

COMPLEX VERB FORMATION IN LEKO

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1. Introduction¹

Leko used to be spoken widely on the Andean eastern slopes of the province of La Paz in Bolivia. Today it is almost extinct. The last speakers have passed the age of 60. They did not speak the language for over 40 years and did not pass the language on to their children. The major published source on the language, apart from the small word lists by Lázaro de Ribera (in Palau & Saíz 1989), Cardús (1886), Brinton (1946) and Montaña Aragón (1987), is a Christian doctrine composed by the missionary Andrés Herrero in the beginning of the nineteenth century. The Leko doctrine was published by Lafone Quevedo (1905), who used it as the major source for a grammatical sketch of the language. His work has remained the only serious analysis of Leko, since no other linguistic study of the language was undertaken since then. In 1994, I was able to trace some of the last speakers of the language and during visits in the following years I gathered enough language data to extend the linguistic analysis presented in Lafone Quevedo and publish a reinterpreted version of the Leko doctrine (van de Kerke 1999). A first view of complex verb formation was presented in van de Kerke (1998) and the purpose of the current article is to pursue this line of investigation, since I have collected much more reliable data since then.

2. The Leko language

In Grimes (1996) Leko, classified as an isolate, was reported to be extinct. However, Montaña Aragón (1987) reported a number of speakers in the region of Atén and Apolo in the province of Franz Tamayo and along the river Mapiri in the province of Larecaja, both in the Andean foothills region (the eastern slopes), to the north of La Paz, Bolivia. In 1994, responding to an appeal in Adelaar (1991) to investigate the possibility that speakers of the Leko language might still survive, I undertook a fieldwork trip to Bolivia. A thorough search in the region of Atén and Apolo was in vain, but I contacted some elderly men and women on the Mapiri river, who in their youth had learned to speak a language that, on the basis of the existing data, could be characterized as Leko. Since then, ongoing fieldwork has produced much more language data. One of the major problems is the fact that the Leko speakers do not feel free to enter into spontaneous conversation with each other, so most of my data are the result of elicitation.

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Happily enough, in July 2001, a speaker² whom I had contacted the year before, told me a good number of spontaneously produced stories. Wherever possible I will use examples from these stories to illustrate the use of the different derivational suffixes. Tentatively, a number of ordering constraints of the suffixes will be discussed in section 5.

3. *Complex verb formation in Leko*

Leko belongs to the class of so called ‘agglutinative’ languages in which a complex meaning may be expressed by means of a morphologically complex word. Complex words consist of a root and a number of clearly recognizable morphemes with a specific meaning. Apart from the addition of inflectional morphemes, which express Person, Number, and Case (in the case of nouns) and Tense (in the case of verbs), complex words may be formed by the addition of derivational morphemes and by means of the compounding of roots. Whether and how these word formation processes may be distinguished is an unresolved question that has led to a number of highly theory-dependent and language-specific answers. The distinction between derivation and inflection is difficult to make when inflectional morphemes occur in between clearly derivational morphemes. The same holds for the distinction between derivation and compounding. The fact that a root is combined with another morpheme that may occur as a root in the language, is by itself no conclusive evidence for the combination to be a compound, especially when other morphemes occur in between them. Our knowledge of Leko is still so incomplete that it is premature to take a firm stand on the question whether some complex verbs are the result of derivation or of compounding. In the following I will present all the word formation processes as derivational, although I am well aware of the fact that in the end a number of them may be better analyzed as cases of compounding.

