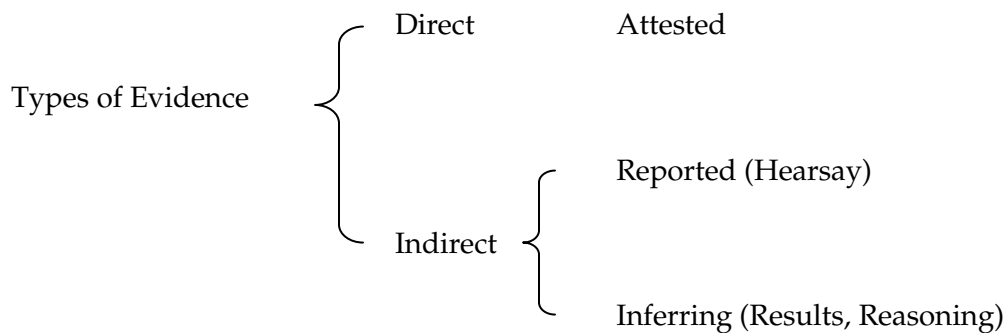


Starting with the seminal studies compiled in Chafe & Nichols (1986), linguists have endeavored to characterize the expression of evidentiality, a linguistic category indicating the source of information. Willett (1988) identified the basic evidential distinctions observed across languages, as shown in the following simplified version of the figure from his work (88: 57). In this schematic representation, the overarching semantic contrast in evidential systems distinguishes direct and indirect evidence as information source. Indirect evidence, in turn, may be hearsay or observed results, etc.



(See De Haan (2001) for a different analysis of evidential contrasts.) Although the semantic content of evidential concepts is universal, languages differ widely in the formal means available for their expression (Aikhenvald, 2004; Plungian, 2001). Languages such as English rely on lexical expression, e.g., adverbs such as *allegedly*, *reportedly*, or on syntactic means, e.g., *I saw John arrive* (direct evidence), *I see that John has arrived* (inference based on indirect evidence), *They say that John has arrived* (indirect evidence: hearsay). In other languages, evidential distinctions are actually encoded in the grammar; that is, grammatical forms such as evidential enclitics and distinct verb forms indicate the source of the speaker's information. Such is the case in Quechua, an agglutinative language spoken in several distinct varieties throughout the Andean nations of South America. The present study presents data that shed light on the

development of the evidential system in Southern Peruvian children acquiring Cuzco Quechua as their first language.

Previous studies investigating the development of evidential systems in other languages suggest that the path to full understanding and adultlike production of evidential morphemes is a drawn-out process. Aksu-Koç (1988, 2000) conducted a groundbreaking investigation of children's acquisition of the Turkish evidential morphemes. Like Quechua, Turkish is an agglutinative language, with suffix sequences appended to lexical roots. The evidential distinction in Turkish is encoded in the Past tense verb forms, which bear an obligatory suffix, either *-dı* for direct experience or *-miş* for indirect experience (inference/hearsay). Aksu-Koç observed that Turkish children start producing the morphemes at the age of two years; however, children do not consistently make appropriate use of the two suffixes until after the age of four years. In fact, they do not attain genuine understanding of the corresponding distinctions in source knowledge until after the age of six years. Aksu-Koç further reports that the direct evidence morpheme emerges first in child production; thereafter, children acquire the inferential meaning of the indirect evidence morpheme before acquiring the hearsay construal.

Japanese and Korean encode the distinction between direct and indirect evidence in obligatory sentence-final particles attached to the verb. Like the Turkish children, Korean children start producing the evidential morphemes at age two, and, by the age of three years, they competently produce the morphemes that distinguish direct evidence from hearsay (Choi, 1995; Papafragou, Li, Choi & Han, 2007). Matsui, Yamamoto & McCagg (2006) note that Japanese has two participles that contrast with *yo*, an element that encodes both certainty and direct evidence. In the expression of certainty, *yo* contrasts with *kana*, which indicates the speaker's lack of conviction or commitment to the stated information. In its evidential function, *yo* contrasts with *tte*, the hearsay particle. The researchers conducted a study to determine

children's understanding of these morphemes in a task that required them to make decisions regarding the whereabouts of different objects, based on verbal clues. Overall, the children, aged 3- to 6-years-old, were more successful in interpreting the certainty contrasts than the evidential contrasts. The authors assert (2006: 162), "With regard to cognitive complexity, it is our position that understanding speaker certainty . . . requires less cognitive processing than does comprehension of evidential certainty." They further observed that the 5- and 6-year-olds were far more successful than the 3- and 4-year-olds in understanding the evidential contrasts.

The only previous investigation of evidential competence in Quechua-speaking children (Courtney, 1998, 1999) yielded the observation that the direct evidence morpheme emerges at the end of the third year exclusively in affirmative answers to direct questions. The analysis relied primarily on spontaneous speech produced by three children who were acquiring the variety of Quechua spoken in the highlands of Arequipa, Peru. Clearly, a more extensive inquiry is called for.

It is not surprising that the development of evidential competence should be a protracted process, since the acquisition of grammatical forms encoding information source relates to cognitive development, specifically children's theory of mind. As noted by Papafragou (2002: 62), "the ability to reason evidentially about the origins . . . of our beliefs is part of our ability to reason about mental states in general." Papafragou and her colleagues (Papafragou, Li, Choi & Han, 2007) explore an intriguing 'chicken-and-egg' problem associated with the development of evidential systems in young children: does children's understanding of the types of evidence underlying beliefs facilitate the acquisition of evidential forms, or is it the other way around? The latter possibility, reminiscent of Whorf's (1956) perspective, would mean that the existence in a language of a set of evidential markers gives children a leg up in the development of the underlying conceptual distinctions. To investigate this issue, Papafragou

et al. undertook an elegant set of experiments designed to test the abilities of three- and four-year-old children acquiring Korean, a language which also exhibits obligatory marking of the direct/indirect evidence distinction on the sentence-final verb. Presumably, they did not test two-year-olds because children at this age are unsuccessful in theory-of-mind tests, because of either conceptual deficits (e.g., Perner, 1991; Wellman, Cross & Watson, 2001) or processing limitations (e.g., Bloom & German, 2000; Fodor, 1992). The authors observed the children's ability to monitor information source (a non-linguistic task), to attribute utterances with different evidential markers to the appropriate individuals (comprehension), and to produce appropriate Korean evidential markers in situations where either direct evidence or indirect evidence was provided (production). Although the children had some difficulty with the linguistic tasks, the researchers note that "the linguistic competence with evidentiality seems to proceed hand in hand with the conceptual understanding of information sources" (2007: 31). Finally, the Korean children performed the non-linguistic source monitoring task no better than a group of English-speaking 3- and 4-year-olds; therefore, no evidence was found that there is an advantage in conceptual development for children acquiring a language with grammaticalized evidentiality.

As part of their investigation of Japanese children's interpretations of the sentence-final certainty and evidential particles, Matsui et al. (2006) had children perform false belief tasks, specifically the Sally Anne test (Wimmer & Perner, 1983) and the Smarties test (Perner, Leekam & Wimmer, 1987), both widely used indicators of theory of mind. Since they discovered no correlation between children's comprehension of the particles and their understanding of false belief, they concluded that "a consistent, working understanding of knowledge states precedes fully representational understanding of (false) beliefs" (2006: 171). Quechua-speaking children perform poorly on false belief tests (McCormick & Olson, 1991; Vinden, 1996). Additionally, in

a replication of the source monitoring task employed by Papfragou et al. (2007), Quechua-speaking three-year-olds performed only at chance. Furthermore, while the four-year-olds performed somewhat better than the three-year-olds, there was no significant difference in their performance scores. It is plausible that the protocols used to test understanding of false belief and information source are not culturally appropriate for children unaccustomed to this type of questioning. Therefore, the present study relies for insight on analysis of naturalistic speech data.

In light of these findings, the present study addresses three questions:

1. If two-year-old Quechua speakers produce evidential morphology spontaneously, what meanings or functions, if any, do they assign to the morphemes?
2. In what order do the different evidential markers emerge in naturalistic child production?
3. How do Quechua-speaking children make use of the evidential markers in story-telling?

In what immediately follows, the highlights of the Quechua evidential system will be presented. Thereafter, two types of data will be presented and discussed: mother-child conversations and story retellings.

THE QUECHUA EVIDENTIAL SYSTEM

Evidential enclitics

There are three evidential enclitics available to Quechua speakers for indicating the source of information (e.g., Calvo Pérez, 1993; Faller, 2006c; Floyd, 1993; Lefebvre & Muysken, 1988). These are illustrated in (1), with the enclitics underlined.

1. a. Juan-mi chaya-mu-n.
Juan-DIR arrive-TRL-3SG
'(SPEAKER has seen that) Juan has arrived.'
- b. Juan-cha chaya-m-u-n.

Juan-INF arrive-TRL-3SG

‘(SPEAKER infers/supposes that) Juan has arrived.’

c. Juan-si chaya-mu-n.

Juan-REP arrive-TRL-3SG

‘(SPEAKER has been told that) Juan has arrived.’

In each example, the subject *Juan* bears a different evidential suffix.¹ By using the suffix *-mi* (DIRECT EVIDENCE) in its evidential function, the speaker vouches for Juan’s arrival, based on direct observation. In this regard, Faller (2002) asserts that *-mi* is licensed when the speaker has the most direct evidence possible, or ‘best possible grounds’. The suffix *-cha* (INFERENCE) indicates that the speaker relies on reasoning and indirect evidence to infer or conjecture that Juan has arrived. Finally, the speaker uses the suffix *-si* (REPORT) to note that she has learned about Juan’s arrival from what someone else has said (Faller, 2006a).

