2.4 Transitive n-stems with stress on the transitivizer. The following cases obtain here: k°ez-én-cut "to train (k°ez-) oneself", s-qeyx°-én-cut "to do what men do, to act like a man (s-qeyx°)", qə1-qə1-xn-én-cut "to suffer from lack of help" (qə1 "bad", -xən suffix "foot, leg", for its use here cf. zóq°--xən "to starve", zoq° "dead"), x°əs-t-én-cut "to exert oneself, make an effort" (x°əs- unique root, found only in this word), yə1-yə1-én-cut "to be tough" (yə1-yə1 "strong"). Note that here the presence of as rootvowel does not require the transitivizer to have the shape -ən. A case with a unique transitivizer is presented by thin-cut "to brag about oneself, to show off" (thin "to admire smt.").

Comments. The four types discussed in this paper show not only formal, but also (rather subtle) semantic differences. Types 2.1 and 2.2 seem to have a rather subjective, types 2.3 and 2.4 a more objective character. This hypothesis is supported by the fact that we have nes-en-cut, lek-en-cut, and qem-t-en-cut for "to bring oneself" (2x) and "to hit oneself" (see 2.3). whereas "to bring" and "to hit" are nes-c (← \*nes-s),  $\lambda$ ek-s, and qe $\dot{n}$ -t-s respectively. I presume that it is the negative connotation of -s-cut-forms that makes derivation with -s-cut for "to bring, hit oneself" impossible. I do not see any semantic difference between types 2.3 and 2.4. As the examples show, there is a striking difference in frequency between the four types: 2.1 and 2.3 are represented by a large number of cases, whereas 2.2 and 2.4 each comprise a small number of examples.

## The Source of the Upper Chehalis Reflexive

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The source of the reflexive suffix in Upper Chehalis has been a mystery.¹ It has the shape -cš(t-), which is unlike the reflexive morpheme in any other Salishan language. Yet I believe that it can be shown that it has the same origin as the form -cūt (or regular derivatives of this) which occurs elsewhere.² Indeed \*-sut is what Hoard reconstructed for Proto-Salish (Hoard 1971). His reconstruction does fit the facts that he presents, although his Upper Chehalis citation is wrong, and would not fit if it were correct (blame for the error is not Hoard's, but my earlier misanalysis). In Ch, -cš occurs in completive aspect, -cšt- (often -čt- in allegro speech) occurs in continuative aspect, making the presence or absence of the final t paradigmatic. The Cowlitz cognate is -cx (also -icx or -acx, and -cš before third person possessive -i; the continuative aspect form is -čit-), and the Lower Chehalis is -cəš. Thus these Tsanosan forms have a common source, \*-cx(t-).

The probable reconstruction of the reflexive suffix in Proto-Salish is \*-t-sowt-. Six steps are necessary to arrive at Ch -c\$.

(1) The initial  $\underline{t}$  is the transitive marker, and is normally fused in all daughter languages with the initial  $\underline{s}$  of this suffix or of object suffixes into  $\underline{c}$  (which then develops to  $\underline{\theta}$  in Halkomelem, Pentlatch, and Sliammon, and to  $\underline{s}$  in Comox and Northern Straits); this does not affect the derivation of the suffix. But since it affects all the languages, I attribute the merger to the Proto-Salish stage. IS languages regularly have -cút or -st as the reflex of this morpheme. The first is the regular stressed form; but this is a variable-stress suffix, and stress can sometimes shift back to the root (with accompanying vowel deletion),

resulting in -st. The collapse of the sequence  $\underline{\delta w}$  to  $\underline{u}$  is not common in IS, but also occurred in the causative suffix, which should be reconstructed as \*-st $\delta w$ , and which appears in IS as -st $\hat{u}$ - or (with stress shift and vowel loss) -st-. Thus it is possible to derive homophonous variants of the reflexive and causative suffixes in IS.<sup>3</sup>

(2) Another development illustrated by the causative suffix helps to explain the Tsamosan reflexive suffix. The final w of \*-stow was devoiced and fricativized to xw in Sliammon, Sechelt, Pentlatch, Halkomelem, Northern Straits, and Lushootseed, resulting in -staxw, -stxw, -txw, or -sxw. Devoicing of w is not general in Salish, so no general conditions can yet be stated for its occurrence; however, it may have been common in final position or before a voiceless consonant. Presumably a vowel had to precede, since it seems to be an old rule in Salish that w between two consonants or between a consonant and a word boundary becomes u. Note that the Tsamosan causative did not devoice w, but kept w (and lost the preceding vowel--it is a weak suffix there) because further inflection is required in these languages; the result is -stw-. But Tsamosan does provide another instance of this devoicing in the reflexive suffix. The result of change 2 would then have been \*-cəxwt. Confirmation of this state unexpectedly turned up in Quinault (Gibson field notes) after I had made this analysis: -cixw (not cited above).

