0. INTRODUCTION

The Na-Dene hypothesis has undergone careful scrutiny in recent years. The argument that Haida is part of this grouping has weakened with the exclusion of diffused words and faulty comparisons as well as general typological resemblances that are too weak to be considered probative. The case for the inclusion of Tlingit, on the other hand, has strengthened to the point where the genetic relationship of Athabascan, Eyak, and Tlingit can be considered proven.

We have long been aware of non-generic features shared by these languages. One is the set of "classificatory verbs" consisting of an intransitive stative theme meaning that an object of a particular shape or type "is lying" there (and its causative "is keeping O" there) together with a transitive motion theme referring to handling such an object. Another is the characteristic verb template with essentially the same order of elements in Athabascan, Eyak, and Tlingit. And above all, the hallmark of Tlina-Dene is the tripartite portmanteau prefix known as the classifier.

What has been lacking until now is the proof of regular AET sound correspondences, which will be presented in this paper. Athabascan-Eyak obstruent correspondences have long since been clarified by Krauss' articles on the phonology of "Na-Dene". Correspondences with Tlingit have proven to be a much greater obstacle. This appears to be in part due to the idiosyncratic phonological history of Tlingit, which is still only partially understood. Nevertheless, the more regular and productive sound correspondences can now be identified.

We will concentrate here on three key areas: regular obstruent correspondences, the classifiers, and cluster resolution, particularly in Tlingit. Cluster resolution refers to the replacement of a consonant cluster by a single consonant. In Athabascan and Eyak such cases are relatively easy to identify and explain. In Tlingit we see but a few landmarks in the fog.

1. REGULAR SOUND CORRESPONDENCES:

1.a. OBSTRUENT CORRESPONDENCES

<table>
<thead>
<tr>
<th>PAET ~*</th>
<th>PAE *</th>
<th>PA *</th>
<th>Eyak</th>
<th>Tlingit</th>
<th>Tlingit (L-assim.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
<td>d</td>
</tr>
<tr>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
<td>t</td>
</tr>
<tr>
<td>t'</td>
<td>t'</td>
<td>t'</td>
<td>t'</td>
<td>t'</td>
<td>t'</td>
</tr>
<tr>
<td>L</td>
<td>L</td>
<td>L~l</td>
<td>L</td>
<td>L</td>
<td>L, tL'</td>
</tr>
<tr>
<td>tL'</td>
<td>tL'</td>
<td>tL'</td>
<td>tL'</td>
<td>tL'</td>
<td>L', tL'</td>
</tr>
<tr>
<td>s</td>
<td>s</td>
<td>s~z</td>
<td>s</td>
<td>s</td>
<td>L</td>
</tr>
<tr>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>tL</td>
</tr>
<tr>
<td>ts'</td>
<td>ts'</td>
<td>ts'</td>
<td>ts'</td>
<td>s', ts'</td>
<td>tL', L'</td>
</tr>
<tr>
<td>sh</td>
<td>sh</td>
<td>shr~zhr</td>
<td>sh (s)</td>
<td>sh (s)</td>
<td>L</td>
</tr>
<tr>
<td>dzh</td>
<td>dzh</td>
<td>dzh</td>
<td>dzh</td>
<td>dzh</td>
<td>?</td>
</tr>
<tr>
<td>tsh</td>
<td>tsh</td>
<td>tsh</td>
<td>tsh</td>
<td>tsh (ts)</td>
<td>tL</td>
</tr>
</tbody>
</table>
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 2

<table>
<thead>
<tr>
<th>tsh'</th>
<th>tsh'</th>
<th>tsh'</th>
<th>tsh'</th>
<th>s', tsh' (ts')</th>
<th>tL'</th>
</tr>
</thead>
<tbody>
<tr>
<td>xy</td>
<td>s</td>
<td>s−z</td>
<td>s; sh</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>gy</td>
<td>dz</td>
<td>[dz,] s−z</td>
<td>dz</td>
<td>g</td>
<td></td>
</tr>
<tr>
<td>ky</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
<td>k; sh</td>
<td></td>
</tr>
<tr>
<td>k'y</td>
<td>ts'</td>
<td>ts'</td>
<td>ts'</td>
<td>k'</td>
<td></td>
</tr>
<tr>
<td>x</td>
<td>x</td>
<td>xy−y</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>g</td>
<td>g</td>
<td>g</td>
<td>g</td>
<td>g(w)</td>
<td></td>
</tr>
<tr>
<td>k</td>
<td>k</td>
<td>ky</td>
<td>k</td>
<td>k(w)</td>
<td></td>
</tr>
<tr>
<td>k'</td>
<td>k'</td>
<td>k'y</td>
<td>k'</td>
<td>x'(w), k'(w)</td>
<td></td>
</tr>
<tr>
<td>xw</td>
<td>xw</td>
<td>shr−zhr</td>
<td>xw &gt; x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>gw</td>
<td>gw</td>
<td>dzhr</td>
<td>gw &gt; g</td>
<td>g(w)</td>
<td></td>
</tr>
<tr>
<td>kw</td>
<td>kw</td>
<td>tshr</td>
<td>kw &gt; k</td>
<td>k(w)</td>
<td></td>
</tr>
<tr>
<td>k'w</td>
<td>k'w</td>
<td>tsfr'</td>
<td>k'w &gt; k'</td>
<td>x'(w), k'(w)</td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>X</td>
<td>X−GH</td>
<td>X</td>
<td>X(w)</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G</td>
<td>G(w)</td>
<td></td>
</tr>
<tr>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q</td>
<td>q(w)</td>
<td></td>
</tr>
<tr>
<td>q'</td>
<td>q'</td>
<td>q'</td>
<td>q'</td>
<td>X'(w), q'(w)</td>
<td></td>
</tr>
</tbody>
</table>

Xw    Xw  /Xw/ > X  X  X(w)

Gw    Gw  /Gw/ > G  G  G(w)

qw    qw  /qw/ > q  q  q(w)

q'w   q'w  /q'w/ > q'  q'  X'(w), q'(w)

Extraneous
friative corrs.

sx    x    x y ~ y  x  s
shx   x    x y−y  sh  sh
S (1sg.)  ?x(w)  S (sh−xy)  xw > x; s  X

The known obstruent correspondences are summed up in the above table. For the correspondences given in the last column, see section 6.

1.b. The two most stable series are the coronals (d-series) and the uvulars (G-series), although the latter have become velars in most Athabascan (in onset position often with uvular affrication, depending on the language). The contrast between PA palatals and uvulars, according to Krauss (p.c.) is the most stable of all contrasts in Athabascan. In onset position, all languages have distinct reflexes for these two series. The extreme stability of the velar-uvular contrast within AET must be taken seriously when attempting comparison outside AET.

1.c. One of the central problems surrounding the AET obstruents is the rarity of dl, tL, and dz. Not only are they rare in AE, but they seldom match up from one branch to another. Taking morphemes with onset dl for example, I doubt we can find one instance where Eyak dl matches PA *dl or Tlingit dl matches PA *dl or Tlingit dl matches Eyak dl. The obvious conclusion is that PAET lacked *dl. Each branch developed it in its own way(s).
Eyak has 4 lexical instances of onset dl, demonstrably secondary in 2 cases. PA likewise has few instances of onset *dl (but relatively more than Eyak), virtually all accountable by the rule:

\[
\text{Pre-PA } *dE-L... > *dE-l... > PA *dl... 
\]

Tlingit has around 20 instances of onset dl. Time permitting, in section 8 we will explore the hypothesis that the Tlingit onsets dl, dz and often dzh are attributable to the resolution of former consonant clusters into single consonants in Tlingit, here referred to as "cluster resolution".

1.d. Both Eyak and Tlingit sometimes have sibilants where one would expect shibilants. Sometimes we find what look like doublets, such as

Eyak L-she'k' "to sob, choke, gasp for breath (of someone weeping)" vs.
Eyak dE-L-sik' "to hiccough"

Tlingit ka-sha`G~ (event): ka`washáG "is winded, out of breath" vs.
Tlingit ka-sa`G~ (event): ka`wasáG "is exhausted, worn out"
Tlingit sa`G~ (event): 7uwasaáG "is exhausted, faint from hunger" CK wuLísáG

I have put correspondences like these in parentheses in the above chart, e.g. PAET *sh > Tlingit sh (s). What is responsible for them remains an open question, although in some cases we could reasonably attribute them to soundplay variation. In Eyak, as in Athabascan, there is some evidence suggesting that sibilants can be diminutive variants of shibilants. According to Golla, this is still a semi-productive process in Hupa.

In Tlingit, on the other hand, our meager evidence points toward the reverse relationship: shibilants might sometimes be diminutive variants of sibilants; see "finger" under 6c.

1.e. Rounding of velars and uvulars in Tlingit does not correlate with that reconstructible for PAE. I suspect that the original PAET rounding contrast--which we can sometimes reconstruct for Pre-PA--disappeared (or was eliminated in certain positions) in Tlingit, but in the process a contiguous high vowel was assimilated to u, e.g.

PAET ~*hwi: (motion) "to swim (of one person or animal)"
PA *we: (motion) "id." : *GHEwe:L "is swimming"
Eyak we~ (motion) "id." : GEwe:L "is swimming"
Tlingit hu~: (motion) "to swim (of one animal), to wade (of one person)":
\[
\text{ýa`}=\text{nah}(w)\text{è:n } \text{"is swimming, wading", } \text{wu` hu`}, \text{ "swam, waded"}
\]

PAET ~*7wi:gw "to boil", caus. O-S-7we/i:g "to boil O"
Pre-PA *we:gw >
PA *we:dzhr (s-act) "id." : *Ewe:dzhr "it boiled",
caus. *O-L-we:dzhr (s-act): yÉsLwe:dzhr "boiled O"
Tlingit 7u`7u~ (event) "id." : 7uwa7úgw "it boiled",

\[
\text{PAET } *\text{hw}i: (motion) \text{"to swim (of one person or animal)"}
\text{PA } *\text{we: (motion) } \text{"id." : *GHEwe:L } \text{"is swimming"}
\text{Eyak } *\text{we~ (motion) } \text{"id." : GEwe:L } \text{"is swimming"}
\text{Tlingit hu~: (motion) } \text{"to swim (of one animal), to wade (of one person)":}
\text{ýa`}=\text{nah}(w)\text{è:n } \text{"is swimming, wading", } \text{wu` hu`}, \text{ "swam, waded"}
\text{PAET } *\text{7wi:gw } \text{"to boil", caus. O-S-7we/i:g } \text{"to boil O"}
\text{Pre-PA } *\text{we:gw >}
\text{PA } *\text{we:dzhr (s-act) } \text{"id." : *Ewe:dzhr } \text{"it boiled",}
\text{caus. *O-L-we:dzhr (s-act): yÉsLwe:dzhr } \text{"boiled O"}
\text{Tlingit 7u`7u~ (event) } \text{"id." : 7uwa7úgw } \text{"it boiled",}
\]
PAET ~*qwi:k'y "to fall (as of a pole, tree)"
PA *q[w]e:ts' "to fall, move independently (as of a pole, boat)"
Tlingit qu'x'~ "to fall over (as of a tree)"

In all these examples, PAET *Cwi... > Tlingit Cu... At this stage Tlingit may no longer have had distinctively rounded obstruents (if they persisted at all, it would have been next to low vowels). At a later stage, new rounded obstruents were created anew by diachronic developments within Tlingit.

In Athabascan-Eyak, on the other hand, the original PAET *i was lowered to *e in a type of height dissimilation: PAET *(C)wi... > PAE *(C)we... As a result, the sequence *wi, for example, is rare and usually demonstrably secondary in PA (and in Eyak?).

These examples illustrate that some PAET vowel correspondences are the result of interaction between the original vowel plus a neighboring consonant. Often (as in the case of "breast", 6d) we can explain the less common vowel correspondences by positing an original sonorant coda which interacted differently with the original vowel in Tlingit than in PAE.

1.f. The "miscellaneous fricative correspondences" at the bottom of the obstruent chart do not align in any obvious way with the "regular" obstruent series. Each of these correspondences occurs only in a few cognate sets. The PAET "reconstructions" of these correspondences should be regarded as convenient fictions, mere labels. The PAET reconstructions *sx and *shx, in particular, are what we might call "pseudoclusters". That is to say, they should not necessarily be thought of as implying PAET clusters, but simply as quasi-mnemonic labels for what were probably unit phonemes in PAET.

1.f.i. PAET *sx, PAE *x or *sh, Tlingit s

PAET ~*sxin "(shaman's) song, medicine song"
PA *xyEn "id."
Eyak xi:l "shaman"

PA *D-yEn (act) "to sing (a medicine song)"; (state) "to be a shaman": *dEyEn "is singing (a medicine song); is a shaman"
* dEyEn-En "shaman" (with the sg. human nominalizer *-En)
Tlingit O-sa'n~ (act) "to cure O shamanistically": 7asá'n "is curing O shamanistically (by singing, gathering up and blowing away the cause of the illness)"

PAET ~*D-sxi/e()-k'(w)
Pre-PA *D-xi:k'(w) "to breath"
PA (BET) *D-yi:k', (AP) *D-yi:tshr' (act) "to breathe": *dEyÊxy[-gy] "is breathing; is alive"
Tlingit D-sa~: (act) "to breathe"; (state) "to be alive": dise:gw "is breathing; is alive"
Eyak she'k' (act) "to sob, choke, gasp for breath (of someone weeping)"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 5

compare also Eyak dE-L-sik' (act?) "to hiccough"

A more complex set of correspondences is seen in

PAET ~*wE-sxe() or ~*u:-sxe() "name"
PA *--u:-zhe' "name"
Eyak wE-sheh "name"
Tlingit sa` "name"

PA *O-u:-zhi: (gh-act) "to name O, call O by name"
vs. PA *NP u:-L-D-ye:[w] (state) "to be named, called NP"
Tlingit MANNER O-sa-: (act) "to name O (so), call O (so)"
\[y' 7a\text{\textdegree}as\text{\textdegree}a:gw calls O so; y' 7a\text{\textdegree}was\text{\textdegree}a: gw O is called, named so; y' 7a` was\text{\textdegree}a: named O so"

Perhaps the alternation between the PA onsets *zh... < Pre-PA *sh... and PA *y... < Pre-PA *x... in the last pair of themes can be explained by appealing to labialization in PAE directly following the prefix that shows up as PA *u:- and Eyak wE-. (One wonders if the labialization of the Tlingit repetitive suffix -g in the imperfective stem sa:-gw is also somehow connected.) In PA *NP u:-L-D-ye:, on the other hand, the classifier intervenes between this prefix and the root, and so could have prevented this labialization from occurring. At any rate, both "breath" and "name" give rise to many questions I cannot fully answer at present.

1.f.ii. PAET *shx, PA *xy ~ *y, Eyak x and/or sh, Tlingit sh

This occurs only in one problematic cognate set:

PAET *shxa:n (?) "old age/person"; (as postnominal modifier) "old"
PA *xya:n "old age"; *=ya:n "old"
Eyak xa:nih "very old salmon"; =shiyah "bad, nasty, disgusting"
Tlingit sha`n "old age; old person"; =sha`n "old"

and compare Tlingit xe`n "old/dying salmon with white spots caused by fungus"

1.f.iii. PAET *$, PAE *x(w), PA *$, Eyak x(w) ~ s, Tlingit X

This notoriously difficult correspondence set is found in the 1sg. pronominals. I refer the reader to Krauss' unpublished paper on the PA fricatives for the gory details. I will note only that PA *$ (Krauss' symbol) reflects *sh in some Athabascan languages but *xy in others. Here, as in the "name" set in (1.f.i), it seems likely that the PA variant *sh reflects PAE *xw whereas the PA variant *xy reflects PAE *x. This variation is apparently due to the fact that the PAE 1sg. subject prefix was labialized in some environments but not in others. Most likely, the principal PAE allophone was *xw-, but this was delabialized to *x- when followed by the perfective/stative prefix *(y)i-. That is, PAE */xw-(y)i-/ >>> *x-i- (rather than **xw-i-); this combination appears as Eyak x-i- (without labialization) and as PA *y-E- after a vowel (rather than **zh-E-). How Tlingit wound up with uvular X is an open question.

