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**Verb morphology in South Bolivian Quechua: A case study of the Uma
Piwra rural variety**

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Piwra rural variety**

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Report

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Abstract

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The University of Texas at Austin, 2019

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This report presents a preliminary description of the verbal morphology of South Bolivian Quechua spoken by monolinguals in the town of Uma Piwra, Anzaldomunicipality, Cochabamba, Bolivia. The descriptive analysis presents the verbal morphology minimally composed by two constituents STEM +INFL. The stem constituent bears a lexical verb base (LVB) which takes the initial position, and to which non-inflectional suffixes will combine. The LVB can be mono-morphemic or bi-morphemic, mono-morphemic bases are single roots that are morphologically unanalyzable synchronically, whereas bi-morphemic ones are formed through derivation, this involves adding unproductive lexeme building suffixes to form a LVB based on a verb, noun or an adjective. I report two types of non-inflectional productive suffixes: (i) simplex and complex. Simplex suffixes bear compositional meanings. Complex suffixes are bound morphemes resulting from the combination of two or more morphemes diachronically, however they have a meaning as unit and not necessarily compositional meanings as individual suffixes. This analysis is a new one both for South Bolivian Quechua and for other Quechuan languages, which have similar verb structure, in that it argues that a perspicuous and semantically transparent account must be based on a hierarchy of embedded constituent within the verbal word rather than on a flat structured template for ordering elements within that word.

Different from earlier studies that focus on urban South Bolivian Quechua varieties, this study presents a description for a monolingual variety basing its analysis on a 20-hour natural corpus and it reports a simpler verb template since it organizes non-inflectional productive suffixes occupying fewer slots. Finally, the study makes its contributions in three areas: (i) it presents an original description for an undescribed dialect of monolingual speakers, (ii) it proposes a new view for South Bolivian Quechua grammar and (iii) it considers the case of Uma Piwra Quechua (UPQ) in recent morphological typology.

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1. INTRODUCTION

This paper describes the verbal morphology of *Uma Piwra* Quechua (UPQ), a rural variety spoken in the southern part of Bolivia. It analyzes the contribution in meaning of each non-inflectional simplex and complex suffix to the meaning of a lexical verb base (LVB). First, it establishes a framework for derivation and inflection and accounts for productive morphology similarly. The analysis presented in this paper offers a new view of the grammar in the South Bolivian Quechua verbal morphology. It also considers the standing of UPQ in the context of recent work in the typology of morphologically complex verbs. I argue that UPQ is typical of polysynthetic verb structure since it allows rich elaboration of often specific adverbial meanings in its suffix inventory, but it is atypical because it does not allow any compounding, nor does it have suffixes with typical verbal, adjectival or noun meaning.

The description of South Bolivian Quechua (SBQ) verb morphology in previous studies (Garland D., et al 1971, Muysken 1986:639-640, Herrero & Sanchez 1978, Van de Kerke 1993:15-35) and Plaza (2009:251-256) faces three challenges (*i*) the meaning of non-inflectional simplex suffixes are not clearly described, (*ii*) the productivity of simplex suffixes is not always characterized accurately, so that some suffixes are described as productive but they are in fact unproductive, (*iii*) certain suffix-suffix combinations are built compositionally rather than as single lexemic chunks that are treated as complex suffixes throughout this paper. The verb template in current literature contains numerous verb slots. This study presents a more hierarchically based analysis and finds a simpler verb structure with fewer slots. It does this in part by recognizing certain recurrent suffix-suffix sequences as single units with non-compositional meanings and, with special internal phonological changes. Additionally, data for this analysis is supported by a corpus

of 20 hours of naturalistic speech collected in daily conversations. Previous studies do not support their descriptions with natural spoken corpora but mostly with elicited data, hence many examples are marginally acceptable to an L1 native speaker of South Bolivian Quechua.

This paper is organized in 10 sections. In sections 2 to 4 of this paper, I will present the goal of the study, language background and the methodology. Section 5 presents an overview of the verbal word and its hierarchical structure. It explains the two constituency components STEM+INFL. Section 6 describes the meaning of non-inflectional simplex and complex suffixes combined to a lexical verb base. Section 7 presents lexeme building suffixes. Section 8 discusses previous studies on South Bolivian Quechua. Section 9 presents the typological view of UPQ morphology. Finally, the conclusions are presented.

2. GOAL OF THE STUDY

The goal of this study is to present a constituent-based analysis by describing the verbal morphology in the *Uma Pirwa* rural variety of Quechua. The constituent-based analysis will allow an account of different types of constituents that semantically function as units within the stem constituent in the verbal word. Thus, my analysis will be relevant to understand the place of morphology in the Quechua language family's grammar.

In order to achieve the goal of this study, this paper will respond to the following questions:

- What is the structure of the verbal word? What is the meaning of each morphological element within the verbal word?
- What is a stem in UPQ?
- What morphemes form verb stems in UPQ?
- To what extent is each non-inflectional simplex suffix or complex suffix productive?
- Do complex suffixes bear compositional meanings as separate simple suffixes?

This study hypothesizes the existence of three types of verbal suffixes in UPQ: lexeme building or unproductive, non-inflectional and inflectional suffixes. Non-inflectional suffixes are productive, and they are of two types; simplex and complex. Inflectional suffixes are also of two types; non-obligatory and obligatory.

3. LANGUAGE BACKGROUND

The Quechua language family is spoken in the Andes of South America: Ecuador, Peru, Bolivia and parts of Colombia and Argentina. It is divided into two major groups, Quechua I and Quechua II (Torero 1964). These two groups are classified based on the general lexicon, the phonological and morphological patterns they share within each group (Adelaar 2013, Adelaar and Muysken 2004). Bolivian Quechua is classified in two varieties; northern and southern. The two varieties spoken in Bolivia both belong to the IIC group as presented in the following diagram.

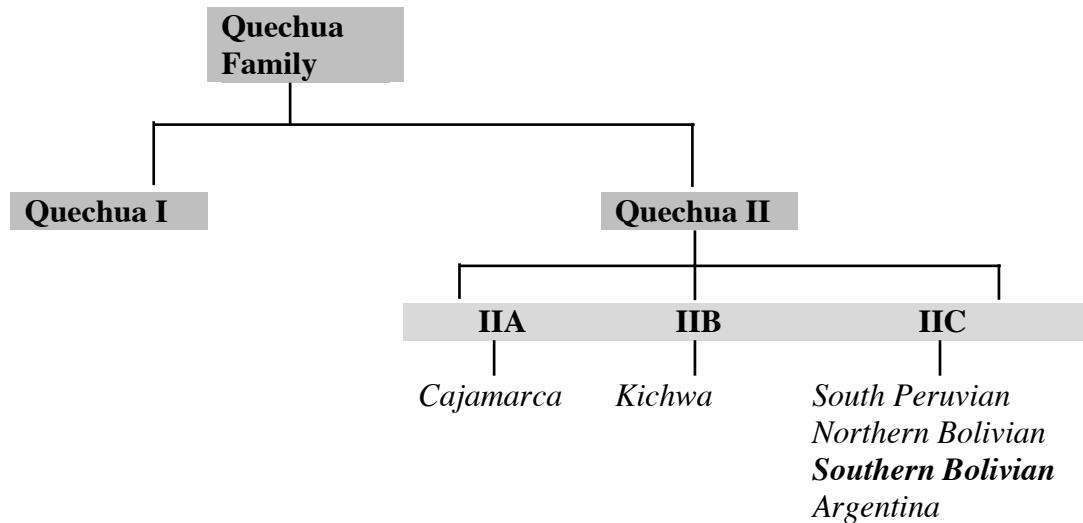


Figure 1: Quechua classification

South Bolivian Quechua has around 1,610, 000 (2014 UNSD) speakers (Ethnologue 2018). It is spoken in the urban and rural areas of the departments of Cochabamba, Chuquisaca, Oruro, Potosí and Chuquisaca (Plaza 2012). Urban areas are Spanish-dominant and most people in these areas only speak Spanish. Most Quechua-Spanish bilinguals living in urban contexts typically learned Quechua from their monolingual parents who have migrated from a rural area in their childhood or youth. Rural area towns are located at a further distance from the urban areas. People in these towns are Quechua-dominant, and in most cases

monolingual, as is the case for the variety that I have studied, that of *Uma Piwra*, *Anzaldo* municipality, *Esteban-Arce* Province, *Cochabamba*, *Southern Bolivia*. In this town, there are 8 families and just 17 people in total. This town is inhabited by elders due to youth out of town migration. People in this town mostly do agricultural work such as the cultivation of different legumes that are widely grown in the area.

Previous studies on South Bolivian Quechua focus on the varieties spoken in the urban areas and not necessarily on the varieties spoken by elders in rural area towns. This study describes the speech of monolingual Quechua speakers from the rural area of *Uma Piwra*. Urban and rural Quechua varieties are different, and not much is known about the latter one. Historically, South Bolivian Quechua spoken in *Cochabamba* department has moved from the center towards *Potosi* and *Chuquisaca* departments. Later on, Quechua spoken in *Cochabamba* became two different sociolects: one spoken in the rural areas, known as rural or indigenous; and one that is currently spoken in the urban areas, as is widely discussed in Pierrard (2018:163). Due to Spanish influence, urban Quechua varieties have developed in a distinct way compared to the rural Quechua varieties. Therefore, all the Quechuan varieties of Southern Bolivia should not be treated as homogeneous dialect as suggested by Bills et al., (1971). Although, urban Quechua varieties appear well described in the literature, rural varieties remain substantially unknown. Therefore, the aim of this paper is to present an analysis describing UPQ as it is spoken by monolingual elders living in the rural town of *Uma Piwra*, in *Cochabamba* department, *Bolivia*.

4. METHODOLOGY

The speakers for this study were 6 monolinguals of ages 71-80. Four of these speakers contributed the majority of the data. The methodology for this study involved collecting spontaneous conversations during the summer 2018 in the rural town of *Uma Piwra*. This town is located in one of the surrounding areas of *Anzaldo* municipality, inside *Esteban Arce* province, *Cochabamba* department, Bolivia. 20 hours of audio-recording was collected, consisting of 18 hours of spontaneous conversations and 2 hours of story narratives. The data was collected over the course of 4 weeks in the period of June 2018. The researcher (myself) lived in the community at the home of two speakers who are the main speakers represented in the corpus. The methodology involved active participation of the researcher in the everyday conversations during breakfast, lunch, dinner and the break times while working in the community's daily work activities. In the natural conversations, the researcher spoke her Quechua variety from Kalallusta and the community members spoke using the monolingual variety. All of them were originally from *Uma Piwra*. The audio was collected using a Zoom H5 recorder, then each audio was stored in the computer with metadata, for example <day_1_breakfast>, <day_1_lunch>, <day_2_breakfast>, and so on. Audio files were transcribed in a Microsoft Word document. The document was then converted into a plain *.text* file and organized in R-Studio (Core Team 2017). Separately, a dictionary with all the verb roots attested in the corpus was created in a Microsoft Excel spreadsheet. Each verb was at the same time classified by transitivity, and the aspectual classification following (Vendler 1957). Finally, all the verb forms were extracted from the corpus using *Tidyverse* (Wickham 2017) a package in R-Studio. This process enabled searching different suffixes and combinations of suffixes attested with different roots. Importantly, to analyze the meaning of verbal suffixes I used my L1 intuitions as someone

speaking *Kalallusta* Quechua variety which is mutually intelligible with *Uma Piwra* Quechua. Additionally, I consider my L1 skills closer to the one of monolinguals since I was mostly exposed to monolingual variety during my entire life.

5. OVERVIEW OF THE VERBAL WORD

The verbal word in UPQ is necessarily composed by two constituents as follows:
VERBAL WORD ==> STEM + INFL.

5.1. VERB STEM

A stem constituent necessarily requires a Lexical Verb Base {LVB}. A LVB can be a single morpheme, or morphologically elaborated through suffixation. A single LVB morpheme is no longer analyzable morphologically. An elaborated LVB can be formed by adding a Lexeme Building Suffix {LB-suffix} that will form a lexeme out of a root *e.g.*, *jank'a-kipa-* 'to change color, texture of grain by toasting/grinding' as in (1a). A verb stem constituent can be formed by adding non-inflectional productive simplex suffix(es), a complex suffix or a combination of both to a LVB. For example, in (1b) the simplex suffix *-chi* '-CAUS' and complex suffix *-kampu* 'for safety' both combined to the LVB form a stem constituent. Non-inflectional productive suffixes are not obligatory in their occurrence. These suffixes will be discussed in a more detailed way in *section 6*.

