A grammar of lexical suffixes in most Salishan languages must account for two things: stress and order. Importance of one or the other may vary according to the predictability of stress (as in Sliammon, where stress is always on the first syllable of a word) or the propensity for compounding lexical suffixes (compare Columbian, which compounds them relatively freely, with Upper Chehalis, which does so rarely). This paper deals with these two problems in Columbian Salish (hereafter Ch), but makes no claims that these solutions are applicable to any other language.

Stress placement in a complex word is one of the most difficult problems in nearly all Salishan languages, and Ch is no exception. Every full word must have one and only one primary stress. Most suffixes and many roots have both stressed and unstressed variants. The problem is to make generalizations as to whether the root or a suffix will be stressed in any given combination. Clearly there are some roots and some suffixes which are basically stressed and others which are basically unstressed (hereafter to be called strong and weak, respectively; "stressed" and "unstressed" will refer to actual occurrence of stress). Other roots seem to be variable as to stress according to the suffixes that are added to them; most suffixes that can be stressed have variable stress. But few of these groups are entirely consistent—strong roots sometimes occur unstressed and weak roots sometimes occur stressed; variable roots seem simply to be unpredictable. The first two inconsistencies are easy to deal with. A strong root will be unstressed under two conditions: 1) when followed by a strong suffix, and 2) when followed by two or more lexical suffixes, at least one of which is variable (or strong). A weak root will be stressed only when
followed by one or more weak suffixes, or when final in a word. Otherwise any strong root will dominate any weak or variable suffix, any strong suffix will dominate any weak or variable root, any variable root will dominate any weak suffix, and any variable suffix will dominate any weak root. Examples of each of the nine possible combinations follow.

1. strong root + strong suffix
   kwa'wútiya? 'carry in the hand' (kwa'w- 'take, carry', -útiya? 'around')
   ma'kwa'ximáken 'ruin something for someone' (ma'kwa'w- 'break', -ximáken 'benefactive')

2. strong root + variable suffix
   tkwa'anksán 'shake hands' (kwa'w- 'take, carry', -áksť/-ksť 'hand')
   námátkwáken 'he broke his back' (ma'átkw- 'break', -íkan/-kán 'back')

3. strong root + weak suffix
   kwa'ánta? 'take it!' (kwa'w- 'take, carry', -ta? 'sg. imperative')
   máaks'ólqs 'he broke his nose' (ma'aks'- 'break', -ólqs 'nose, point, end')

4. weak root + strong suffix
   nkwa'múxayt 'shoulder' (kam- 'surface, area', -álxayt 'shoulder')
   nákswálas 'mean person' (kas- 'bad', -álswás 'chest, heart')

5. weak root + variable suffix
   snkwa'máken 'back' (kam- 'surface, area', -íkan/-kán 'back')
   káswólminán 'hate' (kaw- 'bad', -ínol/-mán 'instrumental')

6. weak root + weak suffix
   tk'olmáxqstxán 'shin' (kam- 'surface, area', -élqst 'shin', -xán 'foot, leg')
   káswól 'bad' (kaw- 'bad', -ól 'characterization')

7. variable root + strong suffix
   tk'ulswás 'suffer' (qul-/qil- 'sick', -álswás 'chest, heart')
   kíxaralswásan 'bib' (xúr-/xar-/xar- 'cover with flat object', -álswás 'chest, heart')

8. variable root + weak suffix
   qúllt 'sick' (qúll-/qil- 'sick', -t 'characterization')
   xwúk'kán 'I washed it off him' (xwúk'-/xwúk'- 'clean', -kán 'benefactive', -án 'I')

9. variable root + variable suffix
   snaqúlltá? 'stomach-ache' vs. snqalwapás 'toothache' (qúll-/qil- 'sick', -álca?/-íca? 'body (inside)', -ápás/-aps 'tooth')
sx'iyps 'toothache' vs. sx'iýána? 'cactus' (x'iý-/x'iý- 'sharp', -ápás- 'tooth', -ána?/-ána? 'ear')

tx'úk'sáqt 'clear sky, clear day' vs. x'úk'íca?án 'clean lint off a blanket' (x'úk'-/x'úk'- 'clean', -ásáqt/-sáqt 'sky, day', -íca?/-cá? 'body (outside)')

katxárk' 'thin layer of scum on water' vs. snxóráxán 'a shield' (xár-/ xár/-xár- 'cover with flat object', -átk'-/k' 'water', -áxán/-xán 'upper arm')

scílksáqt 'Friday' vs. ncílkstqán 'five tipis put together' (cílkst 'five', -ásáqt/-sáqt 'sky, day', -qín/-qán 'head')

