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# Noun Reduplication in Comox, <br> a Salish Language of Vancouver Island 

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## Noun Reduplication in Comox,

## a Salish Language of

## Vancouver Island

## INTRODUCTION.

One of the most characteristic grammatical processes of a group of Northwest Pacific Coast languages, embracing the Tsimshian, Kwakiutl-Nootka, Salish, and Chemakum linguistic stocks, is initial reduplication, employed in both noun and verb forms to indicate a variety of grammatical concepts, chiefly those of plurality, distribution, and iteration. The Salish languages in particular are known to make exuberant use of reduplication for grammatical purposes, but the subject, which seems to bristle with irregularities and intricacies of detail, has never been adequately treated for any of the numerous dialects. of the stock. Indeed, a thorough grammatical study, at the same time phonetically adequate, of a Salish language, is still one of the desiderata of American linguistics.

During the autumn of 1910, while prosecuting ethnologic and linguistic research for the Geological Survey of Canada among the Nootka Indians now living in two reserves near Alberni, B.C., opportunity was incidentally found to gather some linguistic data on Comox, a Salish language spoken on the east coast of Vancouver island near the present town of Comox. The dialect represented in these notes seems to be

Comox proper ( $Q!\delta m o x^{u} s$ ), with which $L!(\underline{o} h o s$, spoken on the mainland of British Columbia, was stated to be identical. Sttölt" was stated to be a northern dialect of the same language. This term is evidently identical with Boas' Çatloltq, which he uses to apply to the most northern group of Coast Salish tribes, excluding Bella Coola, inhabiting "Discovery Passage, Valdes Island, Bute and Malaspina Inlets." Boas adds, "The Çatlfltq are called K'omoks by the Lékwiltok"' (southernmost Kwakiutl tribe.)

Thè informant was Tommy Bill, an Indian of mixed blood, whose father belongs to the Ts! ict'at ${ }^{a}$ tribe of Nootka Indians, while his mother was a Comox, he himself living with and being to all intents and purposes a member of the Höpátc!as'atH ${ }^{a}$ tribe of Nootkas. His knowledge of Comox was obtained in his earlier years, when living among his mother's people, whom he visits from time to time; it is only fair to add that he speaks mainly Nootka and English nowadays and does not claim to have a perfect command of Comox. However, the rather elementary character of the data obtained, together with convincing internal evidence derived from their study, leaves no room for doubt as to the essential accuracy of the material here presented. Most of the time spent on Comox was taken up with securing material pertinent to the problem of reduplication in nouns. For most of the nouns obtained, plural, diminutive, and diminutive plural forms were secured, all of which involve various types of reduplication. Our linguistic material thus naturally divides itself into three heads, not to speak of a small number of nouns that are always used in reduplicated form. A few introductory remarks on Comox phonetics and some supplementary data are also added.

## I. PHONETICS.

Vowels. The short vowels found in the Comox material secured are: $a$ (as in German Mann); ä (as in English bat); $e$ (short and open as in English met); $e$ (short and close as in French été); $i$ (short and open as in English bit); $i$ (short and close as in French fini); o (short and open as in German dort);

[^0]$\varphi$ (short and close as in French beau); and $u$ (short and open as in English $p u t$ ). Of these vowels, $e, i$; and $i$ are etymologically one sound, which is modified by phonetic surroundings; similarly, $o$ and $u$. Velar consonants tend to lower preceding or following $i$ to $e$ (possibly sometimes $e$ ), while certain consonants (particularly $s$ and $t$ ) tend to palatalize $i$ to $i$. .e and $o$, which latter does not occur often, are doubtless etymologically related to eand $g$ respectively, but seem in every case to be clearly kept distinct from these. a is not common.

Corresponding to each of the short vowels is a long vowel (long $a$, however, has not been found).. These are indicated as: a (as in German Bahn); $\quad$ (long and open as in French nère, or as in English bear, but without "r-vanish"); e (long and close as in German See); $i$ (long and open as in English beer, but without "r-vanish"); $\boldsymbol{i}$ (long and close as in English see); $\boldsymbol{j}$. (long and close as in English roll; or as in German Sohn); 0 (long and open'as'in English born, but without "r-vanish"); $\vec{u}$ (long and close as in English rule); añd $\mathfrak{a}$ (long and open as in English poor, "but without ""-yanish"), Similarly to the corresponding short yowels, and under parallel phonetic circumstances, $\cdot \dot{e}, t$ and $t$ are variants of one sound; etymologically speaking, though $i$ is often to be interpreted as lengthened form of inorganic vowels, in which case it does not seem to vary with $\delta$ and $\eta_{i}, \delta, \hat{A}_{\text {, }}$ and $u$ are likewise representatives of what is etymologically a single sound. 6 does not often occur; it is probably etymologically related to $\delta$. e occurs often and cannot be considered a mere variant of $\bar{e}$.

As not infrequently happens in American Indian languages, the long yowels are not always held out with even stress, but end with short rearticulations which give the whole vowel in each case a quasi-diphthongal effect. Such vowels have been noted by the writer in Takelma, Southern Paiute, and, at least to a moderate extent, in Nootka; Boas has noted them in Tsimshian. While they occur to a considerable extent in Comox. they cannot as in Takelma be considered the normal forms of the long vowels; sometimes the short rearticulations seem to serve as glides to following consonants; particularly velars:. The quasi-diphthongal long vowels.are here indicated by long vowels followed by superior short vowels, the vocalic 50138-3
quality of the latter being indicated as in normal short vowels. There are found: $\bar{a}^{a} ; \hat{e}^{c} ; \bar{e}^{c} ; \bar{e}^{2}$ (occurs before anterior palatal consonants); $\hat{\imath}^{i} ; \hat{\imath}^{2} ; \hat{\imath}^{e}$ (occurs before velar consonants); $\bar{o}^{o}$ and $\bar{o}^{u}$; and $\hat{u}^{u}$. A number of cases also occur of short vowels followed by weak rearticulating vowels; such are $e^{e}$, $\rho^{\circ}$, and $i^{c}$ (here the ${ }^{c}$ is a glide to the following velar consonant). Some of these may well represent secondarily shortened long vowels. Differing from such long or short vowels with quasidiphthongal character are vowels that are secondarily diphthongized by a vocalic glide whose timbre depends wholly on the following consonant; such is $\hat{\imath}^{u}$ in kúp $\hat{\chi}^{u} m \hat{\imath}^{u} x^{u}$ "hill," in which the second ${ }^{u}$ is a glide due to the $u$-timbre of the final consonant.

Short vowels of somewhat obscure quality are also found, either representing dulled forms of normal short vowels or being of inorganic origin and meant to lighten consonant clusters or serve as glides. Such vowels are: a (as in English but, yet sometimes less clearly marked in quality), which is sometimes inorganic, sometimes dulled from $a ; E$ (obscure vowel with $e$ quality); and $I$ (very short rather unclear $i$ ).

At times short vowels are so weakly articulated as to be barely audible; these are rather "murmured" short vowels of etymological significance than merely glides, timbre-echos of preceding consonants, or voiceless vowels. Examples are:
 "clam"; yet in this case ${ }^{\circ}$ can just as well be morphologically dispensed with and phonetically explained as a timbre-echo of $-\bar{o} t-$ ); ${ }^{A}$ in $q e^{t} w^{A} x$ "steel-head salmon" (that ${ }^{A}$ is organic, despite its dull quality and extreme brevity, and reduced from $a$, is indicated by Nootka qẹ'waH "steel-head salmon," with which Comox $q e^{\prime} w^{A} x$ is evidently identical; borrowing has doubtless taken place); ${ }^{A}$ and ${ }^{a}$ in hẹ́w ${ }^{A} q e ̣ n^{\bullet}$ "swan" and its diminutive $h e w^{a} q A \hat{A} d \bar{o} t$.

Another class of "murmured" vowels (German 'Murmelvokale") is formed by weakly articulated, yet not voiceless, vowels occurring in syllabically final position after glottal stops ('). Such vowels are only in part "murmured echoes," i.e., reduced repetitions of immediately preceding fully voiced vowels (such are $a^{\prime a}, e^{\prime i}, \hat{\imath}^{\prime} i, a i^{\prime}, \tilde{o}^{\prime} o, \delta^{\prime o}$; vowel breakings of this type occur often in American languages); in some cases we have
also murmured vowels after glottal stops that are of different quality and etymologically distinct from immediately preceding vowels (such are $a^{\prime i}$ and $\vec{a}^{\prime 2}$ ).

Some consonants, notably glottalized ("fortis") consonants, are apt to be followed by timbre-echoes dependent in quality on the preceding vowel. This simply means that the oral resonance chamber characteristic of a vowel may, failing to be materially disturbed by the following consonant position, linger on and thus become acoustically noticeable as a voiceless (sometimes aspirated) vocalic echo; if the consonant is a spirant, the vocalic timbre may be audible during its production. Examples of such unaspirated timbre-echoes after glottalized consonants are: ${ }^{a}$ in $p!\notin ' a l a t s!^{a}$ "skunk"- and ${ }^{o}$ in $k!\hat{o}^{\circ} d \bar{o} t!^{\circ}$ "porpoise." In $7 \hbar^{a} g^{y} \hat{c} t!^{a}$ "herring" the $t$ ! was heard with definite $a$-timbre despite preceding $\hat{e}$. After $u$ (o)-vowels syllabically final $k$-sounds are regularly followed by echoes (aspirations when consonant is not glottalized) with $u$-timbre. Hence $k^{\bullet u}$, $k!^{u}, x^{u}, q^{q_{u}}, q!^{u}$, and $\dot{x}^{u}$ (see below for orthography of $k$-sounds). These sounds, however, are also very frequent after unrounded vowels, as in $l \hbar^{a} d a k^{\circ}$ " "skin;" in such cases they represent original labialized $k$-sounds (see below). Aspiration with definite $u$-timbre is also found after $t$, as in súlt"u"woman."

Excluding such inorganic diphthongs as are formed by vowels and following glides (e.g., $\hat{\imath}^{u}$ ), there have been found as true short diphthongs $a i$, $a u$ (also $a u$ ), $u i, e i$, and long diphthongs $\bar{a} i, \bar{a} u$. Vowels normally forming diphthongs that do not so unite, each preserving its full value, are separated by . (thus, $a . i$ as distinct from true diphthong $a i$ ). Stress accent is indicated by ' over vowels.

Consonants. The consonant system of Comox is fairly full, including, as it does, eleven distinct series that differ according to place of articulation. As regards manner of articulation, six distinct series are to be recognized (voiceless stops, glottalized or "fortis" stops, voiced stops, voiced nasals, voiceless spirants, and voiced spirants), though by no means all of these are represented for all places of articulation. The voiceless stop and glottalized stop series are complete, the voiceless spirants nearly so, while the others are quite defective. All these consonants may be represented in the form of a table:-

50138-3 $\frac{1}{2}$

| . | VoiceLEBG stops | Glot talized stops | Vorced stops | Nabals | $\begin{aligned} & \text { Vorce- } \\ & \text { LESS } \\ & \text { BPIRANTS } \end{aligned}$ | Voiced bpirante |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Laringeal (glottal) | , | -••• | - | - . . | $h$ | - ... |
| Velar. | $Q$ | $q$ ! | - . | . | $x$ | ... ... |
| Labialied velar | qu | Q'o | $\cdots$ | $\cdots$ | $x w$ | - . |
| Guttural .... | $k$ | $k!$ | $\ldots$. . | - . | $\pm$ | $\cdots$ |
| Labialized guttoral .. | $k$ wo | $k^{\prime} \boldsymbol{w}$ | . |  | $\pm \pm$ | . |
| Prehgutrubal (anterior pala- fal)... | ku | $k^{\prime \prime}$ ! | $0^{\prime \prime}$ |  | $x$ | $v$ |
| Dorgal lathral........ | $\boldsymbol{L}$ | $L^{\prime}$ | $l$ (volced contin- uant) | . | $\ell$ |  |
| Palaral stbilant . . . | tr | ter | dJ | - | $c$ |  |
| Alteolar bibilany | ts | $t{ }^{\prime}$ |  |  | $s^{1}$ |  |
| Alviolaz . . .. | $t$ | $t^{\prime}$ | (d) | $n$ |  | - |
| Labial........ | $p$ | $p^{\prime}$ | (b) | $m$ |  | w |

$\epsilon$ is pronounced like sh of English ship; $x^{y}$ like ch of German $i c h$. . $t c$; $t c$ !, dj (like $j$ of English $j a m$ ), $t s$, and $t s$ ! are affricatives (stop plus corresponding spirant; no simple stops correspond to $t c$-series). $L$ and $L$ ! are also affricatives; but with lateral (voiceless spirant $l$ ) release.
$b$ and $d$ are phonetic variants of $m$ and $n ; \quad b$ and $d$ were often, though not consistently, heard between vowels, $m$ and $n$ rather consistently as initials, while $m$ and $n$ were more often heard as syllabic finals than $b$ and $d$. These $b-m$ and $d-n$ sounds have been at various times analysed by Boas as "semi-nasalized" consonants. "The nasal opening," he writes, "may differ in width, and the stricture of the upper nares may produce seminasalized consonants.'"2) Again. in speaking more definitely of Coast Salish, ". . . the b sound . . . is produced with half-closed nose by the Indians of the Strait of Fuca, in the State of Washington. . . . The characteristic trait of the sound is a semiclosure of the nose, similiar to the effect produced by a cold in the head." 3 These remarks doubtless apply to Comox as

[^1]well as to more southern Coast Salish languages, yet it seems likely to the writer that under certain phonetic conditions these semi-nasals become true nasals. No attempt will here be made to normalize orthography on this point, a faithful record of what was heard, or thought to be heard, being presented.

Eliminating $b$ and $d$ as of secondary origin ( $g^{y}$ and $d j$, it should be carefully noted, are true sonant stops, not "intermediates"), all the other consonants listed in the table are etymologically distinct, that is, none of them are mere variants. ( $k, k!$, and $x$, however, may prove to be merely secondary forms of $k w$, $k!w$, and $x w$.) This gives us no less than thirty-six (or thirtythree) organically distinct consonants to operate with. A secondary series of aspirated surds (voiceless stops followed by aspiration) arises when voiceless stops occur as syllabic finals (written $p^{2}, t^{i}, k^{e}, k^{v^{2}}, q^{2}, t c^{\bullet}$ ); $k w$ and $q w$ become $k^{{ }^{u} u}$ and $q^{{ }^{u} u}$, that is, their aspiration-release has $u$-timbre; similarly, $k!w$ and $q!w$ in this position become $k!^{\prime \prime}$ and $q!^{\prime} . \quad q$, it may be noted, is often released into a weak spirant glide $x$ (written ${ }^{x}$ ) before the following vowel is attacked (thus, $q^{x} a$ for $q a$ ). Final vowels and $m$ and $n$ are also often followed by aspiration ( $-a^{\circ}$ and similarly for other vowels, $m^{\prime}$ or less often $b^{i}, n^{\circ}$ or less often $d^{\prime}$ ), though this was not consistently heard. Final $m$ and $n$ are etymologically distinct from final glottally affected $m$ and $n$, which are written $m^{\prime}$ and $n^{\prime}$ (sometimes breath release is heard after glottal release, when they are written $m^{\prime \prime}$ and $n^{\prime \prime}$ ). Long consonants (indicated by after consonant) were noted, but seem to be of no etymological significance (examples are $q^{\circ}, d^{*}$ ).