(1) **STEM CONSTITUENT ==> LVB + (PROD-suffix(es))**

a.

jank'akipa-ni
toast-1SG.NF
'I toast/toasted (X type of grain)'

b.

ilaya-chi-kampu-ni
cool down-CAUS-for.safety-1SG
'I went to make it cool down something for safety'

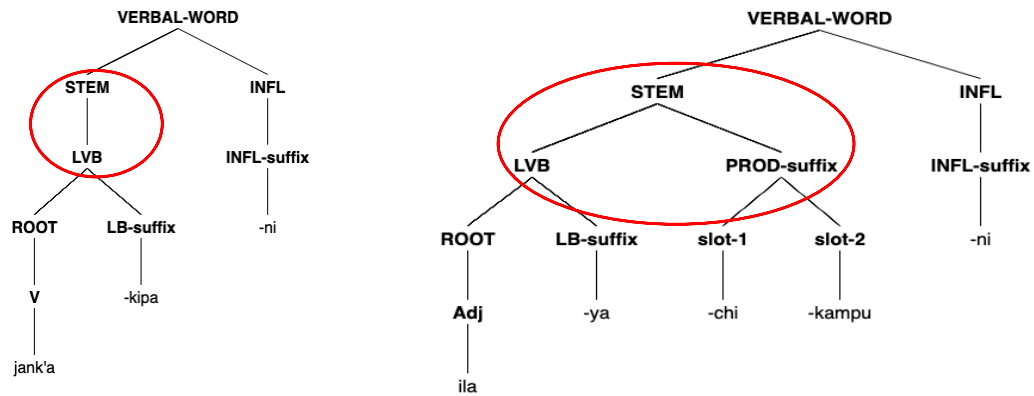


Figure 2: Stem constituents

5.1.1. LEXICAL VERB BASE {LVB}

A lexical verb base is mono-morphemic or bi-morphemic. A mono-morphemic lexical verb base is composed by a single verb root that is morphologically unanalyzable synchronically *e.g.*, *puñu-* ‘sleep’ in (1a). A bi-morphemic lexical verb base is morphologically derived from another verb or another lexical category by adding a lexeme building suffix {LB suffix} *e.g.*, adding *-cha* ‘transformative’ to a noun root *kachi-* ‘salt’ will result in a bi-morphemic LVB *kachi-cha-* ‘to make something salty’ as schematized in (1b).

(1) **LVB** ==> {VRoot, NRoot, AdjRoot} + (LB suffix-)

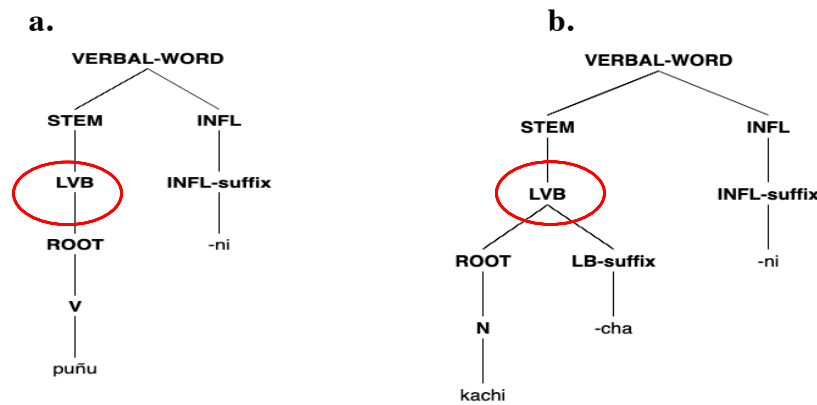


Figure 3: Lexical verb bases

Lexeme building suffixes are unproductive or in some cases semi-productive because their meanings are only partially predictable. These suffixes only combine with certain roots. For instance, in examples (2) and (3) the lexeme building suffix *-ya* derives a bi-morphemic lexical verb base out of an adjective with the meaning ‘for subject to become like adjective’, however, it does not apply to all adjectives, see *e.g.*, (4).

(2) *q’ala* *tullu-ya-yu-nki*
 very slim-**TRANS**-PERF-2SG
 ‘You’ll become very slim’ (Copertino)

(3) *ila-ya-chka-n=puni* *ah!*
 cold-**TRANS**-PROG-3sg=certainly ah!
 ‘It is certainly cooling down ah’ (Angela)

(4) *k’acha* ‘cute (female)’ **k’acha-ya-y*
kusa ‘good’ **kusa-ya-y*
millay ‘bad’ **millay-ya-y*

Table 2 presents an inventory of all suffixes of this type that I have identified in the 20 hour corpus. More details about lexeme building suffixes will be presented in *section 7*

(V → V)	-ra	‘to do V again, and again/one after another’
	-yacha	‘to do V in a non-linear path’
	-raya	‘to do V in a stationary position without movement’
	-paya	‘to express something spoken/sentiment’
	-kipa	‘to change texture of grains by softly grinding or toasting’
	-naku	‘reciprocal’
	-naya	‘want/about to’
(N → V)	-cha	‘to make object like N’
(Adj → V)	-ya	‘for subject to become like adjective’
	-ra	‘for object to become like adjective’
	-cha	‘for object to become like adjective’

Table 1: Lexeme building suffixes in UPQ

5.2. INFLECTIONAL CONSTITUENCY

In general, the inflectional constituent provides information about T/A/M, person, number and object marking. There are two kinds of inflectional suffixes that are determined based on their occurrence and function in the verbal word; obligatory and non-obligatory. The second one is defined as an extender because it marks the border between a productive suffix and the obligatory inflection, but at the same time it complements partially to the inflectional information. Obligatory inflection marks tense, mood, and person and number agreement *e.g.*, **-ni** ‘1SG.NF’ in (1a). Inflectional extenders mark aspect and object agreement *e.g.*, **-rqa** ‘PST.reportative’ as a complement to the obligatory inflection *e.g.*, **-ni** ‘1SG.NF’ in (1b). The rule in (1) summarizes the inflectional constituent.

(1) **INFL** ==> (INFL-ext) (INFL-ext) (1OBJ) (INFL-ext) (2OBJ) + INFL suffix

a.

wayk’u-ni
 cook-1SG.NF
 ‘I cook/cooked’

b.

wark’u-rqa-ni
 cook-PST.REP-1SG.NF
 ‘I cooked’

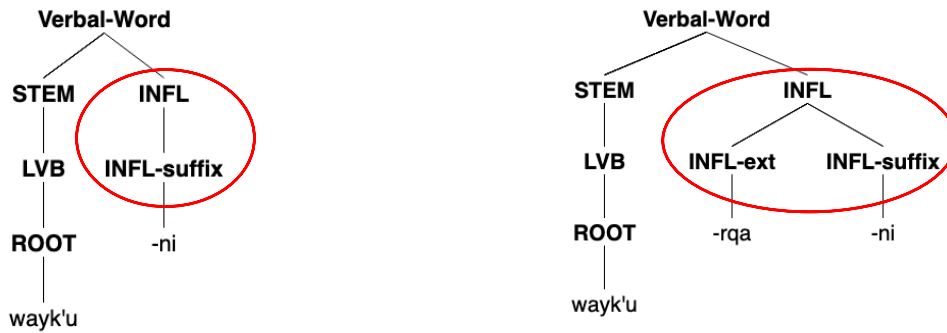


Figure 4: Inflectional constituent

The obligatory inflectional morphology necessarily combines to a verb stem as follows:

- (2) *mikhu-n* **mikhu-*
eat-3SG.NF
‘he/she ate/eats’
- (3) *qati-kampu-n* **qati-*
drive back (the animals)-do.V.for.safety-3SG.NF
‘he/she drove/drives back (his/her animals) for safety’

UPQ presents three moods in the obligatory inflectional category; indicative, potential and imperative. The indicative mood is composed of four tenses: non-future, future, conditional and a paraphrastic construction for habitual past.

The present simple and the past tense are not morphologically distinguished in the indicative form. For example, the inflectional form *-ni* ‘1SG.NF’ in (4) can either mark past or present. The other tenses in the indicative have their own distinctive inflectional paradigms for each person, e.g., *-saq* in example (5) marks the first-person singular in future, *-yman* in (6) the conditional and the paraphrastic form *-q kani* in (7) marks the habitual past. Table 2 details the obligatory inflectional categories and the different set forms for person, number and Tense and Mood for UPQ.

(4) *chay q'achi papa-s-manta wayk'u-ni*
that shred potato-PL-from cook-**ISG.NF**
'I cook/cooked from those shredded potatoes' (Angela)

(5) *kay q'illu-n mikhu-saq nuqa ya?*
this yellow-3SG.POSS eat-**ISG.FUT** 1SG ok?
'I will eat its yellow (*the egg yolk*) ok?' (Copertino)

(6) *Yuraq Corral-pi ka-pti-n ri-yman*
Yuraq Corral-LOC be-if-3SG go-**ISG.COND**
'If it is in Yuraq Corral (place) I would/could go' (Angela)

(7) *chay doctor-man lluqsimu-ytawan yaku*
That doctor-from get out-after water

t'impu-chi-ku-q kani.

boil-CAUS-REF-**ISG.HAB.PST**

'After getting out from the hospital I used to boil water myself' (Angela)

INDICATIVE				
Person & number	Non-future	Future	Conditional	Habitual past
1SG	-ni	-saq	-yman	-q ka-ni
2SG	-nki	-nki	-waq	-q ka-nki
3SG	-n	-nqa	-nman	-q ø
1PL. INCL	-nchik	-sunchik	-sunman	-q ka-nchik
1PL.EXCL	-yku	-sayku	-ykuman	-q ka-yku
2PL	-nkichik	-nkichik	-waqchik	-q ka-nkichik
3PL	-nku	-nqanku	-nkuman	-q ka-nku
Person & number	POTENTIAL		IMPERATIVE	
1SG	-nayta		---	
2SG	-naykita		-y	
3SG	-nanta		-chun	
1PL. INCL	-nanchikta		-nachik	
1PL.EXCL	-naykuta		---	
2PL	-naykichikta		-ychik	
3PL	-nankuta		-chunku	

Table 2: Obligatory inflectional categories

This paper reports six verb paradigms corresponding to different moods as presented in table 2. I list fewer inflectional paradigms compared to previous analyses because I only account for what is obligatory in the inflectional constituent of a verbal word. Obligatory inflectional suffixes in combination to what I have stated as inflectional extenders previously, can generate numerous paraphrastic constructions. Earlier studies by Herrero & Sanchez (1978), Bills et al., (1971), and Van de Kerke (1993) report more verb paradigms in the inflection because they treat such combinations as different paradigms. The following inflectional categories in *Table 3* have been proposed by Herrero & Sanchez (1978:307-321). For instance, when they refer to *‘Present progressive’* it involves a paraphrastic construction of the inflectional extender suffix *-chka* ‘PROG’ plus the obligatory suffix *-ni* ‘1SG’. To my analysis, the example as in (1) is treated as in (2) where the inflection is just *-ni* ‘1SG’.

- (1) papa-ta mikhu-**chkani**
 potato-ACC eat-**PROG.1SG**
 'I am eating potato'
- (2) papa-ta mikhu-chka-*ni*
 potato-ACC eat-PROG-*ISG*
 'I am eating potato'

Inflectional categories	
Indicative mood	-Present progressive -Past progressive -Future progressive -Recent past -Remote past -Habitual present -Recent past habitual -Remote past habitual -Future.
Imperative mood	-Immediate -Prohibitive form -Future -Future prohibited form -Future progressive.
Potential mood	-Simple -Composed
Irrealis mood	-Simple
Referential mood (non-visible)	-Past non-progressive -Past progressive -Habitual past -Future
Verificative mood	-Past non-progressive -Past progressive -Habitual past
Subordinated mood	-Real (simultaneous, indefinite, posterior) -Potential (simple, compound) -Irrealis (simple, compound)

Table 3: Previous inflectional categories

5.2.1. INFLECTION EXTENDER SUFFIXES

Inflection extender suffixes are not obligatory in their occurrence. When they occur in the inflectional constituent, they mark progressive aspect, past narrative, past reportative and object pronoun. The grammatical meaning information can be clearly predicted as opposed to derivation. There is only one suffix that is adverb related e.g., *-lla*. These suffixes always precede the obligatory inflectional suffix. They stand as the limit to mark where the productivity of verb derivation ends. There are six inflection extenders as schematized in the following rule. Interestingly, the first object pronoun and the second object pronoun have different positions, and *-sqa* ‘PST narrative’ and *-rqa* ‘PST reportative’ in position 4 cannot co-occur.

	1	2	3	4	5	
INFL ==>	(INFL-ext)	(INFL-ext)	(1OBJ)	(INFL-ext)/(INFL-ext)	(2OBJ)	+ INFL suffix
	<i>-chka</i>	<i>-lla</i>	<i>-wa</i>	<i>-sqa /-rqa</i>	<i>-su</i>	
1	<i>-chka</i>	progressive aspect				
2	<i>-lla</i>	only				
3	<i>-wa</i>	1OBJ				
4	<i>-sqa /-rqa</i>	PST narrative/PST reportative				
5	<i>-su</i>	2OBJ				

To recapitulate the inflectional constituency in UPQ, it is composed by two types of inflectional suffixes; non-obligatory and obligatory in their occurrence. The inflectional constituency in UPQ can be summarized as follows:

INFL ==> (-chka) (-lla) (1OBJ) (-rqa/-sqa) (2OBJ) + Time/mode/person & number agreement

6. NON-INFLECTIONAL PRODUCTIVE VERBAL SUFFIXES

There are two types of non-inflectional productive suffixes: simplex and complex. In this analysis a suffix is productive if it combines with many types of verb stems compared to lexical suffixes that are restricted with few verbs. Additionally, the meaning of a productive suffix is predictable, whereas unproductive suffixes combine with few verbs and their meanings are not predictable as for productive suffixes. Simplex suffixes normally occur singly, or when they combine with other simplex suffixes they hold a compositional meaning. Complex suffixes are formed out of two or more particular simplex suffixes, and they necessarily undergo internal phonological changes to form a unit with a single meaning. They combine compositionally when they co-occur with simplex suffixes.