An example of a strong root losing stress to a combination of variable or strong lexical suffixes is kícuscinxán 'deer-hoof rattle worn on ankle' (cíc- 'make a banging noise', -cí-/cán 'mouth, edge', -xán 'foot, leg'); cf. cúskstám 'rattle, shake a rattle' (-ákst/-kst 'hand'). Another may be kíc'onzánxán 'grab by the wrist' (k'á-/take, carry', -cí-/cán 'mouth, edge', -ákst/-kst 'hand') or nk'snapúsxán 'hold someone by the arm' (-áp 'base, bottom, lower end', -ús/s- 'eye, face', -áxán/-xán 'upper arm') vs. yapk'únsxán 'grab someone passing by the arm or hand'. There are exceptions to this particular generalization, e.g., snaxtánasqán 'rooster's comb' (xít- 'ridge', -áns/-íns/-u's/-áns 'middle, center', -qín/-qán 'head') vs. snaxtqán 'fancy ridge (on a house)' and katxíták' 'ripples on water' (-átk'/-/k' 'water').

As can be seen from the examples in (9) above, combinations of variable roots and suffixes are unpredictable. Rare instances even occur of two forms with the same variable root and suffix differing only in stress placement. I have only one example in Columbian, sólya?qán 'round head' vs. sólya?qín 'a knob southeast of Waterville (place-name)' (sól- 'round', -áya?/-ya? 'head', -qín/-qán 'head'), and one in Upper Chehalis, wítq' 'out on a prairie' vs. wítáq' 'middle of a prairie' (wít/-wít- 'middle', -áq'/-q' 'prairie').

As noted above, a sequence of variable or strong lexical suffixes always attracts stress; there is one exception to this: -áya?-qán often does not, e.g., ?ack'úsya?qán 'curly hair', n?an'áwyá?qán 'stand on head'. When more than one variable or strong suffix occurs (whether lexical or otherwise), a decision must be made as to which will bear stress. Any strong suffix will retain stress; in a sequence of two strong suffixes, the second will be stressed.
Examples are infrequent, but it appears that in combinations of variable lexical suffixes and non-lexical suffixes, a lexical suffix will be stressed. And when there are two variable lexical suffixes, the last one will be stressed; there are a few exceptions, indicating that there is a hierarchy of stress dominance. -qín/-qom 'head' loses stress to -áp 'base, bottom, lower end', -áwás/-áwš/-uš 'middle, center', or -áya/-ya? 'head'; -álxw/-lxw 'house' loses stress to -á?st/-a?st 'stone'; -íča/-ča? 'body (outside)' loses stress to -áp 'base, bottom, lower end'; and -áxon/-xon 'upper arm' loses stress to -ús/-š 'eye, face'. Only eight three-member sequences occur, and four of these have weak -xon 'foot, leg' as last member. But only one of the other four has stress on the final member: -kon-amxw/-cín. All other three-member sequences stress the penultimate suffix. Four-member sequences are stressed like three-member sequences.

The order in which lexical suffixes occur in sequences does not seem to be random. Suffixes occur consistently before or after specific other suffixes. The order may turn out to be insignificant, but since the total meaning of a complex form is not a sequential accretion of meaning corresponding to the physical sequence of suffixes (other than in layered derivations), I assume that it is not random. Because of limited co-occurrences, absolute order between all occurring suffixes is not possible. Insofar as it is possible to determine it, ordering seems to be according to the following list. The number of combinations in which each suffix participates is given in parentheses after the gloss for the suffix. Suffixes enclosed in a left bracket show no preference as to their relative order with other members of that group. Several suffixes occur in only one combination, so nothing can be indicated about their place in this sequence except that they immediately precede or follow another suffix; these are the suffixes to the left (for preceding) and right (for following) of the main column.

