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The Attributive Suffix in Pastaza Kichwa

Barrett Wilson Hamp

A thesis submitted to the faculty of Brigham Young University in partial fulfillment of the requirements for the degree of

Master of Arts

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Department of Linguistics

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#### ABSTRACT

### The Attributive Suffix in Pastaza Kichwa

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This thesis is a corpus-based description of the attributive suffix -*k* in Pastaza Kichwa, a Quechuan language spoken in lowland Amazonian Ecuador. The goal of this work is, first, to describe the behaviors, characteristics, and functions of the suffix using data from the Corpus of Pastaza Kichwa (Rice 2018a), and second, to offer a typological analysis of these behaviors in order to identify the most appropriate classification for the suffix. The suffix has previously been described as a nominalizer (Nuckolls & Swanson, forthcoming), and the equivalent suffix in other Quechuan varieties has been described as an agentive nominal relativizer (Weber 1983; Weber 1989; Cole 1985; Lefebvre & Muysken 1988) or a participle (Markham 1864; Weber 1989; Guardia Mayorga 1973; Catta Quelen 1985; Debenbach-Salazar Saenz 1993, Muysken 1994). This work claims that the function of the -*k* suffix in Pastaza Kichwa more closely conforms to crosslinguistic descriptions of active participial functions.

After introducing Pastaza Kichwa and the -k suffix, I use numerous examples to describe the behavior of the suffix. The data is taken from the Corpus of Pastaza Kichwa, which is composed of 40 narrative texts and contains 32,127 tokens. 846 examples of the -k suffix are found in the corpus. Following the presentation of the data, I offer an analysis based on previous descriptions of nominalizations and participles in Quechuan languages, as well as typological descriptions of nominalizations and participles crosslinguistically. I rely chiefly on the typological description of participles found in Shagal (2017) to conclude that verb + -k forms function as active (or nominative) participles in Pastaza Kichwa.

Keywords: Kichwa, attributive, participle

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I would also like to acknowledge Alex Rice of the University of Alberta who created the Corpus of Pastaza Kichwa and Tod Swanson of Arizona State University for his contribution to the corpus. A special thank you to Mama Luisa Cadena for sharing so many of her stories.

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## LIST OF ABBREVIATIONS

*	ungrammatical form
$\rightarrow$	becomes
1p	first person plural
1s	first person singular
2р	second person plural
28	second person singular
3р	third person plural
38	third person singular
ABL	ablative
ACC	accusative
ADV	adverb
AN	agent noun
CAUS	causative
CIS	cislocative
СОМ	commitative
СРК	Corpus of Pastaza Kichwa
DESP	despitative
DS	different subject (switch reference)
DUR	durative
EVO	evidential (other)
EVS	evidential (self)

evidential (uncertain)
future
habitual
ideophone
imperative
inchoative
infinitive
instrumental
irrealis (negative and interrogative in PK)
limitative
locative
negation
nominal
object
passive
perfective
Pastaza Kichwa
plural
present
progressive
participle
possessor
past

RECIP	reciprocal
REL	relative
SS	same subject (co-reference)
SUF	suffix (active participle)
SUF2	suffix 2 (absolutive participle)
ТОР	topic
TRLC	translocative
UNTIL	until

#### Chapter 1: Introduction

The purpose of this thesis is to describe the uses and grammatical characteristics of the attributive suffix *-k* in Pastaza Kichwa (PK). The primary goal of this study is to take inventory of the varied uses of the *-k* suffix and the environments in which it occurs using the Corpus of Pastaza Kichwa (CPK) (Rice 2018a). Secondarily, I will offer a typological analysis of the behavior of the *-k* suffix in PK, concluding that the function of the suffix is similar to active participial functions crosslinguistically. This discussion will be informed by previous analyses of the *-k* suffix in PK (Nuckolls & Swanson, forthcoming) and analyses of agent noun suffixes in other Quechuan languages (Weber 1989; Cole 1985; Lefebvre & Muysken 1988). An in-depth description of the behavior and functions of the *-k* suffix in PK has not been previously undertaken.

In this chapter I offer a sociolinguistic overview of PK and a basic description of the typology of PK and introduce the -k suffix. I discuss the literature surrounding the -k suffix and its equivalents in other varieties of Quechua. I also detail the CPK, its composition and preliminary findings concerning the -k suffix. In Chapter 2 I present the description of the -k suffix based on data from the CPK. In Chapter 3 I explore typological and theoretical explanations for the behavior of -k. Finally, in Chapter 4 I conclude and discuss shortcomings.

#### 1.1 Pastaza Kichwa

The Quechua language family is comprised of languages spoken throughout South America in the Andean regions ranging from southern Colombia to northern Argentina, as shown in figure 1. PK is a Quechua II language spoken in the Pastaza region of lowland Amazonian Ecuador.

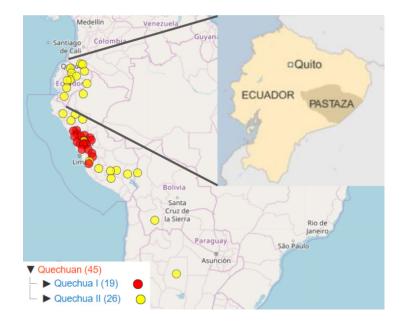


Figure 1: Map of Quechuan languages throughout South America (https://glottolog.org/resource/languoid/id/quec1387)

With over 10 million speakers, the Quechuan family has the highest number of speakers of any indigenous language in North or South America (Adelaar and Muysken 2004). Pastaza Kichwa (also known as Northern Pastaza Kichwa) [ISO-code: qvz] belongs to the Quechua II-B branch of the family. Figure 2 shows the genetic relationships in the Quechuan language family leading to PK. For a complete family tree, see Appendix 1.

## Quechuan (45) • Quechua I (19)

- Quechua II (26)
  - Cajamarca Quechua
  - Chincha Quechua
  - Lambayeque Quechua
  - Quechua IIB (14)
    - Chachapoyas Quechua
    - Colombia-Ecuador Quechua IIB (12)
      - $\circ$  Ecuadorian Quechua A (3)
      - Ecuadorian Quechua B (7)
        - Cañar Highland Quichua
        - **Ecuadorian Lowland Quechua (4)** 
          - Napo Lowland Quechua
          - Northern Pastaza Quichua
          - Southern Pastaza Quechua
          - Tena Lowland Quichua
        - Imbabura Highland Quichua
        - Loja Highland Quichua
      - Ingan Quechua IIB (2)
    - San Martín Quechua
  - Quechua IIC (9)

Figure 2: Quechuan language family

(https://glottolog.org/resource/languoid/id/quec1387)

Today there are approximately 10,000 speakers of PK with an estimated 300 monolingual speakers. PK is classified as threatened in both Glottolog and Ethnologue and classified as vulnerable according to the Endangered Languages Project (Lewis, Simon, and Fennig 2016).

Typologically, PK exhibits fairly typical Quechuan morphosyntactic properties. It has nominative-accusative alignment. The basic word order is SOV, though in many situations there seems to be free variation with SVO. PK employs a switch-reference system. Morphologically, PK is a highly agglutinating, suffixing language. Unlike many of the Peruvian varieties of Quechua described in the literature, PK lacks a full paradigm of personal reference markers used on nouns to express possession and on verbs to indicate direct object agreement. The loss of these in PK is perhaps due to influence from the Barbacoan languages that were spoken throughout Ecuador when Quechua was first introduced (Gijn 2016). Muysken (2000: 985) posits that the morphological and phonological reductions found in Lowland Ecuadorian Kichwa varieties, when compared to Peruvian varieties, are possibly the result of a creolization that occurred after Spanish colonialization.

#### 1.2 The -k suffix

The -*k* suffix in PK is described by Nuckolls & Swanson (forthcoming) as an attributive suffix. This attributive suffix is defined as a deverbal nominalization that "attributes a certain role, ability, activity, or characteristic trait to the subject of its verb" (Nuckolls & Swanson, forthcoming: 174). As a nominalizer the -*k* suffix is similar to the agent noun suffix -*er* in English. For example, English *teach* becomes *teach-er* (teach-AN) 'one who teaches'. Similarly, in PK, *yachachi-na* (teach-INF) 'to teach' becomes *yachachi-k* (teach-SUF) 'teacher' or 'one who teaches.' However, Nuckolls & Swanson observe a number of non-agentive uses of the -*k* suffix, and therefore do not refer to the -*k* suffix as "agentive" (Nuckolls & Swanson, forthcoming: 180).

Descriptions of other Quechan languages have generally analyzed equivalent suffixes as agentive nominalizers, though they have also been analyzed as active participles, habitual aspect markers, relative subordinators, and complementizers. A goal of this paper is to determine the most appropriate categorization of the -k suffix based on its behavior. Throughout this paper the -

*k* suffix will be glossed SUF so as not to favor one analysis over another until a conclusion is made.

Concerning the phonological representation of the suffix in the literature, the *-k* suffix in PK is generally represented as a voiceless velar stop [k], though it can allophonically be realized as a voiced velar stop [g] when followed by a voiced consonant (Nuckolls & Swanson, forthcoming: 176). The agent noun suffixes in a number of other Quechuan varieties are also described as [k] (Markham 1864; Coombs 1976; Catta Quelen 1985). In the Imbabura dialect described by Cole (1985), the equivalent suffix is realized as a voiceless velar fricative [x] which is represented in examples from the literature using the letter *-j* per Spanish orthography. In the Peruvian varieties, the agentive noun suffix is a voiceless uvular stop [q] and is represented in the orthography as such (Weber 1983; Weber 1989; Parker 1969; Lefebvre & Muysken 1988, etc.). It is reasonable to assume that historically these suffixes share a common source, likely the uvular [q], as the function is roughly the same in each variety, and the uvular consonants have been lost in the Ecuadorian varieties, becoming velar (Muysken 2000).

Nuckolls & Swanson (forthcoming) is a pedagogical grammar of PK and is the only work to describe the -k suffix in PK, presenting the suffix's forms and its four main functions. In addition to nominal functions, verb + -k forms are shown to function also as adnominal modifiers. It is also observed that verb + -k forms are used in a habitual aspect construction in which a verb + -k form is used with the verb *ana* 'to be' (Nuckolls & Swanson, forthcoming: 192). Also, Nuckolls & Swanson describe verb + -k forms functioning adverbially to modify a matrix verb in instances where the verb + -k form cannot be said to fill an argument of the matrix verb (Nuckolls & Swanson, forthcoming: 208). In summary, a verb + -k form can function as a noun, as a modifier, as a habitual aspect marker, and as an adverb. A goal of chapter 2 will be to examine these claims and compare them to data from the CPK in order to verify Nuckolls & Swanson's characterization of the suffix.

Looking outside of PK, there is a small literature on agentive nominals in other varieties of Quechua. Table 1 summarizes these sources. They are sorted first by the branch of the Quechuan language family in which each variety is found, in relation to PK. Since PK is a Quechua II-B (QII-B) language spoken in Ecuador, QII-B languages of Ecuador are listed first, followed by other QII-B languages. These are followed by QII-C languages of Peru and Bolivia, and finally QI languages. The name of the Quechuan variety and the source is given, as well as the phonological representation in each variety of the agent nominal suffix. Finally, a summary of the key analyses made in each source concerning the suffix is given.

Family	Location	Variety	Source	Representation	Analysis
QII-B	Ecuador	Imbabura	Cole (1985)	-j [x]	Agentive nominalizer, relativizer, "headless" relatives, part of a subordinate tense paradigm
QII-B	Ecuador	Chimborazo	Catta Quelen (1985)	- <i>c</i> [k]	"Habitual" participle
QII-B	Peru	San Martin	Coombs (1976)	-k	<i>El que</i> "one who…"
QII-C	Peru	Ayacucho	Parker (1969)	-q	Agent nominal, with adverbial functions
QII-C	Peru	Ayacucho	Soto Ruiz (1976)	-q	Agent noun

Table 1: Summary of non-PK literature

QII-C	Peru	Cusco	Lefebvre & Muysken (1988)	-q	Agentive nominalizer, relativizer, complementizer, inflectional vs. derivational
QII-C	Peru	Cusco	Muysken (1994)	-q	Agentive nominalizer, head of participial clause
QII-C	Peru	Qosqo	Samanez Flores (1996)	-q	Agentive nominal
QII-C	Peru	Santiago del Estero	Alderetes (2001)	-q	Agentive nominalizer, subordinator, relativizer, complementizer
QII-C	Bolivia	Cochabamba, Oruro, Potosi	Gomez Bacarreza (1988)	-x	Agentive nominalizer
QII-C	Bolivia	Cochabamba, Oruro, Potosi	Huarachi Revello (2005)	-q	Agentive nominalizer
QI	Peru	Huaylas	Escribens (1970)	-q	Agentive nominalizer
QI	Peru	Huallaga	Weber (1983)	-q	Agentive nominal, relativizer, adverbial uses, non-agentive uses
QI	Peru	Huallaga	Weber (1989)	-q	Active participle, agentive nominalizer, habitual marker, narrative past, relativizer, sensory verb complementizer, adverbially purpose- motion construction, non- temporal habitual nominalizer

(1987) past habitual aspect marker
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To summarize, among Quechuan languages there is a suffix -k, -x, or -q (likely derived from proto \*-q) that derives a noun or participle from a verb. It is classified as an agentive nominalizer in nearly all analyses. The resulting noun or participle refers to the agent or active participant of the verb and can function as a noun, a nominal relative, a habitual aspect marker, a verbal complement, and/or an adverb. Comparing Nuckolls & Swanson's description of the -ksuffix in PK to these descriptions, there are clear similarities, e.g., deverbal derivation, nominal functions, adnominal modifying functions, habitual aspect construction, adverb-like use. A goal of chapter 2 will be to examine these behaviors in greater detail, and to explore potential other uses of the suffix in PK not addressed by Nuckolls & Swanson, such as complementation.

