Stative Marking in Tlingit: Evidence for the Complexity of States

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1. Introduction

(1)   **The Star of the Show:**
        The 'stative' prefix *i- / ya-* of Tlingit (Na-Dene; Alaska, British Columbia, Yukon)

	a. x̱at yanéekw		b. x̱at sinéekw

    a. x̱at yanéekw
       x̱at= Ø   ya- ¹√nikw -μμH
       1SG.O IMPFV STV ¹√sick VAR
       'I am sick.'

    b. x̱at sinéekw
       x̱at= Ø   s- i- ¹√nikw -μμH
       1SG.O IMPFV CSV STV ¹√sick VAR
       'He/she/it makes me sick.'

(2)   **General Take-Away Messages:**

    a.   In some languages such as Tlingit, stative predicates / predication can be more structurally complex than many people have assumed.

    b.   The so-called 'stative markers' of some languages like Tlingit may distinguish *certain* sub-classes of states:

         (i)   So, we should be careful with our terminology, but also…

         (ii)   *Question:*   Do *any* languages mark 'states' *tout court*?

    c.   The distinction proposed by Maienborn (2005) between 'K-states' and 'D-states' receives overt morphological support from Tlingit.
       • As do the proposed syntactic/semantic diagnostics for this distinction

> *To expand on this a bit more…*

(3)   **Relatively Common Claim: The 'Simplicity' of States and Stative Predicates**

    • States are ontologically the 'simplest' type of eventuality, i.e. the most fundamental of the eventuality type[1] classes (Dowty 1979; Rothstein 2004)

    • Correspondingly, stative predicates are the 'simplest' kind of predicate, and other predicates are somehow constructed from them (Dowty 1979; Kiyota 2008)

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[1] We use the term 'eventuality type' for what is called "Aktionsart", "Vendler class", "lexical aspect", "situation aspect", or "verb aspect class" among many other labels. This is the "verb theme category" of Na-Dene tradition.

(4)   *Prima Facie* **Challenge for the Common Claim: Stative Markers**

- Many languages possess 'stative markers': morphemes which indicate that a predicate is stative; for example Tlingit in (1)

- If these morphemes are semantically contentful then they would appear to somehow contribute the *stativity* of the resulting predicate…

- **This would seem to be at odds with those predicates being inherently stative, or with stativity itself being a primitive property!**

(5)   **Another Relatively Common Claim: The Uniformity of States**

Going back to Aristotle and later Vendler (1967), dynamic events are categorized into different eventuality subtypes while nondynamic states are a single, undifferentiated class

   Common Picture of Eventuality Type Classes (Cable 2021):

   States   Events:
                     - Telic Events: Achievements, Accomplishments
                     - Atelic Events: Activities, Semelfactives

(6)   **Challenging This Claim: The Heterogeneity of States**

- Going back to at least Dowty 1979, it's also been recognized that not all states behave uniformly with respect to various eventuality type diagnostics.

- More recently, Maienborn (2005) reviews these issues, subdividing states between (a) the more prototypical states and (b) states that are more 'event-like'

a.   K-States: *love, know, fear, be asleep, be tall, be angry…*

- 'K' for 'Kimian' from Jaegwon Kim (1969)
- suggested mnemonic: '**K**onstant' states, also *know*

b.   D-States: *sit, wait, stand, lie, sleep…*

- 'D' for 'Davidsonian' from Donald Davidson (1967)
- suggested mnemonic: '**D**ynamic' states (cf. Bach 1986)

With this in the background, here's what Tlingit brings to the table…

(7)   **Preview of the Empirical Argumentation from Tlingit**

- As noted in (1), Tlingit verbs can have a prefix *i- / ya-*, but only if they are states.

- **However, following the diagnostics of Maienborn (2005),** *not all stative predicates in Tlingit have i- / ya-*

- Following other diagnostics of Maienborn (2005), we find evidence for the following generalization:

a.   **Tlingit *i- / ya-* as a Marker of K-Stativity**
       (Imperfective) predicates have *i- / ya-* if and only if they denote K-states.

(8)   **Some Consequences of the Generalization**

- Following (7a), D-states in Tlingit lack the *i- / ya-* prefix of K-states

  o   **Thus, D-states in Tlingit are structurally *simpler* than K-states**

- In addition, the D-states we examine are morphologically *defective* in a way that K-states aren't:

  o   **These D-states only allow imperfective aspect, while the K-states allow all aspectual inflections (imperfective, perfective, future, potential, …)**

(9)   **Questions This Raises:**   *How is this possible?*

- Why do K-states in Tlingit bear this additional structure that D-states don't?

- Why are D-states more aspectually restricted than K-states?

(10)   **Outline of the Rest of the Talk:**

a.   <u>Section 2:</u>
       Review of Maienborn's (2005) proposed distinction between 'K-states' and 'D-states' and their associated diagnostics.

b.   <u>Section 3:</u>
       Morphosyntactic background into Tlingit and its 'stative' *i- / ya-* prefix

c.   <u>Section 4:</u>   Evidence for the generalization in (7a)

d.   <u>Section 5:</u>   Towards some answers to the questions in (9)

2. **Maienborn's (2005) Distinction Between 'D-States' and 'K-States'**

(11) **'States' and 'Stative' Predicates**

    a.   <u>States:</u>

        (i)   Eventualities which involve no internal change of any sort

        (ii)   Eventualities which are *not* 'dynamic' (Aristotle)

        (iii)   Eventualities which can – but need not – be extended over time
                so they can hold at either instants or at larger intervals (Taylor 1977)

    b.   <u>Stative Predicates:</u>   Predicates which denote states.

        (i)   Examples: *love cats, (be) tall, fear death, (be) asleep*

(12) **A Well-Known but Problematic English-Specific Diagnostic for States**

Stative predicates in English have often been claimed to 'resist' the present progressive, and to 'sound more natural' in the simple present.[2]

    a.   (??) Dave **is knowing** Italian.
    b.   Dave **knows** Italian.

There are many issues with this claimed diagnostic (see footnote 2 for references). One that has received a bit less attention is outlined below:

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(13) **Observation:**
By the diagnostic in (12), the adjectival predicate (*be*) *asleep* would be categorized as 'stative', while its clear verbal counterpart *sleep* would not.

    a.   (i)   Dave **is asleep**.   b.   (i)   ?? Dave **sleeps**.
        (ii)   ?? Dave **is being** asleep.   (ii)   Dave **is sleeping**.

<u>Question:</u>   Is there a stativity test where both *(be) asleep* and *sleep* are categorized alike?

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(14) **The *Happen* Test (Maienborn 2005)**

The translational equivalents of the verbs *happen* (English) or *geschehen* (German) can describe events, but not states.

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[2] It is important to note that this is not a cross-linguistically valid diagnostic for stativity although it is often implied to be so. It is also problematic even for English since some states can appear in the progressive as long as they are understood to be somehow 'temporary' (Dowty 1979, Deo 2009), e.g. the McDonald's ad slogan *I'm loving it*.

(15)   **The *Happen* Test in English, Part 1**

     a.   (i)   Sue was playing piano.   While that was happening...
            (ii)   The clothes were flapping in the wind.   While that was happening...
            (iii)   The candle was flickering.   While that was happening...

     b.   (i)   Eva knew Italian.   ?? While that was happening...
            (ii)   Eva was asleep.   ?? While that was happening...
            (iii)   Eva was sleeping.   ?? While that was happening...
            (iv)   Eva was standing at the window.   ?? While that was happening...
            (v)   Eva was waiting for the bus.   ?? While that was happening...

(16)   **The *Happen* Test in English, Part 2**

     a.   Prompt: *What is happening in there?*

     b.   Responses: (i)   Sue **is playing the piano**.
                        (ii)   ?? Eva **knows Italian**. [3]
                        (iii)   ?? Dave **is asleep**.
                        (iv)   ?? Dave **is sleeping**.
                        (v)   ?? Dave **is standing by the window**.
                        (vi)   ?? Eva **is waiting for Tom**.

(17)   **The *Happen (Geschehen)* Test in German (Maienborn 2005)**

     a.   (i)   Eva **spielte Klavier**.   Das geschah   während…
                   Eva **played piano**   this happened   while

            (ii)   Die Wäsche **flatterte im Wind**.   Das geschah   während…
                   the clothes **flapped in.the wind**.   this happened   while

            (iii)   Die **Kerze flackerte**.   Das geschah   während...
                   the **candle flickered**   this happened   while

     b.   (i)   Eva **kannte die Adresse**.   ?? Das geschah   während…
                   Eva **knew the Address**   this happened   while

            (ii)   Heidi **schlief.**   ?? Das geschah   wahrend…
                   Heidi **slept.**   this happened   while

            (iii)   Eva **stand am Fenster**.   ?? Das geschah   während…
                   Eva **stood at.the window**   this happened   while

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[3] These responses can be accommodated by a kind of bridging inference that there is some contextually known, eventive *consequence* of Eva's knowing Italian (*e.g.*, that people would get excited). To the extent that these responses require such bridging inference to be felicitous, we view them as contrasting with pure eventives like (16bi).