-s ? (8)   \{-álus 'a stack'
  \{-álps 'back part of the neck'
\{-amx 'people' (2)
\{-ás/ás/-uš/-ašs 'middle, center' (15)
\{-cín/-cán 'mouth, edge' (12) -ákš(on)/-ks(on) 'hand, arm'
\{-áya/-ya? 'head' (4)
-ap 'base, bottom, lower end' (3?)
-ána/-ána 'ear' (4)
-qín/-qan 'head' (17)
-ál/-ál 'skin, hide'
-á?son 'long solid object'
-álp/-lp 'tree, plant'

-míx/-əmx 'person, man'

-áíq/-lq 'long or tall cylindrical object'
-ét/-ut 'distant' (2)
-ús/-s 'eye, face' (5)
-áps/-ps 'tail, rump'
-áx/-x 'foot, leg' (16)
-álqst 'shin'

-élqst 'nose, point, end'

-álk/-ák 'belly, flat surface'

-imt/-ém? ' (5)
-átk/-k 'water' (8)
-át 'base, bottom, lower end' (9?)
-íkén/-kén 'back' (9)
-úps/-ps 'tail, rump'
-íča?-/-ča? 'body (outside)' (5)

-á?lq/-l 'throat, oral cavity' (2)
-álq/-lqs 'clothes, dress' (3)
-élq 'nose, point, end' (2)
-átk/-atk‘up/-k‘p 'fire' (2)
-úlx/-lx 'soil, earth' (5)

-álk/-l 'residential' (8)

-útiya? ' (5)
Note that -áp occurs in two positions; so does -élqs, but it is infrequent in combinations and is placed between parentheses in the left column to separate it from other suffixes which occur in only one combination. It is not certain that -s is a lexical suffix; its function or meaning have not yet been established.

Several of these suffixes should be reducible (at least historically) to a sequence of -ál/-ąl- (a combining element of indeterminate function) plus a lexical suffix. But this -ál- should precede all lexical suffixes occurring in a word (as it does, e.g., in Cn). Here, however, it occurs with the following suffix as a unit, never separated, and this unit then occurs following another lexical suffix. Synchronically, then, these forms with -ál- must be considered units (unless a function for -ál- can be found which is compatible with compounding of lexical suffixes). Such suffixes found to occur in combinations are: (a) after -s: -álus, -álps, -álq"p; (b) after other lexical suffixes: -álx", -álqs, -álq", -ált, -élqúás, -élqs, and possibly others (the two groups do not overlap).

Differences in the form of a few other suffixes suggest further analysis. Isolation of an element -ál/-ąl- is suggested by -álča?/-įča? 'body (inside)' vs. -įča?/-ča? 'body (outside)'. The variation between the stressed and unstressed variants of -atk"p/-k"p 'fire' and -áltk"/-áltk" 'water' suggests the isolation of an element -ált-. And finally, the semantically similar sets -atkst/-kst 'hand' vs. -aks(an)/-ks(an) 'hand, arm', -átst 'stone' vs. -átst 'shin' suggest that -t and -n may be extensions added to these and various other lexical suffixes, and may actually be -t 'characterization' and -n 'nominalizer'.

Some exceptions to the above order do occur, indicating layering of derivation. -cín meaning 'language' may come last, following -ąx" 'resident'. Another layered sequence is -ąlu?x"-ųłax", the only instance of the same suffix occurring twice on one word.

Three-member sequences (and four, if they are valid) vary the above order somewhat. Only eight three-member sequences have been found, and only two that may consist of four suffixes (both of which augment existing three-member sequences with -s-). These differ from two-member sequences in at least two ways, the second of which was noted above: (1) the ordering of elements is
different in -apawsqan and -kənamx'cín; (2) stress is not on the last element as expected in -apawsqan, -(s)qənuskst, and probably -(s)apūxän.\(^6\)

Often a sequence of suffixes has a specialized meaning, not necessarily an obvious sum of the meanings of the members of the sequence. Thus -cənáksən and -cənáksən always refer to the wrist, and -cînxən to the ankle. Other such specialized meanings are: -cənána?xən 'ankle bone', -qənuskst 'finger', -qənǔsqən 'toe, hoof', -ápəxən 'heel', -apūxən 'upper arm', -ápəxən 'lower end, base', -awasqən 'crown of the head', -úsxən 'hip, thigh', -əlqsəwíl 'end of a canoe', -alqstxən 'shin, lower leg', -cənátkw 'shore', -(â)ya?qən 'head, knob', -qənwíl 'load' or 'car', -qínxən 'knee(cap)'. Others always occur with one or another positional prefix (S = stem): niʔ-S-ankákst 'palm', kat-S-qənál 'lid, cover', n-S-qənálx 'house top', n-S-cənánaʔ 'temple', niʔ-S-ápəqən 'hair on the head', n-S-sáws 'juncture, point of contact', n-S-sáwsqən 'knee', n-S-íkənxən 'sole', kat-S-íkənxən 'footwear'.