1.g. The best-attested vowel correspondences (and perhaps the only vowels necessary to reconstruct PAET) are listed cursorily (and probably incompletely) below.
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 6

Regular vowel correspondences

<table>
<thead>
<tr>
<th>PAET ~*</th>
<th>PAE *</th>
<th>PA *</th>
<th>Eyak</th>
<th>Tlingit</th>
</tr>
</thead>
<tbody>
<tr>
<td>i(:)</td>
<td>i(:)</td>
<td>i:, E</td>
<td>i(;)</td>
<td>i</td>
</tr>
<tr>
<td>e(:)</td>
<td>e(:)</td>
<td>e:, E</td>
<td>e(;)</td>
<td>a</td>
</tr>
<tr>
<td>a(:)</td>
<td>a(:)</td>
<td>a:, A</td>
<td>a(;)</td>
<td>a</td>
</tr>
<tr>
<td>o(:)</td>
<td>a(:)</td>
<td>a:, A</td>
<td>a(;)</td>
<td>u</td>
</tr>
<tr>
<td>u(:)</td>
<td>u(:)</td>
<td>u:, U</td>
<td>u(;)</td>
<td>u</td>
</tr>
</tbody>
</table>

All the PAET reconstructions may be regarded as provisional except for the very common vowels *e(;) and *a(;) which remain as such in PAE but merge in Tlingit. In particular, I tend to regard the reconstruction *o(;) as a convenient fiction, merely a symbol for a fairly common correspondence between PAE *a(;) and Tlingit u(. This correspondence could conceivably be due to the Pre-Tlingit vowel assimilating to a neighboring rounded consonant, yielding Tlingit u (as in the examples given above). However, it seems to occur in cases where such an explanation would be problematic (e.g. between consonants which have no labialized counterparts); moreover, "breast" (6d), reconstructed PAET ~*ts`aw > PAE *ts`u:, Tlingit L`a` presents a real problem for such an analysis. So for now, we include *o(;) in our inventory of regular vowel correspondences.

1.h. I give no regular vowel correspondence yielding Tlingit e. The evidence strongly suggests that in Tlingit (as in Haida) the vowel e is a late addition to a previously three-vowel system. One well-attested source of Tlingit e is the rhyme

Pre-Tlingit *a`y > Tlingit e`

In general, where *R is a Pre-Tlingit sonorant lost in Tlingit,
Pre-Tlingit *VR > Tlingit V`. This is a major source of the fading stigma `.

This rule is probably responsible for Tlingit ablaut in open verb roots: before a consonant suffix, roots with the vowels i and e keep these vowels unaltered, but
Ca~` >>> Ce`- and Ca~: >>> Ce:`-;
Cu~` >>> C(w)e`- and Cu~: >>> C(w)e:`-.

Taking as a starting point Pre-Tlingit *Ca`y~, we would find the reduced stem before consonant suffixes (-C), as in modern Tlingit. By the above rule,
Pre-Tlingit *Ca`y-C > *Ce`-C, parallel with *Ci`y-C > *Ci`-C (and presumably also *Cu`y-C > *Cu`-C). Subsequently, ablaut was generalized to all synchronically open stems, whether or not they originally ended with a sonorant. Expected *Cu`-C was replaced by Tlingit C(w)e`-C. In modern Tlingit, even "invariable" open stems undergo ablaut: O-7u` (na act) "to buy O", normally with invariable root 7u`, undergoes ablaut e.g. in the conditional 7a-na-7we`-nì: "if s/he buys it".

The Tlingit conditional with /-ni`/ is probably related to the Pacific Coast Athabascan potential with *-nE.
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 7

1.i. I will not attempt to address the PAET sonorant system here, and PAET sonorant reconstructions should be regarded as approximate.

One new development is the discovery of the PAE coda clusters *...nd and *...nt'.

PAET ~*LEnd "smoke"
PA *LEd "smoke"
Eyak LaNh'd "smoke" < *LENhd

PAET ~*--sEnt' or ~*--xyEnt' "liver"
PA *--zÈt' "liver"
Eyak --sahd "liver" < *--sEnht'

PAET ~*--Gunt' "knee"
PA *--GÛt' "knee"
Eyak --Guhd, (Anna) --GuNh'd "knee" < *--Gunht'

Perhaps crucially, all these roots appear with reduced vowels in PA. Here the original nasals disappeared without a trace. Support for this type of nasal-deletion in PA is found in Golla's observation (p.c.) that in California PCA, root-final nasals were deleted before obstruent suffixes. He bases this observation on the behavior of verb roots ending in a nasal. In California PCA the nasal disappears without a trace before an obstruent suffix, leaving simply the reduced stem vowel; whereas in the rest of Athabascan the nasal is kept, yielding a long nasalized vowel, as seen for example in the progressive stem of PA *taːn, the classificatory verb for sticklike objects and vessels:

PA *tEn-L in *yEgh(E)tEnL "is carrying it (as a stick, a bowl, a canoe)"
Pre-California PCA *tEL in *(yE)ghEtEL, Hupa witiL
elsewhere *tiN:-L, e.g. in Chipewyan yatiNL, Navajo yootiNL, Galice ...tiNL

In Eyak, on the other hand, it appears that first the nasal was devoiced in the cluster (as also word-finally), subsequently giving rise to a nasalized vowel plus h, e.g. PAET ~*LEnd > Pre-Eyak *LENhd > Eyak LaNh'd. In the case of PAET *...nt', this would have given rise to Pre-Eyak *Vnht' (> *VNht'), which at some point ran afoul of the constraint against a glottalized coda being preceded by aspiration, and was therefore repaired to VNhd. Nasalization is often unstable in Eyak, however, and tends to be lost. A prime example of this is Eyak *ta~, the classificatory verb cognate with PA *taːn and Tlingit ta`n~.

2. THE PAET PALATAL SERIES

Perhaps the most reassuring development in AET comparison is the discovery of regular correspondences between Tlingit velars and AE sibilants. These can be reconstructed as AET palata...
ONSET CORRESPONDENCES

<table>
<thead>
<tr>
<th>PAET *</th>
<th>Tlingit</th>
<th>PAE *</th>
<th>PA *</th>
<th>Eyak</th>
</tr>
</thead>
<tbody>
<tr>
<td>xy</td>
<td>x</td>
<td>s</td>
<td>s; z</td>
<td>s; sh</td>
</tr>
<tr>
<td>gy</td>
<td>g</td>
<td>dz</td>
<td>[dz,] s-z</td>
<td>dz</td>
</tr>
<tr>
<td>ky</td>
<td>k; sh</td>
<td>ts</td>
<td>ts</td>
<td>ts</td>
</tr>
<tr>
<td>k'y</td>
<td>k'</td>
<td>ts'</td>
<td>ts'</td>
<td>ts'</td>
</tr>
</tbody>
</table>

2.a. Onset *xy, Tlingit x, PAE *s

PAET ~*--xyets' "skin (of fish)"
Tlingit --xá's'i "skin (of fish)"
Eyak --sits' "skin (of fish)" (identical with Hupa --sits' "skin, hide")
Pre-PA *--sits' "skin, hide"; *--sits'-{d} "skin bag (?)"
PA (EP) *--zÉts' "skin, hide"; (ABES) *--zÉs{d} "skin, hide; skin bag"
Chipewyan --dhÉdh "skin, hide"; --dhéth "skin bag"

PAET *xye:g "empty shell, skeleton"
Tlingit xá:g "empty shell", poss. --xá:gi'
PA *--ze:gye' "corpses"; (in Koyukon and Hupa also) "invalid"
Cf. Eyak sahxw "cockle", probably not cognate.

PAET ~*xyo()g "sandbar; dry ground"
Tlingit xágw "sandbar"
PA *sa:xy "sand", possibly spirantized from Pre-PA *sa:g

Compare further
Eyak gudE-su' "dry salmon"
Eyak GE-su' "dry salmon, 'newspaper fish'"
Lower Tanana tsabaya tho' "half-dried whitefish"
Tsuut'ina súní "dried meat"

and
Tlingit xu' gw~ (event) "to become dry": 7uwaxúk "it is dry"
Tlingit =xu gw (adj.) "dried": tshá:dl xu' gw "dried halibut"
Chipewyan 7eLddháyi "dry fish" < ~*k'yE-L-dzá:yi:
Galice da:aldzaya "dried (meat)" < ~*na:=GHE-l-(d)zEyi:

Note that the vowel in the Chipewyan stem ddháy in 7eLddháyi "dry fish" matches that of thy "sand" < *sa:xy.

PAET ~*(s-D-)xyi(x)k' "for one thing to fall, move through space"
Tlingit xi x~ (motion) "id.": da` g uwaxíx "it fell down"
Tlingit sh-D-xi x~ (motion) "for one to run": ÿa` nashíx "is running along"

In this verb alone we find synchronic merger of classifier plus stem onset:
sh-xi x~ >>> shì x~ (where sh- is /sh-D-/).
The choice of classifier series sh- rather than s- may historically be due to palatal assimilation from the root onset.
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 9

PA (A) ~*L-D-zÊk'y "id.": GHElzÊxy "it is falling, moving through space"
with suppletive perf. *L-D-nêñ. The non-perfective root is attested only as
lengthened (mom. IO) stem *zî:xy and reduced suffixed stem *zÊxy-, so its vowel
grade is unknown in this theme. However, from Tsuut'ina and Southern
Athabascan we can reconstruct PA *O-L-zÊk'y "to shoot O (arrow); to throw O
(pole)"

PAET *O-(S)-xyi()d "to make furrow(s), groove(s) in/on O"
Tlingit O-L-xi`d (act): 7awLixid "made furrows in O (as a garden)"
Tlingit O-ka-sh-xi`d-, imp! stem xid (act): 7akawshixid "wrote it; photographed it;
(original meaning) painted, drew a design on it (with a brush)"
PA (A) *qU-zEd (motion): LT xo=xUghEsdhEt "I dug a hole"
PA (A) *O-dE-nE-zEd (motion) "to make mark(s), groove(s), design(s) on O"
LT nE=yEdEnadhEt "he marked it, drew it"
Koyukon nE=kEdEnaldEt "she drew, etched a design"

PAET ~*O-xyi()t' "to rake or sweep O"
Tlingit O-xi`t`- (Ga act) "to sweep, brush O": axit'gw "is sweeping it"
PA *O-zi:d (motion) "to pour, spread O"
This root merged with *zEd in AB.
Tsuut'ina ..zi(d-)/zi(d-) "to spread O (sand, a mass)"
Navajo O-zi:d/zi:d (motion) "pour O (liquid, sand); rake O (sand, dirt)"

PAET ~*xye()d "to extend or to be configured (?)"
Tlingit Op-de` xa'd (ga state) "for one to stick out or hang from Op":
  7a'dé: ñaxád "it sticks out/hangs there"
Tlingit MANNER ka-xa'd- (ga state) "to be shaped (so)": yé' ka'xád "it is shaped so"
Eyak sid (7i-stative impf.) "for several to extend": 7u:-tsh' 7i:sid "(roads) reach there"
  7u:-tsh' "3-towards", i.e. "to there"

PA (A) *L-zE{n}Exy > *L-ziN:xy (A-state): *hELsiN:xy "it is numb"
Chipewyan i-L-dhum/dhùN (transition): iLthùN "it got numb"
Navajo i:-L-ziih/zi (transition): yiisii' or (emphatic) yiixiíi' "(body part) has gone numb,
'fallen asleep"
Tsuut'ina ..zi: [ziy] "to be numb" (Note zero classifier.)
Tlingit NEG u-xwádzh-g (ga state): tLè:L uxwádzhg "(body part) is paralyzed"
This set has an obvious problem: the Tlingit form is lexically negative,
and so logically means "(body part) is not responsive to sensation", so
xwádzh-g should mean "responsive to sensation", the opposite of "numb".

PAET ~*xye()L "evening", with instrumental noun suffix *-L
Eyak se:L "evening"; L-se(L) (event): GELse'L "it is becoming evening"
Tlingit xa`na` "evening", with instrumental noun suffix -(n)a`

Somehow related seems to be
Tlingit (S) xi(`)=, (N) xe(`)= (incorp.) "dusk" in
  xi/e(`)=7a`d* (event): xi`wa7ád, xe`wa7ád "it became dusk; darkness fell"
The above cognate set depends crucially on the coda sonorantization hypothesis, which explains the progressive suffix /-n/ and the /-n/ of the instrumental noun suffix /-(n)ə/ as being due to sonorantization of PAET *-L, which functions both as progressive suffix and instrumental noun suffix in PA and Eyak. Specifically, Pre-Tlingit *-L sonorantized to *-l > Tlingit /-n/. Unfortunately, there is little evidence for this particular correspondence other than these two suffixes.

In some cases we find Eyak sh (rather than expected *s) corresponding to Tlingit x. In some cases this may be due to a very ancient classifier-stem contraction confined to Eyak: PAET *O-s-xy... or *O-s-s... > Eyak O-sh...

Eyak O-she~ (act): shEshehL "killed it"
    Compare Eyak sEsiNh (act): sEsiNhL "died"

This could explain the Eyak onset sh in the following:

PAET ~*O-s-xyi(t)' "to scrape O (inner bark, cambium)"
Tlingit O-L-xi't'~ (O/na act) "id.": 7aLi'xt' "is scraping it (cambium, e.g. off hemlock)"
Eyak O-she:t' "to scrape O (inner bark, cambium)"

PAET ~*O-s-xyi(t)L' ~"to erase, remove O"
Tlingit O-ka-(L-)xi'L'~ (act): 7a'X 7akaxi'L', 7a'X 7agLaxi'L' "is rubbing it off, erasing it"
Eyak O-sha'tL' (act) "to sweep O (removing O from something ": 7Esha'tL' "sweep it!");

2.b. Onset *gy, Tlingit g, PAE *dz > PA *z

PAET ~*(s-D-)gyind (motion) "for one animate to fall or to undergo an experience"
Tlingit O-s-D-gi'd~ (motion) "for O (one animate) to fall": wudzigi't "fell"
PA *zEd (motion) "for one animate to fall" (this meaning kept only in Oregon PCA); "for one animate to undergo an experience involving the passage of time"
Tututni sEd (motion) "to fall";
    Tututni na=D-sEd (gh-act) "to fall down (again)": naghEdsEd "fell down"
PA *dEne: yî:ghEñzEd "reached manhood",
    Ahtna dene: yighized "became a rich man",
    Carrier dEne=yinzEd "reached manhood",
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 11

originally literally "fell (*zEd) into (*--yî:=(gh)) [being] a man (*dEne:)

Note especially the shared idiom:

Tlingit ke`=O-s-D-gi'd~ (event) "for O to wake up": ke`=wdzigíd "woke up";
causative ke`=O-s-gi'd~ (event) ke`=7awsigígí "woke O up"
with ke`= "up"
PA *tshr'e:=zEd (n-mom.) "to wake up": *tshr'e:=nEnzEd "woke up";
causative *tshr'e:=O-L-zEd (n-mom.): *. *tshr'e:=yÊnEnëLsEd "woke O up"
with *tshr'e:=(n) "outside"

For the reconstruction with a PAET coda cluster in ~*gyind, compare the
following themes with PA stems *zEd and *zEn, which suggest that PA *zEd <
earlier *(d)zEn-d. This would then be another instance of deletion of Pre-PA *nd
> PA *d in coda position after a reduced vowel; see further (1g).