Unlike other languages, e.g., the Colombian language, Tuyaca (Lazard, 2001), overt evidential marking is not obligatory in Quechua. Faller (2002: 15-16) observes that Quechua speakers often produce sentences lacking evidential marking in informal discourse: “*-mi* in normal conversation is primarily used in situations of real or anticipated argument—in situations in which the speaker wants to make a particular strong point”. In statements without evidential marking, the evidential value is recoverable from the context. With respect to Quechua narrative, however, Mannheim & Van Vleet (1998) assert that the absence of *-si* or *-mi* generally indicates that the speaker is hedging. In addition to indicating information source, the Quechua enclitics serve to mark the primary focus in a sentence, an element which generally constitutes ‘new’ information (Muysken, 1995).

¹ Terms for the abbreviations in the interlinear glosses are provided in the Appendix.

It is important to note that *-mi* has functions in Quechua sentences other than marking information source and primary focus. It has been argued that *-mi* has an epistemic (validational) function (Nuckolls, 1993; Floyd, 1996). Nuckolls asserts that “personal conviction or belief rather than direct experience is the Gesamtbedeutung of *-mi*” (1993: 239); that is, *-mi* provides the Quechua speaker with the means of expressing certainty, or commitment to a proposition, particularly in contrast to Inference *-cha*, a suffix used to express conjecture or speculation. However, Aikhenvald (2004) asserts that the certainty function of *-mi* is an epistemic extension of its primary role as an indicator of direct evidence. In the same vein, Fallner remarks on the absence of validational properties in the evidential enclitics, here referring to Inference *-cha* as the Conjectural evidential (2006c: 3):

“The evidentials themselves do not directly encode anything about the degree of certainty with which the speaker believes the embedded proposition, but someone using the Direct evidential normally believes that *p* is true with a high degree of certainty, and a speaker using the Conjectural usually at least believes *p* to be a possibility. No such correlation exists for the Reportative, however.”

Nonetheless, there are situations where Quechua speakers would appear to make use of *-mi* to express commitment to a proposition, including sentences with first-person future verb forms and information questions. Provided in (2)-(3) are examples of *-mi* and its allomorph *-n* in first-person future statements and information questions produced by adult Quechua speakers.

2. a. Apa-ra-m-pu-saq-mi ni-wa-n.
take-EXH-TRL-REG-1FUT-DIR say-1OBJ-3SUBJ
‘He said to me, “I’ll bring it back.”’
- b. Anchay uras-ta-n pasa-saq wichay-ta.

that hour-AC-DIR go-1FUT up-AC

'I'll go up there at that hour.'

With regard to first-person future statements with *-mi*, such as those presented in (2), Floyd (1996: 85) states that "the speaker's commitment to a proposition may be justified to the extent that s/he construes his/her own subsequent actions as being particularly subject to his/her initiation and control." Accordingly, Quechua speakers may add the *-mi* suffix to assure the addressee that they will complete the future action, based on personal conviction of ability and intention.

There are conventional contexts in which Quechua speakers frequently produce *-mi*: on wh-question words, in responses to direct and information questions, on *ni-* 'say' in direct quotations, and in equi-statements without the copula *ka-*. It has been argued that *-mi* has evidential import in these contexts. For example, Floyd (1996) asserts that speakers often add *-mi* to the wh-words in information questions, as shown in (3), because they assume that the addressee knows the answer and has direct evidence for the requested information. By contrast, Adelaar (1977) asserts that the use of *-mi* in direct questions has little if any meaning at all.

3. a. Pi-n jardin-pi maqa-sunki?
who-DIR kindergarten-LOC hit-3SUBJ>2OBJ
'Who hits you in kindergarten?'
- b. Ima-n haqay orqo-q suti-n-qa?
What-DIR that hill-GEN name-3PS-TOP
'What is the name of that hill?'

Past tense inflections

In addition to the evidential enclitics, Quechua sentences exhibit distinct Past tense inflections, as shown in the contrast presented in (4).

4. a. Juan chaya-ra-n.
Juan arrive-PT-3SG
'Juan arrived.' (directly perceived)
- b. Juan chaya-sqa.
Juan arrive-NEPT
'Juan arrived.' (not directly perceived)

Following Faller (2004) and Cusihuamán (1976), the Past tense suffix *-ra-* (allomorph: *-rqa-*) in Southern Quechua indicates that the speaker has direct perceptual evidence for asserting that John arrived, whereas Non-Experienced Past *-sq*a- marks the absence of direct perceptual evidence. Faller (2004: 2) analyzes *-sq*a as “a spatio-temporal deitic which specifies that the described eventuality *e* is not located within the speaker’s perceptual field at topic time”. Accordingly, although *-sq*a is not a true evidential morpheme, not perceiving an event means that one’s evidence is necessarily indirect. As in other languages (Aikhenvald, 2004), the Non-Experienced Past morpheme (NEPT) exhibits a cluster of related functions. For example, the suffix has a RESULTATIVE function when the speaker’s focus is on the observed end state, or result, of an action or process, especially in change-of-state verbs. A case in point is the form *rik’cha-sq*a from the verb root *rik’cha-* ‘awaken’, which could be glossed ‘He/She is awake’, expressing a resulting state. In like manner, the difference in meaning between *ri-sq*a (go-NEPT) and *ri-ra-n* (go-PT-3SG) might be glossed as ‘He is gone’ and ‘He went’, respectively. In Quechua narrative, *-sq*a has a REPORTATIVE function: it is used in recounting stories, myths, and legends to indicate that the narrator has been neither a witness to, nor a participant in the

narrated events. As such, the suffix is used with Report *-si* in storytelling to characterize the story events as reported information. Finally, *-sqa* is appended to verb roots that express background events—those that occur prior to other events in past time, akin to the primary function of the English Past Perfect. It must be mentioned that Quechua speakers typically produce sentences without evidential or Past tense marking, as shown in the following alternative to (4). In (5), the verb is Non-Past (\emptyset).

5. Juan chaya-mu-n.
Juan arrive-TRL-3SG
'John arrives/has arrived'

In order to explore the acquisition of these Quechua morphemes, child participants were recruited in four rural communities, all situated in the province of Paruro in Cuzco, Peru. Since the socioeconomic status of all these children is low, even by Peruvian standards, the children lack toys, books, and television, and they are largely unacquainted with the lifestyle of mainstream Peruvians. The younger children spend their days with their mothers, frequently tending the family livestock out in the fields. The older children attend kindergarten or elementary school, where they typically struggle to learn Spanish. Although the parents of the children may be bilingual in Spanish and Quechua, particularly the fathers, Quechua is spoken at home: it is the children's first language. The ages and numbers of child participants varied for each component of the data collection process, as indicated in the description of each procedure.

MOTHER-CHILD CONVERSATIONS

Procedure

Mothers were asked to tape-record conversations with their children in familiar settings for 30 to 60 minutes. The topics of conversation were remarkably similar across mother-child

pairs. Typically, mothers and their children talked about chores to be done (cooking, attending to animals, working in the fields, gathering firewood and fodder), about school and getting ready for school, and about the whereabouts and activities of different family members. In all, recordings were obtained of conversations with fifteen children, including 9 girls and 6 boys, between the ages of 2;3 and 8;0 (Mean Age = 3;7). The exact ages are shown on Table 1.

Table 1: *Exact ages of children recorded in conversations with mothers, by age range*

Two-year-olds	Three-year-olds	Four-year-olds	Six-to-eight-year-olds
2;3	3;1	4;0	6;1
2;6	3;4	4;2	8;0
2;6	3;8	4;4	
2;8	3;8		
2;11			
2;11			

The recordings were later transcribed by the same native speakers of Quechua who had interacted with the mothers and children in other settings. They yielded a total of 2318 utterances after elimination of those that merely acknowledged what was said with responses such as *ya, ha, aha, hay, han, uhu, a*. These were coded for instances of the evidential clitics *-mi*, *-si*, and *-cha*, as well as for occurrences of the past tense inflections *-sqa* and *-ra-*. The mothers' utterances were also coded for these morphemes.

Results

Direct Evidence -mi

The corpus of 2318 child utterances yielded a total of 218 instances of *-mi*. There were 72 tokens of the negative form *mana-n* (*mana* 'not' + *-mi*). These are not considered in the present

analysis because there is no way of telling whether or not the children produced the form as an unanalyzed amalgam. Additionally, there were 18 instances of the filler *ima-n* (*ima* ‘something’ / ‘what’ + *-mi*), which are also eliminated from the data set, leaving a net total of 128 tokens of the *-mi* suffix.

With respect to the group of two-year-olds, the youngest child, aged 2;3, produced only one constituent with *-mi*, a single instance of negative *mana-n*. Henceforth, this child is eliminated from the analysis since the remaining instances were all produced by the children aged 2;6 to 2;11. They produced a total of 35 tokens of *-mi* in 701 utterances. Most of the instances of *-mi* produced by these two-year-old children occurred in contexts in which production of the suffix is conventional usage in Quechua. These 24 instances include wh-question words, responses to questions, the verb *ni-* ‘say’ used in reporting direct speech, and equi-statements without the copula *ka-*. The ages of the children are shown in the following examples, where ‘M’ indicates ‘Mother.’

wh-question words

(6) 2;6 ima-n ankiy-pa suti-n-qa?
 what-DIR that-GEN name-3PS-TOP
 ‘What’s the name of that?’

(7) 2;11 Ima-ta-n hap’i-sa-nki?
 what-AC-DIR hold-PRG-2SG
 ‘What are you holding?’

responses to questions

(8) M Maria mama-yki, may-ta pasa-n-ri?
 Maria mother-2PS where-AC go-3SG-RESP
 ‘And your Mama Maria, where has she gone?’