In order to fully characterize the *-k* suffix in PK I will use the Corpus of Pastaza Kichwa to take inventory of its uses and the environments in which it is found. This survey will be informed first by Nuckolls & Swanson's description of the suffix. Then I will turn to the descriptions of other Quechuan languages to see how well, if at all, those descriptions match the behavior of the suffix in PK.

#### 1.3 The Corpus of Pastaza Kichwa

The Corpus of Pastaza Kichwa (CPK) was created by Rice (2018a) and is composed of 40 narrative texts totaling 32,127 words (tokens). The majority of the recorded narratives (29 out of 40) were collected by Dr. Janis B. Nuckolls (Brigham Young University) and are archived in

the Quechua Collection in the Archive of Indigenous Languages of Latin America (AILLA) at the University of Texas Austin. The remaining narratives (11 out of 40) were recorded by Dr. Tod D. Swanson (Arizona State University) who owns and operates a field school outside of Tena, Ecuador, where Kichwa language and culture is studied and taught. In each case, the texts were recorded and transcribed in handwritten notes that were then re-transcribed into digital format before creating the CPK.

Rice's motivation for creating the CPK was twofold: first, to facilitate the study of PK morphology and syntax, specifically switch reference (see Rice's MA thesis *Switch-Reference in Pastaza Kichwa*, 2018b); and second, to show that the use of corpora in documentary linguistics can be a "fruitful endeavor" (Rice 2018b: 30). Using corpora, it is possible to analyze large amounts of data and to discover patterns that may have been less apparent or less intuitively observed. There are of course shortcomings to using corpora. With under-documented languages the available data, or lack thereof, can affect the validity and usefulness of a corpus. This risk can be mitigated in part by gathering data from a variety of sources on a variety of subjects. In the case of PK there was no digitized corpus before the CPK, leading Rice to build the corpus from the ground up. Rice chose to use narrative texts taken from recorded speech of a native speaker, Sra. Luisa Cadena. The advantage of using these narratives in creating the CPK is that they represent natural speech and cover a variety of subjects. A shortcoming is that the data is representative of only one speaker.

Table 2 lists the complete set of narratives that make up the CPK, along with the name of the speaker, the name of the contributor who recorded the narrative, and the word count. They are sorted alphabetically according to the title. These works are cited throughout this paper by

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their abbreviation following "CPK:". For example, a sentence taken from the story "Adopting an anaconda" will be cited (CPK:ado).

Abbreviation	Title	Speaker	Contributor	Word Count
ado	Adopting an anaconda	Luisa Cadena	Nuckolls	2,190
aft	After a lake explodes	Luisa Cadena	Nuckolls	2,405
ama	A marriage breaks up	Luisa Cadena	Nuckolls	1,444
ams	Amasanga warmi simayuka tukun	Luisa Cadena	Swanson	1,092
bec	Becoming a shaman	Luisa Cadena	Nuckolls	446
can	Canoe of death	Luisa Cadena	Nuckolls	470
cha	Chased by a motolo	Luisa Cadena	Nuckolls	637
def	Defending my brothers	Luisa Cadena	Nuckolls	457
est	Esteban and Mareclina Nuñez	Luisa Cadena	Nuckolls	902
fin	Finding Peruvian spy	Luisa Cadena	Nuckolls	7,860
fru	Frustration	Luisa Cadena	Nuckolls	35
how	How people grow old and die	Luisa Cadena	Nuckolls	491
hww	How we work with clay	Luisa Cadena	Nuckolls	99
ind	Indillama	Luisa Cadena	Swanson	491
jag	Jaguar chagra	Luisa Cadena	Nuckolls	1,831
mac	Machin Martin and Martina	Luisa Cadena	Swanson	300
man	Mana shutiashka taruga tukun	Luisa Cadena	Swanson	241
myf	My first pregnancy	Luisa Cadena	Nuckolls	850

Table 2: Narratives in the CPK

new	New world coming	Luisa Cadena	Swanson	609
pah	Paho	Luisa Cadena	Nuckolls	233
per	Peruvians with a dolphin	Luisa Cadena	Swanson	265
pie	Piercing ears	Luisa Cadena	Nuckolls	72
pum	Pumas want woman	Luisa Cadena	Nuckolls	289
rai	Raising a chichicu	Luisa Cadena	Nuckolls	327
ram	Ramana and Ramayana	Luisa Cadena	Nuckolls	288
ray	Rayu Runa	Luisa Cadena	Swanson	192
ser	Serrucho anaconda	Luisa Cadena	Nuckolls	1,882
sui	Suicide	Luisa Cadena	Nuckolls	469
sun	Sun bittern	Luisa Cadena	Swanson	356
tay	Tayag warmiwa wawauna	Luisa Cadena	Swanson	232
the	The chickwan speaks	Luisa Cadena	Nuckolls	1,260
thk	The killing near big water	Luisa Cadena	Nuckolls	394
thp	The proper way to cut a branch	Luisa Cadena	Nuckolls	118
thr	The return of dead and animals	Luisa Cadena	Swanson	361
thu	The unseen dangers of a swollen river	Luisa Cadena	Nuckolls	369
tip	Titipuru supay	Luisa Cadena	Nuckolls	1,198
toa	To ask a wana where it's from	Luisa Cadena	Nuckolls	89
twi	Twitching	Luisa Cadena	Nuckolls	144
umu	Umu perfume	Luisa Cadena	Swanson	124
wha	What an anaconda caught	Luisa Cadena	Nuckolls	615

## 1.3.1 Tagging and preliminary data

In total there are 846 occurrences of the -k suffix in the CPK. Each of these was tagged by the author of this thesis for its morphological and syntactic characteristics, i.e., morphological co-occurrences and syntactic roles. Tables 3, 4, and 6 summarize the tags, criteria, and preliminary results of searches in the CPK, with examples. Included also in Table 5 is a summary of the PK enclitics that interact with verb + -k forms. These were not tagged but are presented here for completeness in describing the nominal and verbal morphology found to co-occur with the -k suffix.

Morphologically, the -k suffix attaches to a verbal stem which can be composed of the verbal root and certain suffixes. Table 3 summarizes the verbal suffixes that were found to co-occur with the -k suffix in the CPK

Suffix	Gloss	Number of co- occurrences with -k	Example	Source
-chi	causative	44	<i>riku-chi-k</i> see-CAUS-SUF 'one who shows'	CPK:ind
-ri	passive	58	<i>riku-ri-k</i> see-PASS-SUF 'one who appears,' i.e., is seen	CPK:ser
-naku	reciprocal	6	<i>rima-naku-k</i> speak-RECIP-SUF 'those who speak to each other'	CPK:def
-wa	1s object	22	kwinta-wa-k	CPK:tip

Table 3: Verbal suffixes used with -k

			tell-1S.OBJ-SUF 'one who tells me'	
-ти	cislocative	5	<i>apa-mu-k</i> take-CIS-SUF 'one who brings'	CPK:ado
-уа	inchoative	4	<i>pundzha-ya-k</i> day-INCH-SUF 'that which becomes bright'	CPK:fin
- <i>u</i>	durative	8	<i>puri-u-k</i> walk-DUR-SUF 'one who is walking'	CPK:cha
[None]		699	<i>riku-k</i> see-SUF 'one who sees'	CPK:ams

The -k suffix derives a deverbal noun, which means the resulting verb + -k form can take nominal morphology. Table 4 shows the nominal suffixes that co-occur with the -k suffix in the CPK.

Table 4: Nominal suffixes used with -k

Suffix	Gloss	Number of co- occurrences with -k	Example	Source
-guna	plural	38	<i>apa-k-guna</i> take-SUF-PL 'those who take'	CPK:cha
-ta	direct object	2	<i>yacha-k-guna-ta</i> know-SUF-PL-ACC 'shamans' lit. 'those who know'	CPK:fin
-wan	comitative	1	yacha-k-wan	CPK:bec

			know-SUF-COM 'with the shaman'	
-gama	'until'	1	<i>paki-ri-k-gama-ga</i> break-PASS-SUF-UNTIL-TOP 'until it is broken'	CPK:aft
[None]		804	<i>yacha-k</i> know-SUF 'shaman' lit. 'one who knows'	CPK:tip

Additionally, there are four enclitics that are found to interact with verb + -k forms in PK. These are -mi, -shi, -ga, and -chu. -mi is an evidential that indicates a statement made from the perspective of the speaker or self. -shi is an evidential that indicates a statement made from the perspective of an other. -ga is a topicalizer. And -chu is an irrealis marker used in negative constructions and yes/no questions. As clitics, these have greater freedom to attach to nouns, verbs, and other categories, which means their use with verb + -k forms tells us little about the category of the verb + -k form. However, it bears mentioning that there are interactions. Table 5 shows how many times each enclitic was found to co-occur with a verb + -k form in the CPK.

Suffix	Gloss	Number of co- occurrences with -k	Example	Source
-mi	self evidential	26	<i>ñuka kusa illapa-s illa-k-mi</i> 1s husband shotgun-DESP lack-SUF-EVS 'my husband lacked even a shotgun'	CPK:cha
-shi	other evidential	10	<i>kasna riku-ri-k-shi a-g a-ra-ngi</i> like.this see-PASS-SUF-EVO be-SUF be-PST-2S	CPK:how

Table 5: Enclitics used with -k

			'you used to appear like this, they say'	
-ga	topic	71	<i>kanta-k-ga</i> sing-SUF-TOP 'the singer'	CPK:jag
-chu	irrealis	7	<i>ñuka-ga mana miku-k-chu a-ni</i> 1s-TOP NEG eat-SUF-IRR be-1S 'I am not an eater'	CPK:ind
[None]		732	<i>ñuka yaya kwinta-k a-ra</i> 1s father tell-SUF be-PST 'my father used to tell (a story)'	CPK:ser

Finally, each verb + -k form was tagged for the syntactic role it played in the phrase in which it was found. These roles and the criteria for determining them are based on Nuckolls & Swanson's description of the suffix in PK and the descriptions found in the literature of agent noun suffixes that may be equivalent in other Quechuan varieties. These are described here and are summarized in Table 6.

The nominal quality of verb + -k forms in the literature seems chiefly to be based on their ability to take nominal morphology (Nuckolls & Swanson, forthcoming: 176; Lefebvre & Muysken 1988: 3; etc.). Additionally, verb + -k forms can serve as the argument of a verb, can be modified by nominal modifiers, such as adjectives, demonstratives, and relatives, and can stand alone in an NP.

The key defining feature in determining if a verb + -k form is part of a habitual aspect construction is its collocation with a form of the verb *ana* 'to be' (Nuckolls & Swanson, forthcoming: 192; Weber 1989; Adelaar 1987: 32; Hurtado de Mendoza 2002: 92-93). All other cases where a verb + -k form is used with a verb, but is not an argument of the verb, are considered adverbial (Nuckolls & Swanson, forthcoming: 208). Though not described explicitly by Nuckolls & Swanson, but described throughout the literature, a verb + -k form that modifies a head noun, or one that has internal argument structure, such as a direct object marked with the accusative suffix -ta, is considered a relative clause, and specifically a nominalized relative, meaning a clause (with internal structure) that can function as a noun or modify a head noun (Weber 1983; Weber 1989; Cole 1985; Lefebvre & Muysken 1988). Additionally, it is the case that in most of the literature that describes relative clauses in Quechuan languages, a verb + -k form that stands alone in an NP is analyzed as a relative clause without an overt head noun, and is considered a "headless relative" (Cole 1985: 175). This analysis would mean that all of those forms in the current study tagged NOM should likewise be tagged REL. At this stage, however, I have chosen to keep the tags separate so as to maintain a distinction between the two behaviors, i.e., noun-like vs. modifier-like, but with the understanding that further analysis will likely conflate these two categories.

In the literature, a number of authors have referred to verb + -k forms as participles (Markham 1864; Weber 1989; Guardia Mayorga 1973; Catta Quelen 1985; Debenbach-Salazar Saenz 1993, Muysken 1994). The term "participle" can be difficult to define crosslinguistically, and not all of the authors in the Quechuan literature who use the term define it. In the absence of clear criteria in the Quechuan literature, I have chosen not to use participles as a tag; however, by the end of this thesis I hope to reach a better understanding of what participles are, especially in terms of the -k suffix in PK.

Table 6 summarizes the syntactic tags, the categories, and the criteria used in tagging.

Occurrences	Tag	Category	Criteria
of verb + $-k$			

Table 6: Syntactic distribution

forms			
237	NOM	Head of NP	<ul> <li>Nominal morphology (e.g., nominal plural)</li> <li>Argument of a verb</li> <li>Modified by adjective, demonstrative, or relative</li> <li>Stands alone in a phrase</li> </ul>
473	HAB	Habitual aspect	• Co-occurrence with a form of the verb <i>ana</i> 'to be'
24	ADV	Adverbial	• Non-argument co-occurrence with a verb other than <i>ana</i> (e.g., <i>shamuna</i> 'to come')
119	REL	Relativizer	<ul> <li>Modifies a head noun</li> <li>Internal argument structure (e.g., co-occurrence with an accusative marked direct object or an oblique)</li> </ul>

## 1.4 Summary

In this chapter I have given a brief description of PK and the Quechuan language family. This set the stage for a discussion of the *-k* suffix in PK. I summarized the existing literature surrounding the suffix in PK and agent noun suffixes in other Quechuan varieties. I have also introduced the CPK and presented data preliminary to analyzing the suffix's behavior. In the next chapter I present data from the CPK that exemplify the behavior of the *-k* suffix.

