MDPI

*Article*

# Acquisition, Loss and Innovation in Chuquisaca Quechua—What Happened to Evidential Marking?

**Susan E. Kalt**

Language Department, Roxbury Community College, Boston, MA 02120, USA; skalt@rcc.mass.edu

**Abstract:** Variation among closely related languages may reveal the inner workings of language acquisition, loss and innovation. This study of the existing literature and of selected interviews from recent narrative corpora compares the marking of evidentiality and epistemic modality in Chuquisaca, Bolivian Quechua with its closely related variety in Cuzco, Peru and investigates three hypotheses: that morpho-syntactic attrition proceeds in reverse order of child language acquisition, that convergence characterizes the emergence of grammatical forms different from L1 and L2 in contact situations, and that the Quechua languages are undergoing typological shift toward more isolating morphology. It appears that reportive *-sis* disappeared first in Bolivia, with eyewitness/validator *-min* retaining only the validator function. This finding seems to concord with reverse acquisition since it has previously been claimed that epistemic marking is acquired earlier than evidential marking in Cuzco. Meanwhile, Spanish and Quechua in nearby Cochabamba are claimed to mark reportive evidentiality via freestanding verbs of saying. I explore the reportive use of *ñiy* 'to say' in Chuquisaca as compared to Cochabamba and Cuzco and suggest the need for comparative statistical studies of evidential and epistemic marking in Southern Quechua.

**Keywords:** Quechua; acquisition; attrition; convergence; typological shift; bilingualism; evidentiality

## 1. Introduction

What is the relationship between theories of language acquisition, loss and change? Additionally, which areas of grammar are resilient in comparison to more vulnerable areas of grammar? Predominant theories idealize monolingual speakers, but recently bilingual and heritage speakers have gained attention, enriching our understanding of the human language faculty (Benmamoun et al. 2013). The current study is intended to open a broad inquiry into the status of evidential and epistemic morphemes in the variety of Quechua spoken in rural communities of Chuquisaca, Bolivia. These communities were selected for their relatively high incidence of Quechua dominance and rich use of discourse-related enclitics (Laime Ajacopa 2014), nevertheless, internal and external processes of change have been at work in the region, producing divergence from the closely related variety spoken in Cuzco, Peru.

Evidential marking is an important phenomenon to investigate because it is a distinctively non-European feature of Andean languages. Bolivian Quechua is unusual within the Quechua language family because it has been claimed to have lost morphological marking of direct and indirect information sources in the present or unmarked tense (Muntendam 2015, p. 222[1]; Dankel and Soto Rodríguez 2012, p. 102), although the evidentiality distinction is apparently preserved in the past tense and is marked via the freestanding verb *ñiy* 'to say' (Dankel and Soto Rodríguez 2012, p. 100). These facts lead us to ask a series of questions: (A) What forces would lead a population of speakers to abandon markers of a grammatical category in their native language while transferring its semantic features to their second language? (B) Additionally, to what degree is the marking

---

[1] Muntendam's 2015 study investigates focus rather than evidentiality; however, both are realized by the same enclitics in Southern Quechua.

of evidentiality similar or dissimilar in Bolivian Quechua from its 'parent' language in Cuzco? (C) Is there a variety of Bolivian Quechua where evidential enclitics are still in use? In this article I will explore three hypotheses: morpho-syntactic attrition occurs in reverse order of child language acquisition (Montrul 2013, p. 212); convergence characterizes the emergence of new grammatical forms different from L1 and L2 in contact situations (Sánchez 2003); and the Quechua languages are undergoing typological shift toward more isolating morphology (Hintz 2011, 2016).

The hypothesis that late-acquired elements are more vulnerable to change than early ones is testable for Southern Quechua (quz, quh) since Courtney (2015) has sketched a developmental sequence for evidential marking in rural Cuzco child Quechua. Based on spontaneous production, story retellings and a reliability judgment task, she claims that the markers *–mi/m* (certainty) and *–chá* (conjecture) emerge first as markers of focus and certainty in the early twos and threes. Reportive evidential *–si/s* emerges and solidifies between four and six and so do perspectival and evidential discourse distinctions marked by past tense *-r(qa)* and *–sqa* in narratives.

If the reverse acquisition hypothesis is correct, we would expect reportive evidential expressions to be vulnerable to change earlier than expressions of certainty and focus in Quechua. If we were to find a variety in which evidential suffixes were nearly obsolete, particularly one in which reportive *-si/s* disappeared before validational *-mi/m* and conjectural *-chá*, the reverse acquisition hypothesis would find initial support. If we were to find that reportive evidentiality is beginning to be marked via freestanding words rather than suffixes in both Quechua (a language that traditionally marks this distinction through agglutinating morphology) and Spanish (a language that traditionally only marks evidentiality lexically or clausally), the convergence hypothesis would find support, as has already been claimed for the contact variety of Spanish by Babel (2009), and for both Spanish and Quechua in Cochabamba by Dankel and Soto Rodríguez (2012). The typological shift hypothesis, which traces the post-contact surge in auxiliary verb constructions expressing aspect around the Quechua language family (Hintz 2011, 2016) would find support in the same set of facts as the convergence hypothesis, for overlapping reasons related to the influence that Spanish and Quechua exert on each other. Namely, the convergence hypothesis recognizes the clustering of new functional feature combinations at the level of grammatical categories in the bilingual mind, and the typological shift hypothesis recognizes that suppression of suffix formation and increased production of freestanding verbs contribute over time to a more isolating morphology. The three hypotheses taken together offer a bigger picture of the complex forces at work in the region.

By searching the literature for instances of evidential and epistemic marking in Bolivia at large, I aim to establish an initial baseline of what has been observed about them to date. Since I am not aware of any studies of these phenomena specific to Bolivian Quechua, I will complement the literature search with a qualitative case study of evidential marking in one of the most conservative varieties spoken in Bolivia and compare it to the language of Peruvian (Cuzco Quechua) speakers with relatively matched characteristics. My hope is to prepare the way for a more in-depth frequency comparison of the two varieties, and to gain an initial sense of how the language is evolving in Bolivia.

Chuquisaca hosts one of the Bolivian varieties still featuring a small degree of monolingualism among adults, and this article marks a first analysis of evidential marking found in recently collected corpora recorded among nearly two hundred children and adults in both Cuzco and Chuquisaca, analyzed and glossed by native speakers of each variety (Kalt 2009, 2016). Presuming that any findings would be relevant to changes in many other of the world's morphologically complex endangered languages, this study of two closely related varieties of an indigenous L1 in contact with a post-colonial language takes on particular urgency. Thus, the current article has relevance to linguistic description, linguistic theory and to those who wish to apply an understanding of language acquisition, loss and innovation to what happens in communities and classrooms where native, second and heritage languages are spoken.

Today, there are over 1.6 million speakers of Quechua in southwest Bolivia and north-west Argentina (Eberhard et al. 2019), and the variety spoken in rural areas of Chuquisaca is anecdotally believed to be one of the most conservative in Bolivia. In 2001, 220,739 speakers in Chuquisaca identified Quechua as their first language (UNICEF and FUNDOPROIB Andes 2009). Varieties of Quechua spoken in Central and South Bolivia are assumed to be descendants of Cuzco Quechua (Torero 1964; Cerrón-Palomino 1987; Mannheim 1991; Durston 2007).[2]

This article will proceed as follows: Section 2 situates the morphological marking of evidentiality among the world's languages and among the languages of the South American Andes and Amazon. For an overview of relationships within the Quechua family of languages which crucially establishes the comparability of the communities from which original data were drawn, I refer the reader to Section 2 of "Typological shift in bilinguals' L1: Word order and case marking in two varieties of child Quechua" (Kalt and Geary, this volume). Section 3 traces the values attributed to evidential markers in Cuzco Quechua and the developmental sequence identified by Courtney and specifies predictions of the reverse acquisition hypothesis in relation to that sequence. Section 4 tests these predictions against mentions of evidential enclitics and past tense markers in the existing literature on Bolivian Quechua, and motivates the additional investigation of free-standing verbs as both quotive and reportive markers in Southern Quechua. Section 5 presents results of a qualitative empirical study; here I compare the evidential morphemes and words found in selected interviews of adults from Cuzco and Chuquisaca (Kalt 2009, 2016). Section 6 contains a discussion, conclusions and next steps. A sample narrative elicitation instrument appears in Appendix A.

## 2. Evidentiality in the World at Large

Language typologist Aikhenvald (2015, p. 1) introduces evidentiality in the following way: "Every language has a way of saying how one knows what one is talking about, and what one thinks about what one knows. In some languages, one always has to specify the source on which the information is based—whether the speaker saw the event, or heard it, or inferred it based on visual evidence or on common sense, or was told about it by someone else. This is the essence of evidentiality, or grammatical marking of information source".

According to the World Atlas of Language Structures, a survey gathered by the Max Planck Institute for Evolutionary Anthropology, in a sample of 418 languages, when one excludes lexical markers of information source such as 'John is **reportedly** ill' and biclausal markers such as '**It is said that** John is ill', there are 181 languages which lack evidential marking, 166 languages which grammatically mark only indirect evidence, and 71 languages which mark both direct and indirect evidence. All three types of languages are found on every continent, though the indigenous languages of the Americas stand out in that they frequently mark at least indirect evidence and do so via verbal affixes and clitics in addition to separate particles and tense markers (de Haan 2013). Cuzco Quechua belongs to the most restrictive group mentioned by de Haan, as it marks both direct and indirect evidence in the unmarked or present tense; however it is less morphologically elaborated than some of the languages studied by Aikhenvald that subdivide modes of sensory perception and types of inference and ways of knowing. Quechua has distinctive past tense markers for direct and indirect evidence. The marking of evidentiality is not obligatory in Cuzco Quechua although its absence may imply direct evidence according to Faller (2002a, p. 14).