This section will describe in detail the meaning of each simplex suffix in 6.1. and each complex suffix in 6.2. Each section will provide the inventory and the meaning of each productive suffix, the order in which they occur, and it will describe the grammar and the semantics of each non-inflectional productive suffix.

6.1. NON-INFLECTIONAL SIMPLEX SUFFIXES

Simplex suffixes in UPQ are not obligatory in their occurrence. However, when they combine with a lexical verb base, they form a verb stem with a different meaning resulting from the combination of the two morphemes, to which inflection is obligatorily combined.

Following an analysis developed by Tallman (2018) for Chácobo, a Panoan language of Bolivia, non-inflectional suffixes can be distinguished between slots and zones in the verb stem elaboration. A slot shows that only one suffix can occur at a time whereas in a zone multiple suffixes can occur, and they can be variably ordered (Tallman 2018:199). Simplex suffixes in UPQ occupy four fixed slots, each suffix in a particular slot can only occur once. There is one zone where *-rqu* and *-rpa* suffixes can freely vary in order with respect to *-ysi*. The following rule schematizes the organization of non-inflectional suffixes within the stem constituent:

Productive suffixes ==> (slot 1) + (zone) + (slot 2) + (slot 3) + (slot 4)

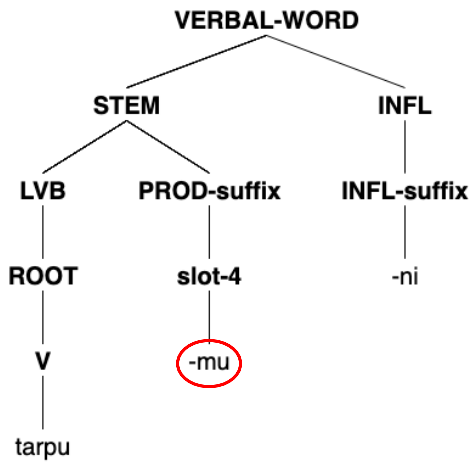
(slot 1) +	(zone) +	(slot 2) +	(slot 3) +	(slot 4)
-yu	({- rqu ¹ , -rpa}) (-ysi)	-ri	-chi	-ku
	(-ysi) ({- rqu , -rpa})			-mu
				-pu
	*-rqu-rpa			
	*-rpa-rqu			

Finally, to illustrate using hierarchical structures, the examples in (1a) *tarpu-mu-ni* [plant-away-1SG.NF] and (1b) *apa-yu-ri-pu-saq* [carry-*PRF-nicely-BEN*-1SG.FUT] exemplify non-inflectional suffixes in the stem constituent.

(1)

a.

tarpu-mu-ni
sow-go.do.V-1SG.NF
'I went to sow'



b.

apa-yu-ri-pu-saq
carry-*PRF-nicely-BEN*-1SG.FUT
'I will nicely carry it on his/her behalf'

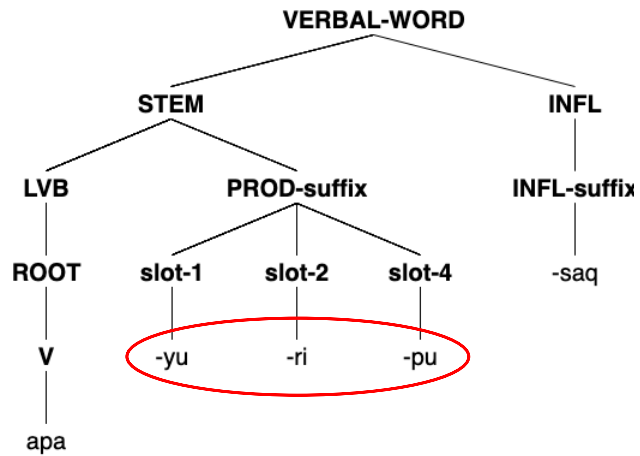


Figure 5: Non-inflectional simplex suffixes

This study identifies 9 non-inflectional simplex suffixes. Most of them bear just one compositional meaning, others might allow more than one meaning. *Table*

¹ With vowel /a/ when before a complex suffix in slot 5 of the first level

4 details the meaning(s) of each simplex suffix. The meaning of each of them will be described afterwards.

slot 1	Perfective aspect	-yu, -yku	'to do V, with an emphasis on the finished result of the action'
zone	Nimbley	-rqu2	'to do V nimbley'
	Suddenly	-rpa	'do V suddenly'
	Argument associated (Valency increasing)	-ysi	'X helps Y (Subject LVB) to do(transitive/intransitive)'
slot 2	Sentiment/emotional/desire	-ri	'for V to be performed softly, gently, politely, pleasantly'
slot 3	Argument associated (Valency increasing)	-chi	'X' causes/makes 'Y' to do V'
slot 4	Reflexive	-ku	'do V for oneself'
	Associated motion	-mu	'for subject to do V moving from X point towards Y point' 'for subject to go to an X place and do V'
	Argument associated (Valency increasing)	-pu	'to V on behalf of someone at a specific location' (transitive verbs) 'to V back to origin' (verbs describing a path) 'to complete V for good' (verbs having an end-point)

Table 4: Non-inflectional simplex suffixes

-yu, -yku 'to do V with an emphasis on the finished result of the action'

² The meaning of this suffix with certain verbs also involves for speaker feeling affection or sorrow while performing V in a nimble way.

This suffix appears stated as ‘decisiveness’ in Muysken (1988:638). It is interpreted as pointing out a concrete space or area of the activity in Herrero and Sanchez (1978:213). On the other hand, in Van de Kerke (1993:20) and Plaza (2009:251) the suffix has a directional interpretation, although in a lot of cases it can be wider than the idea of ‘inward’ since it can also be interpreted as ‘onto’ or ‘towards’. More broadly, in Huallaga Quechua this suffix means that the verb is carried out with enough energy to be successful (Weber 1989:129). In most of the examples used in Van de Kerke (1993) and Plaza (2009) *-yku* is interpreted in context. The context for the directional interpretation is understood from the external argument bearing an allative or ablative case. In this analysis, this suffix functions as a suffix bearing a culminative meanings and it is glossed as -PERF throughout this paper. When the *-yku* or the unpredictable allomorph form *-yu* appears combined to a lexical verb base, there is an emphasis in the finished result of the action of the verb. If we compare the following examples, in (1) the verb *apay* ‘to carry’ has an imperfective meaning, any information about the result is specified. In example (2) there is an emphasis on the result of the verb *apay*, this means that after the action of the verb there will be a completed result entailing that the wheat will be placed in the patio of the house.

- (1) *lata-n* *tiya-n,* *chay* *lata-pi* *apa-ni*
 big can-3SG.POSS have-3SG that big can³-LOC carry-*ISG*
 ‘It (the dog) has a can (can where it usually eats), I carry it (the food) in it
 (the bowl)’
 (Angela)
- (2) *patiu-n-man=chá* *apa-yu-nqa* *ah*
 patio-3SG.POSS-ALL=DUB carry-*PERF*-3SG ah
 ‘It is very likely that he will carry (the wheat) onto his patio’ (Asteria)

³ Big cane used as a bowl to give food to dogs.

Similarly, in (3) the event of ‘eating’ has an imperfective meaning, there is no specific information about the result or the end of the event of the verb *mikhuy* ‘to eat’. But, in (4) the events of the verbs ‘to eat’ and ‘to drink’ have been completed, entailing that there is no food or drink left.

- (3) *ajina sayk’uspa ma mikhu-ni=chu, pisi mikhu-ni*
 like this tired NEG eat-**ISG**=NEG, little eat-**ISG**
 ‘When I am tired like this I don’t eat, I eat little’ (Copertino)

- (4) *mikhu-yu-ni uqya-yu-ni, kunan qara-mu-saq*
 eat-**PERF**-1SG drink-**PERF**-1SG now feed-go.do.V-1SG.FUT

oveja-s-man

sheep-PL-to

‘I ate, I drank, now I will go feed the sheep’ (Angela)

-rqu ‘to do V nimbly’

In urban SBQ described by Herrero and Sanchez (1987:208) **-rqu** denotes that the action of the verb is completed with certain decision and rapidity. In Van de Kerke (1993) **-rqu** means the action of the verb is performed quickly and it adds politeness from the part of the speaker. In UPQ **-rqu** appears to mean ‘for the verb to be performed nimbly’ e.g., (5), (6) and (7).

- (5) *trata-qti-n kama jampu-n ah.*
 tell off-when-3SG after come-3SG.PST ah.

Paqarin jamu-rqu-sqa

This morning come-**nimbly**-3SG.PST

‘When she tells it to go away, it (dog) returns back ah.

This morning it

(dog nimbly came’ (Copertino)

- (6) *q’ala thanta-s-ta-ñataq apa-rqu-n*
 Entirely clotting-PL-ACC-CONJ carry- **nimbly** -3SG
 ‘It (dog) nimbly takes away all the clothing’ (Genoveva)

- (7) *wañu-rqu-chi-ytawan* *warkhu-ni* *nuqa-qa*
 kill-**nimbly**-CAUS-after hang-1SG 1SG-TOP
 ‘Me, I hang it after nimbly killing it (a type of bird)’ (Angela)

Additionally, two types of emotional feelings are added. With activity verbs the adverbial meaning is maintained as ‘nimbly’ however the emotional feeling of the speakers denoting ‘happiness’ is involved *e.g.*, (8), (9) and (10), the speaker performs the verb nimbly and expressing happiness emotionally.

- (8) *runt-it-u* *ka-pti-n* *runtu* *wayk’u-rqu-ku-ni*
 egg-DIM exist-if-3SG eggs cook-**nimbly**-REF-1SG
 ‘If there are eggs, I cook the eggs right up’ (Genoveva)

- (9) *libi* *kanka-ta* *ruwayku-sqa-nku,* *lindu* *mikhu-rqu-ni*
 a lot roasted-ACC make-PST-3PL good eat-**nimbly**-1SG
 ‘They have made a lot of barbecue, I nimbly and happily ate well’ (Genoveva)

- (10) *maran-pi* *kuta-rqu-nchik*
 fulling mill-LOC grind-**nimbly**-1PL.incl
 ‘We nimbly and happily grind in a gristmill’ (Angela)

On the other hand, when **-rqu** combines to verbs associated with ‘sorrow’, such as *wañuy* ‘to die’, *waqay* ‘to cry’, *llakikuy* ‘to be sad about something’, *maqay* ‘to hit’, it also means doing V nimbly but in addition to the core meaning it involves for the subject to feel sorrowful about the action of the verb. In (11) the speaker expresses the sorrow or sadness feeling about the intention of ‘hitting’ nimbly by 3SG on him 1SG.

- (11) *maqar-qu-chka-wan=ña*
 ‘hit-**nimbly**-PROG-3SG>1SG=almost
 ‘She is almost hitting me (subject feels sorrowful)’ (Copertino)

-rpa ‘do V suddenly’

Herrero and Sanchez (1978:207) state **-rpa** meaning for the verb to be executed with decisiveness and rapidity in urban SBQ. For the same variety of Quechua, Van de

Kerke 1993:21 states as ‘*suddenness*’ and ‘*immediacy*’ with action verbs and has a clear controlling agent. In UPQ, it means the verb is performed ‘*suddenly*’. This meaning does not change based on different classes of verbs. The following examples (12-15) show the use of *-rpa* combined to different kinds of verbs and holding the same meaning.

- (12) *sayk'u-rpa-ni* *ah*
 get tired-*suddenly*-1SG well
 ‘well, I suddenly got tired’ (Copertino)
- (13) *coca piqchia-spa t'aka-rpa-n* *ah*
 coca chew-GER drop-*suddenly*-3SG ah
 ‘he suddenly dropped it while chewing coca’ (Copertino)
- (14) *chiri-pi-chá* *wañu-rpa-saq* *ni-chka-ni* *jajaja*
 cold-LOC-DUB die-*suddenly*-1SG.FUT say-PROG-1SG hahaha
 ‘I am saying that “I will suddenly drop dead in the cold”’ (Angela)
- (15) *mana ah, allqu uqu-rpa-n* *ah*
 NEG well, dog devour-*suddenly*-3SG ah
 ‘Well no, the dog suddenly devours it (the eggs) ah’ (Copertino)

-ysi ‘X helps Y (Subject LVB) to do V (transitive)’

In the literature for urban SBQ the suffix *-ysi* is described as adding the idea of assistance (Herrero and Sanchez 1978:388) and (Van de Kerke 1996). To my analysis *-ysi* adds an argument who will assist the agent to do verb. Similar suffixes called sociative causative have been observed in Tupi language spoken in French Guyana and in other Amazonian languages (Guillaume and Rose 2010:388). In UPQ, *-ysi* involves for the agent and the person assisting both participating in the realization of the event of the verb as seen in examples (16), (17) and (18). The special inflected forms mark the person who assists and the person who is assisted. The person assisting, and the person assisted are marked with special inflected forms. For example, in (16) *-yki* shows that 1SG acts assisting 2SG, in (17) *-wan* means the 3SG assists 1SG, and in (18) 3PL assist 3PL.

