Pharyngeal Movement in Colville and Related Phenomena in the Interior Languages[1]

Anthony Mattina
University of Montana

0. In this paper I present an interesting morphophonemic phenomenon in Colville, an interior Salishan language of eastern Washington. Then I discuss similar phenomena in related languages and draw some diachronic inferences. The phenomenon in Colville is one I call "long-distance conditioning", where some element in the root interacts with an element in the suffix at a distance of several phonemes, and often one or more morphemes.

1. There occur some words in Colville which appear to have shifted a pharyngeal resonant from the root to the stressed suffix: the root has lost a pharyngeal, and the suffix has added one. Further, the vowel of the suffix is lowered to [a], homorganic with the (immediately preceding) inserted pharyngeal. Thus three changes are involved, one in the root (the loss of a pharyngeal), and two in the suffix (the insertion of a pharyngeal and the lowering of the vowel).

The following forms are attested in Colville:

1. q̓ʷəy-lscʕát *his clothes are dirty* (q̓ʷʕáy *black*), -lscút *clothes, appurtenances*

1a. q̓ʷəy-ʕás *Black man*, -ús *face*

1b. i-s-t-q̓ʷəy-ʕáca̓ʔ *I am very dirty*, -íca̓ʔ *surface*

2. n̓-x̓əl-s-ʕáɬca̓ʔ-t-ən (s-x̓əl-x̓ʕ al-t *day*), -íɬca̓ʔ *inside*

2a. x̓əl-p-ʕál̓axʷ *it's daylight*, -úl̓axʷ *earth*

2b. c-k̓əɬ-x̓ə-x̓l-ʕás-əm *he has been watching for them*, -ús *eye*

3. k-s-cəm-ʕálqs *he has a blanket coat* (*cʕam *cover*), -(á)lqs *clothes*

4. si-m-ən-cʕát *they make a fuss* (sʕáy-l̓x *they are noisy*) -cút *reflexive*

5. pw-ən-cʕát-əlx *they make noise running down* (pʕáw *he ran down*), -cút *reflexive*

6. k̓əɬ-t̓əm-ʕás-s-əlx *they kiss them* (*t̓ʕam *suck*), -ús *face*

7. c-ən-c̓ən-c̓ən-m-ʕás-əm *he keeps his eyes tightly shut* (c̓ʕan *tight*), -ús *eye*

8. ɬaʔ-ɬaʔt̓-xʕán *he gets his feet wet* (ɬʕat *wet*), -x(á)n *feet*

9. s-ən-pə-pt-ʕálaʔqʷ *dumplings* (pʕat *boil*), -álaʔqʷ (dim. of -álqʷ *cylindrical object*)

10. c-ps-ʕayaʔ *senseless* (pʕas *scared*), -áyaʔ *?*

All these examples contain lexical suffixes, and two of the root pharyngeals are unattested.

In addition to these lexical suffixes, at least one grammatical suffix attracts unto itself a pharyngeal:

11. c̓əm̓-c̓m̓-ən-t-ʕás *he started sucking* -(í)s *3rd trans*

The root c̓um̓, however, is apharyngeal.

Finally, one case of vowel lowering, unaccompanied by pharyngeal intrusion (or shift), has been noticed:

12. x̣ə-x̣s-áɬc̓aʔ *good tasting meat* (x̣as *good*), -íɬc̓aʔ *meat*

The stress properties of the roots sʕay, pʕaw, *t̓ʕam, c̓ʕan, ɬʕat̓, pʕat and pʕas are indeterminate, which is to say that examples have not been found of these roots occurring with variable stress suffixes; q̓ʷʕáy is stress retentive (loses its stress only to an inherently stressed suffix, but retains its stress when followed by a variable stress suffix); x̣ʕal, *cʕam and c̓um̓ are stress shifting (lose their stress to variable stress suffixes as well as to inherently stressed suffixes). All the suffixes are inherently stressed except -(á)lqs, -x(á)n and -(í)s.

