Notes

1 All Colville data were taken from A. Mattina’s unpublished fourth version of Colville Dictionary.

2 Two suffixes: -ilx ‘motion’, -olx ‘plural’

3 The list of cognates is based on Kinkade’s 1977 materials.

4 Karen Booker discusses general pattern in the use of number-paired roots in her paper entitled “A Cross-Linguistic Study of Number Suppletion in North American Languages”. Here she notes the types of words commonly suppleted, and some constraints on the occurrence of these pairs.

References


Proto-Salish *γ and the Velar Nasal Problem
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The resonant *γ, a front velar fricative articulated with little friction, has been added as a ‘latecomer’ to the overall Salish phoneme inventory on the basis of its recent ‘discovery’ in Lillooet (L), Thompson (Th), Shuswap (Sa), and northern dialects of Okanagan (OK). Its existence as a Salish phoneme came to light only after detailed research on these northern languages of the Interior uncovered this exceedingly rare sound.

Earlier studies on Salish comparative phonology by Boas and Faebertin (1927), Vogt (1943b), Swansons (1952) and Reichard (1958) dealt very little with the northern Interior languages, and it is therefore not surprising to find a complete lack of reference to *γ in their studies. Interestingly enough, Boas’ comparative Salishan vocabularies (APS manuscript) show forms for at least two words now known to contain *γ: ‘tree’ and ‘lymph’. He transcribes γ as either r or η (= x, i.e. front velar), v. e.

(1) Th. li sute’; Sh (n) cyap ‘tree’ (2) PIS *sina’w ‘lymph’

Boas MS., item 176:
Ll cIra’ap Th sIga’a
Sh tsa’ap
Th sImga’a
Sh wsa’ap

Kuipers was the first to recognize γ as a Salish phoneme, and he also postulated it as a Proto-Salish (PS) phoneme in 1979 on the basis of its occurrence in Shuswap. In describing his proposed PS phoneme inventory, he writes:

γ (phonetically similar to y in the same way as, e.g., Dutca y to labial palatal w) is found in Sh[uswap] only in the other Interior languages it has merged with y. (Kuiper’s 1979:5)

In the same year (1973) dissertation shows γ as a phoneme in a northern dialect of Shuswap (NOK). Shortly thereafter Lillooet was added to the list of languages having γ, followed by Thompson. Thompson was at first thought to show a reflex for PS *γ, with γ occurring as a fronted allophone of η in the environment of high vowels and y. After directing special attention towards elicitation of this rare sound, however, contrasts became apparent and γ was raised to phonemic status (L. C. Thompson, p.c.).

In addition, a number of the 7th forms containing γ were found to have cognates in other northern Interior languages: e.g., Th γay (PS *γ > Th y), ‘insert’ as; Sa lay, ‘root’ (additional examples in appendix).

Understanding of γ increased as more and better materials became available. Kuipers (1979) suggested Southern Interior cognates for Shuswap forms with γ in the comparative Salish data included in his Shuswap dictionary, e.g., Sh sIra, ‘strong’, Coeur d’Alene /Jα/, ‘fire’; Sa (n) cyap, ‘tree’, Colville (OK) wIra, ‘tree’. Later, Kuipers (1979, 1979) formally outlined the reflexes
for PS *γ in the Interior languages, e.g.,

PS *γ

Li, Th, Sh, SxK : y
Ka, Cw, SxK : y
Cr : γ

Incidentally, the change of PS *γ > y : γ in Cr parallels the change of PS *γ > Cr d; Vogt (1940b:15) recognized the Ka γ : Cr d correspondence in his brief but insightful comparative southern Interior Salish study. It is important to note that in the proposed PS *γ > y : γ Cr the original PS *γ must have already shifted before the PS *γ > intermediate Cr γ. There was probably an intermediate stage or so in the PS *γ > Cr d shift, i.e. *γ > *δy > d. PS *γ, on the other hand, may have moved directly to a palatal stop, i.e. Cr γ.

Reflects of PS *γ for Coast Salish, however, have been, and continue to be, elusive. Two possible correspondences have been suggested, both of which are based on single forms. The first suggestion was a PS *γ : CS y correspondence, based on the word for 'coyote'/‘lynx', *γγ.