Attempts have been made to disentangle evidentiality from epistemic mood and to address both of their representations at the crossroads of syntax, semantics and pragmatics (e.g., de Haan 1999; Speas 1999, 2003, 2010; Kalsang et al. 2013). An important strand of investigation of evidentiality explores its deictic properties at the level of larger discourses such as narratives, see especially Mushin (2001) who analyzed reportive speech in English,

---

2　Hintz suggests that the Quechua spoken in Chuquisaca may never have had evidential markers (pc).

Japanese and Macedonian narratives, building upon Langacker's (1990) work on linguistic iconicity and subjectification. The importance of this work on the deictic function of evidential markers is that it highlights how they allow speakers to indicate shifts in perspective (onstage vs. offstage in the story world) and in levels of identification with what they are saying. In Quechua, evidential markers are claimed to fulfill all three functions, as well as marking information structure: distinguishing focused or foregrounded information from topics or backgrounded information. Thus, we will be considering morphemes and words that have multiple meanings and functions, indicating information source, epistemic mood, speaker perspective and stance, and information structure.

The social importance of mastering an evidential system cannot be underestimated. Just as a lack of attribution of sources is considered offensive and indicative of questionable moral character in Western academic writing, a lack of reportive evidential marking is considered pretentious or mendacious in many Andean cultures (Babel 2009; Hardman 1986).

## 3. Evidentiality and Its Acquisition in Cuzco Quechua

The Quechua family of languages is agglutinative/polysynthetic and makes heavy use of morphological case to indicate grammatical function. Constituents tend to be head-final, with Subject-Object-Verb order, although main clauses may exhibit free word order, due to fronting of elements marked for focus via evidential enclitics. Affixation works left to right, and evidential enclitics are considered independent markers, meaning that they can attach to a variety of word categories; they attach at the rightmost edge of words.

Cuzco Quechua is one of the languages which has separate enclitics to mark both direct and indirect evidence in the present or unmarked tense; these fall under the subset of enclitics which mark focus, according to Cusihuamán Gutiérrez (1976, p. 240). They always appear at the end of the words and are mutually exclusive with each other. Cusihuamán notes that *-mi* and *-si* attach to syllables ending in consonants, while their allomorphs *-m* and *-s* attach after vowels.

Here, are some examples taken from Courtney (2015, p. 106)[3]. It should be noted that since Quechua evidential enclitics are also focus markers, in all three of these sentences, Xwan is the focused element. Courtney translates these as referring to events in the past, although they could equally be in the present as they are in the unmarked or non-future tense.

(1)     *Xwan-**mi***          *chaya-mu-n.*
         Juan-DIREV          arrive-CIS-3nearby
         '(Speaker has witnessed that) Juan has arrived/It is Juan who has arrived.'

(2)     *Xwan-**si***          *chaya-mu-n.*
         Juan-INDEV          arrive-CIS-3
         '(Speaker has been told that) Juan has arrived/It is Juan who has arrived.'

(3)     *Xwan-**chá***          *chaya-mu-n.*
         Juan-CONJ          arrive-CIS-3
         '(Speaker infers/supposes that) Juan has arrived/It is Juan who has arrived.'

The evidential system also extends to past tense markers; *-rqa* expresses the speaker's experienced past, while *–sqa* expresses information the speaker did not experience personally, or was not consciously aware of at the time it took place. *-sqa* is also associated with observed end states and resultatives '*it turned out that*' and mirativity or surprise

---

3   The following glossing conventions are used in this paper: DIREV 'direct evidence'; 1 '1st person subject'; 1OBJ '1st person object'; 1OBJ2 '1st person object 2nd person subject'; 1POS '1st person possessive'; 2OBJ '2nd person object'; 3 '3rd person subject'; 3 '3rd person subject'; 3 POS '3rd person possessive nominal'; 3OBJ '3rd person object'; 3PL '3rd person plural subject'; AC 'accusative'; AD 'additive'; ADV 'adverbial'; AFIRM 'affirmation'; AG 'agentive'; BEN 'benefactive'; CINT 'complement of interrogative pronoun'; CIS 'cislocative'; CONJ 'conjecture'; CONJ 'conjecture'; CONTR 'contrastive'; DAT 'dative'; DIM 'diminutive'; DISC 'discontinuative'; DUB 'dubitative'; DYN 'dynamic'; EMPH 'emphasis'; EUF 'euphonic'; FUT 'future'; GER 'gerund'; INCH 'inchoative'; INDEV 'indirect evidence'; INT 'intensifier'; LIM 'limitative'; NEG 'negative'; OBL 'obligative'; PAR 'participle'; POT 'potential'; PROG 'progressive'; XPST 'experienced past'; NXPST 'non-experienced past '; REF 'reflexive'; SEQ 'sequential'; STAT 'stative'; SUBS 'subordinator with same subject'; TOP 'topic'; VAL 'validation'. Parentheses are used to indicate optionality.

(Manley 2015, p. 145). The following examples illustrate use of the two types of past tense markers in Cuzco:

(4)      *Xwan*            *chaya-mu-**rqa**-n*
         Juan            arrive-cis-xpst-3
         'Juan arrived (directly perceived)'

(5)      *Xwan*            *chaya-mu-**sqa**-0*
         Juan            arrive-cis-nxpst-3
         'Juan arrived (not directly perceived)'

Notice that unlike the evidential enclitics, the past tense markers are associated with information source but not information structure; in other words, they do not express whether the information is old (topic) or new (focus).

A rich, growing and often controversial literature has explored the multiple meanings and functions of the evidential enclitics and past tense morphemes mentioned above; for a concise and relevant overview see Courtney (2015, pp. 106–12); I have particularly consulted Cusihuamán Gutiérrez (1976) and Faller (2002a, 2002b, 2004) in relation to Cuzco Quechua; Nuckolls (2008) for correlates in Ecuadorian Pastaza Quichua; Howard (2012) for Huamalíes; and Hintz (2007) for South Conchucos, the latter two being Central Peruvian varieties less closely related to Chuquisaca than Ecuadorian or Cuzco Quechua. Nuckolls, Howard and Hintz in particular explore the deictic role of evidential enclitics and past tense suffixes in narratives. Closely interwoven with these markers are instances of the verb of saying, which are excluded from de Haan's taxonomy and not considered by Courtney. I will return to discussion of verbs of saying in Section 4.

Nuckolls and Howard make clear and compelling cases for understanding evidential markers as indicators of speaker stance and perspective within a distinctly Andean world view and dramatic storytelling tradition. Both Nuckolls and Howard refer to work comparing Macedonian, English and Japanese narratives by Mushin (2001). Nuckolls develops an application of this theory to the Andean context, showing that evidential morphemes express shifts among subjective voices. For example, the *speaking self* within a story frequently uses the direct evidence enclitic and either non-past or experienced past tense markers, while the *speaking other* would tell the narrative from a vantagepoint of distance with its corresponding markers (Nuckolls 2008, p. 68). Howard shows that a gradual shift from narrative voice to direct experience correlates with a shift in stance in the mind of the narrator with regard to ever-increasing intimate knowledge of the story content being related. Hintz (2007) demonstrates that in South Conchucos, different past tense markers are used to denote different portions of a narrative; one marker even expressing speaker affect in relation to the storyline; this affective past tense marker is not used in the Southern Quechua varieties we are examining, but rather demonstrates how deeply tied to speaker evaluation and subjectivity these markers can become.

Table 1 summarizes meanings of Cuzco Quechua evidential morphemes in speech and narratives:

**Table 1.** Pragmatic values of evidential enclitics and past tense suffixes in Cuzco.

| Morpheme | Info Source | Epistemic Mood | Info Structure | Stance |
| --- | --- | --- | --- | --- |
| *-mi/-m* | direct evidence | certainty, commitment | focus (new info) | self, proximal |
| *-si/-s* | indirect evidence, hearsay | contextually determined | focus (new info) | other, distal |
| *-chá* | conjecture, inference | Potentiality, uncertainty | focus (new info) | |
| *-r(q)a* | experienced past | certainty, commitment | – | self, proximal |
| *-sqa* | non-experienced past | contextually determined | – | other, distal |

Courtney (2015) notes that Faller (2002a, pp. 177, 204) distinguishes among the three focus enclitics *-mi, -si and -chá,* claiming it is possible to separate evidential meanings from epistemic ones, but only in the case of the reportive *-si.* Courtney (2015, p. 108) states that "Linguists largely concur that CONJECTURE *-chá* has both evidential and epistemic import, while REPORTIVE *-si* serves only the evidential function of marking information as hearsay." Nevertheless, Babel (2009) notes that reportive evidential markers play a social role, one that is contextually determined, such as "casting doubt, framing gossip, distancing oneself, or indicating empathy".

