# INTERIOR GLOTTALIZATION AND THE SUFFIX -(V)P IN LILLOOET, SHUSWAP AND THOMPSON

Jan P. van Eijk

Department of Linguistics University of Victoria

#### I. INTRODUCTION

Lillooet, Shuswap and Thompson belong to the Interior branch of the Salish (or Salishan) language family, and are spoken in British Columbia, Canada. (For a map of the Salish language area, plus a general introduction to Salish, see Thompson 1979.) In what follows, I discuss two aspectual devices in Lillooet, Shuswap and Thompson, in sections 3-7. General information on the phonology of these languages is given in section 2. Lillooet material is taken from Van Eijk 1985, Shuswap material is from Kuipers 1974, and Thompson material is from Thompson and Thompson 1980. Lillooet forms marked F are from the northern dialect (spoken around Fountain), and forms marked M are from the southern dialect (spoken around Mount Currie); both dialects are completely mutually intelligible; forms bearing no marker are the same in both dialects.

#### 2. PHONOLOGY: GENERAL INFORMATION

Kuipers (1974) uses  $\lambda$  instead of  $\hat{\mathbf{t}}$ , and he uses  $\hat{\mathbf{t}}$  instead of  $\hat{\mathbf{t}}$  to indicate labialization. Thompson and Thompson (1980) use  $\hat{\mathbf{t}}$  and  $\hat{\mathbf{t}}$  instead of  $\hat{\mathbf{t}}$   $\hat{\mathbf{t}}$ . In this article, all consonant symbols for all three languages are standardized according to the symbols given in section 2. However, vowel symbols in the Shuswap and Thompson examples are those that Kuipers and Thompson and Thompson use.

Note that a and i overlap phonetically in  $[\epsilon]$ . The phonetic realization  $[\dot{\epsilon}]$ 

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two major dialects: Western (described in Kuipers 1974) and Eastern. Both dialects have  $e i u \ni a o \Lambda$  (corresponding to Lillooet  $a i u \ni a u \ni$ ), while Eastern Shuswap (which is not reflected in the discussion below) also has a counterpart to Lillooet i. Thompson has  $e i u \ni a i o \ni$  (corresponding to Lillooet  $a i u \ni a i u \ni$ ). The favourite root shape in these languages is CVC. Lillooet and Thompson (but not Shuswap) allow  $\ni$  to occur under the stress. All three languages delete or insert unstressed  $\ni$  under certain morphophonemic conditions. The vowel  $\ni /\Lambda$  is rare in all three languages. (In particular, it is difficult to find roots which have  $\ni /\Lambda$  and also employ any of the aspectual devices discussed below. We therefore leave roots with  $\ni /\Lambda$  out of consideration in this article.)

# 3. ASPECT IN LILLOOET, SHUSWAP AND THOMPSON

Like other Salish languages, Lillooet, Shuswap and Thompson have a complex aspectual system. (For our definition of 'aspect' we follow Comrie (1983: 3): "aspects are different ways of viewing the internal temporal constituency of a situation". See Thompson 1979: 733-736 for a general discussion of Salish aspect.) Many details of the aspectual systems of Salish languages are still unclear. However, two aspectual devices have been described in sufficient detail to permit a contrastive analysis. These devices are (1) 'interior glottalization', which consists of the insertion of the glottal stop (?) adjacent to a root-vowel, (2) the addition of a suffix -p or -Vp to a root. Both interior glottalization and the affixation of -(V)p have an inchoative function (at least in Lillooet and Thompson). Moreover, these devices are largely in complementary distribution on the basis of the shapes of the roots involved. I discuss the Lillooet facts in section 4, Shuswap in 5, and Thompson in 6. In section 7 I discuss some problems that are presented by the data.