PA *yEni:=zEd (motion) "for one to think", lit. "for one's mind (*yEni:) to 'fall'
(*zEd) or undergo experience"
PA *MANNER/COMP yE=nE-(i:-)zEn (irreg. A-stative) "to think (so); to want
(to)": *7a:=yEni:zEn "thinks so" (where *yE=nE-(i:-) < *yEni:=)

PAET ~*MOUTH=D-gya(ŋ)n'k'y (act) "plead, implore, beg, pray"
Eyak dE-D-dzaN:ts' (act) " plead, implore, beg, pray": dEdEdzaN:ts' "plead (e.g. with
God)!

Tlingit sh=ká-x'X'e-D-ga'x'~ (act): sh ká'X'adagá'x' "is praying"
related to O-D-ga'x'~ (event): wudigá'x' "is bothered by, tired of noise, talking"
and causative O-s-ga'x'~ (event): 7awsigá'x' "(noise or maker of noise) bothers O,
irritates O"

PAET ~*gyu: "good, pleasant"

Tlingit s-gu: (state): sigú: "it's pleasant, brings joy"; sagú "joy"
Eyak k'u-dzu: "good"

PA *zhu: (state) "to be good", although similar, is probably unrelated.

PAET ~*O-gyo(n)G (motion) "to push O end forward, poke O (as a stick)"
Tlingit O-gu`Gw~ (motion) "to move O end forward, push O, poke O (stick)"
Tlingit O-s-gu`Gw~ (motion) "to throw O (as a spear) end forward"
Tlingit O-ka-gu`Gw~ (motion) "to throw O (as a stick) end forward";
O-ka-gu`Gw~ (act): du ji'de: 7akagú:Gw yá: chá:dl "is pushing halibut to him"
Tlingit O-ka-s-gu`Gw~ (act) "to drop O (anchor)": shayé:na`hí:nde`kawdudzigúGw
"they dropped anchor" (i.e. pushed the anchor overboard)
Eyak 7Ed-L-D-dza(N)hG (motion): 7EdGELEdzaHL "you're walking with a cane;
you're pushing yourself along (e.g. on a sled along ice)"
Eyak 7Ed-L-D-dziNhG (motion): 7EdGELEdziNhGL "you're poling yourself along in a
boat"
The different stem vowels in the above Eyak themes could be historically attributable to vowel gradation.

The following assumes the sonorantization of coda *xw to Pre-Tlingit *w.

PAET ~*O-gyux (motion) "poke, stab O"
~*O-s-gyux (motion) "move or alter O by poking"
Eyak O-dzux (motion) "stab, pierce, spear, poke O"
O-L-dzuz "poke O out of position"
Tlingit O-s-gu~: (motion) "poke, stab O" < Pre-Tlingit ~*O-s-guw

The rhyme of the following potential cognate set is problematic.

Tlingit gu’dl "bump, hump" and gu’dzh "hill"
PA dzEL "mountain"

2.c. Onset *ky, Tlingit k, PAE *ts

PAET ~*kyi(t)L' "ashes"
Tlingit kéL'-t"ashes"; O-sh-ke'L~ (act) "to make ash of O"
Eyak tsiN'tL'-g "ashes"
PA *tsi:tL' ~ *tsi:ts' ~ *tsi:t' "hot coals, embers"

PAET ~*--kyo:n "hem, hanging end (of garment)"
Tlingit --kú:n "hem (of coat, shirt)"
PA *tsa:n "breechcloth"
Eyak dE-tsiN'-G (state) "be naked": di:tsiN'G "is naked", with privative-G, could also be related.

PAET ~ *O-s-ko:ng "see O"
Tlingit O-s-ku~: (event): 7awsikú: "knows O; came to know, recognized O"
PA *O-í-L-tsa:ñ (transition) "see, catch sight of O": yí:Ltsa:ñ "saw O"
Eyak O-(u)'I-E-L-tsa~ (perf. state, event): xu'liLitsahL'Nh "is staring at me, looking at me piercingly" (IE- "face")
Eyak O-(u)'I-L-D-tsa~ O-L-D-tsa~ (event) "O becomes visible; O appears, seems, looks (so)" : 7u'sLitsahL "it became visible"
also Eyak O-L-D-tsa~ (event) "O becomes visible"

PAET ~*L-kyo()x "be(come) dry"
Tlingit ka-L-ku`xw~ (event): 7a kát kawLikúxw "(container) has gone dry"
7i`X kawLikúxw "the oil has drained out"
PA (SP) *L-tsâ:y (state): *(ghE)nELtsâ:y "it is dry"
Navajo yiLtsaii "it is dry, dessicated, withered"
Hupa niLtsa:y "it is dry, dried up"
PA *na:=L-D-tsâ:y (gh-act): *na:ghELtsâ:y "it dried (up), became dessicated"
Causative:
PAET ~ *O-s-kyo()x (act) "dry O"
Tlingit O-ka-s-ku'wx~ (act) "bail O": 7agsaku'x "is bailing it out"
PA *O-L-ťsâ:y (gh-act) "to dry O" (often with *na:=): (na:=)yELtsa:xy "is drying it"
Hupa O-L-ťsa:y' (s-act): k'yiwhtsay' "I am drying (deerhide, salmon), seasoning (acorns, wood)"

The preceding pair of etymologies deserve some comment. First, note that what we reconstruct here as PA *tśâ:y has the perf. stem *tśâ:y and the impf.-opt. stem *ťsâ:xy in most Athabascan, but the PCA languages show the roots *ťsâ:y and *ťsâ:y'. Based on the Tlingit cognate, it would seem that the latter are innovative, and that PA *ťsâ:y < Pre-PA ~ *ťsâ:'x.

Second, this appears to be a case where Tlingit has preserved the contrast between the original PAET *L- and *s- classifiers. The second theme is an ordinary causative with Tlingit O-s-, PA *O-L-. The first theme is more interesting. Athabascan has very few intransitive stative verbs with *L- classifier; *(ghE)nELtśâ:y "it is dry" above (attested only in SP) is one of them. Some of them take an unusual gh-stative in most Athabascan, but appear as plain statives in P (and sometimes S); another example is *(ghE)-nELgyEd "it is rotten". Others take s-statives in some languages but plain statives in P (and S), e.g. (AB) *sELtshr'El, (P) *nELtshr'El "it is wet". At any rate, the L- classifier in these verbs obviously has nothing to do with valence. It seems rather to refer to a natural process eventually resulting in a state, such as drying out, getting wet, rotting. We may compare also Tlingit wuLi's'ix "(meat or fish) is rotten (still firm but smelly)", wuLiX'wán "(wood) is rotten and powdery". Tlingit may thus provide evidence that this particular type of non-valentizing classifier was PAET *L- rather than *s-.

Tlingit 7a-ki'd~ (act) "to snore": 7aki:d "is snoring"
Eyak tsu'd ~ tsuhd (event) "to sleep": sEtsu'/hdLiNh "fell asleep, slept"
Eyak tsu'd ~ tsuhd "sleep"

Tlingit =kéxw-gw "light, fluffy"
Eyak (ya:-)tsidz-g "thin"

Compare also Eyak (ya:-)dzhidzh-g "thin" [CHECK, not in ED]

Tlingit ka-ki's'~ (event): ka'wakis' "the fire went out"
PA *nE-tsEz ~ *nE-tsAz (s-act): *nè:ztsEz~tsAz "the fire went out"

2.d. Onset *ky, Tlingit sh, PAE *ts

There appears to have been a split in the Tlingit reflex of PAET onset *ky. In (c) we have seen an impressive number of cognate sets where PAET *ky yields unpalatalized Tlingit k, but below we will see an equally impressive number where PAET *ky yields Tlingit sh, a garden variety result of palatalization. But I cannot as yet ascertain the prehistoric phonological environment(s) that conditioned this palatalization that yielded Tlingit sh. We can merely note that most of these etyma begin with PAET *kyi or *kye.
The most productive member of this correspondence set is

PAET ~*--kye/i(:)ng "head"
Tlingit --shá "head"
PA --tsi' "head"
Eyak tsN'-dE- "neck" (tsN'- originally incorporate, with dE- gender)

Especially interesting are compound forms of "head" ending with a nasal in Tlingit and Carrier:

Tlingit --shan-tú "inside of head" (--tú "inside")
   Tlingit shanguke'dí:, a clan from the place named (N) shan-gu-ká, (S) shangwka might be another example, but this is purely conjecture.

Carrier --ts_inghai', Dena'ina (I) --tsinghun "brains", elsewhere PA *--tsi:-gha:ñ'
Carrier --ts_inz_Ez_ "scalp", elsewhere PA *--tsi:-zÉts' or *--tsi:-zÉs{d}
Carrier --ts_ints_En "skull", elsewhere PA *--tsi:--ts'En'

The nasal does not occur in the following compound:

PAET ~*kye/i(:)ng'+Xa()w "hair of the head", lit. "head+hair"
PA *tsi:-gha:, poss. *--tsi:-gha' "id." > Carrier --ts_igha'
Tlingit sha-Xa'w, poss. --sha-Xa'wú: "id."

A related etymon seems to be

PAET ~*kyi(:)ng
Tlingit (di-)kí: "up above" and (di-)kín-de' "upwards"

Tlingit ki: ~ kín- is no doubt also related to "head"; see further PAET ~*ŋa(:)xy-kyi(:)ng
> Tlingit 7ix-ki: under (f). For the semantics cf. Eyak --lE-tsiN'-d "above (tsiN') the head (lE-) of". Note also the nasal in kin-de' "upwards" like that in --shan-tú "inside of head". I cannot explain why PAET *ky becomes Tlingit sh in the case of "head" but Tlingit k in the case of "up above", other than to suggest that the root vowel may have had different ablaut grades in PAET.

The following also seems related, but with a suffix ~*--w:

PAET ~*kyi:w "ahead of, before, in front of"
PA *--tse: "id."
Tlingit --shú "end; (sitting (down)) to (food, work) [< *(sitting) before (food, work)]"
   7ad=Xá shú:-d 7á: "is sitting 'before food', i.e. sitting to eat"

PAET ~*kyi:w(-C) "first"
PA *tse:-(d) "first, ahead", *tse:--d:i: "first one, elder"
Tlingit shú:g-u= (followed by a possessed noun) "first": shú:gu=7a’yí: "the first one"
The reflexes of the PAET rhyme *...i:w posited here mirrors that of roots beginning with *Cwi(:); see section 1. In Tlingit, the coda w assimilates the vowel to u. In Athabascan, however, the presumed coda *w first dissimilates the preceding vowel from *i: to *e: and then disappears. Thus

PAET ~*kyi:w > Pre-PA *tse:w > PA *tse:
PAET ~*kyi:w > Pre-Tl ~*shi:w > ~*shú: > Tlingit shú(-)

The following, if valid, yields yet another vowel correspondence, one I cannot reconstruct.

Tlingit gu-shé "I don't know": =gwshé "I wonder", also in
gu7a'=-L=gwshé (with prohibitive/optative impf. or perf.) "I hope"
Ahtna (CLW) gyutse ~ gyitse, (Mentasta) gyetse (with optative) "I hope"
  Compare Dena'ina tsadi "I hope, I wish" ?< PA *tse:-d-i: (cf. PA *tse:(-d) "first, ahead")
  Compare also Deg Hinag 7Etthe' "I hope; if it's OK"; 7Etthe "one should"

Other comparisons:

PAET ~*kya(y) "rock, stone"
Tlingit sha: "mountain"
PAE *tsay "stone, rock"
Eyak tsa: "stone, rock"
PA *tse: "stone, rock"

PAET ~*yE-kye:y "to bark"; ~*O-kye:y "to bark at O"
Tlingit 7a-sha~: (act) "to bark"; 7asha: "is barking";
  O-sha~: (act): Xad=shá: "is barking at me"
PA *yE-tse:[y] (gh-act) "to bark": *yEtse: "is barking"

  Eyak 7i-kahL (act) "to bark" might also be related, but there are obvious phonological problems. Moreover, the Eyak root kahL looks suspiciously like Tlingit ke'dl "dog", which looks like it could be from PAET ~*kyey-L "barker". It is possible that all these forms are somehow related, and as in the case of "head" and "above", different PAET ablaut forms are involved.

PAET ~*kye/i(y) "blood"
Tlingit shé, (Northern) shí "blood"
PA *qU-tse: "menstrual blood", incorp. *tse:=

PAET ~*kyi():y "limb, knot", with a problematic vowel correspondence.
Tlingit shí:ŷ "limb, knot"
Eyak tsiN:(y) "limb, branch, knot"
PA *tsu: "limb, branch"; cf. Alaskan *--zu:-kyEne' "limb, branch, knot"
  I cannot explain the PA vowel here.
Recent advances in AET comparison

Jeff Leer, ANLC, Draft of 1/28/2008, p. 16

PAET ~*kyi(:)ng "song"; also with indef. non-human object (possessor):
   Tlingit 7ad=, Eyak k'u-
   Tlingit shi "song"; 7ad=shi "song, singing, music"
   Eyak tsiN(y), tsiNh "song"; k'u-tsiNh "song, music"; gerund k'u-tsiNh:l "singing"

PAET ~*O-kyi(:)ng "to sing O"; with indef. non-human object: "to sing"
   Tlingit O-shi~ "to sing O": 7ashi "is singing it"; 7ad=shi "is singing"
   O-tsiN~ "sing O": tsiNhiNh "is singing it", k'utsiNhiNh "is singing"

PAET ~*kyo(:) "undergo pangs (of pain, starvation, death)"
   Tlingit O-ka-shu~ (na event): ka'washu' "O is tormented (as by constant pain), is
   intoxicated (as from alcohol)"
   PA *dâ:=tsa: (s-act): dâ:=tsâ:X "(one) is dying", dâ:=zEtsa:n "(one) died"
   The proclitic *dâ:= very likely comes from incorporated *da:n' ~ *dAñ' "famine",
   in which case the original meaning of this PA idiom could have been "undergo
   the pangs of starving (to death)".

Tlingit sha`yá:L "hawk", possibly < *sha=!ya:L "hawk=MODIFIER"
PA *k'yE-tsa: "hawk"

2.e. Onset *k'y, Tlingit x' or k', PAE *ts'

PAET ~*--k'yaw' "crosspiece, thwart"
   Tlingit --yaXa-k'a:w-u` "crosspiece (of canoe, snowshoe)"
   --yaXa- is not obviously analyzable, but perhaps comparable further with IT
   --yaX-7a-dú:x'u` "lashing along the inner edge of the frame (of snowshoe)"
PA *--t'sa' "crosspiece (of snowshoe, sled, canoe), thwart (of canoe)"

PAET ~*s-(D-)k'yin()d (motion) ~"fall over"
   Tlingit sha-s-x'i`d~ (motion): ke'=shawsix'íd "tree has fallen uprooted"
   (sha- "head" refers to a tophheavy object)
   Eyak L-ts'iN't' "to sink, settle; to flop (of a fish)": yEX GELts'iN't'L "it's sinking, settling"
PA *L-D-ts'Ed "to fall (of one thing)": *nâ:=ghElts'Ed "it fell down"

PAET ~*k'ya/e()q'w "adhesive" or the like
   Tlingit k'u'X'w "pitch"
   Eyak ts'a'q' "soft feces, diarrhea"
PA *ts'e:q' "glue"

PAET ~*k'ye/i:- or ~*k'yey- "straight"
   Tlingit xé:-Ga` "true, truly"
PA *ts'i:- "straight (in a certain direction)" (used with directionals)

PAET ~*k'y...s "overflow" or the like
   Tlingit x'a's "waterfall"
PA *ts'EñEs ~ *ts'Ez "aufeis, frozen overflow, thin fresh ice"
PAET ~*--...k'yi(t)L' (or the like) "occiput, nape of neck"
Tlingit --La-k'i'tsh' "id."
PA *--ts'ÉtL' "id."