Sound Changes. Lengthening and reduction of vowels are important phonological processes in Comox, also, though to less extent, changes of vowel quality. As these, however, are generally of grammatical significance, they are best taken up in their proper place under types of reduplication. As more strictly phonetic pure and simple in character is to be considered the palatalizing of $a$ to $i$ in the neighbourhood of $g^{y}$, also the change of a to $u$ and $i$ in appropriate phonetic circumstances. These changes also, however, are most clearly brought out in connexion with morphological processes.

Many cases of $g^{y}$, perhaps all, are undoubtedly due to original $w$. It seems that $w$, when it came to stand between vowels
(not, it would seem, including cases of preceding vowel plus glottal stop), also initially in many cases, regularly passed into $g^{y}$. Thus, as diminutive of $x$ âucin" "bone" is found $x e^{c} x i g^{\eta} i c i \hat{c} n^{-}$ $<{ }^{*} x$ éxawicîn ${ }^{*}\left(-A g^{v}\right.$ - becomes -ig${ }^{\nu}$-, as noted above). Similarly, from $q e e^{e} w^{A} x$ "stecl-head salmon" is formed qê'qegve $e^{e} x$ "little steelhead salmon" and qẹ́qu $u q \bar{a}^{\prime} a g^{v} \hat{e ́ c}^{c} x$ "little steel-head salmon (plur.)." This phonetic law explains a class of plurals, formed by reduplicating with $o$ - vowel, derived from stems in internal -gy-. Thus, from t!éguem ( $<^{*} t$ téwem) "sun, moon" is formed plur. $t!\delta^{u} t!e^{v} e m ~\left(<^{*} t!\hat{A} w t!\right.$ ewem); other examples will be given in their proper place. So also is explained suffix - $\bar{a} g^{v} i t$ "canoe" in such forms as tcád $\bar{a}^{a} g^{u} i t$ "three canoes," séyatsāa ${ }^{a} g^{u} i t$ "five canoes", as compared with -āut in mósāul "four canoes;" $-\bar{a} g^{y} i t$ is evidently from ${ }^{*}-\bar{a} w i t$ (cf. Kwántlen, of Cowichan group of Coast Salish, -åitl "canoe" in numerals," ${ }^{1}$ i.e., -axwit; perhaps cf. Comox nexwit "canoe"). An interesting test case is $q^{\varepsilon^{2}} g^{v} a s$ "deer," doubtless a loanword from Kwakiutl (cf. Kwakiutl géwas "deer"). Another such test case is afforded by Comox tiguì ${ }^{\mu} x^{u}$ "nine" < ${ }^{*} t_{A} w_{A} x^{u}$ or *táwuxu (cf. Kwántlen $t \bar{u} q$ "nine," ${ }^{3}$ i.e., $t \bar{u} x$ or $t \bar{u} x$, contracted from *tuwux). Compare also Comox hét $g^{v} o ̣ s$ "chief" with Pentlate and Siciatl héwus ${ }^{4}$. On the other hand a number of words have been found with $w$ between • vowels. Such are ts!ats! ${ }^{\text {fwicin' }}$ "hail," $x w \dot{\vec{a}}^{\prime} a w \hat{\imath} \hat{i} t "$ "fire," and ' $\dot{a} w \bar{a} k k^{\circ u}$ "tobacco." It is not clear how this $-w$ - is related to $-w->-g^{y}-$.

Just as $g^{y}$ and $w$ are related, so there is reason to believe that $d j$ and $y$ are related, though there is perhaps not quite as convincing internal evidence at hand. See Type VIII of plural formations for such evidence. Moreover, with Comox djidis "tooth" compare Kwántlen yénis "tooth;"5 with Comox djicin" "foot" compare Siciatl yicin. ${ }^{6}$

[^2]
## II. NOUNS NORMALLY REDUPLICATED.

A considerable number of Comox nouns always appear in reduplicated form, reduplication in these cases being of no grammatical significance, but belonging to the noun as such. Many of them are animal names, and of these some are quite evidently onomatopoetic. Ten fairly distinct types of reduplication seem to be illustrated in the rather limited material available. Very likely others exist.

## Type I. Completely Reduplicating.

| $h \delta^{\prime} m h \bar{o}^{\prime} m$ blue grouse | $x^{\dagger} p^{*} \times \overline{0} p^{*}$ humming-bird |
| :---: | :---: |
| $k^{\nu} \dot{d} c k^{y} \ddot{\text { a c bluejay }}$ | $t s!\hat{l}^{\prime} x^{u t s}!\hat{\chi} x^{u}$ fish-hawk |
| $p o k^{\text {cu }} p \underline{o} k^{\text {cu }}$ liver | $g^{v_{乞} i} g^{\prime} \bar{\chi}^{2}$ panther |
| $q \hat{e}^{\prime} n^{\prime} q$ en ${ }^{\prime \prime}$ duck | $q w^{2} q \chi u \underline{n}^{\prime \prime}$ sea-gull |
| "Duck" and "sea-gu quality but with sho | both syllables with vow in the second. |

## Type II. Completely Reduplicating with $\hat{e}$.

tê'ltol' small butter-ball duck 'hä'ihei' arrow "Arrow" belongs perhaps rather with Type I. Both of these nouns lose a glottal stop in the reduplicating syllable.

Type III. Reduplicating Syllable: $\mathrm{cvc}_{1} .{ }^{1}$
titctitcīcowl
${ }^{\prime} k w a^{\prime} k w \dot{a}^{\prime}{ }^{a} d j o^{\circ}$ grey squirrel
$t!{ }_{\mathrm{A}} q^{2} t!\hat{A} q \bar{a} i \operatorname{dog}$-wood

## Type IV. Reduplicating Syllable: cē.

mî̀ $\hat{\imath}^{\prime}$ mau cat $\quad k^{y!} e^{i} k^{u}!\bar{a} k^{v!}$ crow
tci'itca. $i q^{\circ}$ salt-water hunter
In "salt-water hunter" reduplicating $t c \bar{c}$ - is broken into $t c \bar{\imath}\rangle i$ -

[^3]Type V. Reduplicating Syllable: ci.
Only one or two certain examples have been found of this type. They differ from the preceding in that the vowel of the reduplicating syllable is short.
$q w i^{e} q w \hat{a}^{a} t!^{\prime} \mathrm{Al}^{a} \bar{a}^{a} k^{i}$ butterfly wé'wālọs young man (form probably diminutive in).
Possibly also:-
éädjam' young woman
Type VI. Reduplicating Syllable: cā or ca.
LáLāpx pocket-knife qwaqumî's marten xaxe ${ }^{\prime 2}$ nit mámstcō'm mink

Type VII. Reduplicating Syllable: cv.
ts! ats!'awicin' hail tc!atc! $\mathfrak{a}^{a t!} \bar{a} n^{\prime}$ mouse $x w a ́ x w a d j o ̄ ' m$ fly (word probably diminutive in form). $q A q^{〔} t \bar{a}^{\prime} a m a s$ game with wooden ball ${ }^{1}$ $q \underline{q} q o w \hat{\imath}^{1} m^{\prime}$ down (of bird)

Type VIII. Reduplicating Syllable: c̄̄'.
$q a^{\prime a} q a^{a}$ rush mat $\quad d j a^{\prime a} d j a^{\circ}$ tree

Type IX. Reduplicating Syllable: cō.
Only one example has been found of this type:$t \delta t^{t} x^{u} l a t$ necklace

## Type X. Reduplicating Syllable: cēc.

Of this very peculiar type (doubly reduplicating consonant, otherwise like Type IV) also only one example has been found:$q!\hat{\imath} q!q!\tilde{c}^{\prime} a d j e ̂ ' u k^{‘} u$ butter-ball duck

[^4]Here may also be given:-
$q!a ́ q!t u x^{u}$ big fire (form is augmentative?): cf. q!átix $x^{u}$ fires scattered around.

## III. REDUPLICATED PLURALS OF NOUNS.

By far the larger number of Comox nouns form their plural by reduplication, in a few cases different stems are used for singular and plural, while still other nouns seem to form no plural. The most persistent type of plural reduplication is that in which both first and second consonants of stem are repeated, though 'ess numerously represented types also occur.

## Type I. Reduplicating Syllable: $\mathrm{cvc}_{1}$

! Akom" beaver
kúmāqin' sea-lion
$q w_{A} d \hat{\imath}^{i}{ }^{i}$ humpbacked whale
$q w a ́ s a m$ woolly grouse
$x \delta p^{2} x o ̈ p^{*}$ humming-bird
ts!oxó"o codfish
L! $\hat{x} x w \vec{a}^{i} \operatorname{dog}$ salmon
sá’an' cohoe salmon
$q!w a t^{\prime} i^{2} t c i n^{\prime}$ humpback salmon
$x a^{\prime} \bar{a}$ big clam
$L^{t^{i}{ }^{i}}{ }_{A} m^{2}$ cockle
$x_{\bar{A}} p \bar{a}^{\prime 2}$ red cedar
$q \delta^{\prime} a^{\prime} a^{i}$ hemlock
q!áp!xwai oak
$p!{ }^{\prime} \backslash i x a ̄ i$ alder
$t!e ́ ' i b \bar{a} i$ wild cherry bush
${ }^{\prime}$ 'awāk'u tobacco
$q$ ! wa' $i x$ wood
xa'a.idatc stump
plural $t!_{A}^{A} k^{*} u t!_{\mathrm{A}} k o m^{\prime}$
kumkúmāqin.
$q w_{\mathrm{A}} d^{*} q w_{\mathrm{A}} d \hat{\imath}^{2} \mathrm{~s}$
$q w_{\text {ásquasam }}$
$x^{\prime} p^{2} x \bar{o} p^{2} x \bar{o} p^{2}$
ts!óxts!oxôo
${ }_{L}!_{A x L}!_{A} x w \tilde{a}^{\prime}$
sáa ${ }^{\prime} a^{\prime} a n^{\prime}$
$q!w_{A} t^{i} q!w_{A} t \bar{\tau}^{i} t c i n^{2}$
$\bar{x} \vec{a}^{\prime}{ }^{a} x a^{\prime} \bar{a}$
$L \hat{\imath}^{\prime}{ }^{\prime} L \overline{\imath^{2}} A m^{\prime}$ (type viII?)
$x_{A} p^{\prime} x_{A} p \bar{a}^{\prime}{ }^{\prime}$
$q \bar{o}^{u} q q^{\tilde{v}^{\prime}} a^{\prime i}$
$q!a p!q!\hbar p!e x w a i$ (with lengthening of first stem-vowel; $-e$ - is inorganic)
$p!\bar{e}^{i} p!\not{ }^{\prime} ' i x a \bar{a} i(t y p e ~ v i I I ?)$
t! $\bar{e} t \cdot{ }^{\imath}!e^{\prime} i b \bar{a} \dot{i}$ (type viII?)
'au'áwāk'u many bunches of tobacco
$q$ ! waiq! $w_{A}^{\prime}$ ' $i x$
$x a^{\prime}{ }^{a} x a{ }^{\prime} a$.idatc
máqsin' nose
djicine foot
djidis tooth
u! ilkuinas heart
xáucin ${ }^{\text {e }}$ bone
$k^{y} i t$ ! little finger
ts! 'ímäla index finger
$q$ !wát $A m$ river páxai' creek
L!’áqẽe énac spring
kúp $\hat{u}^{u} m \hat{\imath}^{u} x^{u}$ hill

ц!áxai' old man
$q a ̂ l ' q$ ! warrior
L! ams house
xASAm box
$k w a ́ a m$ coiled storage basket
L! pattit basket bag
$q!a ̂ k^{\circ u}$ board
$k^{y}!i k^{y} \vec{a} y u$ oar
$S_{A} q^{\circ}{ }^{\circ} k^{\prime}{ }^{\prime}{ }^{2}$ war-club
laq! ${ }^{\prime \prime}$ bow
$t c!!t t^{*} q a ̄ m i n ~ k n i f e$
sip! $A m \hat{\imath} n^{\circ}$ shinny stick
láq! $A s$ mountain-goat blanket
$L!p \imath \imath t s!!^{\prime} a$ yellow-cedar
$q!\bar{A} s^{\prime}$ adāi buckskin shirt
L!áq!acin" moccasin
páqāọs white-eyed
tcixāọs red-eyed


## Type II. Reduplicating Syllable: cac.

This type differs from the preceding in that, while both first and second stem-consonants are reduplicated, the stem vowel between these consonants is not, but is replaced by an inorganic $A$-vowel. If the vowel is followed or broken by a glottal stop, or if there are two successive vowels, the second consonant is
repeated just the same, the glottal stop being neglected in the reduplicating syllable. Thus, $t c!e ' \bar{a} d-$ and $L!\bar{a} ' a t-r e d u p l i c a t e ~ a s ~$ tc!in- and $L!$ at- respectively. Several nouns with stem-a and reduplicating-A, listed under Type I, should perhaps belong here. Three sub-types are to be recognized, according to whether $a$ remains as such (sub-type $a$ ), is palatalized by $s, t c$, $t c!, k^{y}, l$, or $y$ to $i(I)$ (sub-type b), or is labialized by $x w$ to $u$ (sub-type c).