## 4. LILLOOET

A number of Lillooet roots CVC can appear in the shape CV2C ('interior glottalization') or CVC-p (addition of the suffix -p). Both interior glottalization and the addition of -p generally refer to an incipient change or a change in progress, and the term 'inchoative' or 'ingressive' may be used here. Interior glottalization is applied almost exclusively to roots CAC (A is a a i i u u). On the other hand, -p is suffixed almost exclusively to roots CaC. Examples of CV?C are: ma?k" "to get dull (blade)" F (cf. mak"-mák" "dull (blade)" F), n-ti?q" "water gets muddy" (cf. n-taq"-tíq" "water is muddy, dirty"), nu?s "to get damp" (cf. nəs-nús "damp"), la?k" "to get loose, untied" (cf. lak"-lak" "loose, untied"), n-li?x "water gets clear" (n-lax-lix "water is clear"), ká? əw to go out farther" (cf. káw-lax "to move away", the latter with the suffix -lex "body, oneself"; the insertion of and the glottalization of w in ká?ew are regular), γi?p "to grow (up)", (cf. γíp-in "to raise someone or something"), nu?q" "to get warm (atmosphere, weather)" (cf. nəq"-nuq" "warm (atmosphere, weather)"), ki?l-ús "to get embarrased, hurt" (cf. kil-us-əm "to be embarrassed, hurt". With roots Cic or Cic", interior glottalization yields the forms Cípic Cípic", e.g. lípic" "to fall apart" (cf. lic"-in "to dismantle, transitive (-in)"). Interior glottalization may combine with various types of reduplication and suffixation, as in ká?kx-al "dried out" (kax "dry", -at "completive", and reduplication of k preceding the insertion of ? in

terms of rule-ordering). There is also a totally unproductive type of interior glottalization where ? is inserted before the root vowel (CVC  $\rightarrow$  C?VC). We do not consider this latter type here, since it does not serve any clear function.

Examples of the use of -p are: nəqw-p "to get warm (atmosphere, weather)" (cf. nəqw "warm (weather)"), pəl-p "to get lost" (from the root pəl- "to be lost"), nəm-ənm-əp "to go blind" (cf. s-nəm-nəm "blind", with the stative prefix -s; the shifts in the position of unstressed ə result from deletion and insertion and are regular; both nəm-ənm-əp and s-nəm-nəm show total reduplication of the root nəm-), kwəm-p "to get dull (blade)" M (cf. kwəm-kwəm "dull (blade)"). Note that nəqw-p and kwəm-p are parallelled by nu?qw and ma?kw respectively (see p. 12), with roots CAC selecting ?, and roots CəC selecting -p. Here also belong the cases mət-əmt-əp "paralyzed" and ma?əm?at id., from the roots mət- and mat- "paralyzed", with both roots showing total reduplication.

We have a few cases of Carc, viz. parq "red-hot" (cf? paq "white"), xars "tired, aching" (no simplex), parac "faded" (cf. parac id.)

The inchoative function of -p or ? is not always completely clear (at least not from a non-Lillooet point of view): see mét-emt-ep and má?em?at and the cases Ce?C above, and note also ?"el-p "to burn" (cf. ?"él-en "to light it, set fire to it, transitive (-en)"), qem-p "warm, hot" (cf. qém-en "to heat it, transitive (-en)"). It is possible that in these cases -p and ? have lost part of their inchoative function, or that the inchoative function was lost in the translations. (For a further discussion of the semantics of -p and ? see also section ?).

As a rule, roots CAC retain the stress when followed by a suffix containing A, while roots CəC shift the stress to such a suffix. For example, from  $\chi'$ 1 ('to arrive' we form  $\chi'$ 1 (-kan) arrive', while from məq "to be full from eating" we form məq-kan "I am full". However, stems CA?C behave like roots CəC with regard to the stress, as in cax- (root) "shy, ashamed, embarassed"  $\rightarrow$  cax-an "to poke fun at someone, transitive (-an)" vs. ca?x-us "ashamed, shy" (ca?x id., -us "face"). Note also the pair ki?l-us/kil-us-əm on p. 12. Interestingly, both interior glottalization and the suffixation of -p yield forms CVCC (e.g., ma?k", k"əmp). Forms like ká?əw or lí?ic (p. 12) are also to be considered CVCC, since the presence of  $\Rightarrow$  and unstressed 1 is automatic in these forms.

