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ON DIVERGENCE, INTERACTION AND MERGING  
OF SALISH LANGUAGE-COMMUNITIES

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1. A comparative survey of several Salish languages for which lexical material is available<sup>1</sup> reveals two seemingly contradictory facts. On the one hand, the lexica differ considerably -- so much so, that a glottochronological test suggests a considerable time-depth for the parent-language. On the other hand, the phonetic comparisons that can be established show only relatively minor (and very common) sound-shifts. Particularly the consonant-systems show a great stability. Furthermore, many grammatical (as opposed to lexical) morphemes are found in near-identical forms over the whole Salish area. With regard to the lexicon, geographically distant Salish languages seem about as divergent as the main subdivisions of Indo-European, while phonologically and with regard to grammatical elements they are as close as, for instance, the Germanic or even the Slavic languages.<sup>2</sup>

2. The phonetic closeness of the languages may be demonstrated by a number of comparisons between Squamish as a representative of the Coast Division and Coeur d'Alene as a representative of the Interior Division. Sq. is taken as a point of departure, and we set as our goal to give four examples of each correspondence. Where Reichard's stem-list (or our perceptiveness) fails to yield this number, words from Kalispel (Vogt) or Shuswap (own recordings) are quoted.<sup>3</sup> The comparisons are numbered, and the examples of each correspondence are tabulated below.

(1) Sq. peλ- CdA. pēλ 'thick', (2) Sq. peχ°- CdA. -pāχ° 'to spit', (3) Sq. puh- CdA. pux°- 'to blow', pu°us 'to swell', (4) Sq. p'éli? Shu. p'elén? 'bark of tree', (5) Sq. p'i?- 'grab', p'ic' 'get squeezed' CdA. p'i? 'crush by pressing', (6) Sq. meq' 'be full (fr. eating)' Shu. meq' 'overeate', (7) Sq. -tx° CdA. -tx° 'house', (8) Sq. taq° 'drink', Vq°u 'water' CdA. əq°s 'drink', (9) Sq. tuɿ CdA. tūwe 'go across', (10) Sq. t'em? CdA. t'ēm 'cut', (11) Sq. t'ək°s CdA. t'əq° 'explodes', (12) Sq. t'eq°° 'break' CdA. t'əq°°-s 'egg or eye bursts', (13) Sq. cek°- CdA. cek° 'pull', (14) Sq. c'ex° (Cow.

ç'âq'°em) Shu. ci'eq'° 'rotten', (15) Sq. cut 'say', cun 'tell, order' CdA. cun 'point, show' (for the meaning cf. Lat. dico Gr. deiknumi Germ. zeigen), (16) Sq. c'u'°- CdA. c'awq 'pull out', (17) Sq. c'uλ- Shu. c'ελt Kal. c'al 'cold', (18) c'ip'°-us-m 'shut eyes /-us-/ itr. /-m/' CdA. c'ip' 'pinch fine', (19) Sq. -ic'a CdA. -ic'â' 'all around, all over', (20) Sq. s-p'ûl'-am 'smoke' Shu. s-pe'ûl' 'fog, steam', (21) Sq. sel- CdA. sêl, sil 'turn, spin', (22) Sq. seq' CdA. saq' 'split', (23) Sq. sum' CdA. sum' 'smell', (24) Sq. s̱at CdA. s̱- g°ât 'who?', (25) Sq. n-s̱û'yu CdA. s-wâ' 'cougar', (26) Sq. -Vôn CdA. -Vôn 'back', (27) Sq. č'it CdA. č'it-â' 'near', (28) Sq. šman CdA. šmān 'enemy', (29) Sq. -šn CdA. -šn 'foot, leg', (30) Sq. šuāl CdA. n-šg°āl 'road', (31) Sq. -šit CdA. -šit 'as a favor to', (32) Sq. λeq' CdA. λaq' 'wide', (33) Sq. λuq'°, λeq'° 'come off (bark, skin)' CdA. λaq'° 'skin, pull off', (34) /λik'° λik'° 'get hooked up' CdA. λêk'° 'pierce w. fine-pointed object, fork, barb, spike', (35) Sq. λ'ex° 'be won, mastered' Kal. λ'exûp 'beat in game' CdA. t'uxup 'win, earn', (36) Sq. lix° CdA. dēx° 'descend', (37) Sq. k°lûl'a Shu. k°le'εlp 'alder', (38) Sq. k°usn Kal. Ak°kūsem Shu. sek°ūsnt 'star', (39) Sq. k°uλn CdA. kuλ 'borrow', (40) Sq. k'°ât'an CdA. k'°it'ân 'mouse', (41) Sq. k'°in CdA. k'°inc 'how many?', (42) Sq. -x° CdA. -x° '2nd pers. sing.', (43) Sq. -qs Kal. -qs 'nose', (44) Sq. -qin 'throat, language' CdA. -qin 'voice', (45) Sq. sqayc 'potato' CdA. sqig°c 'wild potato (?)', (46) Sq. q'êlja 'take steambath' Shu. sq'êlje 'sweat-lodge', (47) Sq. q°al-, q°el- 'think, mind; speak' CdA. q°a?q°â'l 'speak, talk', (48) Sq. q°an'imač Shu. q°enimeqλ 'mosquito', (49) Sq. q'°uc CdA. q'uc 'fat', (50) Sq. q'°el CdA. q'°âl 'cook', (51) Sq. xem CdA. xēm 'heavy', (52) Sq. °es-îû'k° CdA. du'uk° 'stingy', (53) Sq. wanâx° CdA. g°unix° 'true', (54) Sq. °acim CdA. cicāmā' 'small', (55) Sq. -ač CdA. -ičt, -ičs 'hand', (56) Sq. -alq°u Shu. s-ελq°ε kw 'water' (cf. 8), (57) Sq. °aj'x 'crab' CdA. ayx 'crayfish', (58) Sq. -aħa'n CdA. -aħen 'arm', (59) Sq. hui 'be ready' CdA. hai 'cease', (60) Sq. °upn CdA. upen 'ten', (61) Sq. °u'ūs CdA. usê' 'egg', (62) Sq. °iln CdA. iln 'eat', (63) Sq. -iy'as CdA. -iŵās 'between, together, in contact', (64) Sq. °acq 'outside' CdA. acqâ' 'go out', (65) Sq. q'°iflê Kal. q'°eýemencut 'dance'.