2;6 Qusqu-ta-n pasa-n.
Cusco-AC-DIR go-3SG

'She's gone to Cusco.'

- (9) M Waqra-yu-sunki-chu, mana-chu?
butt-AUG-3SUBJ>2OBJ-INTERR, NEG-INTERR
'Didn't it butt you with its horns?'

2;11 Waqra-yu-wa-n-mi
butt-AUG-1OBJ-3SBJ-DIR
'It butted me with its horns.'

Direct speech with *ni-*

- (10) 2;8 Kicha-ra-pu-wa-y qhawa-na-y-paq ni-yki-n.
open-EXH-REG-1OBJ-IMP look at-POT-1SG-BEN say-1SG>2OBJ-DIR
'I say to you, "Open it for me so I can look."'

- (11) M Waka-cha-n-qa ima-ni-spa-n waqa-sqa?
cow-DIM-3PS-TOP what-say-SR-DIR cry-NEPT
'And his cow, what did it say when it cried?'

2;11 "Eee" ni-spa-n.
Eee say-SR-DIR
'Saying, "Eee".'

Equi-statements without copula *ka-*

- (12) 2;8 Kay-qa papa-yki-q-mi.
this-TOP dad-2PS-GEN-DIR
'This is your dad's.'

- (13) 2;11 Chay-mi uwiha.

that-DIR little sheep

'That's a sheep.'

In addition to these conventional contexts, the two-year-olds produced 5 utterances which demonstrate use of *-mi* to express conviction or commitment to particular information. Three children produced utterances (14)-(16) in situations where they anticipated contradiction or wished to correct an interlocutor.

(14) 2;8 tiyu-yki-n qo-wa-n.

uncle-2PS-DIR give-1OBJ-3SG

'Your uncle gave it to me.'

(15) 2;11 Ama, ama, ama! Nuqa-paq-mi, nuqa-paq-mi, yaw!

NEG-PROH pron1SG-BEN-DIR pron1SG-BEN-DIR, hey

'No, no, no! It's for me, it's for me. Hey!'

(16) 2;11 Mana-n chay-nin-ta-chu; (h)aqay-nin-ta-n, (h)aqay-nin-ta-n.

NEG-DIR that-3PS-AC-NEG; that-3PS-AC-DIR

'It's not through there; it's over there, over there'.

In (17)-(18), the children make use of *-mi* to express their firm intention to do something in the future, which may also be considered instances of expressing conviction or commitment.

(17) 2;6 Kunan-mi kunan ri-pu-saq.

now-DIR now go-REG-FUT1SG

'I'll go back now.'

(18) 2;11 Pintula apa-ku-saq, apa-ku-saq-mi.

pintura-(AC) carry-REFL-FUT1SG carry-REFL-FUT1SG-DIR

'I'll take paint.'

In all the previously presented examples of utterances with *-mi*, there is no apparent evidential meaning, i.e., identification of source of evidence as direct observation. However, in the following 2 statements, each indicating where something is (not), the *-mi* suffix may have an evidential function. Example (19) occurred near the end of a monologue several clauses in length in which the child was calling out to the researcher to come back and get a doll. Example (20) occurs near the end of the child's explanation that the teacher has gone off somewhere. In both examples, the suffix appears on the sentence-initial locative constituent.

(19) 2;8 Kay-pi-n muñeka-n ka-sha-n.
 this-LOC-DIR doll-3SG be-PRG-3SG
 'His doll is here.'

(20) 2;11 (h)aqay-lla-pi-n ka-sha-n.
 that-DEL-LOC-DIR be-PRG-3SG
 'He's over there.'

The three-year-old children produced a total of 21 tokens of *-mi* in 577 utterances. In addition to making use of *-mi* in all the previously mentioned contexts, the three-year-olds produced utterances with the morpheme affixed to a wider variety of constituents. In (21)-(22), produced by different children, this morpheme appears on an adverb of manner and the main verb, respectively, which bear the sentence focus. The contexts suggest that use of *-mi* in both utterances indicates conviction or commitment rather than information source.

(21) 3;8 (Child tells mother on how one has to call out to someone else.)
 Ya, ya, fuerte-ta-n rima-na-n riki.
 ya, ya, loud-AC-DIR talk-POT-3SG
 'Yeah, yeah, he has to talk LOUDLY, of course.'

(22) 3;8 (Child tells her mother about the existence of a ghost.)

Marguscha riku-ru-ra-n-mi.

Marguscha see-EXH-PT-3SG-DIR

'Marguscha SAW it.'

In (23)-(25), *-mi* again appears on different focused sentence constituents: an adverb of time, an instrumental adjunct, and the main verb, respectively. Here, the contexts suggest that *-mi* may have an evidential function because the children are directly observing events.

(23) 3;1 (Child is watching a cat.)

Kunacha-lla-n-mi kunan pusa-n pusa-sha-n.

now-DEL-DIR now take-3SG take-PRG-3SG

'JUST NOW, now, it takes it, it's taking it.'

(24) 3;4 (Child is observing how the tape recorder works.)

Luz-wan-mi kay k'anča-sha-n.

light-INSTR-DIR this light-PRG-3SG

'This is lighting up WITH A LIGHT.'

(25) 3;8 (Child is waiting for her father to come home from work.)

Child Hamu-sa-n-mi, (ch)ahay-ta.

come-PRG-3SG-DIR over there-AC

'He's COMING, over there.'

M Hamu-sha-n-ña-chu?

come-PRG-3SG-DISC-INTERR

'Is he already coming?'

The main difference in the performance of the four-year-olds, as compared with that of the three-year-olds, is somewhat greater frequency of production of the *-mi* suffix. These children produced a total of 39 instances of the morpheme in 482 utterances. Except for one

linguistically precocious two-year-old, each two- and three-year-old produced about 5 instances of *-mi* on average. Each four-year-old produced an average of 13 tokens, approximating the number produced by the adults (14-15 on average). As shown in the following 5 examples, the four-year-old children appear to use the morpheme to express certainty /commitment (26-28) as well as to indicate direct observation as information source (29-30).

- (26) 4;0 Chura-ku-n-mi haqnata caset . . . uhu-man-mi chura-ku-n.
 put-REFL-3SG-DIR this way cassette . . . adentro-DAT-DIR put-REFL-3SG
 ‘The cassette is put this way . . . you put it INSIDE.’
- (27) M Ima-ta wayk’u-sun-man-ri.
 what-AC cook-1PL-COND-RESP
 ‘And what should we cook?’
- 4;2 Qowe-ta-n sipi-ru-ku-saq.
 cuy-AC-DIR kill-EXH-REFL-FUT1SG
 ‘I’ll kill myself a CUY.’
- (28) M Chay sombrerochaykiwan churakuy. Manachu umaykita chirisunki?
 ‘Put on this hat of yours. Isn’t your head cold?’
- 4;4 Ari, chiri-wa-n-mi. Hayku-saq-mi ya, hayku-saq-mi.
 yes cold-1OBJ-3SG-DIR enter-FUT1SG-DIR ya enter-FUT1SG-DIR
 ‘Yes, it’s cold. I’ll go in, I’ll go in.’
- (29) 4;2 Qolqe-ta-wan erqe-kuna tari-ru-ku-rqa-nku.
 money-AC-INSTR child-PL find-EXH-REFL-PT-3PL
 ‘The children found themselves (some) money.’
- M Han. (‘Really.’)
- 4;2 Qolqe-ta-n.

- money-AC-DIR
 'Money.'
- (30) M Wallpanchis runtururanchus imaynacha? . . .
 'Could our hen have laid an egg?'
- 4;4 Ka-sa-n-mi.
 be-PRG-3SG-DIR
 'There is (one).'
- M Runtu.
 'An egg.'

Analysis of the utterances produced by the oldest children, ages 6;1 and 8;0, did not yield any noteworthy differences with respect to use of the *-mi* suffix.

Inference -cha

In all, the children produced 26 instances of Inference *-cha*, starting at age 2;11, while the adults produced 64. Both children and adults produced *-cha* in free variation with *-chayki*, which apparently shares the same function/meaning². In what follows, the principal uses of the suffix are presented, including examples produced by both mothers and children. The adults most frequently used the *-cha* suffix to speculate about future actions and proposed plans, in sentences with future and conditional verb forms. In fact, 47% of the adult utterances

² Local informants claim that there is no difference in meaning between *-cha* and *-chayki*. The latter form is probably not a combination of *-cha* and second-person *-yki*. In Ayacucho Quechua, another Southern Peruvian variety, the evidential suffixes are commonly followed by the independent suffix *-ki* (Cerrón-Palomino, 1987). One may speculate that the *-cha/-chayki* variation observed here in Paruro-Cuzco Quechua has been influenced by the Ayacucho variety.

fall into this category, as shown in examples (31)-(33). No child below the age of 4 years produced utterances with *-cha* used in this way. Child examples are presented in (34)-(35).

- (31) M wasi-nchis-cha picha-ru-nki, allichu-ru-nki.
house-1PL.PS-INF sweep-EXH-2SG, put in order-EXH-2SG
'I suppose you'll sweep our house, you'll put it in order.'
- (32) M Ima-ta-taq ruwa-sunchis-ri, puñu-sunchis-chayki.
what-AC-CNT do-1PL-RESP sleep-1PL-INF
'So what shall we do? I guess we'll sleep.'
- (33) M Willa-wa-n-man-chayki ka-ra-n kay-ta, mana willa-wa-n-chu-qa.
tell-1OBJ-3-COND-INF be-PAST-3 this-AC, NEG tell-1OBJ-3-NEG-TOP
'He probably would have told me this; he hasn't told me.'
- (34) 4;2 Kumpa-ra-pa-n-man-cha.
fall-EXH-REG-3SG-COND-INF
'It might fall down.'
- (35) 4;2 Siñura-pis k'ami-ku-wa-n-man-cha.
lady-ADD insult-REFL-1OBJ-3SG-COND-INF
'The lady might insult me.'