(5) Since this suffix is always weak and unstressed, a rule of stress shift is assumed; this is normally accompanied by vowel deletion, although Ch and Cowlitz often show  $\underline{a}$  from  $\underline{5}$  (see the Cowlitz causative suffix, for example). The vowel in Lower Chehalis -cəš may be original, or epenthetic and late (the history of unstressed vowels in Lower Chehalis is not yet known). This stage gives us \*-cx $^{\omega}$ t.

(4) At what point the final  $\underline{t}$  was given paradigmatic status is not clear, and may have preceded stage 3. There are two

possible routes to this status. One is that the final  $\underline{t}$  of the reflexive was simply lost in Tsamosan. Since in Ch all stems ending in  $\underline{s}$  or  $\underline{s}^4$  add  $\underline{t}$  before the intransitive subject markers, this  $\underline{t}$  in  $-c\underline{s}(t-)$  could be from this source, rather than Proto-Salish. Cowlitz has the same rule after final  $\underline{s}$ , but only one instance has been found after final  $\underline{x}$ , and none after final  $\underline{s}$  (no counter-examples after  $\underline{x}$  or  $\underline{s}$  were found either; relevant instances are infrequent, and my Cowlitz data have many gaps). The other, and perhaps more likely, explanation of the final  $\underline{t}$  of  $-c\underline{s}(t-)$  is that the original final  $\underline{t}$  of \*-t-s\(\tilde{s}\)wt was reinterpreted as being the paradigmatic  $\underline{t}$  by analogy with other  $\underline{s}$ -final morphemes. But because of the uncertainty of the distribution of this paradigmatic  $\underline{t}$  in Cowlitz, I leave stage 4 where it is as a development in the history of the reflexive; in any case a rule of either paradigmatization or t-deletion is required, yielding \*-cx\*(t-) or \*-cx\*.

(5) Another change which we know affected several Tsamosan words is the unrounding of  $\underline{x}^{w}$ . A couple of clear cases of this are Ch qɔ̃ns, Cowlitz qɔ̃nx 'mouth' (cf. Quinault qɔ̃nxw, Lushootseed qɔ̃dxw, Sechelt qɔ̃nxw 'throat', Columbian qənūxw 'throat', et al.), and Ch tɔ̃ms, Cowlitz tɔ̃nx 'earth, land' (cf. Quinault tɔ̃mixw 'sky', Twana təbīxw 'earth, land', Squamish tmīxw 'earth, land', Tillamook təwi'xw 'earth, land', Shuswap tmīxw 'earth, land', et al.) (it is possible, of course, that these two sets of forms also go back to etyma with a final \*w in Proto-Salish, but that would not affect the unrounding in Ch and Cowlitz). This shift in the reflexive suffix would result in -cx, and that is precisely the form that occurs in Cowlitz.

(6) All Ch needs further is the shift of  $\underline{x}$  to  $\underline{x}$  to yield -c $\underline{x}$ , and this is indeed a general sound shift in Ch.

The stages of the development of \*-t-səwt into Ch can be summarized as follows:

PS \*-t-səwt (1) PS \*-cəwt t-s merger (2) PTs \*-cəxwt w-devoicing (3)\*-cxwt stress shift and vowel deletion (4)\*-cx\*(t-) or \*-cx\* -t paradigmatization or loss \*-cx(t-) xw-unrounding (5) Cz -cx(t-)(6) Ch  $-c\S(t-)$ palatalization

No new, unfamiliar Salishan phonological developments need be posited to make this derivation.

One problem remains from the data presented here. Three languages have the vowel  $\underline{i}$  in their reflexive suffixes: Quinault -cix\*, Cowlitz -čit-, and Tillamook -jit and -dit. Since Cowlitz -čit- is presumably from \*-cšit-, the  $\underline{i}$  is even on opposite sides of the original  $\underline{w}$  from which the  $\underline{x}^{\underline{w}}$  and  $\underline{\S}$  are developed. I cannot account for these vowels at this time.