We find identical consonants in both languages:

p	(1, 2, 3, 60)	c'	(16, 17, 18, 19)	š	(28, 29, 30, 31)
p'	(4, 5)	s	(20, 21, 22, 23, 38, 43, 61, 63)	λ	(1, 17, 30, 32, 33, 34, 39, 56, 62)
m	(6, 10, 23, 28, 48, 51, 54)	n	(15, 26, 28, 29, 38, 39, 40, 41, 44, 48, 53, 58, 60, 62)	λ'	(20, 35)
t	(7, 8, 24, 27, 31)	č	(26, 55)	l	(4, 21, 37, 46, 47, 50)
t'	(10, 11, 12, 40)	č'	(27)	k°	(13, 37, 38, 39, 52)
c	(13, 15, 45, 49, 54, 64)			k'°	(40, 41)
				x°	(7, 35, 36, 42, 53)

q (43, 44, 45, 64)	q <sup>o</sup> (12, 14, 33, 49, 50, 65)	h (59)
q' (6, 22, 32, 46)		ĩ (46, 52, 59, 65)
q <sup>o</sup> (8, 47, 48, 56)	ĩ (51, 57, 58)	ũ (25, 63)
	ĩ <sup>o</sup> (2)	

Additional cognates do not contain any of the consonants for which fewer than four examples were found. In only one case four examples are available of a correspondence other than the above perfect identities, namely of Sq. ŷ -- CdA. g<sup>o</sup> (24, 30, 45, 53), and this correspondence is the "regular" one. Example (25) is an onomatopoea (cf. also Sq. ŷũ-ŷũ'n 'to bark' CdA. wiħ 'dog barks'), while the CdA. form in (63) has -ilg<sup>o</sup>šs besides it (Reichard Gr. p. 631 suggests that CdA. -iŷšs is a borrowing from Thompson, where l > i).

3. The above comparisons encompass all Sq. consonants (except k, k', which occur only in borrowings). Even though there is a "leftover" in CdA. (to wit the trill r and the uvular fricatives ġ, ġ<sup>o</sup> not found in words with obvious Sq. cognates; for CdA. d see 6 below, end), the almost perfect phonetic congruence of the Sq. and CdA. consonant-systems is striking: it parallels that of Russian and Ukrainian, or that of Dutch and Flemish.

This parallelism becomes only more striking if one considers the deviations from the above pattern. Where a comparison is obvious but not perfect, the interlingual deviation can almost always be matched with an intralingual one. Such deviations are:

I. Plain vs. glottalic cons.: Sq. p'eq' CdA. pšq 'white', Sq. p'es 'go ashore' CdA. paʔas 'come to surface', Sq. x<sup>o</sup>ik<sup>o</sup>- 'brush' CdA. x<sup>o</sup>šk<sup>o</sup> 'clean, sweep', Sq. ʔšlqaiʔ CdA. alq'ic'anč 'snake', cf. also exx. (14, 20) in 2. Examples within Sq. itself: cek<sup>o</sup>-n 'pull' vs. ck'<sup>o</sup>-áčut 'run', lit. 'pull oneself' (cf. also Cow. Ńk<sup>o</sup>et 'pull'); Sq. puh- 'blow, swell' vs. s-p'ũq<sup>o</sup>am 'foam' (cf. also Cow. pa:t 'blow' vs. p'a:m 'swell'); Sq. q'al- 'obstruct passage' vs. q'al'- 'be stopped'. These cases are of various origins: (a) C(V)ʔVC > C'VC, see exx. (14, 20) in 2 and paʔas/p'es above; (b) CVʔ(V)C > CVC', cf. Sq. ʔes-ĩŷʔk<sup>o</sup> CdA. duʔuk<sup>o</sup> 'stingy' vs. Cow. ewk<sup>o</sup> 'wealth, property' (see Kuipers p. 40); (c) in Shu. a root-initial glottalic cons. is regularly reduplicated with a plain one, e.g. c'ex 'shame' cēcexmũl 'bashful', q'čxt 'strong, hard' qeqeq'xt 'stronger, harder', so that a reduction or an analogical change of a petrified reduplicative formation could lead to a change in glottal articulation (such, combined with (b), may be the background of Sq. piʔpeq'lačx<sup>o</sup>m 'get yellow leaves /-ačx<sup>o</sup>-/ (tree in fall)' with -peq'- as opposed to p'eq' 'white').

