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## GEOLOGICAL SURVEY

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## Abnormal Types of Speech in Nootka

By
E. Sapir

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# Noun Reduplication in Comox, 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!ómox"s), with which $x!\frac{6}{h} \rho \rho s$, spoken on the mainland of British Columbia, was stated to be identical. Stazolt" 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." ${ }^{1}$ Boas adds, "The Çatloltq are called K'omoks by the Lékwiltok'" (southernmost Kwakiutl tribe.)

The informant was Tommy Bill, an Indian of mixed blood, whose father belongs to the Tssica'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 Höpatc!as'atH ${ }^{\text {a }}$ 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); $a$ (as in English bat); $e$ (short and open as in English met); $e$ (short and close as in French éte); $i$ (short and open as in English bit); $i$ (short and close as in French fini); o (short and open as in German dort);

[^0]$\circ$ (short and close as in French beau); and $u$ (short and open as in English put). 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 $\ell$ ) tend to palatalize $i$ to $i$. $e$ and $o$, which latter does not occur often, are doubtless etymologically related to $e$ and $o$ respectively, but seem in every case to be clearly kept distinct from these. $\vec{a}$ 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: $\bar{a}$ (as in German Bahn); $\hat{e}$ (long and open as in French mère, or as in English bear, but without "r-vanish"); ē (long and close as in German See); $\hat{\imath}$ (long and open as in English beer, but without "r-vanish"); $\bar{\imath}$ (long and close as in English see); $\bar{o}$ (long and close as in English roll, or as in German Sohn) ; $\hat{0}$ (long and open as in English born, but without "r-vanish"); $\bar{u}$ (long and close as in English rule); and $\hat{u}$ (long and open as in English poor, but without "r-vanish"). Similarly to the corresponding short vowels, and under parallel phonetic circumstances, $\bar{e}, \hat{\imath}$, and $\bar{\imath}$ are variants of one sound, etymologically speaking, though $\hat{\imath}$ is often to be interpreted as lengthened form of inorganic vowels, in which case it does not seem to vary with $\bar{e}$ and $\bar{\imath} ; \bar{o}, u$, and $\bar{u}$ are likewise representatives of what is etymologically a single sound. $\hat{o}$ does not often occur; it is probably etymologically related to $\bar{o}$. है occurs often and cannot be considered a mere variant of $\bar{e}$.

As not infrequently happens in American Indian languages, the long vowels 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: $\bar{a}^{a} ; \quad \hat{e}^{a} ; \quad \bar{e}^{e} ; \quad \bar{e}^{i}$ (occurs before anterior palatal consonants); $\hat{\imath}^{i} ; \bar{\imath}^{i}$; $\hat{\imath}^{e}$ (occurs before velar consonants); $\bar{o}^{\circ}$ 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 $i^{e}$ (here the ${ }^{\circ}$ 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 $\hat{u}^{u} m \hat{\imath}^{u} x^{u}$ "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 ? can just as well be morphologically dispensed with and phonetically explained as a timbre-echo of $-\bar{\partial} t$ ); ${ }^{A}$ in qé' $w^{A} x$ "steel-head salmon" (that ${ }^{A}$ is organic, despite its dull quality and extreme brevity, and reduced from $a$, is indicated by Nootka qé'waH "steel-head salmon," with which Comox $q e^{\prime} w^{A} x$ is evidently identical; borrowing has doubtless taken place); "and a in hẹ́w ${ }^{A} q e ̣ n^{*}$ "swan" and its diminutive $h e w^{a} q A d \bar{A} t$.

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 $a^{\prime a}, e^{\prime i}, \hat{\imath}^{\prime i}, a i^{\prime i}, \hat{o}^{\prime o}, \hat{o}^{\prime o}$; 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 $\bar{a}^{\prime i}$ ).

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
 "porpoise." In $7 a^{a} g^{y}$ êt! " "herring" the $t$ ! was heard with definite $a$-timbre despite preceding ê. After $u$ (o)-vowels syllabically final $k$-sounds are regularly followed by echoes (aspirations when consonant is not glottalized) with $u$-timbre. Hence $k^{0} u$, $k!^{\prime u}, x^{u}, q^{\text {eu }}, q^{\prime u}$, and $x^{u}$ (see below for orthography of $k$-sounds). These sounds, however, are also very frequent after unrounded vowels, as in $l a^{a} d a k$ "u "skin;" in such cases they represent original labialized $k$-sounds (see below). Aspiration with definite $u$-timbre is also found after $t$, as in salttu "woman."

Excluding such inorganic diphthongs as are formed by vowels and following glides (e.g., $\hat{r}^{*}$ ), there have been found as true short diphthongs $a i$, $a u$ (also $A u$ ), äi, ei, and long diphthongs $\bar{a} \dot{\imath}, \bar{a} u$. 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 ${ }^{\frac{1}{2}}$

|  | VorcsLess 8TOP6 | Glottalized STOPS | Voxced sTOPs | Nabals | $\left\lvert\, \begin{gathered} \text { VoICE- } \\ \text { LEBS } \\ \text { SPIRANTS } \end{gathered}\right.$ | Vorced griranta |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Laryngeal (alottal).. | , |  |  |  | h | ........ |
| Velab..... | $q$ | a! |  |  | $x$ | ........ |
| Labialiem telar. | $q w$ | q!o |  |  | $x w$ |  |
| Gutrural. | $k$ | $k$ ! |  |  | $\pm$ | ........ |
| Lablalred guttural. | kw | k/w |  |  | xw | ........ |
|  | ${ }^{k}{ }^{\prime \prime}$ | kvl | $g^{2}$ |  | $x$ | $\nu$ |
| Dorsal lateral | ${ }^{2}$ | L! | $\begin{gathered} l \\ \text { (voieed } \\ \text { contin) } \\ \text { ustit } \end{gathered}$ |  | $l$ | ........ |
| Palaral grbilant | $t c$ | tet | ${ }^{\text {dj}}$ |  | $c$ | ....... |
| Aivrolar bibilant. | ${ }_{8}$ | ts! |  |  | $8^{1}$ |  |
| Altrolar | $t$ | t! | (d) | $n$ |  |  |
| Labial.. | $p$ | $p$ ! | (b) | m |  | ${ }^{0}$ |

c is pronounced like sh of English ship; $x^{y}$ like ch of German ich. tc, tc!, dj (like $j$ of English $j a m$ ), ts, and ts! are afficatives (stop plus corresponding spirant; no simple stops correspond to $t c$-series). $x$ and $L$ ! are also affricatives, but with lateral (voiceless spirant $l$ ) release.
$b$ and $d$ are phonetic variants of $m$ and $n ; b$ 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 $\left.p^{2}, t^{2}, k^{i}, k v^{u}, q^{2}, t c^{c}\right) ; k w$ and $q w$ become $k^{{ }^{\prime} w}$ and $q^{{ }^{\prime} u}$, that is, their aspiration-release has $u$-timbre; similarly, $k!w$ and $q!w$ in this position become $k!^{u}$ and $q!^{u}$. $q$, it may be noted, is often released into a weak spirant glide $x$ (written ${ }^{*}$ ) 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 ( $-a^{a}$ and similarly for other vowels, $m^{*}$ or less often $b^{*}, n^{i}$ or less often $d^{*}$ ), 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 $n$ ' (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 $q^{*}, d^{*}$ ).
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 $x$ áucine "bone" is found $x e^{e x} x i g^{v} i c i n{ }^{2}$ $<^{*} x e x a w i c i n^{2}\left(-A g^{y}\right.$ - becomes $-i g^{y}$-, as noted above). Similarly, from $q e^{e} w^{A} x$ "steel-head salmon" is formed qế $q e g^{y} e^{e} x$ "little steelhead salmon" and qeéquaqq"a $g^{y} \hat{e}^{e} x$ "little steel-head salmon (plur.)." This phonetic law explains a class of plurals, formed by reduplicating with o- vowel, derived from stems in internal $-g^{v}$-. Thus, from t!égyem (<*t!éwem) "sun, moon" is formed plur. t!ôut!egy ${ }^{y}$ em ( $<^{*} t$ ! 1 wt!ewem); other examples will be given in their proper place. So also is explained suffix $-\bar{a} g^{v} i t$
 "five canoes", as compared with - $\bar{\alpha} u t$ in mossāut "four canoes;" $-\bar{a} g^{y} i t$ is evidently from *-awit (cf. Kwântlen, of Cowichan group of Coast Salish, -aQitl "canoe" in numerals,' i.e., -axwit; perhaps cf. Comox nexwit "canoe"). An interesting test case is $q^{t} e^{i} g^{\nu} a s$ "deer," doubtless a loanword from Kwakiutl (cf. Kwakiutl gewas "deer"2). Another such test case is afforded by Comox tígịiuxu "nine" < "tíwaxu or *tíwuxu" (cf. Kwántlen $t \bar{u} q$ "nine," ${ }^{\text {i.e., } t \bar{u} x}$ or $t \bar{u} x$, contracted from *tuwux). Compare also Comox hêigy $̣$ "chief" with Pentlatc and Siciatl héwus". On the other hand a number of words have been found with wo between vowels. Such are ts!ats!twicin' 'hail," xwa'awîit' "fire," and 'áwāke'u "tobacco." It is not clear how this -w- is related to $-w->-g^{\nu}-$.

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;'" with Comox djícin" "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 $\quad x^{\delta} \delta p^{a} x o \bar{p} p^{2}$ humming-bird


$q e^{\prime} n^{\prime} q e n^{\prime \prime}$ duck quti $q w \tilde{i}^{2}$ sea-gull
"Duck" and "sea-gull" have both syllables with vowels alike in quality but with short vowel in the second.

## Type II. Completely Reduplicating with ê.

tê'tolol' 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: cvc $_{1}{ }^{1}{ }^{1}$
titctitcti'cowl kwa'kwd'a djo ${ }^{\circ}$ grey squirrel
$t!\Delta q^{\prime} t!\hat{A} q \bar{a} i \overline{d o g}-\mathrm{wood}$

Type IV. Reduplicating Syllable: cē.
$m \hat{c}^{\prime} s$ mau cat $k^{y!}{ }^{\prime} k^{v!}!\bar{a} k^{y!}$ crow
tet'itca.iq salt-water hunter
In "salt-water hunter" reduplicating $t c \bar{\imath}-$ is broken into $t c i=i$-.

[^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.
$q w i^{e} q w d^{a}!{ }^{\prime} \mathrm{A} l \bar{a}^{a}{ }^{9} k^{i}$ butterfly wệwālos young man
(form probably diminutive in).
Possibly also:-
e'ädjam' young woman

Type VI. Reduplicating Syllable: $\mathrm{c} \bar{a}$ or $\mathrm{c} a$.
LáLāpx pocket-knife qwaqumềs marten
$x a x e^{\prime}{ }^{i}$ nit mámstcō'm mink

Type VII. Reduplicating Syllable: cv.
ts!ats!'awicin' hail tc!atc! $a^{a} t!\bar{a} n^{\prime *}$ mouse xwaixwadjó'm fly (word probably diminutive in form). qâ $q^{\top} t \bar{a}^{\prime}$ amas game with wooden ball ${ }^{1}$ qọqowîim' down (of bird)

Type VIII. Reduplicating Syllable: $\mathbf{c} \overline{\mathbf{v}}$.
$q a^{\prime}{ }^{a} q a^{*}$ rush mat $\quad d j a^{\prime} a d j a^{e}$ tree

Type IX. Reduplicating Syllable: cō.
Only one example has been found of this type:tott $x^{u}$ lat 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:$q!\imath \imath q!q!t^{\prime}$ adjê' $u k^{{ }^{\bullet} u}$ butter-ball duck

[^4]Here may also be given:-
$q!a q!$ !ux ${ }^{u}$ big fire (form is augmentative?): cf. q!átix ${ }^{\text {² }}$ 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 less numerously represented types also occur.