(1) PS *mγyw

\[ 'lynx'/ \text{'coyote'} \]

INTERIOR

Sh smγyw(?)/smγyw(?) : 'lynx'
Th γyw(?) : 'lynx'
SxK smγyw(?) : 'coyote'
Sp γyw(?) : 'coyote'
Cr γyw(?) : 'coyote'

COAST

LI (Coast) sb(i)yaw : 'coyote'

This, however, seems more likely to have been a borrowing into the Coast-language Lushootseed. "Mating and Mating" (19?9:479) marks it as a borrowed term in their Colville dictionary (SxK) (perhaps due to the unexpected *γ-vowel). In Coast d'Aleene, one would expect a γ rather than a γ as the reflex for PS *γ, so it is probably a loan from the Kalispel. The original form of 'coyote' in the Kalispel is not clear. The other Coastal forms may be 'renounced' or reflect an early semantic shift from the original *γγ. This is discussed below. The fact that more commonly used words already exist for 'coyote' in the Kalispel (likely having *γγy 'coyote' (with cognates throughout the Interior), increases the suspicion that *γγy is a borrowed term.

Borrowing of animal terms is not surprising when one considers that the different Salish peoples occasionally used common grounds for hunting and gathering, and there would surely have been many occasions on which common flora and fauna would have been dis-

The connection of IS y with CS y draws on Kuipers' (1979) uvalar-velar loublets hypothesis, which advances the suggestion that uvalars and velars were in some kind of sound symbolism relationship in PS. PS *k and *γ may have been appeared in alternate forms of the same root, with perhaps *k demoting a larger 

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The form Ps *σγγy 'coyote' may have been borrowed from an Interior Salish language, such as the Colville-Okanagan, Coeur d'Aleene, and Kalispel forms could also be explained as borrowings from Columbia. The second correspondence (not a direct reflex) proposed for PS *γ is y, again based on a single form (Kuipers 1979:8):

(4) PS *yaγ : 'stand', 'vertical'

INTERIOR

LI, Th, Sh, SxK : γγp : 'stand', 'vertical'

Sh, Th, SxK : γγγp : 'tree'

SxK : γγγp : 'tree'

The parallel variation for the resonant sound would have been *γγγ and since the PS reflex for *γγγ was y, one may find CS forms with y that would correspond to the (missing) *γγγ. He thus suggests use of the 'large' uvalar partner of the root to refer to what is on the Coast a large tree. The semantic connection is not unreasonable. If the *γγγ meant something like 'long cylindrical object' (as sticking straight up from the ground) (as it does west to), then it is not difficult to imagine different languages (i.e., IS and CS) making the same logical assignment to trees of this description. The CS word may have something like 'long standing erect-tree', with the augmentative form of the root *yaγ, 'stand erect' and the verbal suffix *aγy', 'plant/tree': *γγγγ γγγy'.

It is important to note in considering this example, however, that the uvalar-velar sound-size symbolisms elsewhere in the Americas has been found to be sporadic, not general, although in some languages it is found to be quite common (Nichols 1979).
These two things taken together weaken the case for a PS *yal : CS γj(-"y") etymology considerably.

A search for further examples has yielded a few possibilities:

(5) Coulitz
    së:qu 'earring' (perhaps to be analyzed s-ul:q-"y")
    MT-poke/plugon-war
    cf. Sa lay 'poke'

This could be cognate instead with the element 1lγ occurring in Th liγ=œx, 'foot' and liγ=œst, 'hand', which seems to mean something like 'fringe'.

(6) Songish
    qa 'lake', 'pond', 'swamp' (cf. Ld: qa 'γu'εn 'lake')
    Tn γak 'high-water'

As long as the matter of the Coast reflexes of a PS *γ remains uncertain, the status of the reconstruction will be troublesome. Neither one of the proposals offered thus far can be viewed as satisfactory considering the lack of solid confirming evidence from the Coast. It may be argued that PS *γ was simply lost in the Coast languages. Again we need convincing cognates. This paper includes an appendix giving all roots or stems containing γ which may aid in identifying possible cognates in the Coast languages.

