ABOUT EVIDENCE FOR PROTO-SALISH *r.[1]

1. In their important article Pattern and Change in Halkomelem Salish Dialects Elmendorf and Suttles describe a language-community in a part of which a regular sound-shift takes place: a sub-dialect of Musqueam merges l and n into n (p. 7). The same article discusses the Chilliwack merger of l and n into l. A large number of lexical items are quoted from Cowichan, Musqueam and Chilliwack. This article provided the basis for Kuipers' paper On Divergence, Interaction and Merging of Salish Language-Communities, where Squamish material is added, necessitating consideration of yet another shift, viz. that of l to y in part of the Sq. lexicon: Sq. // Halk. correspondences comprise 53 cases of l // l and 28 of y // l (now raised to 59 and 34). It is shown that shifts regular in particular dialects occur incidentally in others. The Suttles-Elmendorf article gave a close-up of the sociolinguistic situation which gave rise to such deviations, and it contained sufficient material for an analysis of the Sq. // Halk. relations, providing an explanation, for instance, of occasional n-forms in other Halk. dialects and in Sq. For Sq. the conclusion was that it is a mixed l-and-y language. Similar occasional deviations were shown to occur in the whole Salish area.

2. In Towards a Salish Etymological Dictionary (henceforth SED) Kuipers lists 157 Proto-Salish (PS) roots. To avoid pitfalls caused by incidental shifts, borrowing, etc., the etymologies were "limited to root-morphemes with perfect cons.-correspondences" (p. 47). Part of the reconstructed phonology is as follows (Thompson added, see 3 below):

PS	*r	*l	*y
CdA.	r	l	y (d)
Kal., Sh.	l	l	y
Sq.	l/y	l/y	y
Th.	l	y	z (glott. also c̓ y̓)

3. In their paper Proto-Salish *r (henceforth PSR) Kinkade and Thompson make an interesting attempt to add to the number of known PS roots with *r, the evidence for which was thus far limited to that provided by the languages which preserve *r as r. Starting from the observation that the Th. shift of *l to y took place earlier than that of *r to l, they conclude that Th. l gives a degree of evidence for PS *r. Six examples (numbered 1-6) show Th. cases with l where CdA., etc., have r (to these may be ad-

We did not attempt to be exhaustive.

ded Th. məlámən medicine // CdA. mar-im treat for illness).

The next step is the observation that in the languages which preserve *r as r, this phoneme occurs only as C_2 in roots $C_1VC_2(C_3)$, and this only when C_1 is not a uvular. Since Th. has the distinction y vs. l also in other positions, the Th. elements with l in these cases are taken as evidence for PS *r (exx. 7-9 for *rVC_2, 10-12 for *C_1Vr, 14-16 for suffixes).

This reasoning would be convincing if every Th. l as C_2 after a non-uvular which has a CdA. counterpart would be matched by r. The authors state that this is the case: "An examination of the cases in which C_2 of stems shows the correspondence Th. l to l elsewhere reveals that the forms contain also postvelars as C_1." However, a limited material yields the following examples with a non-uvular as C_1:

(1) Th. skəkəl̓éx°eʔ muskrat (cf. also kəl̓x°éẃesxən lizard)// CdA. čélex° muskrat (with the common CdA. stress-shift). The word is widespread in Salish and is even found (borrowed?) in Wakashan, cf. Kwa. kəlák°.

(2) Th. nk°elk°él lukewarm // CdA. k°el̓ be hot, sunny, warm. -- Sh. xk°lk°el lukewarm has the prefix x- corresponding morphologically to Th. n-.

(3) Th. ć̓əlx°íyx to squat // CdA. ć̓el one stands. -- Sh. V̄ć̓l to stand up (ć̓l-ilx to get up, ć̓l-ewt to stand), with extensions in ć̓lx- to stand up, ć̓lx°- to stand, rest on stg. (s-ć̓lux° standing, ć̓lx°-um to raise a structure, ʔs-tk-ć̓lux° to land on one's feet, ć̓lx°-íl̓əp chair, ć̓lx°-ikn̓ saddle, etc.). No *ć̓lx°-ilx (cf. the Th. form) was recorded.

In these examples Th. has l as C_2 corresponding to CdA. l in a position where l is opposed to r. Hence Th. l in any position cannot without further adstruction be regarded as sure evidence for PS *r.

4. In PSR the number of PS roots with *r is further increased by regarding Sq. l as evidence for *r. Given the large number of the Sq. l-forms, it is not surprising to find Sq. cases with l corresponding to CdA. r. Kinkade and Thompson quote SED 81, 20, 128 (PSR 3, 4, 6) and, in addition, four cases where Sq. l corresponds to Th. l unsupported by CdA. (PSR 7, 8, 11, 12). Of these, 11 is semantically unacceptable (PS *cribbed // Sq. write) while 8 Sq. lúlum to sing is more likely to be connected with CdA. dul sing warsong than with a PIS root ?*riwé- rumble, clatter, ring. The two other examples are 7 Sq. láp̓- warped, skew // Th. láp̓- bend (stg.) over and 12 Sq. q̓élya take a steambath // Th. nq̓élzetən sweathouse.

5. The material given in SED contains the following numbers of cases with

Sq. (1, y) going back to PS (*r, *l) (the "regular" correspondences required by the theory are underlined):

PS *r 4 cases // Sq. 1 3 cases (SED 20, 81, 128)
// Sq. y 1 case (SED 8)
PS *l 15 cases // Sq. 1 10 cases (SED 7, 47, 48, 61, 86, 95, 107, 112-113, 122)
// Sq. y 5 cases (SED 13, 30, 62, 89, 101)

5.1 The Sq. case with y from *r is

(4) Sq. ṗiṗiám overflow (√ṗey) // CdA. ṗer flood, be in excess, overflow (PSR 21).