Courtney (2015, pp. 112–36) conducted three experiments in rural highlands Cuzco communities to explore the acquisition of this complex evidential system by children ages two to six as compared to adults. Based on spontaneous production, story retellings and a reliability judgment task, Courtney found that the markers *-mi* and *-chá* emerged first in the early twos and threes as markers of focus and certainty/potentiality, respectively. The reportive enclitic *-si* whose epistemic value is contextually determined did not emerge until age four or later in Cuzco.

A similar developmental sequence was found by Courtney among the past tense markers in spontaneous conversation. Very young children first produced *-r(q)a* for agentive action vs. *-sqa* for end states on unaccusative verbs. In addition, children as young as the late twos recognized that *-sqa* is used to narrate stories and began producing it in narrative contexts but had not mastered the ±direct evidence distinction among past tense suffixes in their spontaneous conversations. Three-year-olds demonstrated comprehension of the contrast in epistemic mood or degree of certainty between *-mi* and *-chá*, but not the evidential contrast between *-mi/-rqa* vs. *-si/-sqa*. It was not until age four that children began to produce reportive *-si* and eyewitness *-mi* as well as reliably sorting out the perspectival and evidential discourse distinctions marked by past tense *-r(q)a* and *-sqa* in narratives, a protracted process that continued into age six.

Courtney explained these results by attributing them to maturation of theory of mind, following a tradition in the literature on child acquisition of evidentiality in Turkish, Korean, Japanese, English, and Tibetan including Papafragou (2002), de Villiers et al. (2009) and numerous other researchers reviewed in her article. Interest in the acquisition of evidentiality remains a hot topic (Saratsli et al. 2020). It is important to note that there is no reason to believe that theory of mind degrades among children or adults learning a second language. Thus, some other explanation unique to the experience of bilingualism must be sought to explain the relative vulnerability of late-acquired elements. One way to explain this is to note that two linguistic systems constantly compete for expression in the bilingual mind. Children who have already acquired the focus and epistemic values of *-mi* and *-chá* by the time they begin learning Spanish will have had more opportunities to develop strong associations with those constituents, while later acquired evidential values such as direct evidence, indirect evidence and conjecture will have less time to develop strong associations as they must simultaneously compete with any Spanish evidential expressions, or lack thereof, that the child might be learning.

The clearest finding of Courtney's three experiments is that evidential meanings, and particularly the reportive marker *-si*, emerge in children's comprehension and production significantly later than the markers *-mi* and *-chá* to indicate certainty and potentiality, around age four years as opposed to age two. Thus, if the de-acquisition hypothesis were true, we would predict that the morpheme *-si* in its reportive function would be more vulnerable to loss and change than other morphemes in contexts of language contact.

## 4. Evidential Markers in the Literature on Bolivian Quechua

A starting point for identifying the distribution and interpretation of the evidential enclitics used in Chuquisaca is to search for them in the indexes, tables of contents and texts proper of Bolivian grammar books. I have surveyed works written in the last 50 years by linguists, with regionally identified examples, omitting a number of prescriptive works and those that cite Peruvian sources for relevant examples. For readers unfamiliar with

Bolivian geography, note that the department of Chuquisaca is geographically adjacent to Cochabamba (to the north) and Potosí (to the west) where Quechua is commonly spoken, as well as Santa Cruz (to the east) and Tarija (to the south), where it is less common. Results of this survey are found in Table 2 below, organized first by region and second by year of publication. A first glance at the chart seems to support the reverse acquisition hypothesis, since all three enclitics are mentioned, but only values related to certainty and focus appear for *-min*, and use of *-sis* is rarely observed. *-chá* which has both evidential and epistemic value but belongs to an inferential rather than perceptual category, seems the least changed in the literature when comparing Cuzco Quechua with Bolivian varieties.

**Table 2.** Evidential enclitics found in the literature on Bolivian Quechua.

| Author | Variety | *-min* | *-sis* | *-chá* |
|---|---|---|---|---|
| Albó (1960) | Mainly Cochabamba | affirmation (noted as less frequent than Peru or Ecuador) | - | 'maybe, I don't know' |
| Lastra (1968) | Cochabamba | certainty | reportive[4] | conjecture |
| Herrero and Sánchez de Lozada (1978) | Mainly Cochabamba | emphasis, certainty | - | listed in index, omitted from text |
| Muntendam (2015) | Cochabamba | archaic/obsolete | archaic/obsolete | archaic/obsolete |
| Bills et al. (1969) | Norte de Potosí, La Paz, Sucre, Cochabamba | factual | - | conjecture |
| Plaza Martínez (2005) | Pan-Bolivian | soft affirmation | - | possibility |
| Peralta Zurita (2006) | Norte de Potosí (Yambata) | focus, eyewitness, certainty, emphasis | - | conjecture |
| Stark et al. (1971) | Sucre = Chuquisaca | emphatic | reportive | Conjecture |
| Laime Ajacopa (2014) | Chuquisaca | validator | - | conjecture |

The only two studies that give examples of *-sis* are Lastra (1968) for Cochabamba and Stark et al. (1971) for Sucre/Chuquisaca. Lastra (1968, p. 41) mentions all three enclitics: a certainty marker *-min*; conjectural *-chá*; and reportive *-sis* although the latter seems to be infrequent in her corpus. On Lastra's page 66 a conversational text is provided about how wheat is harvested and processed, and notably, there is not a single instance of any evidential enclitics[5]. Her data were collected from eleven consultants ages 28–72 who were natives of communities around the city of Cochabamba. Example 6 shows reportive *-sis* from Lastra (1968, p. 41)'s corpus:

(6)  *belas*      *ruwa-ku-n-man-***sis**
     candles      make-REF-3-POT-**INDEV**
     'they say he used to make candles for himself'

Stark et al. (1971, p. 147) give two examples of reportive *-sis* generated by speakers from Chuquisaca:

(7)  *pay-qa*      *sumaq*      *hampiri-***sis**
     she-TOP      good      curer-**INDEV**
     'it is reported that she's a good curer'

(8)  *chay-pi-***sis**      *wasi*      *ka-chka-n*
     there-TOP-**INDEV**      house      be-PROG-3
     'it is said that there is a house there'

Examples 7–8 would lead us to believe that more conservative varieties of Bolivian Quechua might preserve the use of *-sis*. Nevertheless, a study of pragmatics conducted in 2000 in rural communities of Chuquisaca (Laime Ajacopa 2014) found not a single instance

---

4   Lastra (1968, p. 41) also claims that *-sá* is an allomorph of the reportive evidential marker *-sis* in Cochabamba Quechua but the two instances of *-sá* in her corpus appear to be misparsed instances of *-chá*: *hamun-man-***sá** 'That he is coming is doubted'; *qosallay-***sá** *llank'an-man kasqa* 'It is said that my husband would work'. In this second example, reportive meaning can be derived from *-sqa* without recourse to any reportive value for *-sá*.

5   The author thanks Dan Hintz (pc) for this observation.

of reportive *-sis*; while *-min* and *-chá* were found and discussed. The enclitic *-min* appeared only among 0.2% of utterances, only in contexts where no predicative verb was present, and only as allomorph *-n* or as an unmarked or zero morpheme. Laime Ajacopa identified the zero morpheme via his interpretation of the larger discourse, and indicated where it would go in a different variety of Quechua, presumably Cuzco (Laime Ajacopa 2014, pp. 109–10). Below are two of Laime Ajacopa's examples of *-n* and zero as allomorphs of *-min*:

(9)  *hallp'a-**n***          *ancha*     *pisi*
     piece.of.land-**VAL**     very        small
     'the piece of land is very small'

(10) *pero*   *hina-man*        *hina-**ø***       *paykuna-pis*   *suphri-nku*
     but      like.this-DAT     like.that-**VAL**   they-also       suffer-3PL
     'they suffer this way and that'

Based on Laime Ajacopa's study, I would not expect to find frequent instances of *-sis* or *-min* in everyday conversation in Chuquisaca. In Potosí department to the west, an example of the rarely uttered enclitic *-min* was documented in Peralta Zurita (2006, pp. 232–33), who examined 14 h of recorded interviews of 20 native speakers ages 12–79. The speaker is a girl describing her own removal of curls put in her hair by a teacher; see below:

(11) *simp'a-ku-ni*   *urayku-lla-n-**min***
     braid-REF-1      down-LIM-3POS-**EMPH**
     'I sure combed them right out'

Since Peralta Zurita only gives a single example of *-min,* we have no way to evaluate her attribution of the values "focus, eyewitness, certainty, emphasis" to it, values for which she cites the Peruvian as well as Bolivian literature.

One author, Albó, comments explicitly on the rarity of *-min* in Bolivia compared to its use in Peru. Another author, Plaza Martínez (2005, p. 94), originally from Norte de Potosí gives several examples of *-min* used for soft affirmation in answers to questions, and used to indicate that the speaker is attempting to remember something when *-min* is attached to an interrogative word. He also gives a couple of examples of apparent focus-fronting, e.g.,

(12) *Tatay-**min***      *allin-ta-qa*       *llamk'a-n*
     father-**AFIRM**     good-ADV-TOP        work-3
     'My father, yes, he works well'

The above survey of the Bolivian literature suggests that attrition might be proceeding in reverse order of acquisition in two ways: the reportive enclitic *-sis* is attested in only two of the nine works consulted; furthermore, the evidential meaning of *-min* as firsthand information is mentioned in only one case and there it is ambiguous, seeming equally likely to encode an epistemic meaning of certainty or affirmation while retaining pragmatic functions of focus or emphasis. In other words, the values that are acquired late by children in Cuzco appear to be used rarely if at all in most Bolivian varieties. As for the Chuquisaca region, one study finds speakers able to generate *-sis* (Stark et al. 1971) while another finds no examples of *-sis* in a corpus of spontaneous speech (Laime Ajacopa 2014). These findings are suggestive rather than conclusive, in part since the works consulted belong to different genres and presumably employed different types of elicitation task; an issue that will be remedied in Section 5 through comparison of corpora matched for task type and population characteristics.