Adults also frequently produced the *-cha* suffix on wh-words (25%). In these cases, the suffix might be glossed 'I don't know', 'I wonder', 'I'm not sure'. For example, the interrogative forms, *ima-cha* and *pi-cha* could be glossed as 'I don't know what' and 'I wonder who', respectively. Examples (36)-(38) present adult and child utterances with Inference *-cha* used in this way.

- (36) M Ima-cha ka-ku-n? Mana-n yacha-ni-chu.
what-INF be-REFL-3SG NEG-DIR know-1SG-NEG

'What could it be? I don't know.'

- (37) M May-ta-cha chay Jesus-cha-qa pasa-ku-n-pis.
where-AC-INF that Jesus-DIM-TOP go-REFL-3SG-ADD
'And that Jesus, I wonder where he's gone.'
- (38) 4;2 Ima-ta-cha kunan-kama ruwa-mu-sha-n-pis, llank'a-mu-sha-n.
what-AC-INF now-DEL do-TRL-PRG-3-ADD, work-TRL-PRG-3
'And I'm not sure what s/he's doing up to now; s/he's working.'

Another fairly common occurrence of *-cha* in adult usage appears on locative and directional constituents (8%), illustrated in (39)-(40). Starting at age 2;11, the children quite frequently produced utterances with the suffix appended to locative constituents, as shown in (41)-(42).

- (39) M Erqe-kuna-qa rayqha-y-pi-cha ka-yu-ra-n.
child-PL-TOP irrigation ditch-1PS-LOC-INF be-AUG-PT-3SG
'Maybe the children were in my IRRIGATION DITCH.'
- (40) M Yaurisque-ta-cha ri-sa-n; cambia-sqa-taq ri-sha-n.
Yaurisque-AC-INF go-PRG-3SG; change-RES-CONT go-PRG-3SG
'S/he must be going to YAURISQUE; s/he's going all dressed up.'
- (41) 2;11 (H)aqay pata-pi-cha riki qati-yu-nchis.
that top-LOC-INF of course herd-AUG-1PL
'We probably herd on top of that, right?'
- (42) 4;0 Mosoq wasi-pi-cha ka-sa-n.
new house-LOC-INF be-PRG-3SG
'S/he might be in the new HOUSE.'

Finally, in 9% of the adult utterances with *-cha*, the suffix is appended to verbs or noun phrases in sentences that simply express speculation or conjecture, as illustrated in the following mother and child examples, (43)-(46).

- (43) M Añañaw! T'anta-ta-chayki apa-mu-sha-n
 how nice! bread-AC-INF carry-TRL-PRG-3SG
 'Oh, how nice! He's probably bringing BREAD.'
- (44) M Uña patu-nchis-kuna wañu-pu-n-cha
 little duck-1PL.PS-PL die-REG-3SG-INF
 'Our little ducks might have DIED.'
- (45) 2;11 Kay-ri nuqanchis-pa-chayki; haqay-ri, ankay-ri, chay-ri, qankuna-q-chu
 this-RESP us-GEN-INF, that-RESP, that-RESP, that-RESP, you-GEN-INTR
 'This must be OURS; and that, and that, and that, is it YOURS?'
- (46) 8;0 Mana-n qhawa-ni-pas-chu; runtu-ru-ku-ra-n-pas-cha.
 NEG-DIR look-1SG-ADD-NEG lay-EXH-REFL-PT-3SG-ADD-INF
 'I haven't looked; it probably laid an egg.'

Summary observations: -mi and -cha

The data suggest that children begin producing *-mi* by age 2;6 primarily in contexts that are a matter of conventional usage (i.e., *wh*-questions, answers to questions, equi-statements, on *ni*- 'say' in direct quotations). They also make use of the suffix in utterances expressing conviction or commitment to particular information—certainty—as in first-person future sentences. By the late two's, it is possible that children may start using the suffix to indicate information source (direct evidence), although this is difficult to discern from the conversational context. Overall, the data suggest that two-year-olds first acquire the validational (epistemic) function of *-mi*, especially as contrasted with Inference *-cha*, which emerges productively in the

late two's. That is, their initial uses of *-mi* and *-cha* are confined to expressions of certainty and uncertainty/probability, respectively.

Three-year-olds appear to have acquired the evidential function of *-mi*, and they use Inference *-cha* to make conjectures based on inference. However, it is not until the age of four years that children produce *-mi* as frequently as the adults and acquire adult-like use of *-cha* to speculate about future actions and proposed plans.

Report -si

Very few instances of Report *-si* were encountered in the conversation data. Unlike *-mi*, this enclitic has only one semantic function: to attribute the source of information to what someone else has said. Among the 2318 child utterances, there were only 9 in which *-si* or its allomorph *-s* were encountered, all produced by children aged 4;2 and older. Among the small corpus of 19 tokens produced by the mothers, there are three discernible functions of *-si*: (a) so-called "delayed" mandates (7 tokens); (b) reported information/hearsay (3 tokens); and (c) indirect questions formed either with *wh*-words or in combination with interrogative *-chu* (9 tokens). Examples of the last function produced by the mothers are presented in (47) and (48); there were no such indirect questions produced by the children.

(47) M *uwuha-cha-nchis waqa-y-sha-n. Ima-ta-s ruwa-sun-pis?*
sheep-DIM-1PL.PS cry-AUG-PRG-3 what-AC-REP do-1PL-ADD
'Our little sheep is crying. What (did s/he say) we should do?'

(48) M *Allin-ta-chu-s rima-n mana-chu-s?*
good-AC-INTERR-REP talk-3SG NEG-INTERR-REP
'(I wonder whether) s/he talked well or not.'

Both children and mothers produced delayed mandates (Cusihuamán, 1976). These are directives from third parties, transmitted by the speaker through use of Report *-si*. Examples of these directives produced by mothers and children are presented in (49)-(52).

- (49) M Chaki-n-ta-s susunka-ru-n; qhalqe-ru-nki-s.
 foot-3PS-AC-REP fall asleep-EXH-3SG; scratch-EXH-2SG-REP
 '(He says) his foot fell asleep; (he says) scratch it.'
- (50) M Ama-s llami-nki-chu.
 PROH-REP touch-2SG-NEG
 '(She says) don't touch it.'
- (51) 4;2 Kuti-mu-nki-s.
 return-TRL-2SG-REP
 '(S/he says) come back.'
- (52) 8;0 Chay ladun-ta-s qati-ya-pu-na-n ka-ra-n;
 that side-3PS-AC-REP herd-AUG-REG-POT-3SG be-PT-3SG
 '(S/he said) one had to herd (them) through that side.'
 chaymi hina hayku-chu-n ni-spa . . . ni-wa-n.
 for that reason thus enter-SUBJ-3SG say-SR . . . say-1OBJ-3SG
 'for that reason s/he said to me, "Just let them in."'

Finally, both mothers and children used the *-si* suffix to acknowledge the source of information as what someone else said, as contrasted with direct observation. This function is illustrated in Examples (53)-(56).

- (53) M Atoq-si puri-sha-n.
 fox-REP walk-PRG-3SG
 '(They say) a fox is wandering around.'

- (54) M Yarqa-sa-n-ña-s.
 be hungry-PRG-3SG-DISC-REP
 '(S/he says) s/he's already hungry.'
- (55) 4;4 Hamu-sa-n-si. Seqa-mu-sha-n-ña.
 come-PRG-3SG-REP climb-TRL-PRG-3SG-DISC
 '(They say) he's coming. He's already climbing.'
- (56) 6;1 Mama-y kunan-si bola-ta hayt'a-mu-sunchis.
 mom-1PS now-REP ball-AC kick-TRL-1PL
 'Mom, (they say) we're going to kick the ball today.'

There were so few instances of Report *-si* in the child-mother conversations that the parents of one of the children were asked to record their own adult conversation. This is because the mothers might have avoided using the clitic in child-directed speech during their talks with their children. The adult conversation, 3793 words in length, consisted of 445 exchanges between husband and wife. These spouses produced utterances with *-si*-marked constituents in only 21 of their conversational exchanges, as exemplified in (57)-(58).

- (57) Ima-ta-s apa-nqa-ku-taq-ri?
 what-AC-REP take-FUT-3-PL-CONT-RESP
 'And what (do they say) they will take?'
- (58) Chay-pi waqa-yku-sa-lla-n-si khuyay-ta p'unchay-kuna-pis waqa-ku-n-si.
 that-LOC cry-AUG-PRG-DEL-3-REP sad-AC day-PL-ADD cry-REFL-3-REP
 '(They say) he just cries, he cries sadly for days.'

The Past Tense Morphemes

As mentioned earlier, Quechua speakers use the Past tense suffix *-ra-* (PT) when they have direct perceptual evidence of a past event (Cusihuaman, 1976; Faller, 2004); lacking direct

perceptual evidence, they employ the Non-Experienced Past *-sqa* (NEPT). In the resultative function, the *-sqa* suffix serves to focus on the observed end state, or result, of an action or process. Quechua speakers also use the suffix to background events occurring prior to other events in past time.