(16) *mana=chus mikhu-ysi-yki ma tuku-waq-chu karqa*
 NEG-if eat-*ASST*-1>2SG NEG finish-2SG.COND-NEG COND
 ‘If I hadn’t helped you eat (the quinoa meal), you couldn’t have finished it
 (Angela)

(17) *liqran saru-spa khuchu-ni ah a vesnin chaki-y-manta*
 wing step-GER cut-1SG ah sometimes foot-1sg.POSS-ABL

llusp’i-rpa-wa-n vieja=ña jap’i-ysi-wan
 release-COMPL-1ob-3sg wife=rather hold-*ASST*-3>1SG
 ‘I step on its wing and cut it (duck), sometimes it releases from my leg, my wife
 helps me to hold it (the duck)’ (Copertino)

(18) *chay caraju-s q’ala uña pili-situ-s-ni-y-ta*
 that idiot-pl entire little duck-DIM-PL-EUPH-1SG.POSS-ACC

uqu-ysi-rpa-nku ah
 devour-*ASST*-suddenly-3PL ah
 ‘Those idiots (birds) help finishing my little ducks’ food up’ (Copertino)

-*ysi* is productive with transitive or activity verbs that present a defined object as we have seen in the examples above. However, -*ysi* is not fully productive with intransitive or activity verbs without an object. For instance, combinations as in (19) are not semantically possible. However, when it is possible to combine with some intransitive verbs *e.g.*, *puñuy* ‘to sleep’ as in (20) the meaning of -*ysi* will still involve the external argument assisting the agent of the verb but this way of assistance will be understood as ‘to accompany agent while doing V’. The utterance in (20) according to my own intuition would involve the agent is scared of sleeping alone hence the assisting person accompanied the agent to do V during three nights.

(19) <i>chayay</i>	‘to arrive’	* <i>chayaysiy</i>
<i>suchuy</i>	‘to move’	* <i>suchuysiy</i>
<i>waqay</i>	‘to cry’	* <i>waqaysiy</i>
<i>phaway</i>	‘to fly’	* <i>phawayysiy</i>
<i>thuqay</i>	‘to spit’	* <i>thuqaysiy</i>

- (20) *Kimsa ch'isi-ta puñu-ysi-wan*
 Three night-ACC sleep-ASST-3SG>1SG
 'He/she helped me sleep for three nights as a way of accompanying me' (Own data)

-ri 'for V to be performed softly, gently, politely, pleasantly'

Herrero and Sanchez (1978) and Van de Kerke (1993) define **-ri** denoting kindness, politeness. To this analysis **-ri** describes the manner in which the verb is performed *e.g.*, 'softly', 'gently', 'politely' or 'pleasantly'. Though for uniformity, **-ri** will be glossed as 'nicely' in all the examples. The meaning of **-ri** with intransitive verbs means for the subject to do verb feeling 'pleasantly'. Whereas with transitive verbs it either means 'softly', 'gently' or 'politely'. In (21) **-ri** combined to the intransitive verb *winkhuy* 'to lie down' means the dog 'pleasantly' lies down and **-ri** combined to *laq'uy* 'to lick' means the verb is performed 'softly'. Similarly, in (22) with the two intransitive verbs involves for subject to perform verb 'pleasantly'.

- (21) *winkhu-ri-n, uquna-n laq'u-ri-mu-n*
 lie down-nicely-3SG food-3SG.POSS lick-nicely-CISL-3SG
 'It (dog) pleasantly lies down, it softly licks its food' (Genoveva)

- (22) *libi parla-ri-n pay, asi-ri-spa ah*
 a lot speak-nicely-3SG 3SG, laugh-nicely-GER ah
 'He pleasantly speaks while laughing pleasantly' (Genoveva)

With transitive verbs, the meaning contribution of **-ri** is determined by the context. In (23) with the verb *mañay* 'to lend' 1SG politely asks 2PL for money and in (24) the sound is heard 'softly'.

- (23) *maña-ri-wa-ychik*
 lend-nicely-1OB-2PL.IMP
 'Please, lend me (money)' (Genoveva)

- (24) *'talaq, talaq'* *ni-ri-chi-chka-nku* *imata-chá*
 'talaq, talaq' sound-**nicely**-CAUS-PROG-3PL something-DUB
 'talaq, talaq, it seems they are softly making sound on something' (Copertino)

In some cases, the suffix *-ri* combined to certain verbs such as *waqay* 'to cry' or *wañuy* 'to die' it forms a lexical verb base. In these cases *-ri* occurs right after the verb root and the meaning is non-compositional. The combination *waqa-ri-* in (25) would be expected to mean 'to cry pleasantly' however since the meaning is idiomatic instead of compositional, *waqari-* is analyzed as a single lexical verb base. Similarly, in (26) the verb *wañuy* 'to die' combined with *-ri* means 'to strongly want to do V' and in (27) the meaning is 'to covet', in any of the last two examples the lexical verb base is interpreted as 'die'.

- (25) *k'achituta* *waqari-n,* *"para-nqa,* *para-nqa"*
 Beautifully *whistle.beautifully*-3SG rain-3SG.FUT rain-3SG.FUT

ni-nku.

tell-3PL

'It (bird) whistles nicely, beautifully, they (birds) say "it will rain, it will rain'(Copertino)

- (26) *uqllay-manta=taq* *wañuri-chka-nku*
 brood-of=and *strongly.want*-PROG-3PL
 'and they are strongly wanting to brood' (Angela)

- (27) *paykuna* *jallp'a-manta* *wañuri-chka-nku=ña*
 3PL land-of *covet*-PROG-3PL=almost
 'They are coveting (of possessing) the land' (Genoveva)

-chi 'X' causes/makes 'Y' do V'

In UPQ **-chi** is a valency increasing suffix. It adds a new argument who will be the causer. The subject of the verb causes/makes the external argument to do verb, but it is not involved in doing V. Previous analysis in Van de Kerke (1993:26) state **-chi** adding external causation, the verb is extended with an extra argument and the causer is realized as the subject of the derived verb. Although my analysis agrees with previous studies in

which *-chi* licenses a new argument, I think it is important to highlight that *-chi* straightforwardly provides information on who is responsible for performing the action of the verb. The external argument in the verb is only marked if it corresponds to first or second person, the 3rd person is not marked. For instance, in examples (27) and (28) the external argument responsible for doing verb does not appear marked but in (29) is marked with *-wa*.

(27) *achkha llant'a-s-ta-pis apa-chi-φ-ni*
 A lot wood-PL-ACC-also carry-**CAUS**-3SG<1SG
 'I also make someone carry a lot of wood' (Asteria)

(28) *kachi yaku-pi chullu-chi-φ-ni*
 salt water-LOC sock-**CAUS**-3SG<1SG
 'I make it (chicken meat) soak in salt water' (Angela)

(29) *jajaja ay! asi-chi-wa-nki*
 Hahaha ay! laugh-**CAUS**-1OB<2SG
 'Hahaha ay! You make me laugh' (Copertino)

-ku 'to do V for oneself'

In Herrero and Sanchez 1978:199 **-ku** has two meanings, the first meaning has a reflexive interpretation and the second meaning has a benefactive meaning since the action of the verb is realized for the speaker's own benefit without any violence. To this analysis **-ku** glossed as REF means for subject to do V oneself, and it necessarily involves the subject being the beneficiary of the action of the verb. This meaning is combined to different classes of verbs in a productive way with the same interpretation as follows:

(30) *Papa-ta=qa sumaq mikhu-ku-nku*
 potato-ACC=TOP well eat-**REF**-3PL
 'They eat potato for themselves well' (Angela)

(31) *Pay-qa khur-itu-s-lla-ta mask'a-ku-n*
 3SG worm-DIM-only-ACC search-**REF**-3SG

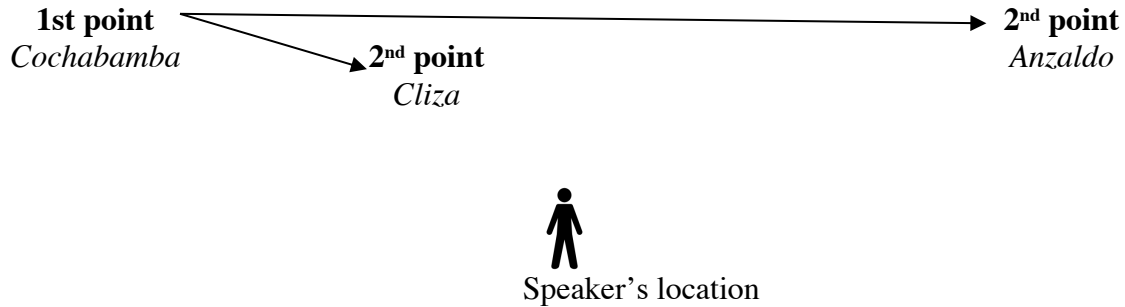
‘The bird does nothing but look for worms for his own benefit’ (Copertino)

- (32) *Nueve dia-sni-nchik-kama* *puri-ku-nchik* *ni-n*
nine day-PL-1PL.INCL.POSS-until walk-REF-1PL.INCL say-3SG
‘It is said that we walk ourselves until our ninth day (after dying)’ (Genoveva)

-mu ‘for subject to do V moving from X point towards Y point’
‘for subject to go to an X place and do V’

Herrero and Sanchez (1978:222), Muysken (1986, 1988) and Van de Kerke (1993:32) define **-mu** as ‘cislocative’ or making movement towards the speaker with motion verbs and as ‘translocative’ marking movement away from the speaker with non-motion verbs. The meaning for **-mu** is determined based on whether the verbs belong to motion verb class or non-motion. Motion verbs for Southern Quechua variety involve motion of the speaker from one place into another such as *riy* ‘to go’, *jamuy* ‘to come’, *yaykuy* ‘to enter’, *tiyay* ‘to sit’ or *hatariy* ‘to stand up’, Parker (1965:47), however **-mu** does not necessarily combine this classification nor clearly states ‘cislocative’ or ‘translocative’. To my analysis the relevant classification to interpret the meaning of **-mu** is the distinction between path and non-path. The difference between these two classes has to do with the trajectory in space. Path verbs involve a long trajectory and a wider space, whereas non-path verbs are performed in a concrete space without involving trajectory traveled by the subject. When **-mu** combines with path verbs it specifies two clear reference points of information; the origin point and the destination point in which the trajectory occurs. **-mu** normally licenses for an ablative or an allative argument to specify these two points of reference in a more precise way. Previous studies state **-mu** encoding movement towards the speaker’s location. In this analysis I will show that the reference point specified by **-mu** is not necessarily related to the speaker’s location. In (33) the first reference point

from where the subject of the verb sends the order is *Cochabamba* urban area and the destination points are depending *Cliza* or *Anzaldo* municipalities as the speaker narrates.



- (33) *Anzaldum-an* *Clizaman* *apa-chi-mu-wanku*
 Anzaldo-*ALL* Cliza-*ALL* carry-CAUS-*toward*-1<3PL
 ‘They send me (the order) to Anzaldo or to Cliza (Municipality)’ (Angela)

In (33) it is intuitively understood that Cochabamba bears the ablative case and, the second points of reference are marked allative case. However, when none of these reference points are specified, the interpretation is ambiguous. For instance, in (34) *-mu* selects an ablative argument to specify only the origin point but the second point of reference is not specified. In this case, the second point of reference specifying the destination can either be any place distant from the speaker such as *chay-man* ‘there-ALL’ or *kay-man* ‘here-ALL’ this last one specifies the actual location of the speaker.

- (34) *Cochabamba-manta* *Fredy-lla* *achk-ita-ta=qa* *apa-mu-n*
 Cochabamba-*ABL* Fredy-only a lot-DIM-ACC-TOP carry-*toward*-3SG
 ‘Only Fredy brings a lot of (vegetables) from Cochabamba’ (Angela)

Similarly, if we consider example (35). In this example there are two points reference. The first point is the place where the dead body is located, the second point is the house of the subject where the dead body might be taken. The speaker is not located in the subject’s house. In this sense, it is clear that *-mu* involves doing V from X point toward a Y point but not necessarily toward the speaker. Therefore, a generic association between

the reference point and the location of the speaker is not necessarily the right interpretation of *-mu*.

- (35) *wasi-nku-man* *apa-mu-nku-man* (*dead body*) *chaypuni*,...
 home-3PL.POSS-*ALL* bring-*toward*-3PL-COND only if...
 ‘Only if they bring it (dead body) to their house... (Copertino)’

On the other hand, in the previous literature, the combination of *-mu* with non-motion verbs has been described as marking movement away from the speaker Muysken (1986, 1988), Herrero and Sanchez (1978) and Van de Kerke (1993). According to my analysis, non-path verbs can be divided in two. The first one is composed by verbs that do not necessarily involve a long-distance path, for example: *waqay* ‘to cry’, *qhapariy* ‘to shout’, *wich’uy* ‘to throw’, *jayt’ay* ‘to kick’, *ch’anqay* ‘to throw a stone’. With these verbs, the meaning of *-mu* will only be interpreted based on the type of argument licensed by *-mu*. Comparing the following examples, in (36) *-mu* licenses an ablative argument and in (37) a locative argument. In (36) *-mu* marks two point of reference, the point from where crying of the bird is originated and the second point where the interlocutor is located. The presence of an ablative or allative argument will give a directional interpretation toward the speaker. However, in (37) the locative argument will specify that the action of the verb will be performed in a specific distant location away from the speaker.