Unlike the neighbouring highland languages Quechua and Aymara with which it shares a number of features, Leko has both suffixes and prefixes. Due to the fact that until this year almost all data from Leko were gathered by means of elicitation and due to the fact that the speakers had not spoken the language for over 40 years, the number of affixes collected so far probably form a small subset of the affixes that were used when the language was still in daily use. However, by scrutinizing the collected data closely from time to time a new affix is discovered, the meaning and position of which can be understood by subsequent elicitation. For example, apart from the object markers that have already been treated in van de Kerke (2000), we find in the set of prefixes the element *ka-* that expresses a subjunctive: it refers to unrealized but possible states of affairs. In the set of suffixes, we find a number of elements that may be described as derivational in nature. They are meaning and/or valency changing and are reminiscent of equivalent sets of elements, both in meaning and in position, in many other languages that rely on verbal derivation to form complex verbal expressions. As far as position in the verbal complex is concerned,

² Cerilo Figueredo, who was born in Karura around 65 years ago and who still lives there.

they can be identified as elements that occur in between the verb root and an inflectional element, which can be either verbal like tense or a nominalizing suffix. This leads to the possibly arbitrary decision that an element like *-chi* that mitigates an imperative, which forms part of the inflectional system, is treated as derivational. A suffix like *-sin*, an equivalent of untranslatable particles like English ‘then’ and Spanish ‘pues’, is not, since it follows the imperative suffix:

1. a. ka- yin- k’o -chi -a
 SUBJ IDAT eat MIT IMP
 ‘He should eat it on my behalf’
- b. yin- k’o -a -sin
 IDAT eat IMP ‘then’
 ‘Eat it on my behalf, then’

Besides clearly inflectional elements like imperative *-a*, I will analyse *-no* as inflectional, too. In earlier papers on the language I have presented *-no* as an indicative marker, the suffix being in complementary distribution with the negative marker *-in*. However, I now tend to analyze it as a nominalizing element since it can be followed by a case marker. Note, for example the dative marker *-ki* in *lulchanoki* in (2), which is the head of the object phrase *ber kallapote lulchanoki* ‘the one passing on a raft’, the complement of the main verb *dosogchano* ‘he was looking at’:

- (2) kala -ra do- soq -cha -no (-te³) ber kallapo-te lul -cha -no -ki
 beach LOC 3OB look DUR NOM(MT) one raft LOC pass DUR NOMDAT
 ‘From the beach he (*yobora* ‘my friend’) was looking at someone else passing on a raft’ (the beach story)

The same holds for the suffix *-a*, which I used to analyze as a part of the past tense marker, but that can better be analyzed as a nominalizing element: a past participle. There is still a lot we do not know about Leko, but on the basis of the data I collected during my fieldwork we can obtain a first impression of the role of the derivational suffixes in this hardly studied Bolivian ‘pie de monte’ language.

4. Derivational suffixes in Leko

4.1. *-cho* ‘feel like’

The suffix *-cho* is glossed as ‘desiderative’, but that is only one part of the meaning complex, the idea of which is better expressed by ‘to feel like’. As a lexical verb it

³ I used to analyze the suffix *-te* as the third person main tense marker. I now analyze it as a tense marker ‘pur sang’, the third person marker being zero. In colloquial speech *-te* is easily dropped. Therefore, one could also analyze *dosogchano* as a nominalized clause in apposition to the noun *yobora* ‘my friend’. This would lead to the interpretation: ‘my friend, the one looking from the beach at the one passing on a raft’.

expresses the idea ‘to hurt’. It must be realized immediately after the root and it is restricted to bases that express mental or physical states: ‘be in pain’, ‘feel sad’, ‘be hungry’, etc.:

- (4) sok’och chikala lais soncho-no hichis -cho -no
 food very well well smell NOM be hungry DESID NOM
 ‘The food smelled very nice, he felt hungry’ (the bear story)

The concept of mental or physical state has to be understood broadly since a verb like *sisich* ‘to sleep’ is also a target for suffixation:

- (3) sis -cho -no -too
 sleep DESID NOM 1SGMT
 ‘I feel like sleeping’

I encountered a great number of combinations of *-cho* with the adjective *lais* ‘good’. This suggests that the suffix can turn adjectives into verbs:

- (5) lais -cho -no -te charki lais -cho -no utu -no on charki
 well DESID NOM MT dry meat well DESID NOM fat NOM that dry meat
 ‘It was very good, the dried meat, very good, fat it was, the dried meat’ (the wild boar story)

4.2. The ‘Motion’ modifiers

Modification of motion verbs by means of suffixes is a well known characteristic of languages in the region, like Quechua and Aymara, and Leko is no exception. Motion verbs that are not inherently specified for the direction in which the motion takes place, are marked as such by means of motion modifiers. Frequently occurring are ‘upward’, ‘downward’, ‘inward’ and ‘outward’ motion. The first three of these are attested in spontaneous speech.

