

A REPORT ON SLIAMMON (MAINLAND COMOX) REDUPLICATION*

Honoré Watanabe
Kyoto University

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0. INTRODUCTION. This paper treats the various types of reduplication in Sliammon (Mainland Comox). Previous works on Sliammon have already dealt with most of the processes treated below, but they sometimes are only mentioned in passing or not organized under one heading. Reduplication serves a major role in Sliammon morphology and surely merits an in-depth study. Because of the limitation of data, much more attention has been paid to the first two, plural (1) and diminutive (2). Imperfective (4) and -VC₂ (5) have been treated in previous works, and little information can be added at this time, so they are treated only briefly. The remaining types are not well understood yet; the data are organized as lists of forms recorded thus far.

1. PLURAL. It seems most likely that number is obligatorily marked only for 1st and 2nd persons, 3rd person forms being unmarked as to number. There are three ways to clarify or insist upon plural reference, one of which involves reduplication (1.1). The non-reduplicative processes are also included (1.2) to better illustrate means of marking plurality in Sliammon.

1.1. REDUPLICATION.

1.1.1. FORMAL PROCESSES. Plural reduplication is formed by repeating the first consonant-vowel-consonant sequence of the root (i.e. /C₁VC₂). When the first vowel of the root is a full vowel, the copied vowel is changed to /ə/ in the reduplicated syllable. There are a few exceptions to the change of the vowel quality, where the vowel of the reduplicated syllable is identical to the original vowel. The reduplicated syllable is prefixed directly to the root. Thus, plural reduplication can be formulated as C₁əC₂ (and C₁VC₂ for a few cases). Glottalized resonants, j', and g' in C₂ position lose glottalization in the reduplicated syllable, for example, /C₁VR'... becomes C₁əR-/C₁VR'.⁽¹⁾

1.1.2. MEANING and USES. Plural reduplication commonly refers to several persons or things, in which case it is translated to English by plural forms of noun. It can also suggest distribution over space or time. Such forms are accordingly translated to English by 'all around/all over the place', and 'always/all the time'. Plural is used

to refer also to several participants involved in the predication. Still others are found with the same processes but are lexicalized as such or idiosyncratic. The following examples are classified accordingly under 'plural', 'plural participant', and 'lexicalized/idiosyncratic'.⁽²⁾

Plural:

C₁əC₂./

k'əsk'usən 'stars' (k'usən)
t'ənt'in 'lots of barbecued fish' (t'in)
p'a?p'a?əc' 'fishing nets' (p'a?əc')(ə>a/_?)
x'əx'atəm 'lots of salt' (x'atəm 'salt')
q'əsq'əsnay 'shirts/dresses' (q'əsnay 'shirt/dress')
tək'wək'an'a //CəC-/tək'w=an'a/ 'both ears deaf' (PL.??=ear)
[túk'wək'ə?nə] (tək'w'an'a 'deaf') [túk'w'ə?nə]

Stems beginning with C₁VR'... :

həmhum'hum 'blue grouses' [hámhom?hom] (hum'hum 'blue grouse')
qənqin'qin 'ducks' (qin'qin 'duck' [qé?nqen])
t'əmt'əm'x'w' 'gooseberries' (t'əm'x'w' 'gooseberry' [t'ə?m'x'w'])
təmtam'ustən //CəC-/təm'=us-tən/ 'headbands' (PL. belt=head-INS) (tam'ustən 'headband' [tə?m'ustən])(ə>a/_RV)

Exception:

təm'tams 'belts' (təm' 'belt') (but see 'headband' above)

Stems taking C₁VC₂ (V identical to the first vowel of the stem) as their reduplicated syllable:

k'wisk'wisk'is 'bluejays' (k'wisk'is 'bluejay')
k'umk'um't 'lots of kelp' (k'um't 'kelp')

Examples denoting distribution over space:

?əm?imas //CəC-/imas/ 'walking around' (?ám?e:mas) (imas 'walk')
?əq'əq'atas //CəC-/?aq'-a-t-as/ 'He is chasing her all around.'
(PL. chase-Link-CTL.TR-3SBJ) (?aq'a8i t'əəm //?aq'-a-8i t'əəm/ 'I will chase you.' chase-Link-CTL.TR+2sg.OBJ 1sg.SBJ+FUT)

Those denoting distribution over time:

?əx?axi8 //CəC-/?axa8 +[i]/ 'always lying down/being lazy' (PL. lie. down +[STV]) [?Ax?ə-xe8] (?axi8 t'əəm 'I will lie down.')
hashasəm c //CVC-/has-?əm/ 'I sneeze all the time.' (PL. sneeze-INTR 1sg.SBJ)
gəxgəxi8 //CəC-/gəx+ [i]/ 'always brave (PL. brave +[STV])' (gəx+ 'brave')
x'əc'x'əc't //CəC-/x'əc't/ 'sleeping all the time/sleeps too much'
[x'ic'x'əc't]⁽³⁾

Plural Participant: plural reduplication of the predicate refers to plural number of the subject in intransitive forms and of the object in transitive forms. Thus,

Intransitive:

təqtəq tə ʔəmʔimin //CəC-/təq tə CəC-/ʔimin// 'All the doors are closed.' (PL·close DEM PL·door)
 cf. təq tə ʔimin 'The door closed.'
 gəq'gəq' tə ʔəmʔimin //CəC-/gəq' tə CəC-/ʔimin// 'All the doors are open.' (PL·open DEM PL·door)
 cf. gəq' tə ʔimin 'The door opened.'

Transitive:

təqtəq cən səm tə ʔəmʔimin //CəC-/təq-t cən səm tə CəC-/ʔimin// 'I will close all the doors.' (PL·close-CTL.TR 1sg.SBJ FUT DEM PL·door)
 cf. təqt cən səm tə ʔimin 'I will close the door.'
 gəq'gəq't tə ʔəmʔimin //CəC-/gəq'-t tə CəC-/ʔimin// '(to) open all the doors' (PL·open-CTL.TR DEM PL·door)
 cf. gəq't cən tə ʔimin 'I opened the door.'

The above forms show plural reduplication on both the predicate and on the subject (in intransitive) or on the object (in transitive). The next example, in which only the predicate is reduplicated for plural, was rejected by MG.

*təqtəq cən səm tə ʔimin *//CəC-/təq-t cən səm tə ʔimin// 'I will close the doors.' (PL·close-CTL.TR 1sg.SBJ FUT DEM door)

Examples from texts are too few to make any generalization, but it seems that this construction is very awkward, if not ungrammatical. It has plural number of objects overtly marked on the predicate by reduplication, stressing their plurality, and lacks any mark of plurality on the corresponding overt argument. See the next two examples for further illustration.

nəpnəpīs tʰəm tə cəyčuy' ʔə tə k'wax'wə //CəC-/nəp-iš tʰəm tə cəy-/čuy' ʔə tə /k'wax'wə/ 'I will put the kids in the box.'
 (PL·put.in-Vs 1sg.SBJ+FUT DEM PL·child OBL DEM box)
 (J'y'/_C or #)
 *nəpnəpīs tʰəm tə cuy' ʔə tə k'wax'wə

In the next example, plural reduplication is combined with 2sg.OBJ suffix (-mi) to indicate 2pl.OBJ.

nəpnəpimi tʰəm tə tə k'wax'wə //CəC-/nəp-i-mi tʰəm tə tə /k'wax'wə// 'I will put you guys in the box.' (PL·put.in-Link-2sg.OBJ 1sg.SBJ +FUT OBL DEM box)
 cf. nəpīs tʰəm tə janx'wə ʔə tə k'wax'wə 'I will put the fish in the box.' (put.in 1sg.SBJ+FUT DEM fish OBL DEM box)

This is the only example of a pronominal suffix for sg. person combined with plural reduplication to refer to pl. persons. It was elicited from MG, but DD and AD readily recognized it and gave the same English translation without hesitation.