#### 5. SHUSWAP

Interior glottalization in Shuswap inserts ? before the vowel of roots CVC (hence CVC  $\rightarrow$  C?VC). Kuipers 1974: 40-41 gives some 45 examples, all with roots CAC (A is e a i u o). As for the meaning of forms with interior glottalization, Kuipers notes: "Many refer to a state, e.g. p?ey cooled off besides pey-n-s he cools it off; for others, the meaning was recorded as the process itself, e.g. c?ic" to bleed". Some more examples are: m?ek" "blunt, dull" (cf. mk"-mek" id.), c?ol "stretched (as sweater after washing)" (cf. col-n-s "he stretches it"), c?al "to hurt, smart, throb" (cf. cal-t "bitter, sour, salty"), l?ep "bent over" (cf. lep-n-s "he bends it down"), q "?ex" "thin, skinny" (cf. q "ex"-t id.).

The Lillooet suffix -p is parallelled in Shuswap by a suffix -ep which has the form -up after roots ending in a rounded consonant. Kuipers (1974: 61, section 17.3.1B) translates this suffix as "arrive(d) into a state". A few examples: pl-ep "get lost",

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cr-ep "get torn", tx"-up "provided with a ration" (for more examples see Kuipers). Interior glottalization and -Vp are in complementary distribution (at least in the data supplied by Kuipers in the quoted sections) in that interior glottalization is found only with roots CAC, and -Vp with roots CC-. Not all roots which select -Vp are always unstressed. For example, besides pl-ep we have pil-n-s "he loses it", and besides cr-ep we have cir-n-s "he tears it". On the other hand, the root of tx"-up occurs unstressed only, as in tx"-nt-es "he adds to it". Shuswap pl-ep/pil-n-s, cr-ep/cir-n-s and tx"-up/tx"-nt-es are parallelled by Lillooet pel-p "to get lost", cer-en "to tear it, transitive", and tex en "to add, to pitch in, transitive". (As is said on p. 12, Lillooet allows en under the stress, but Shuswap does not. It seems that Lillooet has preserved the original Salish state of affairs, see also section 7.) Note that Shuswap forms with interior glottalization are CCVC (e.g., cric", plep).

#### 6. THOMPSON

Thompson has the following two devices for indicating inchoativity: (1) insertion of ? before the vowel of so-called strong roots (basically roots CAC, with A symbolizing e a i i u o), (2) suffixation of -\(\phi\)p to weak roots, i.e. roots with \(\phi\). Thompson and Thompson (1980: 201-202) remark that these operations convey "notions of developing action or changing state", and treat ? and -\(\phi\)p as "unrelated allomorphs conditioned by the valence of the root" (op. cit., p. 201; the term 'valence' refers to the 'strong' or 'weak' status of roots). A few examples: z?uc "it gets tight" (from the root zuc- "tight"), c?ek "it gets cool" (cek- "cool"), sk-\(\phi\)p "to get hit (by falling branch)", (sək- "to club"), k\(\phi\)-\(\phi\)p "it comes apart" (ka\(\phi\)- "to take apart"). As is the case in Shuswap, forms with interior glottalization and those with the p-suffix have the shape CCVC. Both types of forms are weak with regard to the stress. ("It is a curious fact that both allomorphs create weak stems - even the infix for strong roots is weak": Thompson and Thompson 1980: 203.) Where the stress shifts from such stems to a suffix, the forms CCVC generally become CVCC, as in sak-p-s-t-\(\hat{e}\)s "she manages to club it", zu?\(\hat{c}\)-s-t-\(\hat{e}\)s "he (unintentionally) makes it tighter".

#### 7. CONCLUSIONS AND PROBLEMS

Interior glottalization and p-suffixation present at least two problems: (1) the shape of the common operation that underlies both ? and -(V)p (if there is such a common underlying shape), plus the attending problem of rule-ordering, (2) the semantics of the case: Lillooet and Thompson interior glottalization and p-suffixation translate as inchoatives, but in Shuswap they translate as statives or continuatives: do we have different semantic functions here, or do the apparent differences go back to translation ambiguities? To start with the last point: it is possible that Shuswap has reanalyzed the function of interior glottalization and p-suffixation. However, the Shuswap examples do not refer to a solid state but rather to a state resulting from a more or less recent change, or to a state in flux. The Shuswap cases therefore do have a moment of inchoativity. A contrastive and comparative analysis of the function of Lillooet, Shuswap and Thompson interior glottalization and p-suffixation would certainly shed more light on this matter.