PAET ~*...k'yi(t)L'~wi: "bird sp.", lit. "nape=white"
Tlingit (Tongass) La-k'i'tsh'-wu, (N) La-k'i'tsh'-wú "scoter duck", lit. "nape-white"
PA (A) *ts'ÉtL'E-we: ~ *ts'Él-we: "arctic loon", lit. "nape-white"

The coda correspondence between Tlingit and PA is problematic, but the semantic match is perfect. Moreover, only very rarely can one reconstruct whole compounds shared by Athabascan-Eyak and Tlingit. One prime example is "hair of the head" cited above; another is this bird name. For the Tlingit prefix La-, see 6(a).

Eyak LE-k'ush "grebe" and sE-L-k'ush-L "duck sp." look similar to Tlingit La-k'i'tsh'-wú "scoter", but lack any trace of PAET *=wi: "white".

### CODA CORRESPONDENCES

<table>
<thead>
<tr>
<th>PAET</th>
<th>Tlingit</th>
<th>PAE</th>
<th>PA</th>
<th>Eyak</th>
</tr>
</thead>
<tbody>
<tr>
<td>gy</td>
<td>x</td>
<td>dz</td>
<td>s</td>
<td>dz</td>
</tr>
<tr>
<td>gy</td>
<td>g(w)</td>
<td>dz</td>
<td>dz</td>
<td>dz</td>
</tr>
<tr>
<td>k'y</td>
<td>x'</td>
<td>ts'</td>
<td>ts'</td>
<td></td>
</tr>
</tbody>
</table>

2.f. Coda *gy ~ *xy, Tlingit x, PAE *dz ~ *s

The most important example of this variation is "ahead", which shows variation between the original coda PAET *gy and the spirantized form *xy before the locative suffix *-d (see further Leer 1989, esp. pp.603, 622).

PAET ~*ňa:gy "ahead; out on the water";
~*ň(a:)xy-d "(located) ahead, out on the water"
Tlingit 7i:x "downriver, south" ?< *7i:x-d ?< *ya:x-d;
Tlingit 7i-x-de` "(toward) downriver"
Eyak --lahdz, spirantized suffixed --lahs-d "in front of; out to sea from, south of",
XE-lahs-d "out to sea"
Eyak 7iN:dzi' "in front of boat" (Note the resemblance to Tlingit 7i:x)
PA *-ñEs[d]-e' "(toward) ahead, in front; out on the water"
PA final *[d] is inferred from the failure of *s to voice intervocally.

A compound based on the above is found in Tlingit and perhaps also in Athabascan.
PAET ~*ña(:)xy-kye(:)ng
Tlingit 7ix-ki: "downriver, south"; 7ix-ki:-de' "southward"

PA *na: = tse: "first, ahead"

The contrast between original *n and *ñ is lost in proclitics; the PA form has apparently been reinterpreted as *na: = iterative plus stem *tse:, which matches Tlingit kí:

Finally, a very interesting kin term, apparently originally referring to a younger sibling of some sort, appears to be based on this "ahead" directional. (Cross-linguistically, the younger are sometimes said to be "ahead" of the elder, even though the elder are usually said to be "before" the younger. I wonder if anyone has written anything about this.)

PAET ~*--ñagy-DIMIN "younger sibling (?)"
Tlingit --7i'k' (T --7i'k', S --7i:k', N --7i:k') "younger sibling of same sex"

?< *--7ig-k', with substitution of glottal stigma for *g (-k' dimin.)

Eyak --iN:dz-kih "brother (of woman)" (-kih dimin.)

In Leer 1989 (603) I suggest a typological comparison between this and the pair Tlingit --dla`k' "sister (of man)"; Eyak --tsa'-kih "older sister (of woman)". This last comparison is phonologically most odd, but nonetheless quite tempting given the same onset correspondences in Tlingit --dli`y, Eyak --tse', PA *--tse'n' "flesh, meat". I do not see a way to reconstruct these for PAET without having to admit that PAET clusters of fricative plus aspirated stop can become unaspirated stops in Tlingit. Although I have entertained this hypothesis many times, it is just too ugly for me to take very seriously. Besides, it requires too many dei ex machina: we would apparently have to posit Pre-Tlingit fricative prefixes, e.g. *L- in Pre-Tlingit ~*--L-lya(n)-k'i or ~*--L-tsha(n)-k'i > Tlingit --dla`-k', that have no counterparts in Athabascan-Eyak.

2.g. Coda *gy, Tlingit g(w), PAE *dz

PAET ~*--Xi(')gy "shoulder"
Tlingit --Xi g "upper arm", --Xig-shá "shoulder"
Eyak O-Xe'dz 'shoulder O'
PA (AE, Witsuwit'en) *--GHEdze', (S, Carrier) *--GHUs "shoulder"

The variant *--GHUs may have been suffixed in Pre-PA.

PAET ~*Xa(h)gy "(finger)nails, claws"
Tlingit Xa' gw, --Xa'gù: "id."
Eyak --yE-L-Xahdz-L "id." (with yE- "hand")

Compare Ahtna de-l-gha:dz "is making a scratching, grinding, crunching noise" and Navajo ts'i-ghaz "a scraping-scratching sound"

PAET ~*7e'gy (motion) "to step"
Eyak O-7e'dz (motion) "to touch, affect, act upon O with foot"; with indet. obj.
Eyak 7i-7e'dz (motion) "to move, position one's feet, step": 7iGE7e'dz "take a step!"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 19

PA *7ê:dz (motion): "to move one's foot, step": *yEGHAn=nEñ7ê:dz "stepped through it"
PA *O-7ê:dz (motion): "to touch, nudge, act upon O with foot"

PAET *~nE-(s-)D-7e'gy (motion) "to misstep", with ~*nE-D- "mis-
Carrier O-nE-D-7es/7ez/7Es (motion): "to act wrongly on O with one's foot":
L-ts'e=idi'tez "wrongly cut it by the middle with the foot" (Alaskan Athabascan forms with *nE-D- similar to this Carrier form probably also occur.)
Tlingit ŷa-sh-D-7a'g~ (motion): ŷawdzhi7â'g "staggered (of person or animal, with lack of muscle control, as when wounded); flopped, floundered (of fish))"

This is a rare instance of the survival of PAET ~*nE-D- > PA *nE-D- "mis-" as Tlingit ŷa-D-. (The sonorant correspondence is the same as that of "face").

The Tlingit sh-series classifier presumably reflects palatalized *s-. Palatalization of *s- to sh- might be attributable here to the originally palatalized coda of the root, as it might be attributable to the originally palatalized root onset in Tlingit *sh-D-xi`x~ "to run" < PAET ~*s-D-xyi(x)k'; see (a).

A possibly related theme, curiously lacking the D- element and with an as-yet inexplicable Tlingit coda:

PAET ~*nE-s/L-7e(')gy-g "to limp (?)"
PA (AB) *k'yE-tE-nE-L-7Es-gy (act): *k'yEtEnEL7Esgy "is limping"
with *k'yE- indef. obj. and tE- "off"
Tlingit ŷa-ka-L-7e`s (motion): ŷakawLi7e`s "staggered (as when drunk)"
where ka- could conceivably be related to PA *tE-

In the following, Tlingit has a stop coda but PA has a fricative coda.

PAET ~(s/L-)D-Xe(')gy~Xexy "to shrink back, retract"
Tlingit D-Xa'g~ (event): wudiXág "it shrank, is shrunken"
Tlingit L-D-Xa'g~ (event): wudliXág "(limb) is withered"
Tlingit s-D-Xa'g~ (motion):
7a=tú:de` yu` dziXágg "(snail) keeps retracting into (its shell)"
7ád wudziXágg "(branch, elastic band) lashed/snapped back and hit there"
PA *L-D-GHEz (motion) "start (when startled), flinch, duck, dodge"

2.h. Coda *k'y, Tlingit x', PAE *ts'

PAET ~*t'i()k'y "ice"
Tlingit t'i:x' "ice"
Eyak t'its' "ice"

Tlingit t'i:x'~ (event): 7uwat'ix' "it got frozen by itself"
Tlingit ka-t'i:x'~ (event): ka'wat'ix' "it is hardened, caked together"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 20

PAET ~*(L-)D-t'i()k'y (event) "to freeze, solidify"
Tlingit L-D-t'i'x'~ (event): wudlit'ix' "it froze, is frozen"
Eyak D-t'its' (event?): qa' sdit'its'L "it's frozen"

PAET ~*O-L-t'i()k'y (act) "to freeze O, let O solidify"
Tlingit O-L-t'i'x' (act): 7aLt'ix'X "is freezing it", 7awLit'ix' "froze it"
Eyak O-L-t'its' (act) "to freeze O, make O icy, turn O to ice"

PAET ~*O-s-t'i()k'y (event) "to freeze, solidify O together (into a configuration)"
Tlingit O-sh-t'i'x'~ (event): 7awshit'ix' "held O steady"
Passive: Eyak L-D-t'its' (perf. state and event) "for an object to freeze in such a way that its position or material relation with another object is affected":

7Ew-X 7iLit'its'L "it's frozen to it", qa' sLit'its'L "it froze and came up out"

PAET ~*qwi(:)k'y (motion) "to fall (as of a pole)"
Tlingit ʔa-s-qu'x'w~ (motion): ʔawsiqú'x'w "(tree) fell over"
Tlingit sha-s-qu'x'w~ (motion): shawsiqú'x'w "it fell over (as a pole with something on top)"

The s-classifier in Tlingit is evidently a late addition, referring among other things to a branched object or a long object with something on the end.
PA *q[w]e:ts' (motion): "to fall, move independently (as of a pole, boat)": Ahtna i'ezqc:ts' "a loaded boat left", Chipewyan ts'iy 7eLedéthkedh "canoes meet each other". Chipewyan nághiNk'edh "(a long object) dropped"

The last two sets below apparently involve spirantization. The Tlingit coda ...x seems to be the remnant of an original coda cluster.

Tlingit s'i'x "dust, dirt, scraps, crumbs, trash"
PA *q'Ey=ts':ts'e' (or *=ts':dze') "rotten birch (soft and crumbling)"
Koyukon q'iyh=tl'odlE' "decayed birch wood (soft and crumbling)"
Chipewyan k'EI=th'âdé "decayed birch"

Tlingit L-s'i'x~ (event): wuLis'ix "it is rotten, spoiled (of meat or fish, still firm but smelly)"
Tlingit ka-L-s'i'xw~ (event): (S) kawLis'ixw, (N) kawLis'úxw "it has soured"
Tlingit ka-L-s'i'xw-ú: (state): (S) kaLis'i'xú:, (N) kaLis'u'xú: "it is sour"
Eyak L-t'siya'ts' (event?): ya' sELts'iya'ts'L "it (e.g. meat, food, clothing) got completely rotten or moldy, went to pieces"
Koyukon dE-L-D-tL'odl (gh-act): dELEtL'odl "(rotten birch wood) crumbles" where the Koyukon root tL'odl < PA *ts':ts' or the like.

Now here's the tricky part. The Tlingit onset s' reflects either PAET *tsh' or *ts', so the most probable reconstruction (ignoring the vowels etc.) would be PAET ~*tsh'...k'y. The expected PAE reflex ~*tsh'...ts', which would be uncanonical, was assimilated to *ts'...ts'.

We find further evidence for this hypothesis in
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 21

Eyak 7iN:-L-tsh'iya'k', (Yakutat) 7iN:-L-tsh'iya'k'w-L "rotten fishheads"

Here we see a doublet in Eyak ...ts'i'ya'ts' "completely rotten" vs. ...tsh'iya'k'(w) "rotten (fishheads)". This looks suspiciously like the Tlingit doublet ...s'i`x~ "rotten, spoiled" vs. ...s'i`xw~ "sour". On the basis of this, we might reconstruct a PAET doublet, one with a palatalized coda and one with a rounded coda:

PAET *tsh'...k'y > Eyak ts'iya'ts', Tlingit s'i`x~ (where coda x comes from a cluster)
PAET *tsh'...k'w > Eyak tsh'iya'k'(w), Tlingit s'i`xw~ (where xw comes from a cluster)

Now, however, we have opened up another Pandora's box, namely
Eyak L-tsh'iya'k'(w) (prog. state): GELtsh'iya'k'L "it smarts, burns, stings"
PA L-tsh'i:k'y (s-state): *sELtsh'i:k'y "it smarts, burns, stings"
Eyak L-ts'i:k' (event): sELts'i:k'L "it ulcerated (of untended sore)"

We must also mention Tlingit k'ínk' "aged fishheads", meaning the same as Eyak 7iN:Ltsh'iya'k' "rotten fishheads (a piquant food)"), which if related to the above would have a regular coda correspondence but an odd onset correspondence.

A semantically similar etymon involving spirantization before an obstruent suffix is

Tlingit tL'i`x "trash, debris, dirt"
Eyak tL'its' "dirt, dust"

Compare also Eyak tL'Edzh "slush", tL'Etsh'-g "snot, gelatin" and PA *tL'Êtsh' ~ *tL'Êsh[gy] "mud, goo, slime", as well as the following:

Tlingit qútL'gw "mud" <
Pre-Tl ~*qu-tL'ig(w)

The labialization may be due to very late spread as in the case of
Tlingit --hùnXw, (Carcross) --hùnX "older brother (of man)" <
Pre-Tlingit ~*--hunEX-i, cognate with
PA *--:u:nEgh-e: "older brother".
PA *qU-tLÊsh[gy] "mud"

3. THE AET CLASSIFIER

3.a. Morphological representations of the three classifier components

<table>
<thead>
<tr>
<th>The actual morphemes</th>
<th>Their abbreviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAET *yi- *S- *dE-</td>
<td>*I- *S- *D-</td>
</tr>
<tr>
<td>PAE *(n)i- *L- *dE-</td>
<td>*I- *L- *D-</td>
</tr>
<tr>
<td>PA *(n)E  *L- *dE-</td>
<td>*I- *L- *D-</td>
</tr>
<tr>
<td>E yi- L- dE-</td>
<td>I- L- D-</td>
</tr>
<tr>
<td>T (Portmanteau)</td>
<td>S- D- I-</td>
</tr>
</tbody>
</table>
I reconstruct PAET *S- for the second element because I believe there were more than one such prefix, at least two: *s- and *L-, each evidently with multiple functions. The symbol S- in Tlingit and PAET is therefore a cover label for more than one fricative series: Tlingit s- and L-, PAET *s- and *L- (and conceivably others). Tlingit has kept these series separate (and added a third, sh-), but so much restructuring has gone within Tlingit on that the Tlingit series can no longer be relied upon to reflect the PAET series.