- (36) *may-manta-chus* *chay* *p’isqu* *waqa-mu-n* *ah*
 where-*ABL*-DUB that bird (*on the tree*) cry-*toward*-3SG ah
 ‘I am not sure from where toward here the bird cries ah’ (Genoveva)

- (37) *entierro-pi* *li* *taki-ri-mu-nki*
 burial-LOC a lot sing-nicely-*away*-2SG
 ‘you’ll go away and sing at the burial’ (Researcher)

¿taki-mu-saq? *waqa-ri-mu-saq=chá* *ah*
 sing-*away*-1SG.FUT cry-nicely-*away*-1SG.FUT=DUB ah
 ‘Will I go away and sing in? I guess I will go away and softly cry there
 ah’ (Angela)

clearly determine whether *-pu* means ‘do *V* on someone’s behalf’ as in (41) or it means ‘back to origin’ as in (42).

- (41) *Juan-paq* *papa-ta* *apa-pu-ni*
 Juan-**DAT** potato-ACC carry-**BEN**-1SG
 ‘I carried potato for Juan’ (Own constructed data)

- (42) *p’isqu* *runtu-S-ta* *thapa-n-man* *apa-pu-ni*
 bird eggs-PL-ACC nest-3SG.POSS-**ALL** carry-**back**-1SG
 ‘I took the eggs of the bird back to the nest’ (Own constructed data)

As I mentioned before, this suffix can be interpreted in three ways. The first meaning of *-pu* is ‘to *V* on behalf of someone’. *-pu* denotes a benefactive meaning when it combines to transitive verbs such as *wayk’uy* ‘to cook’, *allay* ‘to dig’, *t’aqsay* ‘to wash by hand’, *aqhay* ‘to prepare chicha’. The benefactive meaning normally involves doing the verb at a certain location without involving motion from one point of reference into to another. The following examples in (43), (44) and (45) the action of the verb *ruthuy* ‘to cut’, *ruway* ‘to make’ and *siray* ‘to sew’ is performed in the benefit of another person at a specific location. With this type of verb, this suffix can only license a locative argument type *e.g.*, (44).

- (43) *yaku q’uñi* *chura-pu-ni,* *almuerzo* *usqay*
 Cinnamon tea make-**BEN**-1SG lunch quickly

wayk’u-pu-ni...

cook-**BEN**-1SG

‘I make cinnamon tea for him, I quickly cook lunch for him...’ (Angela)

- (44) *kay* *wasa-pi* *pila-sni-yku-ta*
 this back-**LOC** sink-PL-1PL.excl.POSS-ACC

ruwa-pu-wa-rqa-yku

make-**BEN**-1OB-PST-1PL.ex

‘Behind this mountain, they made out sinks for us’ (Vitalia)

- (45) *pantalu-y-ta-pis* *sira-ri-pu-way* *ah!*

Jeans-1SG.POSS-ACC-at least sew-AFF-**BEN**-1SG.IMP ah!
 ‘At least gently sew the jeans for me!’

The second meaning of **-pu** is ‘to *V* back to origin’. This meaning is interpreted when **-pu** combines to verbs describing path such as *kutiy* ‘to return’, *yaykuy* ‘to enter’ for example in (46) and (47). With these verbs, **-pu** only licenses an allative argument type marked **-man** to indicate the ‘back’ direction of the original place as in (47).

(46) *yayku-pu-ni luz-ta apaga-rpa-ytawan*
 enter-**back**-1SG light-ACC turn off-suddenly-after
 ‘After suddenly turning off the lights, I enter back (to the room from outside)’
 (Genoveva)

(47) *kunan kay-manta may-man ri-ri-nki? kuti-pu-nki-chu?*
 Now here-ABL where-**ALL** go-nicely-2SG? return-**back**-2SG-Q?
 ‘And from here where will you go? Will you head back to origin (Kalallusta)?’
 (Genoveva)

The third meaning of **-pu** is ‘to complete *V* for good’. The suffix **-pu** denotes an irreversible meaning when it combines with verbs that have a natural end point or involving change of state such as *wañuy* ‘to die’, *ch’akiy* ‘to dry’ or *phunuy* ‘to spoil/deteriorate’. The verbs in this group do not allow ablative **-manta** or allative **-man** arguments.

(48) “*ri-sun-chá wañuy=man kunan=qa ari*” *ni-wa-n.*
 “go-dual-DUBfuneral-ALL now=TOP so” say-1OB<3SG

pi wañu-pu-sqa-ri? ni-ni.
 who die-**for.good**-PST.NAR-WH say-1SG.NF
 ‘I think we might go to the funeral’, she said to me. ‘Who has died?’
 I replied (Copertino)

(49) *ch’aki-pu-n=ña yura-n-pis*
 dry-**for.good**-3SG=already plant-3SG-also
 ‘Even its plant has already dried’ (Asteria)

This section presented non-inflectional simplex suffixes in UPQ and their order in the stem constituent. Each of these suffixes are productive since they can combine with a

wide range of verb sets and their meanings can be predicted. Simplex suffixes in the template can combine between them maintaining their compositional meaning. The next section focuses on non-inflectional complex suffixes.

6.2. NON-INFLECTIONAL COMPLEX SUFFIXES

A non-inflectional complex suffix is a lexicalized bound morpheme resulting from the combination of two or three simplex suffixes. The lexicalization process necessarily involves two types of internal phonological changes in a regressive way; vowel change or vowel deletion. For instance, the underlying suffixes in column (a) undergo this process and become allomorphs as in column (b) before the suffixes in column (c) that trigger vowel change /u/ → [a] before *-rpa*, *-mu* and *-pu* or vowel deletion in the suffix *-mu* preceding *-pu*.

(a) Underlying suffix	(b) allomorphs	(c) triggering suffix
/-yu-yku/	→ [-ya/-yka]	___/-rpa, -mu, -pu
/-rqu/	→ [-rqa]	___/-rpa, -mu, -pu
/-ku/	→ [-ka]	___/-mu, -pu
/-mu/	→ [-m∅]	___/-pu

This study reports 10 lexicalized complex suffixes, see details *table 5* below. They occupy the same slot/zone positions within in the verbal stem constituent as shown in the following phrase structure rule. As stated earlier, each suffix in a slot either simplex or complex can only occur once. Additionally, complex suffixes can co-occur with simplex suffixes bearing compositional meanings as represented in the hierarchical structure in (i) *ruthu-chi-kampu-n* ‘cut dried wheat-CAUS-for.safety-3SG’, but two complex suffixes cannot co-occur.

Verbal word ==> STEM + (slot 1) + (zone) + (slot 2) + (slot 3) + (slot 4) + INFL

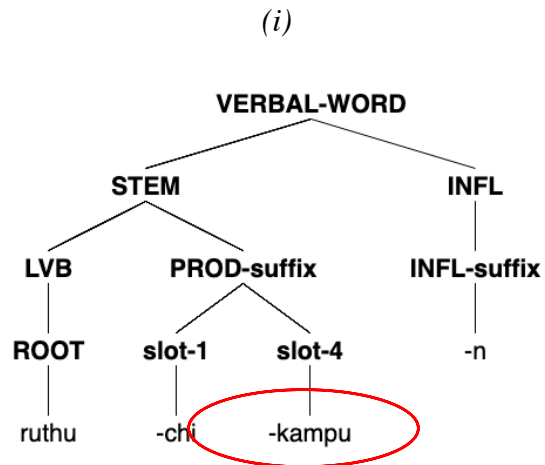


Figure 6: Non-inflectional complex suffixes

Complex suffixes whose meanings are detailed in *table 5*, are formed from the following simplex suffixes:

- yu* 'do V with emphasis on the finished result of the action'
- rqu* 'do V nimbly'
- rpa* 'do V suddenly'
- ku* 'do V for oneself'
- mu* 'do V moving from X to Y point'
- 'for S to go to an X place and do V'
- pu* 'Benefactive'
- 'back to origin'
- 'to complete V for good'

Individual simplex suffix components	Complex Suffix displaying phonological changes	Meaning
-ku-mu-pu	-kampu	'for subject to do V for safety'
-ku-mu	-kamu	'for subject's own choice to do V'
-ku-pu	-kapu	'for V to occur naturally, effortlessly entirely affecting the object'
-mu-pu	-mpu	'for S to voluntarily do V on someone's behalf' (non-path) 'toward the original place of the speaker voluntarily' (path verbs)
-rqu-mu	-rqamu	'for S to do V with diligence'
-rqu-pu	-rqapu	'for the speaker to feel sad about the action of the V'
-rqu-yu	-rqaya	'to do V forcefully by totally affecting the plural object'
-rqu-mu	-yamu	'to do V decidedly'
-yu-pu	-yapu	'to totally do V'
-yu-rpa	-yarpa	'to do V unexpectedly'

Table 5: Non-inflectional complex suffixes

In Solá and Lastra (1964), Bills et al., (1971), Herrero & Sanchez (1978), Muysken (1986), Van de Kerke (1993) and Plaza (2009), the understanding of non-inflectional complex suffixes are treated as combinations bearing compositional meanings *e.g.*, (i). Complex suffixes appear to be composed by two independent elements historically since most of them maintain semantic connections from their independent compositional elements despite the phonological changes observed. For instance, the combination *-ku-mu* 'do V for oneself' and 'do V moving from X to Y point or for S to go to an X place and do V' when they form *-kamu* 'for subject's own choice to do V' the two points of reference or the information about the locative argument where the verb is performed, is still understood as compositional *e.g.*, (ii) and (iii). The phonological changes have also been

observed by previous scholars, but the suffix-suffix combinations appear described compositionally. Indeed, these combinations are licensed from numerous slots in the verb structure that I will discuss in more detail in section 8.

- (i) *apa-ka-mu-n*
carry-**REF-CISL**-3SG
'he brings himself something towards the speaker'
- (ii) *allqituta* *apa-kamu-ni*
little dog carry-**own.choice**<1SG
'I brought myself a little dog (it's subject's own choice)' (Genoveva)
- (iii) *ch'aki-rpa-n* *jaqay papa* *alla-kamu-nay* *kama*
dry-suddenly-3SG that potato hoe-**own.choice**-1SG.SUBJ till
'It (plantation field) suddenly dried till I hoe potato' (Vitalia)

This section attempts to interpret the meaning of each non-inflectional complex suffix identified in this study. The aim is to provide evidence that each complex suffix bears a meaning as a unit and is not built from the meaning of individual simplex suffix components.

-kampu 'for subject to do V for safety'

-kampu is composed by the simple suffixes: **-ku** 'to do V for oneself', **-mu** 'do V from X point toward Y point' or 'go and do V in a certain location' and **-pu** 'benefactive' with activity verbs, 'back to origin' with path involving verbs or 'complete V for good' with verbs that have an end point. However, **-kampu** as a unit means 'to do V for safety'. The compositional meaning is still represented in the sense that the subject is the one who performs the action, and there is associated motion with path involving verbs. **-kampu** productively combines with path verbs and most of transitive verbs but it does not combine with intransitive verbs such as *asiy* 'to laugh', *tusuy* 'to dance', *chinkay* 'to disappear',

waqay ‘to cry’. This complex suffix obligatorily needs an animate subject hence it does not combine with weather verbs such as *paray* ‘to rain’, *rit’iy* ‘to snow’ or *chiriy* ‘to be cold’. Additionally, *-kampu* implies a possessive relation between the subject and the object. It means the subject owns the object or in the case of having a person object marked accusative, the object is part of the subject’s family. For example, in (1) the dead body was part of the subject’s family, therefore the subject took it back to *Uma Piwra* town for safety as a way of preventing something bad to happen if they bury it in the city rather than the rural area town. In (2) the subject owns a turkey and she took it back for safety when the day was becoming dark to avoid the turkey to be eaten or attacked by an unknown undomesticated beast during the night. In (3) the subject owns a fumigator and he will take inside for safety as a way of preventing to be stolen by someone or for the instrument to be ruined if it stays outside.

- (1) *wakinri ma chay-pi p’ampa-nku=chu*
and others NEG there-LOC bury-3PL=NEG

apa-kampu-nku kay-man
carry-*do.V.for.safety*-3PL here-ALL
‘And others don’t bury (the dead body that is part of subjects’ family) there (in Cochabamba department) they bring it back here for safety (to Uma Piwra)’ (Genoveva)

- (2) *imapis jap’i-nman ni-spa,*
we never know what catch-3SG.COND say-GER,

qati-kampu-ni ah
take animals-*do.V.for.safety*-1SG ah
‘We never know what can catch it (the brooding turkey sitting far away from home) saying that I took/take it back for good’ (Angela)

- (3) *jumigadora-y-ta apa-ya-kampu-saq...*
fumigator-1SG.POSS-ACC carry-PERF-*do.V.for.safety*-1SG.FUT
‘I will carry my fumigator for safety’ (Copertino)

-kamu 'for subject's own choice to do V'

The meaning of **-kamu** is related to the subject's own choice in order to do verb. It is composed by **-ku** 'to do V for oneself' and **-mu** 'do V from X point toward Y point' or 'go and do V in a certain location'. The suffix **-kamu** still holds a basic meaning in which the subject is the only one who performs the verb and the associated motion is also involved with path verbs, but the complex suffix means 'for subject's own choice to do V'. This suffix cannot occur with weather verbs, otherwise it combines to all kinds of verbs with the same meaning. For example, in (4) the speaker points out the birds' own choice to gather where the grain is, or in (5) for the cats' own choice to go catch birds.