It is of course possible that all forms involving PS *γ were simply lost in the Coast languages; γ is certainly rare enough where it does occur (in the Yfint languages).

Thompson (1979) hints toward an alternative source for the first γ and its [λt yj] counterparts - a PS *η. In discussing the possibility of a PS *η, he writes (Thompson 1973:716):

'Ethnologists thought to contain PS *γ but moving inappropriate reflexes in certain languages may well reflect a *η. And the rare Proto-Interior *γ may reflect the same element.'

Thompson appears to point to γ as an intermediate Proto-Interior Salish (PS) form which would correspond to the reflexes of PS *η on the Coast. How would this fit into the overall PS sound system? What would the reflexes of this PS *η be in CS languages? These are questions which must be considered. Before turning to these, however, comments on Thompson's 'hint' by Kuipers (1979) need to be addressed.

In the same article in which he proposed the PS *γ : CS γ correspondence, Kuipers criticizes some of Thompson's ideas, in some cases apparently misunderstanding some of the reflexes of Thompson's revised PS root system. In connection with the suggested PS *η may be said:

'Although Thompson's first comment requires some correction. Thompson's uvular resonants become pharyngeals in the modern Interior languages, i.e. 4, 4', 4, 3'. The PS pharyngeals, 4, 4', he proposes exist in all languages on the basis of retraction roots in the Interior languages. Thompson's PS *γ, *η, then, are not possible alternatives for the Mi'kmaq γ, γ. Mi'kmaq γ, γ are reflexes of his PS *γ, *η. Kuipers' second comment assumes that he has made a strong case for the uvular-velar doublets hypothesis. So far as γ/4 for Proto-Salish, the hypothesis seems to be based on the single case discussed above. Returning now to the questions of the place of PS *η in the overall PS system and the reflexes of PS *γ in CS, we observe here a good deal of open-ended speculation.

Thompson's tentative suggestion of a PS *η (it is listed with a query in his PS phoneme chart) is added theoretically (as Kuipers points out) as a logical counterpart to what appears to be a more motivated PS *γ. The PS *η has probable reflexes m and η in Salish, and because a labialized consonant is assumed to be more marked than a plain one, it seems somewhat suspect typologically; this leads to speculation about what may have happened to an expected parallel *η. The *η is part of a PS labial-velar set (Thompson 1979) proposed because of a PS *aγ to account for the odd correspondences of a, 3 and p, p in Coast languages to η, η, η, η, η, η (respectively in Straits languages). Kuipers finds fault with the proposal of these labio-velars, especially the PS *η. After pointing out forms in Straits which he considers problematic in considering Thompson's proposal, he states:

'Finally, though typological considerations must always take second place to factual evidence, they do add to the counter-evidence (i.e., evidence against Thompson's proposal) PS γ, γ. A phoneme set would be enough of an ability to require a firer abduction.'

Acceptance of the PS *η and its labialized counterpart *γ must of course be met with a good deal of skepticism. This skepticism has as its source some unconscious prejudices or tacit assumptions on how proto-systems should look. First, there seems to be a definite lack in that vocal corpus to date for any just proto-phonemes; i.e., instances of η (and *η) are best treated as secondary developments (e.g., γγ > ηη > γγ with loss of γ). Part of this attitude is doubt comes from Indo-European scholarship, where η can be shown to be a secondary development in the languages that have it. Second, labialized consonants also seem to be considered lesser candidates for proto-phoneness. This may stem from notions of weakness; i.e., labialized consonants are considered to be rather marked.
and therefore unlikely candidates for inclusion in proto-systems, or simply from the experience that with familiar languages such elements are set with resistance. Scholars are reluctant to tamper with what has been established. Algolianists will not touch Bloomfield’s PA *p, even though there is the possibility of it being improved upon, considering the reflex in Arapeho/Atsina is $\xi$; maintaining Bloomfield’s reconstruction indicates a highly marked unconditioned $p > A / A t > (k) > \xi$ (this is discussed below). Indo-Europeanists are not content with the unnatural $p, t, k, k' / b, d, g, g' / b, d, g, g'$ stop system; yet, new suggestions are set with cool reception. Perhaps it is time to question some of these tacit assumptions. First, the prejudice concerning PS *$\gamma$’s right to proto-phonemes is addressed, showing that such a PS phoneme is reasonable in light of data found in other American languages. Second, the notion that (proto-)systems lacking labials are oddities is questioned, as Thompson’s proposal of PS *$\gamma$, *$\gamma'$ is necessarily affected (adversely) by this notion. Third, distribution of $\gamma$ in languages neighboring the Salish linguistic area is studied as a possible explanation of how a proposed PS *$\gamma$ may have become $\gamma$ as a reinterpretation due to areal influence. Fourth, irregularities in the sound correspondences in certain Salish languages are presented may bring additional support to the PS *$\gamma$, *$\gamma'$ proposal.