(18) **Conclusion, Part 1:**

Following Maienborn (2005), a better sign of whether a predicate is 'stative' is whether it can be described as a 'happening' (or its equivalent)

(19) **Conclusion, Part 2:**

In English, felicity with the present progressive is a necessary *but not sufficient* condition for being 'eventive' or 'non-stative' (Dowty 1979)

- All eventive predicates are felicitous with present progressive.

- **Some** stative predicates are *not* felicitous with present progressive (though **some** are)

a. Statives Felicitous with Present Progressives:
sleep, stand, sit, wait

b. Statives (Generally) Infelicitous with Present Progressive:
know, love, (be) asleep, (be) Italian

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(20) **Observation: Not the 'S(tage)-Level' / 'I(ndividual)-Level' Distinction**

Although sometimes identified this way, the division between (19a) and (19b) is not identical to the 'S(tage)/I(ndividual)-Level distinction (Carlson 1977):

- While all the states in (19a) are S-level, some in (19b) are too (e.g. *be asleep*)

(21) **Key Claim of Maienborn (2005)**

In both German and English, there are other grammatical properties that *also* distinguish the statives in (19a) from those in (19b).

- These properties would also group the statives in (19a) with eventive predicates.

(22) **Complement to Direct Perception Verbs (Maienborn 2005)**
Only statives like those in (19a) - and not those in (19b) - can head the complement of a direct perception verb (in English and German)

(23) **Direct Perception Test in English**

a. (i)   I saw Dave **sleep**.
    (ii) I saw Dave **stand there**.
    (iii) I saw Dave **wait for the bus**.

b. (i)   ?? I saw Dave **know Italian**
    (ii) ?? I saw Dave **love Mary**.
    (iii) ?? I saw Dave **be asleep**.

(24)   **Direct Perception Test in German (Maienborn 2005)**

    a.   (i)   Ich sah Carol **am   Fenster stehen.**
                       I   saw Carol **at.the window stand**

            (ii)   Ich sah Carol **schlafen**.
                       I   saw Carol **sleep**

            (iii)   Ich sah Carol **warten.**
                       I   saw Carol **wait**

    b.   (i)   ?? Ich sah Carol **müde sein**.
                       I   saw Carol **tired   be**

            (ii)   ?? Ich sah Carol **die Antwort wissen**.
                       I   saw Carol **the answer   know**

            (iii)   ?? Ich sah **meine Tante Romy Schneider ähneln**.
                       I   saw **my   aunt Romy Schneider resemble**

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(25)   **Modification by Manner Adverbs (Maienborn 2005)**
Only statives like those in (19a) – and not those in (19b) – can be modified by manner adverbs (in English and German)

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(26)   **Manner Adverb Test in English**

    a.   (i)   Dave **slept** quietly.   b.   (i)   ?? Dave **was asleep** quietly.
            (ii)   Dave **stood** quietly.   (ii)   ?? Dave **knew Italian** quietly
           (iii)   Dave **waited** quietly.   (iii)   ?? Dave **loved Mary** quietly.

An Aside:

- There *are* non-anomalous interpretations of (26bii)–(26biii), where *quietly* means something more like 'without it being known publicly'.

  o   We put such interpretations aside, as arguably the adverb no longer functions as a true manner adverb

- Certain manner adverbs seem to felicitously combine with some of these statives as long as they precede the stative predicate (e.g. 'Dave was **desperately** thirsty').

  o   It's again not entirely clear to us whether these structures retain a genuine manner interpretation (vs. degree)

(27)   **Manner Adverb Test in German**

a.   (i)   Paul **schlaeft** <u>friedlich</u>.   (ii)   Carol **saß**   <u>reglos</u>.
                Paul **slept**   <u>calmly</u>   Carol **sat**   <u>motionless</u>

b.   (i)   ?? Paul   war   friedlich   **müde**
                Paul   was   calmly   **tired**

       (ii)   ?? Carol   war   unruhig   **durstig**.
                Carol   was   restlessly   **thirsty**

(28)   **Modification by *A Little Bit / Ein Bisschen* (Maienborn 2005)**

- When statives like (19b) are modified by *a little bit* (in English) or *ein bisschen* (in German), the modifier is understood only as describing the degree/intensity of the state.

- When statives like (19a) are so modified, the modifier can (also) be understood as describing the duration of the state (*i.e.*, a little bit *of time*.)

(29)   **The *A Little Bit* Test in English**

a.   (i)   Dave was a little bit **tall.**   (*small degree*)
       (ii)   (?) Dave was a little bit **asleep**.   (*small degree*)
       (iii)   Dave **loved Mary** a little bit.   (*small degree*)

b.   (i)   Dave **stood by the window** a little bit   (*short duration*)
       (ii)   Dave **slept** a little bit   (*short duration*)
       (iii)   Dave **waited for the bus** a little bit   (*short duration*)

(30)   **The *Ein Bisschen* Test in German (Maienborn 2005)**

a.   (i)   Carol   war   ein   bisschen   **müde**.   (*small degree*)
                Carol   was   a   little.bit   **tired**

       (ii)   Carol   **ähnelte**   ein bisschen   ihrer   Grossmutter.   (*small degree*)
                Carol   **resembled**   a little.bit   her   grandmother

b   (i)   Carol   hat   ein   bisschen   **geschlafen**   (*short duration*)
                Carol   has   a   little.bit   slept

       (ii)   Paul   hat   ein bisschen   im   Garten **gesessen**   (*short duration*)
                Paul   has   a   little.bit   in.the   garden eaten

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(31) **MAJOR UPSHOT**

Assuming that the *Happen* Test (14) is a more accurate diagnostic for stativity, the properties above distinguish two sub-classes of statives.

a. Those like in (19a) which:
(i) Are most felicitous in English in the present progressive.
(ii) Can head the complement of direct perception verbs
(iii) Can be modified by manner adverbs
(iv) Allow for duration readings with *a little bit / ein bisshen*

b. Those like in (19b) which:
(i) Do 'resist' being put in the English present progressive
(ii) Cannot head the complement of direct perception verbs
(iii) Cannot be modified by manner adverbs
(iv) Allow only for a degree reading with *a little bit / ein bisshen*

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(32) **Some Terminology: D-States vs. K-States (Maienborn 2005)** [4]

a. D(avidsonian)-States: States described by the predicates in group (31a)

b. K(imian)-States: States described by the predicates in group (32b)

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(33) **An Additional, Problematic Diagnostic**

- Maienborn (2005) also argues that only D-states permit *locative* modifiers.

- However, this is convincingly challenged by both Ramchand (2005) and Rothstein (2005), and so we put aside this potential diagnostic.

(34) **Distinction from 'S-Level' and 'I-Level'**

- In English, it seems that a *verb* denotes a K-state *if and only if* it is also I-level

- **Nevertheless, many K-state *adjectives* are S-level (*e.g. asleep*), and so one cannot simply equate K-stativity with being I-level**

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[4] A similar distinction was recognized by Dowty (1979), who proposed that the states in (31a) differ from those in (31b) in holding only over intervals and not points. Likewise, Bach (1986) distinguishes between so-called 'Dynamic States' (31a) and 'Static States' (31b). Most recently, Krifka (2012) suggests that this distinction could possibly be captured within a vector semantics, where the states in (31a) all involve some additional vector of 'force', originating either from an agent or from the natural world (such as gravity).

(35) **Burning Question:**

If we do accept this distinction between stative predicates in English and German, do we also see this distinction reflected in the grammars of other languages?

(36) **Our Answer (Previewed in Section 1):   YES!**

In Tlingit, the so-called 'stative' prefix *i- / ya* is more aptly described as a marker of *K-state* predicates (K-statives)

(37) **Some Further, Interesting Consequences:**

- As briefly mentioned before, the D-state predicates of Tlingit are generally paradigmatically defective

    o That is, they can only ever bear imperfective (IMPFV) aspect

    o If the root of a D-stative does allow aspectual inflections other than IMPFV, then in those forms the stem receives an eventive reading (e.g. 'stand' → 'stand up')

    o But some D-stative stems are not even permissible in any aspects except IMPFV (e.g. √.*a* 'be seated')

- K-statives in Tlingit are morphosyntactically complex than D-statives and they are also fully regular paradigmatically, so they appear in all aspects, moods, and modalities

- This kind of contrast isn't as visible in languages with relatively poor verbal morpho-syntax, such as English and German…

3. Verb Syntax and the *i-/ya-* Prefix in Tlingit

(38) **Goals of This Section**

- Present key assumptions regarding the structure of verbs in Tlingit

- Present crucial background facts regarding the Tlingit 'stative' prefix *i- / ya-*

We begin by presenting some key background facts regarding the morphology of Tlingit verbs, and our assumed theory of their morpho-syntactic structure (Crippen 2019)…