Sub-type II $a$. $\dot{m}_{i}{ }^{e} x \bar{a} l$ bear
L! 't'a ${ }^{\prime}{ }^{\prime}{ }^{\prime} m^{\prime} m^{\prime}$ wolf
$q!\bar{a}^{a} L!$ land otter
$q!\grave{a}^{a} s a^{e}$ sea otter
$x \AA^{a} w a$ fur seal
as $x^{u}$ hair seal $k!\tilde{y}^{\circ} d \bar{o} t!^{\circ}$ porpoise
$p!a q!$ adätc goose
$q \hat{e}^{\prime} n^{\prime} q e n^{\prime}$ duck
$h e ̂ w^{A} q e n^{2}$ swan
$q^{e^{\prime}} w^{A} x$ steel-head salmon
$t \hbar^{a} q$ ! wa devil-fish.
mát! $\bar{a} i$ horse clam
$s a^{a} b a^{a}$ mussel
$m a^{a} t c!n^{2}$ louse
бsā $i$ huckleberry bush
$x w a ̄ s a b a ̈ i$ soapberry bush
$t!\hat{e}^{\prime e^{\prime}} d \hat{e}^{e} q w a i$ salmon-berry bush
$t!\bar{a} \cdot a b u x w a ̄ i$ gooseberry bush

$q \bar{e} x^{u}$ ring finger
${ }^{2}!\tilde{d}^{a} q!w a \bar{a}$ fish-gill
sópadatc tail
ts!ämuqt cloud

| $t!x^{\prime} \cdot a \cdot \frac{1}{}{ }^{\prime}$ mountain | plural t! $A q!t!\Phi^{\text {a }}$ ! ${ }^{\text {at }}$ |
| :---: | :---: |
| sér qett dug hole, well |  |
| tô'mic man | t ${ }_{\text {A }} m$ tö ${ }^{\text {mic }}$ |
| $x \bar{a}^{\text {a }} p$ ! baby basket | $x_{A} p$ ! $x a^{a} p$ ! |
| $t!\chi^{\prime} m t^{\prime}$ paddle | t! $A m t!\delta ' m t^{\circ}$ |
| waxants! i pipe | wAxwaxãats! i |
| $t \delta t^{\circ} x^{u} l a t$ necklace | tat'ot't ${ }^{\text {a }}$ ulat |
| $q^{\prime} t$ d'abas $^{\prime}$ wooden ball used in game | $q A^{\prime} t^{\prime} q^{\top} t \bar{t}{ }^{\prime} a b a s$ |
|  | $m A t^{2} m \hat{\imath}^{\imath} t a ̄ l i$ (with lengthening of first stemvowel) |
| $q a^{\prime}{ }^{\prime} q a$ rush mat | $q A q^{\prime} q{ }^{\prime}{ }^{\prime}{ }^{\prime} q a^{\prime \prime}$ |
| lāq! wainop cedar-bark mat | lâq! ${ }^{\text {a }}$ ăq! $w a ̈$ inop ${ }^{\text {a }}$ |
| L!taxe oldest |  |
| L!átsämi strong | L! ${ }_{\text {clu }}$ !átsämi |

An irregular example of this sub-type is:sats! ${ }_{A} m$ tyee salmon samsáats! $A m$
Here the first and third, instead of first and second, consonants are reduplicated.

| Sub-type II b. tc!éādo ${ }^{\text {dog }}$ | tc!intc!e'àdo |
| :---: | :---: |
| $k^{\nu} \hat{a} c k^{\nu} \mathrm{a} c$ bluejay | $k^{\nu} \hat{i} c k^{y} \ddot{a} c k^{\nu} \ddot{a} c$ |
| ló' ${ }^{\prime \prime}$ bopm' small clam | timlot'obom ${ }^{\text {a }}$ |
| ts! $\ddagger t c!i t b a i$ spruce |  instead of $t s!i t c!-$ ) |
| sfsin ${ }^{\text {a }}$ mouth | sissösinㄹ (with shortening of second stemvowel) |
| stuāxos horn | sipsāpāxos |
| $k \delta^{\prime}{ }_{S A}{ }^{\prime}{ }^{\prime}$ star | kwiskōsAd' |
| $y \pm x a i^{\prime \prime}$ pack-basket | yı́xiyāxai'i |

Irregular examples of this sub-type are:-
 instead of tc!it!-see "spruce" above)
tixusal tongue
tistīxusal

In the first of these the plural is built not on the already reduplicated simplex (as e.g., in "bluejay" above), but on a simpler unreduplicated stem abstracted from it. In the second example the first and third, unstead of the first and second consonants, are reduplicated (cf. "tyee salmon" above).

Sub-type II c. Only one example is available:-
$x w a t \varphi q q o ̣ ' m$ "falls" plural xút'xwātọqọ'm

Type III. Reduplicating Syllable: cō or cọ.
Nearly all of these nouns have $g^{\nu}$ as their second consonant, representing, as we have already seen, original $w$. These nouns could be considered a sub-type of Type II, were it not that they form their reduplicating syllable not in $-A u$, as might perhaps be expected (cf. xauxaucin' under Type I), but in $-\bar{o}-(-\bar{u}-$ after $d j$ - and $g^{\nu_{-}}$) or $-0-$ (probably due to contraction of original $-A w-$ ). Two sub-types can be recognized, according to whether the reduplicating vowel is short (sub-type $a$ ) or long (sub-type $b$ ).

Sub-type III a.
$t \pi^{\prime} a g^{y} a x^{u}$ fern
$t d^{\prime} a g^{\nu} i n$ salmon spear
tọt d' $^{\prime} a g^{v} a x^{u}$
tọta'ag ${ }^{v}$ in
Sub-type III b.
$\not \chi_{a}{ }^{a} g^{y} \hat{e} t!^{a}$ herring
$p!e ́ g{ }^{\nu} \vec{a} i$ halibut
$g^{v i} g^{v i} i^{i}$ panther
t!égyem sun, moon
$t \not \approx t \tilde{a}^{a} g^{y} \hat{e} t!^{a}$
$p!\bar{o}^{u} p!e ́ g^{v} a \bar{a} i$

* $g^{y} \bar{u} g^{y} \bar{\imath}^{2} g^{y} \bar{\imath}^{i}$ (not obtained as such, but-implied in diminutive plural $\boldsymbol{g}^{v^{i}{ }^{i} g^{y} \bar{u} g^{y^{\ell}} g^{y^{2}} \bar{i}^{i}}$. "panther cubs")
$t!\tilde{o}^{u} t!{ }^{2} g^{v} e m$ sun and moon
$h e g^{y}{ }^{y}$ s chief
djigyin song
$t d^{a} d a k^{*}$ skin
djūdjíguin


It is not clear why "skin" should reduplicate with $\overline{0}$-vowel.

Type IV. Reduplicating Syllable: cv; Syncope of First Stem Vowel.

Only one example has been found of this type. As it begins with $g^{\nu}$-, the stem $-g^{\nu}$ of the plural, coming immediately before another consonant, reverts to $w$, uniting with preceding $a$ to form au.
$g^{y} \dot{a} q^{\prime} \bar{a} h a s$ married woman plural $g^{y} \dot{a} u q^{\dot{a}} \bar{a} h a s$
That *wáq ähas is to be presupposed is corroborated by comparison with Kwántlen s-wä-wékus "married woman."'

## Type V. Reduplicating Syllable: č̌c.

Nouns belonging to this group have long stem-vowels and differ from Type I in that the reduplicated vowel is shortened, though it keeps its, quality.
xáugyas grizzly bear $x a ́ u x a ̈ u g^{y} a s$
$q t^{\prime} u m^{\circ}$ eye
qáuqā’um.
$q \dot{o}^{\prime \prime}{ }^{\prime} m a i^{i}$ snow on ground $\quad q u ́ m q \bar{o}^{u}{ }^{\prime} m a i^{i}$
łơkōo $m$ и̂n bailer
tuk'tôko ${ }^{\circ} m$ ân
Type VI. Reduplicating Syllable: cac.

| $t \hat{\imath}$ ' $h \bar{a}^{a} d \bar{a} n{ }^{\prime}$ chief's wife | táhtîhāa ${ }^{\text {a }}$ dan ${ }^{\prime}$ |
| :---: | :---: |
| héq $q^{\text {º }} \bar{a}^{\text {a }} \mathrm{min}^{\text {a }}$ pole for poling canoe | háq'hẹq'sãa ${ }^{\text {a }}$ in ${ }^{\text {a }}$ |
| ótqai ${ }^{\prime}$ snake | 'át'otqai' (with shortening of first stemvowel) |
| $a_{L}$ leggings | ${ }^{\prime}{ }^{2} L^{\prime}{ }^{2}$ |

"Leggings" may, of course, just as well belong to Type I.

Type VII. Reduplicating Syllable: cv.

| $q!o ̣ a ' a ̄ d a ~ e a r ~$ | $q!o ̣ q!o ̣ a ' a ̄ d a$ |
| :---: | :---: |
| $\dagger_{\text {f }}(L!$ a $m s)$ big (house) | $t \tau t i ̄ ~(L!\wedge m s) ~ b i g ~(h o u s e s) ~$ |
| dx $x^{4}$ snow-flake | $\widehat{a}^{\prime} \bar{a} x^{u}$ falling snow |

[^5]
## Type VIII: Reduplicating Syllable: cē.

According to varying phonetic circumstances we have either $i$ or $\bar{e}$, the latter occurring after $q, q!$ and $x$. The examples of this type obtained are:-
> $q!a i k^{\cdot i}$ eagle
> kwúdjākiu trout
> $t i x^{4}$ yellow cedar

$d j a^{\prime a} d j a^{a}$ tree
sá'idja: leaf
tcayac hand saya'ada neck:
qa. $y a^{2}$ water
sa'yal lake
atadjaic stone
tcu'sichild
$h!$ oyokobestit: (or -mt ${ }^{i}(f)$ fishorman
sidja $q \bar{o}^{-3} p^{\prime}$ basket trat
laidatctan woman's cedar-bark skirt

$$
\text { plural } q!e^{i} q!\bar{a} i k^{\star u}
$$

kuでkuudjāk"u
tilfiruai (may belong also to type vir; note $-a i^{\circ}$ in plural)
 tained as such, but implied thy diminutive plural djédjucijat'a ${ }^{\prime}(j a$ ').
sisạ̀idja'
lcitcā̃ac
sis sayä́ada
qéc $q a^{\prime} y a^{\prime}$
stisa’yat
rtrā̃adjaic
lcttcû':
$k!w t h!o y o l o m \hat{\imath}^{i} n$ :
-stsidjaqqū. $p^{\prime}$.
lflaidatct.in

Eliminating "yellow cedar;" which, as was pointed out, may. just as well be reckoned as belonging to Type YII (there is reason, however, to believe that tii $x^{u}$ goes back to *tiyitu ; fee diminutive type I b and diminutive plural type II f), all these plurals may be plausibly explained as eases of Type II, rediplicating -z-or - - - being the contracted result of $-A y-$. It w/ill be observed that the stems of these nouns contain either $i$-diphthongs, including broken groups ( $\left.-a^{i}-;-a^{\prime} \underline{i},-a^{\prime} i-\right)$, vówel plus $y$
 -idj$)$; $d j$, as wè saw above, is probably a resultant of original $y$ :

Sub-type $I X a($ with $\bar{a})$.
$t c$ !ept rain
$q \delta^{\prime} u$ qwai speaker
yip $\hat{\imath}^{i} x^{u}$ hole
Sub-type IX b (with a).
tct'itca. $i q^{2}$ salt-water hunter $\quad$ tcatci'itca. $i q^{*}$

| plural tc!atc!et $q w a \bar{q} \delta^{\prime \prime}{ }^{\prime} q w a i$ yayipīix $x^{u}$ |
| :---: |
| tcatci'itca.iq* |

plural tc!atc!et
$q w a ̄ q \delta^{\prime \prime} q w a i$
yayipīi ${ }^{i} x^{u}$

Type X. First Stem-vowel Chanyed to e.
These nouns are reduplicated to begin with, and substitute for plural reduplication a change of the first stem-vowel to $\hat{e}$ (long and open).

The few examples are:-
wẹ' wälocs young man wé'wälos
éädjam' young woman

ê'ádjam'
$k^{v}!\hat{e}^{\prime} c k^{\nu}!\bar{a} k^{\nu}!$

Type XI. Reduplicating Syllables: cācac.
Only two examples have been found of this doubly reduplicating type of plural formation. In the first, the $A$, coming after $g^{y}$, is palatalized to $i$; in the second, the reduplicating -aybecomes -i- (see Type VIII).

| $g^{v} \hbar^{a} d \hat{\imath}^{i} m$ slave | $g^{v} \bar{a} q^{v} i d g^{v} d d \hat{\imath}^{i} m$ |
| :--- | :--- |
| ttyyac killer-whale | t $t \bar{t} \bar{t} \bar{a} y a c$ |

Irregular Plurals.
Several plurals listed above are somewhat irregular, but there has been no difficulty in assigning them to definite types. The two that follow are quite irregular. The second shows not only reduplication but breaking of $-A-$ to $\vec{a} ’ a$-.
dja'a ${ }^{\prime}{ }^{\prime} a^{\circ}$ tree
mall'qu'u fawn
djādj̄̄̄́c'm
mamáaliq'"

A few nouns change the stem entirely in passing from singular to plural. Such are:-
satte woman plural nigyap ${ }^{y}$ tai
 of nigyáp'tai)
Involving this same change of stem is:-
staltuxu married man
$n i g^{\nu}{ }^{\prime} p^{\prime} t a h a i^{\prime}$
Rather different, presumably, is:-
tattr'nātcap ${ }^{\text { }}$ leg
tcúk! $u$ 'nätcap ${ }^{*}$
which keeps the same suffix in the plural, while changing the stem.

Nouns without Plurals.
Quite a number of nouns were secured which form no plural. Some of these are reduplicated to begin with, and there is clearly a feeling, though one by no means consistently applied, against re-reduplication in forming plurals. Others, however, are such as might easily be reduplicated, were it usage to do so. 'It is possible that reduplicated plurals might have been given for some of these by other informants. Reduplicated nouns that form no plural are:-
$g^{y \varepsilon^{i}} g^{y} \bar{z}^{i}$ panther
titctitcic ${ }^{i}$ owl
$t s!\imath^{\prime} x^{u} t s!\hat{\imath ̂} x^{u}$ fish-hawk
$q w i^{e} q w a a^{a} t!A l \bar{a}^{a^{\prime}} k^{e}$ butterfly
(probably diminutive; dim. plur. is found)

LáLāpxu knife
$q w a ́ q u m \hat{\imath}{ }^{i}$ s marten
mámstcō'm mink
$q w^{i} q{ }^{i} q i^{i}$ sea-gull
xwáxwadjō'm ${ }^{\text {a }}$ fly
$x a x e, i$ nit
háizhei' arrow

Non-reduplicated nouns for which my informant would give no plurals are:-
mayos raccoon
$q$ !éẹtc elk
$\left.\begin{array}{l}p!o ̣ x \vec{o}^{\circ o} \\ p!a h\end{array}\right\}$ raven
$t c!e q^{x}$ robin
$p_{i}^{i} k$ ! ground ${ }^{2}$ hog
p!áalalats!a skunk
'amax ${ }^{\prime} \dot{i} d j \bar{o}^{\prime o}$ ant
qệix salmon-egg
$m$ ơ'ọ head

For "robin," tc! $A$ q'tc!eq", which might well enough be expected as plural, was explicitly denied. If necessary to express plurality in these nouns, qax or $q_{A} x$ "many", can be juxtaposed before any of them.

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## IV. REDUPLICATED DI MINC゙TIVES OF NOUNS.

Diminutives in Comox, as in other Salish languages, are formed by means of reduplication. Reduplicated diminutive forms, however, differ from reduplicated plurals in that the reduplicating syllable repeats the first consonant of the stem, never also the second. Moreover, the vowel of the reduplicating syllable is formed according to different rules from that of the reduplicating syllable of plural forms. Further complications result from the internal changes to which the stem is often subjected, so that altogether a large number of more or less distinct types of diminutive formations may be recognized. It will be advantageous to list in a purely analytical way the various features that are found in diminutives, so that ready reference may be made to them when discussing the types as such.

Diminutivizing characteristics are:-
(1.) Reduplication of initial consonant of stem, followed by
a. Short $e(i$ or $i)$. Two types of $e-$ reduplication may be recognized, according to whether $e$ is or is not accented. Thus, mimọ'ọs from mọ́’os "head"; qeqa'ya' from qa'ya' "water.'
b. Long $\bar{e}(\hat{\imath}$ or $\bar{\imath})$, always accented. Thus $L!\hat{\imath} L!_{A x w a}{ }^{\prime}$ from $L!A \bar{A} x w \bar{a}^{\prime}$ "dog-salmon."
c. $\hat{e}$, always accented. Thus $q!\hat{e}^{\prime e} q!\bar{e}^{c} L!$ from $q!\hat{a}^{a} L^{\prime \prime}$ landotter."
d. $\breve{v}$, which may or may not be accented. Thus, tọ̣tkọ mîn from tofkōom ${ }^{\circ} n$ "bailer."
e. $\bar{v}$, which is regularly accented. Thus, k! $\delta k!\frac{0}{?} \bar{t}!!?$ from $k!\delta^{\circ} d \bar{o} t t^{o}$ "porpoise."
f. Short a, accented or not. Thus, $L a ́ L \bar{\imath}{ }^{\prime}$ ' $\hat{\imath} m^{\prime \prime}$ from $L \hat{l}^{t}{ }^{\prime} A m^{*}$ "cockle."
g. Long $\bar{a}$. Thus, ${ }^{2} j \bar{a} d j a^{a} g^{v} \hat{i} n^{\prime}$ from djigyin' "song."
h. Long $\bar{a}$ 'a. Thus, sáastt"u from satt'u "woman."
i. Short ọ. Thus, $L!$ oc! $\grave{a}$ 'amîis from $L!{ }_{A m s}$ "house."
(2.) Glottal stop inserted in stem. This may occur as
a. Breaking of (non-final) vowel or diphthong. Thus, tcitca'ayac from tcáyac "hand."
b. Glottalizing of final consonant (generally $m$ or $n$ ); this should probably include breaking of vowel when final.