II. Uvular vs. velar cons.: Sq. k<sup>o</sup>uĩ CdA. q<sup>o</sup>ay 'joke', Sq. q<sup>o</sup>š<sup>o</sup>-ui-

'nail' CdA. k<sup>o</sup>ax 'claw', cf. also ex. (11) in 2. Examples within Sq. itself: c'ek<sup>o</sup>-č-alšá? 'seventy' vs. c'eq<sup>o</sup>-λ-alšá? 'id. (counting money)'; V-q<sup>o</sup>u 'water' vs. formative -k<sup>o</sup> in words with maritime references; q<sup>o</sup>á?-uit 'they (absent)' vs. all other "absent" deictics which have k<sup>o</sup>-; cf. also Chi. šq<sup>o</sup>él-ewel 'mind' vs. sk<sup>o</sup>élewel 'to think', containing the same root as ex. (47) in 2. The two series are much closer to each other than is the case, for instance, in the North Caucasian languages, and there have been crossovers from q<sup>o</sup> to k<sup>o</sup> in the whole Salish area.

III. Alternatives λ'/t' (cf. ex. (35) in 2). CdA. has merged the two into t'; in Shu. they are mostly (possibly always) in free variation, and λ' is reduplicated with t (see Ic above), e.g. λet-λál' 'wet'. In Sq. itself there are alternative forms in two words: st'l.mú<sup>o</sup>t/sλ'l.mút 'old person', t'el.nám/λ'el.nám 'go on a prolonged hunting-trip'; cf. also Sq. t'amk<sup>o</sup> 'salmon-eggs' and s-λ'amk<sup>o</sup> 'id. dried for use in winter'.

IV. Alternatives λ/l (cf. exx. (17, 30 in 2). Within Sq.: 'élaqai? 'snake' vs. 'lqáí? 'a small (mythical?) animal which moved by "rolling sideways"'. In Cow. léx<sup>o</sup>ten vs. Mus. λ'ex<sup>o</sup>tén 'blanket' deviations I, II and IV appear to be combined.

4. This close phonetic parallelism between widely separated Salish languages combined with the considerable lexical differentiation presents a picture which I cannot match with any language-area of which I have some knowledge. For the sake of comparison: the phonetic differences between E and W Circassian, which are mutually intelligible, are much greater than those between Sq. and CdA., but as the lexica are largely identical the speakers easily adjust themselves to such differences as E /f/ corr. to W /s<sup>o</sup>/, while E /x<sup>o</sup>/ corr. to W /f/. The Salish situation is the exact opposite: the phonology is largely identical but the lexica diverge strongly. I can explain this only by a comparatively recent spreading over a wide area by small, relatively independent groups: a small community adopts lexical changes much more easily than a large one. In the earliest period, when their number was small, these groups could develop minor individual sound-shifts, while as a result of continued contact one dialect could borrow elements from another in forms which differed from the native ones. Also, mergers of groups must have taken place. In this way, phonetic doublets arose which later spread over a wide area. Cases which may go back to the oldest period are those pointed out by Boas-Haeberlin p. 126 where k<sup>o</sup> and k/č forms exist side by side, as in the suffix -m(i)x<sup>o</sup>/-m(i)š 'people' and in the numeral 'one' CdA. nāk<sup>o</sup>-á? (and nik<sup>o</sup> 'be tribe'), Kal. nk'u? (and

nk'o'a 'one day'), Shu. nek'u? versus Sq. nč'u? (and nč'áí'u?am 'family', etc.). Notice that in both Sq. and CdA. the suffix 'people' occurs in both its forms: Sq. sqx'á?miš 'Squamish' vs. ?úx'umix' (population of) village', snanáí.mex' 'Nanaimo', CdA. sčícá?mš 'Coeur d'Alene' vs. snik'o'álmx' 'tribesman'.<sup>4</sup>

If there have been old dialects which shifted k° to k/č, we may expect such dialects to have shifted k/č to c. Such secondary dental forms may survive in the word 'five' CdA. Kal. Shu. cil-, Sq. ci- < \*cei- or \*cii- (in cíačis 'five') as compared to the word for 'hand' Kal. čelš Shu. kelx Cow. céleš (with Cow. c < k/č); further in the word 'turn, spin' CdA. sál Sq. sel- as compared to \*xel in Kal. šelč 'turn around', Sq. ši- in šič' 'be all around', ši-ši'č 'round', ši'uk'o- 'id.' (Cow. šelák'o), šúí-uj'in 'drill holes with awl' (Cow. šél-cep 'firedrill', suff. -cep 'fire')<sup>5</sup>; possibly also in CdA. Shu. ci' 'deer' as compared to CdA. č'i' 'antler, horn' (cf. Slavic \*korva 'cow', Lat. cervus Germ. Hirsch 'deer' containing the same root as Lat. cornu Gr. keras Germ. Horn). With the latter root we find a deviation from the regular Sq.-Halc. correspondences (č to c, and c to č) in Sq. c'istn Halc. c'ýsten 'horn'. The same deviation occurs in Sq. c'm'il Cow. c'emíl' 'thin, flat' and in Sq. scá'qin Cow. sc'č'qen 'cattail'. Halc. itself has divergent forms of this type in Cow. sq'am? 'bone' vs. sc'am?elčxen 'upper arm ("armbone")', cf. on the one hand CdA. sc'am Kal. sc'om 'bone', on the other hand Kal. sčuwáxen 'arm' (deviation I of section 3)<sup>6</sup>. A doublet like \*kVl/\*cVl 'hand/five', found as iá is in the same form over the whole Salish area, must be old, while the doublet 'cattail' is probably due to recent borrowing. The recent Halc. shift of č to c duplicates a very old one, causing difficulties with regard to the dating of individual doublets.