Personal names commonly occur with two lexical suffixes.\(^7\) Often the root of a personal name occurs nowhere else in the language, so the total name cannot be translated; however the suffixes are usually clear enough. At least two suffixes occur only in personal names, both as the first element in a suffix compound: -ímt/-əmt and -álx. Because of this restricted occurrence and the unidentifiable roots, neither can be glossed. -álx precedes only -íkən/-kən 'back', but -ímt/-əmt can occur before five other suffixes. Besides these combinations, personal names provide seven suffix compounds that have not been found elsewhere. Some of these may in fact not be Columbian names inasmuch as intermarriage with the Colvilles has brought Colville names into the language, but the order of the suffixes follows the list given above.
1. Research on Columbian Salish has been made possible by grants from the National Science Foundation, the American Philosophical Society Library, and the University of Kansas. I wish to thank especially Laurence C. Thompson and M. Terry Thompson for comments and suggestions on earlier drafts of this paper.

2. In Upper Chehalis (Ch), sequences of lexical suffixes are much less frequent than in On; they might even be considered rare. Those that do occur seem to be much more loosely combined than in On. Or, put another way, the On sequences often have a specialized meaning by themselves and are added to the root as a sequence; in Ch, the second and third suffixes seem to be added to a stem already containing a lexical suffix (like the On forms considered layered). Only 13 two-member and one three-member sequences have been found in Ch: -iyaq-als in čipx'iyaqalsn 'eyelashes', -apš-alucn in nsúlapšalucn 'mouth of Chehalis River', -aqp-ul in talaqepul 'call for a canoe', -či-aq' in taličiaq' 'river side of a prairie', -ax'-inp in siíá?ax'inp 'floor', -am?-i?i in sk'wata'nil 'baby mouse', -als-i?i in máx'á'isi?i 'baby squirrel', -lni-i?i in qinúilili 'baby wolf', -či-amš in sqé:wicíamš 'Puget Sound Indians', -stq-alis in q's?stqls 'headache', -iaq-als in q'wácíaq'als 'upside down, on one's head', -iyq-lwltxw in čsqiyqzwltxw 'anthill', -a?l in q'wáyáilq 'Upper Chehalis language', -a?l-č-in? in q'eyáileq'in 'Upper Chehalis woman'. Little ordering is possible among these; -i?i is a final suffix, as is probably -ln?, and -als precedes -i?i. -či precedes -aq' and -amš; -als or -als (= -alis) follows -iyaq, -iaq', and -stq. -al- is a more obviously independent unit in Ch than in On, but nevertheless occurs as part of complex suffixes -als or -als, -alucn, and -lwltx'. Generalizations about stress cannot be made for Ch, except to observe that root stress seems to be more dominant than suffix stress; only once is primary stress on one of a sequence of suffixes.

Only three Ch sequences have both members cognate to On suffixes: -an?-i?i (On -ána?, -ált), -als-i?i (On -ús, -ált), and -či-amš (On -átk', -ámx or -ámx'). The third of these is in a different order from the On order.

3. On has several frequently occurring weak suffixes, resulting, if necessary, in this shift of stress back to weak roots. Some of these suffixes have stressed variants in some of the neighboring Salishan languages. Thus weak roots occur with stress more frequently than in these other languages.
4. k’wan- is problematic. The root may actually be k’waná-, as in several other Salishan languages.

5. It is unclear why a few suffixes have variant stress location, e.g., -ātkw’p/-atkw’up ‘fire’, -āpas/-apáś ‘tooth’, -āskit/-askáyt ‘throat, chest’. Note that the strong root :init- ‘ridge’ loses stress before the -apáś variant of ‘tooth’: nʔitapáś ‘a saw’.

6. -w does have a stressed form -ax, unlike -x, -olq, -olqt, and -x, but no examples occur of the stressed form in a combination of suffixes.