(3.) Quantitative vocalic changes (increments). These include
a. Lengthening of (last) stem vowel. Thus, tatigyāax from $t t^{\prime} a g^{y} a a^{u}$ "fern."
b. Change to $w \bar{a}$ or $w a$ of $u$ of stem. Thus, diminutive plural $k w \hat{i} k u m k w a^{\prime} m a ̄ q \hat{q} n^{*}$ from plural kumkúmāqin' "sea-lions."
c. Lengthening of inorganic $A$ (or $i, e$ ) to $\hat{\imath}$. Thus, xéx $x$ sitm' from xásam "box." Less often, full $a$ is changed to $\hat{\imath}$ (cf. 4b), as in kwệkwi'̂̂m' from kwá'am "coiled storage basket."
d. Insertion of $\hat{\imath}$. This is probably but another form of 3 c , inorganic $a$ and absence of vowel being perhaps considered as phonologically equivalent. Thus, qééqAl $\hat{\imath}^{\prime} q$ ! from qul" $q$ ! "warrior."
e. Insertion of short vowel $(A, i)$ before syllable with lengthened vowel. Thus, xéexiguicîn (note second $i$ ) from xáucin" "bone."
f. Lengthening of $A$ or $a$ (non-final) to $\bar{a}$. Thns, $q!w \bar{a} q!w a^{\prime} a_{-}$ djix from $q$ ! $w_{A}$ 'ix "wood."
(4.) Qualitative vocalic changes. These include
a. Umlaut of a to short $e \underset{e}{(i) . ~ T h u s, ~ x e x a ́ a d j e ' i c ~ f r o m ~}$ xa'adjaic "stone."
b. Umlaut of $a$ (or $\bar{a}$ ), rarely $\rho$, to long $\bar{e}(\hat{\imath}, \imath)$. Thus, $q!e^{e} q!{ }^{c}{ }^{c} k^{*} u$ from $q!a k^{* u}$ "board."
c. Change of stem vowel to $\vec{a} ’ a$. Thus, totáamic from tómic "man."
(5.) Vocalic reduction. Under this head may be grouped
a. Shortening of stem vowel before syllable with lengthened vowel (or inserted $\hat{\imath}$ ). This shortening before lengthening is doubtless due to quantitative rhythm. Thus, quir$q w i^{r} q w \hat{\imath}^{\prime i}$ (note second $i$ ) from $q w \hat{\varepsilon}^{2} q u \hat{i}^{*}$ "sea-gull. Such shortened syllables regularly lose their glottal stop, if there is one present, as in qéqawêm" from qat'um" "eye."
b. Syncope of stem vowel after reduplicating syllable with accented vowel. Long vowels may thus fall out quite as readily as short ones. Thus, sêcsp'xos from súppāxos "horn."
These twenty-two diminutivizing features occur in various combinations, so that a large number of possible types of 50138-4 $\frac{1}{2}$
diminutive formation may result. A considerable number of such types can be constructed from the available material, but this need not exemplify all that actually occur. As to which of the features listed are fundamental to Salish and which merely secondary in Comox or several Coast Salish languages, it is useless to speculate. Adequate comparative data are necessary. A few points of a comparative nature will be brought forward at the end of the paper. The various diminutive types will now be taken up in order, the main stress being laid on the form of the reduplicating syllable.

## Type I. Reduplicating Syllable: cẹ́.

Various sub-types occur, according to whether the stem vowels remain unmodified or are subjected to comparatively slight changes.

Sub-type I a. Diminutive feature la only:-
mọ'os head
q'tt'abas wooden ball
$q!o ̣ o a^{\prime} a d a$ ear
'áwāk'u tobacco
$q w_{A} d \hat{\imath}{ }^{\imath} s$ whale
$q \hat{\sigma}^{\prime \prime} a^{\prime \prime}$ hemlock
sidjaqoó ${ }^{\prime}{ }^{\text {a }}$ basket cap
qẹix salmon-egg
diminutive mimọ’os
qéq̣ $q^{\prime} t a ’ a b a s$
q! wééq! oa’àda
'ẹ' $a w \bar{a} k^{\prime u}$
$q w e ́ q w_{A d} \hat{\imath}^{\imath} s$
$q w i q{ }^{-{ }^{-x}} a^{\prime}{ }^{\prime 2}$.
sịsidjāqō $p^{\text {a }}$
qéqeyix (-eyi- probably merely variant of $-e i-$-)

Sub-type I b. Diminutive features la, 3c (or d):-

| máqsin ${ }^{\text {n }}$ nose | mịmaqsî̀n |
| :---: | :---: |
| djidis tooth | djidjiditis |
| $t_{i} i x^{u}$ yellow cedar ( $<^{*}$ tivi $i x^{u}$ ) | tịtivīix ${ }^{\text {u }}$ |
| $q \hat{A} l^{\prime} q$ ! warrior | qéqalî $q$ ! |

Sub-type I c. Diminutive features la, 3a, 5a:-


Type II. Reduplicating Syllable: cé; stem: feature $2 a$.
In these diminutives the first vowel of the stem is broken, the broken vowel taking the form $\breve{v} \breve{v}$. If the final vowel is long; it seems to be shortened ( $-\bar{a}$ becomes -'a).
$p^{i}$ ' $k$ ! ground-hog diminutive $p i!p ?^{\prime} i k!$
q!éẹtc elk
$x a^{\prime} \bar{a}$ big clam
$q!e ̣ q \cdot q^{\prime} e^{\prime} \bar{e} ’ e ̀ t c$
$x e_{1} A^{\prime} \bar{a}^{\prime a}$

Though the last diminutive seems to correspond exactly in form and rhythm to the second, the final $-\vec{a}^{a}$ may perhaps here be better explained as breaking of the last vowel $(-\bar{a})$ of the stem (feature 2 b ).

Type III. Reduplicating Syllablè: cệ: stem: features $3 a$ or $d, 5 a, 2 b$.

| $q{ }^{\prime \prime}$ 'um' eye | ```qẹqqawêm" (-\hat{c}- doubt- less merely variant of -\hat{\imath}-)``` |
| :---: | :---: |
|  | $q w^{\prime} q w i^{e} q w \hat{i}^{\prime \prime}{ }^{\prime}$ |

Type IV. Reduplicating Syllable: cẹ́; stem: features $4 a, 3 c, 2 b$. kroáam coiled storage basket kwẹkwi'îm'

Type $V$. Reduplicating Syllable: cẹ́; stem: feature $5 b$.

L! ikuinas heart
$x_{\bar{A}} p \bar{a}^{\vec{i}}$ red cedar

L! ! L! !kuinas
xéxp $\bar{a}^{\prime}$

Type VI. Reduplicating Syllable: cẹ́; stem: featurể̉ $55 b$, $4 b$.
$q w_{A} S A m$ woolly grouse
páxai' creek

$p{ }^{i} p^{2} x \bar{e}^{\prime}{ }^{3}$

Type VII. Reduplicating Syllable: cẹ́; stem: features 5b, 3c, $2 a$.

## Type VIII. Reduplicating Syllable: cẹ.

In this type the reduplicating $e$ is unaccented. According to whether or not the stem is modified in regard to vocalic length or quality, various sub-types may be recognized.

Sub-type VIII a. Diminutive feature la only:ts! $t t c!i l b a i$ spruce diminutive ts! $i t s!d t c!!ł b a i$ $q a^{\prime} y a^{a}$ water qeqa'yá $q \delta^{\prime}{ }^{\prime} q$ wai speaker quiqす'uqwai
Here probably also belongs $q w i^{e} q w \hat{a}^{a} t!A l \bar{a}^{a} k^{e}$ "butterfly."
Sub-type VIII b. Diminutive features la, 5a (accent on third syllable of diminutive):-
saya'ada neck sisiyatada (sa-shortened to $s_{A}-$, which, coming before $y$. has to be palatalized to si-)
$x \bar{a}^{\prime}$ aidatc stump
xẹxa'áidatc (-a.iprobably equivalent to $-\bar{a} i-$ )

Sub-type VIII c. Diminutive features 1a, 3a (or c):st'yal lake sisa'yät $m \dot{a}^{a} t c!i n^{\circ}$ louse $\quad$ mimáa $^{a} t c!\hat{\imath n}{ }^{\circ}$

Sub-type VIII d. Diminutive features la, 4 b :-


Type IX. Reduplicating Sylluble: cep; stem: fecture $2 a$.
Here again the reduplicating vowel is an unaccented e.. The stem, however, is characterized by the breaking of one of its vowels. According to whether or not umlaut also takes place, two sub-types are to be recognized.

Sub-type IX a. Diminutive features la, 2a:tcáyac hand tcọtctáayac

Sub-type $I X b$. Diminutive features la, $2 \mathrm{a}, 4 \mathrm{a}:-$ $x t^{\prime}$ adjaic stone diminutive xexta'adje'ic
As irregular representative of this type may perhaps be con-sidered:-
$q \hat{e ́}^{\prime} n^{\prime} q e n$ ' duck qeqs'ád-ōt (built on unreduplicated simplex)

Type X. Reduplicating Syllable: ce.
Various sub-types are to be recognized, according to whether or not the stem vowels are quantitatively modified.
Sub-type $X$ a. Diminutive feature Ib only:-
tc!el rain
$p!e ́ g^{y} \bar{a} i$ halibut $p!\grave{\imath}{ }^{\imath} p!i g^{\nu} \bar{a} i$
ts! ${ }^{\prime} x \hat{o}^{\prime \prime}{ }^{\prime \prime}$ codfish
$L!A \bar{A} x w \bar{a}{ }^{i}$ dog-salmon
$x \AA^{a} p!$ baby-basket
$p!o ̣ x o^{\prime o}$ raven
$y\left\{p \hat{\imath}^{1} x^{u}\right.$ hole
$L!p \hat{\imath}^{\prime} t s!\bar{a}^{\prime}$ a yellow-cedar bark blanket
titctitcīc little owl
$k^{y} \dot{a} c k^{y} a ̈ c$ bluejay
$q \dot{o} q \underline{q} w \hat{\imath}^{2} m^{\prime}$ small breast feathers
1.

In the last two examples the diminutive is formed, not from the already reduplicated simplex, but from the unreduplicated form abstracted from it.
Sub-type $X b$. Diminutive features $1 \mathrm{~b}, 3 \mathrm{c}$ :-
L!patịt bag - $L!e^{e} e^{L}!p a ̄ t \hat{\imath} t$
$t c!e q^{x}$ robin
kúmāqin' sea-lion
djicin ${ }^{\text {f }}$ foot
tiqq! bow
$t c!\tilde{\imath}^{2} t c!\hat{\imath}^{e} q^{x}$
$k w \hat{\imath}^{\prime} k u m a ̄ q i ̂ n^{\prime}$
djî'djicin ${ }^{*}$


Sub-type $X$ c. Diminutive features lb, 5a, 3c (or 3a):-
$q!w_{A} t^{\prime} \bar{\imath} t{ }^{2} t c i n^{\circ}$ humpback salmon $q!w e ́ q!u t \bar{i}{ }^{i} t c i n^{\circ}$
t!'t'abuxwāi gooseberry bush
p!d́alats! ${ }^{a}$ skunk
t! $\bar{\imath}!!$ àmuxwāi
$p!e ́ p!A^{\prime} l a ̄ t s!\quad$ (misheard for $-p!{ }_{A} l-?$ )

Sub-type $X d$. Diminutive features $\mathrm{lb}, 3 \mathrm{e}, 3 \mathrm{c}:-$
 *- ${ }^{-1} w_{A-}$ )

It should be noted that this type of diminutive formation, while externally similar to Type VIII of plural formation (cf., e.g., $x \varepsilon^{e} x \bar{a}^{a} p!$ "little basket" with $q$ ! $e^{i} q!\bar{a} i k^{\prime 4}$ "eagles"), is in reality quite distinct in origin, the latter, as we have seen, tracing its reduplicating $-\bar{e}-$ to $-A y$ - and being limited to nouns with $i$-diphthongs.

Type XI. Reduplicating Syllable: cé; stem: feature $2 b$.
mát! $\bar{a} i$ horse clam

hâihei :(hâihei'?) arrow $q!A \not s^{\prime} A d \bar{a} i$ buckskin shirt
$m e ́ ' m_{A} t!\bar{a}^{\prime i}$ ( $m \vec{e}$ '- perhaps misheard for $m \bar{e}-$ ) héheihei; ${ }^{\text {i }}$
$q!e^{e} q!a s^{\prime} a d \bar{a}{ }^{’} i$

Type XII. Reduplicating Syllable: cé; stem: $4 b$.


Type XIII. Reduplicating Syllable: cé; stem: feature 5 .
There are two sub-types, according to whether or not the stem vowel is modified.

Sub-type XIII a. Diminutive features lb, $5 \mathrm{~b}:-$
q!áp!xwai oak
$p!$ !éixāi alder
${ }_{L}!\bar{a}^{a} q!w \bar{a} i$ fish-gill
kúp- $\hat{u}^{u} m \hat{\imath}^{u} \underline{x}^{u}$ hill
łāq!wainop $p^{\circ}$ cedar-bark mat
$t!$ ' $' i b a ̈ i$ wild-cherry bush
$t!a q^{+} t!a ̂ q a ̄ i d o g-w o o d$
$q!e ́ q!p!x w a i$
$p!\hat{\imath} \quad p!x \bar{a} i$
$!!\hat{\imath}^{\prime}{ }^{\prime} L!q!w a \bar{i} i$
$k w i k^{{ }^{\text {a }}} p-\bar{\imath} i t^{c}$
$\left\lceil\hat{\imath}^{\prime} ? q!w a \bar{a} i n o p{ }^{\circ}\right.$
$t!\hat{\imath}^{\prime} t!b \bar{a} i$
t'êt! qāi

In the last example the diminutive is built up on the unreduplicated stem abstracted from the already reduplicated simplex. The broken stem vowels $-\bar{e}$ ' $i$ - of "alder" and "wild-
cherry bush" disappear in the diminutive apparently without trace of '; but this may in part be due to following $q$ ! and $p$ !, which imply'. With these contrast:-
sáan $n^{2}$ cohoe salmon diminutive sis'ad-öt
Here the $-a^{\prime} a$ - is treated, not as a broken vowel, but as two vowels with intervening consonant.

Sub-type XIII b. Diminutive featūres $1 \mathrm{~b}, 5 \mathrm{~b}, 3 \mathrm{c}:-$
$l_{A q} q$ ! $A s$ mountain-goat blanket líl'q! $\hat{l}$ s
L! ịq!acin" moccasins

L! !ec $L!q!a c e ̂ n^{\text {e }} \quad$ (misheard for -ên'??)