Table 2: *Summary of functions of Past inflections produced in conversations by age*

	<i>-sqa</i> (Non-Experienced Past)			<i>-ra-</i> (Past Tense)		
	unaccus/ existence	agentive activity	auxiliary <i>ka-</i>	unaccus/ existence	agentive activity	auxiliary <i>ka-</i>
2;3 – 2;6 (3 children)				1		
2;8 – 2;11 (3 children)	5	---	---	8 (5)	6	---
3;1 – 3;8 (4 children)	12	2	1	3 (1)	21	1
4;0 – 4;4 (3 children)	16	6	1	2 (2)	15	2
6;1 and 8;0 (2 children)	31	6	1	11 (3)	20	3
adult (15 adults)	73	46	---	33 (14)	114	24
Total:	137	60	3	59	175	30
(30 speakers)	(30%)	(13%)	(0.5%)	(12.5%)	(38%)	(6%)

As shown on Table 2, in the conversation data, *-sqa* is especially prevalent in verbs expressing changes-of-state and existence, as well as in unaccusative movement verbs equivalent in

meaning to *go, come, enter*, etc., when the intention is to focus on the observed end state of the movement. In like manner, the table shows that both mothers and children were more likely to mark agentive (volitional) verbs with *-ra-*. Since movement verbs can also be construed as agentive, they occurred quite frequently with Past tense *-ra-*. (These are indicated on the table in parentheses.) Finally, the adults, in particular, used the suffix on *ka-* in its function as an auxiliary verb (e.g., *apa^waq ka-ra-n* ‘you would have taken’; *apanayki ka-ra-n* ‘you had to take’), as illustrated in (59a). As shown in (59 b-c), adults also produced *-sqa* on agentive verbs to ‘background’ events.

- (59) (a) Maskha-ra-mu-waq ka-ra-n riki.
 look for-EXH-TRL-2COND be-PT-3SG of course
 ‘Of course, you could have looked for it.’
- (b) Kay patu-n kay punku-pi hisp’a-ru-sqa chay-ta picha-ra-mu-nki.
 this duck this door-LOC urinate-EXH-NEPT that-AC sweep-EXH-TRL-2
 ‘You swept where his/her duck had urinated on this door.’
- (c) Qati-ya-m-pu-ra-nki-s-chu?
 herd-AUG-TRL-REG-PT-2-PL-INTERR
 ‘Did you go and herd (the animals)?
 Q’achu-ta-pis qara-ra-mu-sqa-nki-chis riki .
 fodder-AC-ADD serve-EXH-TRL-NEPT-2-PL of course
 ‘And you’d given them fodder, of course.’

In the utterances produced by the three younger two-year-olds, aged 2;3 to 2;6, there was only one past-inflected verb form, with copula *ka-* bearing Past Tense *-ra-*: *Anchaypi ka-ra-n wayqecha* ‘In that place was my brother’. The three older two-year-olds, aged 2;8-2;11, produced the remaining 19 past-inflected verb forms, including 15 tokens of *-ra-* and 5 tokens of *-sqa* on

unaccusative/existence verbs. The totals shown on Table 2 for this age group are deceiving because a single child, aged 2;11, produced 16 of the verb forms, including all but one of the *-ra-* inflected verbs. The child produced only 2 instances of *-sqa*, both on unaccusative/existence verbs. As shown in the utterances in (60), this child appropriately used *-sqa* to focus on the end state of ‘going’ in (a) and *-ra-* on agentive verbs, including the causativized change-of-state verb *chinka-chi* ‘cause to disappear = lose’ in (c).

- (60) (a) (h)aqay-manta-ma ri-sha-sqa, (h)aqay-man. [unaccusative verb]
that-ABL-IMPR go-PRG-NEPT that-DAT
‘He is gone from over there to over there.’
- (b) Mama-y, anchay naranja-ta qo-ku-ra-ni. [agentive verb]
mom-1PS that orange-AC give-REFL-PT-1SG
‘Mommy, I gave (him/her) that orange.’
- (c) Chinka-ra-chi-mu-ra-ni. [causativized verb]
disappear-EXH-CAUS-TRL-PT-1SG
‘I lost it.’
- (d) Uray-ta-chayki pasa-y-ra-n, prosor-niy-qa.
down-AC-INF go-AUG-PT-3SG teacher-1PS-TOP
‘My teacher probably went down.’

There is nothing in these examples that deviates from adult use of the two Past forms; however, some adult functions are not represented in the utterances produced by the two-year-olds. The children did not make use of *-sqa* on agentive verbs, either to indicate lack of perceptual evidence or to background events that occur prior to other events in past time. Additionally, they did not produce any utterances using *ka-* as an auxiliary verb.

As shown in Table 2, these functions appear to emerge gradually in child production. Nonetheless, children's verbs exhibit the basic distinction between *-sqa* for expressing end states or results and *-ra* for expressing agentive action at least by the age of 2;11.

Discussion

Analysis of the conversational exchanges is suggestive: there is no way of establishing conclusively from production data whether or not children actually assign evidential meaning to the five morphemes. The problem is compounded by the multifunctional nature of two of the suffixes, Direct Evidence *-mi* and Non-Experienced Past *-sqa*. Additionally, perhaps because the evidential enclitics are optional elements in Quechua conversation, few exemplars were encountered. That said, analysis of the conversational contexts in which adults and children produced the forms suggests a developmental sequence in production.

The evidential enclitics

1. Direct evidence *-mi* emerges in child production during the mid to late two's, with Inference *-cha* appearing shortly thereafter. Two-year-olds produce *-mi* primarily in conventional contexts of use, such as wh-questions and responses to questions; possibly, they assign no meaning to the suffix in these contexts. However, they appear to use *-mi* in utterances expressing certainty or conviction—the validational (epistemic) function—especially as contrasted with Inference *-cha*, which conveys the meaning of uncertainty or conjecture based on inference. There is no evidence in the data that two-year-olds use *-mi* to encode information source as direct evidence, especially considering that they do not produce Report *-si*, which would express a contrast in information source. Is it possible to be certain of something without understanding the source of one's conviction? Apparently so, judging from Matsui et al.'s (2006) finding that Japanese children, aged 3- to 6-years-old, are better at interpreting certainty contrasts than evidential contrasts.

2. The data suggest that three-year-olds begin producing *-mi* in its evidential function, although *-si*, the contrasting Report evidential, does not appear in the data until the age of four years.
3. This sequence is similar to that observed by Aksu-Koç (1988) for Turkish children. In Turkish, the direct evidence morpheme emerges first in child production; thereafter, children acquire the inferential meaning of the indirect evidence morpheme before acquiring the hearsay (report) construal.

The Past Tense suffixes

1. Children produce both suffixes, Past Tense *-ra-* and Non-Experienced Past *-sqa*, by the mid to late two's. The distinction observed in the two-year-olds' use of these inflections lies in the lexical semantics of the verb roots. The children use *-sqa* exclusively in unaccusative/ existence verbs and not on verbs expressing events under the volitional control of an agent. This suggests that children are not yet aware of the semantic distinction between perceived and unperceived past events; otherwise, they might produce an agentive verb with *-sqa* to indicate that the corresponding event was backgrounded or not directly perceived. The children produce unaccusative/ existence verbs and agentive verbs with *-ra-* when they construe the event as being under the volitional control of an agent.
2. By the age of four, Quechua-speaking children start using the Past Tense suffixes in the same functions as adults. This suggests that they have begun to attribute to *-sqa* the notion of past events not directly perceived.

STORY RETELLINGS

Procedure

A native speaker of Quechua assembled small groups of children for story telling. The group included the target participant and other children, often older siblings, who accompanied the participant. The researcher told a story to the children while enacting the events with toy

figures of people and animals. He then invited the child to retell the story. In total, 13 retellings were collected, all produced by children between the ages of 2;6 and 5;7 (Mean Age = 4;3).

As shown on Table 3, three different stories, averaging 430 words in length, were used to elicit the story retellings. One story, herein labeled “The Dog”, tells the story of a good dog that saves two children from being bitten by a snake. A second story, called “The Donkey”, recounts how a donkey helps a man recover a rope stolen by a sly fox. In the third story, “The Condor”, a condor takes a fox to a party in the sky; later, the fox can’t get back down to earth when the condor flies away without him. Most of the children heard and retold the last story; the other stories were used in case the participants had heard about “The Condor” from other children.

Table 3: *Ages of children who heard and retold each of three stories*

	Two-year-olds	Three-year-olds	Four-year-olds	Five-year-olds
Condor	2;6	3;8	4;2	
	2;9	3;9		
		3;10		
Donkey			4;2	5;5
			4;5	5;7
Dog			4;1	5;3
				5;5

The researcher told the stimulus stories using all the morphemes appropriately, i.e., the evidentials *-mi*, *-si-*, *-cha*, and the past tense suffixes, *-sqa* and *-ra*. This included use of the

evidential markers for focusing constituents, as required in the narrative. All of the renditions of the researcher's stories were recorded and transcribed by native speakers of Quechua, as were the children's retellings. Thereafter, the retellings were coded for instances of the five morphemes: *-mi*, *-si*, *-cha*, *-sqa*, and *-ra*.

Results

Before discussing the story retellings produced by the children, we should consider essential features in adult story telling. In what follows, three segments of the Condor story (a, b, c) are presented as it was told by the researcher to the children, each comprising both straightforward narrative and direct quotations. The noteworthy aspects are underlined in both the original Quechua and the English glosses. For example, the first two words, *huk pacha-s*, literally, 'one time-REPORT' are underlined because they are a conventional beginning in Quechua stories, akin to English 'once upon a time'. The Report *-si* affix appended to this expression serves to identify the narrative as hearsay. There are two other salient characteristics in the adult story telling: verb form and evidential marking.

With respect to the verb inflections, the different uses of three forms are particularly noteworthy: Non-Experienced Past *-sqa* (NEPT), *-ra*- Past (PT), and $-\emptyset$ - Non-Past (NONPT). Whenever verbs occur in straightforward narrative, they are marked either in Non-Experienced Past or in Non-Past. Faller (2004) refers to this use of *-sqa* as the Reportative Past, the appropriate form in myths and folktales. Quechua speakers use the Non-Past in the narrative to make the account more vivid; accordingly, this form produces an effect similar to that of the English historical Present, e.g., *qaparimun kay suwa atoq* 'shouts this thieving fox'. The only verb form inflected in Past Tense appears in directly quoted material: *imana-ra-yki* 'what did I do to you?'. The direct quotations also include Non-Past, Future, and Conditional verb forms.