5. We now turn to some problems posed by a comparison of two closely related languages, Squamish and Halcomelem, and in particular to the correspondences involving i, l, n (i = y). To Sq. i there correspond Halc. y and l, to Sq. l Halc. l, and to Sq. n Halc. n. Of the Halc. dialects, Chilliwack merges Halc. l, n into l, while a sub-dialect of Musqueam is known to have merged them into n.<sup>7</sup> Schematically:

Sq.	i	l	n
Cow., Mus.	y	l	n
Chi.	y	l	
Mus. dial.	y	n	

As far as the relations of l and n are concerned, deviations can occur only in the first two rows of the above chart. Regular are Sq./Cow.Mus. l/ll and n/nm, each represented by numerous examples. There are deviations in the following cases:

l/nm in (1) Sq. sél'i-éi' 'wild grape' Cow.Mus. séney'-əlp 'Oregon grape (short)', (2) Sq. c'm'ál' Cow.Mus. q'émén 'arrow', (3) Sq. x<sup>o</sup>alítm Cow.Mus. x<sup>o</sup>enítm 'white person', and doubtfully (4) Sq. s-k<sup>o</sup>l-k<sup>o</sup>él-c Cow.Mus. swák<sup>o</sup>en 'loon'.

In principle there are two possibilities: either the Sq. word is borrowed from an l-dialect like Chi. (for (1) and (2) cf. Chi. sélí:əlp, x<sup>o</sup>elítm), or the Halc. forms are borrowed from an n-dialect. In Kuipers p. 293, 302, 349 the former alternative is suggested. However, the latter one is indicated by Shu. sc'el's 'fruit of Oregon grape', sc'el'səlp 'Oregon grape' and by the word 'shot' quoted by Boas-Haeberlin p. 129: Shu. čemálest Thompson čemēlest (in Shu. č is a free variant of c)<sup>8</sup>, both with l. The Cow.Mus. n-forms are therefore very probably secondary. This means that n-dialects must have been more numerous and widespread than they were in recent times (see Elmendorf-Suttles p. 7f.).

l/nl probably in (5) Sq. sɣals 'throw away, scatter' Cow. swans Mus. swals (Chi. swa:ls) 'scramble giving'. Kuipers p. 299 suggests that the n-form is original, but in view of the cases just dealt with this is far from certain.

n/ll in (6) Sq. snč'ínaq Cow.Mus. snec'éləq (Chi. slēc'éləq) 'spouse of spouse's sibling'. Kuipers p. 286 suggests that n is original and Cow. Mus. l due to influence of an l-dialect, but this l may also be identical with the l in Cow.Mus. x<sup>o</sup>-nec'élwem 'family', in which case Sq. -nč'í- represents \*-nč'əi- and we are dealing with the correspondence Sq. i -- Halc. l (cf. Sq. nč'íi'uy'am 'family'; see section 6). In that case Halc. \*-ln- was reduced to -l- in this word.

There is one probable case of an l-n doublet in Sq., namely (7) sčen'q 'Gibson's Landing', besides which one informant (who called Gibson's landing by a different name) used sčel'q for 'Howe Sound'. Hill-Tout p. 474 quotes stcink 'Gibson's Landing'.

A quite special case is possibly presented by Sq. lam' Cow.Mus. lélem' Chi. lé:lém 'house', which may contain the root Sq. ham', hem' 'be covered; come home', with local prefix n- in n-ham' 'come home', re-duplicated in hi'ám' < \*hi'-hám' 'return home' (nominalized in si'ám' < \*s-hi'-hám' 'Chief, Sir', cf. Lat. dominus). The Sq. local prefix n- oc-

curs as le-, lɛ- in Chi., so that the Sq. and Cow.Mus. words for 'house' can be borrowings from a Chi. form going back to \*n-ham<sup>9</sup> or \*n-hem<sup>9</sup>.