7. Suffixes on personal names are consistently associated with one sex or the other, with few exceptions. An unfamiliar name can thus be identified as male or female according to the final suffix. Women are definitely slighted in the distribution of suffixes, having only two or three to themselves and sharing up to three others; men, on the other hand, are designated by over 15 suffixes. The two suffixes used most frequently on women’s names are -alq/-lq ‘clothes, dress’ and -atkw/-kw ‘water’. A few others use -iča/-ća ‘body (outside)’ (and extended to mean ‘robe’), but men’s names also have this suffix-and more frequently; I can detect nothing within this group of names to indicate why some are given to women, others to men (e.g., kiʔkaymíča?, q’amqamíča?, and q’ayíc? are women’s names, but paŋqstíc?iʔ, yánaʔsíc?iʔ, and q’iyíc?iʔ are men’s names). Two suffixes occur once each on a man’s name and a woman’s name: -up/-ps ‘tail, rump’ (m. snak’iʔps, f. k’lax’ka’húps) and -únt (unidentified) (m. lax’únt, f. nha’núnt). The most common suffixes on men’s names are -qin/-qun ‘head’, -xun ‘foot, leg’, -íkun/-kun ‘back’, -ulax’/-alax’ ‘soil, earth’, -axun/-xun ‘upper arm’, -ásqt/-sát ‘sky, day’, -cín/-cun ‘mouth, edge’, -ús/-s ‘eye, face’, -ílx (unidentified), and -íia? (unidentified).
APPENDIX A: COMPOUND LEXICAL SUFFIXES

Listed in alphabetical order of the final suffix, and then the penultimate suffix, since the meaning of forms is based more on the final suffix than others.