This counter-example is explained as due to a doublet in PS (and another doublet is posited because of Th. səl- turn and siyə́- twist PSR 20). But one can posit doublets in a proto-language only on the basis of a well-established theory, while here the doublets are posited to establish the theory! It would then be better to assume a doublet or shift (due to borrowing, dissimilation, etc.) in the individual languages. For possible examples of such cases see On Divergence p. 10; cf. also Sh. x°əx°yéywt loan (√x°ey) and Kal. xulx°ílt debt, CdA. x°el be alive and Kal. x°i(ʔ) id. Other examples in 7 below.

5.2 As to the cases with Sq. 1 from *l, though this is by far the largest category, in PSR the view is taken that these "can reasonably have been borrowed from l-languages, which surround Squamish" (p. 48). But this is not likely, and that not even so much because of the number of these cases, but because of their status in the language. Examples:

(5) Sq. √ q°al, q°əl think, mind, speak (q°lq°álwan think, plan, sq°álwan mind, heart (spiritual), opinion, q°ə́lq°əl talk excessively, nq°əltn voice) (SED 107).

(6) Sq. √q̓°əl ripe, cooked, done; berry (q̓°əl be cooked, q̓°əlt to cook, sq̓°əlm roast salmon, nq̓°íq̓°lus stick for roasting salmon; sq̓°lam berry, sq̓°əlḿx° blackberry) (SED 112-113).

Ablaut and derivatives speak against borrowed status here. Of (5), a y-form occurs only in q°íʔq°i(s) talk (to) and nəx°sq°íʔq°i talkative, of (6) no y-form is found at all in Sq. On the other hand, Sq. has quite isolated morphemes with l from *l which are more likely to be relicts than loans:

(7) Sq. q̓°i-íls to dance. The Sq. formation corresponds exactly to Sh. q̓°y-ilx id. (lit. shake the body). Th. has the suffix -íyx, cf. (3) but for to dance has q̓°eýcút (lit. shake oneself; ý remains bef. cons.). Sq. has -ils otherwise only in ɬxils to stand up (red. ɬiɬxíls). Neither of these words is likely to be a borrowing.

Cm. p̓alk̓- 'turn over' Cm p̓arq̓- 'turn up' Th p̓iyáq̓ 'turned in the wrong direction'

(8) Sq. p̓lac̓m "turned-over" (canoe). This root is not otherwise found in Sq., but p̓lac̓- is to Sh. plek̓ to roll as is Sq. q̓iáx̌an stockade to Sh. q̓leƛn fortress, c-q̓leẋ round (for Sh. deglottalization see SED p. 48). The two cases, one with l and one with y, are perfectly parallel. (SED 101)

(9) Sq. si?l grandparent (sí?la "granny"). This word, a common Salish relationship term, is very unlikely to be a borrowing. (SED 48)

6. Given that Th. l after uvular points to *r, and Sq. y to *l, another group of cases to be explained are those with Sq. y // Th. l:

cf. Th qʷəz- 'blue'

(10) Sq. q°éyq°əy copper // Th. sq°li? id.

(11) Sq. qəy bad (qi-?úcin to curse, etc.) // Th. q(e)líl angry; to bawl out.

(12) Sq. wúq̓°i go downstream // Th. wúq̓°əl id.

These, like the examples (1-3) above, would have to be explained as Th. borrowings from an l-language.

7. The one case where the loan-status of a Sq. word with l is adstructed in PSR is 22 Sq. čl?aqɬ // Colm. p̓láqəl (Th. spi?héwt) yesterday, where Sq. č might point to borrowing from Straits. But precisely this case can serve to illustrate the "occasional shifts" mentioned in section 1.

An interchange of l and n, regular in parts of Halk., occurs occasionally in IS, cf. Sh. celc̓l cricket // CdA. c̓anc̓an̓ grasshopper, Sh. ?ek̓°n fish roe // CdA. ík̓°ul id. In a number of cases this interchange is due to dissimilation, e.g. Sh. pún̓-ləx° mole (zool.) // CdA. pul-y̓e gopher, pul-ya-hal̓ mole; such cases are found within Sh. itself, e.g. V̄lg̓° to hide and ng̓°-ilx to hide oneself, V̄?alk̓° to ache and nk̓°-p-al̓xkn rheumatism.

cf. Cm sárs̓ar 'cricket' Cm čáńčan 'grasshopper' Cm púl?ya 'gopher, mole' Cf. Cm s?átwan ~ s?átwal 'goose or swan' Cm nkiy̓ált ~ lkiy̓ált 'spouse's grandparent' I doubt this. Cf. Cm pan-

The l in Colm. p̓láqəl shows a similar shift from (less likely, to) l, cf. Sh. pn-hé?e when?, pn-?éne at that time, etc. The element pi?- in Th. spi?héwt/spi?x̌éwt yesterday, tomorrow (dep. on article) recurs in Th. pi?sté? when? and possibly in Sh. pyin now, with still another shift. If in the temporal-deictic root *p(a)n- the n is old (as is suggested by CdA. s-pintč year, pin(t)č always, Kal pen(tə)č year, Sq. k°i t-pánu next year, Pug. padáb period, time), then we don't have a PS *l here. If one rejects this identification, then Th. pi?- is first of all reminiscent of Kal. pi:- in spi:sc̓é yesterday, pi:stém̓ when? (which parallels Th. pi?sté?). Kal. preserves *l; Vogt's (always unstressed) i: represents əy. We have, then, three forms of this deictic element: pn-, pl-, py-. Nor is this case isolated, cf. CdA. q°in be blue, q°el̓ be livid, bluish, angry,

cf. Cm qʷíy̓ 'blue', qʷín 'green'; qʷalí 'buckskin horse with black mane'

and Kal. q°ay blue, green, Sh. q°iy-, q°ey- blue, purple, Th. q°ez- blue.

Even the correspondence p ṕ // č č́ may occur outside its "regular" area, cf. Sq. ṕéli? thin bark, Sh. ṕelén bark // Cdá. čel be bark, Kal. čí?lélx° bark of tree.[2] The whole first part of Sq. čl?aqɬ poses too many problems to serve, by itself, as a basis for any conclusions.