## FOOTNOTES

- 1. Material for this article was collected from 1960 onward under the auspices of the American Philosophical Society Library, Indiana University, and the National Science Foundation. Abbreviations used in this paper are Ch Upper Chehalis, IS Interior Salish, PS Proto-Salish, PTs Proto-Tsamosan. I wish to thank Laurence C. Thompson for helpful comments on an earlier version of the paper.
- 2. The actually occurring forms outside Tsamosan are as follows (all transcriptions have been normalized): Bella Coola -cut (R. Saunders, p.c.), Comox -sut (J. Timmers, p.c.), Sliammon -Out (J. Davis 1978), Pentlatch -Out (Boas 1890), Sechelt -cut (J. Timmers, p.c., R. C. Beaumont, p.c.), Squamish -cut (Kuipers 1967), Halkomelem -(a)Oot (Galloway 1977, Kinkade class notes), Nooksack -cut (B. Efrat, p.c.), Sooke -(s)at, -(s)t (Efrat 1969), Songish -(s)at, -(s)ot (Raffo 1972), Clallam -cut, -ct (Thompson and Thompson 1971),

Lushootseed -cut (Hess 1976, Snyder 1968), Twana -t (Drachman 1969, Kinkade field notes), Tillamook -set, -ct, -jit, -dit, -t (Edel 1939), Lillooet -cut (Van Eijk 1978), Thompson -cut, -st (Thompson and Thompson ms.), Shuswap -cut, -st (Gibson 1973, Kuipers 1974), Okanagan -cut, -st (Mattina 1973), Spokane -cut, -ist (Carlson 1972), Kalispel -cu(t), -i(st) (Vogt 1940), Coeur d'Alene -cut, -cut (Reichard 1938), Columbian -cut, -st (Kinkade field notes). My data are probably inadequate for Lillooet, Quinault, and Lower Chehalis.

Central Salishan languages often have a second reflexive corresponding to a second set of object suffixes. This is probably reconstructable to Proto-Salish (because the second set of object suffixes also occurs in Tsamosan and Tillamook, but without a second reflexive) as \*-möwt. Forms developed from this source available to me are Bella Coola -mut (R. Saunders, p.c.), Sliammon -mut (J. Davis 1978), Sechelt -mut (Beaumont, p.c.), Squamish -numut, -nam²ut (Kuipers 1967), Chilliwack Halkomelem -lā·mət (Galloway 1977), Sooke -āŋət (Efrat 1969), Songish -āŋət, -əŋət (Raffo 1972), Clallam -uŋət (L. C. Thompson, p.c.), Lushootseed -but (Hess 1976, Snyder 1968), Twana -təbət (Kinkade field notes), Tillamook -wət (L. C. Thompson, p.c.).

3. Since comparison with the causative suffix is relevant here and to the next step of the derivation of the Ch reflexive, I give here all causative forms available to me (missing are Comox, Clallam, Nooksack, Lower Chehalis, Tillamook, and Lillooet). This suffix has extended or changed its function, or is variously interpreted by analysts, in several languages; these factors are ignored here. Bella Coola -tu-, -tu- (Newman 1769), Sliammon //-stw//-staxw, -sxw, -stu-, -st-, -s- (J. Davis 1778), Pentlatch -stxw (Boas 1870), Sechelt -staxw-, -stxw, -stu- (Beaumont 1977, J. Timmers, p.c.), Squamish -s(-t) (Kuipers 1967), Halkomelem -staxw, -st (Galloway 1977, Kinkade class notes), Sooke -tixw, -txw (Efrat 1969), Songish -txw (Raffo 1972), Lushootseed -txw, -tu-

(Hess 197c, Snyder 1968), Twana -st, -s (Drachman 1969, Kinkade field notes), Quinault -stu- (Gibson field notes), Upper Chehalis -stw-, -stu-, -tw-, -tu- (Kinkade field notes), Cowlitz -staw-, -stu-, -st- (Kinkade field notes), Thompson -s(-t) (Thompson and Thompson ms.), Shuswap -st- (Kuipers 1974), -s- (Gibson 1973), Okanagan -stú-, -st- (Mattina 1973), Spokane -s-t(é)-, -stúnm (Carlson 1971), Kalispel -stú-, -st- (Vogt 1940), Coeur d'Alene -stu-, -st-, -s- (Reichard 1938), Columbian -stú-, -st- (Kinkade field notes).

- 4. With a very few exceptions; this does not apply to CVC(C) roots, which mark continuative intransitives with -(a)w-.
- 5. The <u>a</u> in Northern Straits is regular from  $*\underline{u}$ , and the various instances of a are regular (unstressed) reductions of  $*\hat{u}$  (or  $*\hat{a}$ ).