Type 1. Reduplicating Syllable: cvc $_{1}$

| t! Akom' beaver | plural t! ${ }^{\text {a }} \mathrm{K}^{\text {Put! }}$ Akom ${ }^{\text {e }}$ |
| :---: | :---: |
| kúmāqiñ sea-lion | kumkúmāqin ${ }^{\text {a }}$ |
| qwad ${ }^{\text {c }}$ ¢ ${ }^{\text {c }}$ humpbacked whale |  |
| $q w a s \mathrm{sm}$ woolly grouse | qwásqwasam |
| $x \delta p^{2} x 0^{2}$ humming-bird | $x \bar{\sigma} p^{2} x \bar{o} p^{2} x \bar{o} p^{2}$ |
| ts!oxô'o codfish | ts! $6 x t s$ ! $0 x \hat{o}^{\prime o}$ |
| L! ${ }_{\text {d }} \times w \bar{a}^{{ }^{i}}$ dog salmon |  |
| sáane cohoe salmon | sa'asa'an' |
| q!wat ${ }^{\text {a }}$ itcin ${ }^{\text {e }}$ humpback salmon |  |
| $x a^{\prime} \bar{a}$ big clam | $x a^{\prime}{ }^{\prime} x a^{\prime} \bar{a}$ |
|  |  |
| $x \pm p \bar{a}^{\prime}{ }^{i}$ red cedar | $x_{A} p^{2} x_{A} p \bar{a}^{\prime}{ }^{\text {i }}$ |
| $q 0^{4} a^{\prime 3}$ hemlock | $q \bar{o}^{u} q \delta^{\prime \prime} a^{\prime}{ }^{\text {i }}$ |
| q!áp!xwai oak | $q!a p!q!t p!e x w a i$ (with lengthening of first stem-vowel; -e- is inorganic) |
| $p!$ 'e'ixāi alder | $p!\bar{e}^{i} p!e^{\prime} i x a \bar{a} i$ (type vini?) |
| $t!e{ }^{\prime}$ 'ibäa wild cherry bush | $t!\bar{e} t$ 'té'ibāi (type viri?) |
| ${ }^{\text {a }}$ áwāk ${ }^{\text {e }}$ u tobacco | 'au'd̄ā̄k'u many bunches of tobacco |
| $q!w s$ 'ix wood | $q!w_{\text {aid }}{ }^{\text {d }}$ A'ix |
| $x a^{\prime}$ a.idate stump | $x a^{\prime a} x a^{\prime}$ a,idatc |


| $m A q s i n{ }^{\text {a }}$ nose | plural maqrmaqsin ${ }^{\text {e }}$ |
| :---: | :---: |
| djicin ${ }^{\text {foot }}$ | djucdjicin． |
| djidis tooth | djiddjidis |
| L！ikuinas heart | L！Ekix！Ikuinas |
| xaucin ${ }^{\text {a }}$ bone | $x$ Auxaucin ${ }^{\text {e }}$ |
| $k^{y} i t$ ！little finger | $k^{\nu}\left\langle t!k^{\nu} i t!\right.$ |
| ts！Åmāla index finger |  |
| $q$ ！wát ${ }^{\text {a }}$ m river | q！wait＇q！wat＇${ }^{\text {am }}$ |
| páxaí creek | páxpaxai |
| L！áqēenac spring |  |
| kúp $\hat{u}^{u} m \hat{\imath}^{u} x^{u}$ hill | kup ${ }^{*} k u ́ p u m \hat{\imath}^{u} x^{\mu}$（with shortening of second stem－vowel） |
| L！áxai old man | u！áxs！axai＇ |
| qA $l^{\circ} q$ ！warrior | qal＇qalq！ |
| L！Ams house | $\underline{L}$＇AmLlams |
| $x$ Asam box | xasxasam |
| $k w a ́ a m$ coiled storage basket | kwa＇akwa＇am |
| L！patit basket bag | $L!_{A} p^{*} x!$ Apātit |
| q！ak＊${ }^{*}$ board | $q!a ̊ k^{*} u!a k{ }^{\text {c }}$ |
| $k^{y}!\hat{\imath} k^{\nu} \bar{a} y u$ oar | $k^{\nu}!i k k^{\nu} k^{\nu}!i k^{\nu} \bar{a} y u$ |
|  | SÁA ${ }^{2} S A q^{\circ} A K^{\text {cu }}$ |
| tiq！${ }^{\text {u }}$ bow |  |
| $t c!⿰ 亻 弋$ ¢ $q \overline{\text { anin }}$ knife |  |
|  | sip！sip！$A m \hat{\imath} \hat{i}^{i} n^{2}$ |
| lAq！$A s$ mountain－goat blanket |  |
| $L!p \hat{\imath} t$ ts $\bar{a}^{9}$ a yellow－cedar |  |
| $q!A s^{\prime} A d \bar{a} i$ buckskin shirt | $q l_{\text {asqlas }}$＇adāi |
| L！áq！acin ${ }^{\prime \prime}$ moccasin | L！aq！ L ！ Aq ！acin ${ }^{\text {R }}$ |
| páq āops white－eyed | páq ${ }^{\text {p }}$ aqāạos |
| tctxāos red－eyed | tcixtcixāos |

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, tc! $e^{\prime} \bar{a} d$ - and $L!\bar{a}^{\prime} a t$ - reduplicate as tc! in- and $u$ ! Al- 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 $i(r)$ (sub-type b), or is labialized by $x w$ to $u$ (sub-type c).

| Sub-type II a. $m i^{x} x a^{t}$ bear | plural maxmie $x a \bar{t}$ |
| :---: | :---: |
| L! $t^{\prime}$ at'o' $m^{2}$ wolf | L! $\overline{1} \backslash L!\vec{a}^{\prime} a l^{\prime} \bar{o}^{\prime} m^{*}$ |
| $q!\bar{a}^{a} L!$ land otter | $q!A L!q!{ }^{\text {a }}$ L! |
| $q!{ }^{\text {a }}{ }^{\text {a }}{ }^{2}$ sea otter | $q!\bar{d} q q!\bar{a}{ }^{\text {a }}$ a $a^{2}$ |
| $x \chi^{a^{\prime}} w a$ fur seal | $x \AA u x \vec{a}^{\prime} w a$ |
| as $x^{u}$ hair seal | 'As'ā $x^{\text {x }}$ |
| $k!\square^{\circ} \mathrm{dō} t!^{\circ}$ porpoise | $k!w a d \cdot k!w \delta^{\circ} d \underline{d}+!!\quad$ (with shortening of second vowel of stem) |
| $p!$ aq! Adãtc goose | $p!\hat{A} q$ ! $p$ ! $\bar{a} q$ ! $A$ dātc |
| $q \mathrm{e}^{\prime} n^{\prime} q$ qen' duck | qad'qên'qen' |
| hếw ${ }^{\text {A }}$ qẹn ${ }^{\text {e }}$ swan | hauhew ${ }^{\text {d }}$ qen ${ }^{\text {a }}$ |
| $q^{\text {é' }} w^{A} x$ steel-head salmon | $q$ auqe' $w^{\text {A }} x$ |
| $t a^{a} q$ ! wa ${ }^{\text {a }}$ devil-fish | $t_{A q}!t t^{a} q!w a^{*}$ |
| mat! $\bar{a} i$ horse clam | mat!máat!āi (with lengthening of first vowel of stem) |
| $s a^{a} b a^{2}$ mussel | samsáa $b a^{\text {a }}$ |
| $m \hat{a}^{\text {a }}$ tclin ${ }^{\text {e }}$ louse | matclimáatc ${ }^{\text {a }}{ }^{\text {a }}$ |
| ofs $\bar{a}^{\prime} i$ huckleberry bush | ' $\mathrm{A}^{\prime}$ ' $\delta s \bar{a}^{\prime} \boldsymbol{i}$ |
| $x w a s a b \bar{i} i$ soapberry bush | 2wAsxwāsabāi |
| $t!\hat{e ́}^{\prime \prime}{ }^{\prime} d \hat{e}^{e} q w a i ~ s a l m o n-b e r r y ~ b u s h ~$ | $t!{ }_{\text {ant }}$ ! $\hat{e ́}^{\prime}{ }^{\text {e }}$ dêe $q w a i$ |
| $t!$ a'abuxwāi gooseberry bush | t! ${ }_{A m t}$ ! $\bar{A} m u x w a \bar{i}$ (with reduction of $\bar{a}^{\prime} a$ of stem to A) |
| $q e ̈ x x^{4}$ ring finger | $q \bar{A} x^{u} q \bar{e} x^{x}$ |
| L! da $^{\text {a }}$ ! wäa fish-gill |  |
| sópadatc tail | síp ${ }^{\text {s }}{ }^{\text {u }} p_{\text {adatc }}$ |
| ts! $6 m u q$ cloud | ts!Amıts!āmuqt |

$t!a^{\prime}{ }^{a} q!a t^{e}$ mountain
séeqett dug hole, well
tơ'mic man
$x \bar{a}^{a} p!$ baby basket
$t!0^{\prime} m t^{\prime}$ paddle
waxd ${ }^{a} t s!i$ pipe
tott $x^{u}$ lat necklace
$q^{\circ} t t^{\prime} a b a s$ wooden ball used in
game
mitāli beaver-tooth die mattmềtāli (with length-
$q t^{\prime}{ }^{a} q a$ rush mat
lāq!wainop cedar-bark mat
L!dxe oldest
L!átsāmi strong
ening of first stemvowel)
plural t!aq!t!áaq!at
sAq $q^{2} \overline{s e}^{e} q e t^{\circ}$
t^Atō'mic
$x_{A} p!x a^{a} p!$
t! $\Delta m t!\delta ' m t^{\circ}$
wáxwaxāats!i
titeote ${ }^{2} x^{u} l a t$
$q{ }^{2} t^{*} q^{*} t \bar{a}^{\prime} a b a s$
$\Delta q^{\circ} q a^{\prime}{ }^{\prime} q a^{\prime \prime}$

L! $A x L$ ! $\alpha x e$
L! Atu!átsāmi

An irregular example of this sub-type is:-

```
sats!'Am tyee salmon
samsáats!am
```

Here the first and third, instead of first and second, consonants are reduplicated.

| Sub-type II b. |  |
| :---: | :---: |
| tc!éabdo dog |  |
| $k^{y} \hat{c}_{\text {che }} k^{v} \ddot{a} c$ bluejay |  |
| $l 6^{\prime \prime} 06 m^{2}$ small clam | timid'obọm |
| $t s!a t c!i t b a i$ spruce | ts!itcts!atc!itbai (ts!itceinstead of ts!itc!-) |
| sósîn ${ }^{2}$ mouth | sissōsine (with shortening of second stemvowel) |
| sapaxos horn | stpsäpāxos |
| $k \delta^{\prime \prime} s A d$ 'star | $k w i s k o ̄ s a d '$ |
| $y \$ x a i^{\prime i}$ pack-basket | yixry ${ }^{\text {a }} \times i^{\text {i }}$ |
| Irregular examples of this sub-type are:- |  |
| tc!atc! ${ }^{\text {ata }}$ ! $\bar{n}^{\prime \prime}$ mouse | $t c!\left\langle t t^{\prime} t c \bar{a}^{a} t l \bar{a} n^{\prime \prime}\right.$ (for $t c l i t^{2}-$ instead of tclit!-see "spruce" above) |
| tixusal tongue | tı̂stī ${ }^{\text {n }}$ sat |

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:-
xwatoqqq'm "falls" plural xuit'xwātoqo'm

## Type III. Reduplicating Syllable: cō or cọ.

Nearly all of these nouns have $g^{y}$ 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. xiuxaucinc 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).