*Verbs of Saying in the Evolution of Evidential Systems Worldwide and in Bolivia*

Recall that in the World Atlas of Language Structure survey of evidentiality among the world's languages, lexical markers of information source such as *reportedly* and full clauses such as *it is said that* are not counted among the grammatical markers of evidentiality. Nevertheless, lexical expressions of quoted and reported speech are a known pathway for new evidential forms to arise among the world's languages. For example, Korean, which resembles Quechua in that it is a morphologically complex, head-final language, has evolved its current system of evidential suffixes from a phonetically elided verb *ha* 'to say' (Ahn and Yap 2014). Similarly, clausal and nominalized expressions of quoted and

reported speech provide well-worn historical pathways to the formation of evidentials in many languages (Aikhenvald 2015, sct. 5.3).[6]

According to Herrero and Sánchez de Lozada (1978, p. 471, translations mine)'s study of Cochabamba, Bolivian Quechua, speakers are claimed to prefer to employ direct quotation when reporting the speech of others and mark it singly or doubly with a conjugated or nominalized form the verb of saying *ñiy* at the end of a sentence, as in the following seven examples:

(13)     *hamu-saq*     **ñi-n.**
         come-1FUT     say-3
         'I will come, he/she said.'

(14)     *hamu-saq*     **ñi-spa**         **ñi-n**
         come-1FUT     say-SUBS          say-3
         'I will come, he/she said.'

An indirect quotation or report of the speech of a specific individual equivalent to 13 and 14 above is also possible but less frequently used, according to Herrero and Sánchez de Lozada (1978):

(15)     *hamu-na-n-ta*              **ñi-n**
         come-OBL-3POS-AC           say-3
         'He said that he will come.'

Herrero and Sánchez de Lozada (1978, pp. 472–73) list a few additional sentences in which the verbs of saying precede clauses containing indirect reported speech, but claim that this is a less preferred and less frequent, Hispanified way of quoting speech. It is not clear whether preposing the verb of saying is what makes it less preferred, or whether it is the stacking of subordinated clauses rather than simply quoting directly. For example:

(16)     *Tata*      *Nemesio*     **ñi-wa-n**       *mana*     *hallp'as-ni-yki-ta*
         Mr.        Nemesio       **say-1OBJ-3**     NEG       lands-EUF-2OBJ-AC

         *qarpa-q*      *hamuy-ta*      *ati-sqa-n-ta*
         water-AG       come-AC         able-PAR-3POS-AC
         'Mr. Nemesio told me that he isn't able to come water your lands.'

Nevertheless, Dankel and Soto Rodríguez (2012, p. 100, 106–8) make the explicit claim that in Quechua, verbs of saying should come at the end of sentences unlike in Andean Spanish where the reportive particle *dice* 'he/she says, it is said' or *dizque* can be placed more liberally around the sentence and seems to be on the road to becoming a reportive evidential adverb. Dankel and Soto Rodríguez also give an example in which *ñispa* is used to quote a person's internal thoughts, as in 'I said to myself'.

To summarize this section we should note that variations on three forms of the verb of saying are used frequently for quotive and reportive speech in Bolivian Quechua; that these verbs are frequently doubled as in *ñispa ñin* 'saying he said'; that direct quotation is preferred; and that sentences containing verbs of saying often occur mixed or juxtaposed with sentences containing verbs marked with the reportive/narrative/indirect evidence or non-experienced past tense marker *-sqa*. A final note regarding the verb of saying in Quechua is that the line is easily blurred between quoted speech attributed to a particular individual, and reported speech attributed to general knowledge or hearsay. This blurring is partially enabled by the fact that Quechua is a language in which verbs can appear without explicit subjects, number is marked only loosely and gender is not marked grammatically at all. Thus, a single expression *ñin* can mean 'he said', 'she said' or 'it is said'.

A number of researchers around the Andes have noted that a reportive verbal particle *dice* or *dizque* with roughly the same features as Quechua *ñin* is becoming popular; and this has been attributed to the phenomenon of convergence (among others, Sánchez 2004; Babel 2009; Dankel and Soto Rodríguez 2012). For example, Sánchez (2004) states that "Convergence, the common specification for equivalent functional features in the two languages

---

6   Teófilo Laime Ajacopa (pc) suggests that homophony of the Quechua reportive enclitic and Aymara third person verb of saying 'si' is not a coincidence and may reflect contact at an earlier stage.

spoken by the bilingual in a language contact situation, takes place when the languages have partially similar matrices of features associated with the same functional category. Frequent activation of the two matrices triggers convergence in features." Convergence in the expression of past tense marking has been attested in Peru and Ecuador as well as in Bolivia (Klee and Ocampo 1995; Sánchez 2004; Babel 2009; Babel and Pfänder 2013; Dankel and Soto Rodríguez 2012).

Convergence in quotive and reportive marking is observable even in some of the earliest recorded contact between the two languages, as claimed by Harrison (1989) who notes that a manuscript by L2 Spanish speaker Santacruz Pachacuti Yamqui S. dating back to 1613 uses many instances of Quechua-influenced conventions for quoting and marking unspecified information source. I cite her observation as Example 17:

(17)      *entonces el moco o nuevo ynga* **dicen que dixo**: *abran esa puerta* . . .
         'then **they say** the young man or the new Inca **said**: open that door . . . '
         (Santacruz Pachacuti Yamqui Salcamaygua [1613] 1927; Harrison 1989, p. 74)

The emergence of a verb of saying as a reportive particle in Andean Spanish and the robust use of a similar verb in Quechua should be mutually reinforcing in the minds of bilinguals in this region. This would lead me to wonder whether the flexible placement of *dice* in Spanish might also begin to apply to *ñin* in Quechua. I repeat the questions posed in the introduction to this paper: (A) What forces would lead a population of speakers to abandon markers of a grammatical category in their native language while transferring its semantic features to their second language? (B) Additionally, to what degree is the marking of evidentiality similar or dissimilar in Bolivian Quechua from its 'parent' language in Cuzco? (C) Is there a variety of Bolivian Quechua where evidential enclitics are still in use?

It appears that our literature review has allowed us to come up with a preliminary and partial set of answers for the first and second questions, at least with regard to the variety of Quechua spoken in Cochabamba. Namely, as predicted by the reverse acquisition hypothesis, late-acquired evidential meanings expressed by enclitics *-sis* and *-min* are nearly obsolete. We seem to observe an acceleration of change based on competition with new forms sharing features of both L1 and L2 but unlike traditional versions of either one (congruence, convergence) mentioned by Hintz in his work on typological shift and by Sánchez and others in their work on convergence—all of these forces may account for the abandonment of evidential enclitic *-sis* in the Cochabamba variety of Quechua and for the more frequent use of the verb of saying *ñin* to express its semantic and pragmatic features there. Dankel and Soto Rodríguez claim that *ñin* operates as a kind of sentence-final lexical tag in their corpus. The question remains whether there is a more conservative variety of Quechua spoken in Bolivia that retains evidential enclitics; this should be addressed through examination of a comparative sample of speech from Cuzco and Chuquisaca, preferably one which includes instances of reported and quoted speech, narration of stories and personal experiences. For this purpose I move on to an investigation of corpora published at the Archive of the Indigenous Languages of Latin America (AILLA).

## 5. Evidential Usage in Cuzco and Chuquisaca Narratives

In this next section I will explore the evidential system found in two types of narrative interviews carried out as part of an endangered language documentation project in Cuzco and Chuquisaca between 2009–2019, published at AILLA as Kalt (2009, 2016) and anonymized for research purposes. Information in the next section is derived from the documentation accompanying the anonymized corpora.

### 5.1. Data Collection, Transcription and Glossing Method

In Quechua dominant communities identified by indigenous educators in both Cuzco and Chuquisaca, a native speaker interviewer asked interviewees to look at a graphic narrative elicitation instrument (see Appendix A) and make up a story about it as if they were telling it to a child. Both groups looked at a specially drawn six frame strip involving a duck, a goose and a fox, including two speech bubbles intended to elicit quoted or reported

speech from the narrators. Before administering the task in each place, team members asked local people how to fill in the speech bubbles, and thus the speech bubble content was slightly different in the Peruvian and Bolivian instruments.

The text of the first speech bubble for the instrument used in Cuzco includes the evidential/epistemic enclitic *-mi*:

(18)    *Qucha-man-**mi***    *hayku-saq*    *runtu-cha-y-ta*    *qhawa-ri-pu-wa-nki*
        lake-DAT-**DIREV**    go-1FUT    egg-DIM-1POS-AC    watch-INCH-BEN-1OBJ2
        'I'm going to the lake; please watch my little eggs for me.'

In Chuquisaca, the documentation team presented the strip to a local farmer/language consultant and were told to eliminate *-mi*. The verb root and diminutive were also slightly different, but in other ways the speech bubble sentence remained the same:

(19)    *Qucha-man*    *yayku-saq*    *runtu-ita-y-ta*    *qhawa-ri-pu-wa-nki*
        lake-DAT    go-1FUT    egg-DIM-1POS-AC    watch-INCH-BEN-1OBJ2
        'I'm going to the lake; please watch my little eggs for me.'