(4) *tanta-kamu-nku* *t'iki-man* *ah,*
gather-**own.choice**-3PL crushed grain-ALL ah,

jamu-lla-nku=puni *chay carajus*
come-only-3PL=always those idiots
'Them join themselves for crushed grain (grain that the speaker provides to his little ducks), those idiots, they always come' (Copertino)

(5) *jap'i-kamu-nanku* *ah*
catch-**own.choice**-3PL.SUB ah
'They (cats) should go and catch (birds)' (Genoveva)

-kapu 'for V to occur naturally, effortlessly entirely affecting the object'

-kapu is composed by **-ku** 'to do V for oneself' and **-pu** 'do V in the benefit of someone with activity verbs, 'back to origin' with path involving verbs or 'complete V for good' with verbs having an end point. **-kapu** means for V to naturally, effortlessly occur entirely affecting the object that is owned or will be owned by the subject. For example, in (6) with the verb *mikhuy* 'to eat' the meaning of **-kapu** involves for the chicken to entirely finish eating their eggs until there are none left. The possessed object by the subject is completely affected. Similarly, in (7) with the verb *qaray* 'to feed', it involves for the subject to gradually feed the white pumpkins to the cows until the pumpkins are finished.

(6)

libi runtunku mikhu-kapu-nku
a lot eggs-3PL.POSS eat-**entirely**-3PL
'They (chicken) entirely eat their eggs' (Asteria)

(7) *nuqa-pis mikhu-ni pisi-ta, animales-man qara-kapu-ni ah*
1SG-also eat-1SG little-ACC, animals-to feed-**entirely**-1SG ah
'I also eat a little bit, I entirely feed the animals ah' (Genoveva)

This complex suffix cannot occur with intransitive verbs nor with weather verbs; however, it is possible to combine with weather verbs only if it allows *-ri* meaning 'inceptive aspect' to indicate the beginning of the action of the verb. For example: *rit'i-ri-kapu-y* 'for snow to have started to snow', *ruphari-ri-kapu-y* 'for the sun to have started to heat up', *wayra-ri-kapu-y* 'for wind to have started to blow'.

-mpu 'for S to voluntarily do V on someone's behalf' (transitive)
'for S to return to the original place' (verbs with clear end point)

-mpu is composed by **-mu** 'do V from X point toward Y point' or 'go and do V in a certain location' and **-pu** meaning benefactive with transitive verbs, 'back to origin' with path verbs, and 'complete V for good' with verbs with clear end point. With transitive verbs, the meaning of **-mpu** means for subject to voluntarily do V on someone's behalf. This means the beneficiary of the action of the verb is not capable or able to do V for some reason. For example, in (8) the speaker or the beneficiary is very old, and it is very hard to stand up and walk, therefore the speaker asks whether the subject can voluntarily do V on her behalf. The second meaning of **-mpu** is for subject to return to the original place where the speaker is located. This meaning is obtained with verbs having a clear endpoint. For example, in (9) and (10) the **-mpu** involve for the subject to return toward the original place where the subject was and where the speaker is currently located. This complex suffix

cannot occur with intransitive verbs nor with weather verbs such as *paray* ‘to rain’, *rit’iy* ‘to snow’, *wayray* ‘to blow’ **parampuy*, **rit’impuy*, **wayrampuy*.

- (8) *ñit’i-ya-rqa-mpu-wanki=chu?*
 push-PERF-nimbly-**voluntarily**-2SG>1SG=Q?
 ‘Or, will you nimbly go and voluntarily push it (wood in the stove) on my behalf?’ (Genoveva)

- (9) *chay khuru=chá apa-chka-lla-rqa=taq, iskay*
 that animal=DUB carry-PROG-only-PST.REP=again two

dia-manta=ña chaya-mpu-n
 day-ABL=after reach-**back.to.origin**-3SG
 ‘Perhaps that animal was taking it (cat), it came back here after 2 days’

- (10) *lintern-ita-pi yayku-mpu-yku*
 flashlight-DIM-in enter-**back.to.origin**-3PL
 ‘We entered (the house) lighting up with flashlight’ (Angela)

-rqamu ‘for S to do V with diligence’

-rqamu is composed by the simple suffix **-rqu** meaning ‘do V nimbly’ and **-mu** ‘do V from one point toward another’ or ‘go and do V in a certain location’. However, this complex suffix as a unit means ‘for S to do V with diligence’. For example, in (11) and (12) **-rqamu** means the action is performed diligently. This complex suffix is fully productive, it appears combined to all kinds of verbs without restrictions.

- (11) *wawa-sniy jamu-na-nku=paq*
 child-PL.1SG.POSS come-SUBJ-3PL-for

k’iski kay-manta waqa-rqamu-n
 often this-from cry-**diligently**-3SG
 ‘For my kids to come, it (the bird) diligently cries from here’ (Genoveva)

- (12) *chay q’uñina-n=kama llaqwa kuta-rqamu-saq ah*
 that heat-3SG=until spicy sauce grind-**diligently**-1SG ah
 ‘Until it (food in the stove) heats I will go and diligently make spicy sauce’ (Angela)

-rqapu ‘for the speaker to feel sad about the action of the V’

-rqapu is built up by **-rqu** meaning ‘to do V nimbly’ and **-pu** ‘benefactive’ with transitive verbs, ‘back to origin’ with verbs involving path and ‘complete V for good’ with verbs with a clear end point. The complex suffix **-rqapu** mostly expresses the sadness feeling of the speaker about the action of the verb as we can see in examples (13) and (14). This suffix cannot combine with intransitive verbs nor with weather verbs.

(13) *kusa rupha q’uñi-chi-rqa-ni=pis ilaya-rqapu-sqa*
 good warm heat-CAUS-PST-1SG=also cool down-sadly-3SG.PST
 ‘I heated it up, but sadly, it cooled it down’ (Angela)

(14) *wañu-rqapu-nqa=puni martina ni-rqa-nku*
 die-sadly-3SG.FUT Martina say-PST-3PL
 ‘sadly, they said, Martina will die’ (Angela)

-rqaya ‘to do V forcefully by totally affecting the plural object’

This suffix is composed by **-rqu** ‘to do V nimbly’ and potentially the lexeme building suffix **-ya** ‘transformative’. **-rqaya** as a unit means to do V forcefully by totally affecting the plural object. To be interpreted grammatically **-rqaya** necessarily requires a plural object. In (15) the plural object is *lacayotes* ‘white pumpkins’ on which the verb *q’alluy* ‘to slice’ is performed forcefully by totally affecting the plural object. Similarly, in (16) *sinqas* ‘the (dogs’ noses)’ on which the action of the verb *jawiy* ‘to spread’ would be performed. However, sentences with a singular object as in (17) result ungrammatical.

(15) *q’allu-rqaya-nchik (lacayotes) mikhu-rqa-kapu-nku paykuna*
 slice-forcefully-1PL.incl eat-PERF-entirely-3PL 3PL
 ‘we forcefully slice all of them (white pumpkin), they (cows) eat them’
 (Genoveva)

(16) *li sinqa-s-ni-nku-pi chay puka luqutu*
 Very nose-PL-EUPH-3PL-LOC that red spicy chili

chira-wan *jawi-rqaya-yman*
 seed-COM spread-**forcefully**-1SG.COND
 ‘I could totally spread with the seeds of the spicy chili into their (dogs) noses’
 (Genoveva)

- (17) **juk* *quwi-ta* *ñak’a-rqaya-ni*
 one guinea pig-ACC butcher-totally-1SG

-yamu ‘to do V *decidedly*’

-yamu is composed by the simple suffixes **-yu** ‘do V with emphasis on the finished action’ and **-mu** ‘do V from one point toward another’ or ‘go and do V in a particular place’. **-yamu** involves for subject to do V *decidedly*. For instance, in examples (18) and (19) **-yamu** shows that the V is performed by the subject in a decided way. This complex suffix combines with all kinds of verbs including weather verbs.

- (18) *nuqa-man-pis* *ajna* *avesnin*
 1SG-ALL-also like this sometimes

apa-yamu-wa-nku *wawa-s-ni-y=qa* *á*
 carry-**decidedly**-1OB-3PL kid-PL-EUPH-1SG.POSS=TOP ah!
 ‘Similarly, to me, my kids *decidedly* bring it to me
 (all kinds of vegetables)’ (Asteria)

- (19) *chay* *puchuqta=taq pili-s-ni-y-man* *qara-yamu-ni*
 that left over=and duck-PL-EUPH-1SG.POSS-ALL feed-**decidedly**-1SG
 ‘And the left overs, I *decidedly* went and fed my little ducks’ (Angela)

-yapu ‘to totally do V’

-yapu is composed by the simple suffix **-yu** meaning ‘to do V with emphasis in the result on the finished action’ and **-pu** ‘benefactive’ combined with transitive verbs, ‘back to origin’ with verbs involving path and ‘complete V for good’ with verbs having a clear end point. **-yapu** as a unit means ‘totally’. For example, in (20) and (21) the complex suffix **-yapu** specifies that the action of the verb has totally occurred. This suffix does not appear combined with weather verbs.

(20) *q'ala sach'as wiña-yapu-n*
 completely trees grow-**totally**-3SG
 'trees have totally grown' (Angela)

(21) *juk pacha wasi ukhu-man yayku-yapu-n*
 one time house inside-ALL enter-**totally**-3SG
 'once, it (the bird who asks for rain) totally entered inside the house' (Copertino)

-yarpa 'to do V unexpectedly'

-yarpa is composed by the suffixes **-yu** meaning 'to do V putting emphasis in the finished result' and **-rpa** 'do V suddenly'. **-yarpa** as a unit means to do V unexpectedly. For example, in (22) as the speaker narrates her eyes unexpectedly got inside, and in (23) the speaker reports the action of the fox who unexpectedly throw the sheep into the water. This suffix normally does not appear combined to intransitive verbs.

(22) *nuqa-q-ta-pis q'ala ukhu-man chinka-yarpa-n*
 1SG-1SG.POSS-ACC-also entirely inside-ALL enter-**unexpectedly**-3SG

ñawi-sniy=qa
 eye-1SG.POSS=top

'Mine also, my eyes unexpectedly got inside down' (Genoveva)

(23) *yaku-man wich'u-yarpa-n mana wañuy ati-qti-n=chá*
 water-ALL throw-**unexpectedly**-3SG NEG to die can-when-3SG=DUB
 'It (the fox) unexpectedly threw it (the sheep) to the water, very likely because (the sheep) couldn't die' (Angela)

This section broadly presented non-inflectional complex suffixes that suggest a non-compositional meaning. The individual meanings are still relevant in some cases, especially when it involves the simple suffix **-mu** that will change part of the meaning based on the types of verbs: path verbs non-path. The interpretations provided above present preliminary attempts for the meaning of complex suffixes, hence, a more detailed analysis to interpret their meanings taking different contexts is still needed.

7. LEXEME BUILDING SUFFIXES

This section presents unproductive suffixes in UPQ. These suffixes derive a lexical verb base to which inflection is added, and non-inflectional suffixes in between those. The meanings of lexeme building suffixes are not fully predictable, since they combine with restricted verbs compared to productive non-inflectional suffixes described in section 6. This study identifies one simplex lexical suffix and 6 complex lexical suffixes, see *table 6*. Most of these lexicalized suffixes appear described as productive in Herrero and Sanchez (1978) and Van de Kerke (1993), but in this analysis, they are not shown to be productive.

Simplex lexeme building suffix in UPQ		
(V → V)	-ra	'to do V again, and again/one after another'
Complex lexeme building suffixes in UPQ		
(V → V)	-yacha	'to do V in a non-linear path'
	-raya	'to do V in a stationary position without movement'
	-paya	'to express something spoken/sentiment'
	-kipa	'to change texture of grains by softly grinding or toasting'
	-naku	'reciprocal'
	-naya	'want/about to'

Table 6: Lexeme building suffixes

7.1. SIMPLEX LEXEME BUILDING SUFFIX

Only one unproductive simplex suffix has been identified in this study as follows:

-ra *'to do V again, and again/one after another'*

-ra has been described adding a nuance of totality to the action of the verb (Herrero and Sanchez 1978:209). Another use of **-ra** has been stated as giving an antonymic

interpretation (Herrero and Sanchez 1987:209) and (Van de Kerke 1993:23). For example:

- (i) k'umpuy 'to turn a bowl' k'umpuray 'to turn it back'
(Herrero and Sanchez 1978:209)

In the corpus used for this study, this suffix has limited occurrence because it does not widely combine with certain verb classes such as: intransitives, weather verbs, or verbs having an end point. *-ra* means for the verb to be performed again and again or one after another, for example in (1) and (2) it means 'again and again' but in (3) and (4) it means 'one after another'.