It is not clear why "skin" should reduplicate with ō-vowel.

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

Only one example has been found of this type．As it begins with $g^{y}$－，the stem $-g^{y}$ of the plural，coming immediately before another consonant，reverts to $w$ ，uniting with preceding $a$ to form au．
$g^{y} a q^{\circ} \bar{a} h a s$ married woman plural $g^{y} a ́ u q^{\circ} \bar{a} h a s$
That＊wáq＂ $\bar{a} h a s$ is to be presupposed is corroborated by com－ parison with Kwántlen s－wä－wákus＂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．
xaug ${ }^{y}$ as grizzly bear
$q a^{2} u{ }^{2}$ eye
$q \delta^{u}{ }^{\prime} m a i^{i}$ snow on ground
tôkōa ${ }^{a}$ 亿̂n bailer

$$
\begin{aligned}
& x a ́ u x \bar{a} u g^{v} a s \\
& q a ́ u q \bar{a}{ }^{\prime} u m^{2} \\
& \text { qúmqō'mai } \\
& \text { tuk"tofkōomへ̂n }
\end{aligned}
$$

Type VI．Reduplicating Syllable：cac ${ }_{1}$ ．

| $t \hat{\imath}{ }^{\prime} h \bar{a}^{a} d \bar{a} n$＇chief＇s wife | táhtîh $\bar{a}^{a} d \bar{a} n^{\prime}$ |
| :---: | :---: |
|  | háq ${ }^{\circ} h e q^{\prime} \overline{s a}^{\text {a min }}{ }^{\text {a }}$ |
| otqai＇isnake | ${ }^{2}$ at＇otqai ${ }^{\prime i}$（with shorten－ ing of first stem－ vowel） |
| $a_{L}$ leggings | ${ }^{\prime} a_{L}{ }^{\prime} a_{L}$ |

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

Type VII．Reduplicating Syllable：cv．

| $q!6 a^{\prime} \bar{a} d a$ ear | $q!6 q!o a ' a ̄ d a$ |
| :---: | :---: |
| tt（ $L$ ！ 4 ms ）big（house） | ttit̄（L！Ams）big（houses） |
| dx snow－flake | $a^{\prime} \bar{a} x^{u}$ falling snow |

[^5]Type VIII. Reduplicating Syllable: cē.
According to varying phonetic circumstances we have either $\bar{\imath}$ or $\bar{e}$, the latter occurring after $q, q!$ and $x$. The examples of this type obtained are:-
$q!a i k^{*}{ }^{*}$ eagle
kwúdjāk ${ }^{\text {'u }}$ trout
ťi ${ }^{\text {xu }}$ yellow cedar
$d j a^{\prime}{ }^{\prime} d j a^{a}$ tree
sá’idja' leaf
tetyac hand
sayáada neck
$q t^{\prime} y a^{2}$ water
st'yat lake
$x \hat{a}^{\prime}$ adjaic stone
tc $\hat{\chi}^{\prime \prime} i$ child
$k!\underline{6} y o k o b \hat{z}^{i} n$ (or $-m \hat{\imath}^{i} d$ ) fisherman
sidjaq $\bar{o}^{7} p^{2}$ basket hat
táidatctan woman's cedar-bark skirt
plural $q!e^{i} q!\bar{a} i k^{e u}$
$k w \tilde{n}^{i} k w u d j a \bar{k}{ }^{e} u$
tĩt tixwai (may belong also to type vir; note $-a i^{i}$ in plural)
*djīdja'adjae (not obtained as such, but implied by diminutive plural $d j e \overline{e l j} \imath d j a$ 'adja')
stsa'idja ${ }^{\text {a }}$
tcítcāyac
stsayā’ada
$q e ́ q \bar{a} y a^{\bullet}$
stsä'yat
xéxä’adjaic
tcítcu'i
$k!w t k!o y o k o m \hat{\imath}^{i} n$
stsidjāqō $p^{\text { }}$
乵 $\bar{a}$ idatctan

Eliminating "yellow cedar," which, as was pointed out, may just as well be reckoned as belonging to Type VII (there is reason, however, to believe that $k \bar{\tau}^{i} x^{2}$ goes back to *tiyixix; see diminutive type I b and diminutive plural type II f), all these plurals may be plausibly explained as cases of Type II, reduplicating $-\bar{\imath}$ - or $-\bar{e}-$ being the contracted result of $-\Delta y$-. It will be observed that the stems of these nouns contain either $i$ - diphthongs, including broken groups ( $\left.-\bar{a} i-,-a^{\prime}\right\}-,-\hat{u} \hat{\prime}^{\prime} i-$ ), vowel plus $y$ ( $\left.-\bar{a} y-,-a y-,-\bar{a}{ }^{\prime} y-,-o y-\right)$, or vowel plus $d j$ ( $-u d j-,-\bar{a}^{a} a d j-,-\bar{a}^{\prime} a d j-$, $-i d j-)$; $d j$, as we saw above, is probably a resultant of original $y$.

Type IX. Reduplicating Syllable: cā (or ca).

| Sub-type IX $a($ with $\bar{a})$. tclet rain | plural tc!atclęt |
| :---: | :---: |
| $q \delta^{\prime}{ }^{\prime} \mathrm{q}$ qwai speaker | $q w \bar{a} q \delta^{\prime}{ }^{\prime} q w a i$ |
| yip ${ }^{\text {a }}$ it $x^{u}$ hole | $y$ ¢yip ${ }^{\text {in }} \chi^{\text {a }}$ |
| Sub-type $I X b$ (with $a$ ). tct'itca. $i q^{\text {a }}$ salt-water hunter | tcatct'itca.iq ${ }^{\text {a }}$ |

Type X. First Stem-vowel Changed to ê.
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'wālos young man | wêt'wălos |
| :---: | :---: |
| é'ädjam' young woman | $e^{\prime \prime} \bar{a} d j a m$ ' |
| $k^{\nu!} e^{i} k^{v}!\bar{a} k^{v!}$ crow | $k^{v}!\hat{e}^{\prime} e k^{v}!\bar{a} k^{v}$ ! |

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 $g^{v}$, is palatalized to $i$; in the second, the reduplicating $-\Delta y$ becomes - $\bar{\imath}$ - (see Type VIII).

| $g^{y} a^{a} d \hat{\imath}^{i} m$ slave | $g^{y} \bar{a} g^{\nu} i d g^{\nu} a d \hat{\imath}^{i} m$ |
| :--- | :--- |
| táyac killer-whale | tátūtāyac |

## 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 $\bar{a}{ }^{\prime} a$-.
$\begin{array}{ll}d j a^{\prime}{ }^{\prime} d j a^{2} \text { tree } & \text { djādjā̃'m } \\ m A l^{\prime} q^{a r} \text { fawn } & \text { mamáaliqqu }\end{array}$

A few nouns change the stem entirely in passing from singular to plural. Such are:-
sádt $t^{4}$ woman plural $n i g^{v} a p^{\prime} t a i$
 of $\left.n i g^{v}{ }^{2} p^{*} t a i\right)$
Involving this same change of stem is:saftux ${ }^{u}$ married man nigyáp'tahai' Rather different, presumably, is:-
tatt'nātcap' leg
tcúk! ${ }^{\prime}$ 'nätcap ${ }^{\text {a }}$
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:-
$g^{y \tau^{i}} g^{2 \tau^{i}}{ }^{i}$ panther $q w a ́ q u m \hat{\imath}^{i} s$ marten
tutctrtcicic owl mámstcō'm mink
ts! $\hat{l}^{\prime} x^{u} t s!$ l $\hat{x} x^{x}$ fish-hawk $q w \tau^{i} q w i^{i}$ sea-gull
$q w i^{i} q w{ }^{a}{ }^{a} t!A l \bar{a}^{a^{\prime}} k^{2}$ butterfly $x w a ́ x w a d j o{ }^{\prime} m^{2}$ fly
(probably diminutive; dim. plur. is found)
pộk ${ }^{\text {ru }}$ pok ${ }^{\text {cu }}$ liver
xaxe'i nit
Láāapxu knife
hâiuhei' arrow
Non-reduplicated nouns for which my informant would give no plurals are:-
máyọs raccoon pīik! ground-hog
$q!$ é'ẹt elk p!áalats!a skunk

$p!a h$ fraven qẹix salmon-egg
tcleqx robin mọ́'ọs head
For "robin," tc! Áq"tc!eq", which might well enough be expected as plural, was explicitly denied. If necessary to express plurality in these nouns, $q a x$ or $q_{A x}$ "many" can be juxtaposed before any of them.

50138-4

## IV. REDUPLICATED DIMINUTIVES 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'os from mọ' $\rho s$ "head"; qeqă' $y a^{2}$ from qa'ya" "water."
b. Long $\bar{e}$ ( $\hat{\imath}$ or $\bar{\imath}$ ), always accented. Thus $L!\frac{\ell}{L}!_{A x w a} \bar{a}^{\prime i}$ from $L!\dot{A} x w \bar{a}^{\prime} i$ "dog-salmon."
c. $\hat{e}$, always accented. Thus $q!e^{\prime}{ }^{e} q!\bar{e}^{e} L!$ from $q!\dot{a}^{a_{L}}$ !" landotter."
d. $\check{v}$, which may or may not be accented. Thus, Zọtko ${ }^{\circ} m \hat{i} n$ from $7 \delta$ kōo min "bailer."
e. $\bar{v}$, which is regularly accented. Thus, k!ofk! odott!? from k! ! ódöt!? "porpoise."
 "cockle."
g. Long $\bar{a}$. Thus, $d j \bar{a} d j \bar{a}^{a} g^{v} v_{i} n^{2}$ from $d j \hat{q} g^{v i n} n^{2}$ "song."
h. Long $\bar{a}{ }^{\prime} a$. Thus, sá' $a s t t^{\prime} u$ from satt ${ }^{4}$ " "woman."
i. Short ọ. Thus, $L!$ ocu!d'am $\hat{\imath}^{\text {is }}$ s from $L$ !ams "house."
(2.) Glottal stop inserted in stem. This may occur as
a. Breaking of (non-final) vowel or diphthong. Thus, tcitcód'ayac from tcáyac "hand."
b. Glottalizing of final consonant (generally $m$ or $n$ ); this should probably include breaking of vqwel when final. Thus, $Z \delta t^{6} b \rho^{\prime} m^{2}$ from $l b^{\prime \prime}$ " $b \rho m^{2}$ "small clam."
(3.) Quantitative vocalic changes (increments). These include
a. Lengthening of (last) stem vowel. Thus, tátig ${ }^{v} \bar{a} x^{u}$ from tá' $a g^{y} a x^{u}$ "fern."
b. Change to $w \bar{a}$ or $w a$ of $u$ of stem. Thus, diminutive plural $k w \hat{\imath} k u m k w a^{a \prime} m \bar{a} q \hat{\imath} n^{2}$ from plural kumkúmāqin' "sea-lions."
c. Lengthening of inorganic $A$ (or $i, e$ ) to $\hat{\imath}$. Thus, xéxsim' from xissm "box." Less often, full $a$ is changed to $\hat{\imath}$ (cf. 4b), as in kwétkwi'̂̀m' from kwa'am "coiled storage basket."
d. Insertion of $\hat{2}$. This is probably but another form of 3c, inorganic $A$ and absence of vowel being perhaps considered as phonologically equivalent. Thus, qẹ́qal̂̀qq! from qâl"q! "warrior."
e. Insertion of short vowel ( $A, i$ ) before syllable with lengthened vowel. Thus, xéexigyicin ${ }^{2}$ (note second i) from xAucin" "bone."
f. Lengthening of $A$ or a (non-final) to $\bar{a}$. Thns, q!wāq! wáa ${ }^{\prime} a_{-}$ djix from $q$ ! wis'ix "wood."
(4.) Qualitative vocalic changes. These include
a. Umlaut of a to short e (i). Thus, xepxt'adjẹ'ic from xa'adjaic "stone."
b. Umlaut of $a$ (or $\bar{a}$ ), rarely $\rho$, to long $\bar{e}(\hat{\imath}, \bar{z})$. Thus, $q!e^{e} q!\bar{e}^{e} k^{\circ} u$ from $q!a k^{〔 u}$ "board."
c. Change of stem vowel to $\bar{a}$ 'a. Thus, tota'amic 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, quer$q w i^{i} q w \hat{\imath}^{i}$ (note second $i$ ) from $q w \tau^{i} q w \grave{y}^{i}$ "sea-gull. Such shortened syllables regularly lose their glottal stop, if there is one present, as in qéqqawêm" from qa'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, sê'sppixos from satpāxos "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. Diminu mọ' ọ head | ture la only:diminutive mimo' $\varphi s$ |
| :---: | :---: |
| $q^{\prime} t t^{\prime}$ abas wooden ball | qéq q ª̈'abas |
| $q!\frac{o ̣ a ' a ̀ d a ~ e a r ~}{\text { a }}$ | q! wéqq!oa'à ${ }^{\text {a }}$ a |
| 'áwākéu tobacco | 'ẹ'awāk ${ }^{\text {en }}$ |
|  |  |
| $q \delta^{u}{ }^{\prime} a^{\prime i}$ hemlock | $q u r q \bar{o}^{u}{ }^{\prime} a^{\prime \prime}$ |
| sidjaqo'p ${ }^{\prime}$ basket cap | sísidjäqō'p ${ }^{\text {a }}$ |
| qę̇ix salmon-egg | qẹqeyix (-eyi- probably merely variant of -ei-) |