The task was administered in conjunction with other tasks which differed in each place. In Cuzco, the graphic narrative was administered following a picture selection and description task. In Chuquisaca, the graphic narrative task was administered first, followed by a second narrative elicitation task in which the interviewer showed a picture book from the frog story series (Mayer 1992) adapted by Sánchez (2003); versions of this task have been used for numerous international child language studies (Berman and Slobin 1994). After viewing the pictures all the way through, the interviewer asked the participant to narrate its story. Since many participants demonstrated unfamiliarity with picture books and with creating stories from them, the interviewer then asked them to reflect on the pictures and tell related stories from their lives. All recorded interviews were transcribed in Quechua, verified, glossed and translated to Spanish by a native speaker of Quechua fluent in the variety being investigated.

*5.2. Interviewee Characteristics and Selection Criteria*

In Chuquisaca, 12/28 or 43% adults interviewed declared themselves not to speak another language besides Quechua. In Cuzco, 3/3 or 100% were able to speak some Spanish. Before discussing selection criteria for the current study, I will summarize the arguments fleshed out in Section 2 of Kalt and Geary (2021) that are intended to establish the shared characteristics of speakers in the particular communities where interviews were carried out. We assessed shared characteristics across three axes of variability among Quechua languages proposed by (Mannheim 2018): Regional diversification, contact with other indigenous languages, and social register. Geographical distance between Peruvian and Bolivian speech communities is large, yet interviewees in all four communities were not speakers of an elite register of Quechua and they appear to share a similar history of contact.

> The languages they speak are mutually intelligible today (our field observations; Urton and Nina Llanos 1997, pp. 10–11). They have a shared prehistory: Nearby communities in both regions were originally peopled by the Yampara ethnic group, which is believed to have spoken the now extinct Puquina language before Quechua (Barragán Romano 1994; Laime Ajacopa 2014, p. 27); for more on traces of Puquina in Quechua see Cerrón-Palomino (2020). In terms of contact with other indigenous languages, people in both regions would have had a complex history of contact with Aymara (Cerrón-Palomino 2008) and perhaps with the Amazonian languages in their neighborhood, most likely Arawak via its influence on Puquina (Adelaar 2020). Because interviewees in the corpus are matched along Mannheim's three axes, we conclude that any divergent characteristics of the Cuzco and Chuquisaca varieties will most likely not be due to fundamental differences in exposure to a particular variety of Spanish, nor to social standing and register, nor to original pre-history and contact with

other indigenous languages, but instead to internal developments in each L1 in complex relation to the L2. (Kalt and Geary 2021)

Among the Cuzco data, only three narratives by adults were collected, lasting a total of 5:35 min. For the current study, I selected narratives by three adults from Chuquisaca roughly matched to the Cuzco interviewees by gender, age and amount of schooling completed. An additional free-form Chuquisaca interview was included, featuring recollections of traditional stories and personal experiences as told by the mother of the interviewer, Santusa Quispe de Flores, who wanted her interview recognized by name. The selected interviews from Chuquisaca lasted a total of one hour, 35:44 min. All interviewees were persons engaged in herding, farming and weaving in arid lands between 3200–3700 m above sea level, in communities of less than 120 households and more than 10 km from the nearest town or city. Since much less is known about the grammar of Quechua spoken in Chuquisaca, I selected interviews that would cast the net as wide as possible in age and speech genre for an initial study. A summary of interviewees' characteristics are listed in Table 3:

**Table 3.** Characteristics of interviewees.

| Location | Narrator | Gender and Age | Years in School |
|---|---|---|---|
| Cuzco | Killa086 | Female, age 17 | Enrolled in 6th |
| Cuzco | Inti012 | Male, age 36 | 6 |
| Cuzco | Inti100 | Male, age 33 | 6 |
| Chuquisaca | Killa179 | Female, age 18 | 6 |
| Chuquisaca | Inti172 | Male, age 24 | 5 |
| Chuquisaca | Inti189 | Male, age 78 | 1 month |
| Chuquisaca | Santusa | Female, age 56 | 3 |

*5.3. Evidential Usage Found in Cuzco and Chuquisaca Narratives*

This qualitative study aims to ascertain whether the evidential enclitics *-mi/m -si/s* and *chá* and past tense forms *-r(q)a* and *-sqa* attested in Courtney's studies are found in the narrative corpora here, and to make preliminary observations about their distribution and meaning. Although the data examined here from Cuzco represent the same variety as that studied by Courtney, it is important to verify that speakers actually use these forms in the type of narratives elicited in Chuquisaca. In addition I will search for instances of the verb of saying *ñiy* for quoting the speech of identifiable speakers and for reporting hearsay, general knowledge and truisms.

5.3.1. Examples of Enclitics and Past Tense Markers Found in Cuzco Narrative Interviews

The first young woman whose interview I examined from Cuzco, used *-si* and *-sqa* in her narrative about the duck and goose. Note that the story is not a traditional one, but she tells it as if she has heard it from others; this is the stylistic narrative voice referred to by Nuckolls.

She introduced the story with a formula:

(20)    *huk*    *kutin-**si***    *ka-**sqa***
      one    time-INDEV    be-3NXPST
      'Once upon a time' Killa086 female, age 17,
      Cuzco

In the following example from the same speaker, **–si** seems to be a continuation of the narrative style:

(21)    *huk*    *patu-**s***    *wallata-**s***    *saqi-ya-pu-Ø-**sqa***
      one    duck-INDEV    goose-INDEV    leave-INT-STAT-3OBJ-3NXPST
      'They say the duck, they say the goose neglected it'

The second Cuzqueño narrative lasted about a minute and a half and featured the use of both *-r(q)a* as well as *-sqa* while engaging in direct quotation of one of the story characters, showing that the two are not used rigidly:

(22) | *patu* | *qhawa-ri-pu-wa-nki-man* | | *runtu-cha-y-ta-qa* | *ka-ra-n* |
| --- | --- | --- | --- | --- |
| duck | watch-INCH-BEN-1OBJ-2-POT | | egg-DIM-1POS-AC-TOP | be-**XPST**-3 |

| *may-taq* | *runtu-cha-y-rí* | **ni-spa** | **ni-sqa** | *wallata-ta-qa* | *patu* |
| --- | --- | --- | --- | --- | --- |
| where-CONTR | egg-DIM-1POS-INTR | **say**-SUBS | **say**-3NXPST | goose-AC-TOP | duck |

'Duck, would you please watch my egg, **it was**. And where is my egg?' **So said** the duck to the goose.' Inti012, male, age 36, Cuzco

In Example 22 above we see that quotative *nispa nisqa* 'saying she said' is used directly to the right of the quoted speech. This pattern was used by all three speakers. There were also instances of using just one or the other (i.e., *nispa* or *nisqa*) to the right of a quote, and an instance of using *nisqa* quoted-speech *nispa*.

The third interviewee selected from Cuzco had received recent training as paraprofessional in school, although we are not told what that training entailed. In general, his altered tone of voice and pace seemed to convey a high level of stylization and self-conscious performance of both reading and storytelling. He made use of *-mi, -si* and *-sqa*. His use of *-mi* was in the context of a direct quote from the speech bubble in (23) below, and he then used *-si* and *-sqa* to report the action of the story in (47):

(23) | *qucha-man-**mi*** | *hayku-saq* | *runtu-cha-y-ta* |
| --- | --- | --- |
| lake-DAT-**DIREV** | enter-1FUT | Egg-DIM-1POS-AC |

| *qhawa-ri-pu-wa-nki* | **ñi-spa** | **ñi-sqa** | *huk* | *pato-cha-ta* |
| --- | --- | --- | --- | --- |
| watchr-INCH-BEN-1O-2 | **say**-SUBM | **say**-SP2 | one | duck-DIM-AC |

'I'm going to enter the lake, please take care of my little egg for me, she said to the duckling.'

(24) | *chay-**si*** | *chay* | *pato-qa* | *huk* | *qucha-man* | *hayku-**sqa*** |
| --- | --- | --- | --- | --- | --- |
| then-**REP** | that | duck-TOP | one | lake-DAT | enter-**NXPST** |

'and then they say that duck went into a lake.' Inti100, male, age 33, Cuzco

I have not investigated all of the possible meanings of the past tense markers, but we find more frequent use *of -sqa* than *-rqa*, which is expected in narratives.

5.3.2. Examples of Enclitics and Past Tense Markers Found in Chuquisaca Narrative Interviews

Now let us compare data from rural Chuquisaca, Bolivia. The first three Chuquisaca interview selections were much longer, averaging twenty-four min, involving the duck/goose /fox strip, the additional frog story task, and the personal reflection on related life experiences. The first interviewee was a proficient reader of images who had been chosen by the teacher to take care of her child during school hours in exchange for becoming her protégé and goddaughter; a common practice in the countryside. Rather than using the formula *huk kutinsi* 'once-upon-a-time' containing *-si* as in Cuzco, this narrator began with a topic-marked phrase:

(25) | *Huk* | *kuti-qa* |
| --- | --- |
| One | time-TOP |

'Once upon a time' (Killa179, female age 18, Chuquisaca)

There were no instances of *-mi* or *-si.* Her entire story was related in the narrative past tense marked by *-sqa*, as in the Example 26 below, with the exception of the story's climax which was marked with *-rqa*, in (27).