6. A problem of larger scale is posed by the double Sq./Halc. correspondences  $\dot{\text{i}}/\text{y}$  and  $\dot{\text{i}}/\text{l}$ , represented by 53 and 28 examples respectively (of the correspondence  $\text{l}/\text{l}$  there are 54). The  $\dot{\text{i}}/\text{l}$  cases, which constitute a minority, are here summed up: (1) Sq. -iap Cow. -lep '2nd pers. pl.', (2) Sq.  $\lambda\text{qai}\dot{\text{c}}$  Cow.  $\lambda\text{qalc}$  'moon', (3) Sq.  $\text{seq}^{\circ}\text{eq}^{\circ}\text{f}^{\circ}\text{nex}^{\circ}$  Cow.  $\text{sq}^{\circ}\text{él}\dot{\text{e}}\dot{\text{s}}$  'bird', (4) Sq.  $\text{q}^{\circ}\text{if}^{\circ}\text{tq}$  Mus.Chi.  $\text{q}^{\circ}\text{el}\dot{\text{i}}\text{teq}$  'gull', (5) Sq.  $\text{q}^{\circ}\text{ú}\dot{\text{i}}^{\circ}-\text{q}^{\circ}\text{u}\dot{\text{i}}^{\circ}\text{šn}$  Cow.  $\text{q}^{\circ}\text{él}-\text{šen}$  'toenail', (6)  $\text{sá}\dot{\text{x}}^{\circ}\text{i}^{\circ}$  Cow.  $\text{sá}\dot{\text{x}}^{\circ}\text{el}$  'grass', (7) Sq.  $\text{s}^{\circ}\text{ai}^{\circ}\text{qs}$  Cow.  $\text{s}^{\circ}\text{élqsēn}$  'point', (8) Sq.  $\text{k}^{\circ}\text{ai}$  'to hide' Cow.  $\text{š}-\text{k}^{\circ}\text{el}-\dot{\text{e}}\text{le}$  'hideout', (9) Sq.  $\text{hi}-(\dot{\text{i}})\text{únex}^{\circ}$  'big waves' Cow.  $\text{hay}-\text{lénx}^{\circ}$  'autumn' (prob. '(season of) big waves'), (10) Sq.  $\text{ši}^{\circ}\text{úk}^{\circ}$  Cow.  $\text{šelák}^{\circ}$  'round' (see also 2nd paragraph of 4), Sq.  $\text{si}^{\circ}\text{í}\dot{\text{c}}$  Cow.  $\text{selic}$  'full' (simplex in Sq.  $\dot{\text{i}}\dot{\text{i}}\dot{\text{c}}-\text{it}$  'fill',  $\dot{\text{i}}\dot{\text{e}}\dot{\text{c}}$  'full', (12) Sq.  $\text{si}\dot{\text{u}}-\dot{\text{i}}\text{ux}^{\circ}\text{a}$  Mus.  $\text{syá}^{\circ}\text{lex}^{\circ}\text{e}^{\circ}$  'old', (13) Sq.  $\text{qei}$  Cow.  $\text{qel}$  'bad', (14) Sq.  $\text{nč}^{\circ}\text{ái}^{\circ}\text{uy}^{\circ}\text{am}$  Cow.  $\text{x}^{\circ}-\text{nec}^{\circ}\text{élwem}$  'family', (15) Sq.  $\text{?ái}\dot{\text{i}}\dot{\text{s}}$  Cow.  $\text{?él}\dot{\text{e}}\dot{\text{s}}$  'sibling', (16) Sq.  $\text{sk}^{\circ}\text{íwas}$  Cow.  $\text{sk}^{\circ}\text{élwes}$  'co-parent', (17) Sq.  $\text{snč}^{\circ}\text{inaq}$  Cow.  $\text{snec}^{\circ}\text{éleq}$  'spouse of spouse's sibling' (see ex. (6) in 5), (18) Sq.  $\text{q}^{\circ}\text{ei}-\text{m}$  'to camp' Cow.  $\text{q}^{\circ}\text{él}-\text{men}$  'camp' (Sq.  $\text{V}^{\circ}\text{q}^{\circ}\text{ai}$ ,  $\text{q}^{\circ}\text{ei}$  'be high up'), (19) Sq.  $\text{xé}\dot{\text{i}}(\text{?})\dot{\text{x}}$  Cow.  $\text{xéyle}\dot{\text{x}}$  'war', (20) Sq.  $\text{k}^{\circ}\text{ájuc}-\text{mix}^{\circ}$  Cow.  $\text{k}^{\circ}\text{élews}$  'murder', (21) Sq.  $\text{t}^{\circ}\text{ui}^{\circ}\text{t}$  Cow.  $\text{st}^{\circ}\text{élmex}^{\circ}$  'medicine', (22) Sq.  $(\text{s}-)\text{xai}^{\circ}\text{s}$  Cow.  $\text{xé}:\text{ls}$  'world changer', (23) Sq.  $\text{su}\dot{\text{i}}\text{tn}$  Cow.  $\text{swéltēn}$  'net', (24) Sq.  $\dot{\text{i}}\dot{\text{ái}}^{\circ}\text{uas}$  Cow.  $\text{lé}:\text{l}^{\circ}\text{wes}$  'bed platform', (25) Sq.  $\text{sú}\dot{\text{i}}\text{i}^{\circ}\dot{\text{c}}$  Cow.  $\text{sá}:\text{lac}$  'type of mat', (26) Sq.  $\dot{\text{i}}\text{ex}\dot{\text{i}}^{\circ}\text{u}$  'use fire in hunting' Cow.  $\text{híl}^{\circ}\text{xewé}^{\circ}$  'hunt with fire in canoe', (27) Sq.  $\text{cía}\dot{\text{c}}\text{is}$  'five' Cow.  $\text{céleš}$  'hand', and at least for the suffix (28) Sq.  $\text{t}^{\circ}\text{k}^{\circ}\text{ám}-\dot{\text{i}}\text{ex}^{\circ}$  Cow.  $\text{k}^{\circ}\text{émlex}^{\circ}$  'root'.<sup>10</sup>