These turn out not to correspond; cf. Ok ki?lílx", Th kazéy fine bark'

8. The cases (1-12) must be dealt with before any new PS reconstructions based on Th. (let alone Sq.) are attempted. The Th. l-y distinction requires an explanation, and a number of cases clearly go back to *r-*l. The Sq. l-y distinction, on the other hand, cannot be explained in this way, nor can it serve to establish PS *r. For the more Sq. forms with l from *l are assumed to be borrowings, the greater the likelihood that any word with l is a borrowing, since the l-dialects don't distinguish between l from *l and l from *r. Hence, as one stresses the likelihood of borrowing -- and PSR goes quite far in this -- one decreases the indicative force of cases like Sq. láṕ- (sect. 4, end). The argumentation is therefore self-defeating. The most one can say about such cases is that they do not contradict a particular reconstruction. Since the r-languages likewise cannot contradict the reconstruction (not having a distinction r-l in the positions in question), the Th. evidence must stand entirely on its own. Counter-examples must be explained, and different explanations will be possible for different words, and here, again, the "least favorable" explanation will be the one that declares a Th. l-form to be a borrowing, as the more such cases there are, the more the remaining instances will be suspect.

I don't see that this follows. And the same argument might be based on dialect mixing, which, after all, is just borrowing from another dialect.

some of them?

But not if proposed by K&T?

Not necessarily so, since *r seems not to have been common.

9. The diagnostic value of Th. l for PS *r would be greater if it could be proved that Sq. has a double representation y/l not only for *l but also for *r. This would first of all eliminate cases (5-9), the discussion on the status of Sq. l-forms no longer being relevant. Case (4), far from causing problems, supports this view, which would also remove points (10-12), leaving only (1-3). Only one more example which could be used in support of Sq. y from *r has been found: the Lill. cognate of (11) is qəl bad, which takes the "darkened" form of the suffix in n-ql-átk°e bad water (-étk°e), n-ql-ánwes to hate (-énwes). In Sh., such darkened suffixes point to l from *r. But it is more probable that the root qəl was borrowed by Lill. and Th. We find darkened vowels also in other borrowings, e.g. o (not u) in Lill. k°óṣo pig, Th. poṣ cat (ṣ is [sj], s is [šj]). The language from which qəl was borrowed may have had a slightly different pronunciation of əl in general than was the case in the borrowing languages, which identified this əl with their əl from *ər after non-uvulars.

on the contrary!

He qɔ́l

why?

But darkened vowels also occur in native words.

10. We now turn to Interior Salish. As lack of initial r- is not uncommon, while the exclusion of r after back consonants is either unique or very rare, the more likely cases where PS *r might be reconstructed are those with Th. qVl- (Q = back cons.). In PSR three such cases are presented (PSR 10-12), but two of these raise serious doubts:

(13) Th. n-q̓élzetən sweathouse // CdA. líq̓- bake [error for bury?] (with metathesis), Kal. sə-láq̓ist sweat-bath (with metathesis) (PSR 12). Cf. also Kal. es-láq̓i be buried, be in the sweatbath (laq̓ to bury, Sh. liq̓- Colm. líq̓-), Sh. q̓ílye take a sweatbath.

(14) Th. q°il- cheat // CdA. q°il- id. (PSR 10).

In (13) we are faced with two (or three?) meanings, and with a troublesome metathesis of *q̓il- which would yield liq̓- (Reichard's läq̓) in CdA. but laq̓ in Kal. This is not the sort of case that can establish a theory. Furthermore, the Th. root meaning to bury is yeq̓- (and not leq̓-), which makes the case problematic even if the metathesis is accepted. -- As to (14), it is as possible to allow doublets in Th. as in PS, in which case the root can be connected with √q°al- (see (5) above), as can CdA. q°íleʔ to sing.

11. There is a more fundamental difficulty. In IS, the l-languages have in part different vowels before l from *r than before l from *l. For example, Sh. reflects *al *il as el il but *ar *ir as al el (so that *al and *ir coincide). A number of Sh. verbs with overall meaning "dismantle" have alternative suffix- and root-stressed forms, the latter having the vowel i.[3] Examples: plq°-/pílq°- break off, t̓lx°-/t̓ílx°- rip at seam, ɬǧ-/ɬíǧ- sell out, ɬǧ°-/ɬíǧ°- lose, kɬ-/kíɬ- take off (as clothes), t̓q°-/t̓íq°- strike, kill, q̓w-/q̓íw- break, pl-/píl- lose. To this group also belong k̓l-/k̓él- cut into strips, sl-/sél- peel, x°l-/x°él- divert water, which go back to *k̓(i)r-, *s(i)r-, *x°(i)r-; for the first of these cf. CdA. c̓ar cut flimsy object with shears and PSR (2), where the Th. form is quoted as k̓əl-, besides which we recorded k̓íləm cut strips of skin, that is, (part of?) Th. has the same ablaut, but here the l from *r did not color the vowel.

The Sh. words with l from *r have another peculiarity: on the whole, they take suffixes in their "darkened" form, i.e. suffixes which otherwise have e i u appear with a e o instead. The 3 subj. - 3 obj. trans. form of plq°-, etc., above is plq°-nt-és, but that of k̓l-, sl-, x°l- is k̓l-nt-ás, sl-nt-ás, x°l-nt-ás. From this it follows that a darkened suffix by itself, i.e. without support of a root-stressed ablaut-form, gives a degree of evidence for l from *r as C_2. Thus, Sh. c̓ls-ám to oil (intrans -ém) points to *c̓rs-. Sq. c̓əls be shiny does not contradict, and its meaning suggests a connection with Sh. sc̓aʔls Oregon grape (has holly-like leaves), cf. also

coloring (velarization?). Alternation of the Sh type (e i vs. a e) does not occur in Cm.

the darkened vowel in ćls-áɬp O. grape bush (-éɬp). Th. has śćáɬse' O. grape, with ɬ and darkened vowel. On this cumulative evidence a PS *ćVrs- shiny may be tentatively posited. It is probable that we have a "Schwebe-ablaut" form *ćrVs- in Sh. ćlas Th. ćəlés kingfisher (PSR no. 19; the UCheh. Cowl. form ćəlém suggests that *-(V)s is a suffix), and here r actually appears in the r-languages (Colm. ćərís). Sh. has, in addition, tk-ćlás-t soaking wet, and the semantic connection "shiny - oily - wet" recurs in CdA. nas wet Sq. s-nés-qn hair-oil Cw. s-nés-šən marrow, s-nas fat.