Type XIV. Reduplicating Syllable: cê; stem: features 5a, $3 c, 2 b$.
t!égyem sun, moon
$t!\hat{\imath}^{\prime} t!g^{y}{ }^{\mathrm{i}} \mathrm{m}^{\prime}$
$-i$ - is for $-A$-, because of following $g^{y}$.

Type XV. Reduplicating Syllable: cé; stem: features 5b, 4 .

|  |
| :---: |
|  |  |

Type XVI. Reduplicating Syllable: cê'.

| $q t^{\prime} a q a^{2}$ rush mat | $q \hat{e}^{\prime} c q \bar{a}^{\prime} a$ |
| :--- | :--- |
| $t \delta t t^{\prime} x^{u} l a t$ necklace | $t \hat{e}^{\prime} c^{\prime} x^{u} l a t$ |

The diminutive of "necklace," as often happens with nouns reduplicated to begin with, is built up on the implied unreduplicated stem. The same applies to the diminutive of "rush mat," except that here it is the reduplicating syllable of the simplex, which doubtless more nearly represents the simple stem, that is taken as the base of the diminutive form.

Type XVII. Reduplicating Syllable: cê'; stem: feature $4 a$ or $b$.
Two sub-types are found, according to whether or not there areat the same time quantitative changes in the stem.

Sub-type XVII a. Diminutive features le, 4 b :$q!a^{a}{ }^{a}!$ land-otter diminutive $q!!^{\prime} r q!\bar{e}^{e} L!$ $q!a^{a} s a{ }^{a}$ sea-otter $q!\hat{e}^{\prime} q!\cdot \bar{e}{ }^{e} s$ (note loss of $-a^{\text {a }}$ )
Sub-type XVII b. Diminutive features, 1c, 5a, 4a (or b):$q e^{\prime} w^{A} x$ steel-head salmon $q^{\hat{e}}{ }^{\prime} e^{4} e^{\nu} e^{a} x$
$-g^{\nu}-$ is from original $-w$-. It is not clear whether $-q e g^{y} e^{\rho} x$ represents *-qewēéx or *-qewex.

Type XVIII. Reduplicating Syllable: cé; stem: features $3 c, 2 b$. $q$ !wat' $A m$ river
$q$ ! wéc $q$ ! wat îm ${ }^{\prime}$ ( $q$ !wée not equivalent to $q!w e \hat{e}^{c}$-; see diminutive plural type iv)

Type XIX. Reduplicating Syllable: cê'; stem: feature 5 b.
There are two sub-types, the latter with modified stem vowel.
Sub-type XIX $a$. Diminutive features lc, 5b:-
sápäxos horn sétsp ${ }^{\prime} x$ es
héq $q^{\circ} \mathrm{s} \bar{a}^{a} \mathrm{~min}^{\circ}$ pole for poling canoe $\quad h e^{\prime} c h q^{\prime} s \bar{a}^{a} \mathrm{~min}^{\prime}$
Sub-type XIX b. Diminutive features $1 \mathrm{c}, 5 \mathrm{~b}, 3 \mathrm{c}$ :-
$t!$ Ikoom" beaver (-kọ- doubt- $t!\hat{e}^{\prime} c t!k w i ̂ m$ ' less for -kw.ı-)

Type XX. Reduplicating Syllable: cv̌.
Here again there are two sub-types, the latter with vocalic reduction.
Sub-type $X X a$. Diminutive feature ld:-
$x \not x u g^{v} a s$ grizzly bear $x a \overline{x a ̄ u g g^{y} a s}$
Here probably belongs also xwáxadjō'm" "fly."
Sub-type $X X$ b. Diminutive features 1d, $5 \mathrm{a}, 3 \mathrm{c}$ or d:-

tátigyêt! ${ }^{a} \quad(-i-<-4-)$
taidatctAn woman's cedar-bark Zafidatctîn ( $-\bar{i}$ - $<-A i-$ ) skirt
$t: \delta ' m t^{\prime}$ paddle
$t!\underline{t} t!\lrcorner b \hat{\imath}^{i} t t^{\prime}$

Type XXI. Reduplicating Syllable: cv̌; stem: feature 5 b.
There are three sub-types, based on differences in the further treatment of the stem.
Sub-type XXI a. Diminutive features 1d, 5b:$y a ́ x a i^{\prime}{ }^{2}$ pack-basket diminutive $y a ́ . i x a i^{\prime}{ }^{2}$

Sub-type XXI b. Diminutive features Id, 5b, 3a:waxatts! $i$ pipe wauxt ${ }^{a} t s!\hat{\imath}^{2}$

Sub-type XXI c. Diminutive features ld, 5a, 5b:tôk $\bar{o}^{\circ} \operatorname{mîn}$ bailer tọlkọmin

Type XXII. Reduplicating Syllable cv̌; stem: features 3 a or c, and $2 b$.

There are two sub-types, depending on whether or not the first vowel of the stem is reduced.

Sub-type XXII a: Diminutive features Id, 3c, 2b:s $\delta t s!$ a $m$ tyee salmon . sas $\bar{a}^{a} t s!\hat{\imath} m^{\prime}$

Sub-type XXII b. Diminutive features ld, 5a, 3a, $2 \mathrm{~b}:-$ sá’ịdj. leaf
sastdja ${ }^{\prime}{ }^{a}$ (- $\bar{i}$ reduced from - $a$ ' $\mathfrak{i}$-)

Type XXIII. Reduplicating Syllable: cí; stem: features $5 a$, $3 a$ or $c$.


- $k!\bar{o} k!o d \bar{o} t!^{o}$
mamiyọs ( $-i$ - palatalized from $-\boldsymbol{A}-$, reduced from $-\bar{a}$-)
ttitig ${ }^{y} x^{u}$ ( $-i$ - palatalized from -A-, reduced from $-\vec{a} \cdot a-$ )
tátíg ${ }^{y} \hat{\imath} n$ (dit.)
$g^{y} \hat{a} g^{y} i d \hat{\imath}^{\imath} m$ ( $-i-$ palatalized from -A-, reduced from $-\bar{a}^{a}-$ )
hadak ickin
A $x^{4}$ hair seal
h!!tmuql cloud

| 'a'ast |  |
| :---: | :---: |
| $\because \%$ tslatslamaqurt |  |
| palatalized from |  |
| $\therefore$ reduced from - - - - |  |
| $\therefore$. -ma- merely vari- |  |
| $\because$. Ant of -mu-) |  |
| . $\therefore$ 'tolqai' ${ }^{\prime}$ |  |
|  | n'maxyidjóo |

'a'asixí"
tslatslamaquil (-ipglatalized from-s-, reduced from - - - - $;$ -ma- merely variant of $-m u-$ )
' $\begin{array}{r}\prime \\ \text { olqai's' }\end{array}$
:n'smaxvidjó'.
diminutive $\ddagger$ alïdá ${ }^{*}{ }^{*}$
blaai' snake
'amaxyidjō'p, ant

In the last two examples the final vowel is considered quantitatively long and hence cannot be further lengthened. Quite irregular is:-

- tayac killer-whale $\quad \because \quad \because$ tatizyac

The long -ir and the short - $a$ - of the stem are the exact reverse of what would be expected (*tatyac, ef tatig ${ }^{\nu}$ ax above).

Type XXIV. Reduplicating Syllable: " ct," stem: features 5a, $4 b$.
tclato!attan" mouse
teiatclitlin": (-i- palatalized form of $-1-$; reduced from -ăa-)
The diminutive, as often, is based on the unreduplicated stem abstracted from the already reduplicated simplex:

Type XXV: Reduplicating Syllable: co; stem: features $5 a, 2 b$
Two sub-types are to be recognized, depending on the treatment of the last vowel of the stem.

Sub-type XXV a . Diminutive features 1a, $5 \mathrm{a}, 2 \mathrm{~b}:-$
$16^{\prime \prime o b o m}{ }^{\circ}$ small clam
k! ofygkobin fisherman
lolob ${ }^{\prime} m^{\prime}$
k/tkloyokobsin"

Sub-type $X X V b:$ Diminutive features $1 \mathrm{e}, 5 \mathrm{a}, 3 \mathrm{~m}, 2 \mathrm{~b}:-$
$x a^{a} w a$ für seal
$s a^{a} b a^{a}$ mussel
tc!é'ado dog.
$x d x A \overline{w a}{ }^{\prime} a$
$s a s, 4 b a^{\prime \prime}$
 talized from - - - , rèduced from eitan

In the last example $e$ ' $\varnothing$ is treated as a reduplicating long yowel.

Type XXVI. Reduplicating Syllable: cv́; stem: feature 5 .
Three sub-types are to be recognized, according to whether the stem undergoes no further change or is further modified.
Sub-type XXVI a. Diminutive features $1 \mathrm{e}, 5 \mathrm{~b}$ :-
sơsîn ${ }^{\text {e mouth }}$
$p!a ́ q!a d a ̄ t c$ goose
$t \hat{\imath}^{\prime} h \bar{a}^{a} d \bar{a} n^{\prime}$ chief's wife
sobadatc tail
$x w a ́ s a b a ̄ i$ soapberry bush
tix $x^{u}$ sal tongue
$\delta s{ }_{a}{ }^{\prime} i$ huckleberry bush
$m i{ }^{\bullet} x \bar{a} l$ bear
sip! $A m i n n^{2}$ shinny stick
mitāli beaver-tooth die
$k^{\nu!}!k^{\nu} \bar{a} y u$ oar
sîe $q e t^{t}$ dug hole, well
diminutive sôssin ${ }^{\circ}$
$p!\bar{a} p!q!A d a ̄ t c$
tît'hadān'
sठ"spadatc
$x w a x^{u} s a b a \bar{a} i$
$t \tau^{2} t x^{4} s a l$
'ó' $A s \overline{a ̆} ' i$ (-ōs- cannot be further reduced than -'As-)
$m^{\prime} \hat{\imath}^{\prime}$ mexāt ( $-E$ - is merely glide)
sit'sp! $A m \hat{\imath}^{\prime} n^{2}$
$m \hat{\imath}^{\prime} m(I) t \bar{a} l i \quad(-I-\quad$ is merely glide)
$k^{\nu}!\hat{\imath}^{\prime} k^{\nu}!k^{\nu} \bar{a} y u$
si' ${ }^{\prime}$ sqet $t^{c}$
"Bear," "shinny stick," "beaver-tooth die," and "oar," which have short stem-vowels, are perhaps better listed with type X .
Sub-type XXVI b. Diminutive features $1 \mathrm{e}, 5 \mathrm{~b}, 3 \mathrm{c}$ :$k \dot{\delta}^{u}{ }^{\prime} A d^{\prime}$ star
$k \not t k^{\prime} s \hat{d} d^{\prime}$
Sub-type XXVI c. Diminutive features 1e, 5b, 5a, 3a:$t!\hat{e}^{\prime}{ }^{\prime} d \hat{e ́}^{e} q w a i$ salmon-berry bush $t$ !êt! $d_{A} q u a \bar{u} i$

Type XXVII. Reduplicating Syllable: ćv; stem: features

$$
5 b, 4 b
$$

$t!d^{a} q!a t^{\bullet}$ mountain
$t!t t!q!\bar{e}^{i t} t^{2}$
Type XXVIII. Reduplicating Syllable: ct́; stem: features $5 b$ (or a), 8a, 2a.
$t a^{a} q!w a^{a}$ devil-fish
$d j a^{\prime}{ }^{\prime} d j a^{a}$ tree
$t a t^{\circ} q!w \vec{a}^{\prime a}$
djādjidjáa ${ }^{a}$ (-i- palatalized from - -1 , reduced from $-\vec{a}^{a_{-}}$)

Type XXIX: Reduplicating Syllable: ca.
Two sub-types have been found illustrated, each represented by but one example in the material obtained.
Sub-type XXIX a. Diminutive features 1f, 3c, 2b:$L i^{\prime}{ }^{\prime} m^{\prime}$ cockle diminutive $L a ́ L \imath^{\prime} ' \hat{i} m^{\prime}$
Sub-type XXIX b. Diminutive features 1f, 3b, 2a:-
kwúdjāk"" trout kwakwa’a ${ }^{\circ} j \bar{a}{ }^{\circ}{ }^{\circ u}$
Type XXX. Reduplicating Syllable: cā; stem: feature Sf.
Two sub-types may be recognized, the second with further modification of the stem.
Sub-lype XXX a. Diminutive features $1 \mathrm{~g}, 3 \mathrm{f}$ :-
$q!w A^{\prime} i x$ wood ${ }^{-} \quad q!w a ̄ q!w a^{\prime a} d j i x \quad(-d j-$ $<^{*}-y$-, glide between $-\bar{a}^{{ }^{\prime}}{ }^{-}$and $-i-$ ).
Sub-type $X X X$ b. Diminutive features $1 \mathrm{~g}, 3 \mathrm{f}, 3 \mathrm{c}$ :djíguin' song ( $\left.<^{*} d j_{A} w_{A} n^{*}\right) \quad d j \bar{a} d j j^{a} g^{*}{ }^{*} n^{*}$

Type XXXI. Reduplicating Syllable: ct'v̌; stem: feature 56.
stitt ${ }^{\prime}$ woman $\quad$ sàastt ${ }^{\prime}$ girl

Type XXXII. Reduplicating Syllable: cọ; stem: feature $4 c$.
Two sub-types, each represented by one example, are found, the second involving a further change of stem.
Sub-type XXXII a. Diminutive features 1 i (perhaps rather 1 d), 4 c :-
tớmic man
Sub-type XXXII b. Diminutive features $1 \mathrm{i}, 4 \mathrm{c}, 3 \mathrm{~d}$ :-
$L!$ ams house
$\rightarrow L!!L!a ' a m \hat{\imath}{ }^{i} s$

## Diminutive in -ōl, -ọt.

Besides forming diminutives by means of reduplication and internal stem change, Comox can also make diminutives of animal nouns by means of a suffix $-\bar{o}\left(t^{t^{u} u}\right)$ or $-\underline{\rho} l\left(t^{*}{ }^{u}\right)$. Some of the diminutives in $-\bar{o} t\left(t^{*} u\right)$ or $-o p\left(t^{*} u\right)$ are nouns whose simplex is
already reduplicated (cf.. reduplicated nouns which form no reduplicated plural); yet not all: Of those formed from unreduplicated nọins, some have diminutive reduplication at the same time, others not. $\because$ By an interesting phonetic law of rhythmie balance -ot $\left(l^{\prime} u\right)$ is suffixed to stems whose last vowel is short, oft $(t)$ to those whose last vowel is long . The oxamples obtained or the suffix are:-


The last two seem fregular ais regards rhythmic balance; perhaps they were respectively mishoard for *itperpot $\boldsymbol{u}^{\prime}$ and
 "ilittle mink."
$2 \therefore 0 l\left(t^{u}\right)$
htonhö̀m blae grouse
qwaqumes marton
qwasim woolly grouse
$t s!\hat{t}^{\prime} \dot{x}^{u} t \mathrm{~s}$ ? $x^{x^{4}}$ fish-hawk


## V. DOUBLY REDUPLICATED DIMINUTIVE PLURALS OF NOUNS.

The plurals of diminutives are, as a rule, doubly reduplicated, the first reduplicating syllable expressing the diminutive idea, the second that of plurality; the first reduplicating syllable is almost invariably of diminutive type, the second of plural type. Hence diminutive plurals are morphologically, and psycholo gically, diminutivized plurals, not pluralized diminutives. While they may be said, on the whole, to be formed from the plural of the simplex, the diminutive singular has often influence on the form of the diminutive plural, both as regards the inner stem changes and the vowel of the reduplicating syllable. Thus diminutive plurals may be said to combine, roughly speaking, the characteristics of both the plural and diminutive of the simplex. In order better to understand the formation of the diminutive plural and to assist in cross-referencing, the types to which the non-diminutive plural and the diminutive singular belong will be indicated in the following lists.