Except for the fact that there is only one example with word-initial  $\dot{\text{i}}/\text{l}$  (ex. 24), this correspondence is not positionally determined. In particular, it is found in the same general positions as  $\text{l}/\text{l}$  and  $\dot{\text{i}}/\text{y}$ . Here follow five examples of each of these (in the order Sq./Halc.):  $\dot{\text{i}}\text{iq}/\text{yiq}$  'snow',  $\text{sč}^{\circ}\text{iú}\dot{\text{i}}/\text{sc}^{\circ}\text{iyáye}$  'twins',  $\text{č}^{\circ}\text{i}^{\circ}\text{x}^{\circ}/\text{c}^{\circ}\text{ey}^{\circ}\text{x}^{\circ}$  'dry',  $\text{q}^{\circ}\text{ui}/\text{q}^{\circ}\text{ay}$  'die',  $\text{p}^{\circ}\text{éli}^{\circ}/\text{p}^{\circ}\text{éley}^{\circ}$  'bark of tree' --  $\text{lex}\dot{\text{x}}/\text{léwe}\dot{\text{x}}$  'rib',  $\text{cáli}^{\circ}/\text{q}^{\circ}\text{él}\dot{\text{e}}^{\circ}$  'heart',  $\text{sqal}\dot{\text{x}}/\text{sqéle}\dot{\text{x}}$  'digging-stick',  $\text{sk}^{\circ}\text{a}\dot{\text{i}}\text{l}/\text{sk}^{\circ}\text{éyel}$  'day, sky',  $\text{si}^{\circ}\text{l}/\text{sí}^{\circ}\text{le}$  'grandparent'.

In a number of cases Sq. has forms with  $\text{l}$  besides related forms with  $\dot{\text{i}}$ : Sq.  $\text{qei}$  'bad' (and possibly  $\text{qé}^{\circ}\text{qi}^{\circ}$  'soft') besides  $\text{qel}$  'spoil, itr.' (and possibly  $\text{qlim}$  'weak'). -- Cow.  $\text{qel}$  'bad'.

Sq.  $\text{s}^{\circ}\text{ai}^{\circ}\text{qs}$  'point, promontory' besides  $\text{?ai}\text{qsn}$  'Pt. Grey'. -- Cow.  $\text{s}^{\circ}\text{élqsēn}$  'point, spit'.

Sq.  $\text{k}^{\circ}\text{ájuc}-\text{mix}^{\circ}$  'murder' besides  $\text{k}^{\circ}\text{élaš}$  'shoot, sting'. -- Cow. on the

one hand k<sup>o</sup>élews 'murder' and on the other hand k<sup>o</sup>élešt 'shoot', cf. Chi. sək<sup>o</sup>əléx<sup>y</sup> 'arrow', Shu. sck<sup>o</sup>il 'arrow'.

Sq. q<sup>o</sup>éi-q<sup>o</sup>i 'copper' (redupl.) besides sq<sup>o</sup>a<sup>o</sup>íls 'id.' -- Mus. sq<sup>o</sup>éel 'id.' (own recording).

Sq. k<sup>o</sup>i<sup>o</sup>qtn 'fur, skin' besides k<sup>o</sup>l<sup>o</sup>ay<sup>o</sup> 'skin'. -- Cow. k<sup>o</sup>élew<sup>o</sup> 'skin, hide'.

No Halc. counterparts are known of the following, more doubtful cases:

Sq. q<sup>o</sup>i<sup>o</sup>sán 'boil, tr.' besides q<sup>o</sup>el 'be cooked' (glottalized!). -- Kal. q<sup>o</sup>el 'cook by fire underground'.

Sq. q<sup>o</sup>is 'be tied, knotted' besides q<sup>o</sup>elq<sup>o</sup> 'be wound around'.

Sq. xip<sup>o</sup>, xiq<sup>o</sup> 'get scratched', xic<sup>o</sup> 'itch' besides xəl<sup>o</sup> 'write' (orig. 'scratch marks'?).

The Sq. connective element -aj- often found before productive somatic suffixes (Kuipers p. 119) has besides it -al- which is found before non-productive somatic suffixes, in particular -q(i)n 'head' and -Včn 'back', and also in a few other cases, e.g. in the suffixes -alx<sup>o</sup>caλ 'tongue', -alap 'thigh', cf. also nex<sup>o</sup>mec<sup>o</sup>tn<sup>o</sup>álqp 'lie, falsehood' possibly to be connected with CdA. -alp<sup>o</sup> 'mouth inside, oral cavity'.

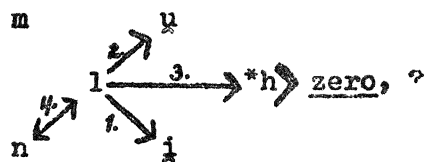
The Sq. forms with l belong to at least two (and possibly to several) different layers. A case like ʔəlqsn 'Pt. Grey' is clearly borrowed from Halc. as besides Sq. s<sup>o</sup>aj<sup>o</sup>qs 'point' we have such derivatives as s<sup>o</sup>ájqs-áj 'elbow' and s<sup>o</sup>aj<sup>o</sup>qs-šn 'heel', pointing to the j-form as the native one. The Squamish are known to have spread southward in recent times, and in the toponymy one may expect Halc. forms, cf. also the case sčēn<sup>o</sup>q/sčēl<sup>o</sup>q (ex. (7) in 5). The name má-m<sup>o</sup>l-i 'territory of Musqueam Reserve' (near the Fraser r.) may therefore well contain the l-counterpart of Sq. muj 'submerge, be soaked', mej 'sink' ('territory which is exposed to floods'?), cf. Kal. mēl<sup>o</sup> 'to flood'.

In Kuipers p. 247 the Sq. l-forms besides forms with j are ascribed to borrowing from a Halc.-type dialect. This is true in the case of ʔəlqsn and may be so in a few others, but it is certainly not true in general. If the doublets were to be explained by borrowing it would be more reasonable to say that the j-forms are borrowed from a Thompson-type dialect (where l > j), since the cases of Sq./Halc. l/l and j/y are each twice as numerous as those of j/l.