Handly related.

There are two more groups of cases where darkened vowels occur, and here they are not conditioned by l from *r (nor by back consonants). In the first place they are found in roots, e.g. CdA. nas wet, Sh. staḿ easy, Lill. pamp fast. In the second place, certain roots require them in suffixes, e.g. Sh. ḱa- bad ḱs-áɬće mean at heart (-éɬće), ḱs-os ugly-looking (-ús).

Correlated with the appearance of darkened vowels is the occurrence of "sharp s" (written ş) in Lill. and Th., both in cases with l from *r (Th. ş'kal buckskin) and in cases without (Lill. ştot cricket).

The appearance of darkened vowels and of ş is not regular: Sh. ḱíləm quoted above shows that ablaut patterns have led to eliminations by analogy. Sh. lacks ş but is more conservative than Th. as regards the darkened vowels.

Cm has ? both.

12. We are now in a position to state the problem posed by reconstructions of the type *Qir- (Q = uvular). The question arises why *r leaves no darkening effect on the vowel in any IS language here. One would have to assume either that *r and *l coincided after Q b e f o r e the *r that was left in other positions started having a darkening effect, or that this effect never arose or was eliminated after Q. Both alternatives give rise to new questions. How did *r in the other positions get its darkening feature? What did this feature consist of? (Danish uvular r lowers preceding vowels, but living IS r is not uvular). Why was the feature barred or eliminated by preceding Q? And in general, why should r and l merge after Q but not elsewhere? Notice also, as a matter of detail, that neither of the above alternatives allows the explanation "l from *r" for Lill. qəl quoted in 9. The whole traditional "l from *r" theory is fraught with difficulties.

Good question

Dissimilation — both are +back.

Since *r always has the darkening effect, while darkened vowels may occur without *r, the question should be asked whether *r cannot be explained as a result of a "darkening feature" rather than be considered a cause of it. It will be shown that this "r from *l" hypothesis has many advantages over its opposite.

Interesting idea. But note that at least in Cm l also occurs both before and after darkened vowels. Offhand, I know of no cases of r with a darkened vowel.

13. Let the symbol A stand for any darkened vowel in the individual languages, and let PS roots *C_1VC_2 be symbolized as follows:

C : any consonant l : l
T : any non-back cons. V : any (plain) vowel
Q : any back cons. ! : the "darkening" feature

The "r from *l" theory implies the following developments:

*TVT gives TVT
*TV!T gives TAT CdA. nas, etc. (see 11)
*TVl gives TVl CdA. s-čil quarry Th. key- pursue
*TV!l gives $TA^{r}/_{l}$ CdA. čar Th. ṣ-ḳal (see 11)
*QVT, (*QV!T) } gives QVT
*QVl, (*QV!l) } gives QVl CdA. q°il- sing; cheat Th. q°ey- speak

The only hypotheses this theory needs are (a) that Th. extended the occurrence of l and (b) that V! either did not occur after Q or lost its feature "!" to Q. It is possible, therefore, to select for "!" any feature which would be phonetically likely to be thus influenced by Q. The theory implies several consequences, which will be discussed in the next sections.

14. Requirement (A) is that CdA. must have no roots TAl (except, of course, in TAlQ, where A is due to the following Q). Reichard's Stem-List gives ca. 70 cases of roots TVl(T), of which only two have the "excluded" shape: maʾl be uncomfortably warm and maʾl come to a boil. Since these may be identified, there is really only one counter-example, which may well be due to a special development (Kinkade and Sloat 1972 quote this root as máʔlˀ (no. 37)).

Cm has at least 4 (other) instances of darkened vowels before l.

4 in Cm, 1 in Cr } = 5

15. Requirement (B) is that there must be no IS roots QAl-. In Sh. there are no roots having this shape, nor have any been quoted for Th., where our material contains none. In CdA., out of 13 roots QVl two (once more homophonous ones) have this shape: ǩal redhot and ǩal spy (but not ǩel lay evenly // Th. ʔes-ǩól cribbed PSR no. 11). One notes the total absence of roots Qol, which is no argument in favor of our theory, however, as there is no Qul either (this is significant in the context of the labialized vowel - consonant problem, which is not at issue here). In any case, the two CdA. counter-examples stand alone in the whole of IS.[4]

16. Requirement (C) is that those languages which merge !l and l should tend to preserve the difference V! versus V, i.e. they should have an opposition Al - Vl, while on the other hand those languages which keep !l and l distinct should tend to lose the distinction of V! vs. V, i.e. they should reduce or not develop A before the reflexes of *!l. For whereas the result of *TVT vs. *TV!T yields a distinctive vowel-opposition V - A, the

But note again that Cm has darkened vowels before l but not r.

result of *TVl vs. *TV!l is first of all Vl vs. V'l', where ' indicates the variants of V and l required by "!", variants that became jointly distinctive after the loss of "!" -- a redundancy that could be solved in favor either of V' or of l'. The existing languages fully bear out this requirement. Sh., which merges !l and l into l, keeps a distinction of Al (al el ol) versus Vl (el il ul); in CdA., on the other hand, there are only three possible vowels before r (ar er or) and three before l (el il ul) -- the traditional way of writing CdA. vowels masks the phonemic relations, which are better represented (er ir ur el il ul). According to PSR p. 42,"Spokane, for the most part, has the regular reflexes of PIS vowels before r" -- here the redundancy is solved maximally in favor of l'. Th. shows an embryonic shift of l' to r (PSR p. 45) but the development became superfluous after the shift of plain l to y, which at the same time made possible a reduction of the incidence of A (PSR p. 51), though Th. does preserve the redundancy V'l' in a number of cases. Note that a Th. word like ṣpálmən calf of leg has a double redundancy in having both ṣ and a instead of s and e.