3.b. Phonological forms of the classifiers

3.b.i. Classifiers without I-component

<table>
<thead>
<tr>
<th></th>
<th>S-</th>
<th>D-</th>
<th>S-D-</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAET</td>
<td>*L-</td>
<td>*dE-</td>
<td>*L-dE-</td>
</tr>
<tr>
<td></td>
<td>*s-</td>
<td></td>
<td>*s-dE-</td>
</tr>
<tr>
<td>PAE</td>
<td>*L-</td>
<td>*dE-</td>
<td>*L-E-</td>
</tr>
<tr>
<td>Eyak</td>
<td>L-</td>
<td>dE-</td>
<td>LE-</td>
</tr>
<tr>
<td>Pre-PA</td>
<td>*L-</td>
<td>*dE-</td>
<td>*L-E-</td>
</tr>
<tr>
<td>PA</td>
<td>*L-</td>
<td>*dE-</td>
<td>*L-E-~  *l(E)-</td>
</tr>
<tr>
<td>Pre-Tlingit</td>
<td>*s-/*L-</td>
<td>*dE-</td>
<td>*s-dE-/*L-dE-</td>
</tr>
<tr>
<td>Tlingit</td>
<td>L(a)-</td>
<td>da-</td>
<td>L-</td>
</tr>
<tr>
<td></td>
<td>s(a)-</td>
<td></td>
<td>s-</td>
</tr>
<tr>
<td></td>
<td>sh(a)-</td>
<td></td>
<td>sh-</td>
</tr>
</tbody>
</table>

3.b.ii. Classifiers with I-component

<table>
<thead>
<tr>
<th></th>
<th>I-</th>
<th>I-S-</th>
<th>I-D-</th>
<th>I-S-D-</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAET (stage I)</td>
<td>*yi-</td>
<td>*yi-L-</td>
<td>*yi-dE-</td>
<td>*yi-L-dE-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*yi-s-</td>
<td></td>
<td>*yi-s-dE-</td>
</tr>
<tr>
<td>PAET (stage II)</td>
<td>*yi-</td>
<td>*yi-L-</td>
<td>*yi-di-</td>
<td>*yi-L-di-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*yi-s-</td>
<td></td>
<td>*yi-s-di-</td>
</tr>
<tr>
<td>PAET (stage III)</td>
<td>*yi-</td>
<td>*yi-L-</td>
<td>*di-</td>
<td>*L-di-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*yi-s-</td>
<td></td>
<td>*s-di-</td>
</tr>
<tr>
<td>PAE, Pre-PA</td>
<td>*yi-</td>
<td>*yi-L-</td>
<td>*di-</td>
<td>*L-i-</td>
</tr>
<tr>
<td>Eyak</td>
<td>yi-</td>
<td>yi-L-</td>
<td>di-</td>
<td>Li-</td>
</tr>
<tr>
<td>PA</td>
<td>*ñE-</td>
<td>*ñE-L-</td>
<td>*dE-</td>
<td>*L-E-~l(E)-</td>
</tr>
<tr>
<td>Pre-Tlingit</td>
<td>*yi-</td>
<td>*Li-</td>
<td>*di-</td>
<td>*L-di-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>*si-</td>
<td></td>
<td>*s-di-</td>
</tr>
<tr>
<td>Tlingit</td>
<td>Ya-</td>
<td>Li-si-</td>
<td>di-</td>
<td>dli-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shi-</td>
<td></td>
<td>dzi-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ji-</td>
</tr>
</tbody>
</table>
3.c. Phonological development of the AET classifier

3.c.i. The PAET classifier system

This is meant to be a companion to Krauss 1969 On the Classifiers in the Athapaskan, Eyak, and Tlingit Verb. It takes up where he left off on the analysis of the PAET classifier system. As we will see, however, I have reversed Krauss' presentation of the elements of the PAET classifier. Krauss called them components and presented them in the order d L y (see p. 67) (but he implies the order L d y on p. 54). Here I view them as elements and therefore mark them as prefixes. The analysis presented here depends crucially on the claim that they occurred in the order I- S- D- in PAET, where they are reconstructible as */(yi)-/ */L-/ or */s-/ and */dE-. I use I- to represent the prefix */(yi)-/ because this prefix actually occurred as *yi- word-initially and after a vowel, but as *i- after a consonant. The vowel i is the constant; the preceding y is epenthetic.

In its earliest reconstructible form, the AET classifier consists of three separate components, occurring in the order I-S-D-.

**PAET */(yi)-** perfective/stative prefix (also found in the optative)

The series component: PAET */S-** thematic and valence-increasing prefix. Among its functions are adding a direct object, as in the causative */O-S-**; adding an indirect object, as in PA */Op-E=O-L- 'O in a mutual relationship with Op' (describing a situation where O and Op are mutually affected, e.g. "sew O onto Op") and Tlingit Op-dzh#S- 'with/using Op'; adding an indirect subject, as in the Tlingit causative for transitive verbs Op-#S- 'causing Op to do to O'.

PAET, like Tlingit, may have had more than one such component. Tlingit has three: L-, s-, and sh-; whereas Athabascan and Eyak have only L-. At present, my working hypothesis is that AET had at least two series components: *s-, which formed causatives, and *L-, which denoted mutual interrelationship (and probably had other functions as well). In AE, these two series merged as *L- due to phonological competition with the *s-perfective prefix and in Athabascan with the *s-negative prefix. Both series survived in Tlingit, but there is no longer a discernable difference in function or meaning between them; for example, both s- and L- are used to form causatives.

One must not neglect the fact that quite a few instances of */S- are found in intransitive themes. Athabascanists perhaps justifiably regard PAE */L- as primarily a valence-adding prefix, but when */L- occurs in intransitive themes, we must look elsewhere to explain it. Tlingit S- (i.e. s- ~ L-) is a productive noun-classificatory prefix. In PAE as well, we find clear traces of noun-classificatory use of the */L- classifier:

PA */ta:n, the classificatory verb for a sticklike object or vessel (as a pole, boat)
PA */L-ta:n, the classificatory verb for a bag or its contents.

PA */q[w]e:ts' (motion): "to fall, move independently (as of a pole, boat)"
PA */L-q[w]e:ts' (motion): "to fall, move independently (of a bag or its contents)"
In this pair, *L- refers to a bag or its contents. We note that the Tlingit S- classifier likewise refers to bags and their contents, among other things.

In other cases as well we find an *L- or *s- classifier that seems out of place in an intransitive classificatory theme. Perhaps these, too, were noun-classificatory by origin. Some of the more important examples are

PAET ~*S-7i(ʔ)n, Eyak L-7ya~\textsubscript{–}, Tlingit s-7i`n~, the classificatory verb for food or drink in a vessel
PAE *L-a:ya, PA *la:[y], Eyak L-a~ (cf. Tlingit L-7ad), the classificatory verb for several objects
PA *L-kyú:z, the classificatory verb for a skin, blanket or other sheet

Finally, let us consider the following remarkably ancient and well-preserved pair of intransitive themes:

PAET *te: "to lie, sleep (of one)"
PA *te: (s-stative): *sEte:ŋ "is sleeping"
Eyak te~ (s-stative): sEtehL "is lying down (at rest, awake or asleep)"
Tlingit ta~ (na position) "to sleep (of one)"; ʔa "is sleeping", wu`ta` "went to sleep, slept"

PAET *S-te: "to lie dead, unconscious, incapacitated (of one)"
PA *L-te: (s-stative): *sELte:ŋ "is lying dead, unconscious, incapacitated"
Eyak L-te~ (s-stative): sELtehL "id."
Tlingit s-ta~ (position): satá:n "id."

Both themes have the same transitive motion cotheme:
PAET *O-S-te: (motion), PA *O-L-te:, Eyak O-L-te~\textsubscript{–}, Tlingit O-s-ta~\textsubscript{–} "to carry one O (animate, alive or dead)".

The *L- or *s- classifier certainly seems to have a classificatory function in the second intransitive theme: it refers to a limp body or corpse. (PA and Tlingit further resemble each other in that more than one corpse is referred to generically by the classificatory verb for several objects.)

**PAET** *dE*- thematic and valence-decreasing prefix, indicating reflexive or reciprocal object, indeterminate subject (passive), and in Tlingit also indeterminate object (antipassive). Following Krauss, we call classifiers containing the D- element "vocalic" classifiers.

At some point the classifier gelled as a quasi-portmanteau system containing these three elements. First, vowel assimilation applied from PAET *yi- to a following *dE-, changing it to *di-. Subsequently, PAET *yi- was deleted before *di-. This was possible because its information (the vowel *i) had passed to the following syllable. We will retain Krauss' term "umlaut" to refer to the effects of vowel assimilation that produced the vocalic classifiers *di- and *S-di-. 
PAET *yi-dE- > *yi-di- > *di-
PAET *yi-S-dE- > *yi-S-di- *S-di-

This leaves us with the late PAET classifier system:

*S- *dE- *S-dE-
*yi- *yi-S- *di- *S-di-

3.c.ii. The PAE and Eyak classifier system

The PAE classifier system is derived from the late PAET system above by generalizing
the PAET *S- elements to PAE *L- and applying a cluster-simplification rule: *L-dV- >
*LV- (where V represents *E or *i):

*L- *dE- *LE-
*yi- *yi-L- *di- *Li-

We see precisely such a rule operating millenia later in Alaskan Athabaskan,
whereby the *d of the D- classifier (i.e. PA *dE-) is deleted after a fricative:
PA *s-dE- > LT s-dE-, Koy sE-, Gwich'in shi- (S- 1sg.)
e.g. LT 7EsdEnunh, Koy 7EsEnunh, Gwich'in 7ishiniN; "I am drinking it"
PA *s-dE- > LT th-dE-, Koy LE-, Eastern Gwich'in tha-, Western Gwich'in ho-
(s- perf.)
e.g. LT 7EthdEtEnh, Koy 7ELEtEnh, E. Gwich'in 7athatan, W. Gwich'in 7ohotan
"it is frozen"

The PAE system is perpetuated intact in Eyak:

L- dE- LE-
yi- yi-L- di- Li-

Why did PAET *S-, i.e. *s- or *L-, merge in PAE to *L- alone? A reasonable answer for
this question is that two other prefixes with *s... arose in PA(E), namely the PAE
perfective/stative prefix *s(i)- and the PA non-perfective negative prefix *s(E)-. The
familiar s-perfective of Athabascan and Eyak evidently comes from PAET *xyi-, and
may be cognate with Tlingit wu-/yü-/ sonorantized from Pre-Tlingit *xV-. After PAET
*xyi- > PAE *si-, it would have become very difficult to maintain the contrast between
PAET *s- and *L- classifiers, so the sensible thing to do would be to merge them into a
single series: PAE *L-.

3.c.iii. The PA classifier system

The PA system is altered by two rules. First, short *i merged with *E. Then, by the
intervocalic voicing of fricatives, Pre-PA *L > PA *l intervocalically. This gives the
following PA system:
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 26

\[ *L - *dE - *LE - I.*E - \]
\[ *ñE - *ñE - *dE - *LE - I.*E - \]

(At an indeterminate time, PAE *y > PA *ñ in the I-element.)

Thus PA has eliminated the earlier contrast between *dE- and *di- and between *LE- and *Li-, which we still find intact in Eyak.

3.c.iv. The Tlingit classifier system

We begin with the late PAET system given above:


In Pre-Tlingit, the classifier system took an important step in portmanteau development with the change *yi-S- > *Si-.


Now all prefixes in the second row end with *i. The order of elements in the classifier system is thus significantly restructured at a very early stage of Pre-Tlingit. In place of PAET *I- S- D-, i.e. *I- L/s- D-, we find Tlingit L/s/sh- D- I-. The only loose end to the portmanteau system is now that a morpheme boundary still exists between *S- and following *dE- or *di-.

Several important developments complete the transformation of all Tlingit classifiers into the indivisible portmanteau morphemes we see in modern Tlingit. First, *dE- > *d- in some phonological environment(s), one such environment being after a fricative classifier


A later stage in the development of the Tlingit classifier system is mainly due to a conditional rule of schwa insertion. Beginning evidently in word-initial position and spreading from there to other environments, prosthetic schwa was added to a non-vocalic fricative prefix, as in the classifiers *L- > *L(E)-, *s- > *s(E)- (and probably by now also *sh- > *sh(E)-); and the first person singular Pre-Tlingit *x(w)- > *X(E)-. This development may have mirrored the behavior of the *dE- classifier, which could had remained *dE- in word-initial position but shortened to *d- in some environments. (Perhaps at this stage, too, *yi- > *yE-, which likewise had the variant *y- in some environments. In Tongass Tlingit, this *y- is replaced by fading stigma.) We thus end up with the late Pre-Tlingit system:
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 27

We find one very interesting anachronism where *L- is not vocalized to *LE- as expected. In the tale of the Woman who Suckled the Worm we find Coastal Tlingit du=wá:k'w La-tín "Look at his little face!" (speaking of the baby worm). Corresponding to this, Lucy Wren of Carcross says dzhu=wá:k'w L-tín "Look at his little face!", both in this myth and in general speaking to and about children, also "dzhu=wá:k'w ní" "Look at his little face!" (with ní otherwise unattested). (Outside this one phrase, Lucy Wren has Le-tín which regularly corresponds to Coastal Tlingit La-tín 'look at it!') These lexicalized phrases seem to be isolated survivals from an obsolete dialect of Interior Tlingit. What we now know as Interior Tlingit is a product of near-complete assimilation to Coastal Tlingit.

Subsequently, non-vocalic *d- is deleted in the classifiers *L-d-, *s-d-, and *sh-d-. Elsewhere, *d- is analogically restored to vocalic *dE-. Clusters of fricative plus d are replaced by affricate plain stops in the classifiers *L-di- > dli-, *s-di- > dzi-, and *sh-di- > dzhi-. Finally, *E > a. We thus end up with the modern Tlingit system, at last a fully portmanteau system:

\[
\begin{array}{llll}
\text{Sa-} & \sim & \text{S-} & \text{DZi-} \\
\text{ţi-} & \sim & \text{S} & \text{di-} \\
\end{array}
\]

Here we must consider what *S- means in Tlingit. Tlingit has inherited the two series *s- and *L- from PAET, and added a third, *sh-. But the Tlingit *s- and *L- series have been thoroughly reshuffled. What we find now is a jigsaw puzzle.

First, the Tlingit S- classifier, i.e. s-/L- serves not only to increase the valence of the verb, but is also an important noun-classificatory prefix, referring to complex objects like string, hair, grass, seaweed, pasta, animal meat (a bundle of muscle fibers), branches, trees with branches, arrows (because of the fletching), fishing poles (because of the line), bags, baskets, fish traps, sleds (and cars), and many other things, including the anchor (again apparently because it has a line attached to it). I suspect that this classifier is by origin one or more incorporated noun(s) beginning with *s or *L which came to be used as noun-classificatory prefix(es). Being similar in form with the s/L-causative classifier, this was eventually incorporated into the classifier system.

As a valence-increasing prefix, e.g. in the intransitive causative O-S- "to make O V", the transitive causative Op-x'=S- "to make Op V O", and the instrumental Op-dzh=S- "to V (O) by means of Op", Tlingit S- most frequently appears as s-, except for when L- must be used due to the following cooccurrence restriction rule:

**Of the Tlingit fricative classifier series, only the L-series can occur if the verb stem contains an affricate-series obstruent.**

However, we not infrequently encounter causative and instrumental derivatives with the L- classifier where it is not required by this cooccurrence restriction rule, and we
occasionally encounter causatives with sh-. Even more disturbingly, some roots form semantically differentiated causatives and similar derivatives with both s- and L- or both sh- and L- or both s- and sh- or all three series. It is a real can of worms. A root occurring with all three series was discussed above in (2a):

Tlingit xi`x~ (motion) "to fall, move through space (of one thing)", causative O-s-xi`x~ "to cause one O to fall"

Tlingit shu-xi`x~ (na event) "to become depleted": qudX shu`waxi`x "they are all gone, depleted; they have died off; (supply) is exhausted; (time) is elapsed"
causative O-shu-L-xi`x~ (na event): qudX 7ashuwLixi`x "depleted it, etc."

Tlingit sh-D-xi`x~ (motion) "to run (of one)"; wudzhixi`x "ran", gi`shi`x "run!"

Note the unique classifier-stem onset contraction: /ga:-sh-xi`x/ > gi`shi`x.

Another such root xi`d~ (for which also see 2a), generally referring to poking or plowing with a stick, with both L- and s- series classifiers, as well as sh- in the theme O-ka-sh-xi`d~, imp! stem xid (act): 7agshaxi`d "is writing it, photographing it, (orig.) painting or drawing a design on it (with a brush)"

Both these roots begin with Tlingit x < PAET *xy; this may not be an accident. Sh-series classifiers occur with suspicious frequency before roots beginning with a velar. This raises the possibility that these velars were palatalized in PAET (or in Pre-Tlingit), and the palatalization spread from the velar to the preceding classifier, e.g. *s-xyi... > *sh-xyi... > sh-xi... But in view of the fact that we also find s-xi... and L-xi... as well in Tlingit roots such as the above, we would have to regard these rare instances of sh- classifier as lexicalized survivals of an originally productive palatalization rule, and are left to scratch our heads wondering where and how s-xi.. and L-xi... entered the picture. Examples like these are why I keep saying that we cannot rely on the Tlingit classifier series to reflect the PAET series.