## REFERENCES

- Beaumont, Ronald C. 1977. Causation and control in Sechelt.
  Paper presented to the 12th International Conference on
  Salishan Languages, Omak, Washington.
- Boas, Frant. ca. 1890. Pentlatch materials. Ms. in American Philosophical Society Library, Philadelphia, Pennsylvania.
- Carlson, Rarry F. 1972. A Grammar of Spokan: A Salish Language of Eastern Washington. Unpublished Ph.D. Dissertation in Linguistics, University of Hawaii. Distributed as University of Hawaii Working Papers in Linguistics 4.4 (1972).
- Davis, John H. 1978. Pronominal paradigms in Sliammon. Paper presented to the 13th International Conference on Salishan Languages, Victoria, B. C.
- Drachman, Gaberell. 1969. Twana Phonology. Ohio State University Working Papers in Linguistics 5.
- Siel, May Maratelbaum. 1939. The Tillamook Language. IJAL 10:1-57.
- Efrat, Rarbara S. 1969. A Grammar of Non-particles in Sooke, a Phalost of Straits Coast Salish. Unpublished Ph.D. Dissertation on Luguistics, University of Pennsylvania.

- Galloway, Brent D. 1977. A Grammar of Chilliwack Halkomelem.
  Unpublished Ph.D. Dissertation in Linguistics, University of California. Berkeley.
- Gibson, James A. 1973. Shuswap Grammatical Structure. Unpublished Ph.D. Dissertation in Linguistics, University of Hawaii. Distributed as University of Hawaii Working Papers in Linguistics 5.5 (1973).
- Gibson, James A. 1963. Quinault field notes (unpublished).
- Hess, Thom. 1976. Dictionary of Puget Salish. Seattle: University of Washington Press.
- Hoard, James E. 1971. Problems in Proto-Salish pronoun reconstruction. Sacramento Anthropological Society Papers 11:70-30.
- Kuipers, Aert H. 1967. The Squamish Language: Grammar, Texts, Dictionary. The Hague: Mouton.
- Kuipers, Aert H. 1974. The Shuswap Language: Grammar, Texts, Dictionary. The Hague: Mouton.
- Mattina, Anthony. 1973. Colville Grammatical Structure. Unpublished Ph.D. Dissertation in Linguistics, University of Hawaii. Distributed as University of Hawaii Working Papers in Linguistics 5.4 (1973).
- Newman, Stanley. 1969. Bella Coola paradigms. LJAL 35:299-306.
- Raffo, Yolanda A. 1972. A Phonology and Morphology of Songish, a Dialect of Straits Salish. Unpublished Ph.D. Dissertation in Linguistics, University of Kansas.
- Reichard, Gladys A. 1938. Coeur d'Alene. Handbook of American Indian Languages, ed. by Franz Boas, 3:517-707. Gluckstadt-Hamburg-New York: J. J. Augustin.
- Snyder, Warren. 1968. Southern Puget Sound Salish: Phonology and Morphology. Sacramento Anthropological Society Papers 8.
- Thompson, Laurence C. and M. Terry Thompson. 1971. Clallam: A preview. Jesse Sawyer, ed., Studies in American Indian Languages. UCPL 65:251-294.
- Thompson, Laurence C. and M. Terry Thompson. Forthcoming. Thompson. Handbook of North American Indians. Washington, D. C.

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van Eijk, Jan. 1978. Uswalmicuts. Mount Currie, B. C.: T'szil

Rublishers. Reflexive forms in Lillooet. Paper presented to

the 15th International Conference on Salish Languages, Vancouver, S.C.

Vogt, Hans. 1940. The Kalispel Language. Oslo: Det Norske

Videnskaps-Akademi.

IMPERATIVE FORMATIONS IN COLVILLE-OKANAGAN AND IN THE OTHER INTERIOR LANGUAGES  $^{\star}$ 

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- 0. Introduction
- 1. Colville imperatives
  - 1.1. Intransitive
  - 1.2. (Di) transitive
  - 1.3. Negative forms
- 2. Imperatives in the other Interior languages
- Conclusions
- O. <u>Introduction</u>. In this paper I describe the grammar of Colville (Cv) imperatives, intransitive and (di)transitive, positive and negative; then I review the extant discussions of the imperatives in other Interior Salish languages; and finally I make some observations about the emerging picture of the Interior Salish imperative system.
- 1.  $\underline{\text{Colville}}$   $\underline{\text{imperatives}}$ . There are two major types of Cv imperatives, and each of these can be expressed in the positive or negative.
- 1.1. <u>Intransitives</u>. I will discuss first the intransitive imperatives, organized by person.
- 1.1.1. <u>Second person</u>. The 2nd person intransitive imperative suffixes are -x 'sg'; -wi 'pl'. These suffixes are added to simple intransitive stem:

 $x^{w}uy-x$  'go'  $\lambda ap-x$  'stop that'  $x^{w}uy-wi$  'go pl'  $\lambda ap-wi$  'stop that pl'

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