#### Chapter 2: Description

In this chapter I present a description of the -k suffix in PK using data from the CPK. I begin by presenting the description of Nuckolls & Swanson (forthcoming), as it is the only description of the suffix in PK. Nuckolls & Swanson describe four behaviors of the suffix. First, definitionally the suffix derives a noun from a verb. Nuckolls & Swanson also observe the non-agentive uses of the suffix, calling into question the accuracy of the term "agentive" in classifying this suffix. Second, a verb + -k form can modify another noun. Third, the suffix is used in a verbal habitual aspect construction with the verb *ana* 'to be.' Fourth, verb + -k forms can function adverbially to modify a non-copular verb.

I supplement Nuckolls & Swanson's description with other descriptions of agent nouns from the literature, as appropriate, in order to compare data from the CPK to their characterizations. Chiefly, I will look at Weber (1989), Cole (1985), and Lefebvre & Muysken (1988). Weber observes the non-agentivity of the "agentive" suffix in Huallaga Quechua. Additionally, Weber describes the suffix as a participle (Weber 1989: 284). Cole describes the agentive nominal in Imbabura Quechua as a relativizer and argues for "headless" relatives. Cole also argues that the suffix is part of a subordinate tense paradigm, marking present tense. Lefebvre & Muysken describe relative functions and complement functions of the suffix in Cusco Quechua. Additionally, Lefebvre & Muysken argue for a derivational version of the agentive suffix and an inflectional version in Cusco Quechua.

Finally, I present data on the PK suffix *-shka* in order to determine if there is a relationship between it and the *-k* suffix. Throughout the literature the *-k* and *-shka* suffixes have been described as contrasting participles (Markham 1864; Coombs 1976; Catta Quelen 1985;

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Debenbach-Salazar Saenz 1993) and contrasting nominalizers (Soto Ruiz 1976; Cole 1985; Lefebvre & Muysken 1988; Escribens 1970; Alderetes 2001). A comparison of the two suffixes, if it is found that they are of the same category, may inform our understanding of the *-k* suffix.

## 2.1 Noun-like

Nuckolls & Swanson introduces the -k suffix as being similar to the -er suffix of English, i.e., the agent noun marker. The suffix attaches to a verb root and the resulting derivation is a noun, being able to take nominal morphology, such as the plural, as seen in (1).

(1)	mandzha-na	$\rightarrow$	mandzha-k	$\rightarrow$	mandzha-k-guna
	fear-INF		fear-SUF		fear-SUF-PL
	'to fear'		'fearer'		'fearers'
					(Nuckolls & Swanson, forthcoming: 176)

In the CPK, 38 verb + -k forms occur with the nominal plural *-guna*. A few examples are presented in (2).

(2)	apa-k-guna (take-SUF-PL) 'takers'	(CPK:cha)
	<i>ri-k-guna</i> (go-SUF-PL) 'goers'	(CPK:fin)
	<i>shamu-k-guna</i> (some-SUF-PL) 'comers'	(CPK:per)
	shaya-k-guna (stand-SUF-PL) 'standers'	(CPK:sui)
	wañu-k-guna (die-SUF-PL) 'die-ers'	(CPK:thr)

Verb + -k forms are also able to take case marking, including the accusative suffix -ta, the comitative -wan, and the 'until' suffix -gama (all properties of nouns), as in (3).

(3)	yacha-k-guna-ta (know-SUF-PL-ACC) 'knowers' or 'sham	ans' (CPK:fin)
	puñu-k-guna-ta-shi (sleep-SUF-PL-ACC-EVO) 'sleepers'	(CPK:tip)
	yacha-k-wan (know-SUF-COM) 'with the shaman'	(CPK:bec)
	paki-ri-k-gama (break-PASS-SUF-until) 'until broken'	(CPK:aft)

Verb + -k forms can be modified by demonstratives, such as *chi* 'that,' adjectives, such as *ali* 'good,' quantifiers, such as *tukuy* 'all,' and numbers.

 (4) chi yacha-k (that know-SUF) 'that knower' or 'that shaman' (CPK:bec) ali asna-k (good smell-SUF) 'good smeller' or 'thing that smells good' (CPK:umu) tukuy wañu-k-kuna (all die-SUF-PL) 'all die-ers' or 'all those who die' (CPK:thr) ishkay chunga tiya-k-guna (two ten exist-SUF-PL) 'twenty existers' (CPK:fin)

Verb + -k forms can also be modified by postpositional phrases, as in (5) where they are underlined. While this behavior is not necessarily nominal, as PPs can also function as verbal complements, these data bear mentioning.

 (5) <u>yaku-y</u> tiya-k (water-LOC exist-SUF) 'one that exists in the water' (CPK:bec) <u>perwano-ma</u> ni-k (Peruvian-DAT say-SUF) 'one that says (it) to the Peruvian' (CPK:ser) <u>ñuka-wan</u> ri-g (1s-COM go-SUF) 'one who goes with me' (CPK:ams) <u>yacha-k laro-i</u> tiyari-k (shaman side-LOC sit-SUF) 'one who sits by a shaman' (CPK:bec)

Verb + -*k* forms can function as verbal arguments, e.g., subject, as in (6) and (7), or direct object, as in (8) and (9).

(6) *ishkay chunga <u>tiya-k-guna</u> ri-nawn* (CPK:fin) two ten exist-SUF-PL go-3P 'Twenty dwellers go'

(7)	chi-bi	muyu-ta	<u>apa-k-guna</u>	shamu-naw-ra	(CPK:cha)
	that-LOC	fruit-ACC	take-SUF-PL	come-3P-PST	
	'There th	e fruit take	ers came'		

- (8) chi-ga, <u>yacha-k-guna-ta</u> kacha-nga, haku!
   (CPK:fin) that-TOP know-SUF-PL-ACC send-3S.FUT let's.go
   'Then he will send the shaman, let's go!'
- (9) <u>puñu-k-guna-ta-shi</u> kati-sha ni-shka-ra... (CPK:tip) sleep-SUF-PL-ACC-EVO follow-SS say-PERF-PST 'Following the sleepers, he said...'

Each of these behaviors, i.e., taking number and case morphology, being modified by demonstratives, articles, and quantifiers, and participating in verbal argument structure, is evidence of the noun-like function of verb + -k forms.

## 2.2 Non-agentive

The -k suffix is used with many verbs that refer to volitional actions, such as those in (10).

(10)	wakta-k (hit-SUF) 'hitter'	(CPK:ser)
	<i>shita-k</i> (throw-SUF) 'thrower'	(CPK:ado)
	<i>salta-k</i> (jump-SUF) 'jumper'	(CPK:cha)
	<i>ra-k</i> (do/make-SUF) 'do-er/maker'	(CPK:def)
	kallpa-k (run-SUF) 'runner'	(CPK:the)
	<i>hapi-k</i> (catch-SUF) 'catcher'	(CPK:thk)

However, it is observed that the PK suffix is also used with verbs of low animacy and low agentivity crosslinguistically. For this reason, the term "attributive" is preferred over the term "agentive" (Nuckolls & Swanson, forthcoming: 180). In (11), Nuckolls & Swanson cite an example in which a native Kichwa speaking woman describes the design on a clay drinking bowl.

(11) kasna <u>muyu-g</u> a-ra lluw ñambi-ga like.this curve-SUF be-PST-3S IDEO path-TOP
'As for the path, this is how it's a curver, (going) lluw.' (Nuckolls & Swanson, forthcoming: 180)

The verb *muyuna* 'to curve around' receives the *-k* suffix (which is often voiced [g] in PK as it is here), and it is used to describe the *ñambi* 'path.' The use of a stative verb and a subject that cannot be an agent illustrate the reasons for Nuckolls & Swanson's hesitation to use the term "agentive." Rather, the verb with the *-k* suffix is used to "attribute" the quality of being curved to the path represented by the lines on the clay bowl. The term "attributive" is used to capture both the agentive and non-agentive uses of the *-k* suffix. (For many more examples of the *-k* suffix being used to attribute qualities to low animacy entities, see Nuckolls' audiovisual archive of PK ideophones: <u>http://quechuarealwords.byu.edu/.</u>)

Following is a sample of other examples of verb + -k forms derived from verbs that are crosslinguistically less agentive or volitional.

(12)	<i>a-k</i> (be-SUF) 'be-er'	(CPK:aft)
	<i>wañu-k</i> (die-SUF) 'die-er'	(CPK:ado)
	<i>illa-k</i> (lack-SUF) 'lacker'	(CPK:ama)
	<i>riku-ri-k</i> (see-PASS-SUF) 'appearer'	(CPK:pah)

<i>puñu-k</i> (sleep-SUF) 'sleeper'	(CPK:fin)
<i>tiya-k</i> (exist-SUF) 'exister/dweller'	(CPK:thk)

Nuckolls & Swanson are not the first to observe the non-agentive use of the "agentive" suffix in a Quechuan language. Snow (1973: 79) observed, in different words, the attributive quality of the -q suffix in Ancash Quechua (spoken in Ancash, Peru) when he said "the suffix -qoccurs in relative clauses as an indication of a process performed by or a characteristic of a specified agent." Though Snow discusses a "specified agent," the observation that -q relative clauses can indicate "characteristics" implies something perhaps closer to Nuckolls & Swanson's attributive. Costa (1972: 60) claims that "in [Peruvian] Quechua the agent noun form and relative clause form are the same, but when the -q suffix is used in a relative clause the noun referred to need not be animate." And later, Weber (1983) explored relativization in Huallago Quechua, spoken in the Huanuco province, Peru, observing that relativization with -q is clearly not limited to agents. The following examples (13-17) are taken from that description.

(13)	<i>qasa-q</i> yaku be.cold-SUF water 'cold water'	(Weber 1983: 32)
(14)	<i>chunya-q hirka</i> be.silent-SUF mountain 'deserted mountain'	(Weber 1983: 32)
(15)	<i>shunta-y asukar shikwa-q-ta</i> gather-IMP sugar spilled-SUF-ACC 'Gather up the sugar that spilled.'	(Weber 1983: 32)
(16)	<i>chay meesa hanan-chaw kayka-q shikra</i> that table its.top-LOC being-SUF basket 'that basket which is on top of the table'	(Weber 1983: 32)

(17) huk chay wañu-q kasta aywan...
(Weber 1983: 32)
one that die-SUF clan/relation goes
'one of the dead person's relatives goes...'

In each instance, the relativized verb is intransitive and does not take an agent subject, with the exception of *shikwa-* 'to spill' which is transitive, but 'sugar' is its patient. Additionally, Weber observes that the NP head of the relative clause does not even need to be a physical object, as in (18):

(18) ... aybeesi usha-q fibreeru-chaw (Weber 1983: 33)
 sometimes finish-SUF february-LOC
 '... sometimes during the end of February'

These observations are in line with Nuckolls & Swanson's characterization of the nonagentivity of the *-k* suffix in PK. Similar examples can be found in the CPK. (19) resembles Weber's example in (17) with the verb *wañuna* 'to die.'

(19) ñuka wañu-k mikia
 1s die-SUF aunt
 'my late aunt'

(CPK:the)

In these examples and those given by Nuckolls & Swanson it is not agentivity that is important, rather the verb + -k forms are used to attribute qualities related to the verb, per Nuckolls & Swanson's characterization.

Importantly, the examples given by Weber (13-16) differ from the examples given by Nuckolls & Swanson up to this point in that the verb + -k forms behave like adjectives, modifying a head noun. Example (19), above, shows that similar behavior can be found in the CPK. In the CPK there are 30 examples of verb + -k forms directly modifying nouns in this way. Following is a sample.

- (20) *piña-k rayu* (CPK:ray) be.angry-SUF lightning 'angry lightning' or 'lightning that is angry'
- (21) *kasa-k amarun* (CPK:ado) hunt-SUF anaconda 'hunting anaconda' or 'anaconda that hunts'
- (22) *chuchu-chi-k wawa-yuk* (CPK:est) breast-CAUS-SUF baby-PSSR 'milk-giving baby-possessor' or 'one who has a baby and who gives milk'

In descriptions of other Quechuan varieties, it is chiefly because of this behavior that the *k* suffix is analyzed as a relativizer. A relative clause is a clause that modifies a noun in an NP. For example, in the English NP "the man who saw the movie," the clause "who saw the movie" modifies the noun "the man." Cole (1985) describes verb + -*j* forms in Imbabura Quechua, spoken in northern Ecuador, as relatives. As a Quechua II-B language of Ecuador, Imbabura Quechua is the most closely related variety to PK among those found in the literature. The Imbabura suffix -*j* [x] is described as an agentive nominalizer used to form present tense relative clauses (Cole 1985: 175). What this analysis implies, and indeed what Cole argues for, is that when a verb + -k form is found as the head of an NP, i.e., not modifying a head noun, it can be considered a "headless relative," i.e., a relative clause that does not have an overt head noun in the NP (Cole 1985: 175). This analysis means that the examples of noun-like behavior presented in section 2.1 would actually be examples of headless relative clauses.

An important characteristic of relative clauses is the retention of verbal argument structure. This is exemplified by verb + -*k* forms assigning case, as in the following:

 (23) aswa-ta upi-k (aswa-ACC drink-SUF) 'aswa drinker' (CPK:can) warmi-ta muna-k (woman-ACC want-SUF) 'woman wanter' (CPK:ado) tinaha-ta wata-k (jar-ACC tie-SUF) 'jar tie-er' (CPK:aft) sawli-ta chari-k (machete-ACC have-SUF) 'machete have-er'(CPK:jag)

In each instance, the direct object (in bold) is marked with the accusative suffix *-ta*. In PK, verbs always assign accusative case to a direct object. This means the verb + *-k* form, in addition to its noun-like qualities, also has verb-like qualities, being able to assign case, as well as the adjective-like function of modifying a head noun.