4.2.1. *-su(ri)* ‘upward motion’

- (6) kawot do- to -suri-a has -rep
 above 3OB put UP IMP below ABL
 ‘Throw it from below’
- (7) soboto hekor bat -tha -te chaka -su -no kawot -tha
 insect outsidetree DIM LOC sit UP NOM above DIM
 ‘Outside in a little tree the insect sits high, a little bit high’ (the soboto story)

4.2.2. *-sa(ri)* ‘downward motion’

- (8) kawot -rep⁴ do- to -sari -a has
 above ABL 3OB put DOWN IMP below
 ‘Throw it down from above’
- (9) ho cha wela -ra yin- to -sari -tan on moo lelwo
 this three arrow LOC 1DAT put DOWN OBL that monster
 ‘With these three arrows you have to put down for me that monster’ (the story of the lord of the animals)

4.2.3. *-sori* ‘inward motion’

- (10) ho cha kura wet -a ho -ra wet -no ho- to -sori-ko dowā -ra
 this three priest die PPthis LOC die NOM3OB put INTOEXH river LOC
 ‘These three priests have died, they died here, let’s throw them in the river’
 (the story of the three fathers)
- (11) kandado e -ri -m ha- amphas -sori-a on pilpuq -aya -ki sor se
 lock pull INC PRP 3OB push INTOPPthat door PL DAT in side
 ‘Pulling out the lock, he pushed the doors inward’ (the story of the three fathers)

Although I tried to find the missing ‘outward motion’, I could not get my informants to form an acceptable utterance like ‘he walked out of the house’ other than by using the free verb *ubusich* ‘to leave’ in combination with the place adverb *hekor* ‘outside’:

- (12) wonon -mo ubus -cha -no hekor
 walk PRP leave DUR NOM outside
 ‘He leaves walking outside’

Whilst searching for ‘outward motion’, I was confronted with some other motion modifiers, which give us a clear indication of how these suffixes may have emerged: via a process of verb incorporation. Contrasting pairs show that the same lexeme may be used either as a free verb or as a suffix. In (14a) and (15a) we find the independent verbs *wari-* ‘to climb a slope’ and *hori-* ‘to enter’ in combination with a motion verb in the present participle, in (14b) and (15b) we find the same motion verb in combination with *-wari* and *-hori*, that now function as a suffix.

⁴ At least after nasals the case markers *-ra* and *-rep* change to *-da* and *-dep*, just like the inceptive marker *-ri* and the future marker *-ra* change to *-di* and *-da*. All informants use *-rep* as the ablative marker, but Cerilo Figueredo also uses the marker *-bet*. This is an intriguing fact, since in van de Kerke(2000) I already noted the possible link of *-rep* with the ablative marker in Cholón *-(llac)-tep*. A similar link may be stipulated for *-bet*.

4.2.4. *-wari* 'upward motion'

The difference with 'upward motion' *-suri* is a difference in grade. While *-suri* indicates a relatively vertical upward motion, *-wari* indicates upward motion on a slope.