A similar dichotomy is observed in the evidential marking. Direct Evidence *-mi* (DIR) appears only within direct quotations, e.g., *k'uturusaq-mi washaykita* 'I will cut your rope' and *Taytachaykichis-mi urmaymushani* 'I, YOUR FATHER, am falling'. Inference *-cha* (INF) occurs rarely and only in direct quotations, i.e., *urma-ya-pu-y-man-cha* 'I would probably fall'. (This evidential morpheme will not be discussed in what follows because it occurs only twice in directly quoted material cited by two children, aged four- and five-years.) By contrast, Report *-si* (REP) occurs throughout the actual narrative, including fixed forms such as *chay-si*, *chaymanta-s* 'then' and *hinaspa-s* 'and so'. To sum up, there is a clear demarcation between actual narrative and directly quoted material which reveals the distinct stances of the storyteller and the story characters. The storyteller is a reporter of events not actually witnessed, whereas each character speaks from direct experience.

Excerpts from the Condor story

(a) *Huk pacha-s kay atoqcha huyaylla tiyakushasqa karan wank'a patachapi. Chaymantataq-sis*
One time-REP this fox was sitting sadly at the top of a crevice. And then-REP
huk kuntur volaspa rihurimu-sqa . Hinaspa tapu-sqa kay atoqta, "Compadre, imamantataq
 a condor flying appear-NEPT Then he ask-NEPT this fox, "Friend, why
huyayri kashankiri?" nispas tapu-n. Kay atoqchataq-si kutichi-sqa,
 are you so sad?" saying-REP he ask-NONPT This fox-REP reply-NEPT
"Cielupis fiesta kashan. Chayman-mi mana riyta atinichu, chayrayku huyay kashani."
 "There's a party in the sky. There-DIR I can't go and for that reason I'm sad."
Phawaylla-s askhata ichhuta huñuramu-n-ña. Chaywan-si washata k'uyuyu-n;
Quickly-REP he gather-NONPT a lot of grass. With that-REP he make-NONPT a rope;
chayqa warkuyamu-n-si washata.
 then he hang-NONPT-REP the rope.

(b) *Chay-si kay lorchataq kutiramu-n*, “Yaw atoq! Imamantataq k’amiwasankiri?”

then-REP the parrot reply-NONPT, “Hey, fox! Why do you insult me?”

Nuqari imana-ra-yki-taq? Ya sichus hukpi k’amimanki chayqa k’uturusaq-mi washaykita,”

And what I do-PT to you? If you insult me again, then I will cut-DIR your rope,”

nispa-s kay lorucha nimu-n.

saying-REP the parrot say-NONPT.

“Chayta ruwaruwanki chayqa urma-ya-pu-y-man-cha riki, wañurapuyman. Ama wayqey!”

“If you do to that me, I would probably fall-INF and I would die. Don’t, my brother!”

(c) “*Qhawariy! Auxilio! Socorro! Pampaman mast’aychis ponchuta, llikllata.*

“Look! Help! Help! Lay out ponchos and blankets on the ground.

Taytachaykichis-mi urmaymushani,” *nisparaqtaq-si qaparimu-n kay suwa atoq*

I, your Father-DIR am falling,” saying-REP shout-NONPT this thieving fox.

Runakuna wasinmanta phawari-sqa-ku; chayqa runakunaqa rikuru-sqa-ku.

People from their houses run-NEPT ; then the people see-NEPT (him).

Retellings by two- and three-year-olds

The youngest child invited to retell a story was aged 2;6. The child produced a total of six sentences, with a great deal of coaxing and scaffolding from older children who were listening. The child produced only 6 verbs, including 2 in Non-Past and 4 uninflected roots or stems. There were no evidentials in the retelling, although the last word uttered was *chaychis* (for *chaysi* ‘then-REP’), occurring at the end of a sentence where it made no sense. The excerpt from the retelling presented in (61) shows the child’s utterances as well as his brother’s intervention (B).

- (61) 2;6 Comi-__ aha-(y)-ta atoq.
 eat-Ø chicha?-AC fox
 'The fox eat_ chicha.'
- B "Urma-yu-sqa atoq" ni-y wayqe-y.
 fall-AUG-NEPT fox say-IMPER brother-1PS
 'Say "the fox fell", my brother.'
- 2;6 Atoq urma-yu-n anchay.
 fox fall-AUG-3SG that.
 'The fox falls, that.'

It is clear from this exchange that, even when the Non-Experienced Past is modeled by the child's brother, he does not produce it. The second two-year-old, aged 2;9, produced a longer retelling—14 sentences—although he, too, required some coaxing. In the narrative portions of the retelling, the child used the Non-Experienced Past consistently for both unaccusative and agentive verbs except for two instances of Non-Past, but there were no Report evidentials. The child marked 5 constituents with Direct Evidence *-mi*, twice in the actual narrative (fixed form *chaymanta-n* 'then-DIR and *nanukuna-n* for *runakuna-n* 'people-DIR'). The three *mi*-marked constituents in the directly quoted material included two instances of *mana-n* (NEG-DIR 'no; not'), in addition to the utterance shown in (62).

- (62) 2;9 May-ta tatichiski-mi (for tata-yki-chis-mi) urma-y-mu-sha-ni?
 where-AC your-PL father-DIR fall-AUG-TRL-PRG-1SG
 'Where am I your Father falling?'

The verb forms produced in this retelling are adultlike, whereas the child has not yet sorted out the evidential morphemes.

The retellings produced by the 3 three-year-olds averaged 15 sentences in length. Although none of the children required any coaxing, the sequencing of events is muddled in all of the narratives; that is, the children recall the most important events in the story, but they present them out of order. Two of the children, aged 3;8 and 3;9, produced the Non-Experienced Past *-sqa* consistently in the actual narrative for both unaccusative and agentive verbs, producing just a few Non-Past and Future forms in directly quoted material. There were no instances of Past Tense *-ra-* in their retellings. While the younger of the two children produced no evidential morphemes, the older child produced *chaychis* (for *chaysi* 'then-REP) five times during the narrative. This child also marked a single constituent with Report *-si*, although the corresponding sentence did not reflect events in the original story: *Punchukunata-s apaymusha-sqa* 'They say he was taking ponchos'. The oldest child, aged 3;10, produced the two Past Tense inflections, *-sqa* and *-ra-*, in free variation, in the narrative portion of her retelling. Her only *-si*-marked constituent was the opening convention, *huk pacha-s* 'once upon a time'. Thereafter, she used *-mi* only in self-directed wh-questions which were not actually part of the retelling. Three sentences from her retelling are presented in (63).

- (63) (a) Chay-manta-qa urma-yu-mu-ra-n; tayta-cha-manta hina-ku-sqa
that-ABL-TOP fall-AUG-TRL-PT-3; Father-DIM-ABL do as-REFL-NEPT
'Then he fell; he acted like the Father.'
- (b) Estaka-ta taka-ra-nku; rumi-ta-pu-wan chura-sqa-nku.
stake-AC nail-PT-3PL; stone-AC-REG-INSTR put-NEPT-3PL
'They nailed stakes; and they put stones.'
- (c) chay-manta-taq . . . imani-nku-n? imani-nku-mi?
that-ABL-CNT what say-3PL-DIR what say-3PL-DIR
'And then . . . what did they say? what did they say?'

Examples (a)-(b) show the child's inconsistent use of the Past Tense alternatives, while (c) includes self-directed wh-questions, marked with Direct Evidence *-mi*.

Retellings by four-year-olds

On average, the retellings produced by the 6 four-year-olds are the same length as those produced by the three-year-olds. All the four-year-olds used the Non-Experienced Past or the Non-Past in the narrative portions of their retellings, with production of other verb forms, such as Future and Conditional, confined to directly quoted material. There was only a single instance of Past Tense *-ra-*, occurring in a direct quotation provided by one of the oldest children, aged 4;6. Most of the four-year-olds produced very few constituents marked in Report *-si*. In fact, three children did not use the suffix at all, and another produced only one instance, the fixed form *chaymanta-s* 'then-REP'. A fifth four-year-old produced four *si*-marked forms. One was the first word in his retelling, *atoq-si* 'there was a fox', and the other three were the fixed form *chaymanta-s*. Only the youngest child in the group, aged 4;1, produced Report constituents consistently. There were 14 instances in her retelling; however, 11 of these were the fixed form *chay-si* 'then-REP'. Example (64) presents sentences from her retelling: the sequence in (a) illustrates the child's ability to manipulate verb forms in narrative and direct quotations, while (b) demonstrates her use of Report *-si* in the narrative portion.

- (64) (a) Mama-n-ta tapu-sqa, "Betucha-ta may-tay pusa-sha-ni?"
 mom-3PS-AC ask-NEPT Beto-AC where-AC take-PRG-1SG
 'He asked his mom, "Where am I taking Beto?.'
 Chay-si ni-sqa, "Waq-a-y-chi-mu-waq-taq pero," ni-spa ni-sqa.
 then-REP say-NEPT cry-CAUS-TRL-COND-CNT but say-?? say-NEPT
 'Then she said, "But be careful not to make him cry," she said.'

- (b) Chay-si alqu-cha-n-sis mana-s uyari-ka-mu-sqa-chu.
 then-REP dog-DIM-3PS-REP NEG-REP hear-REFL-TRL-NEPT-NEG
 ‘And so his little dog didn’t hear him.’