One verb + -*k* form in the CPK is consistently found to not assign case, or at least its direct objects are consistently not marked with the accusative -*ta*. The verb *illana* 'to lack' becomes *illa-k* (lack-SUF) 'lacker' and is found in the CPK 17 times. Of these 12 co-occur with a direct object, i.e., the thing that is lacked, and none of these direct objects are marked with the accusative suffix -*ta*. For example:

(24) *kuchillu illa-k* (knife lack-SUF) 'knife lacker, or lacking a knife' (CPK:fin)
 *wawa illa-k* (baby lack-SUF) 'baby lacker, or lacking a baby' (CPK:aft)
 *kusa-ga illa-k* (husband-TOP lack-SUF) 'husband lacker, or lacking a husband' (CPK:ama)
 *illapa-s illa-k* (rifle-DESP lack-SUF) 'lacking even a rifle' (CPK:fin)

Not only are none of the direct objects (in bold) marked with the accusative case, *illa-k* is the only verb + -*k* form that does not assign accusative case to its direct object in the CPK. This could be the result of colloquial usage, or simply incidental to the relatively small data set. It could also be explained that *illa-k* is perhaps a more derivational verb + -*k* form, deriving a more noun-like form that cannot assign case. This would imply that the direct object in each is compounded to the nominal verb + -*k* form, making each an example of a synthetic compound, an endocentric noun-noun compound in which the deverbal head retains its verbal argument structure, and the non-head element fills an argument of the verb, e.g., "truck driver" in English.

The idea of a "more derivational" verb + -*k* form is not a novel one. Lefebvre & Muysken argue for an inflectional and a derivational version of the nominalizations in Cusco Quechua (Lefebvre & Muysken 1988: 64). Much of the evidence Lefebvre & Muysken present does not apply to PK because they rely heavily on certain interactions between nominal and verbal person markers that are not found in PK, as well as a verbal plural marker that does not exist in PK either. However, one of the key characteristics used to differentiate the two types is that inflectional nominalizations can have a direct object, while the lexicalized (derivational) ones cannot (Lefebvre & Muysken 1988: 67). That being said, they explain that it is "marginally possible" to have a direct object with a lexicalized agentive, as in (25).

(25) *papa suwa-q* potato rob-SUF 'potato thief' (Lefebvre & Muysken 1988: 67)

This example from Cusco Quechua is a synthetic compound, potentially like the PK examples with *illa-k*. Thus, if we were to argue for a dichotomy in PK that resembles the one proposed by Lefebvre & Muysken, then the presence or absence of the accusative suffix *-ta*, i.e., case assignment, would be a differentiating feature in PK. Those verb + *-k* forms with accusative-marked direct objects would be instances of the inflectional *-k*, while those with unmarked direct objects compounded to the verb + *-k* form would be examples of the derivational *-k*. This definition is only useful in identifying the difference between verb + *-k* forms with direct objects, however, and there may be other instances, such as *yacha-k* (know-SUF) 'know-er,' which have been lexicalized, in this case to mean 'shaman' in PK, though there is no distinct grammatical evidence in the CPK to distinguish them.

## 2.4 Habitual aspect

Nuckolls & Swanson also describe the use of the -k suffix in a compound verb construction used to convey the habitual aspect in PK (Nuckolls & Swanson, forthcoming: 193). This is done by combining a verb + -k form and the verb *ana* 'to be.' This construction is most often used in the past tense and is often translated 'used to,' as in the following:

(26) ñuka yaya-guna kallari-ga Marañon-bi-shi kachi-ta <u>apa-g</u> <u>a-naw-ra</u>
1s father-PL beginning-TOP Marañon-LOC-EVO salt-ACC take-SUF be-3P-PST
'My fathers, in the old days, used to get salt in Marañon (river).'
(Nuckolls & Swanson, forthcoming: 192)

Examples of this construction are numerous. 56% (473 out of 846) of verb + -k instances in the CPK are part of this type of construction. Of those, nearly two thirds (289 out of 473) are in the past tense. An example of this construction in the past tense is given in (27), and a present tense example is given in (28).

- (27) *ñuka yaya chasna <u>kwinta-k a-ra</u>*1s father like.that tell-SUF be-PST
  'My father used to tell (it) like that.'
- (28) *kari-shi warmi-ta <u>muna-k a-n</u>* (CPK:ado) man-EVO woman-ACC want-SUF be-3S 'The man wants a woman (they say)'

Interestingly in 46 instances, the verb + -k form used with *ana* is itself a form of *ana*.

(29) shows this construction used with a noun, (30) shows it with a predicate adjective, and (31)

shows an adverb modifying the construction.

(29)	amarun	kara-manda-lla	amanga	<u>m-a-k</u>	<i>a-shka-ra</i> (CPK:fin)
	anaconda	skin-ABL-LIM	hammock	EVS-be-SUF	be-PERF-PST
	'It was a l	hammock made o	only from a	naconda skin	,
	lit. 'It was	s a from-just-ana	conda-skin	be-er'	

(30)	kiru-ga	yana	<u>m-a-k</u>	<u>a-ra</u> !	(CPK:ama)
	teeth-TOP	black	EVS-be-SUF	be-PST	
	'The teeth	used t	to be black!'		

(31) *chasna* <u>m-a-k</u> <u>a-nawn</u>! (CPK:ama) like.that EVS-be-SUF be-3P 'They are like that!' Of these 46 instances of "be stacking," 16 of them are preceded by an additional verb with the -k suffix, as in (32), and (33).

- (32) pay-guna randi-chi-sha <u>puri-k a-k a-shka</u> (CPK:fin)
  3-PL trade-CAUS-SS walk-SUF be-SUF be-PERF
  'They used to walk selling.'
- (33) *chasna* <u>**ri-k**</u> <u>**a-k**</u> <u>**a-shka**</u> (CPK:sui) like.that go-SUF be-SUF be-PERF 'He used to go like that.'

These examples exhibit both "be stacking" and "-k stacking" behavior. The difference between these examples and examples like (26) could be paraphrased in English as the difference between "used to X" and "used to be one who Xes." For example, compare (34) and (35).

- (34) *taruga-ta <u>wañu-chi-k</u> a-ra* (CPK:aft) deer-ACC die-CAUS-SUF be-PST 'He used to kill deer'
- (35) *ñuka yaya mana <u>wañu-chi-k a-g a-ra</u>* (CPK:ind)
  1s father NEG die-CAUS-SUF be-SUF be-PST
  'My father did not used to be a killer' or 'My father did not used to be one who kills'

In addition to these, there are four examples in the CPK of "-k stacking" composed of two non-copular verbs, as in (36). The first verb + -k form can be described as functioning adverbially to modify the habitual verb. The adverbial use of verb + -k forms is discussed in the next section.

(36) *chi-ga <u>maska-k shamu-k-shi a-naw-ra</u>* (CPK:ado)

then-TOP search-SUF come-SUF-EVO be-3P-PST 'Then they used to come searching'

An important behavior of verb + -k forms that interact with *ana* that may support Nuckolls & Swanson's analysis that these are compound verb forms, as opposed to nominal complements in a copular VP is the lack of plural marking on the verb + -k form in habitual constructions with plural subjects. Consider the following six examples, (37) through (42). Each of the six combinations of number and person are represented, starting with first person singular and ending with third person plural, in the present tense.

(37)	1st person singular: <i>chi-guna-ta mana <u>miku-k a-ni</u></i> that-PL-ACC NEG eat-SUF be-1S 'I don't eat those'	(CPK:mac)
(38)	2nd person singular: <i>kay señora-guna-ta-chu <u>riksi-k a-ngi</u></i> this woman-PL-ACC-IRR know-SUF be-2S 'Do you know these women?'	(CPK:aft)
(39)	3rd person singular: <i>pay-mi chasna <u>ra-k a-n</u></i> 3s-EVS like.that do-SUF be-3s 'He does (it) like that'	(CPK:def)
(40)	1st person plural: <i>ñukanchi <u>ni-k a-nchi</u></i> 1P say-SUF be-1P 'We say (it)'	(CPK:fin)
(41)	2nd person plural: <u>pakta-k</u> <u>a-ngichi</u> arrive-SUF be-2P 'You all arrive'	(CPK:def)

(42) 3rd person plural: *chasna* <u>ni-k</u> <u>a-nawn</u>
like.that say-SUF be-3P
'They say (it) like that'

(CPK:man)

Summarizing these data paradigmatically, the habitual aspect construction follows the pattern in Table 7.

Table 7: Habitual aspect paradigm

	SINGULAR	Plural
1st	-k a-ni	-k a-nchi
2nd	-k a-ngi	-k a-ngi-chi
3rd	-k a-n	-k a-nawn

Importantly, examples (40), (41), and (42) each have plural subjects, yet the verb + -k form does not receive plural marking. This pattern is also found in the past habitual. For example, (43) and (44) exhibit the same behavior in 1P and 3P.

(43) *pacha-wan-mi <u>puñu-k a-ra-nchi</u>* (CPK:fin) blanket-INST-EVS sleep-SUF be-PST-1P 'We used to sleep with blankets'

(44) yana! shinki! kiru-yuk <u>m-a-k a-naw-ra</u>! (CPK:ama)
black black tooth-PSSR EVS-be-SUF be-3P-PST
'Black! Black! They used to have (black) teeth!' or 'they used to be teeth-possessors'

The lack of plural marking on the verb + -k forms may suggest that they are not functioning as arguments of the verb, especially when compared to examples in which the verb + -k form is marked plural (as in section 2.1). However, there are examples of verb + -k forms exhibiting this same behavior with non-copular verbs, as in (45).

(45) *pay-guna-ga <u>yacha-k</u> tuku-nawn* 3-PL-TOP know-SUF become-3P 'They become shamans'

We will also see in the discussion of the adverbial function of verb + -k forms in the next section that the nominal plural is not used where expected in that function either. It is possible that these two functions, the habitual aspect marker and the adverbial, are a single function, i.e., verb modifier, that has the semantic value of habitual when used with the copula.

# 2.5 Adverbial

Nuckolls & Swanson observe that a verb + -k form is sometimes used with non-copular verbs in a way that cannot be described as filling an argument of the main verb, nor as part of the habitual construction. In these instances, the verb + -k form is said to behave adverbially to modify the main verb by attributing an additional quality to it (Nuckolls & Swanson, forthcoming: 209). Two verbs that are most often modified by verb + -k forms are *shamuna* 'to come' and *rina* 'to go.'

(46) yanapa-k shamu-sha

(Nuckolls & Swanson, forthcoming: 267)

help-SUF come-1S.FUT 'I will come and help.' or '(as a) helper, I'll come.'

(47) *ñuka apa-k ri-sha* (Nuckolls & Swanson, forthcoming: 267)
1s take-SUF go-1S.FUT
'I'll go and take some.' or '(as a) taker, I'll go.'

It is common, according to Nuckolls & Swanson, to see this construction in the imperative mood (Nuckolls & Swanson, forthcoming: 178).

(48) yanapa-k shamu-y! (Nuckolls & Swanson, forthcoming: 178) help-SUF come-IMP
'Come and help!' lit. '(as a) helper, come!'

In these instances, it is difficult to say that the verb + -k form is functioning as a noun in the verb's argument structure, as the person being addressed has not yet come or gone, etc. Additionally, verb + -k forms that are used adverbially do not receive plural marking, even when the subject of the verb is plural. As with the habitual aspect paradigm, if these verb + -k forms were functioning as complements or arguments to a plural verb, it would be expected that they would receive plural marking, but this is not the case. For example:

- (49) *ayllu-guna <u>apa-k</u> shamu-naw-ra* (CPK:sui) family-PL take-SUF come-3P-PST 'Families come as takers'
- (50) pay-guna <u>hapi-k</u> shamu-kpi-s, sinzhi kallpa-ngi
  (CPK:fin)
  3-PL hunt-SUF come-DS-DESP strong run-2S
  'If they come as hunters, run strong (i.e., fast)'

Looking outside PK, Parker (1969) claims that *q*-nominalizations in Ayacucho Quechua can function adverbially, indicating "purpose of action," when used with a verb of motion, as in *miku-* 'eat'  $\rightarrow$  *miku-q* 'eat-SUF' in the phrase *mikuqmi hataričkani* 'I'm getting up to eat' (Parker 1969: 57). Parker presents the data without glosses, but presumably *hataričkani* means 'I'm getting up.' This analysis supports Nuckolls & Swanson's characterization of the adverbial function of the -k suffix, especially with *shamuna* 'to come' and *rina* 'to go' being described as the most commonly used verbs, since these are verbs of motion.

Alternatively, Lefebvre & Muysken (1988) argue that the agent noun suffix in Cusco and other varieties of Quechua is used to mark the complement of a motion verb (Lefebvre & Muysken 1988: 22). The key criteria used to identify *-k* complements, according to this analysis, is that the verb + *-k* form cannot escape the matrix verb phrase to move to topic position. This theoretical assertion could be called into question if examples can be found in the CPK of a verb + *-k* form in topic position. Such an example would be identified by a verb + *-k* form marked by the topic marker *-ga*. In example (51) the topic marker is bold.

(51) palanda-ta <u>apa-k-ga</u> shamu-nchi
 (CPK:jag) plantain-ACC take-SUF-TOP come-1P
 'Taking the plantains, we come' or 'As plantain-takers we come'

In the generative version of syntax that Lefebvre & Muysken are writing in, the topic marker in this example strongly suggests that the verb + -k form has left the matrix VP to move up to topic position. This implies that either the -k suffix is not a complementizer in PK, or that Lefebvre's argumentation does not apply to the PK data. In any case, there is not compelling

evidence that the *-k* suffix in PK is a complementizer. I, therefore, maintain Nuckolls & Swanson's characterization of this behavior as adverbial.