According to Boas-Haeberlin a shift from l to j is an innovation in one Interior language (Thompson) and two Coast languages (Clallam, Comox). In Comox l furthermore shifts to u or zero<sup>o</sup> (prob. via h) in the neighborhood of u and a respectively. Squamish is said to adopt the l-to-j



change occasionally. While none of the four languages in question occupy contiguous territories, they are geographically comparatively close, occupying a triangle in the central-western Salish area with Thompson, Clallam and Comox at the corners and Squamish in the center. This triangle also contains Halcomelem, part of which merges l and n. In this area, then, the system of sonants shows a tendency to be reduced in various ways which have in common that they all involve l :



1. Thompson, Clallam, Comox, (Sq.)
- 2, 3. Comox
4. Part of Halcomelem

The occurrence of Sq. forms with *i* besides l-forms belongs in one context with the l-to-*i* shift in Thompson, Clallam and Comox, even though the languages which are contiguous with Sq. do not make this shift. But neither the number nor the character of the Sq. *i*-forms warrants the term "borrowing": the number is one third of all the known Sq. counterparts of Halc. words with l, and this number includes not only names of common phenomena of nature (moon, bird, grass, wave), of common qualities (round, full, old, bad) and relationship-terms, but also living grammatical affixes. The Squamish language-community rather represents a mixture of l- and *i*-pronouncing groups whose language became secondarily unified. We must therefore assume the historical existence of one or more additional *i*-dialects located in the middle of the triangle formed by the present *i*-dialects. Groups of *i*- and l-speakers merged to form the Squamish tribe. Perhaps the legend of X<sup>o</sup>éč'tál' who slew the two-headed serpent Sínulqai' and on his return home acquired as wives the daughters of a number of chiefs reflects the historical course of events suggested by the linguistic data. The version of the story given by Louis Miranda (Kuipers p. 230 ff.) ends with the words: "That is why the people say we are of one common extraction, from above Squamish down to Stamis, all on account of that X<sup>o</sup>éč'tál'."

The interesting data given by Elmendorf-Suttles p. 7f. on the Musqueam n-dialect present a close-up of a sound-shift in part of an individual community. As was pointed out above, the incidence of secondary n-forms indicates that a shift from l to n must have occurred in more than just one microdialect. The origin of the Sq. *i*-forms lies in a similar sociolinguistic situation, and the same may be assumed for doublets of other types. Where such doublets are widespread, and where the word-pairs are identical (as in the case of 'hand' and 'five'), we must assume an early sound-shift followed by a merger of dialects. A wide spread of a particular phonetic type of

doublet but without a parallel wide distribution of identical word-pairs is less significant, since it may be due to parallel sound-shifts which occurred independently in different areas (and at different times). There is, for instance, some evidence for the existence of *j*-from-*l* forms outside the "triangle of labile *l*". To Kal. *y* there corresponds in a number of cases CdA. *d* (Vogt St. p. 15, with 6 examples).<sup>11</sup> CdA. *d* is undoubtedly secondary. Kal. preserves the distinction of *j* and *l*. An original \**j* is therefore certain in the root \**ju*(?)*k*<sup>o</sup> - as evidenced by Kal. *yeyúk<sup>o</sup>e<sup>o</sup>* CdA. *du<sup>o</sup>uk<sup>o</sup>* Sq. *ʔes-ju<sup>o</sup>k<sup>o</sup>* 'stingy' *nex<sup>o</sup>-juk<sup>o</sup>-á<sup>o</sup>min* 'belonging to a stingy person' (prob. 'treasure'). The regular CdA. counterpart of Sq. *l* is CdA. *l* (see 2 above), but there are two cases where Sq. *l* (undoubtedly continuing Proto-Salish \**l*) has counterparts with *d* in CdA.: (1) CdA. *dāx<sup>o</sup>* 'lower, descend, dismount' Sq. *lix<sup>o</sup>* 'fall down' *lix<sup>o</sup>-t* 'put down', etc., (2) CdA. *dul* 'sing warsong' Sq. *lulum* 'sing'.<sup>12</sup> If these correspondences are not accidental, CdA., with *d* < *j*, also has an older *j*-component, and in this case one would posit a parallel development in one or more eastern dialects, unless *j*-from-*l* forms are more widespread in the languages of the Interior (and especially the more western ones) than is known at present.

7. To sum up, the process of differentiation of the Salish languages can be envisaged as follows:

#### Early period

- 1.0. Early dispersal of small groups with near-identical dialects.
- 1.1. Early phonetic shifts in individual dialects (*k<sup>o</sup>*- to *k*-series, *k*- to *c*-series, possibly *q*- to *k*-series).
- 1.2. Mutual borrowing and mergers of groups with different phonetic systems as developed in 1.1, giving rise to doublets (*-mix<sup>o</sup>/* *-miš* 'people', *kel-/cil-* 'hand/five', etc.).
- 1.3. Spread of mixed groups over large territory (hence occurrence of doublets of 1.2. in whole Salish area).

#### Later periods

- n.1. More recent phonetic shifts in individual groups or areas (central-west *l* to *j*, Halc. dialectally *l*, *n* to either *l* or *n*, etc.)
- n.2. More recent borrowing and mergers of groups with different phonetic systems (secondary *n*-forms in Halc., secondary *l*-forms in Sq., Sq. as a mixed *l*- and *j*-language).

#### All periods

Great stability in structure of consonant-system (the shift from *k* to

č and that of č, c to c, ɕ do not alter the structure of the system). Sociolinguistic conditions maximally favoring lexical change.