I have postulated that the D- classifier sometimes became *d- in Pre-Tlingit, but then was analogically restored to da-. The reader will naturally ask what evidence there is for this development. I know of one clear case where Pre-Tlingit *d- contracted with the stem onset. As the following comparison shows, the same type of contraction has happened in a few Athabascan languages, e.g. Lower Tanana and the Crossjacket dialect of Koyukon, where we find yudi in place of expected *yud(E)ni.

PA *O-u:-D-ni:/ni' or O-u:-D-ni:/ni' (stat): *yu:dEni: 'thinks, believes (so) of him/her/it; thinks, considers him/her/it (so)'
Aht Lik'ye: yudni: 'thinks it's a dog'
Koy Lik yudni 'thinks it's a dog'
Koy (Crossjacket) Litsh yudi 'thinks it's a dog'
LT Liga yudi 'thinks it's a dog'
Nav ké yô'ni 'is friendly with him' (< 'thinks him (yi-) a friend (ké)'
Tut L?En shudEni 'he believes me' (< 'thinks me (shE-) true (L?En)')
In the course of my investigation of AET, I have found (but have yet to document fully) that many, perhaps most instances of Tlingit stem onset dl, dz, dzh come from contractions of consonant clusters (see section 8). This observation lends support to the hypothesis that *L-di- > dli-, *s-di- > dzi-, and *sh-di- > dzhi-.

The relatively tidy picture of the development of the classifiers in AET presented above is incomplete. I would be remiss not to point out the elephant in the room.

We can reconstruct a number of AET stative verbs beginning with *L-D-, such as

PAET ~*L-D-wo(y) (state): ~*Ldiwo(y) "it is white"
PA *L-D-wa:[y] (state) *Liwa: "it is (off-)white, gray"
Tlingit L-D-wú (ga state): dliwú "it is white"

PAET ~*L-D-Giy (state): ~*LdiGiy "it is bright"
PA *L-D-GAy (state): *LEGAy "it is white"
Tlingit (S) L-Gí:, (N) L-Gé: (ga state): LiGí:, LiGé: "it is shining"

PAET ~*L-D-nik-k(') (state): ~*Ldinik-k(') "it is delicious, sweet"
PA *L-D-nÊxy[k'y] (state): *LEnÊxy[k'y] "it is delicious, sweet"
Tlingit L-núgwdz (ga state): Linúgwdz "it is delicious, sweet"

The last two, seemingly explicity, have Tlingit L- rather than L-D-, yet in all other respects they are cognates as perfect as one can hope to find in AET. One has to wonder whether it is possible (at least in this particular category of verbs) that *L-di-... > *Li- occurred in all branches of AET, not just in Athabascan-Eyak. If so, in some instances, the loss of *d could have occurred already in PAET:

PAET ~*LdiGiy > ~*LiGiy, PA *LEGAy "it is white", Tlingit LiGí:, LiGé:
PAET ~*Ldinik-k(') > ~*Linik-k('), PA *LEnÊxy[k'y], Tlingit Linúgdz

The problem with this hypothesis is, why does Tlingit keep the D- component in L-D-wú (state): dliwú "is white"? Why not *Liwú?!

### 4. Tlingit cluster resolution in verbs of size

At this point we reconsider a problem that has perplexed me for many years: Tlingit stative verbs of size ("big/tall/high/numerous", "long", "wide", "thick", "stout", "heavy" and the extension verbs "far", "deep" and their antonyms), also known as dimensional verbs. To do so, however, we must enter the twilight zone of Tlingit linguistic prehistory.
We will consider three of these verbs, namely those that show a lateral in the positive-size verbs but a sibilant in the negative-size verbs in Tlingit.

In Athabascan and Tlingit, each of the positive-size verbs has an absolute theme (e.g. "to be big") paired with a comparative theme, e.g. "to be (so) big, to be big (relative to something else)". The same was originally true for Eyak, but the system has eroded so badly that we see only traces of the absolutive/comparative distinction. With negative-size verbs, on the other hand, in PAET the absolute/comparative distinction may not have existed, or was of limited use. This is because Tlingit and the Athabascan languages as a rule use the only positive-size verb for comparison. "A is bigger than B" translates "A is big more than B", "A is smaller than B" translates "A is big less than B", and "A is as big as B" translates "A is big like B".

In Eyak "A is smaller than B" translates as "A is small less than B" (Krauss p.c.).

Tlingit negative-size verbs are sometimes comparable with positive-size verbs, whereas in Athabascan-Eyak they are not (CHECK). Only the Tlingit negative-size verbs will be considered here.

**Tlingit and Athabascan comparative forms of verbs of size.**

<table>
<thead>
<tr>
<th>Positive-size</th>
<th>Comparative</th>
<th>Negative-size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Absolutive</strong></td>
<td><strong>Comparative</strong></td>
<td></td>
</tr>
<tr>
<td>&quot;it is heavy&quot;</td>
<td>&quot;it is so heavy&quot;</td>
<td>&quot;it is light&quot;</td>
</tr>
<tr>
<td>PA *nE-da:z</td>
<td>*7a:=nE-L-da:s</td>
<td>~ *7E=ghE-nE-L-da:s</td>
</tr>
<tr>
<td>Eyak yi-L-da:s</td>
<td>(n.a.)</td>
<td></td>
</tr>
<tr>
<td>Tl ÿadáL</td>
<td>yé' ku'dá:L</td>
<td>ku'dá:sk'</td>
</tr>
<tr>
<td>/ýa-daL-ý/</td>
<td>/...k-u-ýa-da:L/</td>
<td>/k-u-ýa-da:s-k'/</td>
</tr>
<tr>
<td>Tl rel. ÿadaLi 7ád</td>
<td>yé' ku'daLi 7ád</td>
<td>[ku'dá:sk'i 7ád]</td>
</tr>
<tr>
<td>&quot;a heavy thing&quot;</td>
<td>&quot;a so-heavy thing&quot;</td>
<td>&quot;a light thing&quot;</td>
</tr>
<tr>
<td>&quot;it is stout/thick&quot;</td>
<td>&quot;it is so stout/thick&quot;</td>
<td>&quot;it is skinny/thin&quot;</td>
</tr>
<tr>
<td>PA *nE-tsá:e</td>
<td>*7a:=nE-L-tsá:s</td>
<td>~ *7E=ghE-nE-L-tsá:s</td>
</tr>
<tr>
<td>Eyak la'q' yi-tsha'sh</td>
<td>&quot;it's thick, coarse&quot;</td>
<td>(n.a.)</td>
</tr>
<tr>
<td>Tl ÿatLe' &quot;it's stout&quot;</td>
<td>yé' ku'tLá: &quot;it's (so) stout&quot;</td>
<td>ku'sá: &quot;it's skinny&quot;</td>
</tr>
<tr>
<td>/ýa-tLé'(w)-ý/</td>
<td>/...k-u-ýa-tLá:(w)/</td>
<td>/k-u-ýa-sa:(w)/</td>
</tr>
<tr>
<td>Tl rel. ÿatLe'wu 7a's</td>
<td>yé' ku'tLawu 7a's</td>
<td>ku'sawu 7á:</td>
</tr>
<tr>
<td>&quot;a stout tree&quot;</td>
<td>&quot;a so-stout tree&quot;</td>
<td>&quot;a skinny lake; Koosawah Lake&quot;</td>
</tr>
<tr>
<td>&quot;it is far&quot;</td>
<td>&quot;it is (so) far&quot;</td>
<td>&quot;it is near&quot;</td>
</tr>
<tr>
<td>PA *nE-zá:d</td>
<td>*7a:=nE-L-sAX[d]</td>
<td>~ *7E=ghE-nE-L-sAX[d]</td>
</tr>
</tbody>
</table>
Eyak (sahd-X "for a long time")
Tl na’Lé: yé’ kuna’Lé: kuna’sé:nk’ /na-ŷa-Le:-ŷ/ /...k-u-na-ŷa-Le:/ /k-u-na-ŷa-se:n-k’/ Tl rel. na’Le’yé yé’ kuna’Le’yé [kuna’sé:nk’i yé] “a far place” "a so-far place" "a nearby place"

For many years I have pondered the mystery of the Tlingit verbs of size and how they could conceivably be related to the AE verbs. I included them as possible evidence for the hypothesis of Tlingit as a portmanteau language. But gradually I have evolved a set of hypotheses that can explain these verbs diachronically within AET, as well as shed light on other facets of the relationship between Tlingit and AE.

First, I stumbled across the idea that the Tlingit positive-size stems with lateral onsets actually reflect the AET comparative verbs with the L-classifier, and the Tlingit negative-size stems actually reflect the AET absolute verbs without the L-classifier. The Tlingit comparative stem Le~’ in yé’ kuna’Lé: "it is so far", in this view, reflects something like PAET *L-sEXd. In other words, PAET *L-s... > Tlingit L. Once this cluster was resolved, it was probably not long before its onset was transferred to the positive-size absolute, thus generalizing the positive-size stem in most cases and further differentiating it from the negative-size stem.

The Tlingit "heavy/light" pair implies an even more radical development: PAET *L-da:s > Pre-Tlingit *L-da:L > Tlingit da:L. First, the stem-final *s was assimilated to the classifier *L-. Then, after the original PAET *L-comparative classifier was partially eliminated by cluster assimilation, it was deleted by analogy elsewhere in Tlingit, so that *L-da:L > da:L. This must have happened anciently, long before the evolution of the vocalized La-/Li- classifier pair we now see in Tlingit. Another factor in the elimination of *L-comparative was competition with the Tlingit s/L-classificatory classifier. In modern Tlingit ſa-dál. refers to most heavy objects, whereas Li-dál. refers for example to seaweed, animal meat, and (apparently by extension of this) to animals and humans. (A third form shi-dál. can also refer to animals and humans.)

PAET ~*'yaX 7E=ŷi-L-da:s "it is so heavy"
Pre-PA *7EX 7E=ní-L-da:s > *7E=XE-ŷi-L-da:s ~ *7EXE=ní-L-da:s or the like
PA (A)*t'E=ghE-ňE-L-da:s
PA (ET) *7a:=ghE-ňE-L-da:s
PA (SP) *7a:=-ň(E)-L-da:s, apparently from earlier *7Egh=ňE-L-da:s

Carrier 7E=l-das is only approximately comparable because, like many Alaskan languages, the D-classifier element has been introduced, perhaps on the analogy of forms like "they are each as heavy as the other".

Note that the original *_X of PAET *’yEX= has been lopped off and incorporated into the template as PA *ghE-. This is but one of the various origins of the PA *ghE-qualifier. (I am writing paper on the origins of PA *ghE-.)
Eyak n.att., expected ['wEX 7i:Lda:s /'wE-X 7i-yi-L-da:s/], where Eyak 'wE-X has a different demonstrative stem from PAET *'yE-X.

Eyak yi-L-da:s "it is heavy" is imported from the comparative. It is identical with the final part of the PAET reconstruction of the comparative.

Because Tlingit yé' ku`dá:L contains the elements k-u-, which cannot be related to anything in PAE, we can consider only the final portion of the PAET verb.

PAET *...yi-L-da:s "it is so heavy"
Pre-Tl ~*...yi-L-da:L >
~*...ỹE-da:L >
Tlingit /...ỹa-da:L/ in yé' ku`dá:L

PAET ~*yEX 7E=yi-L-tsa:xw "it is so stout, thick"
Pre-PA *7EX 7E=ňi-L-tsa:s, etc.
PA (A)*tE=ghE-ňE-L-tsa:s
PA (ET) *7a:=ghE-ňE-L-tsa:s
PA (SP) *7a:=ň(E)-L-tsa:s
Pre-Tl ~*...yi-L-tsa:xw > ~*...ỹE-tLa:w >
Tlingit /...ỹa-tLa:/: in yé' k-u' -tLá: "it is so stout, big around",
relative: yé' ku`tLawu=7a`s "so-stout tree"

Eyak n.att., compare absolute (la'q') yi-tsha'sh 'it's thick, coarse'

In Tlingit we see two developments: onset cluster resolution, whereby *L-ts > *tL, and sonorantization of a stem-final fricative, whereby PAET *xw > Pre-Tl *ghw > *w > Tlingit (w). Because we do not know in what relative order these occurred, we cannot correlate these two developments diachronically.

PAET *...L-tsa:xw
Pre-Tl *...tLa:ghw > *...tLa:w >
Tlingit ...tLá:, rel. ...tLawu

Here we can pause to consider what happened when a sonorant suffix was added to a stem with sonorant coda in Pre-Tlingit. Let us compare the absolute forms, where the stative suffix /-ỹ/ was added to the stem, causing reduction of the vowel in Tlingit closed roots.

Late Pre-Tl *ỹE-daL-ỹ >
Tlingit *ỹa-daL "it is heavy", rel. ỹadaLi=

Late Pre-Tl *ỹE-tLaw-ỹ > (metath.) *...tLaỹw > *...tLe`w >
Tlingit ỹa-tLe` "it is stout", rel. ỹatLe`w永遠=

The PAET stem *tsa:xw necessary to account for the Tlingit reflex with w can also clarify the irregular reflexes in PAE. Supposing PAET *tsa:xw > PAE ~*tsa:sh(w), we
can see that the onset has assimilated to the coda in PA *tsa:s, and vice versa in Eyak tsha'\textshash{ts}h~tshahsh.

I cannot account for the fact that the stem of the Tlingit negative-size verb ku`sá: "it is skinny" begins with s rather than expected *ts. Yet root-final w is found in the relative form ku`sawu= "skinny" as it is in yé' ku'tlawu= "so-stout". This is such a striking irregularity that one would expect the two stems to have the same origin. It is not out of the question, however, that the stem of "skinny" has altogether a different origin, and that it borrowed *w from its positive-size counterpart.

PAET *'yaX 7E=yi-L-sEXd "it is so far"
Pre-PA *7EX 7E=ńi-L-sAXd, etc.
PA (A)*t'E=ghE-ńE-L-sAX[d]
PA (ET) *7a:=ghE-ńE-L-sAX[d]
PA (SP) *7a:=ń(En)-L-sAX[d]
Tlingit (S) Li~`, (N) Le~` (extension) "to be far": na`Lí:, na`Lé: "it is far", comparative yé' kuna`Lí:, yé' kuna`Lé: "it is so far",

The stem of Eyak sahd-X "for a long time" seems directly derivable from PAET *sEXd.

In Tlingit we see the same two developments as in "it is stout": onset cluster resolution, whereby *L-s- > *L, and the sonorantization of a stem-final fricative, whereby *X > *gh > *y.

PAET *...L-sEXd
Pre-Tl *...L-sEX >

Lvé >

Lvé ~ *...Láy >

Lvé ~ Le (the basic grade of the root)

Tlingit yé' (Tongass ye', elsewhere yé:) "thus, so" could likewise be derived as follows:

PAET *yaX > Pre-Tl *yagh > *yáy > *yé (glottal metath.) Tlingit yé'

But we digress into the realm of sonorantization of fricatives.

5. CODA RESOLUTION IN TLINGIT VERBS OF NEGATIVE SIZE

As long as we are talking Tlingit verbs of size, we might as well take a look at coda resolution in verb of negative size. Some such verbs take the diminutive suffix -k', and others show traces of Pre-Tlingit *-k'(y).

