SOUTHERN TSIMSHIAN EXTRASYLLABIC INITIAL STOPS

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Southern Tsimshian word initial voiceless stops are frequently extrasyllabic in the sense given by Clements and Keyser (1983). By considering all Southern Tsimshian initial voiceless stops to be extrasyllabic, i.e., by assuming that initial voiceless aspirate and glottalized stops that do not participate in phonetic level consonant clusters are in reality underlying C-h clusters of the types C\textsuperscript{H} and C\textsubscript{h}, one can account for a number of apparent system inconsistencies; certain special characteristics of Southern Tsimshian phonology become system-intelligible.

1. INITIAL EXTRASYLLABIC STOPS. The Southern Tsimshian lexical items listed here have word initial extrasyllabic stops, i.e., they "are separated from neighboring consonants by short neutral or voiceless vowels" (Clements and Keyser 1983:39):

(1) pdal 'rib'
(2) pts'a:n 'pole'
(3) tk=iyetk 'around'  (c is \textsuperscript{\textcopyright})
(4) tk=etk 'around'  (c is \textsuperscript{\textcopyright})
(5) kba'u 'chin'
(6) k=da'ts 'coat'
(7) kwdax 'hungry'
(8) k=du'n 'around'

These (1 thru 8) conform to a CV three tier model as in (9):

\[ C \longleftarrow C V V \rightarrow X \]

\[ \text{[aspirate]} \]

Item (4) above, e.g., might be characterized as in (4.1):

\[ C C V \quad C C C \]

\[ \text{[aspirate]} \]

Item (6.1) can be taken to represent (6):

\[ C C V \quad C C \]

\[ \text{[asp]} \quad \text{[glott]} \quad \text{[asp]} \]

As is typical of extrasyllabic segments these initial sts are "historically susceptible to processes ... that incorporate them into well-formed syllables by means ... such as vowel epenthesis, etc." (Clements and Keyser 1983:39):

(4.2) tce=\textsuperscript{\textcopyright}lk is a variant of (3) and (4)

(6.2) g=\textsuperscript{\textcopyright}da=\textsuperscript{\textcopyright}ts is the Coast Tsimshian variant for (6)

The Coast Tsimshian variant in (6.2.1) has undergone vowel epenthesis voicing of the initial C. The change illustrated in (4.2.1) involves incorporation of the extrasyllabic element into a syllable initial coalesced affricate with maintenance of the original aspirate spread.

2. SOME APPARENT ANOMALIES. There are a few lexical entries that begin with a single voiceless, aspirate stop followed by a vowel:

(10) paks 'spit'
(11) talsm=\textsuperscript{\textcopyright}t 'stockings'
(12) k=bat\textsuperscript{\textcopyright}r=\textsuperscript{\textcopyright}k 'children'  (er is a high, back, unrounded vowel)

These (10 thru 12) apparently violate the general Tsimshian pattern wherein syllabic initial prevocalic stops are voiced. However, if one assumes (10 thru 12) are in underlying-form clusters of extrasyllabic C followed by h, then there is no anomaly:

(10.1) \[ C C C \rightarrow C C C \]

\[ \text{[asp]} \quad \text{[glott]} \quad \text{[asp]} \]

In a similar manner one might argue that (13) has an underlying Cy cluster with extrasyllabic C:

(13) a. Kiy\textsuperscript{\textcopyright}X 'grass'  (k is \textsuperscript{\textcopyright})
An analysis deriving 1 from /ky/ can in a principled way account for the differences in palatalization found in items (14 thru 20).

(14) ka'ik 'stew'
(15) ka'k 'one' (animal, flat classifier)
(16) kap 'really'
(17) kap 'ton' (animal, flat classifier)
(18) k'ash' a 'choke'
(19) k'ashla'n 'wink'
(20) k'as't (the Coast Tsimshian variant of (13))

The palatalization of unrounded velars has generally been considered by Tsimshianists to be a matter of assimilation to front vowels or dissimilation from back vowels. The fact that unrounded velars before front vowels palatalize in some words but not in others has been, I believe, prematurely dismissed as due to variable operation of a palatalization rule/process. In a CV phonology framework the palatalized velars in (14 thru 20) can be derived via coalescence as in, e.g., (16.1):

\[
\begin{array}{c}
\text{CV} \\
\text{CV} \\
\text{CV} \\
\end{array} \rightarrow \begin{array}{c}
\text{CV} \\
\text{CV} \\
\text{CV} \\
\end{array}
\]

This analysis is especially attractive in light of the fact that words beginning with 'iV' have as alternant pronunciations 'iV-

(21) \( \tilde{y}a' \sim \tilde{i}a' \) 'walk'
(22) \( \tilde{y}ax't \sim \tilde{i}ax't \) 'man' (Gitksan cognate: iiwxt (Hindle and Rigsby 1973:32))

The same phenomenon occurs in Coast Tsimshian:

(23) \( \tilde{y}iwkt'e \sim yukt'e \) 'eight' (long classifier)