I don't understand this par.

17. Requirement (D) is that the Th. cases with l in positions where l' did not occur must be explainable as borrowings or as results of special developments. In particular, Th. l at the beginning of a word must be of limited occurrence. -- The general part of this requirement is easily met:

not exhaustive

PSR lists only 7 cases of "irregular" Th. l, of which three as C_2 after q (nos. 10-12) and four as C_1 (nos. 7-9, 17). After the l-to-y shift, the

not so, eh?

distribution of Th. l was limited to TVl (to the exclusion of qVl and lVC), and in the history of languages there are many examples of such distributional gaps being filled. Precisely this sort of situation can

not a doublet

account for a doublet q°Vy-/q°Vl- (no. (14) above).

The second part of requirement (D) is borne out by our Th. material, which, though limited, is large enough to show significant differences. This material contains 10 examples of initial y- from *l- and 6 with initial l-. The difference between the two groups of cases is striking (see Lists 1 and 2 below). The cases of y- are with one exception verbal roots well-integrated in the conjugational and derivational system of the language. The cases with l, on the other hand, do not contain any such root: two concern (within our material) isolated derivatives, and four are nouns with botanical or zoological meanings. It is instructive to compare Th. V̄yiǩ- in yəǩ-yíǩ smart, intelligent and V̄liǩ- in liǩ-kst finger, líǩ-xən toe. We find the first in Sh. lǩ-em inform (with numerous derivatives), ləǩ-líǩ sober, x-ləǩ-líǩ clear (water), CdA. laǩ lighten, be electric, Pug. laǩ remember, ləǩ be light. (The second example of Th. l-

not in a bot. or zool. noun n-ləx°-ləx°-étku clear water is either a misrecording or a changed form of this same root, cf. also Lill. n-ləx-léx clear (of water). The second root recurs in Sh. ləx-líx-kst finger, ləx-líx-xn toe, Sq. níx-q°uy-ač, níx-q°uy-šn id., Cw. s-néx-čəs, s-néx-šən id. (Here one might be tempted to conclude that Th. l and y have different reflexes in other languages, and one could support this view by quoting Lill. -énwes heart // Th. -élus/-álus id. (PSR 15); however, we find other cases of interchange n - y, see 7 above and cf. Sech. yík°usəm nose one's head // Sq. níx°usm id. -- the Cowl. case yápa- bend down (a branch) // Th. láp- id. (PSR p. 50) by itself means no more than the incidental northern cases with n, for which the Elmendorf-Suttles article has provided the explanation.)

doubtful

The meanings of Th. yix- and lix- are easily connected via the notion "show, point", cf. Gr. deíknumi show Lat. dico say, digitus finger, Germ. Zehe toe (from the same IE *deik'- Engl. teach, token) and Germ. weisen point, weise wise, unterweisen teach (ultimately from IE *weid- see). The case is comparable to that of Th. q°il- cheat vs. q°ey- speak, for which we may quote Lat. calo call, proclaim, clarus clear calvor cheat (Engl. calumny), Germ. hell clear (IE *kel- call). The very interchange of sonants has parallels in IE, cf. Russ. klik call, krik shout; in fact, even the triplets mentioned in 7 are matched by Gr. kaléō Lat. calo call, Gr. kanaxé noise Lat. cano sing and Lat. carmen song (dissim. from *can-men).

Cw informants suggest this lix- means 'spread out'.

18. Requirement (E) is that the type TAT be represented by identical roots in the individual languages. The number of examples is not large, but sufficient to show that A in these cases goes back to a feature of the parent-language. But whether this feature was "!" as defined in 13 remains to be determined. It is remarkable that the more widespread roots of this type have similar shapes: they have m and one of the phonemes c' t' as their first two consonants. However, requirement (E) is not necessary for the "r from *l" theory as such but only for bringing all cases of A under a common denominator. Examples of TAT (darkened suffixes are counted as evidence for the darkening feature in roots): Sh. mʌ́c'pe? wasp, blackjacket (ʌ is a rare darkened vowel) // CdA. mac'p bee, wasp; Lill. mác'əɬ pus // CdA. mác'uɬt id.; Sh. s-x-c'm̓ɬ-ós matter in eye (-us) // CdA. sc'omc'omɬt a boil; to this group with m and c' also belongs Kal. sc'oḿ bone // CdA. sc'aḿ id. (Cw. sc'am?); Lill. mət'us-ánk-tən kidneys (-enk) // CdA. mót'us kidney; Sh. st'aḿált/staḿált cattle // CdA. st'aḿá(ltumš) cow (Kal. st'əḿá); close to this group with m and t' is Kal. mo?ot to smoke, fume // CdA. mo?t smoke; isolated is the case Sh. c-ɬac soaked, all wet // CdA.

They aren't. cf. 'snot'

Cw sc'n- 'tame' ɬac one drop falls; further Kal. saṅ be tame // CdA. saṅ id.; Kal. ncs

cm snís 'snot' be snotty // CdA. snos snot; Kal. hoi to quit doing // CdA. hoi cesse.