3.1   The Syntax of Tlingit Verbs (Crippen 2019; Crippen, Déchaine, Elfner 2023)

(39)   **Key Background Assumptions Regarding Tlingit Verbal Morphosyntax**

- Verbs in Tlingit are phonological words that extend from VP to AspP

     o We assume a theory of syntax and morphology where "words" are a purely phonological notion

a.   <u>Morphemes Making Up the Verb Word:</u>

(i)	Functional heads:	V, Ɛ, *v*, Voice, Asp, T, C
(ii)	D-pronoun arguments:	D_{Sbj}, D_{Obj}
(iii)	Incorporated nominals:	N
(iv)	Modifiers:	PP, Adv, maybe Adj
(v)	The 3>3 argument agreement prefix *a-*	(label unclear; D?)

b.   <u>Structure Building in the Verb:</u>

- Ordinary Merge of heads and XPs (***no head movement***)

- Mandatory, **phonologically-driven,** phrasal movement of all phrases (DP, PP, AdvP) from within the AspP

- Mandatory movement of D-pronouns:

     (i) D_{Sbj} from *v*P to VoiceP (phase-edge)   *Scope or Agree*

     (ii) D_{Obj} from VP to AspP (phase-edge)   *Phonology or EPP*
               - *Can also include (pied-pipe?) incorporated Ns*

(40)   **Key Background Assumptions Regarding Tlingit Verbal Morphophonology**

The following summarizes the claims argued by Crippen, Déchaine, & Elfner (2023):

- Elements that correspond to syntactic terminal nodes are phonologically 'small'
     o phonological features (e.g. [labial]), tones (e.g. H), μ, C, V, σ

- Elements are Spelled Out in linear order

- Spellout produces a recursive phonological word

- Constituent structure almost exactly matches phonological domains
     o Some domain edge fuzziness, but only ever local
          (e.g. resyllabification, feature spreading)

(41) **Some Key Consequences of This Picture**

- No head movement, lowering, fusion, etc. (*pace* Cable 2005)

- Semantic interpretation is computed directly from the verbal syntactic structure

    o Thus, contrary to prior non-compositional semantic treatments (Leer 1991), **all verbal structures are semantically compositional**

To illustrate these key ideas, we will walk through the construction of some relatively simple verb forms…

(42)   a.   Tá.
    $^1\sqrt{}$ta   -μH
    $^1\sqrt{}$sleep.SG   VAR
    $\sqrt{}$ V
    '3 is sleeping.'

   b.   X̱atá.
    x̱a- $^1\sqrt{}$ta   -μH
    1SG.S $^1\sqrt{}$sleep.SG   VAR
    D$_{Sbj}$ $\sqrt{}$ V
    'I am sleeping.'

   c.   Itoox̱á.
    i-   too- $^2\sqrt{}$x̱a -μH
    2SG.O   1PL.S $^2\sqrt{}$eat   VAR
    D$_{Obj}$ D$_{Sbj}$ $\sqrt{}$ V
    'We are eating you sg.'

   d.   Iwtuwax̱áa.
    i-   w-   tu-   wa- $^2\sqrt{}$x̱a -μμH
    2SG.O PFV 1PL.S STV $^2\sqrt{}$eat   VAR
    D$_{Obj}$ Asp   D$_{Sbj}$ ε $\sqrt{}$ V
    'We ate you.', 'We have eaten you.'

   e.   Iwtusi.ée.
    i-   w-   tu-   s-   i- $^1\sqrt{}$.i   -μμH
    2SG.O PFV   1PL.S CSV STV $^1\sqrt{}$cooked   VAR
    D$_{Obj}$ Asp   D$_{Sbj}$ *v*   ε $\sqrt{}$ V
    'We cooked you sg.', 'We have made you sg. become cooked.'

… And now a verb with most of the functional heads overtly present:

(43)　a.　<u>Verb:</u>
　　　　Igawtudzi.ée.

i-	ga-	w-	tu-	d-	s-	i-	$^1\sqrt{}$.i	-μμH
2SG.O	SBEN	PFV	1PL.S	MID	CSV	STV	$^1\sqrt{}$cooked	VAR

　　　　'We have made you sg. become cooked for ourselves.'

　　　b.　<u>Syntax:</u>

[$_{AspP}$ **D$_{Obj}$** **N** **Asp** [$_{VceP}$ **D$_{Sbj}$** **Vce** [$_{vP}$ ~~**D$_{Sbj}$**~~ *v* [$_{εP}$ **Ɛ** [$_{VP}$ ~~**D$_{Obj}$**~~ √ V]]]]

i-	ga-	w-	tu-	d-	s-	i-	√.i	-μμH
2SG.O	SBEN	PFV	1PL.S	MID	CSV	STV	√cooked	VAR

But note that verbs are not the whole sentence since DP and PP arguments and adjuncts are always outside of the verb word:

(44)　Ch'a aa-n,　wutusikóo　tatgé　wé x'úx'　nadáakw ká-t　xwateeyí.
　　　[$_{PP}$ just　3N-with]　PFV.1PL·S.know [$_{CP}$ yesterday [$_{DP}$ DET book] [$_{PP}$ table　top-at]　PFV.1SG·S.handle.SUB]
　　　'Anyway, we know that I put the book on the table yesterday.'

3.2　Background on the Tlingit 'Stative' Prefix *i- / ya-*

In traditional descriptions the *i- / ya-* prefix of Tlingit is a component of its 'verbal classifier' system… *But what the heck is a 'verbal classifier' exactly?*

(45)　**"Verbal Classifiers" in Na-Dene Languages**

The "classifier" in Na-Dene languages is a phonological element reflecting multiple functional heads (Krauss 1969)

- The term "classifier" is mostly a misnomer: in general no "classificatory" functions

  - Though there are a few productive such uses in Tlingit, it's otherwise just sporadically lexicalized elsewhere in the family…

- In Tlingit (and in Eyak), this "classifier" can contain up to three morphemes; we analyze these morphemes as heads (lowest to highest) Ɛ, *v*, and Voice (Crippen 2019)

  - Ɛ　　*i- / ya-*　　state (lexical or grammatical)
  - *v*　　*s-, l-, sh-*　　causative, applicative; extended in space, pejorative
  - Voice　*d-*　　passive, antipassive, middle ($x = y$)

- In the more widely-discussed Dene (Athabaskan) relatives of Tlingit and Eyak such as Navajo, there are only two morphemes in the classifier: Voice as **d-* and *v* as **l-*, but Krauss (1969) identifies the vestiges of Ɛ as irregular **y* in some Dene languages

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(46)   **Decomposition of Some "Verbal Classifiers" in Tlingit**

	Voice (*d-*)	*v* (*s-*)	Ɛ (*i-* / *ya-*)
none			
ya			✓
sa		✓	
da	✓		
si		✓	✓
di	✓		✓
Vs	✓	✓	
dzi	✓	✓	✓

(47)   **Question:**   Why do we keep calling this Ɛ-head 'the *i-* / *ya-* prefix?

Answer: As illustrated above these are its most common surface realizations.
- However, there are also some complexities here, which are important to acknowledge

(48)   **Phonology of The *i- / ya-* Prefix: Case 1 – Vowel [ì]**

a.   *s-i-*   →   *si* [sì]   sị.áat' [sì.ˈʔáːtʼ]
       v + Ɛ   s-i-º√.atʼ-µµH
                                               INTR-STV-º√cold-VAR
                                               '3 is cold'

b.   *l-i-*   →   *li* [łì]   lịchán [łì.ˈt∫ʰán]
       v + Ɛ   l-i-º√chan-µH
                                               INTR-STV-º√stink-VAR
                                               '3 stinks'

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c. *sh-i-* → *shi* [ʃì] shigeek̲ [ʃì.ˈkì:q]
    v + Ɛ sh-i-⁰√gik̲-μμL
    PEJ-STV-⁰√stingy-VAR
    '3 is stingy'

d. *d-i-* → *di* [tì] diyáshk̲ [tì.ˈjáʃq]
    Voice + Ɛ d-i-⁰√yash-μH-k̲
    MID-STV-⁰√scarce-VAR-DEPRV
    '3 is scarce'

e. *d-s-i-* → *dzi* [tsì] kadzitéix' [kʰà.tsì.ˈtʰé:x']
    Voice + v + Ɛ ka-d-s-i-⁰√te-μμH-x'
    HSFC-MID-INTR-STV-⁰√rock-VAR-PL
    '3 is rocky-surfaced'

f. *d-l-i-* → *dli* [tɬì] dliwóo [tɬì.ˈwú:]
    Voice + v + Ɛ d-l-i-⁰√wu-μμH
    MID-INTR-STV-⁰√pale-VAR
    '3 is pale, fair'

g. *d-sh-i-* → *ji* [tʃì] kajikáx'x̲ [kʰà.tʃì.ˈkʰáx'χ]
    Voice + v + Ɛ ka-d-sh-i-⁰√kax'-μH-x̲
    HSFC-MID-PEJ-STV-⁰√spot-VAR-REP
    '3 is spotty-surfaced'

---

(49) **Phonology of The *i- / ya-* Prefix: Case 2 – Realizations Without *v* or Voice**