Sub-type I b. Diminutive features la, 3c (or d):-
$m A q s i n{ }^{2}$ nose $\quad m i m_{A} q s \hat{\imath}^{i} n^{2}$
djidis tooth djidjidî̀is

$q$ Âl${ }^{\circ} q$ ! warrior qéqal ${ }^{e} q$ !
Sub-type $I$ c. Diminutive features la, 3a, 5a:-

## Type II. Reduplicating Syllable: cẹ́; stem: feature $2 a$.

In these diminutives the first vowel of the stem is broken, the broken vowel taking the form $\breve{v} ' \bar{v}$. If the final vowel is long, it seems to be shortened ( $-\bar{a} \bar{a}$ becomes -'a ).
$p \pi^{i}{ }^{i}$ ! ground-hog
q!e'etc elk
$x a^{\prime} \bar{a}$ big clam

## diminutive $p\left\{p ?^{\prime} \bar{\imath} k\right.$ !

$q!e ́ q q^{\cdot} \mid e e^{\prime}{ }^{\prime} ’ e t c$
$x e^{e} x_{A}{ }^{\prime} \bar{a}^{\prime} a$

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

```
    Type III. Reduplicating Syllable: cẹ́: stem: features 3a
    or d, 5a, 2b.
qa'um' eye quẹqawêm" (-eे- doubt-
    less merely variant
    of -\hat{\imath}-)
qwitqwịi
    qwi'qwieqwis'>i
```

Type IV. Reduplicating Syllable: cę́; stem: features $4 a, 3 c, 2 b$.
$k w a ́ a m$ coiled storage basket kwệkwi'̂̀m'
Type V. Reduplicating Syllable: cẹ́; stem: feature $5 b$.
L!!kuinas heart z!iz!kuinas
$x \AA p \bar{a}^{\prime i}$ red cedar $\quad x e ́ x p \bar{a} \bar{a}^{\prime i}$

Type VI. Reduplicating Syllable: cẹ; stem: features 5b, $4 b$.
$q w A s a m$ woolly grouse $q w e ́ q^{a} q^{2} \bar{e}^{e} m-o t$
paxai' creek
$p i p p^{2} x \bar{e}^{\prime i}$
Type VII. Reduplicating Syllable: cẹ́; stem: features $5 b, 3 c, 2 a$. $x$ A่sAm box
xéxsîm'

## Type VIII. Reduplicating Syllable: cẹ.

In this type the reduplicating $e \underset{e}{ }$ 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! $\partial t c!$ itbai spruce diminutive ts!its! $t t c!i t b a i$
qáya' water qeqa'yà
$q \tilde{o}^{\prime \prime}$ 'qwai speaker qwiqt'uqwai
Here probably also belongs $q w i^{e} q w \dot{a}^{a} t!A l \bar{a}^{a} k^{2}$ "butterfly."
Sub-type VIII b. Diminutive features la, 5a (accent on third syllable of diminutive):saya'ada neck sisiyá'ada (sa-shortened to sA-, which, coming before $y$, has to be palatalized to si-)
$x \bar{a}^{\prime}$ aidatc stump
xexa' ${ }^{\prime}$.idatc ( $-a . i-$ probably equivalent to $-\bar{a} i-$ )

Sub-type VIII c. Diminutive features 1a, 3a (or c):-
sa'yal lake
$m a^{a} c c!i n{ }^{*}$ louse
sisáyät
mimátc! $\mathfrak{i n}{ }^{*}$

Sub-type VIII d. Diminutive features Ia, 4 b :pộk ${ }^{\text {º }} p o ̣{ }^{\circ}{ }^{\circ}$ liver
pịpúk ${ }^{*}{ }^{2} p \bar{\imath}^{i} k^{e}{ }^{u}$

Type IX. Reduplicating Syllable: ce; stem; feature $2 a$.
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 1a, 2a:-
tctyac hand teitct'ayac

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

## Type X. Reduplicating Syllable: cé.

Various sub-types are to be recognized, according to whether or not the stem vowels are quantitatively modified.
Sub-type $X$ a. Diminutive feature lb only:-
tc!et rain
$p!e ́ g^{y} \bar{a} i$ halibut
ts!oxós ${ }^{\prime \prime o}$ codfish
L! $\AA x w \bar{a}^{\boldsymbol{i}}$ dog-salmon
$x a^{a} p!$ baby-basket
$p!6 x \bar{o}^{\prime} \cdot$ raven
$y_{i p} \hat{\imath}^{i} x^{u}$ hole
$L!p \hat{\imath} \hat{\imath}^{\prime} t!\bar{a}^{\prime a}$ yellow-cedar bark blanket
titctitcī${ }^{i} c$ little owl tîtitctitcīic
$k^{y} \ddot{c} c k^{y} \ddot{a} c$ bluejay
$q \underline{̣} q \underline{o} w \hat{\imath}^{i} m^{\prime}$ small breast feathers
2.2. $q w \hat{i}^{\prime e} q u w i i^{i} m^{\prime}$

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 lb, 3c:-
L! pâtì bag L!éL! pāt ̂̀t
$t c l e q^{x}$ robin tc! $\tau^{i t c!} \hat{c}^{0} q^{x}$
kúmäqiń sea-lion $k w \hat{\imath}^{\prime} k u m a \bar{a} q \hat{\imath} n^{*}$
djúcin ${ }^{2}$ foot djû́djicîn ${ }^{2}$

Sub-type X c. Diminutive features lb, 5a, 3c (or 3a):$q!w a t^{\top} \bar{\imath}^{i} t c i n^{e}$ humpback salmon $\quad q!w^{\text {éq }} q!u t \bar{i} t c i ̂ n^{2}$ $t!\hat{a}^{\prime} a b u x w a ̈ i$ gooseberry bush t!īt! $\AA m u x w a \bar{a} i$ p!a'alats!a skunk p!ép!A'lăts! (misheard for -p! al-?)

It should be noted that this type of diminutive formation, while externally similar to Type VIII of plural formation (cf., e.g., $x e^{t} x \bar{a}^{a} p$ ! "little basket" with $q$ ! ${ }^{i} q!$ äik"u "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 $2 b$.

| matt $\bar{a} i$ horse clam | mé'mat! $\bar{a}^{\prime i}$ ( $m \vec{e}^{\prime}-$ per haps misheard for $m \bar{e}-$ ) |
| :---: | :---: |
| háihei (hâihei'?) arrow | héheihei'i |
| $q!$ 'is'adāi buckskin shirt |  |

Type XII. Reduplicating Syllable: cé; stem: $4 b$.
$q!a k^{\circ} u$ board q!éeq!ēe $k^{\text {u }}$
aL leggings éè $L$
Type XIII. Reduplicating Syllable: cé; stem: feature 5b.
There are two sub-types, according to whether or not the stem vowel is modified.

Sub-type XIII a. Diminutive features $1 \mathrm{~b}, 5 \mathrm{~b}$ :-
$q!a ́ p!x w a i$ oak
$p!e ́ ' i x a ̄ i$ alder
$u!{ }^{a}{ }^{a} q$ !wāi fish-gill
kúp- $\hat{u}^{u} m \hat{u}^{u} x^{u}$ hill
tāq!wainop ${ }^{\text {a }}$ cedar-bark mat
$t$ !é'ibāa wild-cherry bush
$t!_{\text {aq }}+1$ ! $1 q \bar{a} i$ dog-wood
$q!$ !q!p!xwai
$p!\hat{2} p!x a \bar{i}$
$L!\hat{\imath}^{\prime} i_{L}!q!w a \bar{i}$
$k w i k^{\bullet} u p-\bar{i}^{i} \ell^{2}$
f̂̂tq! wäinop ${ }^{\text {² }}$
$t!\hat{c}^{\prime} t!b \bar{a} i$
t!ét! qāi

In the last example the diminutive is built up on the unreduplicated stem abstracted from the already reduplicated simplex. The broken stem vowels $-e^{-} i$ - 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' cohoe salmon diminutive sts'ad-ōt
Here the $-a^{\prime} a$ - is treated, not as a broken vowel, but as two vowels with intervening consonant.

Sub-type XIII b. Diminutive features 1b, 5b, 3c:-
lâq! As mountain-goat blanket l̂̀l $q$ ! $̂ s$
L! Aq!acin* moccasins
 heard for -ên'?)

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

Type XV. Reduplicating Syllable: cé; stem: features $56,4 a$. $S A q^{\circ} A K^{i u}$ war-club stisqet $k^{2 u}$

Type XVI. Reduplicating Syllable: cê'.
$q \hbar^{\prime} q q a^{e}$ rush mat
tott $x^{2} x^{u l a t}$ necklace
$q \hat{e}^{\prime e} q \vec{a}^{\prime a}$
$t \hat{e}^{\prime} t^{t} x^{u} l a t$

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 lc, 4 b :$q!t^{a}{ }_{L}!$ land-otter diminutive $q!\hat{e}^{\prime} e^{\prime} q!e^{{ }^{\theta}} L!$ $q!\tilde{a}^{a} s a a^{a}$ sea-otter $q!e^{\prime s} q!!^{e} s$ (note loss of $-a^{a}$ )
Sub-type XVII b. Diminutive features, $1 \mathrm{c}, 5 \mathrm{a}, 4 \mathrm{a}$ (or b):$q e^{\prime} w^{A} x$ steel-head salmon $q e^{\prime} q$ eg ${ }^{v} e^{e} x$
$-g^{y}$ - is from original $-w$-. It is not clear whether -qegveex represents ${ }^{*}$-qewēéx or ${ }^{*}$-qewẹx.

Type XVIII. Reduplicating Syllable: cé; stem: features $3 c, 2 b$.
$q!w a t t^{\prime} \Delta m$ river $\left.q!w e ́ e q!w a t i m\right)^{\prime}\left(q!w e e^{e}-\right.$ not equivalent to $q!w e^{e}-$;- see diminutive plural type iv)

Type XIX. Reduplicating Syllable: cê'; stem: feature 5 . There are two sub-types, the latter with modified stem vowel.