In the CPK there are 87 examples of verb + -k forms functioning adverbially in the way described by Nuckolls & Swanson. Of these, 80% (70 out of 87) modify the verb *shamuna* 'to come,' as in (52) (and (36) in section 2.4). 7 modify the verb *rina* 'to go,' as in (53). The remaining instances modify various other verbs, such as *nina* 'to say' and *puñuna* 'to sleep, as in (54) and (55), respectively.

(52)	<i>kuti-lla-ta ashka <u>uya-ri-k</u> shamu-ra</i> again-DESP-ADV a.lot hear-PASS-SUF come-PST 'Again, very loudly it came.'	(CPK:ado)
(53)	<i>chi ruya-y</i> <u>kanta-k</u> <i>ri-u-ngi</i> that tree-LOC sing-SUF go-DUR-2S 'In that tree as a singer you are going.'	(CPK:tay)
(54)	kasna <u>rima-k</u> ni-ra-ni like.this speak-SUF say-PST-1S 'Speaking like this, I said (it).'	(CPK:def)
(55)	<u>musku-k</u> puñu-gri dream-SUF sleep-TRLC.IMP	(CPK:how)

'(As a) dreamer go and sleep!'

Of note, in PK the translocative suffix *-gri*, seen in (55), is used with a verb to convey the sense that the subject of the verb transfers to another location. Nuckolls & Swanson explain that this suffix can roughly be understood as "to-go-and-do-something" (Nuckolls & Swanson, forthcoming: 201).

 (56) maytu-na panga-ta ukta maska-gri-chi! roast-INF leaf-ACC quickly search-TRLC-2P.IMP '(You-all) go quickly and search for roasting leaves!' (Nuckolls & Swanson, forthcoming: 201)

Historically, the translocative suffix -gri "developed from a... periphrastic construction" (Muysken 2000: 983) composed of a verb + -k form and the verbal root ri- 'go.' The existence of this suffix does not, however, prohibit the use of a verb + -k form with the verb rina 'to go,' as seen in (38), above. Since the -k suffix is often pronounced as a voiced [g], especially when followed by a voiced consonant, the forms of verb + -k ri- and verb + -gri can look identical. In addition, since there is little to no semantic difference, the two are only distinguishable based on prosodic features, such as intonation. In a few instances in the CPK, the difference is made clear by intervening morphology between the verb + -k form and rina. This can be seen in (57) below where the verb + -k form is substantive and marked with the nominal plural suffix -guna.

(57) *ishkay chunga tiya-k-guna ri-nawn* (CPK:fin) two ten exist-SUF-PL go-3P 'Twenty dwellers go'

There is some evidence that speakers may be aware to a degree of the relationship between *-gri* and the verb *rina*. When one considers that example (58) would have historically been read as in (59), a parallel structure can be seen, i.e., adverb verb, adverb verb.

(58) *rima-gri, kunan ri!* speak-TRLC.IMP now go.IMP 'Go-and-speak, go now!' (CPK:thk)

(59) *rima-g ri, kunan ri!*speak-SUF go.IMP now go.IMP
'Go and speak, go now!' lit. 'As a speaker go, now go!'

Returning to Nuckolls & Swanson's description of the adverbial function of verb + -k forms, it is said that these often modify verbs in the imperative mood. In the CPK, 12 (out of 87) adverbial verb + -k forms modify imperative verbs, as in (55), above, and (60), (61), and (62), below.

- (60) *yanu-shka-ta <u>miku-k shamu-i</u>* (CPK:can) cook-PERF-ACC eat-SUF come-IMP 'Come as an eater of cooked (things)!'
- (61) *aswa-ta <u>upi-k</u> <u>shamu-i</u> (CPK:can) aswa-ACC drink-SUF come-IMP 'Come drink aswa!'*
- (62) *llapi-shka-ta* <u>riku-k</u> <u>shamu-i-chi</u>, wawa-guna (CPK:jag) squeeze-PERF-ACC see-SUF come-IMP-2P child-PL 'Come as seers of aswa pulp (lit. that which is squeezed), children!'

In these three examples, notice that the direct object of the verb from which the verb + -k form is derived is marked with the accusative -ta. This suggests that the verb + -k has retained some of its underlying argument structure, as seen in the relative clause analysis in section 2.3. This may indicate that the relative function and the adverbial function are not so different.

#### 2.6 Connection to -shka

In PK, the verb + *-shka* is described as a verbal "adjective" derived from the present perfect suffix *-shka* (Nuckolls & Swanson, forthcoming: 237). The present perfect suffix attaches to a main verb and can co-occur with subject agreement morphology, as in (63).

(63) *ñuka ri-shka-ni* 1s go-pres.perf-1s 'I've gone' (Nuckolls & Swanson, forthcoming: 237)

Adjectival verb + *-shka* forms, on the other hand, which can refer to a completed action, the result of a completed action, or the patient of a completed action, cannot function as main verbs. Rather they can be used to modify nouns, as in (64) and (65), and do not take subject agreement morphology. A parallel will be drawn between *-shka* and *-k* that calls into question the classification of *-shka*, and for this reason it is glossed as SUF2.

- (64) <u>yanu-shka</u> mikuna tiya-n (Nuckolls & Swanson, forthcoming: 242) cook-SUF2 food exist-3s
   'There is cooked food' or 'food that is cooked exists'
- (65) mikuna <u>yanu-shka</u> a-n
   (Nuckolls & Swanson, forthcoming: 242)
   food cook-SUF2 be-3s
   'The food is cooked.'

The adjective form and the present prefect construction are functionally similar, though formally distinct, as seen in (66) compared to (67).

(66) <u>macha-shka-ngi-chu</u>?
 be.drunk-PRES.PERF-2S-IRR
 'Have you become drunk?'

(Nuckolls & Swanson, forthcoming: 237)

(67) <u>macha-shka-chu</u> a-ngi? be.drunk-SUF2-IRR be-2S 'Are you drunk?' (Nuckolls & Swanson, forthcoming: 237)

Nuckolls & Swanson observe that verb + *-shka* forms can take nominal morphology, such as plural *-guna* and accusative *-ta* (Nuckolls & Swanson, forthcoming: 242). These observations are corroborated by the data in the CPK, as in (68).

(68) wañu-chi-shka-guna (die-CAUS-SUF2-PL) 'those that are killed' (CPK:thr) hapi-shka-guna (catch-SUF2-PL) 'those which are caught' (CPK:fin) yanu-shka-ta (cook-SUF2-ACC) 'that which is cooked' (CPK:can) shamu-shka-ta (come-SUF2-ACC) 'that which has come' (CPK:fin)

The characterization of *-shka* appears similar in a number of ways to the characterization of the *-k* suffix in that they both are derived from verbs, they both can function as noun modifiers, and they both can function as the head of an NP and take nominal morphology. The suffix *-shka* is often associated with *-k* in a contrasting relationship throughout the literature on Quechuan languages. In Chimborazo Quechua, for example, Catta Quelen describes the *-c* [k] suffix as a "habitual participle" translated into Spanish as *el que*... 'the one who....' This is followed by a description of the suffix *-shca* which is also analyzed as a participle, but one meaning *el que ha*... 'the one who has...' or *el que está*... 'the one who is...' (Catta Quelen, 1985: 164). This seems to match the behavior seen in the PK fairly well. This analysis is echoed in Coombs (1976), Gomez Bacarreza (1988), and Debenbach-Salazar Saenz (1993). Furthermore, Weber (1983), Weber (1989), Parker (1969), Samanez Flores (1996), and Huarachi Revello (2005) also analyze the equivalent suffix as a participle.

Weber examines the suffix *-sha* in Huallaga Quechua, which was historically *-shqa* before the loss of the [q] segment (Weber 1983: 18). Verb + *-sha* forms are analyzed as past participles with an "ergative pattern" (Weber 1989: 283-4), meaning here that with intransitive verbs, the participle is oriented toward the subject, as in (69), while with transitive verbs, the participle is oriented toward the object, as in (70).

(69) *wañu-sha runa* die-PRTC man 'the man who died' (Weber 1989: 284)

(70) *maqa-sha runa* hit-PRTC man 'the hit man' or 'the man who was hit' (Weber 1989: 284)

Data from the CPK appears to match this characterization, as seen in (71) and (72), below, which mirror the constructions above.

(71)	wañu-shka mikia	(CPK:the)
	die-SUF2 aunt	
	'an aunt who died'	

(72) *pinta-shka amarun* (CPK:ado)
 paint-SUF2 anaconda
 'painted anaconda' or 'anaconda that is painted' (referring to the pattern on its skin)

It is likely that the *-shka* suffix in PK is a participle similar to those described in the literature on other Quechuan languages. An alternative analysis presented by Cole (1985), Soto Ruiz (1976), Lefebvre & Muysken (1988), Alderetes (2001), and Escribens (1970) is that the equivalent suffixes are relative nominalizers that refer to a perfective or completed action.

In Imbabura Quechua, Cole claims that the -k and -shka suffixes are part of a paradigm of clausal nominalizers that indicate the tense of the subordinate relative clause in which they are found. According to Cole, -j [x] signifies a present tense relative clause, -shka marks a past tense relative clause, and -na is used for future relative clauses. The following sentences illustrate these relationships. In each, the full NP is underlined. The subordinate relative clause is in bold and, as part of the NP, is also underlined.

(73) a. <u>Marya riku-shka runa</u> Past (Cole 1985: 47) Maria see-SUF2 man 'The man whom Maria saw'
b. <u>Marya riku-j runa</u> Present Maria see-SUF man 'The man whom Maria sees'

c. <u>Marya riku-na runa</u> Future Maria see-NOM man 'The man whom Maria will see'

I turn to the CPK to compare this characterization to the behavior of these suffixes in PK. The CPK does not contain three examples of the exact same sentence with only a difference in the nominalizing suffix, but rough equivalents can be found. In (74), below, a verb + *-shka* form modifying a noun is shown. (75a-b) both contain verbs + *-k* forms. Because a single phrase with the *-k* suffix, a direct object, and modified head could not be found, both (75a), which shows the verb + *-k* form with a preceding object, and (75b), which shows the verb + *-k* form modifying a noun. Each of these are marked in the same way as above, with the NP in question underlined and the clause (called by Cole a relative clause) in bold.

- (74) <u>mana warmi muna-w-shka runa-shi</u> sacha-ta puri-ngawa ri-ra
   NEG woman want-DUR-SUF2 man-EVO forest-ACC walk-in.order.to go-PST
   'The man not wanted by women went to the forest in order to walk.' (CPK:ams)
- (75) a. *kari-shi <u>warmi-ta muna-k</u> a-n*(CPK:ado) man-EVO woman-ACC want-SUF be-3S
  'The man wants a woman' or 'the man is a woman-wanter'
  - b. <u>kasa-k amarun</u> chari a-ra (CPK:ado) hunt-SUF anaconda maybe be-PST 'It was a hunting anaconda, maybe'
- (76) <u>chi llakta-manda chimba-na kaspi</u> siri-n (CPK:fin) that town-ABL cross-NOM stick lie-3s
   'The stick for crossing (a lake) from that town is lying there.'

To compare the PK data to Cole's examples in (73), I will start with *-shka*. Cole calls the *-shka* suffix a past participle (Cole 1985; 134), and Nuckolls & Swanson's characterization of *- shka* could also be described as a participle, i.e., deverbal adjective; thus (74) might more accurately be glossed "the not woman-wanted man," and (73a) might more accurately be glossed "the Naria-seen man," analogous in structure to "the flea-bitten dog," i.e., the dog which is bitten by fleas. In essence, the head noun (*runa* in both) is the patient in the underlying argument structure, and the noun modifying the verb + *-shka* form (*Mariya* and *warmi*, respectively) is the agent.

Looking at Cole's translation of (73b) it is clear that the head noun (*runa*) is still the patient, like with verb + *-shka*; however, in PK the argument structure is reversed, with the head noun in (75b) (*amarun*) being the agent, not the patient, in the underlying argument structure. What this means is that if a PK speaker heard Cole's example (75b) *Marya riku-j runa*, the PK

speaker would understand it to mean the 'the man who sees Maria' or the 'Maria-seer man,' i.e., the exactly opposite situation understood by the Imbabura speaker.

It should be mentioned, however, that Cole's discussion on the proposed subordinate tense paradigm is the only place that Cole translates a verb + -*j* form modifying a head noun with the head noun as the patient. In every other example throughout his description, the head noun modified by a verb + -*j* form is the agent, as in (778) where the head noun *wambra* 'boy' is the head noun and agent of the verb + -*j* form *michi-j* (heard-SUF) 'hearder.'

(77) <u>wagra-ta michi-j wambra-ka</u> ña shamu-ju-n-mi (Cole 1985: 75) cattle-ACC herd-SUF boy-TOP already come-PROG-3S-EVS
 'The boy who herds cattle is coming.'

The translation of (77) matches the interpretation a PK speaker would have of this sentence. The inconsistency in Cole's description may cast suspicion on Cole's proposed subordinate tense paradigm, and in fact Lefebvre & Muysken, in their discussion of relative clauses and Quechua nominalizations (*-q, -sqa,* and *-na*), claim that the *-q* suffix in Cusco Quechua always marks the subject of the relative clause, as in (78).

(78) <u>Mariya riku-q</u> runa-qa Maria see-SUF man-TOP 'the man that sees Maria' (Lefebvre & Muysken 1988: 175)

This means that (78) can never be used to mean \*'the man whom Maria sees' (Lefebvre & Musken 1988: 175). Lefebvre & Musken do not mention Cole (1985) explicitly in regard to this example, but it is possible that this is intended as a correction, as they were certainly aware

of Cole's analysis, citing him multiple times throughout their book, and they use the exact same phrase used by Cole.