The root nəp- belongs to a class that takes the suffix -Vš (i.e. nəp-iš), which can be inflected for pronominal object (cf. Kroeber 1989:112). The pronominal object suffixes for 1sg., 1pl., and 2sg. are the same ones used with noncontrol transitive and with causative (-mš

1sg., -mut 1pl., -mi 2sg.). Thus, nəp-i-mš 'put me in', and nəp-i-mut 'put us in', nəp-i-mi 'put thee in'.⁽⁴⁾

However, it was difficult to elicit the parallel form for 2pl.OBJ. Instead of the expected -anapi, used with the noncontrol and causative, my data shows nəp-anami. This form was elicited with difficulty, and it may be the result of forced elicitation. Interestingly, Kroeber (1989:112) encountered the same problem; he lists nəp-i-(nə)napi 'put you (pl.) in' but with a question mark, and remarks that the plural forms were rather hard to elicit.

Whatever the reason for this difficulty may be, the above example shows that plural reduplication serves as a ready means to indicate plurality.

Lexicalized / Idiosyncratic:

ʔəhʔahəm //CəC-/ʔah-ʔəm// 'arthritis/aching' (PL·sore-INTR) (ʔah 'sore')
 ʔayʔajuθəm //CVC-/ʔaj'uθəm// 'native Indian (i.e., Sliammon) language' [ʔəyʔəʔuθəm] (J'y/_C or #)
 cf. ʔaj'uθəm-mut //ʔaj'uθəm-mut// 'He knows Indian language well.' (??-very?) [ʔəʔjuθəm-mot]

The next example peculiarly has a negative connotation with C₁əC₂ reduplication where no such meaning is suggested in the corresponding simplex forms. It is difficult, at least for non-native speakers, to see the connection, if any, to plural.

gəxgəxnumut //CəC-/gəx-nu-mut// 'nightmare' (C₁əC₂·??-NCT.TR-RFL) (gəxnumut 'dream/He dreams.')

To specify the plurality of 'dreams', an analytical process using qəx 'many' is employed (see 1.2.2 for further discussion on qəx).

qəx tʰ gəxnumutut s natut //qəx tʰ /gəx-nu-mut-ʔut s /nat-ut// 'I had lots of dreams last night.' (many 1sg.PSV ??-NCT.TR-RFL-PAST TIME night-PAST) [qəx tʰ gəxnumotut snótut]

Some forms in C₁VC₂ reduplication occur as such without the corresponding simplexes.

k'isk'is 'bluejay' cf. k'isk'isk'is 'bluejays'
 mušmuš 'cow' cf. mušmušmuš - məšmušmuš [mšmušmuš] 'cows'

1.2. NON-REDUPLICATIVE PROCESSES. There are two ways to specify plural reference other than the plural reduplication.⁽⁵⁾

1.2.1. PLURAL AFFIX. There is an affix to mark plurality: /Vg/. Often the reference is to 3rd person, and it may be better to treat this affix in terms of pronominal markers. It is found also, however, to occur with 1st and 2nd person plural pronominal subject clitics. It may be that collectiveness is stressed in the latter case.⁽⁶⁾

The position of this affix within a word is somewhat obscure. It can be attached right after the first syllable of the stem, thus appearing as an infix if the result is decomposition of what is otherwise unanalyzable.⁽⁷⁾ In this position, the vowel of this affix is

the same as that of the first vowel of the root.

ʔitiwtən stəm //ʔitən +[Vg] stəm// 'We will eat together.' (eat +[PL] 1pl.SBJ+FUT) (g>w/_C or #)
 ʔiʔimigas stəm //CV-/ʔim-Vg-as stəm// 'We will be walking together.' (IMPF-walk?-PL-Vs 1pl.SBJ+FUT)
 ʔuʔuʔuwqʷu tə qəyqaymixʷ //CV-/ʔuʔqʷu +[Vg] tə CəC-/qaymixʷ// 'People are digging clams.' (IMPF.dig.clams +[pl] DEM PL. Native.person)
 tʰutʰuʔgat ɕ tə kʷəskʷastə //CV-/tʰut-Vg-a-t ɕ tə CəC-/kʷastə// 'I am putting the cups on the shelf.' (IMPF.put-PL-Link-CTL.TR 1sg.SBJ DEM PL.cup)
 Jaqʰaw tə jaʔjiʔəm //Jaqʰ-Vg tə jaʔjiʔəm// 'Lots of trees fell down.' (fall-PL DEM trees)^(e)
 ʔaqʰagis //ʔaqʰ-Vg-Vs// '(We are) going down the river.' (go.downstream-PL-Vs)

This position parallels that of cognate forms in Sechelt: -iw, -aw (Beaumont 1985:86). But in Sliammon it can also be attached at the end of a word. The data show the vowel of this affix in this position to be always i, regardless of the first vowel of the stem or the nearest vowel in the stem, except in one example.

ʔiʔimasiw //CV-/ʔimas-Vg// 'They are walking together.' (IMPF-walk-PL)
 gəxnumutiw //Jgəx-nu-mut-Vg// 'They dreamt.' (??-NCT.TR-RFL-PL) [gʌxʰnoʰmɔʰtew]
 məmkʰtasiw tə Janxʷ //CV-/məkʰ-t-as-Vg tə JJanxʷ// 'They are eating fish.' (IMPF.eat-CTL.TR-3SBJ-PL DEM fish)
 Exception:
 ʔuʔuʔqʷuʔuw tə ɕəyɕuyʰ //CV-/ʔuʔqʷu-Vg tə CəC-/ɕuyʰ// 'kids are digging clams.' (IMPF.dig.clams-PL DEM PL.child)

Unlike the plural reduplication, this affix can refer to the plurality of both subject and object in transitive predicate. Data are wanting to understand the pattern fully, but the reference of this affix, whether to the subject or to the object, is perhaps ambiguous out of context.^(e) Thus,

səpʰtiw ɕən səm //səpʰ-t-Vg ɕən səm// 'I will club them all.' (club-CTL.TR-PL 1sg.SBJ FUT)
 sapʰatasiw tə ɕəyɕuyʰ //sapʰ-a-t-as-Vg tə CəC-/ɕuyʰ// 'They are spanking the kids.' (spank-Link-CTL.TR-3SBJ-PL DEM PL.child)
 sapʰagatas tə ɕəyɕuyʰ //sapʰ-Vg-a-t-as tə CəC-/ɕuyʰ// 'He is spanking all the kids.' (spank-PL-Link-CTL.TR-3SBJ DEM PL.child)

It is very questionable if two //Vg// affixes can attach to the same predicate, to specify 'they...them', i.e.,

ʔʔsasapʰagatasiw tə ɕəyɕuyʰ //CV-/sapʰ-Vg-a-t-as-Vg tə CəC-/ɕuyʰ// 'They are spanking the kids.' (IMPF-spank-PL-Link-CTL.TR-3SBJ-PL DEM PL.child) (tested with MG)

In one example, this affix was recorded with glottalization of the resonant immediately preceding the affix⁽¹⁰⁾.

ʔitənʰiw //ʔitən-Vg +[ʰ]// 'They are eating.'

Harris (1977) transcribed this affix as [əwʰ ~ ewʰ] in Island Comox. Glottal closure was rarely observed in Sliammon, in which case /wʰ/ is written (only one example):

ɕitɕitimiw //CVC-/ɕitim-Vg +[ʰ]// 'Lots of people are dancing.'

1.2.2. ANALYTICAL PLURAL. Plural reference can be stated analytically by juxtaposition of qəx 'many'. Plural reduplication seems to have dwindled, and the use of qəx is prevalent, at least in the speech of DD among my consultants, and more so among the younger speakers.⁽¹¹⁾ This is most likely an influence from English.

A few words do not, however, undergo plural reduplication, and for such words qəx is the only means to specify plurality⁽¹²⁾:

qəx puqʰpuqʰ 'lots of (wild) blueberries' (puqʰpuqʰ '(wild) blueberry')
 qəxmut hiwqin 'lots of swans' DD (-mut 'very', hiwqin 'swan')
 qəxmut hajuqʰtən 'lots of barbecued seal' (hajuqʰtən 'barbecued seal')
 qəx xəʔa 'clams' (xəʔa 'clam')

The reason for inhibition of these particular words from undergoing reduplication is not clear, but for the last word, 'clam', Blake (1992) states that the reduplicated form, [xəʔxə] SB, means 'woman's genitals', and that is the reason why the reduplicated form is not used to refer to 'clams'.