The shift of the pharyngeals is probably a function of the combination of several factors, including the stress properties of roots and affixes. In spite of the scanty evidence it is possible to conjecture that the pharyngeal of a stress retentive root is pushed onto an inherently stressed suffix (but not onto a variable stress suffix), while the pharyngeal of a stress shifting root is pushed onto both inherently stressed and variable stress suffixes. The following examples corroborate this hypothesis:

1c. s-t-q̓ʷʕáy-xən-x *Blackfeet*, -x(á)n *foot*

1d. q̓ʷʕáy-l̓qs *black robe, priest* -(á)lqs *clothes*

At this point the postulation of underlying forms and

rules that account for these pharyngeal movements (as a synchronic phenomenon) seems less important than the correct reconstruction of a more general pre-Colville morphophonological process.[2]

Internal evidence suggests that pharyngeal movement from the root to the suffix was at one time a regular morphophonemic process, and that, for reasons still unknown, the pharyngeal of the root was occasionally lost, leaving as evidence of its previous existence its suffix reflex--sometimes the suffix pharyngeal and lowered vowel as in example 11, and sometimes only the lowered vowel, as in example 12. Further, there is no reason to believe the suffixes ever to have contained a pharyngeal, since the presence of the suffix pharyngeal is conditioned by the root pharyngeal.[3]

One further general observation should be made, that (pre-) Colville favors "long distance conditioning". The predilection of the language for this is obvious elsewhere: in the stress placement rules, in the metathesis rule of middle verbs, in the ablaut rules, and in the diachronic rules of sound change where back consonants block a vowel shift with intervening segments.

2. The Colville evidence should not be considered separately from the evidence available from related interior Salishan languages, Spokan, Kalispel, Thompson, Shuswap and Coeur d'Alene.

2.1. Of all the interior Salishan languages, Spokan is closest to Colville.

2.1.1. In Spokan Carlson[4] speaks of roots with pharyngealized or "dark" vowels. He describes the process the forms undergo as follows: "A vowel 'harmony' rule works to lower the ... suffix [vowel] before the underlying root vowel is deleted." For example:

13. p̓ᵊc̓-ən-t-ás *he lets his bowels go* (p̓a̲c̓ *loose bowels*) -es *3rd trans.* Cognates: Cv p̓ʕac̓ *shoot out, squirt*, Cm p̓ac̓, Cr p̓ic̓, Ka p̓ac, Sh pic̓

7a. c̓ən-əm-s-t-án *I tightened it* (c̓a̲n *tight*) Ka c̓an

7b. c̓̆ɬ-c̓ən-əm-ánč-m-s-t-ən *I tied the cinch*, -enč *stomach*

In Spokan there are a number of roots with pharyngealized vowels. For example:

14. c̆a̲p *rounded and hollow*

15. t̓a̲s *hard* Cv t̓ʕas, Ka t̓as, Sh? t̓ʕʷ

16. p̓a̲t̓ *gravy-like substance* Cv pʕat̓ *pour in, overflow*, Sh pat̓ *overflow, boil over, hang down around edges*, with darkened vowel c-pət-pt̓-áp *have one's pants hanging down*

17. p̓a̲s, as in spa̲s *nighthawk* Cv p̓s-pʕás

18. c̓o̲m *bone* Cv sc̓im, Cm sc̓am̓, Cr s-c̓ám̓, Ka sc̓óm̓, Sh s-c̓em

19. no̲s *snot* Cv s-nʕas, Ka nós, Sh san-sn

20. mt̓o̲s *kidney* Cv m̓t̓ʕas, Cm mət̓ús, Cr mát̓us

All these roots (with the possible exception of c̓o̲m) are presumed to function as p̓a̲c and c̓a̲n.

2.1.2. The exact phonetic make up of other forms is

unclear, and Carlson thinks that there might be a contrast between pharyngealized vowels and sequences of vowels plus pharyngeals. Examples of this indeterminacy are:

21. loʕ̬ʷ *to fit* Cv liʕʷ, Cm lóʕ̬ʷ-, Cr léRʷ, Ka ləẁ, Sh liʕʷ; and Cr laʕʷ *plunge head first*, Ka loó *dip, fall into a hole*, Sh c-luʕʷ

22. coʕ̬ʷ *fringed* Cv cəʕʷ (vowel unattested), Ka co, Sh s-cuʕʷ

23. ʔal *to lose* Cv ʕal, Ka *aál, Sh ʕʔiʔl

24. ham, hamíp *to melt* Cv ʕəmáp (*ʕam), Cm ḥómp, Cr Rém(t), Ka ámt

25. poc, spoct *a sore* Cv s-puc-t

26. san, sən̓-sán̓-t *tame, gentle* Cv sən-sʕ̓an-t, Ka san̓

27. tcap *to jar, shake*

28. (ʔ)yat *movable*

Several forms based on some of these "uncertain" roots exhibit variation between lowered and intact vowel suffixes:

21a. ləʕ̬ʷóp, hes člóʔ *it fits together*

21b. ləʕ̬ʷáčstən *thimble*, -éčst *hand*

21c. loʕ̬ʷəntén *I put it together*

22a. ncucawáne *Gullhead fish*, -éneʔ *ear*

22b. scowáčst ~ scowéčst *finger*

Cognates from Cv (and other languages) point to Sp roots of two shapes: *CʕVC and CVʕ. It is possible to conjecture that pre-Sp *CʕVC (<CV̲C) participated fully in a pharyngeal movement rule, whereas CVʕ roots did not.

2.2. In Kalispel the lowering of the suffix vowel is conditioned by (1) the presence in the root of the vowel [a] (which must be presumed from *ʕa), and (2) by the presence in the root of the sequence Vl (which must be presumed from *Vr).

2.2.1. Vogt describes the process as follows:[5] "In some cases the vowels i and e of a suffix are replaced by a, when the stem itself contains the vowel a. Stem-vowel a is usually lost." Vogt provides the following examples and comments:

6a. *ṫam *suck*, ṫəmám *he sucks*, esṫəmmá *cont. he sucks*

7a. iċán *it is tight*, esċənpəmá *it is tightening*, ċənóp (with unexplained o), *compl. it gets tightened*

9a. *pat *boil*, as in nptáp *the water boils*, esenpətpəmá *cont. the water boils*, -étkʷ *water*

10a. pas *scared, surprised*, ipás *he is bewildered*, psáp *he gets scared*, espəspəmá *cont. he gets scared* Sp ps(á)

26a. səṅsáṅt *tame*, səṅsəṅtuwál̓š *he gets tame*, also prob. tstsálš *they jubilate*, -íl̓š; derived reflexive with unexplained o: tspəməncót *they applaud*

These forms confirm the hypothesis that all of these roots should be reconstructed as *CʕVC. The unexplained o's may be presumed to be lowered u's.

2.2.2. Some roots which contain the sequence Vl (which must be presumed from *Vr) trigger the lowering of the suffix vowel, as in the following cases:[6]

29. inċəlátkʷ *the water is cold* (<ċalt *it is cold*) Cv ċaʔr,

Sh c̓əl *hurt*, Sp c̓er *ache, hurt, cold*

30. šall *lazy*, šəllámən *who by natural disposition is inclined to laziness*, -émən *habitual* Cv xar *waste time*, Cr šar *use no energy*, Sh xal, xlal *short of breath*, Sp šer

31. k̓ʷal *cracked open*, sk̓ʷk̓ʷəláne *oyster*, -éne? *ear* Cv sk̓ʷək̓ʷrína? *clam shells*, Sp sk̓ʷk̓ʷəréne? *oyster*

31a. k̓ʷal, k̓ʷalíp *it got cracked*

31a. exemplifies what Carlson has called a "reasonably regular retention of unstressed a before l<*r." Instead of "harmonizing" with the root vowel, the suffix vowel remains intact, and the root vowel is retained. Since not all Ka roots with l<*r behave this way, we might suspect that only those roots with *r plus a pharyngeal element either (1) undergo the suffix vowel lowering and the root vowel deletion rules, or (2) do not undergo the suffix vowel lowering rule, but retain the low root vowel. This latter can be presumed to have developed al < *ʕar. Thus pre-Sp (and pre-Cv) *CʕVr > CVr, with no further trace of the pharyngeal, while Ka (and, as will be seen, Sh) exhibit the pervasive process(es) described here.

2.3. The Thompson data allow Thompson to describe the synchronic phenomenon of "dark vowels" wholly in terms of two (phonetic) conditioning factors. Dark vowels occur (1) in stressed or closed syllables (ə́ becomes á, u̯ becomes o̯) (p. 21); and (2) in the neighborhood of re-

tracted consonants ("environments have yet to be fully worked out"). From the examples provided it is impossible to infer that the now near-regular vowel lowering rule was once triggered by the combination of certain roots and suffixes. Thus:

32. //yəʕ-ele?-xən:-t-es// [yʕále?xes] *she drags him*

33. //s-q̓ʷəm-ex̣ən// [sq̓ʷmáx̣n] *shoulder*

34. //x̣ec:-n-es// [x̣áces] *he smokes* [*buckskin*]

35. //nə-x̣ə[e]c-us// [nx̣a?cús] *he gets smoke in his eyes*

2.4. In Shuswap Kuipers recognizes two separate causes for the same phenomenon of vowel lowering: "In suffixes, e i u are replaced by a e o respectively when these suffixes are combined with certain roots."