-ak-áksen
stónkolxánáksen
pine limbs

-ak-áksen
kilptxánáksen
kilxánáksen
grab by the wrist

-alq-akst
 tkomálsákst
lower arm

-alq"-akst
 tkmálsákst
lower arm

-am-áksen
pine limbs

-can-áksen
kilxánáksen
grab by the wrist

-alq-akst

nickmálxákst
palm of the hand

(al)nickxánxákst
callus on the hand

-can-akst
ckiyork'canákst
bracelet

kilxánxákst
wrist

kilxánxákst
sprain one's wrist

kilxánxákst
dislocate/sprain one's wrist

lópcanákst
broken wrist

skilxánxákst
bracelet

-alq-akst

ntómmám'qonákst
worn-out elbows

-s-ákst

ntómmám'qonákst
elevator

-qan-úskst

smálm'qonúsákst
little finger

-qan-úskst

stálm'qonúsákst
little finger

-qan-ál

kálq'qenáltn
bottlecap

kat'qenáltn
opener

katqa?qenáltn
cork for a bottle

katxánqenátlt
a cover, lid

-s-álps

sméwópápsálps
nape of neck

-atk"-álqs

npúyátk"álqs
wash clothes

wpúyátk"álqsán
wash tub, washing-machine

-s-álqt

soltúmx'álqt
wood around the core of a tree

-u?s-álqt

miyíyu'sálqt
middle of a pole or tree

-s-álqa?p

npalpsálqa?p
sore throat

-áwí-ált

sqa?áwíált
middle child

-qan-ált

kíxolqÁnált
setting bird
-uʔt-ált staʔuʔtált youngest child
-s-álus nčəʔqásálus put together lengthwise
-s-alúyáʔ wakʷwalúyáʔ joints
-qən-álxʷ čəʔqənalxʷ play peek-a-boo
-qən-áip qʷiyqʷiyqáíp brains
-aʔst-áixʷ sikʷaʔstáixʷ wild lupine
-cən-áixʷ skəmconáixʷ Indian house of mats
-qən-áixʷ nkəčqənáixʷtn doorway
nkəčqənáixʷ ridge-pole
-s-áixʷ nxərsáixʷtn ceiling
-ap-ánaʔ nmaqʷapánaʔ curtain
-cən-ánaʔ nakəlcənánaʔ bulge on the side of the face
nkəlcənánaʔ part hair on the side
temple
-nəqʷconánaʔ an slap on the cheek or side of the head
ntəqʷconánaʔ an holler into one's ear
ntəscənánaʔ an slap on the cheek or side of the head
-atkʷ-áp nləxʷatkʷapən boil an egg
-s-áp ʔiqałxayapəm pull a rope against something pulling
-uʔs-áp kʷusuʔsáp on the other end until you almost sit down
-old-fashioned dress with a gathered skirt
-qən-áʔson ləčqənáʔson salmon-club
-ap-áʔst qʷəyapáʔst Camp Gilbert
-qən-áʔst sxəlqənáʔst pipestone
-akst-átkʷ nəqʷapkəstátkʷən I dropped it into water deliberately
-kst-átkʷ nəxʷirkəstátkʷən reach into water
-reach the shore
-con-átkʷ klaʔaconátkʷ right next to the shore
-íəʔcanátkʷ ʔiqałxəcənátkʷ sit on the edge of a river
-sčəlcanátkʷ səčəlcanátkʷ trees along the shoreline
-xənʔcanátkʷ xənʔcanátkʷ ice along the shore
-qən-átkʷ snəʔapəʔcanátkʷ a valley off Antoine Creek Valley
-s-átkʷup kələkʷsatkʷuptn a poker
-tkəčsatkʷup put a pole or log on a fire
<table>
<thead>
<tr>
<th>Term</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>-s-áwš</td>
<td>splice, couple, extend</td>
</tr>
<tr>
<td></td>
<td>up to the knees in depth</td>
</tr>
<tr>
<td>-o1-áxan</td>
<td>shoulder-blade</td>
</tr>
<tr>
<td>-s-áy</td>
<td>eye-guards of antlers</td>
</tr>
<tr>
<td>-amx-cín</td>
<td>Columbian language</td>
</tr>
<tr>
<td>-kan-amx'-cín</td>
<td>language of coast people</td>
</tr>
<tr>
<td>-ax'-cín</td>
<td>English</td>
</tr>
<tr>
<td>-uʔ-s-cín</td>
<td>knob at Carlton</td>
</tr>
<tr>
<td>-áp-olqs</td>
<td>tailgate</td>
</tr>
<tr>
<td>-ámx-ox'</td>
<td>local</td>
</tr>
<tr>
<td>-átk'-ox'</td>
<td>Okanagan Valley resident</td>
</tr>
<tr>
<td>-óš-ox'</td>
<td>Wenatchi</td>
</tr>
<tr>
<td>-cэн-ox'</td>
<td>Moses Columbia</td>
</tr>
<tr>
<td>-íken-ox'</td>
<td>person from the coast</td>
</tr>
<tr>
<td>-k'-ox'</td>
<td>Big Bend country people</td>
</tr>
<tr>
<td>-úlax'-ox'</td>
<td>Methow Valley resident</td>
</tr>
<tr>
<td>-xän-ox'</td>
<td>Blackfeet</td>
</tr>
<tr>
<td>-áp-čaʔ</td>
<td>hard leather poorly tanned</td>
</tr>
<tr>
<td>-con-ícaʔ</td>
<td>Hudson Bay blanket</td>
</tr>
<tr>
<td>-aʔst-íkan</td>
<td>Arbuckle Mountain</td>
</tr>
</tbody>
</table>
-u?s-íkan
nciyu?úsíkan
heart

-nlampu?úsíkan
tree breaks in the middle

-snmiytu?úsíkan
middle of a lake or river

-sq'i?tu?úsíkan
44 repeater rifle

-áp-qaen
ni?kíápaqaen
part hair in the middle

-ni?yomápaqaen
hair ornament

-ámsas-qaen
nilq'ámsásqaen
bald-headed

-nlámáamsásqaen
pass overhead

-ntíqámsásqaen
California quail

-snáxítámsásqaen
rooster's comb

-ap-ámsas-qaen
k'waqpa'qámsásqaen
let go from the mouth

-áya?qáen
k'waq'waq'áya?qaen
head bobbing up and down on land

-nx'ax'áya?qaen
a canyon southeast of Beebe

-s'áma'qáen
skull

-wixónáqáen
long-head

-iya?qáen
spit'íya?qaen
piléated woodpecker

-u?uqáen
níd'úusíqaen
pack-rope

-ya?qáen
?ack'úuya?qaen
curly hair

-k'iwíya?qaen
long-head

-n?aw'awaqáen
stand on head

-póiya?qaen
flat-head

-sólyáqáen
round-head

-x'upíya?qaen
hair is messed up

-éna?qáen
?u'kana'qíihn
Douglas

-ya?qáen
sólyáqíihn
a knob southeast of Waterville

-élu?x'úlaqáen
čáwik'élu?x'úlaqáen
sand

-kan-úlaqáen
pók'qanúlaqáen
Zena (or Olds?); a place near Creek

-sót'qanúlaqáen
the coast area

-xán-úlaqáen
stó'qiwixónúlaqáen
Montana

-kán-úqáen
t'kómkánúqáen
hip

-áwís-us
xómasúus qawísqaen
double-bit axe

-avn-us
pstavtús
across the river

-cqw-us
ćakcwús
shore, toward the river
-u?š-ús cx'txtu'sus
go in a circle
kæcmu'sus
extend around
ni?kiu'sus
part hair in the middle
ni?kæmu'sus
forehead
ni?la'wususen
band across the front of a horse's head
xætxtu'sus
extend around