As for the first point, there is the problem that the inserted glottal stop and the suffix -(V)p have no formal mutual resemblance whatsoever. The most reasonable solution to this problem seems to be one which presupposes a proto-morpheme that at

one stage had both ? and -(V)p and continued ? in one type of root, and -(V)p in the remaining type of root. My hypothesis is that -p was originally applied to all roots (so that from Lillooet mak"- "dull" the form \*mak"-p was derived), that then ? was applied to all roots with A, in order to give them the same stress-status as roots with a (so that \*mak"-p became \*ma?k"-p), and that finally forms with ? dropped -p since it was felt that ?, rather than -p, carried the inchoative notion, giving us ma?k". 4 This solution does not account for the fact that in Lillooet we have forms CVCC, while in Shuswap and Thompson we have CCVC. It seems that Lillooet retained the original forms and that at some point in time Shuswap and Thompson applied metathesis to forms CVCC, yielding CCVC. (However, from a synchronic point of view, Shuswap and Thompson are more conveniently described as inserting ? before V immediately (without a preceding stage CV2C), and as affixing -Vp, rather than applying metathesis to CVCp.) Assuming metathesis, on the other hand, gives us a simpler diachronic picture. Also, metathesis is suggested by the following set of cases in Lillooet: stems CaCC and CaCC become CCoC and CCoC when embedded in the combination ka-.. va "suddenly, unexpectedly, after much trying (but with a sudden and unexpected result)", as in xəlq "to roll down" > ka-xláqva "it rolled down (suddenly)", tamk "broken, not usable any more" → ka-tmákva "to break (like an old rope when pulled), to come loose (rotting hide of dead animal)". Thus, in Lillooet we do not only have metathesis, but the direction of this metathesis is CVCC - CCVC, and not vice versa. It is quite possible that this was also the pattern in Shuswap and Thompson. (As we have seen in section 6, Thompson forms CCVC become CVCC when unstressed, but this seems to be due to a rather general Salish tendency to avoid initial consonant clusters that do not border immediately on stressed vowels, cf. Lillooet xwm-áka? "to do something fast" vs. xwəm-ən-cút "to hurry" (xwəm "fast", -aka? "hand", -ən transitivizer, -cút reflexive suffix).)

Combining the origin of ? and -(V)p with the application of metathesis, we arrive at the schema in Figure 1 (solid lines indicate changes in forms, dotted lines indicate the continuation of an existing form).

The fact that Shuswap CCep and CCup result from CCəp can be proven in the following way: as we have seen on p. 12, Shuswap does not tolerate  $\ni$  under the stress, while Lillooet and Thompson do. Comparative Salish evidence shows that it is Shuswap that innovated here, and that it continued stressed occurences of  $\ni$  as cardinal (full) vowels, with the phonetic values that approach the phonetics of  $\ni$  as conditioned by adjoining consonants: Kuipers (1974: 26) describes the phonetics of  $\ni$  as follows: "The unstressed vowel  $\ni$  varies from  $[\check{e}, \check{e}, \check{\lambda}]$ , in the neighbourhood of rounded consonants also  $[\check{o}]$ , to  $[\ni, \check{u}]$  or zero." Obviously, -ep continues the  $[\check{e}]$  variant, while -up continues the  $[\check{o}]$  variant.

This development would parallel developments in Germanic languages where a certain ending is attached to a root, then requires umlaut in that root, and is finally dropped, as in Old High German scōni → Middle High German schōne → Modern German schōn, see Bynon (1983: 26). We could also think of Old English \*fot-i → fet, see Sapir (1949: 172-180). Of course, in the Germanic cases there is a phonetic relationship between the ending and the umlaut, a relationship that is lacking between -p and ? in the Salish case.

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## Figure 1.

Proto-(Interior) Salish:

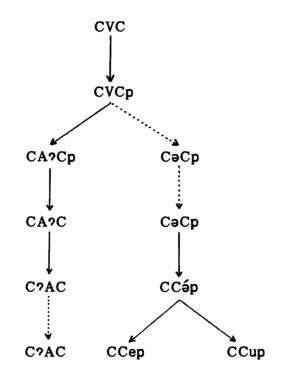
Affixation of -p:

-?- in stems CACp:

Deletion of -p from CA?Cp, yielding final stage for Lillooet:

Metathesis in Shuswap/Thompson, yielding final stage for Thompson:

Shuswap:



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