Sub-type XIX a. Diminutive features le, 5b:stapaxos horn
sétesp ${ }^{\prime} x$ os

Sub-type XIX b. Diminutive features le, $5 \mathrm{~b}, 3 \mathrm{c}:-$
$t!$ ikom' beaver (-ko- doubt- t!êtet $k w \hat{i} m$ ' less for $-k w_{A}$-)

Type XX. Reduplicating Syllable: č.
Here again there are two sub-types, the latter with vocalic reduction.

Sub-type $X X \quad a$. Diminutive feature 1d:-
$x \not a u g^{y} a s$ grizzly bear $x a x a \bar{u} u g^{y} a s$
Here probably belongs also $x w a ́ x a d j o ̄ ' m$ " "fly."
Sub-type $X X b$. Diminutive features $1 \mathrm{~d}, 5 \mathrm{sa}, 3 \mathrm{c}$ or d :-
$Z^{a} g^{y}$ êt ${ }^{a}$ herring
láidatctAn woman's cedar-bark faťaatctîn (-ī- <-Ai-) skirt


Type XXI. Reduplicating Syllable: č; stem: feature 5b.
There are three sub-types, based on differences in the further treatment of the stem.
Sub-type XXI a. Diminutive features 1d, 5b:$y{ }^{6} x a i^{\prime i}$ pack-basket diminutive yá.ixai,i

Sub-type $X X I$ b. Diminutive features ld, $5 \mathrm{~b}, 3 \mathrm{a}:-$ waxats!i pipe $\quad$ waux $a^{a} t s!\hat{\imath}^{i}$

Sub-type XXI c. Diminutive features $1 \mathrm{~d}, 5 \mathrm{a}, 5 \mathrm{~b}:-$

Type XXII. Reduplicating Syllable č̌; 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 ld, 3c, 2b:sats! ${ }_{a} m$ tyee salmon $s a s^{\circ} \pi^{a} t s!\hat{\imath}^{\prime} m^{*}$

Sub-type XXII b. Diminutive features ld, 5a, 3a, 2b:sá'idja leaf sas ${ }^{\circ} d j a^{\prime a}$ ( $\bar{\imath}$ - reduced from -a'i-)

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

|  | $k!o ́ k!o d o ̄ t!o$ |
| :---: | :---: |
| matyos raccoon | mamiyọs ( $-i-$ palat alized from $-A-$, reduced from $-\bar{a}$-) |
| $t \chi^{\prime} a g^{y} a x^{u}$ fern | tatig ${ }^{y} \bar{a} x^{u}(-i$ - palatalized from $-A-$, reduced from $-\vec{a}{ }^{\prime} a$-) |
| $t t^{\prime} a g^{\nu} i n$ salmon-spear | tatig ${ }^{\text {u }}$ in (dit.) |
| $g^{\nu} \bar{a}^{a} d \hat{\imath}{ }^{i} m$ slave | $g^{v} d g^{y} i d \hat{\imath}^{i} m$ ( $-i$ - palatalized from -A-, reduced from $-\tilde{a}^{a}$-) |


| ${ }^{1} \chi^{a}$ dak ${ }^{\circ}{ }^{\text {u }}$ skin |  |  |
| :---: | :---: | :---: |
| as ${ }^{u}$ hair-seal | - | ' $A$ 'asî $\chi^{\prime}$ |
| ts!tmuqt cloud |  | $t s!a t s!1 m a q w i t$ (-Ipalatalized from-s-, reduced from - $\bar{a}$-; -ma- merely variant of -mu-) |
| btqai ${ }^{\text {i }}$ snake |  | ' $\mathbf{j}^{\prime}$ olqai'i' |
|  |  |  |

In the last two examples the final vowel is considered quantitatively long and hence cannot be further lengthened. Quite irregular is:-
tâyac killer-whale tativiyac
The long $-\bar{\imath}$ - and the short $-\bar{\alpha}$ - of the stem are the exact reverse of what would be expected ( ${ }^{*} t a t i y \bar{a} c$, cf. tatig${ }^{v} \bar{a} x^{u}$ above).

Type XXIV. Reduplicating Syllable: ct; stem: features $5 a, 4 b$.
tc!atc!áat!ān" mouse tc!atc!it!̂̂n'e (-i- palatalized form of $-A-$, reduced from $-\bar{a}^{a_{-}}$)
The diminutive, as often, is based on the unreduplicated stem abstracted from the already reduplicated simplex.

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

Sub-type XXV a. Diminutive features $1 \mathrm{a}, 5 \mathrm{a}, 2 \mathrm{~b}:-$

$k!$ ọyọob $\hat{\imath}^{i} n$ fisherman
$k!$ lók! oyokob $b \imath^{\mathrm{i}} n^{\prime \prime}$
Sub-type $X X V$ b. Diminutive features $1 \mathrm{e}, 5 \mathrm{a}, 3 \mathrm{a}, 2 \mathrm{~b}:-$
$x a^{a} w a$ fur seal $x \bar{a} x_{A} w \vec{a}^{\prime} a$ $s a^{a}{ }^{\prime} b a^{e}$ mussel sásabāa
$t c!e ́ ' a ̈ d o d o g \quad t c!e ́ ' \bar{a} t c!i d \sigma^{\prime} o$ ( $-i=$ palatalized from -A-, reduced from $-e^{\prime} \bar{a}-$ )
In the last example $-e^{\prime} \bar{a}$ is treated as a reduplicating long vowel.

Type XXVI. Reduplicating Syllable: ct; stem: feature 5 b.
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 $1 \mathrm{e}, 5 \mathrm{~b}:-$ sôsîn${ }^{2}$ mouth diminutive sôssîn ${ }^{\text {e }}$
p!aq! Adātc goose
$t \hat{\imath}^{\prime} h \bar{a}^{a} d \bar{a} n$ ' chief's wife
sotpadatc tail
$x w a ́ s A b \bar{a} i$ soapberry bush
tix $x^{u}$ sat tongue
osa ${ }^{\prime} i$ huckleberry bush
$m \imath^{〔} x \bar{a} t$ bear
sip! $A m$ în ${ }^{\circ}$ shinny stick
mítalli beaver-tooth die
$k^{v!!k^{y}}{ }^{y} \bar{a} y u$ oar
sit ${ }^{1}$ gett ${ }^{2}$ dug hole, well
p!áp!q!adātc

sơ"spadatc
$x w a ̂ x^{4} s a b a \bar{a} i$
tititxusal
 be further reduced than -'As-)
$m^{\prime}{ }^{\prime} m e x a \bar{t}(-E-$ is merely glide)
$s \tau^{i} s p!A m \hat{\imath}^{i} n^{2}$
$m^{\hat{c}^{\prime} m(I) t a ̄ l i}$ ( $-I-\quad$ is merely glide)
$k^{v}!\imath^{\prime} k^{\nu}!k^{v} \bar{a} y u$
sर̂'sqett
"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 1e, 5b, 3c:$k \delta{ }^{\circ}$ "sAd' star kork 'sîd"
Sub-type XXVI c. Diminutive features $1 \mathrm{e}, 5 \mathrm{~b}, 5 \mathrm{a}, 3 \mathrm{a}:-$ $t!\hat{e ́}^{\prime}{ }^{\prime} d \hat{e} \hat{e}^{e} q w a i$ salmon-berry bush t!êt!dâqwāa

Type XXVII. Reduplicating Syllable: cv́; stem: features $5 b, 4 b$.
t!daq!!at' mountain
t!attqqēèto
Type XXVIII. Reduplicating Syllable: ct十; stem: features 56 (or a), Ba, $2 a$.
$t a^{a} q!w a^{a}$ devil-fish
$t a t t^{2} q!w \bar{a}^{\prime}{ }^{a}$
$d j \hbar^{\prime a} d j a^{a}$ tree
djādjidja'a ( $-i$ - palatalized from -A-, reduced from $-\vec{a}^{\prime} a_{-}$)

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:-

Sub-type XXIX b. Diminutive features 1f, 3b, 2a:$k w u ́ d j \bar{a} k^{{ }^{\prime} u}$ trout $k w a k w a^{\prime a} a j j a k^{{ }^{\text {u }}}$

Type XXX. Reduplicating Syllable: cā; stem: feature $3 f$.
Two sub-types may be recognized, the second with further modification of the stem.
Sub-type $X X X$ a. Diminutive features 1 g , $3 \mathrm{f}:-$
$q$ !wà'ix wood
$q!w a \bar{q}!w \mathfrak{a}^{\prime} a d j i x \quad(-d j-$ $<^{*}-y$-, glide between $-\vec{a}^{\prime} a_{-}$and $-i-$.).
Sub-type $X X X$ b. Diminutive features 1 g , 3f, 3c:-
$d j i g^{v} n^{2}$ song $\left(<^{*} d j a w_{A} n^{*}\right) \quad d j \bar{a} d j \tilde{a}^{a} g^{v} \hat{i} n^{e}$
Type XXXI. Reduplicating Syllable: ct'v̌; stem: feature 5b.
sattt ${ }^{2}$ woman sa'astt ${ }^{\prime}$ " girl
L! $t^{\prime} a a^{\prime \prime} \bar{o}^{\prime} m^{2}$ wolf $L!t^{\prime} a L!t^{\prime} \bar{o}^{\prime} m^{2}$
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 1i (perhaps rather 1 d), 4c:-
tô'mic man totatamic boy
Sub-type XXXII b. Diminutive features 1i, 4c, 3d:-
${ }^{2}!$ Ams house $\quad$ L!oul'á'amâis

## Diminutive in -ōt, -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 $-\bar{\partial} t\left(t^{u} u\right)$ or $-o t\left(t^{t^{u}}\right)$. Some of the diminutives in $-\bar{\sigma} t\left(t^{*} u\right)$ or -ọt( $\left.t^{{ }^{u} u}\right)$ are nouns whose simplex is
already reduplicated (cf. reduplicated nouns which form no reduplicated plural), yet not all. Of those formed from unreduplicated nouns, some have diminutive reduplication at the same time, others not. By an interesting phonetic law of rhythmic balance $-\bar{o} t\left(t^{{ }^{u} u}\right)$ is suffixed to stems whose last vowel is short, $-0 t\left(t^{t^{u} u}\right)$ to those whose last vowel is long. The examples obtained of the suffix are:-

1. $-\bar{o} t\left(t^{\circ} u\right)$
hẹ́ $w^{A} q e ̣ n^{e}$ swan diminutive $h e w^{a} q A$ Adōt
$m \hat{\imath}^{\prime}$ mau cat
$q!a i k^{\circ} u$ eagle
qến'qen ${ }^{2}$ duck
ts! $\hat{t} s q!{ }^{\prime}{ }^{\prime e} n a s$ chicken hawk
$t c!e q^{x}$ robin
sá'an cohoe salmon
$x \partial p^{*} x \bar{o} p^{*}$ humming bird $g^{v} \tau^{i} g^{y} \bar{\tau}^{i}$ panther
$m \hat{\imath}^{\prime}{ }^{\prime} \min$ ' $\bar{o} t$
$\{q!a i k o ̄ t$
q!eq! Auq! $\hbar i k o z t$
little eagles
qeqa'ád ${ }^{2} t$
ts! ̂̂tsq!êe ${ }^{\text {en }} n a s o ̄ t t^{2} u$
tclātcleqºxcléqōtt ${ }^{\text {u }}$ little robins
$\int s s^{\prime} a d \bar{o} t$ \stsosọ'ádōt plur. xóp ${ }^{\circ} x o ̄ p o ̄ t t^{\circ} u$ $g^{v}{ }^{i} g^{v} \bar{\imath} y \bar{u} \bar{t}$