(26) | *Apa-ru-pti-n* | *isk.it.ay-lla-ña* | *puchu-**sqa*** |
| --- | --- | --- |
| carry-DYN-SEQ-3 | two.DIM-LIM-DISC | be.left-NXPST |

'When he snatched it there were only two left'

(27) | *Chaymanta* | *chay* | *huk-qa* | *qhawa-ru-**rqa*** |
| --- | --- | --- | --- |
| therefore | that | other-TOP | look-DYN-XPST |

'Therefore that other one looked intensely at it.'

The interview with the 24 year old man also contained no instance of *-mi* and *-si*.

I selected two additional interviews, this time with elders, to search for examples of *-mi* and *-si* in their speech. The first one, a monolingual male aged 78 with only one month of schooling in his life, had zero instances of *-si* or *-mi*. The second interview of an elder

was the free-form conversation between the interviewer and his mother Santusa Quispe de Flores, age 56. She told several traditional stories remembered from childhood, as well as recounting personal experiences and reflections. She did not use *-si* in the interview, and only used *-min* once on an interrogative word:

(28)　　*agosto-pi-qa*　　　　*kunan-qa*　　　*imayna-taq-**min***　　*ka-chka-n*
　　　　August-LOC-TOP　　now-TOP　　how-CINT-**AFIRM**　　be-PROG-3
　　　　'Now speaking of August, how does it go?'

The following example from Santusa's interview demonstrates the double use of *ñiy* 'to say' as well as *parlay* 'to talk' and conjectural *-cha.* In this example Santusa uses the verbs of saying to describe the thoughts and conversation among story characters the condor and the fox who are remembering and discussing the fact that there is going to be a birthday party in the sky:

(29)　　piru　　　　　primero-ta　　　　**ñi-rqa-nku-chá**[7]
　　　　but　　　　　**first-ADVL**　　　**say-XPST-3PL-CONJ**

　　　　cumpleaños　**ñi-spa**　　　　　　**parla-rqa-nku-chá**
　　　　birthday　　　**say-GER**　　　　　**talk-XPST-3PL-CONJ**
　　　　'But first I imagine they reminded themselves that there was going to be a
　　　　birthday party'

Note that in Example 29 above, the double use of *ñiy* borders both sides of the quoted speech, a pattern also found in Cuzco. Another quotative example from Santusa comes at the end of the story of the condor and the fox, in which she reports that her father, who told her the story, comments that people on earth do not know what they would have eaten if it had not been for the fox falling to earth with a belly full of food that got splattered all around:

(30)　　*ima-ta-chus*　　　*runa*　　　*mikhu-su-n-man*　　*ka-rqa*
　　　　what-AC-DUB　　person　　eat-2O-3-POT　　　　be-PAR

　　　　***ñi-spa***　　　　　***ñi-wa-q***
　　　　**say-GER**　　　　**say-1OBJ-AG**
　　　　'He told me people would have asked what shall we eat'

Note that in Example 30 above, the storyteller reports thirdhand information and uses an embedded direct quote for that information.

These results corroborate Laime Ajacopa's findings and resemble those of the Cochabamba variety in pointing to the decline of validator *-min* and disappearance of evidential enclitic *-si* in Chuquisaca Quechua.

Regarding the use of past tense markers, I have again not explored all potential meanings, but we find more frequent use *of -sqa* than *-rqa*, which is expected in narratives.

### 5.3.3. Possible Innovation Chuquisaca Quechua: Intrasentential Reportive ñiy

I noted in Section 4 that third person singular and plural verbs of saying in Quechua can easily go beyond quotation and function as reportive markers where no identifiable speaker is cited, since the language allows for dropped subjects. Examples of reportive *ñiy* were found in the transcripts of three of the four speakers from Chuquisaca, ranging from young and bilingual to elderly and monolingual.

The bilingual 18 year old woman Killa179 used reportive *ñiy* at the end of a sentence in reflections about the frog story:

(31)　　*hamp'atu*　　　*hap'i-sqa-tawan*　　　*sarna-ku-n*　　　***ñi-nku***
　　　　toad　　　　　grab-par-with　　　　scabies-ref-3　　**say-3**
　　　　'when we handle frogs we get scabies so they say'

Santusa, a bilingual woman age 55, uses reportive *ñiy* to report common knowledge about a character in the midst of telling the story of the condor and the fox. The reportive

---

7　Conflict between the evidential values of *-rqa* and *-chá*, as well as between their epistemic values, makes it likely that *-rqa* is simply a temporal marker here; further exploration is beyond the scope of this article.

marker is used in this humorous segment either stylistically as part of telling a good story or to report actual hearsay:

(32)  atuq-qa        sumaq-ta      **ñi-n**      arma-ku-rqa
      fox-TOP        good-ADVL     **say-3**     arm-REFL-PS1

      charango-ta-pis    sumaq      tuka-ri-q         **ñi-n**
      charango-AC-AD     good       play-INCH-AG      **say-3**

      'the fox armed himself so they say well, he even was a good charango player, so they say'

In Example 32 above note that reportive *ñin* intervenes between a verb and its adverb; it is unclear to me whether the focus of reported information rests on the adverb *sumaqta* 'well' or the verb *armakurqa* 'armed himself'. A frequency analysis of uses in the entire corpus would be required to determine whether the phrase-internal placement of reportive *ñiy* is common, whether it indicates focus, and whether it is accompanied by any special prosody or intonation.

Sentence-final reportive uses were also found in the transcript of the 78 year old man, who reflected on the conventional wisdom about foxes; he placed the reportive verb at the end of phrases:

(33)  *alma-ta*    *hap'i-n*    ***ñi-nku;***    *chay-rayku*    *ahina*      ***ñi-nku***
      soul-AC      grab-3       **say-3PL**      that-reason     like.that    **say-3PL**

      'they steal the soul so they say; that's why it's like that, so they say'

The same speaker reflected on a riddle about the qhiwiña tree:

(34)  *pero*    *ahina*      *thanti-ta-pas*    *achkhata*    *chura-ku-n,*    ***ñi-n.***
      but       like,that    rag-ADVB-AD        many         put-REF-3        **say-3**

      'but although she is ragged, she puts on many skirts, so they say'

Additionally, he reported conventional wisdom on killing a frog:

(35)  *mana*      *wañu-n-chu*      ***ñi-nku-qa.***
      NEG        die-3-NEG         **say-3PL-TOP**

      'he doesn't die, so they say'

## 6. Experimental Conclusions

Initial data selected from the contemporary corpora suggest that reportive and testimonial evidential suffixes *-si/s* and *-mi/m* have fallen into disuse or low frequency use in narrative and conversational contexts in Chuquisaca where they might still be expected in rural Cuzco, even in the speech of a monolingual elder with virtually no schooling. Use of *-min* seems to be restricted to expression of soft affirmation on questions in Chuquisaca. Conjectural *-chá* as well as the past tense markers *-rqa* and *-sqa* appear to be used more frequently than *-mi/m or -si/s* in both regional variants, although a detailed comparison has not been undertaken.

A survey of the literature on Bolivian Quechua suggests that attrition among evidential enclitics proceeded in the order predicted by the reverse acquisition hypothesis; since reportive *-si* appears to have disappeared before testimonial *-mi*. Furthermore, this hypothesis is supported by the fact that only one author (who cited Peruvian as well as Bolivian sources for her analysis) offered an evidential value for *-min*, while epistemic and pragmatic values such as certainty (validation) and focus were mentioned in all cases where *-min* was observed. This does not necessarily signify that individuals acquired and then lost an aspect of their grammar; only that late-acquired elements disappeared within the population before early acquired elements as the language underwent pressure to change.

The evidence that the verb of saying *ñiy* might be evolving into a reportive marker is suggestive of the pattern of suffix renewal in morphologically complex languages, outlined for the Quechua language by Hintz (2016), the diachronic pattern for Korean (Ahn and Yap 2014) and for many world languages outlined by Aikhenvald (2015). This could be the end of the story: purely internal forces of suffix suppression and renewal may have caused the attrition of the evidential values of *-min* and *-sis* in Bolivia, and also caused an

increased productivity of the verb of saying *ñiy* as a reportive marker in narratives and personal reflections. However, we also know that external forces of convergence are taking place in other aspects of Quechua throughout the Andes, and even more importantly, in the expression of evidentiality in Andean Spanish, as claimed by authors Dankel and Soto Rodríguez (2012) and Babel (2009). It would be nearly impossible to tease the forces of internally motivated suffix renewal and externally motivated convergence apart. Nevertheless, it is important to emphasize and perhaps celebrate the fact that evidentiality is not marked grammatically in Peninsular or even standard Latin American Spanish; thus, the population promoting innovation here is the one that speaks Quechua.

There is reason to believe that not all attrition follows the reverse acquisition pattern. Wolfram (2002) notes an important counter-example to the reverse acquisition hypothesis in the Smith Island varieties of English in the northeastern US: some populations whose languages are under pressure end up concentrating distinctive features rather than dissipating them. Nevertheless, an attrition model could be relevant to evidential marking in the Andean context since intensive education in Spanish roughly corresponds to the age where children are sorting out evidential meanings; Andean governments as well as NGOs increasingly target younger children for preschool immersion experiences. Early exposure to Spanish could disrupt the acquisition of later-acquired linguistic features.