With one word, giJa 'dirt/ground/earth', qəx conveys a different meaning from plural reduplication:

qəx giJa 'lots of dirt'
 gəygiJa //CəC-/giJa// '(to own) lands in different spots'

Such a difference between the two processes has not been attested with any other forms.

qəx can also be expanded by a lexical suffix or be inflected:

qəxaya 'lots of people' (=aya person?)
 qəxigan 'liar' (=igan sentiment)
 qəxsxʰ ɕaxʰ //Jqəx-sxʰ ɕaxʰ// 'Get lots!/Pick lots (of berries)!' (many-CAU 2sg.SBJ)
 qəxsxʰuʔ ɕən ʔut //Jqəx-sxʰ-ʔuʔ ɕən ʔut// 'I picked/got real lots.' (many-CAU-PAST 1sg.SBJ ptc) [qʌxsxʰuʔɕɛnʔot]

qəx can function also as an oblique complement, e.g.:

ʔiʔitən Mary ʔə tə qəxmut //CV-/ʔitən JMary ʔə tə Jqəx-mut// 'Mary is eating lots.' (IMPF.eat Mary OBL DEM many-very) [ʔiʔitən mɛʔi ʔətə qʌxmot]

2. DIMINUTIVE. Diminutive formation is more complex than plural formation. Five morphological processes are involved: (1) reduplication of stem initial C₁V, (2) i insertion, (3) glottalization of resonants

or attachment of a glottal stop to word-final vowel, (4) suffixing -uɪ, and (5) ? insertion. C₁V. reduplication (1) is by far the most productive. C₁V. reduplication (1), suffixing of -uɪ (4), and ? insertion (5) can form diminutives by themselves alone. Diminutives formed with (4) or (5) alone are few in number, however, making (1) the only productive process. The other two processes (2 and 3) occur only with the others, namely (1) and (4). The five processes are discussed in detail below. The numbers in parentheses in this section correspond to the five processes. When two or three processes are combined, numbers are marked with '+' (e.g. 1+2, etc.).

The basic meaning is small(er) in size, amount, or force, but specialized meanings, or nuances, and lexicalized items are also found.

2.1. FORMAL PROCESSES.

(1) C₁V. reduplication: Most roots lose their root vowel when they undergo diminutive C₁V. reduplication. The vowel of the reduplicated syllable is the same as the root vowel if the root vowel is a full vowel. Most roots with ə take C₁i. as their reduplicated syllable.

suspayu 'small ax' [sɔspəyo] (suspayu 'ax' [sɔpəyo])
 t'it'in 'small barbecued fish' (t'in 'barbecued fish')
 q'iq'snay' //Ci-/q'əsna// 'small shirt/dress' [q'ɛq'əsnaɪ]
 (q'əsnaɪ 'shirt/dress')
 t'ut'tat 'small bed' (t'utat 'bed')
 gɛq'it //Ci-/gəq-it// '(The door is) opened a little bit.'
 (DIM-open-STV) [gɛq'it]
 ʔaʔya //CV-/ʔaya// 'small house' (ʔaya 'house')⁽¹³⁾
 ʔaʔtx' //CV-/ʔaʔtx'// 'small room' (ʔaʔtx' 'room; (to go) inside')

(2) i insertion: i is inserted in some forms undergoing C₁V. reduplication. It is inserted between the last two consonants of the word. If there is an underlying vowel between the last two consonant -- i.e. if the word does not end in a consonant cluster -- i replaces the vowel.⁽¹⁴⁾

(1+2)
 ʔaʔasix' //CV-/ʔasix' +[i]// 'small seal' (ʔasix' 'seal')
 mimθik' //Ci-/mθək' +[i]// 'small blackcap berry' [mɛmθek'] (mθək' 'blackcap berry')
 ʔiʔapustin //Ci-/ʔəp'=us-tən +[i]// 'small towel' [ʔɛʔap'osten]
 (ʔaʔp'ustən //ʔəp'=us-tən// 'towel' (wipe=face-INS)) (ə>aʔ/_C'V)
 ʔax'tim //CV-/ʔax'təm +[i]// 'just a bit of salt' (ʔax'təm 'salt')
 (cf. ʔax'tim janx' 'salted fish' [i] STV)

(3) Glottalization of resonants or attachment of a glottal stop to word final vowel: this process may be largely due to phonological reasons. In many examples involving this process, the corresponding non-reduplicated forms have glottalized resonants, j', or g' as C₂, e.g. c'ag'ay '(wooden) spoon' [c'ɛʔagay]. When these forms undergo C₁V. reduplication and lose the first vowel of their roots, the C₂ comes next to C₁, thus, *c'a-c'g'ay. However, the glottalized resonants, j', and g' lose glottalization when they follow another consonant, and when this loss of glottalization occurs, glottalization occurs at the word-final position, i.e. c'a-c'gay' [c'ɛc'gayʔ]. Thus, at least on the surface, glottalization can be viewed as moving from one position to

another within the word, as if refusing to be simply lost. With other words, however, glottalization of resonants cannot be explained in a similar fashion (e.g. 'small barbecued deer', see below).

One diminutive form ('small bullfrog', see below) receives glottalization on a word-internal resonant. Analyzing the same process in Island Comox, Harris (1977:171) states that glottalization occurs on the "first resonant reading from right to left in the final syllable" [emphasis mine]. This analysis could likely be extended to Sliammon.⁽¹⁵⁾

The same reason can hold true for some of the words where a glottal stop is attached following the word-final vowel. Thus, the diminutive of mən'a [mɔʔna] 'child' is: mi-mən'a > mi-mn'a > mi-mnaʔ [mɛmnaʔ]. With others, however, the added final glottal stop can not be explained similarly (e.g. 'small box', see below).

In the morphophonemic representation, added (or 'moved') glottalization and glottal stops are marked by [ʔ].

(1+3)
 c'ac'gay' //CV-/c'ag'ay +[ʔ]// 'small (wooden) spoon' [c'ɛc'gayʔ]
 (c'ag'ay '(wooden) spoon' [c'ɛʔagay])
 ʔiʔilq'ay' //CV-/ʔilq'ay +[ʔ]// 'small barbecued deer' (ʔilq'ay 'barbecued deer')
 ʔix'x'ay' //Ci-/ʔəx'ay +[ʔ]// 'small dog salmon' (ʔəx'ay 'dog salmon')⁽¹⁶⁾
 titxəmay' //Ci-/təxəmay +[ʔ]// 'small cedar' (təxəmay 'cedar')
 titk'ənaʔ //Ci-/tək'an'a +[ʔ]// 'a little bit deaf' [tɪtk'vnoʔ]
 (tək'an'a 'deaf')
 qiqinqin' //Ci-/qin'qin +[ʔ]// 'small (brown?) duck' [qɛ-qenqenʔ]
 (qin'qin '(brown?) duck' [qɛʔenqen])
 mimnaʔ //Ci-/mən'a +[ʔ]// 'baby' (mən'a 'child' [mɔʔna])
 c'ac'nuʔ //CV-/c'an'u +[ʔ]// 'small dog' [c'ɛc'noʔ] (c'an'u 'dog' [c'ɛʔno])
 k'wak'x'aʔ //CV-/k'wax'a +[ʔ]// 'small box' (k'wax'a 'box')

(1+2+3)
 sismin' //CV-/simən +[i]+[ʔ]// 'small boil' [sɛsmenʔ] (simən 'boil' [sɛʔmə-n])
 wawalʔθ //CV-/walθ +[i]+[ʔ]// 'small bullfrog' [wɔwaʔθ] (walθ 'bullfrog' [wɔtθ])

(4) Diminutive suffix -uɪ: this suffix may have been historically restricted in its use "especially for names of birds" (Hagège 1981) or "in words for the offspring of an animal" (Harris 1977). However, it seems to be quite productive, at least in MG's speech. This suffix is the only means to form diminutives of words already reduplicated in their singular forms.

k'isk'isut 'small bluejay' (k'isk'is 'bluejay')

(1+4)
 mamθačut //CV-/maθač-ut// 'small black duck' (maθač 'black duck')
 p'ip'huʔut //Ci-/p'uhu-ut// 'small raven' [p'ɛp'hoʔut] (p'uhu 'raven')
 (See also the example cited in note 16.)