(1)

- chuqay* 'to throw sth' *chuqa-ra-y* 'to throw sth again and again'
qhaway 'to look at' *qhawa-ra-y* 'to look at something again and again'
lamphay 'to lick' *lampha-ra-y* 'to lick again and again'

(2)

- lampha-ra-ri-ku-n* *libi* *qallu-snin-ta*
lick-again.and.again-nicely-REF-3SG a lot tongue-3SG.PL.POSS-ACC
'It (snake) nicely licks its tongue a lot again and again' (Copertino)

(3)

- wañuy* 'to die' *wañu-ra-y* 'to die one after another'

(4)

- q'ala* *wañu-ra-pu-nku=taq* *wakin*
a lot die-one.after.another-COMPL.for.good-3PL=and others
llaqta-man=taq *ri-pu-nku*
city-GOAL=and leave-back-3PL
'One after another a lot of them died, and others left to the city' (Genoveva)

7.2. COMPLEX LEXEME BUILDING SUFFIXES

According to my analysis, there are complex lexeme-building suffixes. These suffixes are not productive since they only appear combined to a limited set of verbs. I state

them as complex because they are bi-morphemic although their individual components are no longer possible to clearly decompose into their individual counterparts.

-yacha ~ -ykacha ‘to do V in a non-linear path’

The meaning of ***-ykacha*** in the literature is defined based on whether it appears combined to motion verbs or non-motion verbs. With motion verbs, the event involves motion in many directions, and with non-motion verbs, it means that the verb is performed frequently and/or superficially (Herrero and Sanchez 1978:220). On the other hand, in Van de Kerke (1993:18) ***-ykacha*** means distribution in place, in many cases repetition of the action of the verb. While previous literature centers the attention on motion or non-motion verbs, this suffix does not clearly appear combined to motion verbs as stated by Parker (1965:47) for Southern Quechua varieties. The following examples in (1) show that ***-yacha*** cannot combine with that set of motion verbs, therefore, it could not consider as productive.

- | | | | |
|-----|----------|------------|----------------------------------|
| (1) | jamuy | ‘to come’ | *jamu- <i>yacha</i> -y |
| | riy | ‘to go’ | *ri- <i>yacha</i> -y |
| | wasariy | ‘to climb’ | *wasari- <i>yacha</i> -y |
| | wichariy | ‘to hike’ | *wichari- <i>yacha</i> -y |
| | khapay | ‘to lope’ | *khapa- <i>yacha</i> -y |
| | puririy | ‘to leave’ | *puriri- <i>ykacha</i> -y |

In this analysis, it is relevant whether the verb encodes path or not. When this suffix combines to a restricted set of verbs involving path, the meaning of ***-ykacha*** involves doing verb in a non-linear path and in a wider space. If we consider the following examples in (2) through (5) there is a continuous motion in a wide space.

- (2) *tipina-y-ta* *bolsillu-y-pi*
 tool-1SG.POSS-ACC pocket-1SG.POSS-LOC

apa-ykacha-yu-chka-ni
 carry-***continuous.motion***-PERF-PROG-1SG
 ‘I am carrying around my instrument (instrument to peel corn) in my

pocket'(Copertino)

- (3) *chay-pis alma-lla-ta=taq apa-ykacha-n*
that-also soul-only-ACC=conj carry-*continuous.motion*-3SG
'That (bird when it flies around) also takes a soul with it' (Asteria)
- (4) *alma-ta pusa-ykacha-n*
soul-ACC walk somebody-*continuous.motion*-3SG
'It (bird when it flies around) takes the soul with it' (Angela)
- (5) *de dia=qa puri-ykacha-ku-ni*
during the day walk-*continuous.motion*-REF-1SG
'During the day I walk around' (Genoveva)

On the other hand, with some stative verbs the action of the verb is also performed in a non-linear path, however the action of the verb is interrupted, and it occurs in a specific or determined area. The example in (6) and (7) show that the action of the verbs occurs in a specific space as opposed to a wider space when it combines with path verbs.

- (6) *llanthu-pi puñu-yacha-n*
shadow-LOC sleep-*continuous.interrupted.motion*-3SG
'It (dog) sleeps in different places under the shadow, moving from one place into another place constantly'
- (7) *imana-nki-taq mana cuerpo-yki-ta uqhay ati-spa?*
what-2SG-and NEG body-2SG-ACC lift can-GER
'What can you do if you can't lift your body?'
- suchu-yacha-nchik ah*
move being sitted-*continuous.interrupted.motion*-1PL.INCL ah
'We move from one place into another place constantly' (Genoveva)

-raya 'to do V in a stationary position without movement'

As opposed to *-yacha* 'non-linear path', *-raya* never combines with path verbs like *apay* 'to carry', *pusay* 'to take someone', or *ayqiy* 'to escape'. This suffix normally derives verbs involving positional meaning such as *puñuy* 'to sleep', *winkhuy* 'to lie down', but it can also derive certain transitive verbs such as *watay* 'to tie', *wich'uy* 'to throw'. In this

case the meaning is for the verb to be performed without moving and remaining in a specific place by sitting, lying down or standing for a determined period of time. For instance, in example (8) the action is performed without movement and having a duration of time. Similarly, in (9) with the verb *t'ukuy* 'to reflect on' **-raya** means to remain seated while reflecting about life.

- (8) *ajnalla-ta=puni* *pay-kuna* *puñu-raya-nku*
 only in this way-ACC=always 3-PL sleep-**without.movement**-3PL
 'They (dogs) always sleep in this way' (Genoveva)

- (9) *ni* *may-ta* *ri-ni-chu,* *kay-lla-pi=ña*
 NEG where-ACC go-1SG-NEG here-only-LOC=already

t'uku-raya-ni
 reflect.on-**without.movement**-1SG
 'I don't go anywhere, I just sit (without moving) and reflect on' (Genoveva)

In Herrero and Sanchez (1978:214) and Van de Kerke (1993:10) **-raya** has been described as valency changing type that transforms an action verb into a passive state when combined to the progressive suffix *-chka*. Example (10) shows that it is not the case, since the meaning still involves doing verb in a stationary position without involving movement.

- (10) *trabaja-naykichik* *ah!,* *kay=jina*
 work-2PL.IMP ah!, this=like

wich'u-raya-ri-chka-nkichik
 throw-**without.movement**-nicely-PROG-2PL
 'You should work, you're nicely lying down like this' (Copertino)

-paya 'to address to someone by speaking or by expressing a sentiment'

This suffix has been reported as adding the notion of frequency in Herrero and Sanchez (1978:220) and Van de Kerke (1993:18), for example:

- (i) *maki-y* *punki-paya-wa-n*
 hand-1SG swell-**FREQ**-1OB-3SG

‘My hand uses to swell from time to time’
(Herrero and Sanchez 1978:219)

The frequency interpretation stated by previous scholars might be originated in the following example (ii) where *-paya* derives the verb ‘to know’ into ‘to imitate’, the derived verb implies frequency in the way the verb is performed. However, this example has become an idiom. UPQ does not have more derived examples of this type.

- (ii) yachay ‘to know’
yachapaya ‘to imitate doing something’

In this analysis this suffix is restricted *e.g.*, (11). This suffix has been observed only with three verbs, given in (12). The meaning it adds to the lexical verb root is related to express something by either spoken or through sentiment as in (13) to (14).

- | | | | |
|------|---------|----------------|-------------|
| (11) | wayk’uy | ‘cook’ | *wayk’upaya |
| | puriy | ‘walk’ | *puripaya |
| | tusuy | ‘dance’ | *tusupaya |
| | thuqay | ‘spit’ | *thuqapaya |
| | aqtuy | ‘vomit’ | *aqtupaya |
| | pichay | ‘sweep’ | *pichapaya |
| | t’aqsay | ‘wash by hand’ | *t’aqsapaya |

- | | | | |
|------|------------------|-----------|--|
| (12) | parlay ‘to talk’ | parlapaya | ‘to talk to somebody’ |
| | takiy ‘to sing’ | takipaya | ‘to sing provoking to someone or to a group of people’ |
| | waqay ‘to cry’ | waqapaya | ‘for a bird to announce to a human about an upcoming bad luck’ |

- | | | | |
|------|----------------|--------------|---------|
| (13) | may-pi=pi | ‘tia-y’ | ni-spa |
| | where-LOC=ever | aun-1SG.POSS | say-GER |

parlapaya-rqu-ku-q=puni

talk-nimbly-REF-AG=always

‘wherever she would see me, she would always come to talk to me saying:

‘my aunt’ (Angela)

- | | | | | |
|------|----------|--------------------|-----------------------|---------|
| (14) | ima | pasa-na-n=paq | waqapaya-wanchik | ni-nku |
| | whatever | happen-SUB-3SG=for | announce-3SG>1PL.incl | say-3PL |

‘They say that it (the bird) cries announcing about an upcoming back luck’
(Copertino)

-kipa ‘to change texture of grains by softly grinding or toasting’

-kipa is the most restricted lexeme building suffix. It does not combine with other types of verbs *e.g.*, (15). The literature reports this suffix to be as productive suffix adding a notion of repetition in contexts where the action has failed or not finished in Herrero and Sanchez (1978:212) and Van de Kerke (1993:17). In this analysis **-kipa** only combines to two verbs in the corpus: *jank’ay* ‘to toast’ and *kutay* ‘to grind’. The meaning involves the change of the texture of the direct object which is always a grain type as (16) and (17). The process of changing the texture by either toasting or grinding necessarily involves performing the verb in a consecutive way. This consecutive way of doing verb might be the reason for previous scholars to interpret **-kipa** as adding the notion of repetition.

(15)	wayk’uy	‘cook’	*wayk’ukipay
	puriy	‘walk’	*purikipay
	tusuy	‘dance’	*tusukipay
	thuqay	‘spit’	*thuqakipaay
	aqtuy	‘vomit’	*aqtukipay
	pichay	‘sweep’	*pichakipaay
	puñuy	‘sleep’	*puñukipay
	munay	‘want’	*munakipay

(16)	<i>jank’ak’ipasq-ita-y</i>	<i>tiya-n</i>	<i>unayña</i>
	toasted corn-grain-DIM-1SG.POSS	exist-3SG	long time ago

jank’a-kipa-ku-rqa-ni
toast-**TRANS**-REF-PST-1SG
‘I also have toasted corn-grain, I toasted it a long time ago’

(17)	<i>jank’a-spa (quinoa)</i>	<i>kuta-kipa-nchik,</i>	<i>maylla-nchik</i>
	toast-GER	grind- TRANS -1PL	wash-1PL
	‘we softly grind it (quinoa) after toasting, we wash it’		

-naku ‘Subject does V together with NP (comitative)’

The **-naku** lexeme building suffixes adds the notion of reciprocal. Muysken (1986) and Van de Kerke (1993) state **-na** adding the notion of reciprocity. Additionally, **-na** is normally followed by the reflexive **-ku**. Previous studies also state that this combination can allow other suffixes in between. The use of this suffix can only combine with certain transitive verbs.

(18) *ni may-ta ri-ni-chu, kay-lla-pi=ñã*
 NEG where-ACC go-1SG-NEG here-only-LOC=already

t’uku-rayã-ni
 reflect on-without.movement-1SG

animals-lla-wan=ñã maqa-naku-ni
 animals-only-COM=already fight-REC-1SG
 ‘I don’t go anywhere, I just sit (without moving) and reflect on.
 I fight together with the animals’ (Genoveva)

-naya ‘for subject to want to do V’

This suffix has been described bearing two meanings: ‘going to start to’, or that someone has ‘an urge or desire to’ (Herrero and Sanchez 1978:222). But according to my analysis **-naya** means that the subject ‘wants to do verb’ and there is a reason for this strong desire. In (19) the subject does not want to stay in the city of *Cochabamba* since he finds the city noisy that makes her not wanting to stay there. Or in (20) the subject wanted to go to the market because normally during the farmer’s market people bring pots and exchange with potato. Hence, the subject wanted to go for that reason assuming people brought nice plates to exchange.

(19) *Ma nuqa-ta-pis kaku-naya-wan-chu*
 NEG 1SG-ACC-also stay-want.to-1SG-NEG

Cochabamba-pi=qa ancha sonidu=chus imachã
 Cochabamba-LOC=TOP a lot noise=DUB or something else

‘I don’t want to stay in Cochabamba, it is noisy or something else’ (Genoveva)

- (20) *“Ichapis manka jamu-n-pis” ni-spa=má*
 perhaps pot come-3SG-also say-GER=TOP
- kunan-pis astawan ri-naya-ri-lla-rqa-ni=taq*
 now-also mostly go-**want.to**-AFF-only-PST-1SG=and
 ‘Perhaps people brought pots (to sell)’ saying that, I wanted to go
 (to Anzaldo’s market day) (Angela)

On the other hand, *-naya* combined to the progressive *-chka* ‘PROG’ no longer means ‘to want’. The combination *-nayachka* has been grammaticalized denoting the meaning ‘to be about to’. However, this grammaticalized combination necessarily occurs combined with the enclitic =ña ‘already’ but combined to this sequence =ña means ‘almost’.