To summarize, the *-shka* suffix in PK is described by Nuckolls & Swanson as an "adjective" form of a verb that has been completed. In descriptions of other Quechuan languages, the equivalent suffix is described as either a past participle or a nominalizer that refers to the patient of a completed action. Throughout the literature, the *-k* suffix and the *-shka* suffix have been presented in a contrasting relationship, either as active vs. inactive participles, agent vs. patient nominalizers, or (by Cole) present vs. past relative subordinators. In our discussion of the *-k* suffix, an understanding of the *-shka* suffix may inform our conclusion if it is shown that the two suffixes are members of the same category.

## 2.7 Chapter summary

In summary, the attributive -*k* suffix, as described by Nuckolls & Swanson, is a deverbal nominalizer, though evidence has been presented that the resulting verb + -*k* form could also be described as a relativizer. Four main functions of verb + -*k* forms have been described: a) nominal, capable of receiving nominal morphology, b) adjectival, modifying nouns to attribute a quality to the noun, c) verbal in a habitual construction in tandem with the verb *ana* 'to be,' and d) adverbial, modifying verbs to attribute a quality to the verb. Although, if -*k* is a relativizer, then verb + -*k* forms functioning nominally would be reanalyzed as headless relatives, thus conflating these two categories. Also, some doubt was cast on the need to distinguish between the habitual and the adverbial functions of verb + -*k* forms. It has also been shown that the suffix

*-shka* functions in many of the same ways the *-k* suffix functions, i.e., nominally and adjectivally, and may constitute a contrasting suffix of the same category.

In the next chapter, I discuss typological and theoretical explanations for the suffix's behavior in PK.

## Chapter 3: Analysis

The purpose of this chapter is to explore typological and theoretical explanations for the behavior and usage of the -*k* suffix in PK based on data presented in chapter 2. In this chapter I discuss previous analyses of equivalent suffixes in other Quechuan languages as well as typological descriptions of key linguistics traits to determine how well they match the PK data. Ultimately, I appeal to a typological description of participles (Shagal 2017) and conclude that the behavior of the -*k* suffix in PK most closely matches crosslinguistic behaviors of active (or nominative) participles. To reach this conclusion, I first determine if verb + -*k* forms are nouns or relative clauses. Then after establishing them as relatives, namely participial relatives, I define the term participle. Finally, I support this conclusion by solidifying the parallel between -*k* and - *shka*.

#### 3.1 Noun or Relative

A core question of how to categorize the -k suffix comes down to how to reconcile the noun-like and the adjective-like behavior exhibited by verb + -k forms. It has been observed that verb + -k forms in PK can function like nouns, taking nominal morphology and standing as arguments of a main verb (see section 2.1), and like adjectives, modifying a head noun (see section 2.3). The question is, are these nouns that can function as modifiers, or are these modifiers that can function as nouns?

I first consider the nominal interpretation. Comrie & Thompson (2007) discussing the typology of lexical nominalizations said concerning nominalizations modifying nouns:

(79) "It is not difficult to understand how a nominalization can function as a relative clause: the nominalization and the noun with which it is in construction can be thought of as two juxtaposed nominal elements [nom] [nom], the modifying relationship between them being inferred by the language users (rather than being specified by the grammar, as it is in languages with specific relative clause morphology), just as the modifying relationship is inferred in a noun–noun compound such as *tree-house*, in which the two nominal elements simply happen to be single nouns." (Comrie & Thompson 2007: 378)

Importantly, Comrie & Thompson distinguish between a nominalization that *functions* as a relative and a relative clause with specific morphology in a language that specifies a relationship between the relative element and the nominal head. This could imply that if one were attempting to distinguish between a nominalization and a relative clause, one might look for ways in which the relationship between the modifying element and the head noun are "specified by the grammar." It could be that the contrast between the *-k* suffix and the *-shka* suffix constitutes a morphological means by which PK indicates the modifying relationship between modifier and head noun, i.e., *-k* for agent vs. *-shka* patient, as in (80) and (81).

(80) kasa-k amarun
 hunt-SUF anaconda
 'hunting anaconda' or 'anaconda that hunts'

(81) pinta-shka amarun
 paint-SUF2 anaconda
 'painted anaconda' or 'anaconda that was painted'

The modifying relationships in these examples is not merely inferred; it is specified by the morphology. This suggests that perhaps -k and -shka are not lexical nominalizations, but

rather relative clauses. That being said, the implication is that verb + -k forms that are not used to modify nouns, those that function as the head of an NP, are "headless" relatives, meaning relative clauses that lack an overt head noun. Cole argues for this analysis in Imbabura Quechua based on the logical extension of verb + -k forms being relatives (Cole 1985: 175). This analysis is reiterated by Lefebvre & Muysken (1988). In order to explain the use of nominal morphology with verb + -q forms in Cusco Quechua, it is shown that the nominal plural -*kuna* is carried by the "rightmost lexical nominal element in the noun phrase" which is not necessarily the head of the noun phrase (Lefebvre & Muysken 1988: 107). (82a-c) are provided by way of illustration.

(82) a. *wasi-kuna* house-PL 'houses' (Lefebvre & Muysken 1988: 107)

- b. *allin-kuna* good-PL 'good ones'
- c. *hamu-q-kuna* come-SUF-PL 'those who come'

In (82a) the plural *-kuna* attaches to the noun *wasi* 'house' unproblematically, as this is the head noun. In (82b) the same suffix is attached to *allin* 'good' which is classified as an adjective, i.e., not the head of the NP. The authors claim that there is an "understood empty noun to the right of the lexical element carrying the plural marker" (Lefebvre & Muysken 1988: 108). With these two examples in mind, Lefebvre & Muysken present (82c) in which the nominal plural *-kuna* is attached to the verb + *-q* form *hamu-q* (come-SUF) 'comer.' The argument is made that (82c) is more like (82b) in that *-kuna* is attached to an "understood empty noun," rather than in (82a) where *-kuna* is attached directly to the noun itself. Looking to the CPK, it appears these observations can be made of PK as well. (83a-c) show similar behavior with the nominal plural *- guna* in PK.

(83) a. <i>warmi-guna</i> woman-PL 'women'	(CPK:ams)
b. <i>ali-guna</i> good-PL 'good ones'	(CPK:sun)
c. <i>shamu-k-guna</i> come-SUF-PL	(CPK:per)

'those who come'

Further support for the headless relative analysis can be found in Baker & Vinokurova (2009) which attempts to identify ways in which "agent-denoting nominalizations" such as the English *-er* are distinct from other phenomena. While Baker & Vinokurova are explicitly motivated by a desire to find evidence for features of "Chomskyan" universal grammar (Baker & Vinokurova 2009: 521), their typological analyses may still be valid even outside of that theory, as their crosslinguistic investigation is supported by data from 78 languages from Koptjevskaja-Tamm (2005)'s typology of action nominals found in the "World Atlas of Language Structures."

One of Baker & Vinokurova's goals was to "distinguish expressions like *the manager of the company* from expressions like *the [one who] manages the company* or *the [one] managing the company* where the pronominal head 'one' and the relative pronoun 'who' might both be phonologically null, as is often the case in languages other than English" (Baker & Vinokurova 2009: 537). This dilemma is the same as the one we are trying to resolve in regard to PK, i.e., an

agentive nominalization, as in the first expression above, versus a relative clause with a phonologically null head (headless), as in the other two expressions.

By looking at agentive nominalizations in English, Sakha (Turkic: Norther Siberia), and Mapadungan (Isolate: Chile), Baker & Vinokurova identified certain verbal properties that can be used to differentiate between agent nominalization and headless relative clauses. Then, with each of the 78 languages, Baker & Vinokurova identified how the "closest equivalents to an *-er* nominalization" are expressed. They identified whether the nominalization could only refer to the "subject argument of an agentive verb," or if it was less restricted. Lastly, they looked for any verbal properties beyond taking a theme argument that were exhibited by both the restricted and less-restricted nominalizations (Baker & Vinokurova 2009: 543). As a result, they found that the languages fell into four categories: "languages with a true agentive nominalizer;" "languages with headless/participial relatives, potentially mistakable for agent nominalizer;" "languages with both agentive nominalizer and headless/participial relatives;" and "languages with neither (but have only, for example, headed relative clauses)" (Baker & Vinokurova 2009: 550-2).

Listed among languages in the third category, Imbabura Quechua is described as having both an agentive nominalizer, *-dur*, which is "not used verbally" and "allows only bare (incorporated?) object[s]," and a headless/participial relative *-j*, which "can modify overt nouns; is okay with accusative object; [and] is also used as a finite verb form" (Baker & Vinokurova 2009: 552). These observations were based on Cole (1985: 175) which we have already discussed.

Looking now to PK, by comparing data from the CPK to Baker & Vinokurova's characterization of agentive nominalizations, it may be possible to identify the category PK falls

into. The four key verbal properties that Baker & Vinokurova established as criteria for identifying agentive nominalizations are listed in (84).

- (84) a. agentive nominalizations will not have TAM marking
  - b. agentive nominalizations cannot be negated with negative verbal morphology
  - c. agentive nominalizations cannot use passive morphology
  - d. agentive nominalizations cannot be modified by adverbs

(Baker & Vinokurova, 2009: 540)

Starting with the first criterion which states agentive nominalizations cannot co-occur with TAM morphology, (85) and (86) both show the -k suffix used in tandem with the durative marker -u. As an indicator of aspect, this violates the first criterion.

- (85) shuk amigo <u>chari-u-k-ga</u> (CPK:est) one friend have-DUR-SUF-TOP 'One who has one friend'
- (86) pay kusa-ndi <u>ri-u-k</u> uya-kpi-ga
  (CPK:man)
  38 husband-and go-DUR-SUF hear-DS-TOP
  'She and her husband, who are going, heard (it)'

The second criterion, which states that agentive nominalizations cannot be negated by verbal negation, is clearly violated by (87).

(87) <u>mana manzha-k</u>! (CPK:fin)
 NEG fear-SUF
 'Don't fear!' or 'don't be one who fears'

The third criterion states that agentive nominalizations cannot use passive morphology.

This criterion is violated by examples (88) and (89) in which the verbal stem contains the passive suffix *-ri*.

- (88) *KAUUUUUUU yaku <u>uya-ri-g</u> a-n* (CPK:ams) IDEO river hear-PASS-SUF be-3S '[sound] the river sounds/is heard'
- (89) *chasna <u>riku-ri-k</u> m-a-n* (CPK:ram) like.that see-PASS-SUF EVS-be-3S 'Like that he appears/is seen'

Finally, (90) and (91) are modified by adverbs, thus violating the fourth criterion.

- (90) <u>ashka puri-k</u> m-a-n (CPK:per) a.lot walk-SUF EVS-be-3S 'He walks a lot'
- (91) <u>yapa manzha-g</u> m-a-ni, ñuka puma-ta
   very fear-SUF EVS-be-1S 1S jaguar-ACC
   'I am very scared of jaguar'

Verb + -*k* forms in PK are found to violate each criterion set out by Baker & Vinokurova, which supports the conclusion that verb + -*k* forms in PK are not agentive nominalizations, but rather headless relatives. That, however, is not to say that there are not lexical nominalizations in PK. As was discussed in section 2.3, Lefebvre & Muysken (1988) introduced the idea of inflectional vs. derivational versions of the -*q* suffix in Cusco Quechua. It was shown that the presence or absence of accusative marking on the direct object in PK could indicate a similar distinction in PK. Because of this, *illa-k* (lack-SUF) 'lacker' and *yacha-k* (know-SUF) 'shaman' were suggested as potentially two derivational uses of the -*k* suffix. The ability or inability to assign accusative case was also used by Baker & Vinokurova to differentiate the suffixes in Imbabura Quechua that were described as agentive nominals, -*dur* versus -*j* (see above). Furthermore, in the CPK no form of *illa-k* or *yacha-k* violate any of Baker & Vinokurova's criteria. While this is not conclusive, it is suggestive of a small (potentially 2 forms) subset of derivational verb + -*k* forms. The majority, however, are inflectional, by this analysis. In the next section it will be argued that verb + -*k* forms are participles, which are shown by Shagal (2017) to be inflectional verb forms.

#### 3.2 Participles

Throughout the literature on the -*k* suffix and its equivalents in Quechuan languages, a number of authors have described verb + -*k* forms as participles (Markham 1864; Weber 1989; Guardia Mayorga 1973; Catta Quelen 1985; Debenbach-Salazar Saenz 1993; Muysken 1994). As mentioned in section 1.3.1 of this thesis, the term participle is not clearly defined in the literature. Weber defines participles in Huallago Quechua as "de-verbal substantives that characterize some referent as persisting in some state" (Weber 1989: 282). Debenbach-Salazar Saenz defines participles simply as "nominalizations of verbal roots that can combine with nominal suffixes" (Debenbach-Salazar Saenz 1993: 28). Muysken describes the verb + -*q* forms in Cusco Quechua as agentive nominalizations that "can head a participle clause that can modify a nominal head, and hence function as a 'relative clause'" (Muysken 1994: 2,813). According to these definitions the term "participle" seems synonymous with the term "nominalization." Returning to the original question of whether verb + -*k* forms are nouns with modifier functions or modifiers with

noun functions, these definitions, especially Muysken's, favor the former; however, it has been shown in the previous section that verb + -k forms in PK are likely not nominalizations, rather they are relative clauses that can modify nouns, even if the head is phonologically null. This means that the definitions of participle in the Quechuan literature are inadequate to describe the *k* suffix in PK, but that does not dismiss the possibility of verb + -k forms being participles. Baker & Vinokurova, in the paper that supported the non-nominal analysis of verb + -k forms, refers to the non-nominal forms as participial relatives (Baker & Vinokurova 2009: 549). To further our understanding of participles, I turn to Shagal (2017).