There are several cases of phonological irregularities in certain American languages outside Salish which point toward *$\gamma$ as a well-attested areal phenomenon. Capell (1976) proposed an underlying *$\gamma$/ in Hueyapan Matatl to account for what he considers an anomalous [g] - [v] alternation. Although /$p$/ shows no evidence of its existence at its uttering level, based on an apparent parallel with an underlying /k'/ / Accounting for alternative, in addition to other supportive phonological evidence he finds in the language.

For example, in his thesis proposing a distant genetic relationship between Kootenay and Salish, suggests a “special sound correspondence” between Kootenay $\gamma$/, w and Salish *$\gamma$. He adds, shown that there is internal evidence which points to /$\gamma$/ as an earlier Kootenay phoneme, commenting (11): ‘The peculiar alternation between $\gamma$/ and $\nu$/ in certain morphemes in Kootenay series out for some sort of explanation or an internally reconstructed phoneme having both nasal and labial properties, but which is distinct from $\gamma$/.$\nu$. The total lack of [g] in any form of Kootenay phonology and the internally evident likelihood that an earlier form of Kootenay had [g] (as Bloomfield 1976) suggest that the Kootenay velar and uvular consonant phonemes make *$\gamma$/ as a candidate for such an internally reconstructed phoneme, even without reference to reconstructed Salishan.

Other puzzling sound changes concerning labial and velar (nasal) correspondences can be found in the proposed Proto-Uto-Aztecan system (Voegelin, Voegelin, and Hale 1962). PA *p > Tubatulabal and Hopi *$\gamma$. PA *$\gamma$/ > Southern Paiute *$\gamma$.

The conditioning factors given for such changes are obscure.

The Tubatulabal and Hopi change was supposedly conditioned by a preceding a high nasalized vowel (in the proto-language). A question then arises as to the origin of this proto-nasalized vowel. Perhaps a labio-velar *$\gamma$/ might be seen as a reasonable alternative here. Maziro (1968) suggests Proto-Uto-Aztecan *$\gamma$ as a possible source for Lunofo *$\gamma$. Again, a PA *$\gamma$ might be seen as an alternative. Another case where *$\gamma$ might be considered as a proto-phoneme is Athabaskan; Leer (1979) proposes Proto-Athabaskan *$\gamma$ and *$\gamma'$, with *$\gamma$ showing reflexes i, e, *$\gamma$, and *$\gamma$ (voiceless) and *$\gamma'$ presumably being lost (no reflexes were directly given nor could any be inferred from his material). Here, too, *$\gamma$ or *$\gamma'$ might be seen as reasonable alternatives. After all, how different is a $\gamma$ from (front velar) *$\gamma$, from *$\gamma$ articulatorily or acoustically?

Turning now to the notion that phonological systems lacking labials are oddities, one finds that systems or proto-systems lacking labials are perhaps not as odd in North America as one might expect, considering that both Proto-Athabaskan (Krauss 1964, Leer 1979) and Proto-Iroquoian (Mitch 1979) are reconstructed without labials. Proto-Caddoan might also be added to the list; cf. Chafe’s (1979:222) comment concerning the proposed Proto-Caddoan $\gamma$) which point toward Salishan and Salishan.

It is of course possible that the original sound was *$\gamma$ rather than *$\gamma$, in which case Wichita and Kootenai have preserved a more archaic form of this sound.

The Tubatulabal change, which the genetic connection to Athabaskan-Kyak will presumably be established (cf. Krauss 1964), also lacks labials. Nails, too, is weak in labials. Reference to these languages or other languages in the area which are weak in labials,' this would fit interestingly with other languages in the areas which are weak in labials.