2.4.1. The first cause for the suffix vowel lowering rule remains indeterminate: "certain roots are found with suffixes with darkened vowels..." Several of the roots listed by Kuipers are cognate with Cv roots which contain a pharyngeal:

8a. ɬat̓ *wet*, x-ɬət-ɬt̓-ap *have wet behind*

16a. pat̓ *overflow...*

36. stam̓-ált *cattle*, st̓m-lt-xʷ-áɬc̓e *beef* Cv stəmʕált, Cr s-t̓am̓á(ltumš), Ka st̓əm̓á, Sp s-t̓m̓-á?

37. c-ɬac *soaked*, c-x-ɬc-ap *having wet behind* Cv ɬʕac, Cr ɬac *one drop falls*, Sp ɬc(á) *to drip*

38. s-x-c̓mɬ-os *matter in the eye*, also mc̓uɬt Cv m̓c̓ʕaɬt, Cm məc̓úɬt, Cr mac̓-uɬt, Sp mc̓óɬ-t

For several other roots and forms the cognacy is either unknown or uncertain, or the cognates do not contain pharyngeals:

39. c-mʌ̓t *lying flat*, s-mt̓-éqeʔ *mushroom* Cf? Cv maʕ, c-kɬ-maʕ-ítkʷ *it's floating on top of the water*

40. taʔ *negation*, taʔ-xét-s (also -xít-s) *to refuse sb. (obj.) stg.* Ka tá(m)

41. təɬáne (a mythical monster), təɬənə-ʔáɬxʷ *abode of* təɬáne

42. cnp *to vibrate, tremble, be shaken*, cəcnp-ákst *have one's hands vibrating, etc.*

43. c̓əs-l-, s-cəs-c̓əs-lól̓se *hail* Cv sc̓əc̓slús ənt, Cm c̓əsə-l̓úsaʔ, Cr s-š-c̓əs-lúsɛʔ, Ka ssa·lúseʔ, Sp c̓s-l-úseʔ

44. nk̓ʷ-p-al̓xkn *arthritis, rheumatism*, ʔank̓ʷ-t *bent, twisted*, ʔnk̓ʷ-ál̓xkn *to have rheumatism*

45. c-ɬak *to lie splashed down, to lie in a heap*, ʔs-t-ɬək-akst *to get a splash of stg. on one's arm* Cv? c-ɬak *a swamp*

46. k̓is-t *bad*, k̓əs-os *ugly-looking* Cv k̓as-t, k̓s-us *ugly*, Cr č̓ɛs(t), Ka č̓es, Sp č̓es

47. xəp-qin *noon*, xəp-qn-men *noontime approaches*

48. c-xen *lying spread out*, t-xn-é̓ne *to cover* Cv xən, Cm xé̓n-, Cr šɛ́̓n, Ka šən, Sp šn

49. sə-xʷy-anst (also -enst) *woodworm* Cv sxʷúxʷyaʔ, Ka sxúxʷiy̓eʔ, Sp s-xʷúxʷy-eʔ

Finally, there is a borrowing:

50. kʷúso *pig* Cv kosó (also kʷukʷús), Ka lkosó (lqosó), Sp lqʷosó

It should be noted that a pharyngeal has intruded in the Cv borrowing mʕʷotón *mutton, lamb* (as well as in kʷʕáta *quarter* in the pronunciation of some speakers), suggesting, again, that at an earlier stage of the language, pharyngeals, now in the process of being lost, were very common sounds. How does this follow?

2.4.2. The other cause of the darkened vowel suffix vowels in Shuswap is l (<*r) as C_2. Kuipers observes that "though some roots have all suffixes (in so far as recorded) in darkened form, others may have the darkened form in one and the regular form in another suffix... Sometimes both forms are possible... The 'regular' form of the suffix has analogically replaced the 'darkened' one in a number of cases."