Shagal attempts to establish a definition and comparative description of participles by looking at over 100 languages from various families and areas. After discussing numerous traditional definitions and finding the majority to be inadequate, Shagal defines participles as "morphosyntactically deranked verb forms that can be employed for adnominal modification" (Shagal 2017: 1). Shagal refers to the work of Stassen (1985) who introduced the terms *deranked* and *balanced*. According to Stassen, the verb of a dependent clause that has the same structure as an independent clause in a given language is considered *balanced*; while the verb of a dependent clause that differs from an independent clause morphologically or syntactically and that has been marked somehow to show the difference is considered *deranked* (Shagal 2017; 2). For example, a subordinate verb that is marked with a suffix, e.g., *-k*, and not marked with tense or subject agreement morphology like a main verb could be considered deranked.

Shagal discusses the difficulty in many languages in distinguishing between participles and nominalizations, and in so doing reiterates the question at the core of this chapter. Shagal acknowledges that there are generally two ways typologists have dealt with participle/nominalization polysemy, which will be familiar to the reader: one can either consider

the participle/nominalization as an argument primarily, which would make the adnominal modification its secondary function, or vice versa, i.e., consider adnominal modification to be the primary function and its use as an argument becomes secondary. If the first, then they are nominalizations with adnominal modification being a type of compounding; if the second, the verb forms are participles (Shagal 2017: 31-2). Since it has been shown that verb + -k forms are not nouns primarily but modifiers first, we can say they are participles by this definition. But before concluding, I will compare Shagal's fuller characterization of participles to data from the CPK.

Shagal determines that participles are a form of the verb, i.e., part of the verbal paradigm, as opposed to verbal adjectives or verbal nouns (Shagal 2017: 23). Shagal claims that they are inflectional rather than derivational. Shagal relies on Haspelmath (1996) who showed that morphology can change word class while still being inflectional rather than derivational. Furthermore, Shagal outlines two properties of participles that distinguish them from derivational verbal adjectives/nouns. First, participles are *general*, or in other words productive, meaning virtually all verbs in a language can form a participle, while verbal adjectives/nouns tend to be more restricted. Second, participles are *regular*, or transparent, meaning the meanings of the verb and its participle are related in a predictable and understandable way.

In considering the generality or productivity of the -k suffix in PK, there appears to be no restriction on the types of verbs that can take the -k suffix. In the CPK there are 168 distinct verb roots that take the -k suffix. Perhaps the broadest way of categorizing verbs typologically is based on their syntactic argument structure, which can be summarized in terms of transitivity. (92a-g) show verbs of varying transitivity that have taken the -k suffix (underlined).

(92)	a. Intransitive: <i>pay-ga randi-chi-sha <u>puri-k</u> a-shka</i> 3S-TOP trade-CAUS-SS walk-SUF be-PERF 'He traveled there selling'	(CPK:est)
	c. Transitive (agent subject, patient object): yanu-shka-ta <u>miku-k</u> shamu-i cook-SUF2-ACC eat-SUF come-IMP 'Come eat what has been cooked' or 'come as an eater of c	(CPK:can)
	d. Ditransitive (agent subject, patient direct object, goal ind <i>chi wañu-shka-ta kanoa-ma <u>chura-k</u></i> that die-SUF2-ACC canoe-DAT put-SUF 'The one who put the dead into the canoe'	direct object): (CPK:tip)
	e. Copula with adjective: <i>kiru-ga yana <u>m-a-k</u> a-ra</i> teeth-TOP black EVS-be-SUF be-PST 'The teeth used to be black'	(CPK:ama)
	<ul> <li>f. Copula with noun:</li> <li><i>pay-guna ali runa <u>sh-a-k</u> a-naw-ra</i></li> <li>3-PL good man EVO-be-SUF be-3P-PST</li> <li>'They used to be good men (they say)'</li> </ul>	(CPK:pie)
	g. Copula with another verb + - <i>k</i> form: <i>kani-g</i> <u>sh-a-g</u> a-shka bite-SUF EVO-be-SUF be-PERF 'He used to be a biter (they say)'	(CPK:ams)

Another way of categorizing verbs is based on the semantic argument structure.

Determining semantic structure in PK is outside the scope of this paper, but looking at verbs that

take agent subjects (93), experiencer subjects (94), and theme/patient subjects (95)

crosslinguistically, examples of these can be found in the CPK.

(93)	Agent	subject:
(33)	Agem	subject.

$(\mathcal{I}\mathcal{I})$	Agent subject.	
	<i>chura-k</i> (put-SUF) 'one who puts'	(CPK:bec)
	<i>hapi-k</i> (catch-SUF) 'one who catches'	(CPK:fin)
	<i>piti-k</i> (cut-SUF) 'one who cuts'	(CPK:ser)
	<i>ra-k</i> (do-SUF) 'one who does'	(CPK:def)
	<i>shita-k</i> (throw-SUF) 'one who throws'	(CPK:jag)
	wañu-chi-k (kill-SUF) 'one who kills'	(CPK:aft)
(94)	Experiencer subject:	
	<i>llaki-k</i> (love-SUF) 'one who loves'	(CPK:aft)
	manzha-k (fear-SUF) 'one who fears'	(CPK:fin)
	macha-k (be.drunk-SUF) 'one who drinks alcohol'	(CPK:ind)
	muna-k (want-SUF) 'one who wants'	(CPK:ams)
	<i>piña-k</i> (be.angry-SUF) 'one who is (generally) angry'	(CPK:ray)
	wiña-k (grow-SUF) 'one who grows'	(CPK:ind)
(95)	Theme/patient subject:	
	<i>a-k</i> (be-SUF) 'one who is'	(CPK:can)
	<i>riku-ri-k</i> (see-PASS-SUF) 'one who appears' or 'one who is	seen' (CPK:pah)
	<i>puñu-k</i> (sleep-SUF) 'one who sleeps'	(CPK:rai)
	<i>yuya-k</i> (be.aware-SUF) 'one who is aware'	(CPK:jag)
	urma-k (fall-SUF) 'one who falls'	(CPK:fin)
	wañu-k (die-SUF) 'one who dies'	(CPK:est)

A third way of categorizing verbs is based on aktionsart, or lexical aspect. Determining the aktionsart of PK verbs is also beyond the purview of this paper, so I will similarly look at verbs that fall into each category crosslinguistically. I refer to the four categories described by Vendler (1957): states (static), achievements (telic punctual), accomplishments (telic durative), and activities (atelic durative), as well as the semelfactive (atelic punctual) introduced by Comrie (1976). Examples of each are presented in (96).

(96)	a. State	
	<i>a-k</i> (be-SUF) 'one who is'	(CPK:ado)
	<i>yacha-k</i> (know-SUF) 'one who knows'	(CPK:tip)
	<i>llaki-k</i> (love-SUF) 'one who loves'	(CPK:the)
	<i>shaya-ri-k</i> (stand-PASS-SUF) 'one who is standing'	(CPK:fin)

kawsa-k (live-SUF) 'one who lives'	(CPK:ams)
b. Achievement	
kalla-ri-k (begin-PASS-SUF) 'one who begins'	(CPK:ray)
<i>hapi-k</i> (catch-SUF) 'one who catches'	(CPK:fin)
pakta-k (arrive-SUF) 'one who arrives'	(CPK:def)
<i>llukshi-k</i> (emerge-SUF) 'one who emerges'	(CPK:est)
saki-k (leave-SUF) 'one who leaves'	(CPK:pie)
c. Accomplishment	
<i>ra-k</i> (make-SUF) 'one who makes'	(CPK:def)
<i>chagra-k</i> (make.chagra-SUF) 'one who makes a chagra'	(CPK:ado)
<i>ñambi-k</i> (make.path-SUF) 'one who makes a path'	(CPK:fin)
aswa-ta upi-k (aswa-ACC drink-SUF) 'one who drinks asw	a' (CPK:can)
chi-manda puri-k (there-ABL walk-SUF) 'one who walks fi	rom there' (CPK:fin)
d. Activity	$(CDV, \ldots, t)$
<i>puri-k</i> (walk-SUF) 'one who walks'	(CPK:est)
<i>kallpa-k</i> (run-SUF) 'one who runs'	(CPK:ado)
<i>rima-k</i> (speak-SUF) 'one who speaks'	(CPK:the)
<i>taraba-k</i> (work-SUF) 'one who works'	(CPK:aft)
<i>kasa-k</i> (hunt-SUF) 'one who hunts'	(CPK:ado)
e. Semelfactive	
<i>wakta-k</i> (hit-SUF) 'one who hits'	(CPK:fin)
kani-k (bite-SUF) 'one who bites'	(CPK:ams)
salta-k (jump-SUF) 'one who jumps'	(CPK:cha)
paki-ri-k (break-PASS-SUF) 'that which breaks'	(CPK:aft)
<i>tuvya-k</i> (explode-SUF) 'that which explodes'	(CPK:hww)

Based on transitivity, semantic argument structure, and aktionsart, the -*k* suffix is seemingly unrestricted in its productivity. Considering now the regularity of the -*k* suffix, it has been shown throughout this thesis that the relationship between verb and verb + -*k* form is highly predictable. In every case, the verb + -*k* form refers to the one who does the verb. The only exception might be *yacha-k* (know-SUF) which means 'shaman.' While the meaning is clearly related to the participial definition, i.e., 'one who knows,' the word *yacha-k* has been lexicalized to refer to a specific person in a community with specific characteristics and duties. This semantic shift, while logical, is not predictable based on the word form, and is thus less *regular*. That being said, the likelihood of *yacha-k* being a derivational verb + -*k* form as opposed to the more regular inflectional verb + -*k* forms has already been discussed in connection with Lefebvre & Muysken's analysis. Incidentally, Lefebvre & Muysken assert that the derivational reading likely arose diachronically from a reanalysis of the inflectional readings in Cusco Quechua (Lefebvre & Muysken 1988: 66), and this seems the more probable path for *yacha-k* in PK as well. In terms of generality and regularity, the -*k* suffix seems to conform to Shagal's generalization.

Another aspect of participles described by Shagal is orientation. The orientation of a participle refers to the relationship between the participle and the head noun in terms of the underlying argument structure of the verb from which the participle came. Shagal defines 4 orientations determined by the core arguments with which they are associated. For the following discussion, A refers to the subject of a transitive verb; S refers to the subject of an intransitive verb; and O refers to the direct object of a transitive verb. The four orientations are summarized in (97).

- (97) a. Active participles: these are oriented toward A and S, the subjects of both transitive and intransitive verbs. These can also be called nominative participles. (Shagal 2017: 48)
  - b. Passive participles: these are oriented toward O, the object of the transitive verb. These can also be called accusative participles (Shagal 2017: 52).
  - c. Agentive participles: these are oriented toward only A. These can also be called ergative participles (Shagal 2017: 57).
  - d. Absolutive participles: these are oriented toward O and S (Shagal 2017: 57).

To determine the orientation of verb + -k participles in PK we can look for examples of verb + -k forms oriented toward A, S, and O. In the CPK there are many examples of verb + -k forms oriented toward the subjects of transitive verbs, A, as in (98).

(98)	Verb + - $k$ participles oriented toward A:		
	allsa-k (pull-SUF) 'one who pulls'	(CPK:toa)	
	<i>apa-k</i> (take-SUF) 'one who takes'	(CPK:sui)	
	<i>chura-k</i> (put-SUF) 'one who puts'	(CPK:bec)	
	<i>hapi-k</i> (catch-SUF) 'one who catches'	(CPK:fin)	
	<i>ni-k</i> (say-SUF) 'one who says'	(CPK:tip)	
	<i>piti-k</i> (cut-SUF) 'one who cuts'	(CPK:ser)	
	<i>ra-k</i> (do-SUF) 'one who does'	(CPK:def)	
	<i>shita-k</i> (throw-SUF) 'one who throws'	(CPK:jag)	
	<i>uya-k</i> (hear-SUF) 'one who hears'	(CPK:thk)	
	<i>wañu-chi-k</i> (kill-SUF) 'one who kills'	(CPK:aft)	

There are also many examples of verb + -k forms oriented toward the subjects of  $\frac{1}{2}$ 

intransitive verbs, S, as in (99).

(99)	Verb + $-k$ participles oriented toward S:	
	kawsa-k (live-SUF) 'one who lives'	(CPK:ams)
	macha-k (get.drunk-SUF) 'one who drinks alcohol'	(CPK:ind)
	<i>puñu-k</i> (sleep-SUF) 'one who sleeps'	(CPK:rai)
	<i>puri-k</i> (walk-SUF) 'one who walks'	(CPK:ama)
	<i>ri-k</i> (go-SUF) 'one who goes'	(CPK:ind)
	shaya-k (stand-SUF) 'one who stands'	(CPK:fin)
	<i>siri-k</i> (lie.down-SUF) 'one who lies down'	(CPK:ado)
	<i>tiya-k</i> (exist-SUF) 'one who exists'	(CPK:tip)
	urma-k (fall-SUF) 'one who falls'	(CPK:fin)
	<i>wañu-k</i> (die-SUF) 'one who dies'	(CPK:est)

There are, however, no examples of -k participles oriented toward the object of a transitive verb, O, in the CPK. Thus, it appears the -k suffix in PK is an active or nominative participle marker, being oriented toward A and S.

3.3 -shka

It was established in section 2.6 that the suffix *-shka* is potentially in a contrasting relationship with the *-k* suffix in PK and is likely of the same category. Nuckolls & Swanson describe verb + *-shka* forms as an "adjective" form of a perfective verb (Nuckolls & Swanson, forthcoming: 237), and throughout the literature on Quechuan languages, the equivalent suffix has been analyzed as either a participle (Catta Quelen 1985; Coombs 1976; Gomez Bacarreza 1988; Debenbach-Salazar Saenz 1993; Weber 1983; Weber 1989; Parker 1969; Samanez Flores 1996; Huarachi Revello 2005) or as a nominalizer (Cole 1985; Soto Ruiz 1976; Lefebvre & Muysken 1988; Alderetes 2001; Escribens 1970). With our current understanding of the *-k* suffix as a participle, it would be fitting if *-shka* were shown to also be a participle.