19. In section 11 a PS root with "Schwebe-ablaut" *c̓VɬVs-/c̓ɬVs- was reconstructed; the present theory changes this to *c̓VlVs-/c̓lVs-. In PSR (no. 18) Sq. c̓c̓el, Halk. θ̓ecéle kingfisher are added to this nest of words, and the root is reconstructed as *c̓ker- (?). This would be an unusual type of PS root, and no parallels are given for the dropping of *k in Th. c̓elɔ́s, etc. The "l from *r" theory is based on too many problematic cases. The "r from *l" theory can simply deny that the Sq. and Halk. words are related to the PS root, but also allows the hypothesis that "!" under certain conditions (say, of stress) leaves k as a trace. One would then have to assume a development *c̓!l- > c̓kl- (which would yield the Sq., Halk. forms for kingfisher), and as a parallel one could point to the irregular correspondence Sq. mác̓uɬ // Halk. (Cw.) méc̓eɬ pus (CdA. mác̓uɬt, see 18). The PS form must have had *c̓ (as in Sq. and CdA.) of which the regular Halk. reflex is θ̓ (as in kingfisher above) -- instead, we find Halk. c̓ which continues *k. In our theory, the PS form was *mV!c̓-, and it is possible to imagine a development *mkc̓- (parallel to c̓kl- above) > *mc̓c̓- > mc̓- (Halk. mec̓-). -- But this is speculation, and speculations are possible for the "l from *r" theory, too: the Bella Coola word for pus is mnc̓ɬ-ta, whose "extra" n could be interpreted as a change from l, upon which interpretation one could try to build an "A from *r" theory by positing an older PS *mrc̓- (a development sonant > vowel is quite common in Salish: Eastern Sh. e from nasals, Bella Coola a from n, and everywhere i, u from y, w).

not at all. Some of AK's objections are based on ideas presented but questioned in the presentation.

And rather ad hoc.

Sp, Ti, ch i<n

20. Speculations aside, our conclusion is that r in Salish is strictly secondary, a result of a special development in a limited area. The advantages of the "r from *l" theory are here summed up:

(a) Instead of having to explain why *r and *l merged after Q, it assumes a feature "!", reconstructed in abstracto, so that its non-occurrence (or disappearance) after Q, rather than causing problems, can be used to determine its phonetic nature (one can think of a series of pharyngealised vowels, of an "emphatic" glottal stop, etc.).

(b) No explanation is necessary of how *r first acquired and then lost its darkening feature.

=(b)?

(c) There are no problems of relative chronology (see 12, first par.). The authors of PSR go no further than saying that the conversion of r to l m u s t, and that the effect on neighboring vowels m a y have been recent (p. 50-51). But absolute time-depth solves no problems of relative chronology, and assuming the time-depth to be small only accentuates these problems.

(d) The theory has, above all, the advantage of simplicity: instead of

assuming both *r and an (arising and disappearing) darkening effect, it assumes only a constant darkening feature (from which r follows). No more entities are posited than are strictly necessary. For Sh., Lill., Th. "Al" it is not necessary to reconstruct *Vr, as it can be immediately derived from *V!l.

21. Though our conclusions are in almost every respect the reverse of those of PSR, one truth remains unaltered: the Th. distinction l - y gives a degree of evidence for a phonemic difference in PS -- whether this be called *r vs. *l or *!l vs. *l. The immediate task, then, is to exploit this evidence for the reconstruction of PS. Since Th. clearly has both borrowed and self-created l-forms, it is necessary to analyse and categorize these so as to arrive at a maximally significant residue. The cases of Th. initial l suggest that the language borrowed a number of botanical and zoological names (see 17), and this would explain counter-example (1) in section 2. The darkened vowel in láp- (PSR no. 7) may be of the same nature as the darkening effect of Lill. qel on suffixes (see 9). The l in Th. ćelr°íyx (counter-example (3) above) may be due to dissimilation. The cases PSR no. 8 Th. lewó- knock, hammer and no. 9 lext (fish, meat) is improperly cooked, has bloody taste, le?íx get slimy suggest that Th. l has an imitative-emotive value (cf. Engl. sl- in slap, slam: slush, slobber, etc.). The doublets q°il-/q°ey- and liǐ-/yiǐ-, with their semantic differentiation, form yet another category. Only a detailed analysis of the lexicon can lead to positive results here.

Th. is clearly a y-language, i.e., its regular reflex of PS *l is y, and once its spurious l-forms have been isolated, the remaining ones can be considered evidence for PS *!l. The Sq. case is more complex. If the y-component of Sq. were of the Th. type, there might be l-forms belonging to this component which go back to *!l. But since Sq. also has an l-component, it is impossible to prove this in any particular case, as any individual word with l may belong to the l-component (see section 8).

Appended to this report are a number of lists. These are meant to serve as an adstruction to the above conclusions, and also to provide material for further research. The lists are the following:

1. Thompson initial y-
2. Thompson initial l-
3. Lillooet darkened vowels, ş and ł
4. Sechelt // Squamish corr. l // y
5. Sechelt // Squamish corr. l // l
6. Halkomelem // Squamish corr. l // y (additions to On Divergence p. 7)
7. Halkomelem // Squamish corr. l // l

For Shuswap darkened vowels see Kuipers, The Shuswap Language (forthcoming) sect. 4.

LIST 1.

Thompson initial y-

	V̓yə(ʔ)	good (y̓ə good yewíʔx recover yəʔmíns likes)	Sh. ləʔ (cf.? Sq. V̓ʔəy-)
	V̓yə́p-	squeeze in hand	Sh. líp̓-
Cm lám- 'glad'	V̓yém-	pacify (a child)	Sh. lém- comfort, console
	V̓yén-	feel (y̓ʔéns feels)	Sh. lén-
	V̓yeq-	hay (yeqém to hay syéqem grass)	
Cm líq- 'cover w/dirt'	V̓yéq̓-	bury	Sh. líq̓-
	V̓yəğ-	drag	Sh. lğ-
	V̓yəğ°-	hide	Sh. lğ°-
Cm ləqw- 'put over'	V̓yəğ̓°-	come loose (y̓ʔəğ̓°)	Sh. líğ̓°- (cf.? Sq. yəx̌°- free, loose)
	yəx̌-yix̌	smart, intelligent	Sh. ləx̌-lix̌ sober

LIST 2.

Thompson initial l-

Cm líx-	lix̌-kst; -xəm	finger, toe	Sh. lx̌-lix̌-kst, -xn id.
	n-ləx̌°-ləx̌°-étx̌u	clear water	(see sect. 17)
	sləx̌°éyəxkən	moose	Sh. slx°eyxn caribou (x̌° - x° sic)
	ləhéć	otter	Sh. lhéć
	léćiʔ	unidentif. plant	Sh. líléćʔ desert lily
	sléwəć	inner cedar bark	Sq. sléway̓ thin bark

LIST 3.