- In all the examples in (47), the Ɛ head occurs with either little *v* or Voice

- When these other elements of the "classifier" fail to appear, there are a variety of different realizations that Ɛ can take, depending upon its context

a. <u>Case 2a:</u> Syllable *ya* [jà] (basis case)

b. <u>Case 2b:</u> Syllable *wa* [wà] (when preceded by rounded vowel)

c. <u>Case 2c:</u> Syllable *yeey* [jì:j] (coalescence with specific prefixes)

d. <u>Case 2d:</u> V-Lengthening [à:, ì:, ù:] (coalescence with specific prefixes)

- Each of these realizations is separately illustrated below…

(50) **Phonology of The *i- / ya-* Prefix: Case 2a – Syllable *ya* [jà]**

i- → *ya* [jà]
                                               yat'aa [jà.ˈt'àː]
                                               ya-¹√t'a-μμL
                                               STV-¹√hot-VAR
                                               '3 is hot'

(51) **Phonology of The *i- / ya-* Prefix: Case 2b – Syllable *wa* [wà]**

i- → *ya* → *wa* [wà]
                                             ituwatéen [ʔì.tʰù.wà.ˈtʰí:n]
                                             i-tu-wa-²√tin-μμH
                                             2SG.O-1PL.S-STV-²√see-VAR
                                             'we can see you sg.'

(52) **Phonology of The *i- / ya-* Prefix: Case 2c – Syllable *yeey* [jìːj]**

- When Ɛ is immediately preceded by both the perfective prefix *wu-* and the 2pl subject prefix *yi-*, the resulting sequence is realized (opaquely) as *yeey* [jìːj]

- For the historical origin of this see Cardoso, Crippen, & Mellesmoen 2022

wu-yi-i- → *yeey* [jìːj]
Asp + D_{Sbj} + Ɛ
                                             yeeysháat [jìːj.ˈʃáːt]
                                           yμ-μy-i-²√shaᴴt-μμH
                                           PFV-2PL.S-STV-²√grab-VAR
                                           'you pl. grabbed 3'

(53) **Phonology of The *i- / ya-* Prefix: Case 2d – Vowel Lengthening**

- When Ɛ is preceded by certain prefixes ending in [à], [ì], or [ù], the Ɛ is realized as lengthening of that preceding vowel; we illustrate below with the case of [à]

Ca-ya → *aa* [àː]
                                             yéi x̱aahéi [jéː.χàːˈhéː]
                                             yéi=x̱a-μ-²√haᴸ-μᵉμH
                                           thus=1SG.s-STV-²√will-VAR
                                           'I want 3 to be so'

So far, we've discussed the position of this prefix in the verb and its various surface realizations…
*… **But what are the syntactic and semantic contexts that condition its appearance?***

---

(54) **Key Observation:**
Nearly all verbs in (47)–(52) are *stative* predicates (bearing imperfective aspect)!

- Indeed, its occurrence with (imperfective) stative verbs has long been recognized as one of its major morpho-semantic functions (Leer 1991)
- This leads some to gloss this prefix as 'Stative' / 'STV' (Crippen 2019, Cable 2022)

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(55) **Problem 1: Appearance with Eventive Stems in Certain Inflections**

While *i- / ya-* only occurs with stative predicates in the imperfective, there are other aspectual inflections that *always* contain this prefix, even when the stem is *eventive!*

Table 1: Illustrated Distribution of I- / Ya- Across Aspectual Inflections

aspect/mood	**state** verb ²√*hen* 'claim' (n conj)	**activity** verb ²√*hun* 'sell' (n conj)	**achievement** verb ²√*l'ix'* 'break' (n conj)
imperfective (stv. lexical)	ayahéin a-ya-héin 3>3-STV-claim '3 has claim on 3'	ahóon a-hóon 3>3-sell '3 is selling 3'	* (ungrammatical)
progressive (stv. prohibited)	yaa anahéin yaa=a-na-héin along=3>3-NCNJ-claim '3 is coming to claim 3'	yaa anahún yaa=a-na-hún along=3>3-NCNJ-sell '3 is coming to sell 3'	yaa anal'íx' yaa=a-na-l'íx' along=3>3-NCNJ-break '3 is coming to break 3'
conditional (stv. prohibited)	anahéinni a-na-héin-n-i 3>3-NCNJ-claim-NSFX-SUB 'if 3 claims 3'	anahúnni a-na-hún-n-i 3>3-NCNJ-sell-NSFX-SUB 'if 3 sells 3'	anal'íx'ni a-na-l'íx'-n-i 3>3-NCNJ-break-NSFX-SUB 'if 3 breaks 3'
perfective (stv. required)	aawahéin a-μ-wa-héin 3>3-PFV-STV-claim '3 has claimed 3'	aawahoon a-μ-wa-hoon 3>3-PFV-STV-sell '3 has sold 3'	aawal'éex' a-μ-wa-l'éex' 3>3-PFV-STV-break '3 has broken 3'
realizational (stv. required)	anaahéin a-na-μ-héin 3>3-NCNJ-STV-claim '3 has at last claimed 3'	anaahóon a-na-μ-hóon 3>3-NCNJ-STV-sell '3 has at last sold 3'	anaal'éex' a-na-μ-l'éex' 3>3-NCNJ-STV-break '3 has at last broken 3'
potential (stv. required)	oongaahéin a-u-n-ga-μ-héin 3>3-IRR-NCNJ-MOD-STV-claim '3 is able to claim 3'	oongaahoon a-u-n-ga-μ-hoon 3>3-IRR-NCNJ-MOD-STV-sell '3 is able to sell 3'	oongaal'éex' a-u-n-ga-μ-l'éex' 3>3-IRR-NCNJ-MOD-STV-break '3 is able to break 3'

Table 2: Summary of the Distribution of I- / Ya-

aspect/mood	has *i- / ya-*	lex. spec. *i- / ya-*
imperfective	±	yes
progressive	−	no
conditional	−	no
perfective	+	no
realizational	+	no
potential	+	no

(56) **Problem 2: Systematic Disappearance in Certain Morpho-Syntactic Contexts**

There are certain morpho-syntactic contexts that seem to *suppress* the appearance of this prefix, even in forms where it's otherwise required.

Table 3: Suppression of the I- / Ya- Prefix in Negated Imperfectives

affirmative		Negative	
with *i-/ya-*	without *i-/ya-* (ungram.)	without *i-/ya-*	with *i-/ya-* (ungram.)
ayahéin a-ya-héin 3>3-STV-claim '3 has claim on 3'	*ahéin a-héin 3>3-claim '3 is claiming 3'	tléil oohéin tléil a-u-héin NEG 3>3-IRR-claim '3 doesn't claim 3'	*tléil oowahéin tléil a-u-wa-héin NEG 3>3-IRR-STV-claim
*ayahóon a-ya-hóon 3>3-STV-sell	ahóon a-hóon 3>3-STV-sell '3 is selling 3'	tléil oohoon tléil a-u-hoon NEG 3>3-IRR-sell '3 isn't selling 3'	*tléil oowahoon tléil a-u-wa-hoon NEG 3>3-IRR-STV-claim

Table 4: Suppression of the I- / Ya- Prefix in Negated Perfectives

affirmative		negative	
with *i-/ya-*	without *i-/ya-* (ungram.)	without *i-/ya-*	with *i-/ya-* (ungram.)
aawahéin a-µ-wa-héin 3>3-PFV-STV-claim '3 has claimed 3'	*awuhéin a-wu-héin 3>3-PFV-claim	tléil awuhéin tléil a-wu-héin NEG 3>3-PFV-claim '3 has claimed 3'	*tléil aawahéin léil a-µ-wa-héin NEG 3>3-PFV-STV-claim
aawahoon a-µ-wa-hoon 3>3-PFV-STV-sell '3 has sold 3'	*awuhoon a-wu-hoon 3>3-PFV-sell	tléil awuhoon tléil a-wu-hoon NEG 3>3-PFV-sell '3 has sold 3'	*tléil aawahoon tléil a-µ-wa-hoon NEG 3>3-PFV-STV-sell

Table 5: Suppression of the I- / Ya- Prefix in Subordinate Clauses (Perfective Aspect)

subordinate without *i-/ya-*	subordinate with *i-/ya-* (ungrammatical)
awuhéini wutusiteen a-wu-héin-i wu-tu-s-i-teen [CP 3>3-PFV-claim-SUB] PFV-1PL.S-XTN-STV-claim 'we saw that 3 has claimed 3	* aawahéini wutusiteen a-µ-wa-héin-i wu-tu-s-i-teen [CP 3>3-PFV-STV-claim-SUB] PFV-1PL.S-XTN-STV-claim
awuhooní wutusiteen a-wu-hoon-í wu-tu-s-i-teen [CP 3>3-PFV-sell-SUB] PFV-1PL.S-XTN-STV-claim 'we saw that 3 has sold 3'	* aawahooní wutusiteen a-µ-wa-hoon-í wu-tu-s-i-teen [CP 3>3-PFV-STV-sell-SUB] PFV-1PL.S-XTN-STV-claim
awul'éex'í wutusiteen a-wu-l'éex'-i wu-tu-s-i-teen [CP 3>3-PFV-break-SUB] PFV-1PL.S-XTN-STV-claim 'we saw that 3 has broken 3'	* aawal'éex'í wutusiteen a-µ-wa-l'éex'-i wu-tu-s-i-teen [CP 3>3-PFV-STV-break-SUB] PFV-1PL.S-XTN-STV-claim

(57) **Problem 3: Imperfective Predicates that Seem Stative, But Lack the *I- / Ya-* Prefix**

There are stative predicates whose imperfective forms obligatorily *lack* the *i- / ya-* prefix.