Type I. Reduplicating Syllable: cē; followed by plural of simplex.
The reduplicating syllable is analogous to that of diminutive types X, XI, XII, XIII, XIV, and XV. According to whether or not the remaining part of the word is somewhat modified from the plural of the simplex, sub-types may be recognized.

Sub-type I a. Plural of simplex unchanged:L! flkuinas heart plur. I. dim. v. dim. plur. $L!\hat{\imath}^{\prime} L!E k^{\prime}-$
L!ikuinAs

|  |  | $\begin{aligned} & \mathrm{xa} \\ & \text { dit. } \end{aligned}$ |  <br> ${ }_{L}!\sum_{L}!a x L!a x w \vec{a}^{\prime}$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| $t!p \hat{\imath} t s!\bar{a}^{\prime}{ }^{a}$ yellow cedar |  |  |  |
| bark basket | no plur. <br> (type I implied in dim. plur.) | x b. | $t c!$ İtc! $e^{\text {a }}$ tc!éqōtt ${ }^{\text {a }}$ |

$a_{L}$ leggings
kúp $\hat{u}^{u} m \hat{\imath}^{u} x^{u}$ hill
I. (or vi.)
dit.
xII. éaL'aL

XIII a. kwīkup'kúp-īit $t^{*}$ (with $-i^{i} t^{\prime}$ as in diminutive singular)
$k^{\nu}!\hat{?} k^{\nu} \bar{a} y u$ oar plur. dit. dim. xxvi a. dim. plur. $k^{\nu}!\hat{\imath} k^{\nu}!\hat{i}-$ $k^{\nu} k^{y}!i k^{\nu} \bar{a} y u$
síp! $A m \hat{n} n \prime$ shinny-stick dit. qwaqumits marten no plur. (type I, based on stem-form of unreduplicated simplex, implied in dim. plur.)

| $x \bar{a}^{a} p$ ! baby basket | II | x a . | $x \bar{e} x$ áp! $x \bar{a}^{a} p$ ! |
| :---: | :---: | :---: | :---: |
| t!á'abuxwāi gooseberry bush | dit. | x |  |
| tāq!wáinop ${ }^{2}$ cedarbark mat | dit. | XIII a . | lı̂líq! ${ }^{\prime \prime}$ làq! wãànop |
| ${ }_{L}!\hat{d}^{a} q!w \bar{a} i$ fish-gill | dit. | dit. |  |
| $k!t^{\circ} \mathrm{l} \bar{t}!^{\prime}$ porpoise | dit. | xxiri. | $k!u \hat{v} k!w_{\mathrm{a}} d \cdot k!\delta^{\prime} d \underline{i}!^{\prime}$ |
| ts!ámuql cloud | dit. | dit | ts!îts!amts! ${ }^{\text {dmuqu }}$ |
| ${ }_{m i \text { die }}^{\text {dialal }}$ bear | dit. <br> if a. | xxyia. <br> xxvia. | $m \hat{\imath}^{\prime} m \cdot . t t^{\prime} m \hat{\imath}^{\prime} t \bar{a} l i$ mî̀máx $E$ mixāt | ( $-E$ - is glide)


|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
| bush | dit. | dit. |  |
| stopadatc tail | dit. | dit. |  |
| tô'mic man | dit | xxxila. | títamtōomic |
| $g^{\nu} \chi^{a} d \hat{\imath}{ }^{i} m$ slave | xi. (aside | xxili. | $g^{\nu} \bar{e}^{\nu} i d g^{\nu} \hat{\hat{u}}^{a} d \hat{\imath}^{2} m$ |
|  | from $g^{u t} t$ - belongs to II b.) |  | (based on $-g^{v i d g^{v} \tilde{a}^{a}-}$ $d \hat{\imath}$ ' $m$ of plur.) |
|  | t in b | xxi | yīyixıyāxai'> |
| tc!atc! ${ }^{a}$ ! $!\bar{a} n{ }^{\prime \prime}$ mouse | se dit. | xxiv |  |
| kóns.1d' star | dit. | xxvi b | $k w \hat{\imath}{ }^{2} k w i s k \bar{o}^{*}{ }^{\text {a }}$ d ${ }^{\prime}$ |
| $p!e ́ g g^{\nu} i=$ halibut | III b . | X | $p!\stackrel{\imath}{\imath}!\bar{o}^{u} p!e g^{\nu} \bar{a} i$ |
| $g^{\nu \varepsilon^{2}} g^{\nu} \bar{\imath}^{2}$ panther | no plur. | -ūl |  |
|  | (type in b implied in dim. plur.) |  |  |
| tlqai' ${ }^{\prime \prime}$ snake | vi. | xxili. | ' ${ }^{\prime}{ }^{\prime} \mathrm{A}^{\prime}$ 'oplqai'* |
| 50138-5 |  |  |  |



Sub-type I b. Plural of simplex modified by diminutive feature $3 \mathrm{a}, \mathrm{c}$, or $\mathrm{d}:-$ djidis tooth L! patitut bag djícin' foot
I. $\quad \mathrm{I}$ b. djìdjiddjid $\hat{\imath}^{2} s$
dit. $\mathrm{xb} . ~ L!i \bar{L}!\wedge p^{\prime} L!$ ípät̄̄t lAq! As mountaingoat blanket dit. dit. djîdjisdjıjcin ${ }^{*}$ dit. XIII b. lı̂laq!lâq! $̂$ s
L!'iq!acin" mocca$\sin$
t!Aknm" beaver t!ồ $m t^{*}$ paddle waxtats! i pipe $t a^{\prime} q!w a^{a}$ devil-fish
djigvin song III b. . xxx b. djīdjūdjigyîn
dit. $\quad L!\bar{e} L!A q!L!A q!a c i n{ }^{*}$ (-in' misheard for $-i n^{\prime \prime}$ ?)

1. $\quad \operatorname{xix}$ b. $t!\hat{\imath} t!_{A} k^{\bullet u} t!\hat{A} k w i ̂ m '-\cdots$ il a. $\quad \mathrm{xx}$ b. $t$ ! $\bar{\imath} t!_{A m t!\hat{u}^{u} b \hat{\imath}} \mathrm{t}^{*}$
dit. xxi b. wîwixxwaxāats! $\hat{\imath}^{2}$
dit. $\quad$ xxviII. $t \hat{\imath} t A^{\prime} q^{*} t \hat{a}^{a} q!w \bar{a}^{*}$
( $-q^{\prime}$ misheard for $-q$ ! ?)

Sub-type I c. Plural of simplex modified by diminutive feature 5a:-

| lôkơomîn bailer | v. |  |
| :---: | :---: | :---: |
| $t \hat{\imath} h \bar{a}^{\text {a }}$ dān' ${ }^{\text {n }}$ chief's | vi. | xxvi a. tîtahtihía ${ }^{\text {a }}$ dän' |
| wife |  |  |

Sub-type $I$ d. Plural of simplex modified by diminutive feature 2b:-

| tô' ${ }^{\text {obo }}$ ¢ $\mathrm{m}^{2}$ small clam | II b . | xxv 3. |  |
| :---: | :---: | :---: | :---: |
| $k!!̣ y o ̣ k o t \imath \imath n$ fisherman | VIII. | dit. | $k!w i k!w i k!o y o k o-$ $b \hat{\imath}^{i} n^{\prime \prime}$ |

Sub-type $I$ e. Plural of simplex modified by diminutive feature 4b:
t!a'aq!at mountain plur. in a. dim. xxvin.
dim. plur. $t \cdot \bar{e} t!{ }_{A} q!t!\bar{a}^{a} q!\bar{e}^{i} t{ }^{e}$

Sub-type $I f$. Plural of simplex modified by diminutive features $3 \mathrm{~b}, 2 \mathrm{a}, 3 \mathrm{c}$ :-

A couple of aberrant diminutive plurals with cē-are given under type in f.

Type II. Reduplicating Syllable: ce; followed by plural of simplex.

The reduplicating syllable is analogous to that of diminutive types I, II, III, IV, V, VI, VII, VIII, IX. Sub-types are to be recognized here as in type I .

Sub-type II a. Plural of simplex unchanged:$q w . i d \hat{\imath}^{2} s$ hump-
backed whale I. $\quad$ a. quéquad $q w_{A} d \hat{\imath} ' s$
$q \tilde{\sigma}^{u^{\prime}} a^{\prime 2}$ hemlock
'áwāk'u tobacco
$x_{A} p \bar{a}^{’_{2}}$ red cedar
q!áp! xwai oak
dit.
dit.
dit. quiqōqón' $a^{\prime{ }^{\prime}}$
dit. 'e’'su'áwāk ${ }^{\circ}$ u
dit. $\quad$ v. $x \in x_{A} p^{2} x_{i} p \vec{a}^{\prime}$
q'táabas wooden ball
used in game II a.
$q \hat{e ́}^{\prime} n^{\prime} q e n^{\prime}$ duck dit.
$q t^{\prime}{ }^{\prime} q a^{a}$ rush mat dit.
tốt $x^{u}$ lal necklace dit.
xIII a. $q!e q!$ ! $p!q!a ́ p!x w a i$
1 a. qeq alt $^{\prime} q^{\prime} t a \vec{a}^{\prime} a b a s$
rx b. qeqá $d^{\prime} q e ̂ n^{\prime \prime}$ (based on unreduplicated simplex)
xvi. $q e q-4 q^{a} q t^{\prime} a q a^{a}$
xvi. tit $A x^{u} t o t t^{t} x^{u} l a t$ (reduplicating syllable for plurality based on unreduplicated form of simplex)


Sub-type II b. Plural of simplex modified by diminutive feature 3 c or d :-

| $q A \hat{l} \cdot q$ ! warrior | 1. | I b. | $q e q A l q a l l^{\prime}{ }^{\prime} q$ ! |
| :---: | :---: | :---: | :---: |
| táq! ${ }^{\text {a }}$ bow | dit. | x b. |  |
| $q!w a t{ }^{\prime}{ }^{i} t c i n^{*}$ humpback salmon | dit. | x c. | $q!w e q!w a t t^{\prime} q!w \hat{A}-$ $t \cdot \bar{i} t c \hat{\prime} n^{\circ}$ |
| $x_{\text {Áucin }}{ }^{\text {e }}$ bone | dit. | x d. | xệxauxaucîn ${ }^{\text {e }}$ |
|  | II | viII | mimatc!mátc! ${ }^{\text {a }}{ }^{\text {a }}$ |
| ds $x^{u}$ hair seal | dit. | xxili. | 'e'e'As'āsîx ${ }^{\text {d }}$ |
| $t t^{\prime} a^{\nu} \mathrm{i}$ in salmon spear | III 3. | dit. | tịtot ${ }^{\prime}$ 'ag ${ }^{\nu}$ în |

Sub-type II c. Plural of simplex modified by diminutive features 3 a or c , and 2 b :-


Sub-type II d. Plural of simplex modified by diminutive feature 4 a or b :-

| páxai' creek | 1. | vi. |  |
| :---: | :---: | :---: | :---: |
| $q!a \dot{k}{ }^{\circ}{ }^{\text {a }}$ board | dit. | XII. |  |
| $s A q^{\bullet} A k^{\bullet \bullet}$ war-club | dit. | xv |  |

Sub-type II e. Reduplicating syllable of plural of simplex changed to $\mathrm{c}_{A} u$-:$x a^{\prime} \bar{a}$ big clam I
I. II. xexauxt'A (note change of $x a^{\prime} \bar{a}$ - to $-x \vec{a} ’ a$, perhaps due to rhythmic analogy of dim. sing. xẹ̀ $x_{A}{ }^{\prime} \vec{a}^{\prime}{ }_{A}$ )


These strange diminutive plurals can hardly be explained otherwise than as formed by analogy of such diminutive plurals as xẹxuxđ'wa "little fur seals," xéxauxāug"as "little bears," and xérxauxaucîn" "little bones," where -xau-(-xau-) is etymologically justified. The parallelism of $x a^{\prime} \bar{a}$ "big clam" and $x a^{9} w a^{\circ}$ "fur seal" seems particularly plausible.

Sub-type II f. Plural of simplex modified by diminutive feature 4 c (for convenience of comparison one form with $c \bar{e}$ is included):-
$t!e^{\prime} i b a \bar{\imath} i$ wild cherry plur. I (or vin). dim. xin a. dim. plur.
bush
$q e^{\prime} w^{A} x$ steel-head salmon
t乞̂$x^{2}$ yellow cedar
II. xvir b.
$q e q q_{A} u a^{\prime} a^{y}{ }^{y} \hat{e}^{e} x$ ( $-g^{\nu} \hat{e ́ e}^{e} x$ as in dim. sing.)
Ib. titotat'ayix $x^{u}$ (tĩ $x^{*}$ $>^{*} t i y i x^{u}$, ti- being modified to $t \bar{a} \cdot a-$; -tọ, cf. type in e, is peculiar and is probably due to analogy of titotat' $a g^{v} a x^{\prime \prime}$ 'little ferns")

Another diminutive plural with erratic -o- vowel (in both reduplicating syllable for plurality and stem) belonging to type I , is:-

$s a a^{\prime} a n^{2}$ cohoe sal- | mon |
| :--- |
| mon | xiII a. sisosọ'ád-ōt

The material at hand does not permit to see what analogies have operated here.

Type III. Reduplicating Syllable: cep; reduplicating vowel of plural of simplex shortened.

A new feature is here introduced, the shortening of the long reduplicating vowel characteristic of the plural. Sub-types are here also to be recognized.

Sub-type III a. Plural of simplex not otherwise modified:$x^{c} o p^{\prime} x \bar{o} p^{*}$ hum- plur. i. dim. - $\overline{o l t}{ }^{e^{u}}$ dim. plur. ming bird
$l \hbar^{a} g^{u} \hat{e} t^{a}!^{a}$ herring
iII b .
xx b. titọtáa $g^{y} \hat{e ̂ t} t^{a}$
$t a^{a} d a k^{c u}$ skin
$q a^{\prime} y a^{\prime}$ water
$x a^{\prime} a$.idatc stump
III $b$.
xxini. teltolááa $d a k^{*}$
vili. viil a. qeqqeqáyá
I. viri b. xexexáaidatc
(type viII implied in dim. plur.)

| st'yat lake | Ir. | viif c. | șisisa |
| :---: | :---: | :---: | :---: |
| láidatctan woman's | dit. | xxb . | litititaidatct $_{\text {a }}$ | cedar-bark skirt

Sub-type III b. Plural of simplex modified by diminutive feature 2a:-
tcáyac hand viII. IX a. tcịtcitcā̄yac

Sub-type III c. Plural of simplex modified by diminutive features 2 a , and 3 b or f :-

| sayä'ada neck | vir | viri b. | sịsis ${ }^{\prime}{ }^{\prime} y \bar{a}^{\prime} a d a$ |
| :---: | :---: | :---: | :---: |
| $k w u ́ d j a \bar{k}{ }^{\text {u }}$ trout | dit. | xxix b. | wịkwị $k w a^{\prime a} d j \bar{a} k^{\prime}{ }^{\prime}$ |

Sub-type III d. Plural of simplex modified by diminutive features 4 a and $2 \mathrm{a}:-$
xä̀'adjaic stone viII. Ix b. xexexáadje'ic

Type IV. Reduplicating Syllable: cê; followed by simplex.
It seems that a reduplicating syllable with $\hat{e}$ tends to be considered the morphological equivalent of double reduplication (see plural type X , diminutive type XVI), in this case of combined diminutive and plural reduplication. Various sub-types are to be recognized, according to whether the reduplicating syllable is followed by the unmodified (or modified) simplex, the modified form characteristic of the diminutive, or by a form still further modified.