Problems exist with proposed proto-labials and their labio-velar reflexes in other languages. Proto-Algonkian (Bloomfield 1946) *$\gamma$ corresponds to $\gamma$, in its distant California relative, Yurok (both go back to Proto-Arapaho) as most scholars would presumably reconstruct a Proto-Algonkian *$\gamma$.

PA *$\gamma$/ p > Yurok kips$\gamma$ *$\gamma$/ "turn"
PA *$\gamma$/ p > Yurok keh$\gamma$ *$\gamma$/ "winter"
PA *$\gamma$/ p > Yurok kam$\gamma$ *$\gamma$/ "hot"
PA *$\gamma$/ p > Yurok kips$\gamma$ *$\gamma$/ "unsure"
PA *$\gamma$/ p > Yurok "m" *$\gamma$/ "unsure"
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Salish linguistic area, i.e. Athabaskan, Coast Tsimshian, and Enkimo-Aleut, and this may be important in the development of Salish y. Sherzer (1976:34) gives γ as a trait of all dialects of Enkimo and 'perhaps all languages of the Western Subartic.' While his statement may be an over-generalization concerning the Athabaskan languages of the area, γ has been recorded at least Futchin, Dogrib, Slave, Chipewyan, Tanana, Yukon Ingalik, Hette, Cilicotin, Sarsi, Carrier, and Atnea (inflected from Hojier 1963, Krauss 1964, Shezer 1976, Rice 1977, and Cook 1977). Perhaps others can be added to the list. Sarzi, Cilicotin, and Carrier border on the Nint Salish languages to the north; all have γ. It would also be interesting to know if the Athabaskan enclave of Nicola had γ, as it must have had some effects on the Nint Salish languages. Sapir (1931), Hoijer (1963), and Krauss (1964) do not reconstruct a Proto-Athabaskan *γ; but Leech (1979) does reconstruct it. It is impossible at this time to say anything about relative chronologies between the Nint γ and a putative Proto-Ath *γ or modern neighboring Cilicotin, Carrier, and Sarzi γ.

It is significant, however, that γ occurs in these languages to the north of Salish, paralleling the occurrence of γ in the Nint; and that γ is not found in languages in any area to the immediate south or west of Salish, again paralleling the lack of γ in Sint and Coast Salish.13

Assuming then that a labial-less PS system is reasonable and that a PS *γ could have become a γ in Nint due to areal influence, consideration must be given to the development of PS *γ outside of the Nint languages. It is perhaps reasonable to posit a Proto-Interior Salish *γ with reflexes Nint γ and Sint γ, (with the exception of γ in CM, which belongs to the southern subgroup)14 Evidence from Thompson (1976) Salish would seem to support this, where γ is being replaced by γ. This may be traceable to borrowing from a Sint language (297?) or younger bilingual Thompson-English speakers replacing γ with more common γ. Certain root doubling, however, points to a sound change in progress, e.g. chaŋ and chay: 'erect long cylindrical object' (Thompson, Thompson, et al. in preparation: 233, 234).

What are the reflexes of PS *γ on the Coast? A number of possibilities exist.

1. *γ could have vocalized in unstressed syllables where it fell between consonants, as is the case for s and n in a number of modern languages; it could have then been reduced from such unstressed syllables, along with many other unstressed vowels.

2. *γ could have been fronted to i; this would parallel the fronting of k, k₁ > x, Q. Possible examples of this may be:

   - Saanich: γw=ŋ 'fain' Li 2=5m γn by assimilation
   - Thompson: γw'=ŋ(-t) 'fain'

Klallam: ŋ=aŋ(-t) 'come back home'

Thompson: γw=n(-t) 'return (home),

The 7th root γw coarsely occurs with the immediate aspectual suffix -t; this may be the same element in the second Thompson form, which always has final -t. An assimilation of a PS *γ > n/γ(-t) is not rare to imagine in these cases. The case is further strengthened by the Thompson root γw, which appears in just a few derivatives; e.g.