- (13) on wotha wari -m on -da tintatinta laq -a -te era -iki
 that hill move up PRP that LOC tree peel bark PP MT I DAT
 'Climbing the hill, I peeled the bark from the tintatinta (tree) for me' (story of the tintatinta tree)

So, we obtain the contrast between two independent verbs or one derived compounded verb:

- (14) a. wonon -mo wotha wari -no -te
 walk PRP hill UP NOMMT
 'Walking he climbs the hill'
- b. wotha wonon -wari -no -te
 hill walk UP NOMMT
 'He walks the hill up'

4.2.5. *-hori* 'inward motion'

The verb *ho-* means 'to enter'. Used as a suffix in combination with 'inceptive' *-ri*, it marks 'motion into':

- (15) a. on kachu ho -ri -no -te heboa -ra se -m
 that bird enter INC NOMMT nest LOC fly PRP
 'The bird enters the nest flying'
- b. on kachu se -hori -no -te heboa -ra
 that bird fly INTO NOMMT nest LOC
 'The bird flies into the nest'

4.3. *-ri* 'inceptive'

The 'inceptive' character of the suffix *-ri* may mark that an action is going to take place, cf. (16). In other cases it has related meanings, such as changing a stative verb like *huchich* 'to be the end' into a process verb *huchirich* 'to come to an end', as in (17):

- (16) miis yo- yo -ki yin- hal -di -ra -no -te wes -ra
 tomorrow 1SG mother GEN 1DAT buy INC FUT NOMMT Huanay LOC
 'Tomorrow my mother will go and buy me (a new one) in Huanay.'

- (17) on saltaqwo -ne chika hel topaq ki- chinwa-ra
 that insect TOP very brilliant back 3SG nose LOC

huch-ri -a-ra hote -te siri -aya
 end INC PPLOC have MT eyes PL

‘That flying insect has a very brilliant back, where its nose ends it has its eyes’
 (the saltaqwo story)

4.4. *-hi* ‘completive’

The completive aspect that is marked by the suffix *-hi* relates to different concepts of completedness. It indicates that a process is completed:

- (18) yo- moki warsuch tiltil -hi -no -te
 1 GEN trousers old CMPL NOMMT

‘My trousers are completely used.’

- (19) on -ne vasia -a -te -am it -ki -hi -a-te kaldera
 that TOP empty PP MT 1PL full CAUS CMPL PPMT container

‘That one we have emptied, we have completely filled the container’ (the story of the sugarmill)

Completive aspect is also attested in the next example, but in a different way. Here it relates to the concept of completedness in respect to the set of elements that either performs the action (Agents) or on which the action is performed (Patients). It is quite logical that in such cases one also encounters the universal quantifier *seneng* ‘all’:

- (20) seneng se -hi -a-ra decien se -ra -no -te on suma lito
 all fly CMPL PPLOC then fly FUT NOMMT thay big queen

‘When they have flown all, then that queen mother will fly (the ant story)’

- (21) ni ber noq-bes -in mo -no -te senen kin- k’o -hi -a polo
 not one PL? wake NEG say NOMMT all 3DAT eat CMPL PPpuma

‘Not one (mule) did wake up, it is said, the puma(s) had eaten them all to his detriment’ (the bear story)

4.5. *-har/-handa* ‘again, to come to’

The semantics of *-har* (and its allomorph *-handa*) are far from clear, but elicited examples suggest the implication of ‘motion’ prior to action:

- (22) do- woy -di -a sok’och men -cha -no -te k’o -har -ai
 3OB call INC IMP food cool DUR NOMMT eat COME IMP

‘Go and call him, the food is getting cold, he must come to eat (it)’

In the text material I only encountered examples where *-har* was combined with the verb *nech* ‘to exist, to be’, in which cases it expresses that a former state of affairs has come into existence again. In the following example the speaker could have used *wilkach* ‘to return’, but that would have been different from ‘to be there again’:

- (23) on yobas -ne contento ko- noko -aya ne -har -no -aya-te -s
 that man TOP happy 3 brotherPL be COME NOM PL MT PL
 ‘That man felt happy, his brothers showed up again’ (the story of the lord of the animals)

4.6. *-somo* ‘at once’

The semantics of the suffix *-somo* appear to be very complex, but in a number of contexts it indicates that an action is performed immediately or in a hurry:

- (24) hap k’eso do- hoq -somo -a ka -te thunu -ki
 viper (type) 3OB swallow IMM PP be MT rat DAT
 ‘The viper has swallowed the rat at once’
- (25) chera samas -no -te -am perol primera to -somo -a khiri -te
 we rest NOMMT 1PL pan first put IMM PP oven LOC
 ‘We rest, (but) first we have put at once the pan on the fire’ (how to make chankaka)

4.7. *-bats* ‘almost’

The semantics of the suffix *-bats* is not yet clear, since it is a rarely used suffix. However, the few examples I obtained suggest that it may be used in contexts where English would use the adverbial element ‘almost’. As in English, we find that the scope of the adverbial element may be either on the object as in (26), or on the action expressed by the verb, as in (27):

- (26) thunu -aya senen aros k’o -hi -bats -a ka -te -s
 rat PL all rice eat CMPL NEAR PP be MT PL
 ‘The rats have eaten almost all the rice’
- (27) polo -ki ber puñete di- ki -a di- kis -bats -a mo -no -te
 puma DAT one punch 3OB make PP 3OB kill NEAR PP say NOMMT
 ‘He gave the puma a punch, it is said that he almost killed him’ (the bear story)

4.8. *-mo* ‘reciprocal’

The suffix *-mo*, homophonous with the present participle, combines with transitive action verbs, the thematic grid of which contains both an Agent and an animate Patient. It then indicates that these two animate entities perform one and the same

action with respect to each other. In combination with ditransitive verbs with an animate third argument (the Goal), like *kuch* ‘to give’ and *maytasich* ‘to lend’, the reciprocal relation holds typically between the Agent and the Goal.

- (28) yobas -aya yanapas -mo -no -aya -te ta balich -ki
 man PL help REC NOM PL MT corn plant DAT
 ‘The men help each other to plant corn’

With a number of verbs the reciprocal marker forms semi-lexicalized derivations:

- (29) *kelich* ‘hit’ *kelmoch* ‘fight’
somduch ‘speak to’ *somdumoch* ‘chat’

In reciprocal constructions one usually finds the two (or more) participants in the reciprocal action as subject of the verb:

- (30) abor -mo -a mo -no ka-te ber tropa wutili ber tropa ch’owe
 meetREC PP say NOM beMT one group wutili one group ch’owe
 ‘It is said that they met again, one group of wutili one group of chowe (two different species of monkey) (the monkey story)’

However, especially with the semi-lexicalized reciprocal verbs, one of the actors can be realized as the subject while the other is realized as a comitative complement:

- (31) kibi kel -mo -cha -ra k’eso -i, ni haka do- soq -in -kama -te
 he hit REC DUR LOC snake COM nobody 3OB look NEG be able MT
 ‘When he is fighting with the snake, nobody can look at him’ (the ‘soboto’ story)

In the next fragment we find an unexpected use of the reciprocal marker with the verb *wasuch* ‘to close’ which can be understood when we realize that doors in many cases consist of two parts, here explicitly expressed by mentioning *on toi korwa* ‘the two doors’:

- (32) wasu -a mo -no won wasu -mo -a toi candado lewa -ki -a
 close PPsay NOM house close REC PP two lock hang CAUS PP
 toi candado toq -a yawis -a mo -no ka -te, on toi korwa
 two lock put PP key PP say NOM be MT that two door
 ‘He (the king), it is said, closed the house, he closed it (together), he hung two locks, he put two locks, he closed them with a key, it is said, the two doors (the story of the three fathers)’

As I have argued in van de Kerke (1998), there is no reflexive marker in the language. When an object complement is not overtly expressed, the absence of an object marker on transitive verbs is understood as an implicit reflexive.