- (21) *tullu-s (dogs) wañu-nayachka-nku=ña*
 slim-PL die-**be about to**-3PL=almost
 ‘They are almost dying’ (Genoveva)
- (22) *qayna kay horas ri-nayachka-rqa-nchik=ña*
 yesterday this time go-**be about to**-PST-1PL.incl=almost
 ‘Yesterday at this time, we were almost leaving’ (Copertino)

8. MODELS OF VERB MORPHOLOGY IN SOUTH BOLIVIAN QUECHUA

This section reviews earlier approaches for South Bolivian Quechua verb morphology. Solá and Lastra (1964), Bills et al., (1971), Muysken 1986 and Van de Kerke (1993) present the verb system as morphologically complex. This complex structure encompasses an initial verb root, followed by a lexical, non-inflectional suffixes presented in numerous slots and finally the inflectional system. Different from previous analysis, my study presents the verb structure identifying constituents within the verbal word. I report two types of non-inflectional suffixes that come in fewer slots within the verbal stem. Additionally, my analysis accounts for productivity of verbal suffixes in UPQ. The following *Table 7* summarizes the productivity of verbal suffixes comparing bilingual varieties in urbanized areas stated by previous scholars to UPQ, a rural variety. Some of the suffixes in table 7 whose productivity appears unspecified or stated as productive by previous scholars are shown to be unproductive in the rural variety of UPQ. The right most column in the table 7 classifies the productivity for each verbal suffix identified in this rural variety.

Variety	Bilingual Quechua, urban variety						Rural monolingual UPQ
Suffix	(Solá and Lastra 1964)	(Bills et al., 1971)	(Herrero & Sanchez 1978)	(Muysken 1986)	(Van de Kerke 1993)	(Plaza 2009)	(Camacho 2019)
-ykacha	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	---	<i>LBS</i>
-na	<i>Unspecified</i>	---	---	<i>Unspecified</i>	<i>Unspecified</i>	---	<i>LBS</i>
-naku	---	<i>Unspecified</i>	---	---	---	<i>Unspecified</i>	<i>LBS</i>
-naya	---	---	---	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>LBS</i>
-raya	---	---	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	---	<i>LBS</i>
-paya	---	<i>Unspecified</i>	<i>Unproductive</i>	<i>Unspecified</i>	<i>Unspecified</i>	---	<i>LBS</i>
-kipa	---	<i>Unspecified</i>	<i>Productive</i>	---	<i>Productive</i>	---	<i>LBS</i>
-yku	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-ra	<i>Unspecified</i>	<i>Unspecified</i>	<i>Both</i>	<i>Unspecified</i>	<i>Both</i>	---	<i>LBS</i>
-rqu	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-ri	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-rpa	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	---	<i>Productive</i>
-rpari	---	<i>Productive</i>	---	<i>Unspecified</i>	---	---	<i>Compositional</i>
-ypari	---	---	---	<i>Unspecified</i>	---	---	<i>Not found</i>
-rpaya	---	---	---	<i>Unspecified</i>	---	---	<i>unknown</i>
-chi	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-ysi	---	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-ku	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-mu	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-pu	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Unspecified</i>	<i>Productive</i>
-rqaya	---	---	---	---	---	---	<i>Productive</i>

Table 7: Productivity of non-inflectional suffixes

As mentioned earlier, the understanding of verbal complexity in current literature for SBQ is marked involving numerous slots in the verb structure. 10 slots are reported in Solá and Lastra (1964) and 11 slots in Muysken (1986) as follows:

slot	1	2	3	4	5	6	7	8	9	10
root	<i>-ykacha</i>	<i>-yku</i>	<i>-rpa</i>	<i>-ra</i>	<i>-ri</i>	<i>-chi</i>	<i>-na</i>	<i>-ku</i>	<i>-mu</i>	<i>-pu</i>
		<i>-rqa</i>								(Solá and Lastra 1964)

slot	1	2	3	4	5	6	7	8	9	10	11
root	-ykacha	-naya	-raya	-yku	-ra	-rqa	-ri	-chi	-ka	-ku	-pu
	-na							-rpari	-ysi	-m	
								-rpaya		-mu	

(Muysken 1986)

The suffixes *-ku*, *-mu* and *-pu* are presented holding separate fixed slots. However, UPQ never allows **-ku-mu-pu*, **-ku-mu*, **-ku-pu* or **-mu-pu* sequences with compositional meanings. When those suffixes co-occur, they involve phonological changes and form complex suffixes with a single meaning as a unit *e.g.*, *-kampu*, *-kamu*, *-kapu* or *-mpu*. These complex suffixes in the literature appear to be built compositionally creating an understanding of numerous slots in the verb template. I argue that a constituent-based analysis simplifies the verbal word rather than considering the complexity found in numerous slots.

9. TYPOLOGICAL VIEW OF *UMA PIWRA QUECHUA* MORPHOLOGY

Polysynthesis is generally understood as extreme morphological complexity in the verb (Fortescue et al., 2017:18). UPQ can be considered complex in the sense that the verbal structure is morphologically rich through suffixation. It expresses adverbial information of various types as presented in section 6. On the other hand, following (Matissen 2017) the typology for UPQ can be assessed using the five parameters of polysynthesis: (i) word-formational type, (ii) the internal organization, (iii) participant encoding, (iv) evolutionary path and (v) characteristic design. The morphology of UPQ is understood as presented in Table 8.

Parameter	Subclassification of Polysynthesis	Uma Piwra Quechua
1	Word-formational type	1-i affixal polysynthesis
2	Internal organization	2-i templatic organization 2-ii scope ordering
3	Participant encoding	Polypersonalism
4	Evolutionary path	Verb form expandable between the root and the inflection
5	Characteristic design	Grammatical accumulation Holophrastic Presence of complex suffixes

Table 8: The UPQ morphology

The (i) *word formational type* has as fundamental difference the number of lexical roots allowed in the verb root. UPQ has similar word formational type as Greenlandic. It only allows one root per lexeme. It permits no compounding of roots or stems and it uses suffixal system. The root takes initial position, the inflection final position and the rest are non-obligatory morphemes, however they contribute in the grammar and lexical formation.

The following examples in (1) and (2) show similar word formational types comparing these two languages.

Greenlandic

- (1) *Kaalat tiki-nngik-kallar-puq*
 Kaalat **arrive**-NEG-yet/still-IND:3SG
 ‘Kaalat has not arrived yet’ (Fortescue 1984:137)

Uma Pwra Quechua

- (2) *Fredy apa-mu-nqa=chá*
 Fredy **carry**-MOT-3SG.FUT=DUB
 ‘Probably, Fredy will bring (from Cochabamba city to here/there)’ (Copertino)

The (ii) *internal organization type* involves a mixed system between templatic and scope-ordered organization. UPQ is templatic since the root initial and inflection have their fixed positions. It also presents 4 slots which are also fixed in their order. UPQ is scope ordered since a lexical verb base is modified by lexeme building suffixes.

The third parameter is (iii) *participant encoding type*. UPQ is poly-personal since it can encode more than one person in the verb form. In the example (3) there *causative* and the *benefactive* involve the participation of two other participants besides the subject of the verb.

- (3) “*yaku-ta chura-chi-pu-nku*” *ni-nku*
 water-ACC install-**CAUS-BEN**-3PL say-3PL
 ‘It is said, “they made (someone) install water on (someone’s) behalf”’ (Vitalia)

The (iv) *evolutionary path type* involves the potential formation mechanisms the first one is ‘*onion type*’, it encounters different layers of morphemes in both sides of the verb root. ‘*sandwich type*’ involves the expansion of verbs by chaining morphemes between the lexical and inflectional morphemes. ‘*burdock type*’ accounts for coalescence. UPQ is the *sandwich type* and similar to Chukchi. The verb form in these three languages

are expandable by morphemes which are placed between the lexical verb root and the inflection. The following examples show this expansion process by hosting more than one non-inflectional suffixes such as a causative *-chi* in (4) and a causative plus the associated motion *-mu* in (5).

(4) *apa-chi-ni*
 carry-**CAUS**-1SG
 ‘I make (someone) carry (alcoholic drink)’ (Asteria)

(5) *apa-chi-mu-wanku*
 carry-**CAUS-MOT**-3PL>1SG
 ‘They make (someone) carry to me towards this direction (something)’ (Vitalia)

(v) *the characteristic design type* determines the heterogeneity of polysynthetic structures using 8 features. UPQ follows *grammatical accumulation*. Languages of this type are affixal, they allow multiple categories on the verb especially modality, valency, tense, focus etc. In example (6) aspect and tense categories are represented through affixation.

(6) *Cochabamba-man madera-ta apa-chka-rqa-ni*
 Cochabamba-ALL wood-ACC carry-**PROG-PST**-1SG
 ‘I was carrying wood to Cochabamba (city)’ (Copertino)

Another characteristic observed in UPQ is the presence of complex suffixes whose meanings cannot be predicted from the meanings of individual counterparts. Indeed, the complex suffixes necessarily involve phonological changes. For instance, the combination *-ku-mu-pu* will change into *-ka-m-pu*. The meaning of *-kampu* is ‘for subject to do V for safety’. Complex suffixes in current SBQ literature appear described in a compositional fashion (Solá and Lastra 1964, Bills et al., 1971, Herrero & Sanchez 1978, Muysken 1986, Van de Kerke 1993 and Plaza 2009). However, the example (7d) shows that the meaning

cannot be directly predicted from the compositional components (7a) *-ku* ‘*reflexive*’, (7b) *-mu* ‘*associated motion*’, ‘*go and do V*’ and (7c) *-pu* ‘*backwards*’.

- (7) (a) uqhari-*ku*-y ‘to pick up something for oneself’
 (b) uqhari-*mu*-y ‘to go and pick up something’
 (c) uqhari-*pu*-y ‘to pick up back’
- (d) *juk-ta* *uqhari-rpa-kampu-ni=ñã*
 one-ACC pick up-suddenly-*do.V for.safety*-1SG=already
 ‘the other one (duck), all of a sudden I picked it up for safety’ (Angela)

The presence of complex suffixes in UPQ decreases the complexity that comes through numerous fixed slots in the verb template. In general, this phenomenon remains understudied and very little has been stated about the possible implication in the morphological structures in Fortescue (1980). Additionally, complex suffixes are not only reported in UPQ but they are also present in Eskimo Aleut languages (Woodbury 2017) & (Fortescue 2017).

Finally, for recent typological considerations, UPQ does not necessarily meet the criteria for polysynthesis. First, following Fortescue (2017), it fails one of the necessarily conditions for polysynthesis because UPQ does not allow more than one lexically ‘heavy’ morpheme within the holophrastic verb. UPQ only allows one verb root but no other lexical content such as adjectival, nominal, verbal or an adjunct. All the suffixes allowed in UPQ are suffixes of adverbial type but not necessarily of lexical type. Second, following (Mattissen 2017), UPQ has very limited polysynthesis. Suffixal morphemes in UPQ are limited to express adverbial manners of action and motion. Morphemes expressing setting, location or direction, body part, instrument, modality, chronology, degree, reversative and scale and focus are not present in UPQ. However, atypically, in UPQ what is very well

elaborated is suffixal morphemes expressing adverbial meanings of several kinds as presented in section 6 when describing non-inflectional simplex and complex suffixes.

10. CONCLUSION

This paper described the verbal morphology of *Uma Piwra* Quechua (UPQ), spoken by elders in a rural area of Cochabamba department, Southern part of Bolivia. The first part of the paper presented the verbal word in UPQ. This paper showed a constituent-based analysis for UPQ and it focused on the meaning of verbal suffixes within the verb stem constituent. Different from earlier descriptions by Solá & Lastra (1964), Bills et al., (1971), Herrero & Sanchez (1978), Muysken (1986), Van de Kerke (1993) and Plaza (2009), this study accounts for two types of derivational suffixes; lexeme building suffixes that are unproductive and two types of non-inflectional productive suffixes. This study reports nine simplex suffixes whose meanings are always compositional and 10 complex suffixes that are not built compositionally. As mentioned earlier, the implications of this phenomenon in the morphological typology remains unclear. In the case of SBQ studies, it gives a different understanding of the complexity that come through numerous slots (Fortescue et al., 2017).

Finally, the description supported the analysis by basing it in a naturalistic speech corpus. To provide a solid statement on the productivity and the meaning of non-inflectional simplex and complex suffixes, data gathered through elicitation is also needed. The elicitation process could involve innovative methodologies to collect data from monolinguals all in Quechua. For example, to understand the meaning of each non-inflectional suffix, the researcher can design specific elicitation contexts aiming the speaker to use the target suffix. Further research also proposes to look at the semantics of verbal suffixes within the verbal word and beyond. On the other hand, another interesting topic in UPQ is the notion of space and directional information by analyzing in depth the associated motion suffixes used in different contexts. In section 6, it has been shown that

the type of argument licensed by *-mu* in context is relevant. Similarly, with the lexeme building suffix *-yacha* the lexical semantics of the verb and the spatial information is relevant to understand the meaning of this suffix. Finally, in-depth comparisons of the verb morphology system between monolingual elders from rural areas and bilinguals (Quechua-Spanish) living in urban areas would also be worth looking at.

Appendix

ABL	ablative
ACC	accusative
AFF	affective
AG	agent
ALL	allative
ASST	assistive
BEN	benefactive
CAUS	causative
COM	with
COND	conditional
DIM	diminutive
DUB	dubitative
EXCL	exclusive
FUT	future
GER	gerund
HAB	habitual
IMP	imperative
INCL	inclusive
INF	infinitive
LOC	locative
NARR	narrative
NEG	negative
NF	non-future
OBJ	object
PERF	perfective
PL	plural
POSS	possessive
PROG	progressive
PST	past
REF	reflexive
REP	reportative
SG	singular
SUB	subjunctive
TOP	topicalizer
TRANS	transformative

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