It has already been shown that verb + -shka forms share many of the same nominal and adjectival qualities as verb + -k forms. I now briefly present data from the CPK following the same line of reasoning taken in the discussion of -k to conclude the -shka is also a participle.

(100) Noun-like function of verb + -shka
a. with nominal plural:
api-shka-guna
catch-SUF2-PL
'those which are caught'

(CPK:fin)

b. with nominal case:

	yanu-shka-ta	(CPK:can)
	cook-suf2-acc	
	'that which is cooked'	
	c. modified by determiner: <i>chi tuksi-shka</i>	(CPK:ado)
	that puncture-SUF2	· /
	'that stung (thing)'	
	d. modified by quantifier:	
	ishkay wañu-shka	(CPK:myf)
	two die-SUF2	
	'two that have died'	
	e. modified by PP:	
	pay shimi-wan kwinta-shka m-a-n	(CPK:tip)
	3s mouth-INST tell-SUF2 EVS-be-3s	
	'It is told with his mouth'	
	f. as subject argument:	
	chi tuksi-shka hambi-ri-u-n	(CPK:ado)
	that sting-SUF2 treat-PASS-DUR-3S	
	'that stung (thing) is healing'	
	g. as object argument:	
	payna kwinta-shka-ta kwinta-w-ni	(CPK:man)
	3P tell-SUF2-ACC tell-DUR-1S	
	'I am telling what he told' or 'I am telling what was told by	y him'
(101)	Modifier-like function of verb + -shka	
	a. as modifier:	
	pinta-shka amarun	(CPK:Ado)
	paint-SUF2 anaconda	
	'painted anaconda'	
	b. as predicate modifier:	
	urma-shka m-a-ni!	(CPK:thp)
	fall-suf2 EVS-be-1s	
	'I fell' or 'I am fallen'	

I now consider Baker & Vinokurova's four criteria for distinguishing nominalizations from relatives. Their discussion focused on agentive nominalizations, and thus are not applicable to the current discussion conclusively, but the four criteria are concerned more with verbal qualities than agentive qualities; therefore, I feel comfortable presenting these data, even if the same conclusions derived by Baker & Vinokurova cannot be made here. It is presented more to highlight similarities between *-shka* and *-k*, and though it may not form the basis of my conclusion, it is illustrative of the more verbal nature of verb + *-shka* forms.

(102) verb + -shka can have TAM marking: riksi-u-shka-guna shamu-shka-wna-ra (CPK:fin) know-DUR-SUF2-PL come-PERF-3P-PST 'Those who are known had come.'

- (103) verb + -shka can be negated with negative verbal morphology:
   mana warmi muna-w-shka runa-shi (CPK:ams)
   NEG woman want-DUR-SUF2 man-EVO
   'A man not wanted by women' or 'not woman-wanted'
- (104) verb + -shka can use passive morphology: riku-ri-shka (CPK:thu) see-PASS-SUF2 'That which was seen'
- (105) verb + -shka can be modified by adverbs:
  chasna ra-shka ch-a-w-n
  like.that do-SUF2 EVU-be-DUR-3S
  'It is done like that, maybe'

Ultimately, the question of the *-shka* suffix's category comes down to the same question that the discussion on *-k* came down to: how to reconcile the noun-like behavior and the modifier-like behavior. With so many similarities between the two suffixes, it is likely that not

only is the question the same, but also the solution. Consider the following example in which the speaker tells about her children, those that have died, and those that are still living.

(106) ñuka nueve-ta chari-ni, ishkay wañu-shka, siete kawsa-k
(CPK:myf)
1s nine-ACC have-1s two die-SUF2 seven live-SUF
'I have nine (children), two that have died, seven that live'

The parallel structure serves as fairly plain evidence that *-k* and *-shka* are likely of the same category. With such prevalent parallelism between *-shka* and *-k* in PK, and with the support of much of the literature that describes the contrasting relationship between these two suffixes, I conclude that *-shka* is likewise a participle in PK.

To determine the *-shka* participle's orientation, I searched the CPK for verb + *-shka* forms oriented toward A, S, and O. I found no instances of a verb + *-shka* participle oriented toward A. I did find, however, many examples oriented toward S, presented in (107), and oriented toward O, in (108).

(107)	Verb + - <i>shka</i> participles oriented toward S:	
	wañu-shka (die-SUF2) 'one that has died'	(CPK:the)
	urma-shka (fall-SUF2) 'one that has fallen'	(CPK:thp)
	riku-ri-shka (see-PASS-SUF2) 'that which was seen'	(CPK:thu)
	chura-ri-shka (put-PASS-SUF2) 'one who is clothed'	(CPK:est)
	waka-shka-ta (cry-SUF2-ACC) 'one who has cried'	(CPK:fin)
(108)	Verb + - <i>shka</i> participles oriented toward O:	
	pinta-shka (paint-SUF2) 'one that is painted'	(CPK:ado)
	muna-w-shka (want-DUR-SUF2) 'one that is being wanted'	(CPK:ams)
	ni-shka (say-SUF2) 'that which is said'	(CPK:fin)
	kwinta-shka (tell-SUF2) 'that which is told'	(CPK:tip)
	yanu-shka-ta (cook-SUF2-ACC) 'that which is cooked'	(CPK:can)

Being aligned toward S and O, verb + *-shka* forms can be considered absolutive participles, meaning PK has an active (or nominative) participle *-k* and an absolutive participle *- shka*. Incidentally, one of the languages examined in Shagal (2017)'s crosslinguistic survey of participles was Tarma Quechua (also known as Yaru Quechua), a QI language spoken in many of the districts of Peru to the north east of Lima. According to Shagal's analysis, Tarma Quechua has the same participial paradigm, with an active participle and an absolutive participle.

#### 3.4 Chapter summary

In order to reconcile the noun-like and the modifier-like functions of verb + -k forms in PK, I have argued that they are participial relatives that can optionally modify a null head. I have shown that verb + -k forms retain a number of verbal qualities, including the ability to assign case, to be used with TAM morphology, to be negated with verbal negation, to inflect passive verb stems, and to be modified by adverbs. These suggest that verb + -k forms are not agentive nominalizations. They are instead "morphosyntactically deranked verb forms that can be employed for adnominal modification" (Shagal 2017: 1), i.e., participles. Furthermore, I have shown that these participles have an active (or nominative) orientation, and that they are contrastively paired with verb + -shka forms, which have been shown to be absolutive participles.

In the final chapter of this thesis I make concluding remarks and discuss two shortcomings of the current study.

## Chapter 4: Conclusion

In this thesis I have presented a corpus-based description of the attributive -k suffix in PK using data from the CPK, concluding that the behavior and function of verb + -k forms match typological descriptions of active (or nominative) participles. The description was informed by the characterization of the -k suffix found in Nuckolls & Swanson (forthcoming), the only description of PK currently, as well as literature on similar suffixes in other Quechuan languages. The data in the CPK was found to corroborate Nuckolls & Swanson's description of the nominal, adjectival, verbal, and adverbial functions of the -k suffix, as well as the non-agentive uses of the suffix; however, evidence was found that suggested the nominal and adjectival functions are actually reflexes of a single function, i.e., relative clause.

As a first step toward reconciling the disparate functions of the suffix, I established that  $\operatorname{verb} + -k$  forms in PK are first modifiers with secondary nominal functions, rather than nouns with secondary modifying functions. According to this analysis,  $\operatorname{verb} + -k$  forms are relativizers, and when they do not modify an overt head noun, they are considered headless relatives. This conclusion is supported by the literature in analyses of related languages.

Finally, I established a definition of participles based on Shagal (2017) and determined that verb + -k forms, as "morphosyntactically deranked verb forms that can be employed for adnominal modification" (Shagal 2017: 1), are participles that can serve as the head of a participial relative. This conclusion was bolstered by a parallel analysis to the suffix *-shka* which was shown to be contrastively related to the *-k* suffix and in the same category. By again appealing to the CPK, I was able to determine that the *-k* suffix exhibits behavior similar to active participles crosslinguistically, and the *-shka* suffix exhibits behavior similar to absolutive participles.

A relatively significant shortcoming of the current study is the size and composition of the corpus from which the data was gathered. The CPK is composed entirely of narratives from a single speaker. For a more representative analysis of PK, a larger corpus with texts from multiple speakers could yield more reliable and generalizable results. As it is, trusting in the competence of the one speaker, we can make valuable observations that are likely true of PK, though it is impossible to say how representative these observations are of PK as a whole. Future research will benefit from further documentation and digitalization of PK data.

Another shortcoming of this thesis is the incompleteness of the analysis. The verbal and adverbial functions of verb + -k forms are still not well understood, although both support the conclusion that verb + -k forms are not nominalizations, being more verb-like. Further study is needed to determine exactly how the active participle -k interacts with verbs in PK when not part of an argument. It is my conclusion that the -k suffix in PK is an active participle, but because of the additional use in the habitual aspectual paradigm and its adverbial functions, perhaps a unique label is warranted. For this reason, I believe that the "attributive" suffix, coined by Nuckolls & Swanson, is an appropriate label for the suffix. My only revision to Nuckolls & Swanson's original characterization would be to change the category from a deverbal nominalization that "attributes a certain role, ability, activity, or characteristic trait to the subject of its verb" (Nuckolls & Swanson, forthcoming: 174) to a deverbal participle.

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# Appendix 1: Complete Quechuan Family Tree

Presented here is a complete family tree of languages in the Quechuan family (source: https://glottolog.org/resource/languoid/id/quec1387). The languages are sorted into "branches" with the total number of languages in each branch given in parentheses after the branch's name. For example, there are 19 languages in the Quechua I branch. PK (here Northern Pastaza Quichua) is in bold, as well as are all of the branches to which it belongs; thus, following the bold headings will lead one to PK.

## Quechuan (45)

- Quechua I (19)
  - Central Quechua I (18)
    - AP-AM-AH (4)
      - Cajatambo North Lima Quechua
      - Chiquián Ancash Quechua
      - Huallaga Huánuco Quechua
      - Panao Huánuco Quechua
    - Huangascar-Topara-Yauyos Quechua
      - o Apurí
      - Azángaro-Huangáscar-Chocos
      - Cacra-Hongos
      - Huancaya-Vitis
      - $\circ$  Laraos
      - Madean-Viñac
      - San Pedro de Huacarpana
      - Tana-Lincha
      - Tomñs-Alis
    - Huaylay (7)
      - Conchucos (2)
        - Northern Conchucos Ancash Quechua
        - Southern Conchucos Ancash Quechua
      - Corongo Ancash Quechua
      - Huamalíes-Dos de Mayo Huánuco Quechua
        - Huamalíes
        - Monzón

- Northern Dos de Mayo
- Huaylas Ancash Quechua
  - Huailas
  - Huaraz
  - Yungay
- Margos-Yarowilca-Lauricocha Quechua
- Sihuas Ancash Quechua
- Jauja-Huanca (2)
  - Huaylla Wanca Quechua
    - East Waylla
    - Waycha
    - West Waylla
  - Jauja Wanca Quechua
- Yaru Quechua (4)
  - Ambo-Pasco Quechua
  - North Junín Quechua
  - Santa Ana de Tusi Pasco Quechua
  - Yanahuanca Pasco Quechua
- Pacaraos Quechua
- Quechua II (26)
  - Cajamarca Quechua
    - Eastern Cajamarca
    - Western Cajamarca
  - Chincha Quechua
  - Lambayeque Quechua
    - Cañaris
    - Incahuasi
  - Quechua IIB (14)
    - Chachapoyas Quechua
      - Grenada-Mendoza
      - La Jalca
      - Lamud
      - Llakwash Chachapoyas
    - Colombia-Ecuador Quechua IIB (12)
      - Ecuadorian Quechua A (3)
        - Calderón Highland Quichua
        - Chimborazo Highland Quichua
        - Salasaca Highland Quichua
      - Ecuadorian Quechua B (7)
        - Cañar Highland Quichua

- **Ecuadorian Lowland Quechua (4)** 
  - Napo Lowland Quechua
    - Santa Rosa Quechua
  - Northern Pastaza Quichua
    - Tigre Quechua
  - Southern Pastaza Quechua
  - Tena Lowland Quichua
- Imbabura Highland Quichua
- Loja Highland Quichua
- Ingan Quechua IIB (2)
  - Inga
    - Aponte Inga
    - San Andrés Inga
    - Santiago Inga
  - Jungle Inga
    - Guayuyaco
    - Yunguillo-Condagua
- San Martín Quechua
- Quechua IIC (9)
  - Ayacuchan Quechua (2)
    - Arequipa-La Unión Quechua
      - Antabamba (Arequipa-La Union Quechua)
      - Cotahuasi
      - Highland Arequipa
      - Northern Arequipa
    - Ayacucho Quechua
      - Andahuaylas
      - Huancavelica
  - Bolivian Quechua IIC (2)
    - North Bolivian Quechua
      - Apolo
      - Charazani
      - Chuma
    - South Bolivian Quechua
      - Chuquisaca
      - Cochabamba
      - Northwest Jujuy
      - Oruro
      - Potosí
      - Sucre

- Classical Quechua
- Cuscan Quechua (3)
  - Cusco Quechua
    - Caylloma Quechua
  - Eastern Apurímac Quechua
    - Abancay
    - Antabamba
    - Cotabambas
  - Puno Quechua
    - Cailloma Quechua
- Santiago del Estero Quichua
  - Catamarca y La Rioja
  - Santiago del Estero

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