(1+2+4)

ʰix'pigiŋuʰ //CV-/ʰip=igs-uʰ +[i]// [ʰéʰ'pigiŋuʰ] 'small underwear' (ʰipiws //ʰip=igs// 'underwear' (deep/under=body))

(5) ? insertion: there are only a few examples of this process. (See also the next section.)

saʰtixʷ 'small woman, girl' (saʰtxʷ 'woman'; sasaʰtixʷ also elicited as diminutive)

2.2. SPECIALIZED NUANCES. Some personal names were recorded in diminutive forms. These forms convey contempt:

luʰs '(You little) Rose!' [lɔʰs] (properly, lus [lɔʰs] or lusi [lɔʰse]; DIM form is formed by ? insertion)
paʰp '(You little) Bobby!' [pɔʰp] (properly, pap [pɔʰp]; also by ? insertion)
ʰaʰknis '(You little) Agnes!' [ʰɔʰkʰnes] (properly, ʰaknis [ʰɔʰkʰnes]; DIM form can be analyzed as C₁V- reduplication with loss of the first vowel of the stem, or as ? insertion.)

Another form probably belongs in this category:

ʰiʰu '(You little) Joel' [ʰiʰ-ʰuʰ] (properly, ʰu [ʰuʰ])

Some forms carry a nuance of affection or endearment:

(sə tʰ) miman '(That's my) Dad' [méman] (sə DEM, tʰ IPSV, man 'father')
(tə tʰ) titan '(That's my) Mom' [té-tən] (tə DEM, tʰ IPSV, tan 'mother')
nimuʰ ʰix'əxʰaxay 'Us old people' (17) [némoʰ ʰé-ʰəxʰaxayʰ] (nimuʰ 1pl. pronoun)

The next example probably can be used contemptuously or affectionately (18):

saʰtixʷ //CV-/saʰtxʷ +[i]// 'my little wife' [sə-sʰtixʷ] (saʰtxʷ 'woman') (18)

Some forms have specialized meanings or are lexicalized as such.

ʰax'xayʰ //CV-/ʰaxayʰ +[ʰ]// 'elderly person' (ʰaxayʰ 'old' (20))
ʰiʰiyaʰ 'grandmother' (ʰiyaʰ 'great-grandmother')

Still others are found in what may be diminutives, but their non-reduplicated simplex forms have not been attested. (21)

tʰitʰikʷ '(earth) worm' (22)

3. DIMINUTIVE PLURAL. Diminutive plurals are often difficult to elicit. It seems likely that such a process is no longer in use, though more research may reveal otherwise. Among my consultants, only MG gave diminutive plurals by means of reduplication and/or suffixation. Others usually used qəx 'many' plus diminutives. Many forms obtained are

questionable, so it is difficult to generalize patterns from them. The following therefore is a tentative description based on forms that seem fairly reliable.

One of the two main processes of diminutive plural is double reduplication: the diminutive C₁i- reduplication occurs in front of plural C₁əC₂- reduplication. As Harris (1977:108) describes this process, the plural formation precedes the diminutive formation. Just as described in 2.1, since the first vowel of the stem, i.e. the vowel of the plural reduplication, is ə, the vowel of the diminutive is i. This process can be formulated as C₁i-C₁əC₂-/. Contrary to the diminutive reduplication described above (2.1), neither the vowel of the root nor that of plural C₁əC₂- is lost.

C₁i-C₁əC₂-/
q'iq'əsq'əsnayʰ //Ci-CəC-/q'əsnayʰ// 'small shirts/dresses' (q'əsnayʰ 'shirt/dress')
sisəpsupayuʰ //Ci-CəC-/supayuʰ// 'small axes' [sɪsəpsopəyoʰ] (supayuʰ 'ax' [sɔpəyoʰ])
t'it'ət'utətʰ //Ci-CəC-/t'utətʰ// 'small beds' [t'ət'ət'ot'ətʰ] (t'utətʰ 'bed')

Interestingly, in some cases this double reduplication occurs with glottalization of resonants or attaching ? following the word-final vowel (one example only). The corresponding diminutive of these forms shows glottalization of the resonant and ? attachment. It is not clear if the glottalized resonant (if there is one) in C₂ position of the stem loses glottalization or not (see the first two examples). Note also that the first example has infixes i.

sisəmsiminʰ //Ci-CəC-/sim'an +[i]+[ʰ]// 'small boils' [sɪsəmsiməmenʰ] (sim'an 'boil', sisminʰ 'small boil')
k'ik'ənk'an'ayʰ //Ci-CəC-/k'an'ayʰ +[ʰ]// 'small lids' [k'ik'ənk'an'ayʰ] (k'an'i 'lid', k'ik'ənk'an'ayʰ 'small lid')
titəxtəxəmayʰ //Ci-CəC-/təxəmayʰ +[ʰ]// 'small cedars' [titəxtəxəmayʰ] (təxəmayʰ 'cedar', titəxəmayʰ 'small cedar')
pipəcpəcuʰ //Ci-CəC-/pəcuʰ +[ʰ]// 'small cedar root baskets' [pi'pəcpəcuʰ] (pəcuʰ 'cedar root basket', pipəcuʰ 'small cedar root basket')

The other main process combines plural reduplication with diminutive suffix -uʰ.

C₁əC₂-/...-uʰ
məwmawicʰuʰ //CəC-/mawicʰ-uʰ// 'small deer (pl.)' [mɔ'mawicʰotʰ] (mawicʰ 'deer')
t'əmt'am'x'uʰ //CəC-/t'am'x'-uʰ// 'small gooseberries' [t'əmt'am'x'uʰ] (t'am'x' 'gooseberry')
ʰəsʰasix'uʰ //CəC-/ʰasx'-uʰ +[i]// 'small seals' [ʰəsʰasix'uʰ] (ʰasx' 'seal')

There are a few examples with double reduplication occurring with the diminutive suffix. From a formal point of view, the diminutive is marked twice on these forms, i.e. by C₁i- reduplication and the suffix -uʰ.

miməθmaθačut //Ci-CəC-/maθač-ut// 'small black ducks'
[mém·Aθmaθač·čot] (maθač 'black duck')
sisəmsam'ahu //Ci-CəC-/sam'a(h)-ut// 'small mussels'
[sisəmsə?ə'mə·ho] (sam'a 'mussel')

Still obscure are some stems taking C₁i?i- reduplication to form a diminutive plural. Again, data are insufficient to confirm this point; moreover, the process is further obscured by the possible existence of C₁V7V- reduplication (see below in 8). Note that the first vowel of the stem is lost in the first three examples:

ti?itqiw //Ci?i-/tiqiw// 'small horses' [tétetqew] (tiqiw 'horse')
mi?im?in //Ci?i-/mi?in// 'small carrots' [méfem?en] (mi?in 'carrot')
ti?itk'əti //Ci?i-/tək'əti// 'small rabbits' [tétetk'əti] (tək'əti
'rabbit' [tək'əti], titk'əti 'small rabbit' [tít·tk'əti])⁽²³⁾
t'əi?it'əat'əik' //Ci?i-/t'əit'əik'// 'small worms'
[t'əi?et'əat'əik'w]⁽²⁴⁾ (t'əit'əik'w 'earth' worm')
si?isəttix' //Ci?i-/səttix' +[i]// 'small women' (səttix' 'woman')

4. IMPERFECTIVE. Imperfective⁽²⁵⁾ aspect is formed with almost all roots by initial C₁V- reduplication. The vowel of the reduplicated syllable is identical to the first vowel of the root. The first vowel of the root is lost if it is a /ə/, otherwise retained. Thus,

ti?ilq'ay //CV-/?ilq'ay// 'barbecuing deer' [tétetq'ay] (?ilq'ay
'barbecued deer')
?u?utq'w //CV-/?utq'w// 'digging clams' [tétetq'w] (?utq'w 'dig
clams')
tətagəθut //CV-/tag-a-θut// 'sneaking away' (IMPF·leave-Link-RFL)
[tətagəθot] (tagəθut 'to sneak away')
č'ic'č' //CV-/č'ic'č'// 'raining' [č'ic'č'] (č'əč' 'rain' [č'ic'č'])

With a few forms, glottalization of word-final resonants was observed when a form underwent C₁V- imperfective reduplication.⁽²⁶⁾

tətgəqin' //CV-/təg=qin +[']// 'answering (back)' (IMPF·??=mouth)
[tətgəqin'] (təgqin' čx'w //təg=qin-θ čx'w// 'Answer me!' (??=mouth-
CTL.TR+1sg.OBJ 2sg.SBJ) n>ə/_θ [tú:qəθčx'w])
x'əx'wəj'əm' 'telling traditional story' [x'əx'wəj'əm]
q'wəq'wəθəm' 'I am going to tell a story.' [q'wəq'wəθəm'təθəm]

5. -VC₂ REDUPLICATION. Kroeber (1988) explores -VC₂ reduplication very carefully. No further research has been done on this particular process either to add to or correct Kroeber's description. Some additional data are listed here.

