[ \text{PERF} ] ]^{w,t,g} = [ \lambda Q : [ \lambda t' : \exists e. Q(e) \ \& \ T(e) < t' \ \& \ t' \subseteq T(\text{RES}(e)) ] ]$

I show that reasoning akin to that in Section 5.2 will derive from (12) the 'cancelled result' implication. Finally, I argue that the 'unexpected result' implication merely reflects a common rhetorical use of the past perfect (pluperfect), found even in such widely studied languages as French and English (*cf.* (3b)).

- (13) On te l'avait dit! (Plungian & van der Auwera 2006: 335)  
 they you 3sgO.PST.PERF said *They had said it to you [≈ Didn't I warn you?]*