I have suggested through a review of the literature and of selected speech data from Cuzco and Chuquisaca that attrition of evidential marking through enclitics seems to have proceeded in reverse order of its sequence of acquisition in Cuzco, so that late acquired elements and uses are most vulnerable to change. I have also demonstrated that loss is not the final story—some semantic and pragmatic values of Quechua reportive marking have continued and perhaps even become more productive through use of the verb of saying. Others have noted that functional convergence has produced a reportive marker in contact varieties of Spanish which previously lacked such expressions of evidentiality; this pattern of use could have become mutually reinforcing for the two languages in contact. Pre-existing structural congruence between L1 and L2 may have facilitated this convergence since both Quechua and Spanish allow for third person verbs of saying to appear without subjects, blurring any distinction between quotative and reportive speech. This finding conforms to the observation of typological shift made by Hintz (2016), namely that Quechua languages are becoming more analytic, so that forms previously expressed by enclitics or suffixes are now expressed by forms of freestanding verbs.

In fact, it would be difficult to tease apart whether loss of reportive enclitic *-sis* was caused by the rise of increased use of the verb *ñiy* in reportive contexts or vice versa. The two processes would have reinforced each other cyclically.

The next steps for this program of research would be to carry out a frequency study using inferential methods to see if differences in type and placement of evidential markers between Chuquisaqueño and Cuzqueño speakers are statistically significant. Prosody and the full range of semantic and pragmatic values attributed to these markers should be examined in a variety of speech genres, beginning with those represented in the corpora from which the current data were selected.

**Institutional Review Board Statement:** Human subjects approval was not required because all data in this paper relate to previously published language documentation corpora archived at the Archive of the Indigenous Languages of Latin America. Recognizing different international standards for working with protected populations, the team that collected the data have anonymized it such that participants and communities are not identifiable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Anonymized data are available from the author.

**Conflicts of Interest:** The author declares no conflict of interest.

## Appendix A. Sample Narrative Elicitation Instrument Illustrated by Jaime Aráoz Chacón



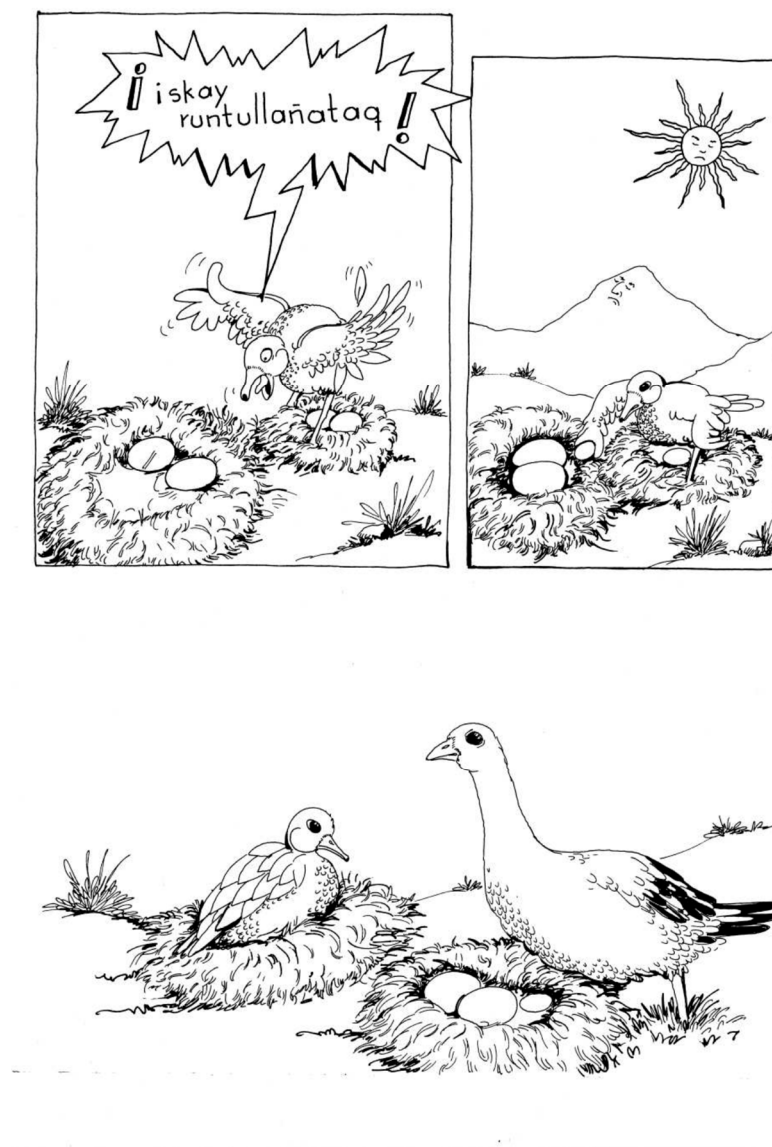**Speech bubble content, modified for Chuquisaca says:**

| *Qucha-man* | *yayku-saq* | *runtu-ita-y-ta* | *qhawa-ri-pu-wa-nki* |
|---|---|---|---|
| lake-DAT | go-1FUT | egg-DIM-1POS-AC | watch-INCH-BEN-1OBJ2 |

"I'm going to the lake; please watch my little eggs for me."

**Speech bubble content, modified for Chuquisaca says:**

| *Isk-ita-y* | *runtu-lla-ña* |
|---|---|
| two-DIM-FRAG | egg-LIM-DISC |

"Only two eggs left!"

## References

Adelaar, Willem. 2020. Linguistic connections between the Altiplano region and the Amazonian lowlands. In *Rethinking the Andes-Amazonia Divide: A Cross-Disciplinary Exploration*. Edited by Adrian J. Pearce, David G. Beresford-Jones and Paul Heggarty. London: UCL Press, pp. 239–49. [CrossRef]

Ahn, Mikyung, and Foong Ha Yap. 2014. On the development of Korean SAY evidentials and their extended pragmatic functions. *Diachronica* 31: 299–336. [CrossRef]

Aikhenvald, Alexandra Y. 2015. Evidentials: Their links with other grammatical categories. *Linguistic Typology* 19: 239–77. [CrossRef]

Albó, Xavier C. 1960. *El Quechua a su Alcance*. Cochabamba: Alianza Para el Progreso.

Babel, Anna, and Stefan Pfänder. 2013. Doing copying: Why typology doesn't matter to language speakers. In *Congruence in Contact-Induced Language Change: Language Families, Typological Resemblance and Perceived Similarity*. Berlin: De Gruyter, pp. 239–57.

Babel, Anna. 2009. Dizque, evidentiality and stance in Valley Spanish. *Language in Society* 38: 487–511. [CrossRef]

Barragán Romano, Rossana. 1994. *¿Indios de arco y Flecha?: Entre la Historia y la Arqueología de las Poblaciones del Norte de Chuquisaca (Siglos XV–XVI)*. Sucre: Antropólogos del Surandino.

Benmamoun, Elabbas, Silvina Montrul, and Maria Polinsky. 2013. Heritage languages and their speakers: Opportunities and challenges for linguistics. *Theoretical Linguistics* 39: 3–4. [CrossRef]

Berman, Ruth A., and Daniel I. Slobin. 1994. *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Hillsdale: Lawrence Erlbaum Associates.

Bills, Garland D., Bernardo Vallejo C., and Rudolph C. Troike. 1969. *An Introduction to Spoken Bolivian Quechua*. Austin: University of Texas Press.

Cerrón-Palomino, Rodolfo. 1987. *Lingüística Quechua*. Cuzco: Centro Bartolomé de las Casas.

Cerrón-Palomino, Rodolfo. 2008. *Quechumara: Estructuras Paralelas del Quechua y del Aimara*. La Paz: Plural editores.

Cerrón-Palomino, Rodolfo. 2020. La presencia puquina en el aimara y en el quechua: Aspectos léxicos y gramaticales. *Indiana* 37: 129–53. [CrossRef]

Courtney, Ellen H. 2015. Child acquisition of Quechua evidentiality and deictic meaning. In *Quechua Expressions of Stance and Deixis*. Edited by Marilyn Manley and Antje Muntendam. Boston: Brill, pp. 101–44. [CrossRef]

Cusihuamán Gutiérrez, Antonio. 1976. *Gramatica Quechua: Cuzco-Collao*. Lima: Ministerio de Educación.

Dankel, Philipp, and Mario Soto Rodríguez. 2012. Convergencias en el área andina: La testimonialidad y la marcación de la evidencialidad en el español andino y en el quechua. In *El español de los Andes: Estratégias Cognitivas en Interacciones Situada*. Edited by Philipp Dankel, Victor Fernández Mallat, Juan Carlos Godenzzi and Stefan Pfänder. Berlin: Lincom, pp. 89–120.

de Haan, Ferdinand. 1999. Evidentiality and epistemic modality: Setting boundaries. *Southwest Journal of Linguistics* 18: 83–101.

de Haan, Ferdinand. 2013. Semantic Distinctions of Evidentiality. In *The World Atlas of Language Structures Online*. Edited by Dryer Matthew S. and Haspelmath Martin. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online: http://wals.info/chapter/77 (accessed on 1 December 2020).

de Villiers, Jill, Jay Garfield, Harper Gernet-Girard, Tom Roeper, and Margaret Speas. 2009. Evidentials in Tibetan: Acquisition, semantics, and cognitive development. In *Evidentiality: A Window into Language and Cognitive Development, New Directions for Child and Adolescent Development, 125*. Edited by Stanka A. Fitneva and Tomoko Matsui. San Francisco: Jossey-Bass, pp. 29–47.