Lillooet darkened vowels, ş, ç and ɬ

(Lill. has three darkened vowels: a o ʌ, the latter very rare. These turn an adjacent s, c into "sharp" ş, ç (glott. ć is always "sharp") and an adjacent l into "thick" ɬ. The ɬ of a reduplication-syllable remains "thick" before ə. In a few words with darkened vowels ş is found not immediately adjacent to the latter, and ɬ occurs in two words before i).

a	pamp	fast	pəpéla	to swing
	pél-pel-t	stubborn	n-pəpéla-tən	a swing
Cm spármən 'muscle'	spálmən	calf of leg	splant	skunk
Cm məćútt	máćoẋ	pus	məʌoş-ánk-tən	kidneys Cm matús
	táɬəʔ	tongue	şl-alć	steep rock
	ćəʔp	sour	sʌ̓əm-ált	cattle
Cm snárkw 'clark's nutcracker'	nálək°	Clark's crow	ɬ̓a-alć	to mud a house
'íkl'ik 'sparrow hawk'	ləx-lákik	ptarmigan	ćk°əlaʔqín	strawberry roan Cm kwraʔqín 'red roan'
	ɬ̓ál-xəl	to bite	k°ćk°laɬ̓	to stagger
	s-ɬ̓al	leather	xlaʔ	raven
	x̌°ʔal	to hurry	sweláps	mountain sheep

	(qəl	bad:)	
	n-ql-átkʷe	bad water	
	n-ql-ánwes	to hate sb.	
	n-ql-áłc̓e	bad-tempered	
o	pṣoṣ	wild cherry	
	ç̓ól-lex	to reach	
	c̓ól̓-col̓	Oregon grape	
	cəl̓-c̓ól̓	bitter	
	spcl	slide	
	stot	cricket	
	ƛ̓óton	to smash up	
	n-ƛ̓oc̓-elús-əm	to wink	
Cm kʷráyq 'yellow'	kʷolíy	green, yellow	
	kʷolmékst	yellow moss	
	kʷolít	brass	
	čkʷolíy̓	sorrel horse	
	skʷékʷol̓	a yellow-chested bird	
	nekʷól	butterfly	
	kʷóṣo	pig	Cm lkʷoṣó
	k̓ʷól̓ce?	wren	
	mác̓oł	pus	Cm macúłt
	ƛ̓qʷóṣa	to urinate	
	nqʷelonétkʷe	"moss in water"	
ʌ	ṣ-p̓ʌṣ-qs	nose	
	p̓ʌ́ṣ-k̓e	hummingbird	
ł	mł̓ínłəp	balsam tree	Cm mrímłp 'spruce'
	c̓ł̓ípen	to pinch stg.	

LIST 4.

	Sechelt l	Squamish y (i)	
	pə́lem	pəym	to fall/id. overboard
	məl	məy	to sink
	tə́l̓əm	təyn	to clear land
	t̓ə́mul	t̓əmuy̓n	to patch up
Cm cílkst	cílačis	cíačis	five
	səlx̌ácut	səyx̌	to drift downstream
	nəč̓ə́lnaq	snč̓ínaq	in-laws (of man, woman)/ /wife's brother's wife
	č̓áliλtən	sč̓áyiλn	any fish
	ləč̓	yəč̓	full
	-lap	-yap	2nd person plural
	kʷalímut	kʷay	to hide oneself
	kʷálucmixʷ	kʷáyucmixʷn	to kill a person
	sxʷálus	sxʷaháy̓us	dropoff
	xʷák̓ʷil	xʷák̓ʷi	to get drunk
	q̓ə́l̓əm	q̓əym	to make camp
	sq̓ilt	q̓it	day/morning
	sq̓ila	sq̓i?	smoked fish/sliced salmon
	qʷə́l̓ay	qʷáy̓cay	hemlock
	qʷəlsát	qʷi?sán	to boil stg.

q̓°álq̓°al	q̓°aẏ̓	tame
x̌ílix̌	x̌əyx̌	to make war
x̌°úlum	sx̌°úyum	grey hair
swə́ltən	switn	fishing net
yúlak°	yúya?k°	wave
?úluλ	?úyuλ	board a canoe

LIST 5.

Sechelt 1	Squamish 1	
mə́lalus	mə́lalus	raccoon
mac̓álaqin	smək̓álqn	brains
mál̓səm	mul̓sm	low blueberry
mak̓°áli	smək̓°ə?á1	grave
t̓ə́lx̌°ək̓	st̓əlx̌°c̓	devilfish
st̓é̓liq°	t̓əlm	wild strawberry
səlq°-	səslq°	sad, lonely
səlíwan	nsə́lus	to spin wool
sí1a	si?1	grandparent/grandmother
čəláqaλuλ	čl?aqλ	yesterday
sλ̓ə́l̓um	st̓lu?m	cockle
lə́wax̌	ləwx̌	rib
slə́way	slə́way̓	inner cedarbark
lilíq	li1̓q	easy
kílalá	kí1ala	butterfly
k°áyəl	sk°ayl	today/sky
x°alítən	x°alítn	white person
qəlqəlmút	qlim	weak
qə́lum	qlum̓	eye
sqálax̌	sqalx̌	digging stick
sqaqláλ	sqaql	baby, toddler
q̓ə́mul	sq̓əml	paddle
q̓al(it)mít	q̓á1an	to believe

q̓íɬawtxʷ	q̓iʔáwtxʷ	smoking shed
q̓ʷəl	q̓ʷəl	cooked, done
q̓ʷə́la	q̓ʷəɬ̓	belly
q̓ʷəlána	q̓ʷə́laʔn	ear
sq̓ʷəlúma	sq̓ʷlam	berry
q̓ʷə́lus	sq̓ʷəlm	barbecued salmon
q̓ʷiyílš	q̓ʷyilš	to dance
x̌ələ́m	x̌əɬ̓	to write
x̌ʷíx̌ʷləm	x̌ʷiɬ̓m	string/rope
hálaytən	hálitn	iron/chisel
hílit	hílit	to roll stg. (over)
swáwlus	swíw̓lus	youth
yálup	yúlaʔ	Indian rhubarb
ʔəlás	ʔəɬ̓ás	sea cucumber
ʔalawíʔ	sxʷəlawúʔ	turnips
ʔilálatxʷ	sʔiltxʷ	roof
ʔílinas	sʔílinas	chest

LIST 6.