The last two seem irregular as regards rhythmic balance; perhaps they were respectively misheard for ${ }^{*} x \delta p^{*} x o p o t t{ }^{*}$ and ${ }^{*} g^{v}{ }^{v}{ }^{i} g^{y} \underline{i} y u \bar{u}$. - $\bar{o} t$ has also been found in $m i m{ }^{\prime} i n I^{\prime} \bar{o} t k^{\bullet u}$ mamstcō'm "little mink."
2. $-0 t\left(t^{\bullet} u\right)$
$h \sigma^{\prime} m h \bar{o}^{\prime} m$ blue grouse qwáqumề's marten
$q w a s a m$ woolly grouse
ts! $\hat{\imath}^{\prime} x^{u} t s!\hat{\imath} x^{u}$ fish-hawk
$k w a ' k w \hbar^{\prime a} d j o^{\circ}$ grey-squirrel

qwaqumî ${ }^{i}$ solt ${ }^{\text {u }}$
$q w e ́ q q^{\circ}{ }^{\text {u }} \mathrm{se}^{e} m o t$
ts! $\hat{\imath}^{\prime} x^{4} t s$ ! $\hat{x} x w o ̣ t$
$k w a^{\prime} k w \mathbf{a}^{\prime a} d j o t$

## 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!íkuinas heart plur. I. dim. V. dim. plur. L! t'L! $L$ Eke Llikuinas

$a L$ leggings kúp $\hat{u}^{u} m \hat{\imath}^{u} x^{u}$ hill
I. (or vi.) dit.
XII. é'al'aL

XIII a. kwīkup $k u ́ p-\imath^{i} \ell^{e}$ (with $-\bar{z}^{i} t^{e}$ as in diminutive singular)



Sub－type $I$ b．Plural of simplex modified by diminutive feature 3a，c，or d ：－
djidis tooth L！patitit bag djicine foot lAq！$A s$ mountain－ goat blanket L！Aq！acin＂mocca－ $\sin$
t！Akom？beaver t！o＇mt paddle waxáts！i pipe $t a^{a} q!w a^{a}$ devil－fish
djig ${ }^{2} \mathrm{in}^{2}$ song

dit．$\quad \mathrm{x}$ b．$L!\bar{\imath} L!{ }_{A} p{ }^{2} L!A \bar{A} \bar{a} t \bar{\imath} t$
dit．dit．djêdjisdjıcinn
dit．XIII b．lîlaq！lıAq！へ̂s
dit．dit．$L!\bar{e} L!A q!L!\tilde{a q!a c \hat{n}{ }^{e}}$
（－$\hat{i} n^{2}$ misheard for －inn ？）
I．XIX b．$t!\hat{\imath} t!{ }_{A} k^{{ }^{\circ} u t!\text { 直kwîm＇}}$
II a．$\quad \mathrm{XX}$ b．$t!\bar{\imath} t!{ }^{1} m t!\delta^{u} b \hat{\imath} \hat{\imath} t^{2}$
dit．XXI b．wîwixwaxāats！̂̂̀
dit．$\quad$ XXVIII．tîta＇$q^{2} t \hat{a}^{a} q$ ！$w \bar{a}^{e}$
（ $-q^{2}$ misheard for $-q!$ ？）
III b．$\quad \mathrm{xxx}$ b．$\quad$ bj̄̃ $d j \bar{u} d j \imath g^{\nu} \hat{\imath} n^{2}$

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


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

| tot＇obome small clam | II b ． | xxv ${ }^{\text {a }}$ | 动timtón ${ }^{\circ} \mathrm{bo} o^{\prime} \mathrm{m}^{\text {e }}$ |
| :---: | :---: | :---: | :---: |
| $k!$ ọyokob̂t $n$ fisher－ man |  | dit． |  |
|  | vIII． | dit． | k！wik！wik！oyọọ－ $b \hat{\imath} \hat{\imath}^{i} n^{\prime \prime}$ |

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

Sub-type $I$ f. Plural of simplex modified by diminutive features $3 \mathrm{~b}, 2 \mathrm{a}, 3 \mathrm{c}$ :-
kúmäqine sea-lion $\quad$. $\quad \mathrm{b}$. kwîkumkwáa'māqin ${ }^{e}$
A couple of aberrant diminutive plurals with ceb- are given under type ir 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 1 .

Sub-type II a. Plural of simplex unchanged:$q w a d \hat{d} \hat{t}^{i} s$ hump-

$q \delta^{u} a^{\prime} a^{i}$ hemlock
'áwākéu tobacco
$x A p \bar{a}^{\prime}{ }^{i}$ red cedar
q!áp!xwai oak
dit.
dit.
dit.
dit.
dit. qwiqöq u' $^{\prime \prime} a^{\prime ;}$
dit. 'ę' $\Delta u$ ' $a w \bar{a} k^{\bullet}{ }^{\text {u }}$
v. $x e_{A} p^{1} x A p \bar{a}^{7 i}$
$q^{\prime} t t^{\prime} a b a s$ wooden ball
used in game
II a. $\quad 1$ a. $q e q q t^{\prime} q^{\circ} t \vec{a}^{\prime} a b a s$
qến'qen ${ }^{e}$ duck dit.
$q a^{\prime} q a^{2}$ rush mat dit. xVI. $q e q q_{A} q^{2} q a^{\prime}{ }^{a} q a^{e}$
tot $t^{\prime} x^{u} l a t$ necklace dit.

50138-5 $\frac{1}{2}$
$q!\bar{a}^{a} L!$ land-otter plur. II a. dim. Xvir a. dim. plur. q!eq! $A L!q!\tilde{a}^{a} L!$ $q!\tilde{a}^{a} s a^{\circ}$ sea-otter dit. dit. $q!e q!$ Isq $!\bar{a}^{a} s$ (with loss of $-a^{2}$, as in dim. sing.)


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

| qal'q! warrior | 1. | I b. |  |
| :---: | :---: | :---: | :---: |
| laq! ${ }^{\text {a }}$ bow | dit. | x, b. |  |
| $q!w A t \cdot \bar{\imath} t c i n=$ humpback salmon | dit. | x c. | $q!w e q!w a t ゚ q!w a-$ $t \cdot \bar{i}^{i} t c \hat{1} n^{2}$ |
| xâucine bone | dit. | xd . | xẹ́xauxaucîn ${ }^{\text {e }}$ |
| $m a^{\text {a }}$ c! ${ }^{\text {d }}{ }^{\text {c }}$ louse | II a . | vili c. | mimatc!matatc! |
| $t_{\text {ds }}{ }^{u}$ hair seal | dit. | xxIII. |  |
| to'agy in salmon spear | III 2. | dit. | titotatag ${ }^{\nu}$ 乞̂n |

Sub-type $I I$ c. Plural of simplex modified by diminutive features $3 a$ or $c$, and $2 b$ :-
$x$ Asam box plur. I. dim. vir. dim.plur.

| $q w^{2} S A m$ woolly grouse | dit. | VI. | $q w e q u s q u \hat{s} \hat{\imath} m^{\prime \prime}$ <br> (-qus- probably merely variant of -qwas-) |
| :---: | :---: | :---: | :---: |


| $q!A s^{\prime} \Delta d \bar{a} i$ buckskin shirt <br> $L^{t^{i}{ }^{i}} \mathrm{Am}^{2}$ cockle | $\begin{aligned} & \text { dit. } \\ & \text { dit. (or viII.) } \end{aligned}$ | XI. <br> XXIX a. | $q!e q!A s q!A s^{\prime} a d \vec{a}{ }^{\prime} i$ <br> $L i L \imath^{i} L \bar{a} u^{\prime} \hat{\imath} m^{\prime 2}$ (with irregular lengthening of $-\bar{\tau}^{i}-=-A i-$ to $-\bar{a} i-$ ) |
| :---: | :---: | :---: | :---: |
| $h e ̣ ̂ w^{A} q \underset{\sim}{e n}{ }^{\text {e }}$ swan | II a | -ōt | $h e h_{A} u h e ̣ ̂ w^{\text {a }} \overline{e V}^{\prime \prime}{ }^{\prime}$ |
| mát!āi horse clam | dit. | XI. | memat!máat $\bar{a}^{\prime}{ }^{\text {i }}$ |
| qa'um' eye | V. | III. | qeqoqt'ōm" ( $-q$ oheard for -qau-, or perhaps for -qaureduced from-qau--see type III) |

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

| páxai’ creek | I. | VI. |  |
| :---: | :---: | :---: | :---: |
| $q!a ̊ k{ }^{*} u$ board | dit. | XII. | $q!e q!a k^{\text {ex }} q!e^{6} k^{\text {e }}$ |
| $s A q^{*} A k^{e} u$ war-club | dit. | xv. | sisiqq ${ }^{\text {saquel }}$ |

Sub-type II e. Reduplicating syllable of plural of simplex changed to cau-:

| $x a^{\prime} \bar{a}$ big clam | I. | II. | $x e x a u x a^{\prime}{ }_{A} \quad$ (note change of $x a^{\prime} \bar{a}$ - to $-x \bar{a} ’ a$, perhaps due to rhythmic analogy of dim. sing. $x e ́ x_{A}{ }^{\prime} \vec{a}^{\prime}{ }^{\prime}$ ) |
| :---: | :---: | :---: | :---: |
| q!dik** eagle | viII. | -obt | $q!e q!_{\text {Auq }}!$ atik-ōt |

These strange diminutive plurals can hardly be explained otherwise than as formed by analogy of such diminutive plurals as xexauxt'wa "little fur seals,". xẹ́xauxāug"as "little bears," and xéxauxaucîn" "little bones," where -xau-(-xau-) is etymologically justified. The parallelism of xá' $\bar{a}$ "big clam" and $x a^{a \prime} w a^{e}$ "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!ếibāi wild cherry plur. I (or viII). dim. xin a. dim. plur. bush $t!\bar{e} t!A m t!a^{\prime} a b \bar{a} i$
(really belongs to type 1 ; based on reduplicated plural of type II)
$q e^{\prime} w^{A} x$ steel-head salmon
tti $x^{u}$ yellow cedar viII. I b. titota'ayix $x^{u}$ ( $t t^{i} x^{u}$
II. xvir b.
$q e q A u q \hbar^{\prime} g^{\prime} g^{v} e^{e} x$ $\left(-g^{y} \hat{e}^{\hat{0}} x\right.$ as in dim. sing.) $>{ }^{*} t i y i x^{u}$, tip-being modified to $t \vec{a}^{\prime} a-$; -to-, cf. type II e, is peculiar and is probably due to analogy of titotti'$a g^{v} a x^{*}$ "little ferns")

Another diminutive plural with erratic -o- vowel (in both reduplicating syllable for plurality and stem) belonging to type 1 , is:-

```
sáan' cohoe sal-
    I. XIII a. sisoso'add-ōt
    mon
```

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

Type III. Reduplicating Syllable: cẹ; 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:$x \delta p^{*} x o ̄ p^{2}$ hum- plur. I. dim. -ōlt ${ }^{*}{ }^{2} \operatorname{dim}$.plur. ming bird

|  | III b . | xx b. ritolda ${ }^{\text {a }}$ vett! ${ }^{\text {a }}$ |
| :---: | :---: | :---: |
| $t d^{a} d a k^{*}{ }^{\text {a }}$ skin | III b. | xxim. tetota ${ }^{\text {a }}$ dak ${ }^{\text {cou }}$ |
| $q t^{\prime} y a^{2}$ water | viII. | vili a. qeqeqáya |
|  | (type viII implied in dim. plur.) |  |
| sa'yat lake | viII. | VIII c. sisisaty yat |
| ldidatctan woman's | dit. | xx b. tititaidatctan |

Sub-type III b. Plural of simplex modified by diminutive feature 2a:tcáyac hand viri. IX a. tcịtcîtcā'yac