- Note that the verb in (57a) below is the translation of stative *be seated*, and so it would seem to be a state.

- In the well-formed (57a), however, this verb does not bear the *i- / ya-* prefix, and attempting to add that prefix results in ill-formedness (57b)

a. Nadáakw kát   x̲a.áa.
    nadáakw   ká-t   x̲a-   ¹√.a -μμH
    table   top-at 1SG.S ¹√sit VAR
    'I am seated on top of the table.'

b. * Nadáakw kát   x̲aa.áa.
    nadáakw   ká-t   x̲a-   μ-   ¹√.a -μμH
    table   top-at 1SG.S STV ¹√sit VAR
    intended: 'I am seated on top of the table.'

In this talk, we are going to focus exclusively upon 'Problem 3' in (57), the stative prefixes which do not take the i- / ya- prefix in their imperfective forms.

- We will lightly touch upon Problem 1 in our concluding section.

- We take Problem 3 to be a purely morpho-syntactic phenomenon (Crippen 2019), and so we bracket it here

(58) **Crucial Observation:**

- Another possible translation of (57a) is '*be sitting*', **a D-stative!**

- Indeed, we find that all the stative imperfectives lacking the *i- / ya-* prefix are translations of D-statives in English.

- This invites our key generalization in (7a), repeated below.

(59) **Central Generalization: The Tlingit *I- / Ya-* Prefix as a Marker of K-States**

(Imperfective) predicates in Tlingit have *i- / ya-* if and only if they denote K-states.

In the following section, we will present our (preliminary) evidence supporting this generalization.

Before we present that evidence, though, we'd like to make a few key observations regarding the imperfective verb form in (57a).

(60)   **The Class of 'Positional Imperfectives' in Tlingit**

- In earlier descriptive grammars of Tlingit, the imperfective verb in (57a) is described as exhibiting a 'positional imperfective' (Leer 1991: 324-329).

- This terminology is apt, as many of the stems that appear in this imperfective form translate the 'positional verbs' of languages like German (*e.g.*, 'sit', 'stand', 'lie', *etc.*)

- **Notably, these verb forms are also inflectionally 'defective', in that they can *only appear in the imperfective* (Leer 1991).**

    o   Combining the stem of a 'positional imperfective' like (57a) with any other aspectual inflection results in ill-formedness (60a)

    o   However, there often are related, *eventive* stems that can take other aspectual inflections (60b).

        ▪   In some cases, these stems are suppletive (60b)
        ▪   But there is usually some kind of derivational relationship (60c)

a. *   Nadáakw   kát   x̲waa.**áa**.   (√.*a* not allowed with perfective)
        nadáakw   ká-t   wu- x̲a-   μ-   ¹√.**a** -μμH
        table   top-at   PFV 1SG.S STV ¹√**sit** VAR
        intended: 'I sat on top of the table.'

b.   Nadáakw káx'   x̲waa**nook**.   (√*nuk* instead of √.*a* with perfective)
        nadáakw   ká-x'   wu- x̲a-   μ-   ¹√**nuk** -μμL
        table   top-at   PFV 1SG.S STV ¹√**sit** VAR
        'I sat down on top of the table.'

c.   (i)   Nadáakw   kát   **tán**
                 nadáakw   ká-t   ¹√.**tan** -H
                 table   top-at   ¹√**lie**   VAR
                 'It lies / is lying on top of the table.'

        (ii)   Nadáakw   káx'   yan uwa**tán**   (√*tan* allowed with perfective)
                 nadáakw   ká-x'   yan= u-   wa- ¹√**tan**-H
                 table   top-at   TERM PFV STV ¹√**lie** VAR
                 'It came to rest on top of the table.'

With this in mind, our key hypothesis / generalization in (59) could also be restated as follows:

(61) **Further Important Observation:**

The (imperfective) stative predicates in Tlingit that take the *i- / ya-* prefix are not inflectionally defective like 'positional imperfectives'.

- Such predicates feely combine with *all* aspectual inflections, such as the perfective (b)

a.   yat'aa
      ya-   ¹√t'a -μμL
      STV ¹√hot VAR
      '3 is hot'

b.   **u**wat'áa
      u-   wa- ¹√t'a -μμH
      PFV STV ¹√hot VAR
      '3 became hot'

(62) **Central Generalization (Equivalent Restatement):**

Imperfective predicates in Tlingit take the 'positional imperfective' form if and only if they are D-states.

(63) **Consequent Generalization:**

- Stative predicates which take the Ɛ-head *i- / ya-* are morphologically regular, and combine freely with all aspectual inflections.

- Stative predicates which do *not* take the Ɛ-head *i- / ya-* (*i.e.*, the 'positional imperfectives', the D-statives) are morphologically defective, and appear only in the imperfective.

(64) **Question:**
WHY? Why does presence of the Ɛ-head *i- / ya-* correlated with a wider range of allowed aspectual inflections?

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4.   **Tracking the Stativity Diagnostics and the *i-/ya-* Prefix**

(65) **Main Hypothesis:**

a.   (Imperfective) predicates bear prefix *i- / ya-* if and only if they denote K-states.

b.   That is, Tlingit 'positional' statives, which lack the *i- / ya-* prefix, are all D-states

(66) **Question:**
But, can we first demonstrate through established diagnostics that all these *prima facie* stative predicates are in fact stative?

(67) **The *Happen* Test (Maienborn 2005)**
Translational equivalents of the verbs *happen* (English) or *geschehen* (German) can describe events, but not states.

(68) **The *Happen* Test in English**

    a.   Prompt: b.   Responses
        What is happening in there?   (i)   Sue is playing the piano.
                                            (ii)   ?? Eva knows Italian.
                                            (iii)   ?? Dave is asleep.
                                            (iv)   ?? Dave is sleeping.
                                            (v)   ?? Dave is standing
                                            (vi)   ?? Eva is waiting for Tom.

(69)   a.   **Question:**   Can 'the *happen* test' also be applied to Tlingit?

        b.   **Answer:**
            The verb *yéi at ni* is often translated into English as 'happen' (and *vice versa*)
            As shown below, judgments akin to those in (68b) can be elicited for this verb.

(70) **Tlingit *Yéi At Ni* 'Happen' Can Felicitously Describe Events (Part 1)**

    a.   Prompt: Máa sáwé at naneen?
                             máa s=áwé   at=na-nee-n
                             how Q=FOC   IND.N.O=PROG-happen-NSFX
                             'How is it that things are happening?'

    b.   (i)   Jaan **al'eix**. Sóo ḵu.aa kanat'á **akaxá**.   (DA; 10/13/22)
                  Jaan a-l'eix   Sóo ḵu.aa   kanat'á   a-ka-xá
                  John XPL-dance Sue CONTR blueberry   3>3-SRO-eat
                  'John is dancing. But Sue is eating blueberries.'

        (ii)   **Adul'eix** ḵa **at duná**.   (SJ; 10/20/22)
                  a-du-l'eix   ḵa   at=du-ná
                  XPL-IND.H.S-dance   and   IND.N.O=IND.H.S-eat
                  'People are dancing and people are drinking things.'

        (iii)   Jaan áyá **gáax**.   (SJ; 10/20/22)
                  John FOC cry.SG
                  'John is crying.'

        (iv)   **Adul'eix** ḵa axoo.aa hás kanat'á **has axá**.   (SJ; 10/20/22)
                  a-du-l'eix   ḵa a   xoo-.aa   hás kanat'á   has=a-xá
                  XPL-IND.H.S-dance and 3PSR among-some 3PL.H blueberry PL.H=3>3-eat
                  'People are dancing and among some of them they are eating blueberries.'

(71) **Tlingit *Yéi At Ni* 'Happen' *Cannot* Felicitously Describe States (Part 1)**

    a.   Prompt: Máa sáwé at naneen?

    b.   (i)   # Sóo du x̱'éi **yak'éi** wé kanat'á.   (DA; 10/13/22)

                    Sóo   du   x̱'é-µ   ya-k'éi   wé   kanat'á
                    Sue   3H.PSR mouth-at   STV-good   DET   blueberry
                    'Sue likes blueberries.' (lit. 'They are good in Sue's mouth, blueberries.')