Halkomelem l // Squamish y

(These cases are in addition to the ones quoted in On Divergence p. 7. Unless otherwise indicated, Halk. forms are Cowichan)

Halkomelem	Squamish	
c̓əlxʷć́lstəl	čiʔáxʷ	quiver
šélčəp	šéyčəp	firedrill
šqəlʔ	nsqiʔ	underbrush
q̓é́lštən	q̓íʔšən	canoe mat
x̌ələx̌qínəm	x̌əyx̌, x̌iʔx̌	war whoop // war
x̌ʷć́lcʔaɬp	x̌ʷáy̓ay	willow

LIST 7.

Halkomelem l	Squamish l	
šqp̓é́lθətən (Ms.)	qp̓alstn	knee(cap)
sp̓é́lʔxʷəm	spélxʷm	lung
p̓ələyʔéws (Ms.)	p̓éliʔ	tree-bark
p̓q̓é́lʔqənʔ	x̌ʷux̌ʷsélqn	mountain goat — ?
méləs (Ms.)	mélalus	raccoon

(Halkomelem)	(Squamish)	
mélx°el?	sméłx°l	Indian plum
mál?səm	muɬsm	swamp blueberry
šməḵ°éləp	ṯeləmáẏ	graveyard // grave
ṯéləmeɬp	ṯeləmáẏ	wild cherry
sɬíqol	sɬiql	mud
sθxéləm	cxalm	sword fern
ćemíl?	ćmil	thin
θəcéle	ćčəl	kingfisher
θélɛ?	ćáli?	heart
sí?lə	si?l	grandparent
sél?səl?tən	səɬsltn	spindle
x°ćélnəct	nčélnəč	chorus of song
šélə	šəɬ	penis
ɬxéyləš	ɬxilš	stand
sx̣pɛ́l?qən	sx̣palqn	feathers
lélam?	laḿ	house
-alk°ɬ	-alk°ɬ	suff. "dancer"
slə?x°íws	slálaẃ	body (doubtful corr.)
-ə?ləq	-a?lq	suff. "wave" (?)
sléwəy	sléwaẏ	tree-bark
léwəx	ləwx	rib
sk°ək°á?təl?	sk°ək°á?tl	living apart
k°íntəl?	k°intl	fight
k°ələlałp	k°lúɬay	alder
k°éləšt	k°élaš	shoot
sk°éyəl	sk°ayl	day, sky
k̓°cəlćqəɬ	(k°i) čl?əqɬ	yesterday
k̓°él?ə	k̓°əɬ	stomach
k̓°éləw?	k̓°ɬaẃ	skin, hide
x°íx°el (Chill.)	x°ix°ɬ	underbrush // branches
x°əlítəm (Chill.)	x°alítn	white person
sqéqɛl?ə	sqaql	child
šqəqá?qəl	sq°úq°ɬ	pond
qéləm	qluḿ	eye
qélqəɬp	qáɬqay	wild rose
sqéləx	sqalx	digging stick
sqəléw?	sqlaẃ	beaver
sq̓éməl?	sq̓əmɬ	paddle
q°əm?cáls	q°mčuɬs	cranberry
šq°áləwən	sq°alwən	heart
q̓°éləm	q̓°əl	to cook

(Halkomelem)	(Squamish)	
sk̓°i:lmex°	sq̓°əlḿx°	blackberry
q̓°ey°íləš	q̓°iílš	to dance
x̌élew	x̌á°lu	spoon
x̌éy°ləm°	x̌°il̓m	rope
hələ́y°tən	hálitn	d-adze // chisel
hə°wú°ləm	həẃúl̓m	to play
wəl°	wəl	tule // bulrush
swíw°ləs	swíẃlus	adolescent boy
syil°ánəm	sil̓ánm	year
yéx°ələ	yəx̌°ólə°	eagle
°əl°élyə (Ms.)	°l°éli	to dream
s°élyə	s°éli	dream "lay" spirit power // dream
s°íltəx°	s°iltx°	plank // roof, house
s°íləs (Ms.)	s°ílinas	chest

Footnotes

1) This paper to a certain extent takes issue with Kinkade and Thompson 1972, which appeared in a series the preliminary nature of which is emphasized on its title-page. To this may be added that the abovementioned article provided the stimulus for the ideas developed here. See further the introduction to the Dutch Contributions as a whole. Abbreviations:

CdA.	Coeur d'Alene	IS	Interior Salish	Sech.	Sechelt
Chill.	Chilliwack	Kal.	Kalispel	Sh.	Shuswap
Colm.	Columbian	Lill.	Lillooet	Sq.	Squamish
Cw.	Cowichan	Ms.	Musqueam	Th.	Thompson
Cowl.	Cowlitz	PS	Proto-Salish		
Halk.	Halkomelem	Pug.	S. Puget Sound		

2) For other possible examples of this sporadic correspondence in IS see Kinkade and Sloat 1972 p. 41.

3) For special ablaut-forms in verbs meaning "dismantle, destroy" cf. the o-phase in Slavic *por- rip up, *pol- weed, *bor- subdue, fight, *kol- stab versus the e-phase in *per- support, *ter- rub, *mer- die, etc.

4) An additional example, that escaped our attention, is CdA. q̓°al be black from burning. These cases probably belong in one category with the Kal. words with a after a uvular (SED p. 53); that this is a secondary development is clear from examples like Kal. q̓am to swallow, where the other IS languages have zero degree and not a single one gives evidence for a darkened vowel: CdA. q̓em, Sh. q̓m-em (not -am!), Th. q̓m-əm, Lill. q̓əm-ən.

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