Sub-type IV a. Simplex unchanged:-


Sub-type. IV b. Simplex modified by diminutive feature 5a:$\boldsymbol{t c}$ !éāado dog II b. xxvb. $t c$ !ếtc! $\mathfrak{i n}$ 'ă $m^{*}$ (irregular in that -o of stem is dropped; with $-\bar{a} m^{2}$ cf. perhaps $-\vec{a}{ }^{\prime} m$ of djādjīđ'm 'trees')

Sub-type IV c. Reduplicating vowel of diminutive changed to $\hat{e}:-$
$x w a ́ x w a d j{ }^{\prime}{ }^{\prime} m^{\prime}$ fly
(dim. in form)
$q w i^{e} q w \hbar^{a} t!_{A} l \vec{a}^{\prime} k^{c}$ butterfly $q w \hat{e}^{e} q w a^{a} t!^{\prime} A l a \vec{a} k^{e}$
(dim. in form)

| maqsin ${ }^{\text {a }}$ nose | I. | I b. | $m \hat{e}^{\prime} m a q s \hat{i}{ }^{\text {i }}$ n |
| :---: | :---: | :---: | :---: |
| $k w a ’ a m ~ c o i l e d ~$ |  |  |  |
| storage basket | dit. | IV. | $k w \hat{e}^{\prime} \mathrm{e} k w \mathrm{i}^{\prime} \hat{\mathrm{m}}{ }^{\prime}$ |
| $q$ !wát $A m$ river | dit. | xv | $q!w \hat{e}^{\prime} \mathrm{e} q$ ! wat ${ }^{\text {¢ }}$ ' |
| tix $\chi^{4}$ sat tongue | II b . | xxvia. | $t e^{\prime} t x^{u} s a l$ |

tîx ${ }^{u}$ sat tongue II b. xxvi a. têe $t x^{\prime}$ sal

Sub-type IV d. Reduplicating vowel of diminutive changed to $\hat{e}$; stem further modified by diminutive features 5 a and 3 c :$q!w_{A}^{\prime}{ }^{\prime} i x$ wood plur. I. dim. xxxa. dim. plur. $q!w \hat{e}^{\prime} q!$ wadjı̂x

Sub-type IV e. Reduplicating vowel of diminutive changed to $\hat{e}$; stem further modified by diminutive feature 5 b :-

| sats! ${ }_{A} m$ tyee sal- | II a. | XxII a. |
| :---: | :---: | :---: |
| mon |  | $s \hat{e}^{\prime} c^{c}$ |

Type V. Redüplicating Syllable: cê; followed by plural of simplex modified by diminutive features 5 a and 3 a :-
t! $\hat{e}^{\prime} e^{\prime} d \hat{e}^{e} q w a i$ salmon- plur. II a. dim. xxvi c. dim. plur. berry bush
$t!e e^{\prime} t{ }^{\prime}{ }_{A n t}{ }^{\prime}{ }_{A n}{ }^{\prime} q w a \bar{a} i$ (- $\hat{e}^{e}$ - is lost, cf. diminutive feature 5 b)
sósin mouth II b. xxvia. sê'sossin ${ }^{*}$

## VI. MISCELLANEOUS LINGUISTIC MATERIAL.

## Numerals.

| 1. $p a^{\prime} a$ | $\delta p^{\cdot} \bar{a} n h a i k^{*} p d^{\prime}{ }^{\prime}$ |  |
| :---: | :---: | :---: |
| 2. sáa | 20. simcyáa | 200. s ${ }^{\prime} m$ m ${ }^{\text {c }}$ c |
| 3. tcatas | 30. tcanaux ${ }^{4} c y{ }^{\prime}{ }^{\prime} a$ | 300. tcta'adag ${ }^{\text {vid }}$ c |
| 4. $m \bar{o} s$ | 40. mosatcya'a |  |
| 5. sityätcis | 50. séyats!atcyā'a | 500. sẹatsà'ag ${ }^{\text {vitu }}$ |
| 6. t!áxam (or-ab) | 60. t!áxamalcyä'a | 600. t'axamáagust |
| 7. $t s!\delta^{\prime}{ }^{\prime} t c i^{i}{ }^{\text {i }}$ | 70. ts! $\overline{\text { ctci'alcy }{ }^{\prime} \text { 'a }}$ |  |
| 8. ta'atczis | 80. tă'atcisalcyt'a |  |
| 9. $t i g^{u} \underline{i d}^{4} x^{u}$ | 90. tig ${ }^{\prime}$ ¢ $\times$ walcy $\chi^{\prime}$ a | 900. tiguixwa'aguêtc |
| 10. $\delta p{ }^{\wedge} \bar{a} n$ | 100. t's $\widehat{a}^{\prime}$ \} | 1000. t'sa'aguţtc |



Numerals with classifying suffixes，referring to class of objects counted，are：－

|  | People | Canoes | Fathoms | Houses | Dollars |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | pípàa． |  | $n a t c^{\prime} d^{v} \boldsymbol{f}^{u} t a \hat{l}$ | natc＇ăさwátau | pagios |
| 2 | siscàa | sabagvil | sìmtāl | sa＇abautx ${ }^{\text {u }}$ | sag ps |
| 3 | tcalay | tcada $\bar{a}^{\text {a }} \nu_{l} l$ | tcàda゙ァで何 | tcdadautfu | tcalasos |
| 4 | mosäy |  | mossibltà | mosautix | mósps |
| 5 | sȩ̂yatsàyı | sityatsüagul | －sçyatsaltal | sȩyatsautr＊ | styatsps． |
| 6 | t！axamàyz |  |  |  |  |
| 7 |  |  |  |  | － |
| 8. | ta＇alczsăyz |  |  |  |  |
| 9 | tigul ruayt |  |  |  |  |
| 10 | jopānōyı | － |  |  |  |

The series for＂dollars＂refers，properly speaking，to round objects，including such objects as heads and turnips．

Body－part suffixes．Examples of body－part＂substanti－ vals，＂as they have been termed by Boas，which occur only in composition（better perhaps derivation），are：－

```
head: páq \(\cdot \bar{e}^{e} q^{x} w a n^{\bullet}\) white-headed
    tcix \(\cdot \bar{e}^{e} q^{x} w a n^{2}\) red-headed
        (or \(-a d^{4}\) )
hand: páq \({ }^{\circ}{ }^{\prime} u d j a^{*}\) white-handed
    tcix \(x \bar{o}^{-} u d j a^{\bullet}\) red-handed
eye: \(\quad p a ́ q \cdot a ̣ o s\) white-eyed
    páq\({ }^{\circ} p a q^{\circ} \bar{a} o s\) white-eyed (plur.; refers to several persons
        or to two eyes of one person)
    tcixāos red-eyed
    tcíxtcixāos red-eyed (plur.)
nose: ts! \(\ddagger t s!\bar{e}{ }^{-} m i q^{\circ}{ }^{\text {a }}\) red-nosed
    páq \(q^{\cdot} \bar{e}^{\prime} q^{\prime} q^{\prime u}\) white-nosed
    \(t!a ́ t t^{\top} t s!\bar{a}^{\prime a} m i q^{\cdot{ }^{\text {a }}}\) nose bleeds
foot: paqicin \({ }^{2}\) white-footed
    páq\(q^{\circ}\) paq \(^{\circ}\) cin \(^{2}\) white-footed (plur.)
```

With these contrast independent use of＂ear＂in páq＂paq＂ $q!o a ' a \bar{a} d a$＂white ears．＂

Possessive and subjective pronouns. Only very fragmentary data were secured on Comox pronouns. I do not consider them as particularly reliable.
tatsı mọ'ọs my head
$t_{A} n$ mọ' ọs your head
$t_{A}$ mọ' ọss his head (visible)
ku móoss his head (invisible)
$t_{A} m s i$ mọ’’̣s our heads
$t_{A}$ mọ’osap ${ }^{\text {a }}$ your (plur.) heads (visible)
ku mọ́ọsap ${ }^{\text {. }}$ your (plur.) heads (invisible)
$t_{\Lambda}$ and $k_{v}$ are articles implying visibility and invisibility respectively. Possessive pronouns modifying verb subjects are:-
'á tsi mọ' ọ my head is sore (' ${ }^{a}$ to be sore)
' $a^{\prime} t_{A} n$ mợ' $o s, y o u r ~ h e a d ~ i s ~ s o r e ~$
' ${ }^{\prime}$ ' $t_{A}$ mọóoss his head is sore
' $d t_{A}$ mọ' ọss $t_{A}$ sallt'u the woman has headache (literally, sore the her-head the woman)

Possessive pronouns modifying verb objects are:-
$t c^{`} k!\dot{u} d_{\mathrm{d}}$ wad tsi mọ’’os I see my head
tčk!údaxwad das mộ’os I see your head
$t c^{\prime} k!u ́ d d_{A} x w a d d_{A}$ mọ'ọs I see his head
tc'k!údaxwad das tccitcāyac I see your hands
$t c^{`} k!\dot{u} d_{A x w a d ~}^{d A}$ tcíttcāyacs I see his hands

Subjective pronominal suffixes are:-
tîtc tō'mic I am a big man ( $t \grave{\imath} \mathrm{big}$ )
$t \tau^{+} a t c^{*}{ }^{\prime \prime} t o{ }^{\prime} m i c$ you are a big man
$t i{ }^{\bullet} a t o ̄ ' m i c$ he is a big man
$t \hat{\imath}^{*} a d j a n$ sält ${ }^{*} \mathrm{I}$ am a big woman
$t^{t i} a d j a u x^{u}$ saltt ${ }^{t u}$ you are a big woman

## VII. ${ }^{\text {COMPARATIVE NOTES ON SALISH NOUN }}$ REDUPLICATION.

This is not the place to enter into anything like a systematic comparative treatment of Salish reduplication, the more so as the phonetics of most of the material available for comparison are not such as to allow one to make definitive classifications of plural and diminutive types (this remark applies particularly to vocalic quantity and glottal stops, both of which, as we have seen, are important for our present purpose). Certain facts of a comparative nature, however, come out quite clearly and may be briefly noted here.

Plural reduplication. It is evident that all Salish languages make use, like Comox, of different types of plural reduplication. Both types I and II are plentifully illustrated and are without doubt the fundamental Salish processes. Examples of type I are:-

| Bella Coola | $s$-tn tree | plur. $s$ - tntn $^{1}$ ( $s-$, as often in Salish, is prefix) |
| :---: | :---: | :---: |
| Tcil'Qéuk (Cowichan gro | $s-k w o m a ́ i ~ d o g$ | $s$-kwomkwomáa ${ }^{2}$ |
| Shuswap | $s k * a q a ~ d o g$ | $s-k \cdot a q k \cdot a q a^{3}$ |
|  | nóqonuq woman | noqnбqonuq ${ }^{3}$ |
| Okanagan | $s-k^{*}$ Elteméq man | s-k'Elk Elteméd ${ }^{4}$ |
| Thompson River mountain | $s-k \cdot u m$ | $s-k \cdot u m k \cdot u m^{5}$ |
|  | $s-n u ́ k o a ~ f r i e n d ~$ | s-nukenúkoas |
|  | $s-k \delta u m$ crumpled | $s$-kōumkбиm ${ }^{5}$ |

Nanaimo
$s-p a l$ raven
$s$-talo river
$s-p_{\text {elp }} \hat{a}^{\prime} l^{6}$
$s$-teltá ${ }^{\prime} \bar{o}^{6}$

[^6]| Shuswap | $s-k a p k k^{*} n^{\text {b }}$ head p | . $s-k^{*}$ epkápqen $n^{1}$ (probably misprint for $-k E p k a ́ p k{ }^{\circ}$ en) |
| :---: | :---: | :---: |
|  | k'esst bad | $k y^{\prime}$ Eskēst ${ }^{1}$ (probably misprint for $-k ' e \bar{e} s t)$ |
| Okanagan | -s-kēle Indian | $s-k \cdot E l k \cdot ¢ \backslash Q^{2}$ |
| Thompson River | cấEnQ stone | cencàmen ${ }^{3}$ |
|  | $s$-pam camp fire | s-pempám ${ }^{3}$ |
|  | $s$-nikiáp coyote | $s$-niknikiaip ${ }^{3} \quad(-\hat{\imath}-\quad$ is very open and short, |
|  | " | $-i$ is close and equivalent to our - $-i$-; hence type inb) |
|  | $s$-quasit to walk | $s$-qusquasit ${ }^{3}$ (type II c) |

An interesting Thompson River example of type II is:ciráp tree cipciráp ${ }^{3}$
An example of type III (reduplicating $-A w$ - contracted to -oor $-\bar{o}-$ ), but with retained $-w$ - (Comox $-g^{y_{-}}$) is:-

Okanagan tetuwét boy - totuit ${ }^{4}$ (based on unreduplicated form of simplex ; final vowel of stem apparently shortened)

This example follows type III b. As illustrating diversity of usage in the treatment of the same stem in different Salish languages, compare with this:-

Lower Lillooet $\quad t u^{\prime} \hat{u}^{u} w u t^{\prime}$ boy tutu', $\hat{u}^{\prime \prime} w u t^{5}(-u$ - is short and close)

This follows type III a, besides which the stem itself seems to differ markedly in regard to vocalic quantity and rhythm from the cognate Okanagan stem. Shuswap agrees better with Okanagan:-
tūuéut boy tūtuwêut ${ }^{6}$

[^7]It would seem that type VII, which is only sporadically represented in Comox, is more typically developed in Interior Salish. Examples are:-

| Shuswap | tsite house シ, | plur. sitsite $^{1}$ |
| :---: | :---: | :---: |
|  | gietia old woman | gigiêia ${ }^{1}$ |
| Thompson River | tcite house | tcitcitte ${ }^{2}$ |
|  | $s$-tsuk picture | $s-t s u t s u k^{-2}$ |
|  | $s-k \cdot t k^{\prime} q a \operatorname{dog}$ | $s-k \cdot{ }^{\circ} \cdot \underline{a} k \cdot q a^{2}$ |
|  | s-pezuzō bird | $s-p e p e z u ́ z \bar{o}^{2}$ (this form, |
|  | - | however, may really |
|  |  | be diminutive plural, |
|  |  | $s$-pezúzō being dimin- |
|  |  | utive, with final re duplication, of $s-p E z \sigma$ |
|  |  | "animal," whose plu |
|  |  | ral is normally form |
|  |  | ed: s-pezpezzo ${ }^{2}$ type I |


| Lower Lillooet | s-kikeláqoa musk- |  |
| :---: | :---: | :---: |
|  | rat |  |
|  | $t c^{2} t^{\prime \prime} x$ house | $t$ citcit ${ }^{\text {c }}$ u $x^{3}$ |
|  | $\dot{q} 0^{\prime}$ ? water | qơq $\bar{o}^{\circ}$ o3 |
| Note also:- |  |  |
| Nanaimo | k•ünes whale <br> (i.e. qúnes) | köluinis ${ }^{4}$ (probably misprint for -k.uinis) |

It is interesting to contrast with this plural (qōquinis in our orthography) Comox $q w_{A} d^{\prime} q w_{i} d_{\hat{\imath}}{ }^{i}$ s humpbacked whales ( $<q w_{A n}$ $\left.q w^{n} n \imath \imath s\right)$ of type I. Here again we see the tendency for different Salish languages to form the plural of the same stem according to different types.