        (ii) # Adul'eix̱ ḵa ax̱oo.aa hás kanat'á hasdu x̱'éi **yak'éi**.   (SJ; 10/20/22)

                  a-du-l'eix̱   ḵa   a   x̱oo-.aa   hás   kanat'á
                  XPL-IND.H.S-dance and 3PSR among-some 3PL.H blueberry
                        has-du   x̱'é-µ   **ya-k'éi**
                        PL-3H.PSR mouth-at STV-good
                  'People are dancing and among some of them they like blueberries.'

(72) **Tlingit *Yéi At Ni* 'Happen' Can Felicitously Describe Events (Part 2)**

    a.   Jaan **al'eix̱**. **Yéi yaa naneení**, x̱atá.   (DA; 10/14/22)
        Jaan   a-l'eix̱.   Yéi=yaa=na-nee-n-í   x̱a-tá
        John   XPL-dance   thus=along-NCNJ-happen-NSFX-SUB 1SG.S-sleep.SG
        'John was dancing. While that was happening, I was sleeping.'

        <u>Speaker Comment:</u>
        It's okay… but why would you say that? (instead of *a tóox̱* 'during that')

    b.   Jaan Sóo **aawasháa**. **Yéi yaa naneení**, Aangóonx' yéi x̱at yatee. (DA; 10/14/22)
        Jaan   Sóo   a-µ-wa-sháa   yéi=yaa=na-nee-n-í
        John   Sue   3>3-PFV-STV-marry   thus=along=NCNJ-happen-NSFX-SUB
                Aangóon-x'   yéi=x̱at=ya-tee
                Angoon-LOC   thus=1SG.O=STV-be
        'John married Sue. While that was happening, I was in Angoon.'

(73) **Tlingit *Yéi At Ni* 'Happen' *Cannot* Felicitously Describe States (Part 2)**

Jaan Sóo **asix̱án**. # **Yéi yaa naneení**, Aangoonx' yéi x̱at yatee.   (DA; 10/14/22)
Jaan   Sóo   a-s-i-x̱án   yéi=yaa=na-nee-n-í
John   Sue   3>3-CSV-STV-near   thus=along=NCNJ-happen-NSFX-SUB
        Aangóon-x'   yéi=x̱at=ya-tee
        Angoon-LOC   thus=1SG.O=STV-be
'John loved Sue. While that was happening, I was in Angoon.'

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(74) **Important Note: Speaker Variation**
Not all speakers accepted even sentences like (72a,b). For example, SJ consistently
rejected such use of *yéi yaa naneení* 'while that was happening' as a conjunction.

(75) **Question:**
The rejected sentences in (71) and (73) involve the verb *yéi at ni* 'happen' applying to a K-state (*i.e.*, 'be good', 'love')…

- **Is this verb also unable to describe D-states in Tlingit, such as the translation of 'stand' or 'sit'?**

(76) **Rejection of *Yéi At Ni* 'Happen' Describing a D-State (Part 1)**

    a.   Prompt: Máa sáwé at naneen?

    b.   (i) #   Jaan gukshutóot **hán**   (SJ; 10/20/22)
                           Jaan   gúk-shú-tóo-t   hán
                           John   ear-end-inside-at   stand.SG
                           'John is standing in the corner.'

(77) **Rejection of *Yéi At Ni* 'Happen' Describing a D-State (Part 2)**

    a.   Jaan gukshutóot **hán**. # **Yéi yaa naneení**, axal'eix.   (DA; 10/14/22)
          Jaan   gúk-shú-tóo-t   hán   yéi=yaa=na-nee-n-í
          John   ear-end-inside-at   stand.SG   thus=along=NCNJ-happen-NSFX-SUB
          a-xa-l'eix
          XPL-1SG.S-dance
          'John was standing in the corner. While that was happening, I was dancing.'

    b.   Jaan káayakijeit kát **áa**. # **Yéi yaa naneení**, axal'eix.   (DA; 10/14/22)
          Jaan   káayakijeit   ká-t   áa   yéi=yaa=na-nee-n-í
          John   chair   top-at   sit.SG thus=along=NCNJ-happen-NSFX-SUB
          a-xa-l'eix
          XPL-1SG.S-dance
          'John was sitting in a chair. While that was happening, I was dancing.'

However, despite the judgments above, there were a few cases where speakers seemed to allow yéi at ni 'happen' *to describe a D-state:*

(78) **(Marginal) Acceptance of *Yéi At Ni* 'Happen' Describing a D-State (Part 1)**

    a.   Prompt: Máa sáwé at naneen?

    b.   (i)   Jaan **tá.**   (DA; 10/13/22)
                    John   sleep.SG
                    'John is sleeping.'

(ii) Jaan gukshutóot **hán**.   (DA; 10/13/22)

Jaan   gúk-shú-tóo-t   hán
John   ear-end-inside-at   stand.SG
'John is standing in the corner.'

(iii) Jaan káaḵijeit ch'a tleiҳ a kát **áa.**   (SJ; 10/20/22)

Jaan   káaḵijeit ch'a tleiҳ   a   ká-t   áa
John   chair   just always   its top-at sit.SG
'John always sits on a chair.' (lit. 'John, a chair, he always sits on it.')

(79) **(Marginal) Acceptance of *Yéi At Ni* 'Happen' Describing a D-State (Part 2)**

a.   Jaan **tá**. **Yéi yaa naneení**, aҳal'eiҳ.   (DA; 10/14/22)

Jaan   **tá.**   **Yéi yaa naneení,**   a-ҳa-l'eiҳ
John   sleep.SG   yéi=yaa=na-nee-n-í   XPL-1SG.S-dance
'John was sleeping. While that was happening, I was dancing.'

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(80) **Conclusion (Part 1)**

- Speakers do sometimes reject the use of *yéi at ni* 'happen' to describe D-states like *han* 'stand' and *.a* 'be positioned'…

- …and such rejection never occurs for clear eventives…

- **Therefore, we conclude that this verb in Tlingit does indeed distinguish statives (both K-states and D-states).**

(81) **Conclusion (Part 2)**

Given that the D-states in (76)/(77) pattern with the K-states in (71)/(73) with respect to 'the *Happen* test', we conclude that Tlingit indeed views all these predicates as *stative.*

- ***Therefore, given the absence of the prefix i- / ya- in (76)/(77), it follows that this prefix is <u>not</u> conditioned on all states.***

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(82) **Main Hypothesis, Redux:**

a.   (Imperfective) predicates bear the prefix *i- / ya-* if and only if they denote K-states.
b.   That is, Tlingit 'positional' statives, which lack the *i- / ya-* prefix, are all D-states

(83) **Prediction 1: Modification by Manner Adverbs**

- Stative predicates bearing the prefix *i- / ya-* **should resist manner adverbs**.
- However, stative predicates lacking the prefix *i- / ya-* **should allow manner adverbs**

(84)   **Manner Adverbs with Eventives and D-States in Tlingit**

a.   Jaan kagéináx̱ al'eix̱.   (SJ; 10/20/22)
      Jaan   kagéináx̱   a-l'eix̱
      John   carefully   XPL-dance
      'John is dancing carefully/slowly.'

b.   Sóo kalk'átl'áḵ kanat'á ax̱á.   (SJ; 10/20/22)
      Sóo   kalk'átl'áḵ   kanat'á   a-x̱á
      Sue   silently   blueberry   3>3-eat
      'Sue is eating blueberries silently.'

c.   Jaan kalk'átl'áḵ ch'a tleix̱ gukshutóot **hán**   (SJ; 10/20/22)
      Jaan   kalk'átl'áḵ   ch'a   tleix̱   gúk-shú-tóo-t   hán
      John   silently   just   always   ear-end-inside-at   stand.SG
      'John is always silently standing in a corner.'

d.   John kalk'átl'áḵ káaḵijeit kát **áa**.   (SJ; 10/20/22)
      Jaan   kalk'átl'áḵ   káaḵijeit   ká-t   áa.
      John   silently   chair   top-at   sit.SG
      'John is always silently sitting in a chair.'

(85)   **K-States in Tlingit Resist Modification by Manner Adverbs**

a.   # Sóo kaltk'átl'áḵ kanat'á du x̱'éi **yak'éi**.   (SJ; 10/20/22)
      Sóo   kalk'átl'áḵ   kanat'á   du   x̱'é-µ   **ya-k'éi**
      Sue   silently   blueberry   3H.PSR   mouth-at   **STV-good**

      <u>Speaker Comment:</u>   No … I don't know why that '*quiet*' is there

b.   # Jaan Sóo kalk'átl'áḵ **asix̱án**.   (SJ; 10/20/22)
      Jaan   Sóo   kalk'átl'áḵ   **a-s-i-x̱án**
      John   Sue   silently   **3>3-CSV-STV-near**

      <u>Speaker Comment:</u>   No (doesn't make sense)

(86)   **Summary: Prediction (83) Born Out!**
Manner adverbs do seem to distinguish D-states in Tlingit from K-states, and this further correlates with the presence of the 'stative' prefix *i- / ya-*

(87)   **Prediction 2: Direct Perception Complements**

(Imperfective) stative predicates in Tlingit should be acceptable in the complement of direct perception verbs *if and only if* they <u>don't</u> bear the *i- / ya-* prefix.