Since this paper has shown the suitability of representing initial voiceless stops as extrasyllabic in a number of string types, CCV-, CV < ChV, Kvy < k?iv, one is tempted to argue that the single remaining type of initial voiceless stop, CV, is also to be considered extrasyllabic, i.e., CV < CV. This possibility is made more attractive by several other related facts. Southern and Coast Tsimshian words with [l-sonant] onset always begin with some glide, including \( \tilde{y} \) and \( \tilde{h} \), i.e., there are, phonetically, no vowel initial words. Of the subset of [l-sonant] onset words that begin with laryngeal glides the \( \tilde{y} \) and \( \tilde{h} \) sometimes substitute one for the other:

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The present analysis posits vastly simplified phonological structures for both Southern and Coast Tsimshian. It strongly suggests that there may be only one consonantal series, an unmarked series that is voiceless, unaspirate, and unglottalized. Aspiration and glottalization result from coalescence. There is one very general voicing rule:

\[
\text{[cons]} \rightarrow \text{[voi]} \]

3. DICTIONARY FRAGMENTS (1). This section is a list of those lexical items with initial extrasyllabic stops, as posited above, that appear in the Southern Tsimshian data in sentential context. Entries in this list include the Coast Tsimshian variants when available. Entries use the common Tsimshian orthography.

pts'aan [p'tsa'n] 'pole' Coast Tsimshian (CT), ibid.
Yagwat batsindit Arnold pts'aan (Arnold is raising a pole).
Yagwat batsg'l pts'aan (He is raising a pole).

p'aas [p'as], also p'as [pas] 'grow' (singular agreement form), 'formed' CT, p'as.
Ama p'as yUMs'ilt (The basket is nice (well-formed)).
Ama p'as ts'i'ina'a (The basket is nice).
Ama p'as laaks (The light is pretty).
Dzida siqwallksi'ta da'at'gaidim sip'aasdi (If they adopt him, will they be able to raise (cause to grow) him)?

t'aa [t'aa] 'sit' CT, ibid. 'stay' [locative complement], 'be' [locative complement].
Ts'asa'ma wil t'aa (I am staying in Victoria).
Nan t'a'a'anu asa ts'a'amsa (I formerly lived in Victoria).
K'ai ilihaulixi galt'sabi wil t'ai ts'imt'aa (A lake is back of town.)
T'uu's [t'u's.] 'boat' CT ibid.
T'da 'gwa'xi t'uusdi 'oli boat (Then the bear slowly pushed the boat).
T'uu's [t'ers] 'hit' CT t'uus.
T'uu't 'ei 'an' on (hit with fist).

K'a. [-Kaj] 'really' CT k'ap- 'certainly'. See also k'ap, k'ap.
K'ai gi'huuki gals'abi wil t'ai ts'imm's (The lake is certainly above the village).
K'ap- [Kaj] 'really, certainly' CT k'ap.
K'ap lu'wil siipgi goodu (I am really angry).

K'agan [Kag'an] 'have an accident'
K'agani yauxt (The man had an accident).
K'al- [Kal] 'at' CT ibid.
K'al'oiixi 'yauxwdi hana'sait 'ei ša'i (The man throw a ball at the woman).
K'al'oiixi [Kal'6icJ 'throw at' (theme, goal complements). CT k'al'oi.
See k'al'- above.

K'a [Ka] 'open' CT k'ax. See also k'ax.
K'a'xdi 'yauxwdi l1ks'gait 'ei hā'āxa (The man opened the door with a key).

K'abatguu'ik [Kabatgerk] 'children' CT ibid. See also kabatguu'ik, gabatguu'ik.
K'ilama'sim 'išatit 'ei k'abatguu'ik (We gave the children a ball).
K'u'ul' [Kul] 'act together as one; join with; act in concert with'
CT k'u'ul' 'once'.
Bausinit 'ei t'ulagim (You who are afraid should join with us).

K'wa'k [K-ua] 'choking' CT ky'ak.
K'wa'kai 'gwa'x'iyauxwdit (The boy is choking).
Dim k'wa'k'insimit (We are choking).

K'it'yauxmx [K'j'íatym] 'give a message for'.
K'it'yauxmx dippwil (I am giving a message for them).

K'wa' [Kw'] 'behind' CT k'to'o 'back'.
Nah kw'o'oi ha'lilitwi y'yaan (You were behind the chair).

K'ye'p[a] [Kép[a] 'ten' (aboard-a-boat classifier) CT kapladaat.
K'ye'p[a] liwandin 'ei lay boat (There were ten in the boat).

K,y'i'laam [Kilam] also k'y'ilam [Kilam] 'give'. See also gi'ilam.
CT k'y'inam.
K,y'i'laamta hoonit 'ei 'os (He gave the dog a fish).
K'y'i'laamty 'yauxwdi hoonit 'ei 'os (The man gave the dog a fish).
K'y'ilama'si ša'itit 'ei k'abatguu'ik (You gave the child a ball).
K'y'ilamu 'onsi 'ei han'ax (I gave the woman a dog).