With respect to Direct evidence *–mi*, there were only 4 instances produced by three different children, all occurring in directly quoted material. One child, aged 4;6, used the suffix inappropriately in the narrative portion. Additionally, in attempting to produce sentences with subordinate clauses, he had trouble with same-reference and switch-reference morphemes. To express sequential action through subordination of the earlier event, Quechua speakers make use of two affixes: Same Reference *–spa* (SR) indicates that the subject of both actions is the same entity, while Switch Reference *–qti-* (SWR) indicates that the subjects are different. Example (65) presents errors produced by this child, together with the intended versions.

- (65) (a) Hinaspa macha-ru-qti-n-taq, secu-ta puñu-ya-pu-sqa.
 then get drunk-EXH-SWR-3SG-CNT dry-AC sleep-AUG-REG-NEPT
 ‘Then, after he₁ got drunk, he₂ slept soundly.’

Intended:

Hinaspa macha-ru-spa-taq, secu-ta puñu-ya-pu-sqa.
 then get drunk-EXH-SR-CNT dry-AC sleep-AUG-REG-NEPT
 ‘Then, after he₁ got drunk, he₁ slept soundly.’

- (b) Hinaspa-n rikch’a-ru-qti-n, may huyay-lla waqa-yu-sqa chay-pi.
 then-DIR awaken-EXH-SWR-3SG sad-DEL cry-AUG-NEPT that-LOC
 ‘Then, when he₁ woke up, he₂ cried there very sadly.’

Intended:

Hinaspa-s rikch’a-ru-spa, may huyay-lla waqa-yu-sqa chay-pi.
 then-REP awaken-EXH-SR sad-DEL cry-AUG-NEPT that-LOC

'Then, when he₁ woke up, he₁ cried there very sadly.'

(c) K'utu-ra-m-pu-s̄pa urma-y-mu-n.

cut-EXH-TRL-REG-SR fall-AUG-TRL-3SG

'After he₁ cut it, he₁ fell.'

Intended:

K'utu-ra-m-pu-q̄ti-n urma-y-mu-n.

cut-EXH-TRL-REG-SWR-3SG fall-AUG-TRL-3SG

'After he₁ cut it, he₂ fell.'

The other four-year-olds did not exhibit problems with these subordinating morphemes, perhaps because they made few attempts at subordination. However, their narratives lacked clarity because all of the four-year-olds, to a greater or lesser extent, failed to identify actors or speakers. In fact, in one retelling, the child never mentions the main character, although she recounts most of the actions the character performs in the story. Nonetheless, in contrast to the three-year-olds, the four-year-olds have no difficulty sequencing the events in their retellings.

Retellings by five-year-olds

Compared to the retellings of the younger children, there are two noteworthy differences in those produced by the five-year-olds. First, the narratives are more coherent: the events are well-sequenced, reference in subordinate clauses is clear, and the actors and speakers are adequately identified. Second, the retellings exhibit greater use of Report *-si*, not only in fixed forms, but also on verb forms, infinitive complements, subjects, and direct objects. Sample excerpts from the retellings are presented in (66)-(67). In the sequence of sentences shown in (66), it is clear that the child manipulates the verb forms required for narrative and direct quotations and produces Report *-si* on a variety of constituents, e.g., fixed forms and infinitive complements.

- (66) 5;3 Chay-si huk'ucha hatunkaray Jose-cha-ta qati-kacha-yu-sqa.
 that-REP snake enormous Jose-DIM-AC follow-SIM-AUG-NEPT
 'Then an enormous snake followed Jose all over the place.'
 Mikhu-ru-y-ta-s muna-yu-sqa.
 eat-EXH-INFIN-AC-REP want-AUG-NEPT
 'It wanted to eat him.'
 "Papay, huk'uchacha mikhu-y-ta muna-yu-wa-sa-n!" ni-spa ni-yu-n.
 dad snake eat-INFIN-AC want-AUG-1OBJ-PRG-3 say-SR say-AUG-NPT
 "'Daddy, a snake wants to eat me!" he says.'

Examples (a) and (b) in (67) show that the child uses the Non-Experienced Past for the narrative portions and the Past Tense within directly quoted material. In like manner, he marks constituents in the narrative portions in Report *-si* while appropriately employing Direct Evidence *-mi* in direct quotations.

- (67) 5;7 (a) Juancha-s waka-ta qati-sqa.
 Juan-REP cow-AC herd-NEPT
 'Juan was herding his cows.'
 Chay-si ch'in, ch'in, ch'in wayq'o-pi puñu-ra-pu-sqa.
 then-REP silent, silent, silent ravine-LOC sleep-EXH-REG-NEPT
 'Then he slept in a silent, silent, silent ravine.'
- (b) "Waskha-y-ta, wayqe-y, suwa-ru-wa-nku.
 rope-1PS-AC brother-1PS steal-EXH-1OBJ-3PL
 "'Brother, they've stolen my rope.
 Pi-n, wayqe-y, suwa-ru-wa-ra-n-pis?" ni-spa.
 who-DIR brother-1PS steal-EXH-1OBJ-PT-3SG-ADD say-SR

'Who stole it, my brother?' he said.'

Chaymanta-taq, "Chay-mi waqa-spa chay-pi puri-sha-ni."

then-CT for this reason-DIR cry-SR that-LOC walk-PRG-1SG

'And then, "That's why I was going around crying there."'

Finally, there is evidence in all these examples that the five-year-olds are simple better storytellers than their younger counterparts. In addition to recounting events with greater clarity, these children use more colorful adjectives and provide more vivid dialogue.

For the three- to five-year-old children, summaries by age group of the observed tendencies in story construction, production of the past tense suffixes, and use of the evidential enclitics are presented in Tables 4, 5, and 6, respectively.

Table 4: *Coherence and sentence structure observed in retellings by three- to five-year-old children*

	Three years (3)	Four years (5)	Five years (4)
<i>coherence</i>	muddled sequence of events	actors and speakers often not identified	events well-sequenced; actors and speakers are adequately identified
<i>sentence structure</i>	infrequent subordination	subordination, with problems in same-reference/switch-reference morphology	clear reference in subordinate clauses

Table 5: *Production of past tense forms in retellings by three- to five-year-old children*

	Three years (3)	Four years (5) and Five years (4)
<i>-sqa</i>	Consistent use by 2 children in narrative	Consistent use in narrative (also Non-Past)
<i>-ra-</i>	1 child used <i>-ra-</i> in free variation with <i>-sqa</i> in narrative	2 instances, both in quoted speech
Other	in quoted speech	in quoted speech

Table 6: Use of evidential enclitics in retellings by three- to five-year-old children

	Three years (3)	Four years (5)	Five years (4)
- <i>si</i>	<u>Narrative:</u> <i>chaychis (chay-si)</i> 2 others	2: none 2: a few fixed forms 1: 11 fixed forms; 4 others	Frequent use of fixed forms; also on varied constituents
	<u>Quotes:</u> none	none	none
- <i>mi</i>	<u>Narrative:</u> none	1 token: <i>hinaspa-n</i>	1 token: <i>hinataq-mi</i>
	<u>Quotes:</u> none; 2 tokens in self-directed questions	2 wh-questions; 2 instances of <i>kunan-mi</i>	2 tokens: fixed form <i>chay-mi</i> ; wh-question <i>pi-n</i>

Discussion

Like the conversation data, the retellings show that children begin producing Direct Evidence *-mi* from the mid to late two's without assigning evidential meaning to the suffix. With respect to Report *-si*, very limited production is observed in the retellings of the three-year-olds. It is not until the age of four to five years that children make consistent use of the Report suffix in the narrative portion of the retellings, with Direct Evidence *-mi* confined to directly quoted material. Particularly noteworthy in the retellings is the early distinction observed in the two past tense forms. With the exception of one three-year-old, all the children between the ages of 2;9 and 5;7 consistently produced the *-sqa* form in the narrative portions of their retellings, whether or not the verbs were unaccusative/existence or agentive.

It would appear that children have acquired a very early understanding of the concept of events unperceived, as indicated by their consistent production of *-sqa* in storytelling; and yet, the Report evidential enclitic surfaces in child production much later. In this regard, Mushin (2000: 932) notes that in Macedonian, which observes a similar distinction in the past

tense forms, the counterpart of *-sqa* used in storytelling “does not index the information to any specific source or type of source but rather asserts that the information is not indexed to the experiencer.” In other words, narrators make use of this morpheme to distance themselves from story events. In the Quechua-speaking world, storytellers conventionally use *-sqa* in narratives because the events in myths and folktales are distant not only in time but also from reality. Floyd (1994: 162) comments, “We understand there to be a greater psychological distance between the speaker and the original information source with a folktale than with prototypical hearsay.” It is therefore plausible that, in story retellings, Quechua-speaking children’s use of *-sqa* in its reportative function—and probably even Report *-si*—is genre-specific.

CONCLUSION

Faller (2002, 2006a, 2006c) and Aikhenvald (2004) present compelling arguments that the Quechua enclitics are purely evidential, with validation meanings assigned as epistemic extensions. In like manner, Quechua linguists (e.g., Cerrón-Palomino, 1987; Cusihumán, 1976) have established that the core meaning of the *-sqa* suffix is the absence of direct perception of events in past time. The resultative and reportative functions of the inflection fall under this overarching semantic category. Nonetheless, the conversation and retelling data presented in this study suggest that child development of the Quechua evidential system starts off with the extensions and secondary meanings.