(88)   **Interim Result, Part 1**

We were not yet able to identify a direct perception complement in Tlingit. The structure used in direct perception contexts can also be used in cases of indirect knowledge.

a.   (i)   <u>Direct Perception Context:</u>
One afternoon, John was eating at the diner. He looked across the room, and saw that Sue was eating there too. Sue finished her meal before John, though. At one point, he looked up, and saw her as she got up, paid, and left the restaurant.

   (ii)   <u>Sentence:</u>
Jaanch yatéen Sóo aax̱ wugoodí.   (SJ; 10/20/2022)
Jaan-ch   ya-téen   Sóo   aa-dáx̱   wu-goot-í
John-ERG STV-see [CP Sue it-from PFV-go.SG-SUB]
'John can see that Sue has left from there.'

b.   (i)   <u>Indirect Knowledge Context:</u>
One afternoon, John was eating at the diner. He looked across the room, and saw that Sue was eating there too. At one point, though, he had to get up and go to the restroom. When he got back to his table, he looked across the room, but Sue was gone.

   (ii)   <u>Sentence:</u>
Jaanch yatéen Sóo x̱áasí aax̱ woogoodí.   (SJ; 10/20/2022)
Jaan-ch   ya-téen   Sóo   x̱áa-sí   aa-dáx̱   wu-goot-í
John-ERG STV-see [CP Sue   EXPL-DUB it-from PFV-go.SG-SUB]
'John can see that Sue apparently has left from there.'

(89)   **Interim Result, Part 2**

Relatedly, the construction in (88a,b) also permits complements headed by K-states, including negated clauses.

a.   Jaanch yatéen Taam Sóo asix̱án.
Jaan-ch   ya-téen   Taam Sóo   a-s-i-x̱án
John-ERG STV-see [CP Tom   Sue   3>3-CSV-STV-near]
'John can see that Tom loves Sue.'

b.   Jaanch yatéen Sóo tlél áwu.
Jaan-ch   ya-téen   Sóo tlél á-wu
John-ERG STV-see [CP Sue NEG it-LOCPRED]
'John can see that Sue is not there.'

(90) **Summary: Prediction (87) Not Properly Tested Yet**

Until we can find a clear direct perception complement, manner adverbs are the main grammatical means for independently distinguishing K-states from D-states
- Nevertheless, they do provide interesting support for they key hypothesis in (82)

(91) **Sidenote for Future Work:**

- Susi Wurmbrand (p.c.) has suggested trying '*hear*' as a direct perception environment.

- Relatedly, the Tlingit translation of the English indirect knowledge sentence in (91b) would require an entirely different verbal root from typical one for 'hear' (*i.e.*, .*ax̱*)

a. Dave heard Sue come home.   b. Dave heard that Sue came home.

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5. **Towards a Theory of the Contribution of the *i- / ya-* Prefix to K-Statives**

In the preceding section, we saw some preliminary evidence supporting the key generalizations

(92) **Main Hypothesis, Redux:**

a. (Imperfective) predicates bear the prefix *i- / ya-* if and only if they denote K-states.

b. That is, Tlingit 'positional' statives, which lack the *i- / ya-* prefix, are all D-states

Moreover, given the discussion in Section 3 and the generalization in (63), it also follows that:

(93) **Consequent Generalization:**

a. Statives bearing the Ɛ-head *i- / ya-* (*i.e.*, K-statives) are morphologically regular, combining freely with all aspectual inflections.

b. Statives lacking the Ɛ-head *i- / ya-* (*i.e.*, D-statives / 'positionals') are morphologically defective, and appear only in the imperfective.

These generalizations, in turn, raise the following key analytic questions:

(94) **Central Questions Raised by the Generalizations**

a. Why do statives denoting K-states in Tlingit require this additional structure (*i.e.*, the Ɛ-head *i- / ya-*) which statives denoting D-states do not require or even allow?

b. Why do statives lacking this additional structure (*i.e.*, the Ɛ-head *i- / ya-*) exhibit a more restricted set of aspectual environments than the statives possessing it?

(95)   **Observation: A Prima Facie Paradox**

The questions in (94) highlight a *prima facie* paradox with generalizations (92)–(93):

- In the work of Maienborn (2005), the K-states are claimed to be ontologically simpler than the D-states…

- Why, then do we find that predicates in Tlingit denoting that ontologically *simpler* class of states, end up being structurally (and paradigmatically) more *complex?*

> *In this final section, we'd like to sketch out one way of possibly answering the questions in (94) and thereby 'deflating' the apparent paradox in (95)…*
>
> *Let us begin by reviewing Maienborn's major semantic proposals regarding K-stative predicates:*

(96)   **Maienborn's (2005) Core Proposals Regarding K-Statives *vs* D-Statives**

a.   D-Statives Project an Eventuality Argument:
Just like eventive predicates, D-stative predicates take an eventuality argument (Parsons 1990).[5]

(i)   ⟦ *sleep* ⟧   =   [$\lambda s_\sigma : \lambda x_e$: sleep(s) & Theme(s) = x]

b.   K-Statives Do *Not* Project an Eventuality Argument

- Unlike eventive predicates and D-statives, K-stative predicates do not project a 'Davidsonian' eventuality argument

- Instead, K-statives denote pure entity predicates

(ii)   ⟦ *asleep* ⟧   =   [λx_e : asleep(x)]

(97)   **Important Consequence of the Proposed Contrast in (96)**

Because K-stative predicates do not project an eventuality argument (96b), they are correctly predicted to be unable combine with structures that operate on such an argument:

(i)   Manner adverbials   (ii)   Direct perception verbs

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[5] Contrary to what we write here, Maienborn (2005: 306) represents this eventuality argument as an *event*. However, given the differing behavior of eventive predicates and D-statives (15)–(17), we choose to view the 'Davidsonian' argument of D-states as a Parsonian state argument (Parsons 1990).

(98) **Potential Empirical Problem for the Proposed Contrast in (96)**

In many languages, K-stative predicates are freely able to combine with aspectual inflection, including Imperfective (IMPFV), Perfective (PFV), and Prospective (PSP):

a.   yat'aa   b.   **uwa**t'áa   c.   **g**uga**t'**áa

     ya-$^1\sqrt{}$t'a-µµL   u- wa-$^1\sqrt{}$t'a-µµH   **g**-u-ga-$^1\sqrt{}$t'a-µµH

     STV-$^1\sqrt{}$hot-VAR   PFV- STV-$^1\sqrt{}$hot-VAR   **PSP**-IRR-MOD-$^1\sqrt{}$hot-VAR

     '3 is hot'   '3 **became** hot'   '3 **will be** hot'

- However, these aspectual heads are generally viewed semantically as mapping predicates of *eventualities* to predicates of times (Cable 2022).

- **Thus, unless we radically revise our semantics for Asp-heads, we need K-statives to also somehow end up projecting a structure with an eventuality argument**

(99) **Potential Analytic Problem for the Proposed Contrast in (96)**

As reviewed in Section 3, Crippen (2019) argues that the classifier, which combines with a K-stative, contains the little-*v* head.

a.   **s**i.áat'

     s-i-$^0\sqrt{}$.at'-µµH

     v-STV-$^0\sqrt{}$cold-VAR

     '3 is cold'

- However, the little-*v* head is generally viewed as semantically mapping predicates of eventualities to *relations* between eventualties and entities (Kratzer 1996)

  o This is necessitated by the even more basic assumption that little-*v* introduces a thematic relation, which is a relation between an entity and an eventualty…

- **Therefore, unless we radically revise our semantics for little-*v*, we need K-statives to also somehow end up projecting a structure with an eventuality argument!**

Interestingly, Maienborn (2005) does propose something that nearly solves the issues in (98)–(99)

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(100) **K-States and 'Exemplification' of Properties**

Although a K-stative predicate lexically takes only an entity argument (96a), the combination of a K-stative and a copula takes an additional 'K-state argument':

a.   ⟦ *be asleep* ⟧   =   [λz: λx$_e$: z *exemplifies* [asleep(x)]]

(101) **Potential Issue for the Claim in (100)**

- Ontologically, this K-state argument in (100) is an 'abstract object' that 'exemplifies' the application of the K-stative property to the entity argument.