Type IX also is illustrated outside of Comox. Examples are:-
Nanaimo

Tcil'Qéuk méla son - matmela ${ }^{5}$

[^8]Type X is illustrated in:-
Nanaimo $k^{*} \dot{a} k^{\circ} E n$ post plur. $k^{*} \hat{a} l a k^{*} E n^{1}$ ( $\vec{a}$ is apparently our $\hat{e}$ )
The last example, with its inserted -la-, shows also another method of plural formation, one not found, at least as far as can be judged from available material, in Comox. Other examples of this inserted -l(a)- are:-

| Nanaimo | ha'pet deer | halá ${ }^{\prime}$ Et $^{2}$ (type IX) |
| :---: | :---: | :---: |
|  | tcitciek: an mink | tciletcíek:an ${ }^{2}$ (type VII) |
|  | spákiem flower | spâlak: ${ }^{\text {m }}{ }^{1}$ |
| Tcil'Qéuk | $k^{\prime} a^{\prime} m i$ maid |  |
|  | stekêyū horse | stelckey ${ }^{3}$ |
|  | yásuk hat | $y \bar{a} l s u h^{3}$ |

There seem to be still other types of plural formation in Salish that are not represented in the Comox material given in this paper. One of these is to prefix -A- (Boas and Hill-Tout write $-E-$ ), which may be palatalized to $-i-$, to the stem. Examples of this type are:-

| Nanaimo |  | s-Eméyeç ${ }^{\text {a }}$ |
| :---: | :---: | :---: |
| Tcil'qéuk | $s-w \varepsilon_{E k a} \mathrm{man}$ | $s$-īwéeka ${ }^{3}$ (-A- palata- |
|  |  | lized to $-i-,-\bar{i}-$ by $s-$ ? |

This type is perhaps a reduced form of another one that occurs with some frequency, reduplication with ca-. Examples are:-

| Tcil'Qếuk | lálem house | $l_{\text {lelăle }}{ }^{3}$ |
| :---: | :---: | :---: |
|  | $s$-mält stone | s-memált |
| Shuswap | la good | lela ${ }^{\text {a }}$ |

Nanaimo lalálem "houses," as compared with Tcil'Qéuk lelálem, suggests, in turn, that ca-reduplication is reduced from ca-reduplication (type IX). Tcil'qéuk yesìàm "chiefs" ${ }^{\text {a }}$ from siám may be dissimilated from *sesĭitm (or does $y$-reduplicate $-\bar{\imath}$ - of stem?). Vocalic changes ( $\bar{e}$ to $\bar{o}$ and $\bar{a}$ ) are illustrated in:-
Tcil'Qéuk $s$-wē $E k$ tetl boy wōEkatl ${ }^{3}$

[^9]$s$-wéwilus youth $s$-wáwilus ${ }^{1}$ (this may be considered, however, as formed from unreduplicated simplex according to Type IX)
With the latter example compare Comox wê' wälos "young men" from wé'wālos.

To sum up, it is clear that there are a number of wide-spread Salish methods of forming the plural, which may, however, at last analysis turn out to be capable of reduction to Type I (of which Type II may be a reduced form). It is conceivable that sub-types, which have developed in particular cases from this by secondary phonetic processes (cf., e.g., Comox Types III and VIII), set the pace for new purely analogical, not etymologically justifiable, forms, so that now any one Salish language exhibits great irregularity. Certain of these secondary types seem to be favoured in one language, others in another, so that, as we have seen, the same stem is sometimes differently treated in different languages. To unravel the history of reduplicated (and other) plurals in Salish, however, requires a far more abundant body of material, for purposes of comparison, than has as yet been made accessible.

Diminutive reduplication. The last remark applies even more forcibly to the study of Salish diminutive formations, for here there is a still greater variety of types represented. Available comparative data are quite scanty, so that only a few points can here be referred to. The most consistently carried out difference between plural and diminutive reduplication in Salish is that in the former the first two consonants of the stem (though not infrequently only the first) are reduplicated, while in the latter only the first is reduplicated, never also the second. At the same time there is a marked tendency, as in so many Comox examples, for vocalic reduction of the stem. Reduplication with $\bar{e}$ - vowel seems also characteristic of many forms; also breaking of stem vowel and umlaut of $a$ to $e$ or $\bar{e}$ seem to be found.

Some of the types represented, outside of Comox, are:-

[^10]Type $X$.
Nanaimo - lálemh house diminutive lêlem ${ }^{1}$ (based on unreduplicated simplex)
Okanagan
н ${ }^{\text {U. }} \boldsymbol{H}$ ōtem little girl $^{2}$
( $H=\operatorname{our} x^{y}$ )
Type XII.
Nanaimo wúqas frog uéwēqas ${ }^{3}$
Type XIX a.
Nanaimo $\quad k^{\prime} \not k^{*} E n$ post $\quad k^{\prime} \cdot k^{\prime} k^{*} \cdot n^{3}$
Type XXI a.
Shuswap pasitlkua lake papsitliua ${ }^{4}$
Thompson River $s$-núkoa friend nünkoa ${ }^{7}$
Type XXIII.
Tcil'Qêuk . s-tâlō river s-tâtelō ${ }^{5}$
Nanaimo $s-t^{\prime} \hat{a}^{\prime} l o$ river $s-t \hat{t} t E l{ }_{0}{ }^{6}$
Type XXVIa.
Nanaimo $s-p a d k^{\prime} E m$ flower $s-p a j p k^{\prime} E m^{6}$
Comparable perhaps to Comox Type XXX a is:-
Thompson River s-pêếtc
$s-p a p a a t s^{7}\left(-a a-=-a^{\prime} a-\right.$
black bear ( $\hat{e}=$ our $e$ )
?)
Other diminutive types than those listed for Comox undoubtedly exist in Salish. Among these is reduplication with CA- (cf. plural types above), as examples of which may be given:Thompson River c-méits deer Tcil'Qéuk lálem house
$c-m E ́ m e ̄ i t s^{8}$
lelim ${ }^{9}$ (based on unreduplicated form of simplex; change of $-E$ - to -ä- is perhaps parallel to that of Comox -A- to - $\hat{-}$-)

[^11]50138-6

Similar apparently to Comox type VII(but without diminutive feature 2a), except for its incomplete reduplication (loss of reduplicating consonant after s-, cf. plural types above), is:-

$$
\text { Tcil'Qêuk } \quad s \text {-malt stone } \quad \text { diminutive } s \text {-emelét }{ }^{1}
$$

Reduplicating with cř-, and with breaking of stem-vowel, is:-
Thompson River kes bad kekees- $t^{2}\left(?=-k A^{\prime} A s\right)$
This type may well exist in Comox, but not happen to be represented in the material collected. Such diminutive forms as Thompson River qEzúzum ${ }^{1}$, with interior reduplication, from $q z u ́ m$ " "large," and Thompson River speyúzu", with change of $-z-$ to $-y$-, from spezúzu "bird," are evidently representatives, of very specialized types. Neither of these, so far as known, has a Comox counterpart.

Judging from the analogy of Comox and from a few Interior Salish forms obtained by the writer, it seems very likely that glottal stops are frequently employed in Salish as diminutivizing elements, though this is not apparent from most of the material that has been published. Examples are:-

Upper Lillooet ${ }^{3}$ s-mútätc woman $s E-$ m'Ém'tetc girl $^{\text {g }}$

## Thompson River ${ }^{4} c$-múlätc woman $c$-mû'm'tätc

(type XXVIa)
Comparative data on diminutive plurals are too scanty to enable us to gather much of interest. Some Interior Salish forms obtained by the writer seem to indicate quite clearly that in those languages the diminutive plural is not, as in Comox, a diminutivized plural, but a pluralized diminutive; in other words, of the two reduplicating syllables, the first contains the first two consonants of the stem (plural type), the second syllable the first consonant only (diminutive type). Examples are:-

Upper Lillooet plur. s-mulmû'fätc dim. se-m'Ém'letc girl


[^12]
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This difference of treatment again indicates that in many respects each dialectic division of Salish has gone its own way in the use of morphologic features common to Salish generally.


[^0]:    ${ }^{1}$ See F. Boas, First General Report on the Indians of British Columbia, Report B. A. A. S., 1889, 5 th Report on North-Western Tribes of Canada, p. 10.

[^1]:    ${ }^{1}$ Boas uses $\&$ (interdental spirant, like th of English thick) in certain words for our s. See his Gatloltq vocabulary, Report B.A.A.S., 1890, 6 th Report on N.W. Tribes, pp. 141-163. I do not know if Tommy Bill's failure to use this sound is an individual peculiarity or not.
    ${ }^{2}$ F. Boas, Introduction, Handbook of American Indian Languages, Bulletin 40, Bureau of American Ethnology, 1911, p. 22.
    ${ }^{3}$ ibid., p. 17.

[^2]:    ${ }^{1}$ See C. Hill-Tout, Ethnological Studies of the Mainland Halkömelem, a division of the Salush of Britsh Columbia, Report of British Association for the Advancement of Science. 1902, Ethnological Survey of Canada, p. 65.
    ${ }^{2}$ See F. Boas, Kwakzutl, Handbook of American Indian Languages, Bulletin 40, Bureau of American Ethnology, 1911, p. 447.
    ${ }^{3}$ C. Hill-Tout, sbd., p. 64.
    ${ }^{4}$ F. Boas, Comparative Vocabulary of Eighteen Languages spoken in British Columbia, Report of British Association for the Advancement of Science, 1890, 6th Report on the Northwestern Tribes of Canada, p. 148.
    ${ }_{5}{ }^{\text {C. }}$. Hill-Tout, Ethnological Studies of the Mainland Halkömelem, a division of the Salish of British Columbia, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 86.
    ${ }^{\circ} \mathrm{F}$. Boas, Comparative Vocabulary of Eiohteen Lanouages spoken in British Columbia, Report of British Association for the Advancement of Science, 1890, 6th Report on the Northuestern Tribes of Canada, p. 147

[^3]:    ${ }^{1}$ In these formula c represents first consonant of stem, v first vowel, $\mathrm{c}_{1}$ second consonant of stem, vi second vowel, and so on. F represents any long vowel, vany shortened vowel.

[^4]:    ${ }^{1}$ Formed from qualabas "wooden ball covered with spruce-roots." There were two sides in the game, with the same number on each. Each side had a goal consisting of a hittle pit, which was guarded by one man. All but the two guards gathered in the centre. One man threw up the wooden ball and everyone tried to catch it, run with it to the goal of the opponents, and put it into the pit. Those of the other side tried to take the ball away from the one that had it. The side that first made ten goals won the game. After four goals had been made, the game was suspended for a while and a general free-for-all fight took place.

[^5]:    ${ }^{1}$ C. Hill-Tout, Ethnological Studies of the Mainland Halkömélem, a division of the Salish of British Columbia, Report of Britısh Association for the Advancement of Science, 1902, Ethnolecical Survey of Canada, p. 89.

[^6]:    ${ }^{1}$ F. Boas, The Salish Lanouages of British Columbia. Report of British Association for the Advancement of Science, 1890, 6th Report on the Northwestern Tribes of Canada, p. 127.
    ${ }^{2}$ C. Hill-Tout, Report of British Association for the Advancement of Science, 1902, Report on the Ethnological Survey of Canada, p. 20.
    ${ }^{2} F$. Boas, ibid., p. 131. $k^{*}$ is here and in other forms equivalent to our $a$; $q$ to our $x$; Q to our $x$; $t l$ to our ( (and $L$ ); $t k$ ' to our $2 l$.

    4 Ibrd., p. 135.
    ${ }^{8} \mathrm{~F}$. Boas, Report of British Association for the Advancement of Science, 1898, 12th and Final Report on the Northwestern Tribes of Canada, p. 28.

    6 F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.

[^7]:    ${ }^{2}$ Ibud., p 131.
    ${ }^{2}$ Ibrd., p 135
    ${ }^{3}$ F. Boas, Report B.A.A.S , 12th Report on N.W. Tribes, p. 28
    ${ }^{4}$ F. Boas, Report B A.A S., ith Report on N.W. Tribes, p. 135.
    Some Lower Lillooet hinguistic material was obtaned in January, 1012, from I nace Jacob (Indian name $Y_{2 s p}$ ).
    ${ }^{6}$ F. Boas, sbud, p. 131.

[^8]:    ${ }^{1}$ ilid, p. 131.
    ${ }^{2}$ F. Boas, Report B.A.A.S., 12 Report on N.W. Tribes, p. 28.
    ${ }^{3}$ Obtaned from Iqnace Jacob
    4 F. Boas. Report B.A.A.S., fith Report on N.W. Tribes, p. 129
    ${ }^{5}$ C. Hill-Tout, Report B A.A.S., 1902, Ethnological Survey of Canada, p. 20.

[^9]:    F. Boas, Report B.A.A.S., 6th Report on N W. Tribes, p. 129.
    : shid.. p 128 .
    ${ }^{3}$ C. Hill-Tout, Report B.A.A S, 1902, Ethnoloxical Survey of Canada, p. 20.
    4 F Boas, Report B.A.A.S, Gth Report on N W. Tribec, p. 128.
    5 Ibsd , p. 131.

[^10]:    ${ }^{1}$ C. Hill-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20

[^11]:    ${ }^{1}$ F. Boas. Report B A A.S. 6th Report on N W. Tribes, p 129.
    2 C. Hill-Tout, Report on the Ethnology of the Okandk' ên of British Columbia, Journal of the Royal Anthropological Institute of Great Britain and Ireland, vol. xu, 1911, p. 143.
    ${ }^{3}$ F. Boas, ibid.
    ${ }^{4}$ Boas, ibid., p. 131.
    C. Hill-Tout, Report B.A.A.S., 1002 ,Ethnological Survey of Canada, p 20.

    6 Boas, ibid., p. 129.
    ${ }_{8}^{7}$ Boas, Report B.A.A.S., 12th Report on N.W. Tribes, p. 29.
    ${ }^{8}$ Boas, $2 b \mathrm{~d}$.
    9 Hill-Tout, ibrd.

[^12]:    ${ }^{1}$ Hill-Tout, ibid.
    ${ }_{3}^{2}$ Boas, tbyd.
    ${ }^{3}$ Upper Lillooet forms were obtained in January, 1912, from Chief Jim (Indian name Aidél ${ }^{1}$ sq!i). E has here been used to indicate very short obscure vowel of undefined quality

    4Some Thompson River forms were obtained in January, 1912, from Chief Tetlenitsa.