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

| saya'ada neck | viir. | virir b. | sịsicsta ${ }^{\prime} \vec{a}^{\prime} a d a$ |
| :---: | :---: | :---: | :---: |
| $k w u ́ d j a ̄ k{ }^{\bullet}{ }^{\text {c }}$ trout | dit. | xxix b. | kwilkw ${ }^{\prime}$ adja $k^{\prime *}$ |

Sub-type III d. Plural of simplex modified by diminutive features $4 a$ and $2 a:-$
$x \hat{a}^{\prime}$ 'adjaic stone viin. Ix b. xexext'adje'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 $\mathbf{X}$, 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:-
p!é'ixāi alder plur. I. dim. xiII a. dim. plur. (or viII). p!êp!ê'i $x a \bar{a} i$

mo ${ }^{\prime}$ 'os hand no plur. $\quad$ a $\quad$ mê'mọ'ọ (may
also be considered
as belonging to
type iv b)
Sub-type IV b. Simplex modified by diminutive feature 5a:tc!éāado dog II b. xxvb. tclếtctin'āmi (irregular in that -o of stem is dropped; with $-\bar{a} m^{2}$ cf. perhaps $-\vec{a}^{\prime} m$ of djādjūa' $m$ 'trees')

Sub-type IV c. Reduplicating vowel of diminutive changed to ê: -
xwáxwadjó'm ${ }^{*}$ fy $x w \hat{e}^{\prime}{ }^{\prime} x w a d j o{ }^{\prime} m^{2}$
(dim. in form)

(dim. in form)

| $m i ́ q s i n{ }^{\text {a }}$ nose | I. | ab . | $m e e^{\prime} m_{A q S i t i n}$ |
| :---: | :---: | :---: | :---: |
| $k w a ' a m$ coiled storage basket | dit. | Iv. | kwêe ${ }^{\text {e }}$ kwi'̂̀m' |
| $q!w a t{ }^{\text {d }}$ - $A m$ river | dit. | Xviri. | $q!w \hat{e r}^{\prime} q$ q wat ${ }^{\text {r }} \mathrm{m}^{\prime}$ |
| trrusal tongue |  |  | tê'etx ${ }^{\text {us }}$ at |

Sub－type IV d．Reduplicating vowel of diminutive changed to $\hat{e}$ ；stem further modified by diminutive features 5 a and 3 c ：－
$q$ ！wA＇ix wood plur．I．dim．xxxa．dim．plur． $q!w \hat{e}^{f e} q$ ？wadj $\hat{\imath} x$

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．xxir a．
mon
sê＇ests！$i^{\prime} m^{\circ}$

Type V．Reduplicating Syllable：cê；followed by plural of simplex modified by diminutive features $5 a$ and $3 a:-$
$t!\hat{e}^{\prime} \varepsilon^{\prime} d \hat{e}^{f} q w a i$ salmon－plur．il a．dim．xxvi c．dim．plur． berry bush
$t!\hat{e ́}^{\prime} t!_{A n t!}{ }^{\prime} n^{\prime} q w a ̈ a$ （－包－is lost，cf． diminutive feature 5 b）
sơsin mouth II b．XXVI a．sếsọsini

## VI．MISCELLANEOUS LINGUISTIC MATERIAL．

Numerals．
1．$p a^{\prime} a$
11．${ }^{\text {on }} p^{\circ} a ̈ n h a i k^{*} p a^{\prime a}$
2．$s \overleftarrow{a}^{\prime} a$
20．simcyata 200．sa＇mîtc
3．tcálas
30．tcanaux ${ }^{u} c y$ a＇$^{\prime} a$
300．tct＇adagyitc
4．$m \bar{o} s$
40．mosalcy屯＇a
400．mosa＇agỵ̂tc
5．s乞yātcịs
50．séyats！atcy $\vec{a}^{\prime} a$
500．sęatsá＇aguitc
6．t！axam（or－ab）
60．t！áxamatcy $\bar{a}^{\prime} a$
600．t！axama＇agûtc
7．$t s!\delta^{\prime \prime u t c} \bar{\imath}^{i} s$
70．ts！ötci＇alcya＇a
700．ts！ōtcịsáagûtc
8．$t a^{\prime} a t c \tau^{i}{ }^{i} s$
80．tä＇atcic satcya＇
800．t屯’atc ${ }^{\prime} s \bar{a}^{\prime} a g^{4}$ ûtc
9．$t i g^{y} \hat{i}^{u} x^{u}$
90．tiguexwatcya＇a
900．tiguixwa＇aguitc
10．$\partial p^{\prime} \bar{a} n$
100．$t^{t}$ sa＇s ${ }^{\text {a }}$ ？$t c$
1000．$t^{t} s a^{\prime} a g^{v i t c} c$
2000 is $s a b a t^{2} s \sigma^{\prime} a g^{y} \hat{i} t c$ or $s a^{\prime} a t^{2} \sigma^{\prime} a g^{y} i t c$.

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

| People | Canoes | Fathoms | Houses | Dollara |
| :---: | :---: | :---: | :---: | :---: |
| 1. $p \uparrow p \bar{a}{ }^{\prime} a$ | natcidag yil | watcdunxutal | natc!axwoautz" | $p d q^{\prime} p 8$ |
| 2. $\frac{\text { ¢quă'a }}{}$ | * 0 bagvil | sàmtal | 8đ'abaut? ${ }^{\text {c }}$ | sat $Q^{\circ} 0^{\circ}$ |
| 3. Lectuayi | $t c a d z a g v i t$ | tcād ${ }^{\text {n }}$ | $t c d^{\text {a }}$ autq* | tedlaspa |
| 4. m¢sayi | mêsăut | môacaltã! |  | môsps |
| 5. sȩyatsãyi | spyatrág ${ }^{\text {a }}$ il | atyatsatual | styatsauts* | zeyates |
| 6. Uaxamàyi | ttaxamáagy ${ }^{\text {a }}$ |  |  |  |
| 7. ts? ofcisāyi |  |  |  |  |
| 8. ta'dıcisăy |  |  |  |  |
|  |  |  |  |  |
| 10. .opânãyi |  |  |  |  |

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

Body-part suffixes. Examples of body-part "substantivals," as they have been termed by Boas, which occur only in composition (better perhaps derivation), are:-
head: $p a ́ q \cdot \bar{e}^{8} q^{x} w a n{ }^{e}$ white-headed tcix $\cdot \bar{e}^{-\quad} q^{x} w a n^{2}$ red-headed (or $-a d^{2}$ )
hand: páq${ }^{\prime} \bar{o}^{\prime} u d j a^{e}$ white-handed tcixō"u $d j a^{a}$ red-handed
eye: $\quad p a q \cdot \bar{a} o s$ white-eyed
páq$q^{\circ} p a q^{\circ}$ ạos white-eyed (plur.; refers to several persons or to two eyes of one person)
tchxāos red-eyed
tcixtcixāos red-eyed (plur.)
nose: ts!ats! $\overline{e ́}^{\text {e }} \mathrm{miq}^{\text {a }}$ red-nosed
$p a q^{\circ}{ }^{\prime}{ }^{\circ} q^{\circ}{ }^{\text {u }}$ white-nosed
t!âťts! $\bar{a}^{\prime}{ }^{a} m i q^{q^{\prime}}$ nose bleeds
foot: páqecin ${ }^{2}$ white-footed
$p a q^{*} p a q^{*}{ }^{c}{ }^{2}{ }^{2}$ white-footed (plur.)
With these contrast independent use of "ear" in páq${ }^{2} p a q^{*}$ $q!~ o a ' a \bar{a} d a$ "white ears."

Possessive and subjective pronouns. Only very fragmentary data were secured on Comox pronouns. I do not consider them as particularly reliable.

| tatsi mọ'os my head | tamsi mó'os our heads |
| :---: | :---: |
| tan mọ'os your head | ta mọ'ọap your (plur.) heads (visible) |
| $t_{A}$ mọ'ọs his head (visible) | $k u m o ̛ ̣ o ̣ a p$ " your (plur.) heads (invisible) |

$t_{A}$ and $k_{U}$ are articles implying visibility and invisibility respectively. Possessive pronouns modifying verb subjects are:-
' $A$ tsi mọ' os my head is sore (' $\bar{a}$ e to be sore)
' $t^{2} t_{A} n m \phi$ 'os your head is sore
' $t^{\prime} t_{A} m o{ }^{\prime}$ 'oss his head is sore
'a $t_{A} m o{ }^{\prime}$ 'oss $t_{A}$ stitte the woman has headache (literally, sore the her-head the woman)

Possessive pronouns modifying verb objects are:-
$t c^{\circ} k!\dot{\prime} d_{\Lambda}$ wad tsi mợos I see my head
tčk! $u$ dAxwad das mọ'ọs I see your head
$t c^{\circ} k!u d_{A} x w a d d_{A}$ mó'ọss I see his head
$t c^{\circ} k!u d_{A x w a d ~ d a ~ t c t i t c a ̄ y a c s ~ I ~ s e e ~ h i s ~ h a n d s ~}^{\text {in }}$

Subjective pronominal suffixes are:-
ťtcc tō'mic I am a big man (tī big) tだatc ${ }^{*} u$ tō'mic you are a big man
$t t^{\prime} \in t 0^{\prime} m i c$ he is a big man tťadjan sātt ${ }^{2}$ I am a big woman $t \not t^{\bullet a} d j a u x^{u}$ sält ${ }^{\bullet}$ you are a big woman

## VII. 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 | $s-\operatorname{tn}$ tree | plur. $s-$ tntn $^{1}$ ( $s-$, as often in Salish, is prefix) |
| :---: | :---: | :---: |
| Tcil'६euk (Cowichan group) | s-kwomái dog | s-kwomkwomaí ${ }^{2}$ |
| Shuswap | $s k^{\prime} \times q / a \operatorname{dog}$ |  |
|  | nóqonuq woman | noqnóqonuq ${ }^{3}$ |
| Okanagan | s-k' ${ }^{\text {elteméa }}$ man |  |
| Thompson River mountain | s-k'um | s-k'umk'um ${ }^{5}$ |
|  | s-núkoa friend | s-nukenúkoa ${ }^{5}$ |
|  | s-kotum crumpled | $s-k o ̄ u m k \delta m^{5}$ |
| Examples of type II are:- |  |  |
| Nanaimo | $s$-pal raven | $s-p s l p a^{\prime} 7^{6}$ |
|  | s-tallo river | 8 -telta' $10{ }^{6}$ |

[^6]| Shuswap | s-kaipk*en head p | $s-k^{*}{ }^{\text {ep }} \boldsymbol{p a ́ p q E} n^{1}$ (probably misprint for -kepkápk'en) |
| :---: | :---: | :---: |
|  | $k ' e \overline{s t}$ bad | $k y^{\prime}$ 'eskēst ${ }^{1}$ (probably misprint for $-k$ 'ēst) |
| Okanagan | $s-k e^{\circ} \mathrm{e}_{l}$ Indian |  |
| Thompson River | cákne stone | cencấmn ${ }^{3}$ |
|  | s-pam camp fire | s-pempám ${ }^{3}$ |
|  | s-nikiáp coyote | s-nîknikiáp ${ }^{3}$ (-̂)- is very open and short, |
|  |  | $-i$ - is close and equivalent to our -i-; hence type IIb) |
|  | s-quastt to walk | $s$-qusquastt³ (type II c) |

An interesting Thompson River example of type II is:cirap tree cipcirat ${ }^{3}$
An example of type III (reduplicating -Aw- contracted to $\sim 0-$ or $-\bar{o}-)$, but with retained $-w$ - (Comox $-g^{y_{-}}$) is:-

Okanagan tetuwét boy tottuit ${ }^{4}$ (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 $\quad t u^{\prime} \hat{u}^{u} w u t^{e}$ boy tutu'ưu ${ }^{u} w u t^{* 5}$ ( $-u$ - 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:-
$t u ̄ w e ̂ u t ~ b o y ~ t u ̄ t u w e ̂ u t ~{ }^{6}$