-VC₂ reduplication repeats the second consonant of the root (i.e., C₂) and the vowel preceding it (i.e., the (first) vowel of the root) and places them directly following the second consonant of the root. Thus the reduplication appears as an infix when the stem is longer than a CVC root. Its occurrence is limited to roots which Kroeber (1988) classifies 'stative'. It carries inceptive meaning with intransitives. With transitives, the semantic contribution of the reduplication is not clear (hence glossed as -VC₂).

x'əx'tətan'a č //CV-/x'ət-VC=an'a č// 'My neck is getting stiff.'
(IMPF·stiff·INCP=neck 1sg.SBJ) (x'ətan'a 'stiff neck')
titih //CV-/tih-VC// 'It is getting big.' (IMPF·big·INCP)
[tít·ti·hə] (tih 'big')
x'əxəx č //x'əx-VC č// 'I am old (now)./I got old.' (old·INCP
1sg.SBJ) [x'əxəx]
x'əxəxəx č //CV-/x'əx-VC č// 'I am getting old.' (IMPF·old·INCP)
[x'əx'əxəxč]
tətk'uk'an'a č //CV-/tək'w-VC=an'a č// 'I am becoming/turning deaf.'
(IMPF·??·INCP=ear 1sg.SBJ) (tək'an'a 'deaf')
qəqəxəx //CV-/qəx-VC// 'It is getting more/increasing in number.'
(IMPF·many·INCP) [qəqəxəx]

?əj'aj'at čx'w ?ut //?əj'-VC-a-t čx'w ?ut// '(You) make it better.'
(good·VC₂-Link-CTL.TR 2sg.SBJ ptc) [tə?əj'et'čx'w?ut]
č'am'am'at čx'w //č'am'-VC-a-t čx'w// 'You cool it off.' (cold·VC₂-
Link-CTL.TR 2sg.SBJ) [č'əf'əmə?məčx'w]

6. C₁əR- REDUPLICATION. Some roots with a resonant in C₂ position are found to undergo what looks like C₁əC₂- plural reduplication at first glance. However, the resonant in the reduplicated syllable receives glottalization; this is radically different from the plural reduplication analyzed above (1.1.1) where glottalized resonants in C₂ position lose their glottalization in the reduplicated syllable. The process in question here can be formulated as C₁əR-. None of the roots in the following examples, except one ('talk'), has been found unreduplicated or unaffixed so far.

The data are insufficient to determine what this process means. The first three examples are similar to what is called 'characteristic' or 'dispositional' aspect in other Salish languages (cf. for example Galloway 1993).⁽²⁷⁾

təw'tiws //CəR-/tiws// 'fast learner/smart' [tútewš - túw'tewš]
cf. titiwsam //CV-/tiws-am// 'He is learning.' (IMPF·learn-INTR?)
[tít·ti·wšəm]
gəy'gəyətən //CəR-/gay-at-tən// 'S.o. always asking (i.e.
curious?)/He is asking all the time.' (C₁əR·ask-LIG-INS)
[gít'gəyətən - gít'gəyətən]
q'wəy'q'wəy 'talkative' [q'wí·?q'wəy] (q'wəy 'to speak/talk; word' JD)
šəm'šəm 'dry' [ším?ším]
x'əm'x'am 'square (shaped basket/object)' [x'ə-m?x'am]⁽²⁸⁾
xən'xən 'shy' [xə-n?xən]
xəm'xəm 'wet' [xəm?xəm]

Though doubly reduplicated, the following example probably belongs here.

nəy'nəyən čx'w nəgi //CəR·CəC?-/nəy čx'w nəgi// 'You always forget/
always make mistakes.' (C₁əR·C₁əC₂?·forget 2sg.SBJ 2sg.pronoun)
MG, 'forgetful' DD [ní?ni:ni:čx'w nígi]
cf. nəynumis nəgi //nəy-nu-mi-s nəgi// 'He forgot you.' (forget-
NCT.TR-2sg.OBJ-3SBJ 2sg.pronoun) [ní:nomes nígi]

7. C₁aC₂- REDUPLICATION. The examples of the reduplication discussed

here are still few in number, which may be due only to my belated realization of its potential productivity.

This reduplication copies the first CVC sequence of the stem (i.e., C₁VC₂) with the change of the vowel to a, hence the formula C₁aC₂. Some forms attested with C₁aC₂ reduplication do not have corresponding C₁əC₂ (plural) reduplication, in which case the former perhaps functions in place of the latter. In other examples, however, C₁aC₂ reduplication contrasts with C₁əC₂ reduplication, with a slight difference in meaning. The meaning of this process is not entirely clear; it seems to involve some sort of aspect. Many more examples, with syntactic tests (such as the one carried out by Kroeber 1988), are necessary to determine what this reduplication means (or whether all of the following examples can be classified under one semantic category).

The following presents all the examples of this process in my data. Though perhaps tedious, all information and translations by different consultants are given.⁽²⁹⁾

ʔatʔitʔən ɛ //CaC-/ʔitʔən+[i] ɛ// 'I am enjoying my meal, eating slowly, bit by bit.' (C₁aC₂·eat+[STV]? 1sg.SBJ) MG <spn>, 'eating a little bit at a time' DD, 'snacking, sampling (food)' EP [ʔatʔitʔən]

cf. ʔatʔitʔən //CaC-/ʔitʔən// 'always eating' (PL·eat) [ʔatʔitʔən]

ʔatʔutʔu //CaC-/ʔutʔu// 'enjoying digging clams' (C₁aC₂·dig.clams) MG [ʔatʔutʔu]

cf. ʔatʔutʔu //CaC-/ʔutʔu// 'always digging clams' (PL·dig.clams) [ʔatʔutʔu]

ʔaxʔjəxʔ //CaC-/ʔəxʔ// [ʔəxʔjəxʔ] 'running around' (C₁aC₂·run) MG, DD, EP

ʔəxʔjəxʔ //CaC-/ʔəxʔ// [ʔəxʔjəxʔ] 'running around to get ready to go out' (PL·run) MG <txt>⁽³⁰⁾, 'runner' DD, rejected by EP and AD

məxʔməxʔas ɛ tə ʔanxʔ //CaC-/məxʔ-Vs ɛ tə ʔanxʔ// 'I am gathering the fish a little bit. / (Among different kinds of fish,) I am gathering the kind I want (in the middle).' (C₁aC₂·gather-Vs 1sg.SBJ DEM fish) MG [məxʔməxʔas]

cf. məxʔas tə ʔanxʔ //məxʔ-Vs tə ʔanxʔ// 'I will gather fish.' (gather-Vs 1sg.SBJ+FUT DEM fish) [məxʔas tə ʔanxʔ]

məxʔməxʔas ɛ //CaC-/məxʔ-Vs ɛ// 'I am gathering.(?)' (PL·gather-Vs 1sg.SBJ) [məxʔməxʔas]⁽³¹⁾

təkʔtəkʔ //ʔəkʔ-ʔəm ga// 'flying around/flying back and forth' (təkʔ 'to fly')

pəpəpət ɛ s natut //CaC-/pəpə-ʔut ɛ s /nat-ʔut// 'I kept waking up last night. / I was awake part of the time.' (C₁aC₂·awake-PAST 1sg.SBJ TIME night-PAST) MG, confirmed by EP. [pəpəpət snəto]

pəpəpət ɛ //CaC-/pəpə-ʔut ɛ// 'I was awake.' (PL·awake-PAST 1sg.SBJ) MG [pəpəpət]

cf. pəpə ga //pəpə-ʔəm ga// 'Wake up!' (awake-INTR IMP) [pəpəga]

səcsəcəm //CaC-/səc-ʔəm// 'itchy all over' (C₁aC₂·itch-INTR) MG səcsəcəm tə tʰ əyis //CaC-/səc-ʔəm tə tʰ /əyis// 'My hand is always itchy in one spot.' (PL·itch-INTR DEM 1PSV hand) MG