Though these statements are intended to apply to all darkening roots, it appears that l roots (<*r) are more subject to variation than other roots. And it isn't always clear that regular forms have analogically replaced darkened ones. In several cases the analogy might have proceeded vice-versa.

The problem cannot be solved at the moment because the comparative evidence is inconclusive. Colville roots with C_2 as l or r (<? *ʕar) no longer behave like the other pharyngeal roots. Undoubtedly there is, somewhere in Colville, a relic of this process, but I haven't discovered it yet. Spokan, likewise, appears to have done away with a vowel lowering rule triggered by l<*r roots. But Kalispel retains the rule. The Ka evidence, in fact, sug-

gests that Sp probably had a similar rule until quite recently, and that the shape of these roots was probably *CʕVr. And the evidence from Cr, as will be seen, is inconclusive.

The Sh roots which darken suffix vowels are listed below, but no reconstruction of pre-Sh roots is attempted:

51. s-ml-ółeʔx^{w} *clay* Cr a-mụl-ɔ́l̓ụmx^{w} *soil, earth*

52. mləm-aɬx^{w} *to paint a house*

53. mlen-ɬp *balsam-tree*, mɬn-ɬp-al̓tx^{w} *balsam-tree bark* Sp marí-n-ɬp

54. mlok^{w} *out of joint*, mlk^{w}-p-akst (also -ekst) *dislocate one's wrist*

55. s-c̓ls-[s]t-as *to oil*

56. sel *come apart* (*sir-), x-sl-aẃs-qn-s *to scalp* Cv sər (full vowel unattested)

57. k̓l-am *to cut strips of skin* Cv k̓ar, Cr č̓ar, Sp č̓er(í) (čal) (čayl)

58. k^{w}al *yellow, green*, t-k^{w}l̓-se-ʔéɬp (-ʔáɬp) *chokecherry tree* Cv k^{w}ri, Cm k^{w}ár-, Cr k^{w}ár, Ka k^{w}a·líʔ, Sp k^{w}r(í) k^{w}al(í), k^{w}ríʔ, (k^{w}alíʔ)

59. xl-xal-t *steep* Cr xr *run uphill*, Ka šal, Sp šr (šal)

59a. xlapt *shortcut*, t-xlpt-aẃs, t-xləp̓t-aẃs *(trail) runs over mountain*

60. xl-el̓x-m *to spawn* Cv xal̓

61. x^{w}l *to turn, spin*

62. x^{w}el-m *to open a ditch, divert water*

63. x^{w}ʔal *to be in a hurry* Cvʔ x^{w}ar *to tremble*, Kaʔ x̣^{w}al

to make a little movement (?), Sp? x^{w}er(í) (x^{w}al(í)) *to shake*

64. ʃl-ʃal-t *strong* Cr? ǯaˀr *be firm, strong*, Ka *el *to try hard, make efforts*

65. wl-em *to burn*, x-wl-nt-áke? *kindling* Cv waˀr, Cr g^{w}el, Ka u·l, Sp wr(í) (wl(í)) (wer(í))

66. wl-aps *antler, horn*, x-wl-əps-áke? *spoon made of horn*

67. wl-ank *intestine, belly, stomach*

68. yel/yal *be wound around* Cv yir, Ka yal (yel), Sp yir(é) (yal(é)

69. yelkˀ^{w} *curve, coil, hollow*, ylkˀ^{w}-nt-as *to coil around stg.* Cv yarkˀ^{w}, Cr yarkˀ^{w}, Sp yerkˀ^{w} (yalkˀ^{w}) (yilkˀ^{w})

2.5. For Coeur d'Alene Reichard realized that the vowel darkening (lowering) processes (she called them 'vowel dissimilation') could be understood fully only when comparative evidence would be available. "I have worked upon the problem presented by these examples [of vowel dissimilation] intensively from the beginning of my work with Coeur d'Alene and I have come to the conclusion that it can be finally solved if at all, only with comparative material." Nonetheless she felt forced to explain the vocalic 'dissimilation' in terms of phonetic conditioning. She thought to have found one possible conditioning factor, but was at a loss to pinpoint others. "Certain stems containing bilabial consonants, but by no means all of them, have a progressive influence on the vowels... It is not possible

to tell in every case which consonant of the stem has the influence, in most cases it seems as if both consonants function together in this respect." And: "The rest of the stems seem to depend on some sound other than labial to influence the following vowels; it is difficult to determine what it might be." The processes in question are two: the lowering of u to ɔ, and the much more common lowering of other vowels to a.