<table>
<thead>
<tr>
<th>Positive-size comparative</th>
<th>Negative-size comparative</th>
<th>Negative-size absolute</th>
</tr>
</thead>
<tbody>
<tr>
<td>yé' ku`gé: (big)</td>
<td>yé' gu`gé:n-k' (small)</td>
<td>--</td>
</tr>
<tr>
<td>yé' kuna`Lé: (far)</td>
<td>n.a.</td>
<td>kuna`sé:n-k' (near)</td>
</tr>
<tr>
<td>yé' ku`wá:t' (long)</td>
<td>yé' gu`wá:tL' (short)</td>
<td>ku`wá:tsh' (too short)</td>
</tr>
</tbody>
</table>
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 34

(yé' ſaku'gé: (abundant)) -- ſaku'7aż:tsh', ſaku'7aż:L', ſaku'7aż:ts' (insufficient)

In the case of "long" (stem ſa't'~), we see some very interesting possibilities:

Pre-Tl ~*nga:t'-k'(y) > *nga:tsh' > /yǎ:tsh'/ in ku'wá:tsh' "it's too short"

versus the original negative-size comparative

Pre-Tl ~*L-nga:t'-k'(y) > *L-nga:tL' > /yǎ:tL'/ in yé' gu'wá:tL' "it's short"

6. Pre-Tlingit L-assimilation

6.a. PAET *(S)s..., PAE *s..., Tlingit L...

The reconstruction PAET *(S)s is actually a pseudocluster and should be interpreted as a unit. It means that PAE shows the reflex of *s, but Tlingit appears to show the reflex of the Pre-Tlingit consonant cluster *Ls, the same development we saw above in "to be far": Pre-Tlingit *L-s... > Tlingit L... The single most important reconstruction of this type is PAET *(S)sa: "mouth" and its derivative *(S)sa-ya- "throat", lit. "mouth-inside". The problem with it is that there is no obvious motivation for Tlingit L to appear instead of the *s we see in PAET. We see no evidence for a hypothetical Pre-Tlingit prefix *L- whatsoever. Therefore we call PAET *(S)s a pseudocluster, meaning that it is merely a convenient notation for the correspondence.

PAET *(S)s:, *--(S)sa' "mouth"
PA *sa:= (incorp.), *--za' "mouth"

BUT NB: Car --z_e "mouth", Chip --dhe "interior of mouth"
Eyak --sa' "mouth"
Tlingit (NS) --La- in --La-ká "inside of mouth"
Tlingit (Tong) --La'- in --La'-ka "inside of mouth"

PAET *(S)sa-ya- "throat"
PAE *--sa-ya-q'(Ed) "throat"
PA *--ze:q'e' "throat" alongside (AS) *tE-ze:q'
Eyak --sa:-q'--d "palate"

Alongside the PAE denominal verb *--sayiq' "to belch", PA (AS) *tE-ze:q', Carrier tE-L-dza' [sic], Eyak (dE-)L-siyEq'~/siyaq'~. Tlingit 7a-L-D-tsa` (act): 7aLtsa` "is belching" could easily be a borrowing from a B.C. Athabascan source like Carrier, showing the aspiration of Athabascan dz to Tlingit ts that we see in other Athabascan loanwords.
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 35

Tlingit --Le`- < Pre-Tlingit ~ *La-ÿ(i)- or *La-ÿa-
Tlingit --Le`-yu`wú: "esophagus", with --yu`wú: "stomach"
Tlingit --Le`-ka-chú:X'u` "windpipe"

Tlingit --Le`-tú:X "throat"
PA (A) *--ze:-t/da:-ghe: "surface of throat"
Koyukon --la-doghE "front surface of neck, surface of throat; beard on neck (of moose)"
LT --dha-toga' "beard on neck (of moose)"

The resemblance between the Tlingit and LT forms is striking; moreover, we have another case where PA *-ghe: corresponds to Tlingit -X, namely PA *--wâN:-ghe; Tlingit -yà`X "shore, bank (of water)"). Finally we have

Tlingit --La-ÿa-t`ágw "depression/fold between throat and neck sinew", with --ÿa-t`ágw "temple"

It seems that this must be a distinct group from Tlingit --sé "neck", PA *-ze:-ne: "around the neck/collar". The PA form looks just like the Tlingit perlative --sé:-nàX "around the neck of" as in 7aX=sé:nàX ÿa`washí: "put his/her arm(s) around my neck". Tlingit --sé or --sa-tú "voice", on the other hand, could be related to the PA incorporate *tse:= "voice" and apparently also the PA qualifier prefix *s/ze- in *O-s/ze-L-ts'a:ñ "hear O" < earlier *"hear O's voice". CHECK

One other potential correspondence set stands out:

PA (B) *zEd "to soar"; caus. PA (A) *O-L-zEd "steer O (boat)"
Tlingit Li`d~ "to glide, slide; to paddle full speed", caus. O-L-Li`d~ "to slide O"

Perhaps Tlingit Li`d~ < ~*O-L-si()d, became intransitive, and then developed a secondary causative. In that case we could reconstruct PAET ~*O-s-si()d. But we have no proof for such a hypothesis.

6.b. PAET *(S)-ts..., PA *ts... ~ *s/z..., Eyak ts..., Tlingit tL...
This occurs in one exuberant family of words.

PAET *(S-)tsa()g-e() "of old, long ago"
PA *sa:g ye: ~ *sa:g ye: "of old, long ago"
Gal sai-daN' "story" < *"long ago-in the past"

PA (AS) =tsa:gy(...) ~ =sa:gy(...) "old, worn out"
Deg =tthog
Koy =tLogEy i, =tLogiyE, =Logi, =lok
Gwi (E) =shik "old, worn out, decrepit, no longer used"
Nav =sá: "old, abandoned, in ruins; (Y-M also) dried up, withered"

Tlingit tLágw < *tLagu "always"
*tLagu may well have persisted till after Russian contact.
Recent advances in AET comparison

Jeff Leer, ANLC, Draft of 1/28/2008, p. 36

Tlingit tLagu`=N[poss] "old, ancient N" < *tLagu-wu=N[poss], as in tLagu`=qá'wu` "old-time person/people, ancient person/people".

Uncontracted tLagu-wu= survives in tLagu-wu=7a`n "ancient village", said to be the original name for tLágw7a`n, Kluckwan. Note that this place name has the unpossessed form 7a`n "town, village, (inhabited) land" rather than the expected possessed form -- 7a`ní:.

The suffix that appears here as -wu= is an allomorph of underlying -(ŷ)i=, found in possessive constructions such as ŷi`dad-i=qá'wu` "person/people of today" (ŷi`dad "now"), tadgé:-ŷi=xúx'u `"yesterday's newspaper" (tadgé "yesterday"). This suffix -(ŷ)i= morphologically converts nouns of time into possessors but semantically allows them to be used attributively. This Tlingit suffix seems to be cognate with PA *-e:, which converts of nouns of time into adverbs of time. A construction morphologically identical with the Tlingit one is found in Lower Tanana:

LT thog-a kayEx "an old village site" (kayEx, --kayEx "village") and Tlingit tLagu-wu=7a`n, Kluckwan, "ancient village", see above.

The Athabascan onsets show variation between reflexes of PA *s and *ts. This is curious in itself, and I cannot account for this split other than to suggest that it may be due to resolution of an ancient cluster. The PA stem, like the Tlingit stem, could reflect PAET *S-ts... We find similar examples of cluster resolution in the reflexes of a few PA forms functioning both as 1sg. possessed forms and vocatives of common kin terms with PA *7E$, a variant of the PA 1sg. object/possessor prefix *$E-. These are sparsely attested but presumably ancient. A few examples:

PA *7E$-tshu: (~ *7Esh-shu:) "my grandmother (MM); grandmother!"
Sekani 7ÈsuN [sic] "my mother-in-law" (stem elsewhere --tșuN)
(other examples have unmarked 7E-)
Tsut'ina 7ísú "my grandmother"
Mattole 7ishxó: "my grandmother!" (stem elsewhere --tshxó:)

PA *7E$-tsů:ye: (~ *7Es-sů:ye:) "my grandchild (man sp.); grandchild!"
Tsut'ina 7ísů vá "my grandchild"
Mattole 7istsői ~ 7ísói "my granddaughter!" (stem elsewhere --tsői)

Examples of PA *7E$-ky... show similar contractions, which in this case is obviously post-PA:

PA *7E$-kyÊtL'e: "my younger brother; younger brother!"
Sekani 7Eshidle "my younger brother" (stem elsewhere --tshidle)
Tsut'ina 7ishitLá' "my younger brother"

Related to "of old, long ago" are the noun "legend, tale" and the associated verb, found in Tlingit, Eyak, and Lower Yukon Athabascan.
Eyak tsahg(-L) "legend, tale"
Tlingit tLa`gú: "id."
PA (A) *qU-za:xy "id."
Deg xEdhoyh "story"
Koyukon XAloiyh "story"

PA (A) *qU-L-za:gy (gh-act) "to tell a legend, tale"
Koyukon (L) XA-L-loyh/lok (gh-act): XALloyh "is telling a story"
("exclusively of folk tales" --JJ)

Eyak O-tsahg "to tell the legend, tale of O"
Tlingit O-tLa`gw (na act) "id."
7atLa`gw "is telling the legend/tale of O"
Tlingit (Op-n) qu-tLa`gw~ (act) "to whisper (to Op)"
7ash=7i`n qutLá:gw "is whispering to Op"

Tlingit qu-tLá:gw "is whispering" could well be from
Pre-Tlingit ~*qu-L-tsa:gw "is telling tales", which would then be an exact cognate of
Koyukon XA-L-loyh/lok.

Eyak, on the other hand, lacks the L- classifier, perhaps, ironically, due to influence from
Tlingit.

This would explain why the verb begins with Tlingit tL..., but what about the noun? We
could argue that the verb stem was generalized. Compare also "female breast, breast milk".

6.c. PAET *(S-)ts', PAE *ts', Tlingit tL'

PAET ~(S-)ts'i(G) "finger"
Tlingit (S) --tL'i G, (N) --tL'e G "finger" alongside
Tlingit (S) --wan-ka-tsh'i G, (N) --wan-ka-tsh'e G "little finger" (--wan-ka- "edge-on-"
Eyak --yE-ts'iNhG "little finger" (--yE- "hand")
PA *--nEla:-ts'EG "finger" (*--nEla:- "hand")

Although these forms are clearly related, there is an obvious problem with the Tlingit,
which show variation between tL'... and tsh'...; ts'... is nowhere to be found. The probable
explanation is that tsh'... is a diminutive soundplay variant of original *ts'...

Another problem is that there is no trace of a fricative prefix in Athabascan-Eyat. Such a
fricative would be needed according to the hypothesis pursued here, which would require
Pre-Tlingit ~*--L-ts'i(G) > Tlingit --tL'i G. However, we do find such a fricative prefix in
Eyak --yE-L-tsEq's-g-L "hand", based on a different stem.

PAET ~*ts'in(')t' (motion) "to sink (into water), founder"
Eyak tsiN't' (motion): yE X sEt'sinya' "(tea leaves, sugar in water) settled to the bottom"
Tlingit ts'i't'~ (motion): wu`ts'í't' "(boat) floats low in the water (as when loaded down)"
Tlingit sha-ts'i't'~ (event): sha' wats'it' "it is full (of water)"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p.38

(sha- is found also in sha`wahik "it is full (not of water)" and sha`yadihe:n "they are
many")

PAET ~*S-ts'in(')t' (motion) "?id."
Eyak L-ts'iN't' (motion): yEX sELts'in't' "(sugar) settled in water; (seal, boat) sank",
    yEX LEts'iN't'X "(fish) is flopping about on land" (yEX=D--X "moving about")
Tlingit sha-tL'i't'~ (event): sha`watL'ít' "it is full (of water)"

The hypothesis here is that Pre-Tlingit ~*...L-ts'i()t'~ > Tlingit *...tL'i't~..., now restricted
to the above theme and its causative. Tlingit sha`watL'ít' is more common than
sha`wats'ít'; they are considered synonymous. Likewise Eyak yEX sELts'in't' is more
common than yEX sEts'iN't'. In neither case, unfortunately, is it possible to discern a
clear semantic distinction between the intransitive theme with or without a fricative
classifier.

PAET ~*S-ts'a(')k' (event) "to drip" or the like
Eyak L-ts'a'k' (hapax) = L-tsa'tL' (motion) "(liquid) drips, leaks (by drops)",
    otherwise attested only in
Eyak 7u:nahd qe'Lts'a'k' "April (when water drips down from the trees)"
    "with 7i- prefix required by 7u:nahd "in the month", which drops, umlauting qa'
    'up out", ED 151.
Tlingit O-D-tL'a'k'~ (event) "O becomes wet": wuditL'ák' "is wet"
Tlingit =tL'á:k' "wet": gán tL'á:k' "wet firewood"

The obvious problem for our hypothesis is that Tlingit has the classifier D-, which should
have had the effect of buffering the stem from L-assimilation. The only suggestion I can
offer is that the D- classifier was a later addition, i.e. Pre-Tlingit ~*L-ts'a()k'~ > Tlingit
tL'a'k'~, which we find as the postnominal modifier =tL'á:k'. After this stem was formed,
D- was pleonastically added to the verb.

It is worth noting that the last two sets involve intransitive themes with fricative
classifiers. These are clearly not valence prefixes by origin.

6.d. PAET *(S-)ts'aw..., PAE *ts'aw..., Tlingit L'...
I have found this correspondence only in a related pair of cognate sets:

PAET ~*(S-)ts'aw "(female) breast, breast milk"
PAE *ts'u: "breast milk", --ts'u' ~ --ts'uuwe' "(female) breast, breast milk"
Eyak ts'u: "breast, teat, nipple",
    --ts'u: in Rezanov <kys-u> "sosok, sosek", apparently k'u-tsu: "breast, teat"
Tlingit L'a "breast milk", --L'a ` "(female) breast"

PAET *O-(S-)ts'aw (act) "to suck, suckle on O"
Eyak O-ts'uh (act) "to suck O (especially of an infant)"
with indet. obj. 7i-ts'uh "to suckle" (act): 7its'uNhiNh "he's suckling"
Tututni O-L-ts'Em (gh-act) "to lick O": yiLts'Em "licks it"
Tlingit O-L'a~`, imperative stem L'a: (act) "to suck, suckle on O":


Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 39

7aL'á: "is sucking, suckling on it", also hapax 7aLL'á: "id."
The causative O-L-L'á~`, imperative stem L'á: (act) 7aLL'á: "is suckling it (infant)" is a secondary formation.

The Tlingit and Tututni forms match perfectly; both can be derived from PAET *O-S-ts'a()w. In Tlingit, the special lengthened imperative-hortative-potential stem is rare, found only with a few zero conjugation active verbs. The roots of these verbs seem to have originally ended with a sonorant, and subsequently become a subcategory of open roots. Thus with some confidence we can reconstruct Pre-Tlingit *O-L-ts'a()w > Tlingit O-L'a~`, with imperative Pre-Tlingit *L-ts'a:w > Tlingit L'á: "suck it!". Here again we are faced with the question why the noun L'á also begins with onset L'. We would have to suggest that either Pre-Tlingit had a fricative prefix, i.e. Pre-Tlingit ~*L-ts'aw > Tlingit L'á, or that the onset of the verb root was imported into the noun.

Possibly related is
Pre-Tlingit ~*--L-ts'aw-t' "suck-DISTRIBUT" >
Tlingit --L'ut' "tongue"

Here the sonorant would have combined with the vowel, so that the rhyme ~*...aw-t' > *...u`-t' > Tlingit ...u't', the last step being glottal assimilation of the stigma.