(emphasis is MG's)⁽³²⁾

ɛʔatʔəʔ 'raining a little bit' MG <spn> [ɛʔatʔəʔ] (ɛʔat 'rain')

ɛʔatʔəʔtəm //CəC-/ɛʔat-t-əm// 'It is raining on a lot of people' (PL·rain-CTL.TR-PASS) [ɛʔatʔəʔtəm]

8. C₁V7V- REDUPLICATION. A few forms were recorded with C₁V7V- reduplication. Some seem to involve some sort of diminutive notion. They therefore may be better classified as diminutive plurals which take C₁i7i- reduplication. It is difficult, however, to see any diminutive nuance with other examples. Unfortunately, the examples are too scarce (less than 10 examples) to explain this process at this time.⁽³³⁾

First, three forms which are translated with diminutive notion:

qʔiʔiqʔa ɛ ʔut //Ci7i-/qʔa ɛ ʔut// 'I am a little bit hungry.' (Ci7i-hungry? 1sg.SBJ ptc) [qʔiʔiqʔa(ʔ)ɛʔot] (qʔaʔa ɛən 'I am hungry')

θi7iθqitas //Ci7i-/θiq-i-t-as// 'He is digging a little bit.' (Ci7i·dig-Link-CTL.TR-3SBJ) [θi7iθqetas]

ti7itkʔat ɛaxʔ //Ci7i-/təkʔ-a-t ɛaxʔ// '(You) pull it a little bit.' (Ci7i·pull-Link-CTL.TR 2sg.SBJ) [təʔetkʔvɛtɛxʔ] (See also 'tug-of-war' below)

The remaining examples with C₁V7V- reduplication follow:

si7ispʔaʔam //Ci7i-/səp-ʔəm//⁽³⁴⁾ 'baseball' (Ci7i·club-INTR) [səʔespʔaʔam]

ti7itkʔatawʔ //Ci7i-/təkʔ-a-t-awʔ// 'tug-of-war' (Ci7i·pull-Link-CTL.TR-RCP) [təʔetkʔvɛtawʔ]

qʔuʔuqʔutas tə kapi //CV7V-/qʔu-t-as tə /kapi// 'He is drinking coffee.' (C₁V7V·drink?-CTL.TR-3SBJ DEM coffee) [qʔuʔuqʔotas tə kʔəpɛ]

qʔuʔuqʔutəm ʔə John tə kapi //CV7V-/qʔu-t-əm ʔə /John tə /kapi// 'John is drinking coffee.' (C₁V7V·drink?-CTL.TR-PASS OBL John DEM coffee) [qʔuʔuqʔotəm ʔəʔon tə kʔəpɛ]

From xʔaxay 'old (person?)', the following is formed by C₁V7V- reduplication:

xʔaʔaxʔay //CV7V-/xʔaxay +[ʔ]// 'lots of elderly people' [xʔaʔa-xʔayʔ]

Recall that 'elderly person' is itself a diminutive of xʔaxay 'old':

xʔaxʔay //CV-/xʔaxay +[ʔ]// 'elderly person'

Thus, the above form with C₁V7V- may be classified as a diminutive plural. There is, in addition, another form that means 'lots of elderly people':

xʔaxʔaxay //CVC-/xʔaxay// 'lots of elderly people'

What may be of interest is that MG expressed that the people involved

in *x'a?ax'xay* may be older in age than in *x'ax'x'axay*. Further checking is needed to see if there is such a difference in meaning; the possibility is just mentioned here.⁽³⁶⁾

The next example is peculiar, perhaps idiosyncratic, in that the reduplication also involves the second consonant of the stem:

ma?ax'məx' //Ca?aC-/məx'// 'calm spot all over the place'
[mó?ax'məx']⁽³⁶⁾ (məx' '(water is) calm', ma?x'im 'calm spot in water')

9. 'VOLITIONAL'? Hagège (1981) claims that reduplication and pre-fixation of stem initial *C₁V*, combined with *-?a?m* conveys 'volitional' meaning. He also states that the meaning conveyed by this process differs from constructions with juxtaposition of *xax'* 'want (to X)' in that the former conveys insistence or obstinacy. All examples listed in Hagège (1981:120) are cited here⁽³⁷⁾:

?i-?i?am-is-?a?m CH 'He wants to hunt.'
ji:x'-?a?m CH 'He wants to run.' (< *Jə-yx'* < *Jə-jx'* < *Jə-jəx'*)
qa-qasəm-?a?m-ə-čx' CH 'Do you want to play?'
mə-mək'w-t-?a?m-ə-t-ə-s CH 'He wants to eat it.'
k'wə-k'wən-t-?a?m-ə-θi-s CH 'He wants to see you.'
qi-qi-t-?a?m-ə-θ-ə-s CH 'He wants to kill me.'
ma-ma?m-t-?a?m-ə-tumu-ə-čip CH 'You guys want to take us (prisoners)'
x'wə? θu-θa-?a?m-ə-s CH 'He doesn't want to go (there).'

It was quite difficult to elicit examples of this process, but MG and AD, at different occasions, uttered 'volitional' reduplication spontaneously (they are marked <pon> following the examples).⁽³⁸⁾ Due to lack of sufficient data, much remains obscure. Detailed description must wait future research; just two problems concerning the formal process are pointed out here.

First, although it is difficult to state the exact phonemic shape of this suffix, it is probably *-(?)am*. The ? between a and m that Hagège writes was never heard; appearance and disappearance of the first ? remains also obscure (thus in parenthesis).⁽³⁹⁾

Second, a few examples expressing 'volition' were elicited without reduplication, so that it is not certain whether *-(?)am* must be combined with *C₁V*-reduplication or not. For example, see the next contrasting pair, where the first one is not reduplicated, but the second one is.⁽⁴⁰⁾ No difference in the meaning, if there is any, could be elicited:

mək'wamitas //mək'w-t-am-it-as// 'He wants to eat it.' (eat-CTL.TR-'volitional'-??-3SBJ) [múk'wə-mə-tas]
mək'wamitas //CV-/mək'w-t-am-it-as// 'He wants to eat it.' (CV-eat-CTL.TR-'volitional'-??-3SBJ) [mAmk'wə-mə-tas]
cf. *mək'watas* 'He eats it.'

The existence of cases without reduplication leads one to speculate whether the suffix and reduplication may be two separate processes. *C₁V*-reduplication is perhaps indicating imperfective aspect, in which case, the translation of the above pair of examples should be 'he wants

to eat it' and 'he wants to (be in the state of) eating it' respectively. No study has been carried out yet to confirm such speculation. Here are other examples without reduplication:

?itənam č 'I want to eat./I feel like eating.' [ʔitənəmč]
cf. *?itən təəm ʔə tə janx'* 'I will eat the fish.' (eat 1sg.SBJ+PUT OBL DEM fish)
x'əčtam č 'I want to go to sleep.' <pon>MG [x'ičtamč] (x'əčt 'fall asleep')

On the other hand, one example was elicited with *C₁əC₂*-reduplication:

?əm?imaš?am č //CəC-/?imaš-(?)am č// 'I want to go for a walk.'
(CəC-walk-'volitional' 1sg.SBJ) [ʔAm?em:əsʔAmč] (?imaš 'walk')

It seems that this particular case is formed by attaching the suffix in question to a stem that has already undergone plural reduplication, i.e., *?əm?imaš* 'walking around'. This point is unclear because the same stem with *C₁V*-reduplication was also elicited:

?i?imaš?am č //CV-/?imaš-(?)am č// 'I want to go for a walk.'
[ʔé?əməšʔAmč]

Examples cited by Hagège were re-elicited as follow:

?i?a?mašam //Ci-/?a?m-Vš-(?)am// 'I want to go hunting.'
[ʔé?əʔmašʔAmč]
Jəy'x'am tə čuy' //CV-/Jəx'-(?)am tə /čuy'// 'The kid wants to run.'
(CV-run-'volitional' DEM child) [Ji:x'am tə čuy?]
qəqsimama čx' //CV-/qsim?-(?)am-a čx'// 'Do you want to play?'
(CV?-play?-'volitional'-QN 2sg.SBJ) [qəqsema-məčx']
məmk'wamitas //CV-/mək'w-t-(?)am-it-as// 'He wants to eat it.' (CV-eat-CTL.TR?-'volitional'-??-3SBJ) [mAmk'wə-mə-tas]
x'wə? θuθuhamas //x'wə? CV-/θu(h)-(?)am-as// 'He doesn't want to go.'
(NEG *C₁V*-go-'volitional'-3SBJ) [x'wəd? θəθə-hamas]⁽⁴¹⁾

10. Personal. Two numerals, 1 and 2, undergo *C₁i*-reduplication when counting persons:

pipa?a 'one person' [pépa?ə] (pa?a 'one')
sisa?a 'two persons' [sésa?ə] (sa?a 'two')

With other numerals, *=aya* 'person?' is attached when counting persons, e.g. *musaya* 'four persons' (mus 'four').