γw-e'kst-e Do it fast!
This paper was written as part of a seminar on comparative Salish at the University of Hawaii during Spring Semester 1981. I am grateful to the seminar members, Anatole Lyovin, Mariana Madwell, Claudine Pogli, Joan Rosnick, and Terry Thompson. Their comments and suggestions were helpful in improving both the content and organization of this paper. I owe a special thanks to L. C. Thompson, the seminar's 'chief', for his generous guidance throughout all phases of researching and writing this paper. My research on the Salish languages has been generously supported by the Melville and Elizabeth Jacobs Research Fund and the National Endowment for the Humanities.

The modern distribution of the lynx (Lynx canadensis) coincides nicely with the aboriginal Nlmt linguistic area (Ingles 1965; 389; Cowan and Guilet 1965). This may indicate that the term *kutsugaw* was not a PS word but one coined by coastal Salish moving into the interior upon encountering the novel feline. The bobcat (Lynx rufus) has a much wider modern distribution, taking in the whole of what was the aboriginal Salish area. The proposed PS *p*?k*xom 'bobcat' (Kuipers 1976:12) is well-attested on throughout such of Salish. The term for 'lynx', on the other hand, appears to be lacking or language specific throughout Salish other than the Nlmt, and this may indicate the ‘lynx’ (Lynx canadensis) was not a familiar animal to the Coast and SInt Salish peoples. The details concerning these two felines have yet to be worked out. Sources often prove to be of little use, because the term 'lynx' is used for both felines; this is similar to problems with vocabularies that do not always differentiate fisher, marten, and weasel.

If y is indeed the correct Coast reflex for PS *y*, then the reflex of PS *y* might also be revolved; i.e. yaw suggests a more augmentative notion, while s-w could be possible reflexes to check against Nlmt *y*.

Here the augmentative-diminutive pattern would appear to be reversed; i.e. yaw suggests a more augmentative notion, while s-w, Li *ya'w* are relatively colorless or tend toward the diminutive.

For direct comparison of the protosystems proposed by the two authors they are cited together here:

Kuipers (1979)

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Kuipers (1976:13) advanced the suggestion of PS *y > Cs y*, as well as the *y > SInt y*. He writes: 'Only southern TS retains a full complement [of PS resonants], elsewhere > y'. Thompson (1979:714) echoes this suggestion, stating PS *y was 'perhaps y on the Coast.' The example on which the suggestion was based is Kutsugaw *Ps > *mya'w* 'lynx/COYOTE', showing up as li as Sh(i)yaw* 'COYOTE'.

*Ka 'cougar'; kw'tu'n = mosiyewl(w) > kw'tisasiyewl(w)

The modern distribution of the lynx (Lynx canadensis) coin-
in the world's languages. It occurs in Romanian (K Latin), Welsh and Breton, Occan-Umbrian, Ancient Greek, Albanian-Kosatci, Caddo and Choctaw-Chickasaw among others. Proto-Uto-Aztecans kw > Papanca b can be added to this list (Voegelin, Voegelin, and Hale 1962:49).

19Note, however, that Haas (1978) gives kw as a consonant in her 'basic core for North America'.

R. Hopper (1973) proposes a distinction of plain, ejective and murmured stop series in PIE as an alternative to the traditional voiceless, voiced, and voiced spirant series, respectively. This serves to make the PIE stops look more like a 'natural' system; e.g. instead of the traditional t, d, db he proposes t, d, j (j = murmured stop).

11An indebted to Anatole Lyovin for information on Tibetan p > k change; the similar Latin p > Romanian (sosie dialectu) k, c is discussed in detail by Rankin (1974).

15Swadesh (1953:35) proposes Proto-Wakashan *g, *γ, in spite the fact that these have not come down in any of the modern languages. This would have implications for a greater areal picture. Unfortunately, he offers no evidence in the way of reflexes for *P *g, *γ) or sample etymologies. He presumably bases the reconstruction on some irregular alternations caused by the 'sanctifying influence of certain suffixes' (p. 40. y. ibid.: 39, cf. also Sapir 1938). Considering the lack of supporting data, the proposal for *P *g, *γ must be considered only tentative and scarcely compelling. Thus, the incidence of *γ remains solely to the north of Salish, paralleling its occurrence in the Sint languages, while it is lacking in all areas neighboring the CS and Sint languages.