- Maienborn (2005) insists that it is *not* a (Davidsonian) eventuality…
  - This allegedly allows the predictions in (97) to be maintained…

- However, if it's not an eventuality, then even the semantics in (100a) will fail to resolve the issues in (98)–(99)…

With all this in mind, let us then consider the following possibility…

(102) **(Nascent) Proposal: The Ɛ-Head *I- / Ya* Introduces an *Eventuality* Argument**

The crucial role played by the Ɛ-Head/prefix *i-* / *ya-* is to introduce a (state) eventuality argument into the semantics of a K-stative sentence.

$$vP: \quad < e , <\sigma, t>>$$

v ƐP: $<\sigma , t>$

$<<\sigma, t>, <e,<\sigma,t>>>$

Ɛ   VP: t

i- / *ya-*

$< t, <\sigma , t >>$ V: $<e,t>$ DP: e
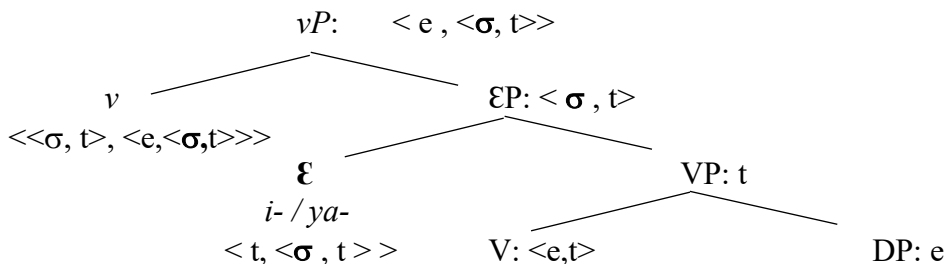
- Provisionally, we might suppose that – following (100) – this (state) eventuality introduced by *i-* / *ya-* serves to 'exemplify' the property introduced by the K-stative V.

⟦ **s**i.áat' ⟧   =   [$\lambda x_e : \lambda s_\sigma$: s 'exemplifies' [cold(x)]]
v-STV-^{0}√cold-VAR

(103) **Some Comments**

- This analysis would need some novel explanation for the inability of K-states to be modified by manner adverbs or appear in direct perception complements

- The types below the ƐP in (102) are all *extremely* provisional…

  - In particular, we probably wouldn't want to view the Ɛ-head as taking a *truth-value* as argument…

  - …Which begs the question of exactly what 'exemplification' is here.

31

(104) **A Connection Between Tlingit *I- / Ya-* and Verbal Copulas?**

- Under this account, the Tlingit Ɛ-head *i- / ya-* would play the same semantic role as that proposed by Maienborn (2005) for the verbal copula.

- **This coheres with Leer's (2000) diachronic analysis of *i- / ya-*, as arising from an ancestral copula verb.**

- However, synchronically, Tlingit does have a separate copular verb *ti* 'be', which is used in cases of nominal and locative predication…
    - … which raises the question of the division of labor between this verb and the Ɛ-head *i- / ya-*

(105) **Key Prediction: D-Statives Do Not Appear with Ɛ-head *I- / Ya-***

If Maienborn (2005) is correct that D-statives inherently project an eventuality argument…
then they should be unable to combine with the i- / ya- prefix
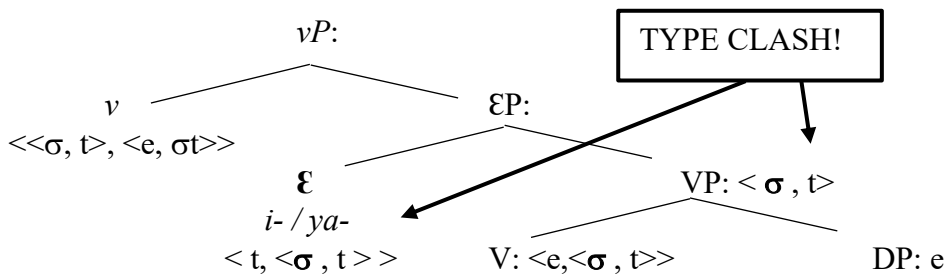
a. Question: So, what kind of verbal structure *do* the D-statives project?

b. One Possibility: It could be that the ƐP projection is absent for D-statives
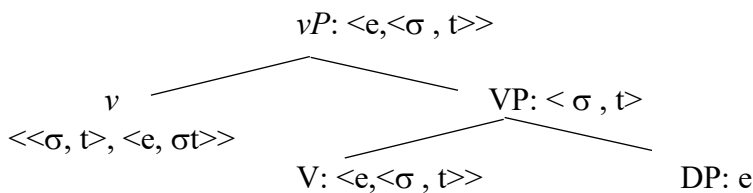
c. Another Possibility: It could be that the ƐP projection is semantically empty
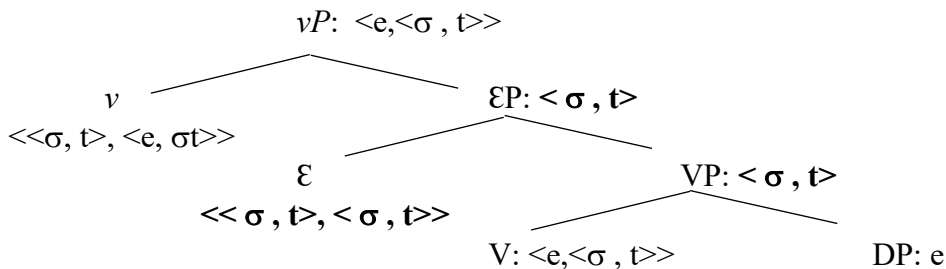
Whatever the answer to question (105a), we see how the proposal in (102) answers the key question in (94a), repeated below:

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(106) a. <u>Question:</u> Why do K-statives in Tlingit require structure (*i.e.*, the Ɛ-head *i- / ya-*) which D-statives do not require or even allow?

b. <u>Answer:</u> Because this additional structure semantically introduces an argument that is already lexically projected by D-statives, but not by K-statives

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(107) **Aspectual Restrictions on Tlingit D-Statives**
Why do the statives in Tlingit which lack the the Ɛ-head *i- / ya-* exhibit a more restricted set of aspectual environments than the statives possessing it?

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(108) **Provisional Suggestions Regarding Question (107)**

- Perhaps we could think of the 'defective aspectual paradigm' of D-statives as actually reflecting a kind of **contextual allomorphy!**

- That is, the special forms we think of as 'positional imperfectives' (60) in Tlingit are simply just **special allomorphs** of D-states, triggered in the presence of IMPFV aspect!

a. / nuk 'sit' / → / .a /   /   IMPFV ____
The stem /nuk/ (meaning 'sit') is pronounced as /.a/ in the environment of imperfective aspect.

- *This could capture the fact that so-called 'positionals' only ever appear in Imperfective Aspect, and all other aspects feature some (potentially suppletive) allomorph…*

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(109) **Potential Answer to Question (107)**

If we adopt (something like) the view in (107), **and also the view in (105b)**, we could perhaps answer the question in (107) with the following:

- The Ɛ-head is a barrier to aspectually-conditioned stem allomorphy!

- That is, if readjustment like (108a) must be entirely local – if the environmental trigger for the readjustment must be directly adjacent to the target of the change …
  - Then the presence of an intervening Ɛ-head would prevent any aspect-based stem-allomorphy!

[$_{AspP}$ IMPFV   [$_{ƐP}$ Ɛ   [$_{vP}$ STEM   ] …]
Readjustment Blocked!!

(110) **Possible Challenge for the Provisional Proposal in (108)-(109)**

- Under (108), 'defective aspectual' paradigms can be created in Tlingit when verbal stems are morphologically 'readjusted' in the immediate context of IMPFV aspect…

- But, eventive verbs would share with D-statives the lack of an Ɛ-head…

- **So, why do we not see similar such 'paradigmatic defectivity' with regular eventive verbs?...** *Why is it only D-statives?*

Before we close, let us briefly return to one major challenge for the very idea that the Tlingit prefix i- / ya- is semantically connected with K-stativity…

(111) **Problem: Appearance with Eventive Stems in Certain Inflections**

While *i- / ya-* only occurs with stative predicates in the imperfective, there are other aspectual inflections that *always* contain this prefix (55), even when the stem is *eventive!*
- For example, the perfective aspect obligatorily requires the *i- / ya-* prefix

a. Iwtu**wa**x̲áa.

i-	**w-**	tu-	**wa-**	$^2\sqrt{}$x̲a	-μμH
2SG.O	**PFV**	1PL.S	**STV**	$^2\sqrt{}$eat	VAR
D$_{Obj}$	**Asp**	D$_{Sbj}$	**Ɛ**	√	V

'We ate you.', 'We have eaten you.'

(112) **One Obvious Possibility to Consider:**
Perhaps these aspectual inflections create morpho-syntactically *derived* K-statives?

(113) **Empirical and Analytic Questions This Raises (For Future Work)**

a. Can it be shown empirically that these aspectual forms are K-statives? For example, do perfectives in Tlingit resist being complements to direct perception verbs (22)?

b. Even if the answer to (113a) is 'yes', what is the semantic motivation for the Ɛ-head in forms like (111a), *which have eventive stems?*

- That is, even if the perfective aspect creates a K-stative, the Ɛ-head in (111a) would seem to have scope below it, combining with the *vP* and not the AspP…

- Furthermore, it's generally held that the projections above AspP (*e.g.,* TP, ModP, CP) do not operate semantically on eventuality arguments…

  - So, maintaining the semantics for *i- / ya-* in (102) would require significant re-evaluation of the assumed structure for forms like (111a)

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