4.9. 'Higher verbs'

It may be the result of influence from Spanish that speakers of Leko use the same 'higher verb' roots, either as infinitival complements or as derivational suffixes. So the string *yisisich kich rainte* 'they do not want to let me sleep' in (33), has almost the same meaning as *yisiskirainte*:

- (33) on bel -aya era -iki lais yi- sis -ich ki -ch ra -in -te
 that bat PL I DAT well IOB sleep INF make INF wantNEG MT
 'Those bats do not want to let me sleep well' (the story of the three fathers)

Note the, from the viewpoint of argument structure, unexpected placement of the object marker *yi-* on the lowest verb *sisich* 'sleep'. As an argument of the verb *kich* 'to make', the object marker should have been realized on this verb. This is seen in the next example in which the speaker makes use of the Spanish loan *dejar* 'to let' as a higher verb, on which the object marker is realized:

- (34) ho -ra bel -aya -te ye- dejas -in -te sis -ich -ne
 this LOC bat PL MT IOB let NEG MT sleep INF TOP
 'There are bats here, they do not let me sleep' (the story of the three fathers)

4.9.1. *-ki* 'causative'

The lexeme *ki-* 'to make' or 'to let' can be used as a free verb selecting a nominal or verbal complement, as in (33), or as a causative verbal suffix with the same meaning:

- (35) o- botha -tha -ki do- ko -ki -a
 2SG brotherDIM DAT 3OB drink CAUS IMP
 'Make your little brother drink.'

- (36) ... hasta wakia -ra ho -m noka ubus -ki -no -te -aska
 until hole LOC enter PRP how leave CAUS NOMMT UNCER

ber -ki ber -ki he- hepka -m hi- kis -no -te senen
 one DAT one DAT 3OB grab PRP 3OB kill NOMMT all
 '(that soboto kills) even entering the hole, how would he make them get out, grabbing them by for one, he kills them all' (the 'soboto' story)

4.9.2. *-ra* 'future'

So far a special inflectional suffix to mark future tense has not been encountered in Leko. To refer to future events speakers make use of the derivational suffix *-ra* which I suppose to be related to the free verb *dach* 'to want'. In many instances it is realized as *rach*, and it can also have a future connotation, the meaning 'to want' being linked to the idea of 'unrealized'. As a free verb *dach* takes either a nominal or an infinitival complement. So as equivalent phrases are accepted:

- (37) a miis on yobas yo- won -ki -ra sis -ra -no -te
tomorrow that man 1 house GEN LOC sleep FUT NOMMT
'That man will sleep tomorrow in my house'
- b miis on yobas yo- won -ki -ra sis -ich da -no -te
tomorrow that man 1 house GEN LOC sleep INF wantNOMMT
'That man wants to sleep/will sleep tomorrow in my house'

The following two sentences are produced in the context of storytelling and clearly show the future/unrealized character of *-ra*:

- (38) es -ra -no -te cha wison -da es -ra -no -te
rain FUT NOMMT three day LOC rain FUT NOMMT
'It will rain, within three days it will rain' (the ant story)
- (39) dingu -i era din- somdu -ra -no -too cuento kulew -moki cuento
gringo COMI 3OB speak FUT NOM 1MT story vultureGEN story
'I will tell a story to the gringo, the story of the vulture' (vulture story)

4.10. *-cha* 'durative'

The fact that actions or processes are ongoing is expressed by means of durative *cha*⁵:

- (40) wachi ne -a o- yo -ki sis -cha -no -te
silent be IMP 2 mother GEN sleep DUR IND MT
'Shut your mouth, your mother is sleeping'
- (41) yo -moki choswai moa mo -ki -a nohal -cha -no -te warapu
1 GEN woman fire fire CAUS PP boil DUR NOMMT cane juice
'My wife has made fire, she is boiling the sugar cane juice' (how to make chankaka)

⁵ There is an obvious link with the durative marker in Quechua which in various dialects is realized as : *-chka*, *-cha*, *-ša*, or *-sa*. Note that the nominal diminutive marker *-cha* in Quechua is realized in Leko as *-tha*.