11. Final Remarks. In this chapter ten types of reduplicative processes were discussed: plural, diminutive, diminutive plural, imperfective, *-VC₂*, *C₁əR'*, *C₁aC₂*, *C₁VTV*, 'volitional?', and personal. The present survey, however, is far from being exhaustive. There are still other types of reduplication yet to be studied⁽⁴²⁾, e.g.,

[ʔiʔi:x' ~ ʔiʔi:yx'] 'running back and forth' MG, 'takes off suddenly, unexpectedly' EP
cf. *Jəx'* 'run' [Ji:x'], *Jəy'x'* 'running' [Ji:x']

[jiʔi·ji·jik] 'running around?' <spn> MG
 [c'iʔi·c'i·c'iʔ] 'It's raining a little bit.' MG, EP
 cf. c'əʔ 'rain' [c'iʔ], c'ic'əʔ 'raining' [c'iʔiʔ]

There is a strong tendency, specially among the younger speakers, to use analytical means of expression rather than synthetic ones, such as reduplication. One cannot but feel that some, if not all, reduplicative processes will soon be irretrievably lost. There is no doubt, however, that reduplication plays an important role in Sliammon morphology, and that it needs to be studied before it is too late.

Notes

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Abbreviations and symbols used in the present work are: [...] infix in morphophonemic representation (preceded by +), otherwise phonetic transcription; / root; · reduplication; = lexical suffix; CAU causative; CTL control; IMP imperative; INS instrumental; LIG ligature; Link link vowel; NCT noncontrol; NEG negative; NOM nominalizer; OBL oblique complement; PSV possessive; ptc particle; QN question marker; RCP reciprocal; RFL reflexive; STV stative; C any consonant; V any vowel; R any resonant. Other abbreviations and symbols are self-explanatory. Vowel length are indicated as [V·] half-long, and [V:] long. [·] is an indicator of raised articulation, [·] that of lowered.

The term Sliammon is used here as a cover term for the mainland dialect of Comox. All examples are elicited from MG unless indicated otherwise. Examples cited from other works on Sliammon or Island Comox are indicated by the researchers' initials.

1. The Sliammon phonemes are /p, (tʰ), t, (x), c, (k), kʷ, q, qʷ ʔ, p', tʰ, t', x', c', (k'), k'ʷ, q', q'ʷ, j, g, j' [ʔj], g' [ʔg], θ, s, t, s, xʷ, x, xʷ, h, m, n, (l), y, w, m', n', (l'), y', w', i, u, ə, a/. j' and g' are not ejectives; they realize as [ʔj] and [ʔg] respectively. The sequence [ʔj] and [ʔg], however, behave like single units. For discussions on postulating these two segments as phonemes see Watanabe (1994a, b).

2. It may be that the specific meaning of the plural reduplication is ambiguous, without any context, as to whether plural participants are involved or one participant is performing the action repetitively and/or distributionally.

3. I may have simply misheard the glottalization on c: the corre-

sponding non-reduplicated form is x'əc't 'fall asleep'. I cannot explain the change of the root vowel to a, but this may be yet another process. Cf. x'ax'ačtəm 'falling asleep' [x'ə·x'əc'təmʔm]

4. 3rd person object is not overtly marked, i.e., nəp-is 'put it in'.

5. There are at least two roots that may denote plurality of action by ablaut. If 'to spank s.o.' is understood (usually) to involve multiple slapping, then compare the following: səp't //səp'-t// 'to club / slap s.o.' (club-CTL.TR), sap'at //sap'-a-t// 'to spank s.o.' (spank-Link-CTL.TR). The other example: θəxʷtasuʔ //θəxʷ-t-as-ʔuʔ// 'He stabbed him.' (stab-CTL.TR-3SBJ-PAST) [θəxʷtasuʔ], θəxʷatas //θəxʷ-a-t-as +[a]// 'He is stabbing it many times.' (stab-Link-CTL.TR-3SBJ +[a]) MG <spn>. I mention this possibility because of parallel forms in Sechelt (another Coast Salish language) (Beaumont 1985): səp'ət 'slap (from one direction)', sap'at 'slap (back and forth)'. These are the only such examples found in Beaumont (1985). Ron Beaumont (p.c.), however, claims this process fairly productive in Sechelt, and kindly provided me with the following additional examples: tʰs'əʔtʰs(V)q'əm 'punching', tʰs'əʔtʰs'əq'əm 'punching all over the place'; x'əq'is 'sit (down)', x'əq'is 'all sit (down)(anywhere/all over the place)'; pəx(V)t 'tear, rip s.t. (once)', pəxat 'tear, rip up'; s-pəxət 'has a rip / tear' (stative), s-pəp(V)xīt 'has tears / rips (all over)' (stative); qələm 'leak (canoe, roof, etc.)', qələqələm 'leaking everywhere' (pl. distributive).

6. John Davis (p.c.) reports that the word for 'native Indian' qaymixʷ has the distributive plural qəyqaymixʷ or qayqaymixʷ, and also the collective plural qayiwmixʷ. The third form seems to have infixed //Vg//.

7. Even where this affix is marked as an infix ([·]) in the following examples, further research may reveal that the stem can be analyzed so that the affix should be marked as a suffix.

8. Jaʔjiʔəm is an irregular plural formed from jaj'a 'tree'.

9. Sechelt -aw and -iw refer to the plurality of object in transitive and that of subject in intransitive (Beaumont 1985:86).

10. The English translation suggests that this glottalization may denote imperfective aspect. Glottalization of resonants is observed with a few forms which underwent C₁V- imperfective reduplication (see 4). This example is the only one found so far in which glottalization alone may denote imperfective aspect.

11. I have not carried out systematic research on the speech of different generations. I can refer only to those few speakers under 50 years of age with whom I had chance to talk. But I believe younger speakers tend to employ analytical expressions.

12. DD rejected more reduplicated forms than MG did. It is difficult to say whether DD did not recognize them, or whether MG formed reduplication by analogy to words that may not have reduplicated forms.

13. Examples with an initial ʔV sequence can be analyzed either as

undergoing C₁V- reduplication with loss of the first vowel of the stem, or as showing ? insertion. E.g., ?a?ya 'small house' can be //CV-/?aya// or //?aya +[?]/. I have analyzed such cases as undergoing C₁V- reduplication; this process is the most prevalent. There are only a few examples which can be analyzed only as showing ? insertion.

14. Stative aspect is marked on some words also by i insertion at the same position as in the diminutive, but that is likely to be an entirely different process.

15. However, 'small bullfrog' is the only example, found so far in Sliammon, of a word-internal resonant being glottalized in diminutive.

16. The following form was also recorded:

ʔix'x^wajut //Ci-ʔx'x^waj-u+// 'small dog salmon.' [x'éx'x^wɑ'jot]
(x'əx^way 'dog salmon' [x'ú.x^way])

For the same word, Blake (1992:201) recorded ʔix'x^wayut 'small dog salmon'. Thus, it is not clear if the last consonant in 'dog salmon' is //j// or //y//.

17. Apparently uttered by one of the Sliammon elders at a local soccer tournament in such a context as, "It's a nice day. Here we are, us old people, enjoying the soccer game." Later reported to me by MG.

This form is actually the diminutive plural reduplication discussed in the next section. For other forms meaning 'lots of elderly people', see 8. See also note 20.