The big question is, why Tlingit L'... rather than tL'...? I had hoped that the Pre-Tlingit L-assimilation hypothesis would also help resolve the history of the split between glottalized occlusives and glottalized fricatives in Tlingit. An attractive hypothesis would be that PAET root-initial glottalized occlusives were preserved as such in Tlingit by fricative classifiers that may since have disappeared, whereas PAET root-initial glottalized occlusives became Tlingit glottalized fricatives elsewhere, i.e. intervocally. The cognates in (c) above would lend support this hypothesis, but "breast" stands out like a sore thumb. Unless we can find some nifty way to explain away the "breast" set, it appears we must look elsewhere to find the raison d'etre of Tlingit glottalized fricatives.

6.e. PAET *S-ky..., PAE *L-ts..., Tlingit L...

For this correspondence set to make any sense, we must assume that
PAET *S-ky... > Pre-Tlingit *S-sh... > *L-sh... > Tlingit L.... That is, the fact that PAET *ky... spirantized by palatalization to Tlingit sh... made it a fricative, and therefore subject to the law that only the L-series may occur before fricative series. This means that Pre-Tlingit palatalization applied before L-assimilation. If this correspondence is valid, we can assign relative dating to two major phonological processes within Pre-Tlingit.

I haven't found much data to support this hypothesis. But the following example is stunning in its perfect semantic match and morphological clarity.

PAET ~*O-S-kyind (act) "to throw a bunch of O"
Eyak O-L-tsiNhd "id.": xLtsiN:d "I'm throwing them"
Tlingit O-Li`d~ "id.": XaLi:d "I'm throwing them"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 40

The derivations would be
PAET ~*O-S-kyind > Eyak O-L-tsiNhd, and
PAET ~*O-S-kyind > Pre-Tlingit *O-L-shi()d>
Tlingit O-Li'd~

We would like to reconstruct Pre-Tlingit *L-sh... in order to account for the choice of L- as classifier. But if Pre-Tlingit *L-sh... > L..., then why does Tlingit now have themes with L-sh..., e.g. Op-X L-shi~' (act): áX Lashi'gw "is stroking, caressing, petting him/her/it"? Many examples of synchronic L-sh... are no doubt secondary formations. But some trace back to PAET, e.g. Tlingit O-sha'd~ (motion) "seize, grab, grasp O" < PAET ~*O-kwin'd vs. Tlingit O-L-sha'd~ (Ga event) "catch, capture O" < PAET ~*O-S-kwin'd. Why don't we end up with **O-La'd~? In this case we can plausibly suggest that L-sh... resisted merger to L... so as to keep the same root as the sister theme with zero classifier.

Another candidate is

PAET *(S-)kyi(ot)L'
Eyak tsEtL' (motion) "slide, slip'
Tlingit O-ka-(L-)li'L'~ (motion):
7a ka'waLi'L', 7akawLiLi'L' "slid O along the length (as of a stick)"
7áX 7a'yakawLiLi'L' "pulled (the curtain) across"
7a kaX ye` dzhikawdiLiL' "came down, her hand following it (the rail of the stairs)"

The most bemusing is the following, which would be a doublet with "head" above (2d). In the following words, we find possible evidence for an L-assimilated form of "head" in certain compounds:

Tlingit --tLa-Ge'ýi: "brains" (--Ge` "within")
Tlingit --La-k'tshh' "occiput, nape of neck" (see 2e)
Tlingit (A) --Li-diX', (S) --L-diX', (N) --Li-deX', (NN) --La-deX' "neck"

This would require a derivation roughly like hypothetical PAET ~*L-kying'~ or ~*s-kying~ > Pre-Tlingit ~*L-shya~ > Tlingit La/i- or tLa-. However, we find neither evidence nor motivation for a fricative prefix before the stem for "head".

7. OTHER INSTANCES OF AET CLASSIFIER ABSORPTION

PA *dE-i:-tsh'è:GH (transition) dǐ:nEtsh'è:GH "opened mouth":
(s-state) dê:zEtsh'Egh "has mouth open"
Eyak dE-tsh'ehX (act) dishitsh'ehXL "I opened my mouth";
(perf. state) dǐ:tsh'ehXLiNh "his mouth is open"
Tlingit X'e-t'a X~ (event) X'e'wat'áX "opened mouth";
(position) ád X'at'áX "is standing (there) with open mouth, agape"
Apart from the unique onset correspondence, the resemblances are striking. The semantics is perfect; the vowel correspondence Tlingit a : PAE *e (reconstructed as PAET *e) is extremely well attested; and the codas match perfectly.

Fortunately in this case we have a clue as to what is responsible for the odd onset correspondence. It is a strict rule in AET that incorporated nouns (whether proclitic or prefixal) require the D- component to refer to a reflexive possessor. "One's own mouth" as incorporated direct object is Eyak dE-D-, PA *(da:)=dE-D-, Tlingit X'e=D-. Why does this particular theme lack the D- component that the semantics requires? The answer is simple: *D- was present in PAET, and contracted with the onset in all three branches. We can therefore posit an approximate reconstruction:

PAET ~*MOUTH=D-7ye()X (act) "to open one's mouth"

The contraction of classifier plus stem onset yields the correspondence set

PAET *D-7y... *d-7y... > PAE *tsh'..., Tlingit t'....

This same correspondence set is seen in "elbow", where however we must invoke coda sonorantization in Tlingit:

PAET ~*--dE-7yix(-C') >
~*--d-7yix(-C') "elbow"
Tlingit --t'i`ý "elbow" < Pre-Tlingit ~*--t'i()x by sonorantization
PAE ~*--tsh'ish-tsh' "elbow"
Eyak --tsh'idzh "elbow"
PA (AP) --tsh'Etsh'
PA (AES) --tsh'Utsh'
PA (ET) --tsh'Êsh[-C]
PA (A) --tsh'Üsh[-C] "elbow"

Perhaps this plethora of Athabascan variants comes from Pre-PA ~*--tsh'ish-tsh' varying with ~*--tsh'ish-dzh, as Eyak --tsh'idzh might come from *--tsh'ish-dzh < PAE ~*--tsh'ish-tsh'.

It is just possible, given that Tlingit fading stigma sometimes corresponds to PAE glottal stigma, that Tlingit --t'i`ý < Pre-Tlingit *--t'i'x. Assuming that the glottal stigma may have come from an earlier glottalized consonant, we could further derive *--t'i'x < *--t'i'C'x, metathesized from *--t'ix-C' < PAET *--d-7yix-C'. That is a lot of assumptions, however. With all its difficulties, I still find this set rather attractive. The putative PAET prefix *dE- could have been the classificatory prefix referring to a sticklike object

A similar contraction might have occurred in the extremely messy verb "to hear":

PAET ~*D-'yanG "to be heard": ~*di'yanG varying with ~*d'yanG "it is heard"
Tlingit du-7a'X~ (event): wuduwa7âX "it was heard", lit. "one heard it"
Tlingit du-7âXdzh (state): duwa7âXdzh "it is heard", lit. "one hears it"
These are passive forms of the simplex verbs O-7a`X~ (event) and O-7áXdzh (state) "hear O"

Pre-PA ~*(i'-)ts'angG (state): *(i'-)ts'angG "it is heard"
PA *i:-ts'AG (state): hi:ts'AG "it is heard"
PA (P)=ts'AG (enclitic of report) "it is heard"

The more primitive active/stative root PA *ts'a:ñ < Pre-PA *ts'a:ng "hear, listen" implies that the stative root PA *ts'AG < Pre-PA *ts'ang-G (no doubt pronounced with a homorganic nasal), where the underlyingly long root was regularly reduced before the suffix *-G, after which the nasal was deleted.

PA *i:- synchronically looks like the transitional prefix, but historically it is to be related to the 1pl. subject *i:-D-, ultimately from the PAET indefinite human subject prefix that appears in Tlingit as du-(D-). Here again, then, we find a source for the D- classifier, namely the indefinite human subject: "one hears it" = "it is heard". The resulting passive root PA *ts'AG was then generalized to transitive forms like *yEdì:ts'AG "hears, understands O's speech" (with *dE- referring to the mouth, speech, etc.).

There is an important lesson in examples like "to open one's mouth". Rather than mechanically trolling for "regular" sound correspondences, we should be keeping an eye out for cases where we have reason to expect a classifier component but do not find it. In precisely these cases we might find ancient classifier-stem onset contractions.

To take a different type of example, we should expect highly telic verbs like "to make O" and "to kill O" to take O-L- causative in AE and O-s/L- causative in Tlingit. This is true of "to make O" in all the languages. But taking the verb "to kill O", only PA has overt L-.

PA *O-zE-L-GHe: (s-act): yEzê:sLXe:ñ "killed it"
Eyak O-she~ (act): shEshehL "killed it"

As mentioned in the discussion on classifiers, I strongly suspect that the correct reconstruction for the causative is PAET *O-s- rather than the *O-L- we find in PAE. My hypothesis is that PAET had different classifier series for different functions, e.g. *O-s-causative but *L-comparative.

Thus for example we may suspect that Eyak O-she~ "kill O" comes from *O-s- causative plus a lengthened variant of the reduced stem siNh "die". Although the details are
unclear, the development might be something like PAET *O-s-xy... > Pre-Eyak *O-s-s... > *O-sh-sh... > Eyak O-sh... (where palatalization might be due to the original root vowel or to the the PAET onset *xy).

Likewise we may suspect that Tlingit Tlingit O-dzha`G~ "kill O" comes from *O-s-causative plus the original stem. One possibility is

PAET *O-s-she()G >
Pre-Tlingit *O-s(h)-sha()G > *O-s(h)-dzha()G >
Tlingit O-dzha`G~ "to kill O"; compare
PAET *s-D-she()G > PA *L-D-zhê:G (motion) "to go hunting"; further compare
Tlingit O-ka-sha`G~ (event): ka`washâG "O is winded, out of breath"
The causative O-ka-L-sha`G~ (event): 7akawLishâG "hunted it to exhaustion"
would then be a quasi-doublet of O-dzha`G~ (event): 7a`wadzhâG "killed it".

Tlingit O-dzha`G~, however, could also plausibly be derived from a different PAET root:

PA *MANNER O-(î:-)lâ:G (suppletive; perf. only): *7a:=yî:lâ:G "did so to O"
(this can refer obliquely to killing O) <
Pre-PA *MANNER O-(i')-L-a'G <
PAET ~*MANNER O-s-ya()G "to do (so) to O" >
Pre-Tlingit (MANNER) O-s(h)-dzha()G >
Tlingit O-dzha`G~ "to kill O"

8. Clues to the origin of the Tlingit onsets dzh, dz, dl

We have now officially entered the twilight zone. At this point, we are bobbing for apples in the Quantum Cafe. This is the price one must pay to have any hope of discovering the origins of the Tlingit plain affricate onsets. I will not attempt an exhaustive discussion of this topic here. Trying to think through the few examples given here is exhausting enough.

8.a. Tlingit onset dzh

As Tlingit O-dzha`G~ "to kill O" suggests, sometimes the onset dzh appears to be the resolution of a fricative classifier (as in the O-s-causative) plus some following consonant.

Perhaps the most interesting case of Tlingit onset dzh in terms of all the detail is another PRO verb. This etymology, however, points in an entirely different direction. If it is correct, Tlingit onset dzh must come from the D-classifier plus stem-initial *n.

PAET ~*MANNER O-u()-D-niy (state) "to think (so) of O"
N.B. *...yu:dEni: contracts to *...yu:di: in a few languages.
Pre-Tlingit ~*MANNER O-u:-D-niy > *...O-u:-d-niy *...dy-nyiy] >
*...O-u:-dyiy > *...O-u:-dzhiy >
Tlingit MANNER O-u-dzhí~` (na state) "to think (so) of O": yé' 7u`wadzhí: "thinks so of O"

PA *NP O-u:-D-ni: ~ NP O-u:-dE-ni: (A-state): *dEne: yu:dEni: "thinks O is a person"
Tlingit Op-X O-u-dzhí~` (na state): qa'-X 7u`wadzhí: "thinks O is a man"

Eyak COMP O-(u)'-L-D-le~ (state): COMP 7u'Lileh "thinks O is COMP" is not directly comparable because it has a different classifier.

What is so intriguing about this cognate set is that the Tlingit progressive stem is dzhi`n in some dialects rather than the expected dzhi: n (which occurs in other dialects). There are only two other Tlingit open verb roots that have a fading stigma/low tone progressive stem. One of them is found in MANNER O-ni~` (event) "O has it happen (so) to self" and its causative MANNER O-s-ni~` (event) "do (so) to O", which have the likewise irregular progressive stem ni` n. This shared irregularity provides additional evidence that Tlingit ni~` as in yé' wu` ni` "it happened (to O)" and dzhi~` as in yé' 7a`wadzhi` "thought O to be so" are cognate roots.

8.b. Tlingit onset dl

The following Tlingit verb seems to show a completely different type of cluster resolution. The verb theme would be based on PAET *Xa(h)gy, Tlingit Xa`gw, Eyak -- yE-L-Xahdz-L "nail(s), claw(s)" (2g):

Pre-Tlingit *O-...L-Xa(h)gw "to scratch O with nails, claws" >
   *O-...dla(h)gw >
Tlingit O-ka-dla`gw (na act) "to scratch O with nails, claws": 7akadla`kw "is scratching it"

What is so impressive about this set is that the rhyme of the Tlingit invariable verb root dla`gw is identical with that of the noun Xa`gw. Although Eyak has no verbal cognate, the noun --yE-L-Xahdz-L "nails, claws" looks like a compound of --yE- "hand" and L-Xahdz-L "scratcher" (with L-classifier and -L instrumental noun), seemingly implying the former existence of Pre-Eyak ~*O-L-Xahdz "scratch O with nails, claws".

Another possible but more difficult doublet (2g) with the same correspondence set would presumably be based on PAET *Xi(h)gy "shoulder", Tlingit --Xi`g "upper arm":

PAET *O-S-Xi(h)gy (motion) "to shoulder O"
Eyak O-L-Xe'dz (motion)"to shoulder O, pick O up onto shoulders, carry O on shoulders, on head": 7iLXe'dz "shoulder it!", 7aNhnu: sELXe'dzL "they carried her on their shoulders"
Pre-Tlingit ~*O-L-Xi(gy-g) "to keep putting O on shoulder" >
Pre-Tlingit ~*O-dli'g(w) >
   ~*O-dle'g(w) >
   *O-dle'gw "to dandle, pet O (as a fussing infant)"
Tlingit dlé'gu` "lullaby"
Recent advances in AET comparison
Jeff Leer, ANLC, Draft of 1/28/2008, p. 45

Tlingit O-L-dlé'gu` "to pet, stroke O (expressing affection)": 7aX dzhin 7aLdlé'gu "is stroking my hand (e.g. to comfort me); is shaking my hand"

The main problem here is the etymologically unexpected L- classifier in Tlingit O-L-dlé'gu` "to pet O", but this is not insurmountable, given that the verb stem is patently borrowed from the noun dlé'gu` /dle'gw-i`/ "lullaby", complete with the nominalizing suffix /-i`, thus assuring that the verb has been restructured. (The labialization of the repetitive suffix -g is not unusual in Tlingit, even where there is no obvious reason for it.)

On the other hand, one source of Tlingit dl... could be Pre-Tlingit *d-L...

PAET *dE-Le/i()ng "fresh meat"; *di-Le/i()ng "(meat) is fresh";
PA *D-le:ñ (state): *dEle:ñ "(meat) is fresh; (wood) is green"; *dEle:ñi: "green wood"
Pre-Tlingit *d-Li()ng "fresh meat"
Tlingit dli`yė "meat, flesh"

Corresponding to Tlingit L-La~`: (act): wuLiLa: 'it has melted' could have been a nominal form:

Pre-Tlingit ~*L-(d-)La: 'something melted/melting' >
   ~*dla:, to which was added *?Ed 'thing'. Hence:
      ~*dla:-?Ed 'melting snow' >
Tlingit dle`d 'snow'