Parallel phonetic shifts -- both in space and time -- due to similar structural tendencies (early k/č to c shift as in 'hand/five', later duplicated by Halc.; l-to-ɬ shift in central-western area possibly duplicated by component of CdA.)

Borrowing from non-Salish languages (not touched upon in this report).

In several cases language-communities have disappeared as such, and their one-time existence appears from the present-day languages. Such is the case with the ɬ-pronouncing communities which became part of the Squamish, with the n-pronouncing Halc. communities, and possibly with the group(s) responsible for the words with d<ɬ<l in Coeur d'Alene.

\* \* \* \*

#### FOOTNOTES

- 1) Abbreviations: Sq(uamish), C(oeur)dA(lene), Kal(ispel), Shu(swap), Halc(omelem) with its dialects Cow(ichan), Mus(queam) and Chi(lliwack). Cow. forms are quoted as representative of Halc. in general, unless specific features of Mus., Chi. are at issue. -- For references to literature see end of this report.
- 2) Cf. Boas-Haeberlin p. 122: "... it is not quite easy to find the same word used in many different dialects, especially when a comparison of the inland stems with those of the coast is desired. The differentiation of the lexicography of the dialects is considerable. While this is true of the word-stems, the more frequent suffixes show a much wider distribution."
- 3) Transcription: x velar; ɣ uvular; ɕ, θ interdental affr. and fric.; ° labialization; V vowel; C cons.; a:, e: long vowels; ʷ and ɬ are used besides w and y (the former mainly for Sq.); g° is Reichard's gw; a° replaces Reichard's a<sup>2</sup> etc.; in the notation of Sq., Cn is [Cen] and C.n is [Cn], etc.; Sq. i° is structurally ih°; Chi. x<sup>y</sup> is palatalized x; Chi. ˘ secondary stress. -- Sq. i represents both \*i and \*eɬ. -- Glottalization in sonants is disregarded for purposes of comparison (but is always written). -- Reminder: Common-Salish \*k and \*c are Shu. k and c/č (free var.), CdA. Kal. Sq. č and c, Halc. c and ɕ respectively.
- 4) One cannot assume that the original k°-series was delabialized in certain positions (say, before u and word-finally) and then shared the development of the k-series, cf. such examples as (38, 39, 53) in 2. In the case of the suffix 'people' two different morphemes could be involved (say, 'people' and

'territory', cf. Sq. Shu. tmix<sup>o</sup> 'land'), but such can hardly have been the case with the numeral 'one'.

5) If Halc. xelc't 'turn, tr.' also belongs to this group, the word would show that a shift from uvulars to velars has occurred in early dialects even before the shift from velars to dentals.

6) The Sq. pair c'ik'<sup>o</sup>in 'squeeze, pinch (w, two fingers)' vs. č'ik'<sup>o</sup>ni'n 'gnash one's teeth' can be matched with the CdA. pair c'ip' 'pinch fine' vs. č'ip' 'pinch', but this is not the kind of words that can be used for drawing conclusions about phonetic developments.

7) See Elmendorf-Suttles p. 7.

8) The Sq.-Halc. and Shu.-Thompson roots for 'Oregon grape' do not correspond regularly, but the words are too similar to be separated and the deviation must be due to borrowing or folk-etymology. In Shu. sc- the affricate tends to lose its closure (sc- > ss-); a similar tendency in sc'- in the sub-dialect from which the word could have spread to the SW could have resulted in the form s- in the receiving language. -- For 'arrow' I recorded Shu. sck<sup>o</sup>il (and ssq<sup>o</sup>élc'uwe), and this is the root found in the Chi. counterpart of (2) sèk<sup>o</sup>èlèx<sup>y</sup>.

9) A widespread Interior word for 'house' is citx<sup>o</sup> (Kal., Shu.). -- Sq. has a word s'iltx<sup>o</sup> which means both 'roof' and 'Indian house', cf. Cow. s'iltx<sup>o</sup> 'plank'. Snoqualmie-Duwamish 'ál(?)al 'house' may be connected with the latter word.

10) In one word there seems to be a reverse correspondence Sq. l - Halc. i, ey, namely in Sq. stél.mex<sup>o</sup> Cow. mestímex<sup>o</sup> Mus. mestéyex<sup>o</sup> Chi. mestí:yex<sup>o</sup> 'person', cf. also Cow.Mus. q'ay'stéy'mex<sup>o</sup> Chi. q'eq'sté:ymex<sup>o</sup> 'forest dwarf'. To my knowledge, Sq. does not differentiate 'person' and 'Indian'; for the latter, Halc. has Cow.Mus. x<sup>o</sup>élmex<sup>o</sup> Chi. x<sup>o</sup>élméx<sup>o</sup>. Cf. further Shu. qélmex<sup>o</sup> 'Indian, people', sqélem(e)x<sup>o</sup> 'man', Kal. sqélix<sup>o</sup> 'Indian' sqaltemíx<sup>o</sup> 'man'. Notice that Kal., like Halc., has forms with and without m in these words.

11) There is, in addition, a CdA./Kal. correspondence y/y, cf. CdA. yuq<sup>o</sup>, yaq<sup>o</sup> 'pretend' Kal. yoq<sup>o</sup> 'tell lies'. The conditions for the occurrence of d are unknown.

12) A relation of this word to Halc. t'flem 'sing' s-t'flem 'secular song' and to CdA. q<sup>o</sup>flām seems doubtful.

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