14Korean (1950:10) gives a 'special sound correspondence' of footney *g : Salishan *γ. This parallels the PIS *g > Sint *γ (and J) shift. *Footney probably occupied an area south and west of its present or even pre-contact location, which would give it an affiliation more with the Sint than the Salish linguistic area.

It should also be noted that a putative Proto-Footney-Salish *γ could logically have developed to Kootenay *γ in the Salishan languages, or vice versa, it could have developed to Kootenay *γ in the Salishan languages, or vice versa, it could have developed to the Sint languages. The areal influence was inducing (or had already resulted in) the shift of *γ to *γ.

Appendix

1. PIS *g1 'pierce'
   Sh 1ay 'put in'; 'poke'
   Th 1ay 'insert tight'
   Li 1ay 'insert' (lay-c-a-n? : to core s.t.; with secondary glottalization)
   NOk 1ay 'stab': 'stick'
   CM 1ay 'stab', poke, smaye
   Cr lej 'pierce': 'prick'

2. PIS *ya'p 'erect'; 'vertical'
   Sh ye'p 'to put up'; 'to stand s.t. up'
   Th ye'p 'to erect'
   Li ye'p 'to put up'
   NOk ye'p 'long object stands'
   SOK yi'p 'standing'

3. 'tree' (presumably etymologically connected with 2)
   Sh ye'p'
   Th ye'p
   Li ye'p (Lyovin); cyep (Kuipers)
   NOk cyep
   SOK cyep', cyep'

4. PIS *meye'w 'lynx'; 'coyote'
   Sh sorry' *meye'w 'lynx'
   Th *meye'w 'lynx'
   Li *meye'w 'lynx'
   SOK smaye'w 'coyote'
   Sh smaye'w 'coyote'
   Fa-Sp smaye'w 'mountain lion'; 'cougar'
   Ka *meye'w 'mountain lion'; 'cougar'
   Ka smaye'w 'coyote'
   Cr smaye'w 'coyote'

5. PIS *g1 'strong'
   Sh yay-l 'strong'
   Li 41 'strong'
   NOk ye'p 'push s.t."
   Fa o1 'to try hard'; 'make an effort'
   Cr ya' 'firm'

6. PIS *tay 'be sprinkled'
   Sh lay 'be sprinkled'
   SOK lay 'water flows'
   SOK lay 'water runs'
   Ka ti'k'u'le'kw? 'spring' = 'melt ground'
   Cr tla' 'pour liquid' (glottalization?)
   Ch ti' ' (snow) melt'

7. PIS *ye(')?
   Sh yi 'this'
Ka ye 'this'

8. PIS *yan?
Th *yan *shiver'
NOK *yan *itch'

9. PIS *say
Sh *say *shake off'
Th *say *aspirate; blow with mouth'
Ca k=s=s-a-w-n *shake a tree* sch-a-n *I shook it (off)'

10. PIS *Sec?
NOK *Sec? *hawk'
Sh *Sec* *hawk'

11. Additional Shuswap forms containing /y:
   a. cey 'burn'
   b. kaly 'cool s.t. off'
   c. y'ah *evening'
   d. ty'-n-s *to compete with s.o.; to doubt one's word'

12. Additional Thompson forms containing /y:
   a. c'g-y 'vertical'
   b. y't 'high-water'
   c. y'ah 'begin to get dark'
   d. yat 'hush'
   e. yat 'stick blade in'
   f. kay 'sweep'

13. Additional Northern Okanagan forms with /y:
   a. yoo 'burrow'
   b. say 'sweater'

14. Allusion Coeur d'Alene forms with /y:
   a. jay 'pin'
   b. jay'jay'(-t) 'be ugly'; 'homely'; 'ugly'
   c. jay'jay'(-t) 'be ugly'; 'homely'; 'ugly'

References


Hopper, Paul J. Dualized and surronded occlusives in Indo-European. Glossa 7, 141-166.


1939. Stem-list of the Coeur d'Alene language. IJAL 13.92-103.


Watkins, Donald. 'A description of the phonemes and position classes in the morphology of Head of the Lake Nakakan (Salish),' University of Alberta dissertation.