Cognate pharyngeal roots in Colville (and elsewhere) point to pre-Cr pharyngeal roots of the shape *CʕVc.

6b. ṫam *make damp, dampen*, syä-ṫam-á̓l̓ṵmxʷ *one who licks people* (-ilṵmxʷ *person*)

10b. pas *be astonishing*, pəsátc-stmən *I will play a trick on him*, -itc *deceive*

10c. pɔʔɔs *joke*, tciʔts-p ʔs-tsán *I am joking hither*, -tcin *mouth*

13a. p̓ac̓ *squirt, hence, defecate, urinate*, cäɬ-hɪs-t-p̓əc̓-ɔ́s-əm *I will squirt him in the eye*, -us *eye*

16b. p̓aṫ *be mushy, pour mushy stuff*, t-p̓aṫ-áʔsʔənts *he poured cement on rock*, -ís

26b. saṉ *tame*, sə-səṉ-səṉ-t-á̓l̓c-stus *he broke it (horse)* -il̓c *grow*

70. yac̓ *be tight, firm*, tc-yəc̓-yəc̓-am-átct-əm *hold on tight*, -itct *finger* Cv yʕac̓

71. ṫap *shoot*, ṫap-scánt *he shot*, stcint *people* Cv ṫʕap, Ka ṫaáp, Sp ṫap(í)

Several other Cr roots lower the suffix vowel, but the

cognates are either apharyngeal or unidentified:

72. ɬaʔ *mark, make welt*, tcɪn-ɬəʔ-ɬəʔ-aʔ-ā́tct *my hand became welted*, -itct *hand* Cv ɬaʔ, Cm ɬiʔ, Cr ɬiʔ, ɬʕ, Sh ɬʔ-

73. ɬal *sprinkle*, hɪn-ɬəl-ɬəl-ā́na?-antəm *he was car sprinkled*

74. nas *wet*, a-tc-nas-nas-us-tcā́nt *he wets people's eyes*, stcint *people* Ka, Sp nas

75. x̣äm *go to live with in-laws*, x̣äm-än-tsɔ́t-ən *he went to live with in-laws* Cv s-ɬx̣má-m-s *he got married*

76. xʷäm *?*, xʷäm-atct *woodpecker*, -itct *finger, wing*

77. c̓ux̣ʷ *?*, hɪn-tc̓ux̣ʷ-tc̓uxʷ-áp-ä́nəm *he retired*, -ip *bottom*

78. tam *scorch*, atc-təm-á́wäs *it exists scorched on the surface*, -iwäs *together*

79. p̓əsaq̓ʷ *long brittle object breaks* (both regular and dissim. forms are correct)

80. p̓uɬ *poison ivy*, p̓uɬ-əm-ā́tc̓a? *he applied p. i.*, -itsa? *all over*

81. mas-mas *kind of vegetable*, an-məs-məs-átkʷa? *water is full of* masmas

One is a borrowing,

82. paᵃy from Fr. *Espagne*, s-paᵃy-ɔ́lụmc *Spanish*, -ulụmc *person*

but this form could have been borrowed from *espagnol*, which would explain the ɔ. Another root, the cognate of which is apharyngeal in Cv, also lowers the suffix vowel. In Cv, inexplicably a pharyngeal intrudes in the suffix:

11a. c̓ɔm *suck*, ni?-c̓ɔm̓-áwäs-ənts *he sucked amongst*

Finally, there are four other Cr roots which lower the suffix vowel. They all have r or $^{(\text{ʔ})}$l as C_2.

58a. kʷar *be yellow*, hɹn-kʷar-kʷar-áwäs-ən *crossbills*, -iẇäs *together*

83. maḷ *bubble*, tcɹni?-məl-páẇas *it bubbles from in between*, -iẇäs *between*

84. maḷ *heat*, a-məḷ-átct-mən-tcälɹs *he is making us too warm*, -itct *fingers ?* Cv mʕal, Cm maḷ, Cr also mɛḷ

85. mul *soil, earth*, a-mụl-ɔ́ḷụmxʷ *soil, earth*, -uḷụmxʷ *ground*

3. From the available evidence I conclude that, in all the Salishan languages of the interior here discussed, at one time there was a wide spread phenomenon in which a characteristic of the root was transferred to a suffix. In these forms that characteristic, once transferred to the suffix, was lost to the root. The characteristic is construed to be a pharyngeal element in C_2 of CCVC roots. Its reflexes in the suffixes vary from language to language, but can be subsumed under two groups: (1) movement of the pharyngeal to the suffix with attendant vowel assimilation; (2) simple vowel assimilation (lowering) with loss of the root pharyngeal. At this time the conditioning factors for these processes can be inferred only for Colville, the language I know first hand.