-akst-útiya? kæk'takstútiya?
using one hand
-alq"p-útiya? nkælq'pútiya?
straight bar (bit)
næq'alq'pútiya?
snaffle bit

-átk"p-m-útiya? nciy'ak'tímu'tíya?
fire-place
-qa'n-útiya? npa?xænqænútiya?tn
shovel
-xæn-útiya?
(s)qæxænútiya?
moccasin

-ølqs-wíl s'æntlqswíl
istem of a canoe
skæmlqswíl
front of a canoe
sxætlqswíl
bow of a canoe

-íkæ?wíl tkæmíkæ'wíl
side of a canoe
ýkæi'wíl
pole a boat

-qa'n-wíl kælqænænwíl
three cars
musaqænwíl
four cars
naqænwíl
a load, wagon-load
qænsænwíl
two loads
tænsænwíl
two cars

-ána?-xæn sxe'dlæhænxæn
hoof

-can-ána?-xæn smæl'ci'xæn
ankle-joint
stæpænænxæn
ankle-joint

-áp-xæn ciyæpxæn
build a fire at the butt of a tree
çælælæpxæn
spurs
næçæpxæn
knot on the end of a rope
nimæpxæn
doubletree
nænapænxæn
broken off at the ground
npænæpxæn
doubletree
tæmxænxæn
worn-out heel
(s)kæmæpxæn
heel

-ápolæ?-xæn kæmolænxæn
heel
-āivas-xon
klakáwasxon
ladder

-āvi-xon
kliylyāwasxon
get a nail in a tire

-sāvi-xon
maiítasxxon
knee comes out of joint

nānāsaxxon
dislocate/sprain a knee

snākuñasxon
knee

-āya?-xon
kāoncawàyaxxon
crippled foot

-cín-xon
kl'koncínxon
ankle

k'mahahcínxon
sprain an ankle

k'kpuñcínxon
deer-hoof rattle worn on the ankle

k'kamo-k'cínxon
dislocate/sprain an ankle

-u's-cín-xon
k'niyriyu'scínxon
half-way up to the knees in depth

-oljst-xon
k'oljstxon
skinned shin

skliyyoljstxon
sliver in the lower part of the leg

sk'oljstxon
hair on the legs

tkoljstxon
lower leg

-íkon-xon
kala'wikóxon
button-hook

kala'wikonxon
button shoes

kat'axíkonxonom
lace boots

kat'ikomíkonxon
instep

nk'omíkonxon
feel a rock in one's shoe while walking

nk'liñxon
horse loses a shoe

nlà'lio'ikonxon
horseshoe

nuk'kxon
horseshoe nails, shoe tacks

ntónk'liñxon
worn-out sole

nx'arílixxon
hole in the sole of a shoe

snkomíkonxon
sole of the foot

-qín-xon
kompqinxon
above the knees in depth

maiñqinxon
knee-cap slips to one side

q'a'qípxxon
knee(cap)