Durston, Alan. 2007. *Pastoral Quechua: The History of Christian Translation in Colonial PERU, 1550–1650*. Notre Dame: University of Notre Dame Press.

Eberhard, David M., Gary F. Simons, and Charles D. Fennig, eds. 2019. *Ethnologue: Languages of the World*, 22nd ed. Dallas: SIL International, Available online: http://www.ethnologue.com (accessed on 12 December 2019).

Faller, Martina. 2002a. Semantics and Pragmatics of Evidentials in Cuzco Quechua. Available online: https://personalpages.manchester.ac.uk/staff/Martina.T.Faller/documents/Thesis.pdf (accessed on 1 January 2013).

Faller, Martina. 2002b. The Evidential and Validational Licensing Conditions for the Cusco Quechua Enclitic-*MI*. *Belgian Journal of Linguistics* 16: 7–21. [CrossRef]

Faller, Martina. 2004. The Deictic Core of 'Non-Experienced Past' in Cuzco Quechua. *Journal of Semantics* 21: 45–85. [CrossRef]

Hardman, Martha James. 1986. Chapter Seven: Data-source marking in the Jaqi languages. In *Evidentiality: The Linguistic Marking of Epistemology*. Edited by Chafe Wallace L. and Johanna Nichols. Norwood: Ablex.

Harrison, Regina. 1989. *Signs, Songs, and Memory in the Andes: Translating Quechua Language and Culture*. Austin: University of Texas Press.

Herrero, Joaquín, and Federico Sánchez de Lozada. 1978. *Gramática Quechua: Estructura del Quechua Boliviano Contemporáneo*. Cochabamba: Editorial Universo.

Hintz, Daniel J. 2011. *Crossing Aspectual Frontiers: Emergence, Evolution, and Interwoven Semantic Domains in South Conchucos Quechua Discourse*. Berkeley: University of California Press.

Hintz, Daniel J. 2016. Auxiliation and typological shift: The interaction of language contact and internally motivated change in Quechua. In *Language Contact and Change in the Americas: Studies in Honor of Marianne Mithun*. Edited by Andrea L. Berez-Kroeker, Diane M. Hintz and Carmen Jany. Philadelphia: John Benjamins, pp. 315–38. [CrossRef]

Hintz, Diane. 2007. *Past Tense Forms and Their Functions in South Conchucos Quechua*. Pacific Rim Research Program. Santa Barbara: University of California. Available online: https://escholarship.org/uc/item/6k19j59j (accessed on 1 January 2013).

Howard, Rosaleen. 2012. Shifting voices, shifting worlds: Evidentiality, epistemic modality and speaker perspective in Quechua oral narrative. *Pragmatics and Society* 3: 246–69. [CrossRef]

Kalsang, Jay Garfield, Speas Margaret, and Jill de Villiers. 2013. Direct evidentials, case, tense and aspect in Tibetan: Evidence for a general theory of the semantics of evidential. *Natural Language and Linguistic Theory* 31: 517–61. [CrossRef]

Kalt, Susan E. 2009. The speech of children from Cusco and Chuquisaca. In *The Archive of the Indigenous Languages of Latin America*. ailla.utexas.org. PID ailla: A258876. Available online: https://www.ailla.utexas.org/islandora/object/ailla%3A124493 (accessed on 1 February 2019).

Kalt, Susan E. 2016. Duck and frog stories in Chuquisaca Quechua. In *The Archive of the Indigenous Languages of Latin America*. ailla.utexas.org. PID ailla: A124493. Available online: https://ailla.utexas.org/islandora/object/ailla%3A258876 (accessed on 1 September 2020).

Kalt, Susan E., and Jonathan A. Geary. 2021. Typological Shift in Bilinguals' L1: Word Order and Case Marking in Two Varieties of Child Quechua. *Languages* 6: 42. [CrossRef]

Klee, Carol, and Alicia Ocampo. 1995. The expression of past reference in Spanish narratives of Spanish-Quechua bilingual speakers. In *Spanish in Four Continents: Studies in Language Contact and Bilingualism*. Edited by Carmen Silva-Corvalán. Washington, DC: Georgetown University Press, pp. 52–70.

Laime Ajacopa, Teófilo. 2014. *Quichwapi Rimarisqa Rimay Jap'inamanta: Pragmática de los Enunciados en el Quechua*. La Paz: Plural Editores.

Langacker, Ronald W. 1990. Subjectification. *Cognitive Linguistics* 1: 5–38. [CrossRef]

Lastra, Yolanda. 1968. *Cochabamba Quechua Syntax*. The Hague: De Gruyter Mouton.

Manley, Marilyn. 2015. Multidimensional Markers of Evidential, Epistemic and Mirative Stance in Cuzco Quechua. In *Quechua Expressions of Stance and Deixis*. Edited by Marilyn Manley and Antje Muntendam. Boston: Brill, pp. 145–207. [CrossRef]

Mannheim, Bruce. 1991. *The Language of the Inka since the European Invasion*. Austin: University of Texas Press.

Mannheim, Bruce. 2018. Three axes of variability in Quechua: Regional diversification, contact with other indigenous languages, and social enregisterment. In *The Andean World*. Edited by Linda J. Seligmann and Kathleen S. Fine-Dare. New York: Routledge, pp. 507–23.

Mayer, Mercer. 1992. *One Frog too Many*. New York: Dial Press.

Montrul, Silvina. 2013. *El Bilingüismo en el Mundo Hispanohablante*. Malden: Wiley-Blackwell.

Muntendam, Antje. 2015. Discourse deixis in Southern Quechua: A case study on topic and focus. In *Quechua Expressions of Stance and Deixis*. Edited by Marilyn Manley and Antje Muntendam. Boston: Brill, pp. 208–58. [CrossRef]

Mushin, Ilana. 2001. *Evidentiality and Epistemological Stance: Narrative Retelling*. Philadelphia: John Benjamins.

Nuckolls, Janis. 2008. Deictic Selves and Others in Pastaza Quichua Evidential Usage. *Anthropological Linguistics* 50: 67–89.

Papafragou, Anna. 2002. Mindreading and verbal communication. *Mind & Language* 17: 55–67.

Peralta Zurita, Elvira. 2006. Descripción Morfológica de la Palabra Quechua: Un Estudio Basado en el Quechua de Yambata, Norte de Potosí. Ph.D. dissertation, Universidad Mayor de San Andrés, La Paz, Bolivia.

Plaza Martínez, Pedro. 2005. *Qallarinapaq: Curso Básico de Quechua Boliviano*. Cochabamba: Universidad Mayor de San Simón, Unpublished Manuscript.

Sánchez, Liliana. 2003. *Quechua-Spanish Bilingualism: Interference and Convergence in Functional Categories*. Philadelphia: John Benjamins.

Sánchez, Liliana. 2004. Functional convergence in the tense, evidentiality and aspectual systems of Quechua Spanish bilinguals. *Bilingualism: Language and Cognition* 7: 147–62. [CrossRef]

Santacruz Pachacuti Yamqui Salcamaygua, Joan de. 1927. Relación de antigüedades deste reyno del Pirú. In *Colecci'on de Libros y Documentos Referentes a la Historia del Perú*. Edited by Horacio A. Urteaga. Lima: San Martín, vol. 9, pp. 125–235. First published 1613.

Saratsli, Dionysia, Stefan Bartell, and Anna Papafragou. 2020. Cross-linguistic frequency and the learnability of semantics: Artificial language learning studies of evidentiality. *Cognition* 197. [CrossRef] [PubMed]

Speas, Margaret. 1999. Person and Point of View in Navajo Direct Discourse Complements. Master's thesis, University of Massachusetts, Amherst, MA, USA.

Speas, Margaret. 2003. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114: 255–76. [CrossRef]

Speas, Margaret. 2010. Evidentials as generalized functional heads. In *Edges, Heads, and Projections: Interface Properties*. Edited by Anna Maria Di Sciullo and Virginia Hill. Philadelphia: John Benjamins, vol. 156, pp. 127–50. [CrossRef]

Stark, Louisa R., Manuel Segovia Bayo, and Felicia Segovia Polo. 1971. *Sucre Quechua: A Pedagogical Grammar*. Madison: University of Wisconsin.

Torero, Alfredo. 1964. Los dialectos quechuas. *Anales Científicos de la Universidad Agraria* 2: 446–78.

UNICEF, and FUNDOPROIB Andes. 2009. *Atlas Sociolingüístico de Pueblos Indígenas en América Latina*. Cochabamba: United Nations Children's Education Fund, (UNICEF), Fundación para la educación en contextos de multilingüismo y pluriculturalidad (FUNPROEIB ANDES) and the Agencia Española de Cooperación Internacional para el Desarrollo (AECID).

Urton, Gary, and Primitivo Nina Llanos. 1997. *The Social Life of Numbers: A Quechua Ontology of Numbers and Philosophy of Arithmetic*. Austin: University of Texas Press.

Wolfram, Walt. 2002. Language Death and Dying. In *The Handbook of Language Variation and Change*. Edited by J. K. Chambers, Peter Trudgill and Natalie Schilling. Malden: Wiley. [CrossRef]