Like their Turkish and Korean counterparts (Aksu-Koç, 1988; Choi, 1995), Quechua-speaking children begin producing the Direct Evidence morpheme in everyday speech at the age of two years. The meanings children assign to the suffix progress from mere affirmation (Courtney, 1999) to conviction/certainty to direct evidence. They appear to acquire the certainty contrast between *-mi* and Inference *-cha* before the evidential contrast between *-mi*

and Report *-si* (cf. Matsui et al. for Japanese). With respect to Non-Experienced Past *-sqa*, children's early production in everyday speech is confined to unaccusative/existence/change-of-state verbs, the prototypical resultative function. However, even children as young as two years know that *-sqa* is the appropriate past tense form in storytelling—the reportative function. It is plausible that children do not acquire the core meanings of the Quechua evidential enclitics and past tense inflections until they begin producing Report *-si* at the approximate age of four years. Accordingly, this study presents converging evidence that the acquisition of evidential systems across languages is a protracted process, progressing in tandem with the development of conceptual understanding of information sources.

ACKNOWLEDGEMENTS

I would like to extend heartfelt thanks to Héctor Castillo and Marilú Cusi for their invaluable collaboration in the data collection and transcription phases of this project.

REFERENCES

- Adelaar, W. (1977). *Tarma Quechua: Grammar, texts, dictionary*. Lisse: De Ridder.
- Aikhenvald, A. (2004). *Evidentiality*. Oxford, UK: Oxford University Press.
- Aksu-Koç, A. (1988). *The acquisition of aspect and modality: The case of past reference in Turkish*. Cambridge, UK: Cambridge University Press.
- Aksu-Koç, A. (2000). Some aspects of the acquisition of evidentials in Turkish. In L. Johanson & B. Utas (Eds.), *Evidentials: Turkic, Iranian and neighboring languages* (pp. 15-28). Berlin: de Gruyter.
- Bloom, P. & German, T.P. (2000). Two reasons to abandon the false-belief task as a test of theory of mind. *Cognition*, 77, B25-B31.
- Calvo Pérez, J. (1993). *Pragmática y gramática del Quechua Cuzqueño*. Cuzco, Peru: Centro de Estudios Rurales Andinos "Bartolomé de las Casas".
- Chafe, W. & Nichols, J. (Eds.), (1986). *Evidentiality: The linguistic coding of epistemology*. Norwood, NJ: Ablex.
- Choi, S. (1995). The development of epistemic sentence-ending modal forms and functions in Korean children. In J. Bybee & S. Fleischman (Eds.), *Modality in grammar and discourse* (pp. 165-204). Amsterdam: Benjamin.
- Cerrón-Palomino, R. (1987). *Lingüística Quechua*. Cuzco, Peru: Centro de Estudios Rurales Andinos "Bartolomé de las Casas".
- Courtney, E. H. (1998). *Child acquisition of Quechua morphosyntax*. Doctoral dissertation. University of Arizona, Tucson, Arizona.
- Courtney, E. H. (1999). Child acquisition of the Quechua affirmative suffix. *Santa Barbara Papers in Linguistics. Proceedings from the Second Workshop on American Indigenous Languages*, 30-41. Department of Linguistics, University of California, Santa Barbara.

- Cusihuamán, A. (1976). *Gramática Quechua Cuzco-Collao*. Lima, Peru: Ministerio de Educación/ Instituto de Estudios Peruanos.
- De Haan, F. (2001). The place of inference within the evidential system. *International Journal of American Linguistics*, 67, 193-219.
- Faller, M. (2002). The evidential and validational licensing conditions for the Cusco Quechua enclitic –MI. *Belgian Journal of Linguistics*, 16(1), 7-21.
- Faller, M. (2004). The Deictic core of ‘Non-Experienced Past’ in Cuzco Quechua. *Journal of Semantics*, 21(1), 45-85.
- Faller, M. (2006a). The Cusco Quechua reportative evidential and rhetorical relations. URL <http://semanticsarchive.net/Archive/zRmNmFjN/Faller-CQ-reportative-sdrt.pdf>.
- Faller, M. (2006c). Evidentiality and epistemic modality at the semantics/pragmatics interface. URL <http://www.eecs.umich.edu/~rthomaso/lpw06/fallerpaper.pdf>.
- Floyd, R. (1993). *The structure of Wanka Quechua evidential categories*. Doctoral dissertation. University of California, San Diego.
- Floyd, R. (1994). The Wanka reportative as a radial category: A study in prototypes. In P. Cole, G. Hermon & Martin, M. (Eds.), *Language in the Andes* (pp. 151-189). Newark, DE: Latin American Studies.
- Floyd, R. (1996). Experience, certainty and control, and the direct evidential in Wanka Quechua questions. *Functions of Language*, 3(1), 69-93.
- Fodor, J. (1992). A theory of the child’s theory of mind. *Cognition*, 44, 283-296.
- Lazard, G. (2001). On the grammaticalization of evidentiality. *Journal of Pragmatics*, 33, 359-367.
- Lefebvre, C. & Muysken, P. (1988). *Mixed categories: Nominalizations in Quechua*. Dordrecht: Kluwer Academic Publishers.

- Mannheim, B. & Van Vleet, K. (1998). The dialogics of Southern Quechua narrative. *American Anthropologist*, 100(2), 326-346.
- Matsui, T., Yamamoto, T. & McCagg, P. (2006). On the role of language in children's early understanding of others as epistemic beings. *Cognitive Development*, 21, 158-173.
- McCormick, P. & Olson, D. (1991). Quechua children's theory of mind. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Seattle, WA.
- Mushin, I. (2000). Evidentiality and deixis in narrative retelling. *Journal of Pragmatics*, 32, 927-957.
- Muysken, P. (1995). Focus in Quechua. In K. Kiss (Ed.), *Discourse configurational languages*. Oxford, UK: Oxford University Press.
- Nuckolls, J. (1993). The semantics of certainty in Quechua and its implications for a cultural epistemology. *Language in Society*, 22, 235-255.
- Papfragou, A. (2002). Mindreading and verbal communication. *Mind & Language*, 17 (1&2) , 55-67.
- Papfragou, A., Li, P., Choi, Y. & Han, C. (2007). Evidentiality in language and cognition. *Cognition*, 103, 253-299.
- Perner, J. (1991). *Understanding the representational mind*. Cambridge, MA: MIT Press.
- Perner, J., Leekam, S. R. & Wimmer, H. (1987). Three-year-olds' difficulty with false belief: The case for a conceptual deficit. *British Journal of Developmental Psychology*, 5, 125-137.
- Plungian, V. (2001). The place of evidentiality within the universal grammatical space. *Journal of Pragmatics*, 33, 349-357.
- Vinden, P. (1996). Junín Quechua children's understanding of mind. *Child Development*, 67, 1707-1716.

- Weber, D. (1986). Information perspective, profile, and patterns in Quechua. In W. Chafe & J. Nichols (Eds.), *Evidentiality: The linguistic coding of epistemology* (pp. 137-155). Norwood, NJ: Ablex.
- Wellman, H. M., Cross, D. & Watson, J. (2001). Meta-analysis of theory of mind development: The truth about false-belief. *Child Development, 72*, 655-684.
- Wimmer, H. & Perner, J. (1983). Beliefs about beliefs: Representation and constraining function of wrong beliefs in young children's understanding of deception. *Cognition, 13*, 41-68.
- Whorf, B. L. (1956). In J. Carroll (Ed.), *Language, thought and reality*. Cambridge, MA: MIT Press.
- Willett, T. (1988). A cross-linguistic survey of the grammaticization of evidentiality. *Studies in Language, 12*(1), 51-97.

APPENDIX

INDEPENDENT SUFFIXES

1. Connecting or coordinating suffixes

Contrastive	-taq	CNT
Topic	-qa	TOP
Responsive	-ri	RESP
Additive	-pis	ADD

2. Evidentials, interrogative, and negation

Direct evidence	-mi/-n	DIR
Inference	-cha/-chayki	INF
Report	-si/-s	REP
Interrogative	-chu	INTERR
Negation	mana	NEG
Prohibition	ama	PROH

3. Other

Impression	-ma	IMPR
Discontinuative	-ña	DISC
Delimitative	-lla-	DEL

NOUN SUFFIXES

1. Case inflections

Accusative	-ta	AC
Dative	-man	DAT
Locative	-pi	LOC
Benefactive	-paq	BEN
Ablative	-manta	ABL
Instrumental	-wan	INSTR
Genitive	-pa/-q	GEN

2. Person-of-Possessor (singular)

1 PS	-y
2 PS	-yki
3 PS	-n

3. Other

Plural	-kuna	PL
Diminutive	-cha	DIM

VERB SUFFIXES

1. Person-of-subject

1 singular	-ni	1SG
2 singular	-nki	2SG
3 singular	-n	3SG
1 plural	-nchis	1PL
2 plural	-nki-chis	2PL
3 plural	-n-ku	3PL
1 future	-saq	1FUT
1 plural future	-sun	1FUT.PL
Conditional	-man/-waq	COND
Imperative	-y	IMPER

2. Person-of-object (singular)

1 object	-wa-	1OBJ
1 subject => 2 object	-yki	1SUBJ>2OBJ
3 subject => 2 object	-sunki	3SUBJ>2OBJ

3. Tense and aspect

Non-Past/ Present	Ø	NONPT
Past Tense	-ra-/-rqa-	PT
Non-Experienced Past	-sqa	NEPT
Progressive	-sha-/-sa-	PRG
Potential	-na-	POT

4. Infinitive and subordinators

Infinitive	-y	INFIN
Same reference	-spa	SR
Switch reference	-qti-	SWR

5. GF-changing suffixes

Causative	-chi-	CAUS
Reflexive	-ku-	REFL

6. Directional suffixes

Translocative	-mu-	TRL
Regressive	-pu-	REG

7. Modifying suffixes

Exhortative	-ru-/-ra-	EXH
Augmentative	-y(ku)-	AUG
Simulative	-kacha-	SIM