K'a. [-ka] 'very'. See also k'ap, 'ap-. CT ibid.
Simhauutksa'n[ui sii nipsgiving K'a'amagu (I believe affection is a very good thing).

k'am- [q'am] 'useless; only' CT ibid.
Siipgit k'a'ma'nausu (My poor head aches).

K'ap- [q'ap] 'very'. See also k'a, 'ap. CT ibid.
K'ap lu'wil gyenigt 'asa'da yaguttsdi txy'UUlgisda (It is warm this afternoon).

4. DICTIONARY FRAGMENTS (II). This section is a list of those lexical items with initial extrasyllabic stops that appear in the Southern Tsimshian data without sentential context.

paksx [paksk] 'spit' CT puksk.
pu'al [pu'al] 'rib' CT ibid.
p'aal [pa'al] 'canoe' CT t'soo 'red cedar canoe': p'aal 'cottonwood canoe' (archaic in CT); 'amp'aal 'cottonwood' (t'am-'serving for', p'aal).
p'aal' [pa'alt] 'gloves' (literal: like a cottonwood canoe) CT p'aalt, p'aalt.
p'li'soosk [p'li'soosk] 'a square of dried seaweed' CT p'li'tosk.
p'il'o [p'il'o] 'break in two' CT po'o'o.
p'atsiks [p'atsiks] 'wet'.
p'axs [p'axs] 'grow' CT ibid.
p'yaan [p'yá'n] 'smoke' CT ibid.
t'a' [t'a] 'slap' CT t'a.
t'aap [t'aap] 'pound; hammer' CT ibid.
t'aawans [t'aawans] 'adze' CT dawans.
talsgimts'oox [talsgimts'oos] 'stockings' CT ibid.
tgwiye'k [tg'iyétk] 'around'. Also tkwce'k. CT dzagatgwiye'k.
tkwce'k [tk'c'etk] 'around'. Also tgwiye'k. CT dzagatgwiye'k.
t'ip xo't [t'apx'a't] 'two' (animal, flat classifier) CT ibid.
t'isxo'o'olt [t'sxo'o'olt] 'seven' (animal, flat classifier) CT t'ipxo'o'olt
t'i'ik [t'iik] 'navel' CT ibid.
t'ilgo'olsk [t'ilgO'olsk] 'think; be of the opinion than' CT t'ilgolsk.
t'iyoosk [t'iyoosk] 'snow' CT mooks.
t'iyoosk [t'iyoosk] 'white' CT mooks.
t'oox [t'o'ox] 'suck' CT ibid.
t'u'utsk [t'u'tsk] 'knife' CT ibid.
t'imba'a [t'imb] 'hip' CT t'imbaa.
t'imgaus [t'mgaus] also t'imgaus [t'mgaus] 'head' CT t'imgaus.
k'a'alik [k'a'lik] 'stool' CT k'aalk.
k'ats [kats] 'cut' See also k'ots. CT ibid.
k'adza[k [k'adzat] 'swallow' CT ibid.
k'ala [kala] 'up away from the salt water' CT bax.
k'ala'ayaa [kala'ayaa] 'go up away from the salt water' CT baya.
k'alii'taks [kali'taks] 'river' CT k'ala'aks.
  Note: from k'ala-l'-taks (up away from salt water - connective - water) CT k'athau.
k'alikiwik [kaliwik] 'choke' [agent complement], logical subject.
  CT k'athau.
k'atik'ahimxs [katik'ahimxs] 'choke' [Ø complement], logical subject.
  CT k'atik'ahimxs.
k'a'uk'au [ka'uk'au] 'crow' CT ibid.
k'ai'mga'a [ka'imga'a] 'here' CT ibid.
ka'lu [ka'lu] 'chin' CT kau.
k'amu'ul [ka'mu'ul] 'once' CT k'amu'ul.
k'wik- [kw'ik-] 'across' CT kw'ik-.
kw'da'ats [kw'da'ats] 'coat' CT gw'da'ats; gwidaats; wgidets.
  .w'o'o [kw'o'] 'back'. Also kw'o'-. kw'o'o. CT k'oo 'backbone'.
kw'oo't [k'oo't] 'year' CT k'oo't.
kwdax [kw'dax] 'hungry' CT kw'dii.
kwdun- [kw'dun] 'around' CT kwim; dzaga-.
kw'duniwaap [kw'duniw'ap] 'around the house' CT dzagawaap.
k'y'ask [k'y'ask] 'one' (animal, flat classifier) CT ibid.
k'y'asiky'a'a [k'y'asiky'a'a] 'wink' CT k'y'al.
k'y'am [k'am] 'crab' CT k'almoos.
k'y'ap [k'y'ap] 'ten' (animal, flat classifier) CT ibid.
k'y'i'oks [k'y'oks] 'fall off' [source complement], logical subject (must be human). CT k'y'i'oks 'fall on' [goal complement], logical subject (may be human).
k'y'i'giika [k'y'i'giika] 'below; downstream' CT giika; geeka 'down on the beach'.

REFERENCES