The loss of (root) pharyngeals (pervasive in some languages, less so in others) impedes at this time a direct

reconstruction of these elements, but fortunately clues as to original pharyngeal roots are provided by those forms with darkened suffix vowels (after analogical formations and irregular forms have been identified),[7] as well as by roots with l and r (<*r) as C_2 if it can be proved that they contained an original pharyngeal.

FOOTNOTES

[1]I wish to acknowledge the support of the following during my research: NSF, NEH, the Whatcom Museus (Melville and Elizabeth Jacobs Fund), SIL, and the Universities of Kansas, Hawaii, and Montana.

[2]Interest in the synchronic morphophonological mechanisms is outweighed by the diachronic implications of these pharyngeal movements, and panchrony has precedence over synchrony. This attitude is opposite to (but not incompatible with) Langacker's: "The history of a language may furnish the linguist with valuable clues as he begins a synchronic analysis, and it may provide evidence to corroborate an analysis proposed and justified on other grounds, but it cannot stand alone as the sole motivation for a system of rules and underlying representations. Historical accuracy is neither a necessary nor a sufficient condition for adopting a synchronic theory." (p. 27) In this context I take "theory" to mean a set of inductive rules based on the data.

[3]This phenomenon is strikingly homologous to that observed by Whitney in Sanskrit. In Sanskrit the aspiration of some root stops is shifted to other stops: "before obstruents and word boundaries, root-final aspiration is moved to the initial stop of the root." The phenomenon has been talked about plenty, and the question is: does the aspiration actually shift? Most recently Anderson has proposed a "readily available" alternative analysis which sets up aspiration everywhere and deletes it where necessary. Anderson argues that his analysis is superior to Whitney's on "theoretical" grounds, that is, the rules that account for the phenomenon are simpler. The problem, as I see it, is that these "theories" ultimately prevent the formulation of valid typologies.

[4]I am indebted to Barry F. Carlson for the Spokan data and comments which he has generously provided me.

[5]Vogt lists a series of examples. But there are two phenomena involved, and here I am separating them.

[6]Examples 29 and 30 are Vogt's; 31 and 31a are Carlson's.

[7]The problem is complicated by the ablaut system (and consonant gradation system), which I believe at one time permeated these languages. It is quite likely that the root pharyngeals occurred only in a-grade forms, with different assimilatory properties in the other grades.

WORKS CONSULTED

Anderson, Stephen R. 1974. The Organization of Phonology. Academic Press.

Carlson, Barry F. 1972. A Grammar of Spokan. *UHWPIL 4.*

_____. MS. Spokan Dictionary.

Kinkade, M. Dale and Laurence C. Thompson. 1974. "Proto-Salish *r." *IJAL 40, 22-28.*

Kinkade, M. Dale and Clarence Sloat. 1972. "Proto-Eastern Interior Salish Vowels." *IJAL 38, 26-48.*

Kuipers, Aert H. 1973. "About Evidence for Proto-Salish *r." *8th Int'l Conf. Salish Lgs. Eugene.*

_____. 1974. The Shuswap Language. Mouton.

Langacker, Ronald W. 1972. Fundamentals of Linguistic Analysis. Harcourt, Brace, Jovanovich.

Mattina, Anthony. 1973. Colville Grammatical Structure. *UHWPIL 4.*

Reichard, Gladys A. 1938. Coeur d'Alene. Handbook of American Indian Languages III. 517-707.

Sloat, Clarence. 1972. "Vowel Harmony in Coeur d'Alene." *IJAL 38, 234-239.*

Thompson, Laurence C. and M. Terry Thompson. MS. Thompson.

Vogt, Hans. 1940. The Kalispel Language. Oslo.

Whitney, William D. 1889. Sanskrit Grammar (Second Edition). Oxford University Press.