4.11. *-chi* 'politeness'

When speakers want to soften the imperative character of their requests, they can use the suffix *-chi*:

- (42) lulaq yin- ura -a ka -te yi- siri -ra de- e -chi -a
 bee 1DAT enter PP be MT 1 eye LOC 3OB pull MIT IMP
 'A bee has entered my eye, please pull it out'

4.12. *Mood*

The syntax and semantics of the following two suffixes is still badly understood. I assume that they form part of the 'mood' system of the language; normally an extremely complex matter. The impossibility of combining them with the nominalizer *-no* is a quite striking, although not understood, phenomenon: *-kama-te* or *-bibi-te* and never **-kama-no-te* or **-bibi-no-te*.

4.12.1. *-kama*⁶ 'be able'

As one might expect the verbal suffix *-kama* has also a free variant with the same meaning. The derived form *lamkas-in-kama-te-am* in (43) may also be realized as *lamkas-ich kama-in-te-am*.

- (43) chika es -cha -no -te lamkas -in -kama -te -am
 very rain DUR NOMMT work NEG BE ABLE MT 1PL
 'It's raining cats and dogs, we can't work'

- (44) on -ka te -in -kama -te ni te -in -kama -too on -ka
 that COMP live NEG BE ABLE MT not live NEG BE ABLE 1MT that COMP

heka te -in -kama -te -noq heka-asne lais te -ch -moki
 you live NEG BE ABLE MT 2PL you too well live INF GEN
 'Like that one cannot live, nor I can live, like that you cannot live you also
 (should choose) to live right (the story of the monkeys)

Another example can be found in (31).

4.12.2. *-bibi* 'almost'

I assume that the suffix *-bibi* is a mood marker. Almost always my informant added the Spanish adverbial *casi* 'almost' to underline the uncertainty of the expression. Apart from that, *-bibi* may occur in a paratactic construction. It is realized as a main verb, while the sentence which it modifies is realized independently, cf. (45b):

⁶ It is an interesting question whether there exists a link between the root *kama* as a verb and a verbal suffix, and the case marker *-kama* that indicates a limit in space or time.

- (45) a bat -te waqa -m (casi) kel -bibi -te
 tree LOC climb PRP (almost) fall almost MT
 ‘Climbing into the tree, he might fall/almost fell’
- b bibi -te kaldera lelda-cha -no moa -te
 almost MT pan burn DUR NOM fire LOC
 ‘It is almost/may be the case that the pan is burning on the fire’

The little information I have on this suffix is all the result of elicitation, so care has to be taken with these data. Much more attention has to be paid to the complex nature of mood in the language.

5. The order of the verbal suffixes

In the present state of knowledge of the language, it is dangerous to make explicit statements on the order of the verbal suffixes. My knowledge of Leko is only based on elicited information from a small number of informants and on the analysis of spontaneous speech of not more than two informants. Furthermore we have to keep in mind that all informants have to rely mainly on memories from their childhood. Apart from that, we have to realize that the use of the verbal modifiers may be restricted by the fact that all speakers are using Spanish as the language for daily use, and that Spanish is not a language in which verbal derivation occurs frequently. It should also be mentioned that other languages, which are of the same linguistic type as Leko, do not make use of verbal suffixes all the time either. In my research of Bolivian Quechua (van de Kerke 1996) I found that of all the verbal types in a quite large transcribed Quechua corpus some 35% consisted only of a verb root, 45% of a verb root with one derivational suffix, leaving 20% for the combinations of a verb root with two or more derivational suffixes. So, by nature, affix combinations seem to be restricted and it is to be expected that it is one of the language features that is strongly affected by the process of language loss.

However, in a number of cases, grammatical judgements on the impossibility of certain affix combinations were very outspoken, while a number of other affix combinations is well attested in my data. Of course, the latter all involve combinations of suffixes that are regularly used. Happily enough this group is relatively large. The following suffixes that have been presented in the present article are regularly used: *-cho*, *-ri*, *-ra*, *-ki*, *-mo*, *-hi*, *-cha*, *-kama* and *-chi*. The other suffixes: *-somo*, *-bats*, *-bibi*, *-har/-handá*, and the direction markers show up infrequently.