-us-xon
maiñu'sxon
pull hip out of joint

niñu'sxon
thigh

nila'u'sxon
up to the crotch in depth

nlknúpsxon
broken hip
<table>
<thead>
<tr>
<th>Word</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>mark'usxon</td>
<td>dislocate/sprain a hip</td>
</tr>
<tr>
<td>sniyy'usxon</td>
<td>sliver in the thigh</td>
</tr>
<tr>
<td>snq'ap'usxon</td>
<td>hip pocket</td>
</tr>
<tr>
<td>xol'usxon</td>
<td>fishing platform</td>
</tr>
<tr>
<td>-qon-ús-xen</td>
<td>worn-out toe of a shoe</td>
</tr>
<tr>
<td>ntonx'qonúsxon</td>
<td>hole in the toe of a shoe</td>
</tr>
<tr>
<td>nx'awqonúsxon</td>
<td>split hoof</td>
</tr>
<tr>
<td>skisodqúnúsxon</td>
<td>little toe</td>
</tr>
<tr>
<td>-ap-ús-xen</td>
<td>armband</td>
</tr>
<tr>
<td>lek'apúsxon</td>
<td>break an arm</td>
</tr>
<tr>
<td>nok'apúsxon</td>
<td>upper arm</td>
</tr>
<tr>
<td>nkomapúsxon</td>
<td>armbands</td>
</tr>
<tr>
<td>nkonk'apapúsxon</td>
<td>hold by the arm</td>
</tr>
<tr>
<td>nko'konapúsxon</td>
<td>arm slips out of joint</td>
</tr>
<tr>
<td>nia'apúsxon</td>
<td>up to the arms in depth</td>
</tr>
<tr>
<td>nlemapusxon</td>
<td>broken (upper) arm</td>
</tr>
<tr>
<td>npiyapúsxon</td>
<td>pinch on the arm</td>
</tr>
<tr>
<td>sn'aleapúsxon</td>
<td>shoulder-joint</td>
</tr>
<tr>
<td>-s-ap-ús-xen</td>
<td>shoulder-joint</td>
</tr>
<tr>
<td>Appendix B: Personal Names</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td></td>
</tr>
<tr>
<td>-ömt-álqs</td>
<td>čosömtálqs</td>
</tr>
<tr>
<td></td>
<td>loxömtálqs</td>
</tr>
<tr>
<td></td>
<td>molömtálqs</td>
</tr>
<tr>
<td></td>
<td>sinömtálqs</td>
</tr>
<tr>
<td></td>
<td>skiyömtálqs</td>
</tr>
<tr>
<td></td>
<td>sloxömtálqs</td>
</tr>
<tr>
<td>-xon-álqs</td>
<td>sk&quot;uxxonálqs</td>
</tr>
<tr>
<td></td>
<td>sq&quot;ixxonálqs</td>
</tr>
<tr>
<td></td>
<td>yatxonálqs</td>
</tr>
<tr>
<td>-u?š-ásqt</td>
<td>čoluxšásqt</td>
</tr>
<tr>
<td></td>
<td>čušlusásqt</td>
</tr>
<tr>
<td>-alt-átk&quot;</td>
<td>čušaltátk&quot;</td>
</tr>
<tr>
<td>-ömt-átk&quot;</td>
<td>siyömtátk&quot;</td>
</tr>
<tr>
<td></td>
<td>sloq&quot;umtátk&quot;</td>
</tr>
<tr>
<td>-ömt-k&quot;</td>
<td>kkíloktk&quot;</td>
</tr>
<tr>
<td></td>
<td>čaqacéktk&quot;</td>
</tr>
<tr>
<td></td>
<td>sinóntkt&quot;</td>
</tr>
<tr>
<td>-int-k&quot;</td>
<td>six&quot;intkt&quot;</td>
</tr>
<tr>
<td></td>
<td>sloxíntkt&quot;</td>
</tr>
<tr>
<td>-u?š-cín</td>
<td>nxöstu?scín</td>
</tr>
<tr>
<td></td>
<td>yonk?u?scín</td>
</tr>
<tr>
<td>-ömt-íča?</td>
<td>pa?x&quot;omtíča?</td>
</tr>
<tr>
<td></td>
<td>čiyomtíča?</td>
</tr>
<tr>
<td>-álx-ken</td>
<td>kosla?x&quot;álxkon</td>
</tr>
<tr>
<td></td>
<td>lọs&quot;lọx&quot;álxkon</td>
</tr>
<tr>
<td></td>
<td>nq&quot;x&quot;álxkon</td>
</tr>
<tr>
<td></td>
<td>paqipálxkon</td>
</tr>
<tr>
<td></td>
<td>xixitálxkon</td>
</tr>
<tr>
<td>-int-ken</td>
<td>solpíntkon</td>
</tr>
<tr>
<td>-āya?-qon</td>
<td>kahaya?qon</td>
</tr>
<tr>
<td></td>
<td>poknaya?qon</td>
</tr>
<tr>
<td>-a'y-qa'n</td>
<td>tūq'a'y-qa'n</td>
</tr>
<tr>
<td>-xən-ú'lo:x'</td>
<td>pa?pa'xənú'lo:x'</td>
</tr>
<tr>
<td>-kən-úps</td>
<td>k'λox'x'ke núps</td>
</tr>
<tr>
<td>-cín-xən</td>
<td>kəlpscínxən</td>
</tr>
<tr>
<td></td>
<td>kəmucacínxən</td>
</tr>
<tr>
<td></td>
<td>q'əlscínxən</td>
</tr>
<tr>
<td>-ikan-xən</td>
<td>nə'pá'ikəlnxən</td>
</tr>
<tr>
<td>-i'mt-xən</td>
<td>kiəlɔ'ilmxən</td>
</tr>
</tbody>
</table>