18. MG said that it has negative connotation, but can also be said jokingly.

19. 'wife' is elicited as [sótur ~ sóttur]. It is clearly related to satx^w 'woman', but as regards how is still unclear, though x^w and u alternate in certain positions (cf. Blake 1992).

20. ʔaxay most likely contains a lexical suffix //ay// ('person?') which may be the same as the one for 'tree'. Blake (1992) suggests that this suffix is perhaps better glossed as 'long or standing upright object'. This word is always translated as 'old', but corresponding -VC₂ form is without the suffix: ʔaxax 'get old' (see 5).

21. Perhaps the word for 'cat' can be analyzed also as a diminutive of non-occurring simplex form:
mimaw' ??//Ci-/maw +[?]/ 'cat'

22. Non-reduplicated cognate forms are found in other Coast Salish languages, e.g.,

Squamish: c'əkw 'worm' (Kuipers 1987)
Halkomelem: t'əkw 'worm' (Galloway p.c.)

23. 'small rabbits' was also elicited with C₁i-C₁əC₂- reduplication:
titəkw'tək'iti

24. The change of the vowel quality cannot be explained.

25. Hagège called it 'progressive'. The term 'imperfective' is used

following Davis (1970, etc.) and Kroeber (1988).

26. Non-reduplicated forms of the second and third example have not been recorded.

27. 'Characteristic or dispositional' is explained as follows in Galloway (1993: 297): "The aspect in Halkomelem indicates that an action is characteristic or habitual of the actor or that the actor has the disposition of doing the action repeatedly."

28. Note the diminutive of these forms:

ʔix'əmx'im' //Ci-CəC-/ʔam +[i]+[?]/ 'little square basket/object'
[x'é-ʔəmx'im?]
xiʔənʔan' //Ci-CəC-/ʔan +[?]/ 'little bit shy' [xé.ʔə-nʔan?]
xiʔəmx'im' //Ci-CəC-/ʔəmx +[i]+[?]/ 'little bit wet' [xé-ʔəmx'im?]

29. In the following examples, <spon> indicates that the Sliammon form was uttered spontaneously, and <txt> indicates that the form was attested in texts.

30. MG claimed that the C₁aC₂- reduplication is the "old way" of saying 'running around', the C₁əC₂- reduplication "new way". It may be that C₁əC₂- reduplication is formed by analogy with the plural reduplication.

31. This example with C₁əC₂- reduplication was not well attested; its meaning is not clear. This is possibly the result of forced elicitation.

32. I checked the two forms involving 'itch' with EP. It seemed that the latter form (with C₁əC₂-) could also mean 'itchy all over'. The difference between the two forms was not clear to me, however.

33. Paul Kroeber (p.c.) recorded a fair number of CV?V- reduplication, e.g., /qiʔi-qk^w-əmx/ 'go and stop, go and stop' (from /qəkwəmx/ 'stop').

34. INTR //~ʔəmx// has an allomorph /-aʔəmx/ after roots that have lost their vowel.

35. See also C₁i-C₁əC₂- reduplication of ʔaxay in 2.2.

36. It is often difficult to determine if the vowel following ? is only an echo vowel or exists underlyingly. In this example, however, a following ? is fairly strong and long, and I believe it to exist underlyingly.

37. I have slightly converted Hagège's phonemic transcription to minimize differences from my own: e (CH) > i (HW), o > u. I also will not follow Hagège's elaborate juncture markers (+ for boundary between root and reduplication, etc.). His phonemic long vowels have been left as they are (thus, i: in two of the examples). 2sg.OBJ marker, which he writes ʔe, has been converted to my transcription, ʔi. (See Kroeber [1989] for problems in Hagège's transcriptions.) Translation from French is my own.

38. 'Spontaneous' means here the first (and immediate) answer to my

asking how to say 'I want to X'. My consultants usually resorted to using *xaʔ*, and they could form the process in question only after pondering for a while. When I read examples from Hagège, at least MG, DD, and AD recognized them immediately (and corrected my pronunciation), giving the same translation Hagège gave.

39. In Squamish, there is a suffix meaning 'to want': /-ajʔ/ usually followed by INTR /-m/ (Kuipers 1967:127). I do not know if this suffix is cognate with the Sliammon suffix in question. None of the ten examples with this suffix in Kuipers (ibid.) have reduplication.

40. Paul Kroeber (p.c.) also recorded relevant data without reduplication, e.g., /Juʔ-am/ 'want to go home' PK (/Juʔ/ 'go home').

41. Beaumont (1985:301) cites 'want to go (somewhere)' as *ʔsúʔsáʔəm* in Sechelt. This is the only form found in Beaumont (1985) that may be of relevance to the 'volitional' reduplication discussed here. Ron Beaumont (p.c.), however, has found quite a few regular examples of this process:

ʔáqan-ám-čən 'I need / want to urinate.'
tʔitʔilim-ám-čən 'I feel like singing.'
čʔáčʔ(V)ʔam-ám-čən 'I want / intend to go hunting.' (čʔáʔam
 'hunt, sneak'; čʔáčʔ(V)ʔam 'hunt (short trip)')

42. Furthermore, Davis (1971) reported the following examples that seem to have undergone C₁V. reduplication. (I was unable to check these forms with my consultants.):

Juyxʔət 'trying to vomit', *Juxʔət* 'to vomit' JD
Juyθət 'trying to push (it)', *Juθət* 'to push (it)' JD

Paul Kroeber (p.c.) has found a few forms with C₁a. reduplication:
pʔapʔ 'lots of dirty things' PK (pʔəθ 'dirty/black')

REFERENCES.

- Beaumont, Ronald, C. (1985): *She Shashishalhem The Sechelt Language* (Theytus Books, Penticton)
 Blake, Susan J. (1992): "Two Aspects of Sliammon (táʔamínqən) Phonology: Glide/Obstruent Alternation and Vowel Length", MA Thesis, The University of British Columbia
 Davis, John H. (1970a): "Some Phonological Rules in Mainland Comox", MA Thesis, University of Victoria
 ---- (1970b): "Notes on Mainland Comox Phonology", 5th ICSL
 ---- (1971): "Notes on Mainland Comox Phonology", *Studies in Northwest Indian Languages, Publication of the Sacramento Anthropological Society* 11 (12-31)
 Galloway, Brent (1993): *A Grammar of Upriver Halkomelem*, University of California Publications in Linguistics 96 (University of California Press)
 Haeblerlin, Herman K. (1918): "Types of Reduplication in the Salish Dialects", *IJAL* 1 (154-74)
 Hagège, Claude (1981): *Le comox thaamen de Colombie britannique: présentation d'une langue amérindienne* (Amerindia, revue d'ethnolinguistique amérindienne, numéro spécial 2, Paris)
 Harris, Herbert R. (1977): "A Grammatical Sketch of Comox", Ph.D. dissertation, The University of Kansas
 Hess, Thomas M. (1966): "Snohomish Chameleon Morphology", *IJAL* 32 (350-6)

- Kroeber, Paul D. (1985): "Inchoatives in Mainland Comox", 20th ICSL
 ---- (1988): "Inceptive Reduplication in Comox and Interior Salishan", *IJAL* 54 (141-167)
 ---- (1989): Review of Hagège (1981), *IJAL* 55 (106-116)
 Sapir, Edward (1915): *Noun Reduplication in Comox, a Salish Language of Vancouver Island* (Canada Department of Mines, Geological Survey, Memoir 63, Government Printing Bureau, Ottawa)
 Thompson, Laurence C. (1979): "Salishan and the Northwest", in L. Campbell and M. Mithun (eds.), *The Languages of Native America: Historical and Comparative Assessment* (692-765) (University of Texas Press, Austin/London)
 ---- and M. Terry Thompson (1971): "Clallam: A Preview", in Jesse Sawyer (ed.), *Studies in American Indian Languages*, UCPL 65 (251-94)
 Watanabe, Honoré (1994a): "A Report on Sliammon Phonology and Reduplication", M.A. thesis, Hokkaido University
 ---- (1994b): "A Report on Sliammon Phonology and Reduplication", in Osahito Miyaoka (ed.), *Languages of the North Pacific Rim*, Hokkaido University Publications in Linguistics 7 (Sapporo)