It has already been noted that ‘desiderative’ *-cho* must be realized immediately after the root. It is followed by ‘inceptive’ *-ri*. In between is a position for the direction markers, which all involve the suffix *-ri*, as we have seen. As regards the ‘aspectual’ markers, at least *-hi*, and possibly *-somo*, *-bats* and *-har*, are followed by ‘reciprocal’ *-mo*. This last suffix can be encountered at either side of the ‘higher verbs’, ‘future’ *-ra* and ‘causative’ *-ki*. The mood markers *-kama* and *-bibi* do show up at the end of the suffix string. This also holds for the ‘politeness’ marker *-chi*.

References

- Adelaar, W.F.H.
 1991 'The Endangered Languages Problem: South America', in: R.H. Robins and E.M. Uhlenbeck (eds.) *Endangered Languages*, Oxford: Berg Publishers.
- Brinton, D.G.
 1946 *The American Race*, Biblioteca Americanista, Buenos Aires: Editorial Nova, Imprenta López.
- Cardús, Fr. José OFM
 1886 *Las Misiones Fransiscanas entre los Infieles de Bolivia: descripción del estado de ellas en 1883 y 1884*, Barcelona: Librería de la Inmaculada Concepción.
- Grimes, B.F.
 1996 *Ethnologue: Languages of the World*, 11th edn., Dallas: SIL.
- Kerke, S. van de
 1996 *Affix Order and Interpretation in Bolivian Quechua*, Doct. Diss. University of Amsterdam.
- 1998 'Verb Formation in Leko: Causatives, Reflexives, and Reciprocals', in: L. Kulikov and H. Vater (eds.) *Typology of Verbal Categories*, Linguistische Arbeitsberichte 382, Tübingen: Max Niemeyer Verlag, pp. 195-203.
- 1999 'A 19th Century Doctrine in the Leko Language', in: S. Dedenbach-Salazar and L. Crickmay (eds.) *The Language of Christianisation in Latin America: Catechisation and Instruction in Amerindian Languages*, BAS 20/CIASE 29, Markt Schwaben: Saurwein, pp. 115-150.
- 2000 'Case Marking in the Leko Language', in: H. van der Voort and S. van de Kerke (eds.) *Indigenous Languages of Lowland South America*, ILLA 1, Leiden: CNWS, pp. 25-39.
- Lafone Quevedo, S.A.
 1905 'La Lengua Leca', *Anales de la Sociedad Científica Argentina*, tomo 60.
- Montaño Aragón, M.
 1987 *Guía Etnográfica Lingüística de Bolivia*, La Paz: Don Bosco.
- Palau, M. and B. Saíz
 1989 *Moxos, descripciones exactas e historia fiel de los indios, animales y plantas de la provincia de Moxos en el virreinato del Perú por Lázaro de Ribera 1786-1794*, Ministerio de Agricultura y Alimentación, La Paz: El Viso.

Appendix: Glosses used in the text

| | | | | | | | |
|---------|---------------|------|-------------|------|---------------|-------|------------------|
| 1,2,3 | Person marker | DIM | Diminutive | IMM | Immediate | PL | Plural |
| ABL | Ablative | DUR | Durative | INTO | Inward motion | PP | Past Participle |
| BE ABLE | be able | EXH | Exhortative | LOC | Location | PRP | Pres. Participle |
| CAUS | Causative | FUT | Future | MIT | Mitigator | REC | Reciprocal |
| CMPL | Completive | GEN | Genitive | MT | Main Tense | SG | Singular |
| COM | Comitative | HORT | Exhortative | OBL | Obligative | SUBJ | Subjunctive |
| COMP | Comparison | IMP | Imperative | NEAR | Almost | TOP | Topic |
| DAT | Direction | INC | Inceptive | NEG | Negation | UNCER | Uncertainty |
| DESID | Desiderative | INF | Infinitive | NOM | Nominalizer | UP | Upward motion |