[^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 gietia old woman | plur. tsītsitq ${ }^{1}$ gigiêia ${ }^{1}$ |
| :---: | :---: | :---: |
| Thompson River | tcite house | teitcteto ${ }^{2}$ |
|  | s-tsuk picture | s-tsutsuk ${ }^{2}$ |
|  | $s-k^{*} k^{*} q$ qa dog | $s-k^{\circ} a k^{\circ} a k^{*} q a^{2}$ |
|  | $s-p$ pzúzō bird | s-pepzzuzō ${ }^{2}$ (this form, however, may really |
|  |  | be diminutive plural, |
|  |  | $s-p$ zzuzö being dimin- |
|  |  | utive, with final reduplication, of $s$-pezб |
|  |  | "'animal," whose plu- |
|  |  | ral is normally form- |
|  |  | ed: s-pzzpezó, ${ }^{2}$ type I) |
|  | s-kikeldaoa musk- |  |
|  | rat | $s-$ kikikeláqoa ${ }^{2}$ |
| Lower Lillooet | tcit ${ }^{\text {a }} \times$ x house | tcitcoitt ${ }^{\text {a }} \mathrm{x}^{3}$ |
|  | $q \delta^{\prime} ?$ water | $q \bar{\chi} \bar{o}^{\top}{ }^{\text {o3 }}$ |
| Note also:- |  |  |
| Nanaimo | kounes whale <br> (i.e. qúnes) | $k \cdot \bar{o} k u \hat{n} n s^{4}$ (probably misprint for $\left.-k{ }^{*} u \frac{n}{n} i s\right)$ |

It is interesting to contrast with this plural ( $q \bar{o} q w i n i s$ in our orthography) Comox $q w_{A d} q w_{i} d^{2} \hat{\imath}^{i} s$ humpbacked whales ( $<q w_{A} n-$ $q w \pm n \hat{\varepsilon} s)$ 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 | lâlem house | lalâlem ${ }^{\text {q }}$ |
| :---: | :---: | :---: |
|  | wruas frog | hāuwêqas ${ }^{4}$ ( $-u$ - presumably glide; hāw-dissimilated from *wāw-?) |
| Tcil'Qéuk | mela son | mamela ${ }^{\text {b }}$ |

[^8]Type $\mathbf{X}$ is illustrated in:-
Nanaimo $k^{*} a k^{*} E n$ post plur. $k^{*}$ alak ${ }^{*} E n^{1}$ ( $d$ is apparently our ê)

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 | $h \hat{a}^{\prime}$ pet deer | hald ${ }^{\prime} p_{E t}{ }^{2}$ (type IX) |
| :---: | :---: | :---: |
|  | tcitctek an mink | tciletctek*an ${ }^{2}$ (type VII) |
|  | spak' ${ }^{\circ} \mathrm{m}$ flower | spâlak' $\mathrm{Em}^{1}$ |
| Tcil'qéuk | $k^{\prime} \bar{a} m i$ maid |  |
|  | stelkêyū horse | stelekey $\bar{u}^{3}$ |
|  | $y$ tisuk hat | $y$ atsuk ${ }^{3}$ |

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 | $s-m e ́ y E c ̧ ~ d e e r ~$ | $s-$ enéyeç $^{4}$ |
| :--- | :--- | :--- |
| Tcil'Qêuk | $s-w e ̂ E k a$ man | $s-\bar{\imath} w e ́ E k a^{3}(-s-$ palata- |
|  |  | lized to $-\hat{\imath}-,-\bar{\imath}-$ by $s-?)$ |

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

| Tcil'Qéuk | lalem house | lelálem ${ }^{3}$ |
| :---: | :---: | :---: |
|  | s-mält stone | s-memált ${ }^{3}$ |
| Shuswap | $l a \mathrm{good}$ | $l_{\text {ela }}{ }^{5}$ |
| Nanaimo | "houses," as | pared wit |
| lelalem, sugg | turn, that ca-r | cation is r |
| ca-reduplica | e IX). Tcil' | yesiám "c |
| síam may be | ated from *SE | (or does $y$ - |
| - $\overline{\text { - }}$ of stem? | c changes (è to | $\bar{a})$ are illus |
| 'Tcil'Qéuk | $s-w \bar{e}$ eltatl boy | wōektatl ${ }^{\text {s }}$ |

[^9]| s-wêwilus youth | $s-w t w i l u s^{1}$ (this may be considered, however, as formed from unreduplicated simplex according to Type IX) |
| :---: | :---: |

With the latter example compare Comox wế"wälọs "young men" from wẹ'wälos.

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

| Type X. |  |  |
| :---: | :---: | :---: |
| Nanaimo | lalem house | diminutive lélem ${ }^{1}$ |
|  |  | (based on unreduplicated simplex) |
| Okanagan |  | нёно̄tem little girl ${ }^{2}$ $\left(H=\text { our } x^{y}\right)$ |
| Type XII. |  |  |
| Nanaimo | wúqas frog | wéwēqas ${ }^{3}$ |
| Type XIX a. |  |  |
| Nanaimo | $k \cdot a k{ }^{*}$ post | $k \cdot a k \cdot k \cdot E n^{3}$ |
| Type XXI $a$. |  |  |
| Shuswap | pasitlkua lake | papsitlkua ${ }^{4}$ |
| Thompson River | $s-n u$ ikoa friend | núnkoa ${ }^{7}$ |
| Type XXIII. |  |  |
| Tcil'@éuk | $s$-tallō river | $s$-tatelō ${ }^{\text {b }}$ |
| Nanaimo | $s-t a a^{\prime} l o$ river | $s$-tatele ${ }^{\text {co }}$ |

Type XXVI a.
Nanaimo s-puk' em flower s-pápker ${ }^{6}$
Comparable perhaps to Comox Type XXX a is:-
Thompson River s-pêêtc
$s-p a p a a t s^{7}\left(-a a-=-a^{\prime} a-\right.$ 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-mẽts deer
$c-m$ Émēits ${ }^{8}$
Tcil'Qéuk lálem house lelüm ${ }^{9}$ (based on unreduplicated form of simplex; change of -E- to - ${ }^{\hat{a}}$ - is perhaps parallel to that of Comox - $A$ - to - $\hat{\imath}-$ )

[^10]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:-

Tcil'Qéuk $s$-mält stone diminutive $s$-emelét ${ }^{1}$ Reduplicating with $\mathrm{c}^{\text {ry }}$-, and with breaking of stem-vowel, is:-

Thompson River kes bad $\quad{ }^{-}$Ekees $-t^{2}\left(?=-k A^{\prime} A s\right)$
This type may well exist in Comox, but not happen to be represented in the material collected. Such diminutive forms as Thompson River qEzuzum ${ }^{1}$, with interior reduplication, from qzúm "large," and Thompson River speyúzu1, with change of $-z$ - to $-y$-, from $s p_{\text {ezúzu " "bird," are evidently representatives }}$ 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 se-m'Ém'tetc girl

$$
\text { Thompson River }{ }^{4} c \text {-mútätc woman } \quad c \text {-múm'tätc }
$$ (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-mutmú'tätc dim. se-m'Ém'tetc girl women

Thompson River c-mulmútätc
women
dim. plural
${ }_{S E-m E l^{\prime} m^{\prime} m^{\prime} m^{\prime} t e t c}$
dim. $c-m \hat{u}^{\prime} m^{\prime} \neq a ̈ t c$
dim. pl. $c-m E t m \hat{u}^{\prime} m^{\prime} t a ̈ t c$

[^11]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, 5th Report on North-Western Tribes of Canada, p. 10.

[^1]:    ${ }^{2}$ Boas uses $c$ (interdental spirant, like th of English thick) in certain words for our 8. See his Qatifltq vocabulary, Report B.A.A.S., 1890, 6th 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.
    ${ }^{1}$ ibid., p. 17.

[^2]:    ${ }^{1}$ See C. Hill-Tout, Ethnological Studies of the Mainland Halkomellsm, a division of the Salish of British Columbia, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 65.
    i See F. Boas, Kwakiutl, Handbook of American Indian Languages, Bulletin 40, Bureau of American Ethnology, 1911, p. 447.
    ${ }^{3}$ C. Hill-Tout, ibid., p. 64.
    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
    ${ }^{5}$ C. Hill-Tout, Ethnological Studies of the Mainland Halkomelrm, a division of the Salish of British Columbia, Report of British Association for the Advancement of Science, 1902, Ethnological Survey of Canada, p. 86.
    ${ }^{5}$ 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. 147

[^3]:    1 In these formuim a represents first consonant of stem, $v$ first vowel, $c_{1}$ second oonsonant of stem, vi second vowel, and so on. v represents any long vowel, $\stackrel{y}{*}$ any shortened vowel.

[^4]:    ${ }^{1}$ Formed from $q$ " $1 a^{\prime} a b a s$ "wooden bsll 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 little 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 cther 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 gosla 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 Halkömelzm，a division of the Salish of British Columbia，Report of British Association for the Advancement of Science，1902， Ethnological Survey of Canada，p． 89.

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

    4 Ibid., p. 135.
    ${ }_{5} \mathrm{~F}$. Boas, Report of British Associstion for the Advancement of Bcience, 1898, 12th and Final Report on the Northwestern Tribes of Canada, p. 28.

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

[^7]:    ${ }^{1}$ Ibid., p. 131.
    Ibid., p. 135.
    ${ }^{2}$ F. Boas, Report B.A.A.S., 12 th Report on N.W. Tribes, p. 28.
    ${ }^{6}$ F. Boas, Report B.A.A.S., 6 th Report on N.W. Tribes, p. 135.
    ${ }^{5}$ Some Lower Lillooet linguistic material was obtained in January, 1912, from I naoe Jacob (Indian name $Y$ isp).
    ${ }_{6}$ F. Boas, ibid., p. 131.

[^8]:    1 ibsd., p. 131.
    ${ }_{2}$ F. Boas, Report B.A.A.S., 12 Report on N.W. Tribes, p. 28.
    ${ }^{8}$ Obtained from Ignace Jacob.
    4 F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.
    ${ }^{5}$ C. Hill-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20.

[^9]:    ${ }_{1}^{1}$, F. Boas, Report B.A.A.S., 6th Report on N.W. Tribes, p. 129.
    ${ }^{1}{ }^{2}$ ibid. $^{2}, \mathrm{p} 128$.
    ${ }^{8}$ C. Hiji-Tout, Report B.A.A.S., 1902, Ethnological Survey of Canada, p. 20.
    ${ }^{4}$ F. Boas, Report B.A.A.S, 6th Report on N.W. Tribes, p. 128.
    -Ibid., p. 131.

[^10]:    ${ }^{1}$ 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 Okonak'erh of British Columbia, Journal of the Royal Anthropological Institute of Great Britain and Ireland, voI. XuI, 1911, p. 143.
    ${ }^{3}$ F. Boas, ibid.
    4 Boas, ibid., p. 131.
    C. Hill-Tout, Report B.A.A.S., 1902 ,Ethnologioal Survey of Canada, p. 20.
    ${ }^{6}$ Boas, ibid., p. 129.
    7 Boas, Report B.A.A.S., 12th Report on N.W. Tribes, p. 29.
    ${ }^{5}$ Boas, ibid.
    ${ }^{9}$ Hill-Tout, ibid.
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[^11]:    1 Hill-Tout, ibid.
    a Boas, ibid.
    ${ }^{8}$ Upper Lillooet forms were obtained in January, 1912, from Chief Jim (Indian name Aidet ${ }^{1} / t$ ). $E$ has here been used to indicate very short obscure vowel of undefined quality.

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

