

## Propositional- and illocutionary-level evidentiality in Cuzco Quechua

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This paper discusses the differences between two grammatical means of conveying evidential contrasts in Cuzco Quechua, and argues that evidential interpretations can arise on different levels of meaning. In Quechua, evidential contrasts are encoded on the illocutionary level by a set of evidential enclitics. Evidential interpretations also arise with the past tense marker *-sqa*. These, it will be argued, are not encoded by *-sqa* but arise indirectly from an additional spatial meaning component, which requires that the described eventuality be located outside the speaker's *perceptual field* at topic time. It is hypothesized that the distinction between illocutionary-level and event-level evidentiality is of cross-linguistic relevance.

### 1. Introduction

This paper discusses the differences between two grammatical means of conveying evidential contrasts in Cuzco Quechua (referred to as simply Quechua in the following), and argues that evidential contrasts can arise on different levels of meaning.<sup>1</sup> In Quechua, evidential contrasts arise on the illocutionary level, as well as within the proposition. Evidentiality is in this paper defined as the linguistic encoding of the speaker's grounds for making a speech act, which in assertions amounts to the speaker's type of source of information, i.e. how the speaker acquired the proposition expressed *p*. Evidentiality, under this definition, is a relation between the speaker and *p*.<sup>2</sup> The primary system for marking evidentiality in Quechua consists of the following three enclitics: *-mi* (allomorph *-n*), encoding *best possible grounds* (BPG) *-si* (allomorphs *-s*, *-sis*), encoding *reportative* evidence, and *chá*, encoding *conjectural* evidence. Their meaning in assertions is paradigmatically illustrated with the examples in (1).<sup>3</sup> These enclitics are not obligatory, and sentences with-

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<sup>2</sup>This is both a narrower and wider definition than previous ones. It is narrower in considering evidentiality to be a category distinct from epistemic modality, whereas some authors assume that the two form a single category, e.g. Chafe (1986), Palmer (1986). Arguments for making this distinction can be found in van der Auwera and Plungian (1998), Faller (2002), de Haan (1999). It is a wider definition than previous ones in allowing evidentiality to be marked in types of speech acts other than assertions. This is necessary because in Quechua (and other languages) evidentials can occur in content questions (but not in yes/no-questions).

<sup>3</sup>Abbreviations: 1: first person, 1O: first person object, 2: second person, 3: third person, 3S/2O: third person subject/second person object, ABL: ablative, ACC: accusative, BEN: benefactive, BPG: best possi-

out one implicate the same evidential value as sentences with *-mi*, as shown in (1d), (Faller 2002).

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|--|--|
| (1) a. Para-sha-n- <b>mi</b> .<br>rain-PROG-3-BPG<br><i>p</i> =‘It is raining.’<br>EV: <i>sp</i> sees that it raining    | b. Para-sha-n- <b>chá</b> .<br>rain-PROG-3-CONJ<br><i>p</i> =‘It is possibly raining.’<br>EV: <i>sp</i> conjectures that it might be raining |
| c. Para-sha-n- <b>si</b> .<br>rain-PROG-3-REP<br><i>p</i> =‘It is raining.’<br>EV: <i>sp</i> was told that it is raining | d. Para-sha-n.<br>rain-PROG-3<br><i>p</i> =‘It is raining.’<br>(implicated) EV: <i>sp</i> sees that it is raining                            |

In addition, the two Quechua past tense suffixes give rise to an evidential contrast: the suffix *-sqa* encodes that the speaker did not perceive the described eventuality; whereas sentences containing the suffix *-rqa* implicate that the speaker has BPG (Faller 2002). These suffixes are illustrated in (2).

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|---|---|
| (2) a. Para-sha- <b>rqa</b> -n.<br>rain-PROG-PST-3<br><i>p</i> =‘It was raining.’<br>implicated EV: speaker saw it rain | b. Para-sha- <b>sqa</b> .<br>rain-PROG-NX.PST<br><i>p</i> =‘It was raining.’<br>EV: speaker did not see it rain |
|---|---|

In this paper, I argue that the evidential enclitics are illocutionary modifiers, i.e. they operate *above* the propositional level (see Faller (2002)), whereas the past tense suffix *-sqa* operates *within* the proposition and on the event. *-sqa*, it will be argued, does not, in fact, *encode* an evidential value according to the definition of evidentiality adopted here, because it does not encode a relation between the speaker and *p*. Instead, it is argued to locate the event outside the speaker’s *perceptual field* at topic time. From this spatial definition of the meaning of *-sqa* its evidential interpretation follows: a person who has no perceptual access to an event, cannot have direct evidence, i.e. (s)he must have acquired *p* in an indirect way.

For reasons of space, the argument that the evidential enclitics are illocutionary modifiers will only be developed for the Reportative *-si* in section 2 (for the full argument see Faller (2002)). Section 3 compares the past tense *-sqa* to the Reportative, and on the basis of the observed differences argues that *-sqa* is not of the same type as the evidential enclitics, but operates on the event. In section 4, an analysis of *-sqa* as locating the event both temporally and spatially will be presented. The main claims are summarized in section 5.

ble grounds, CISL: cislocative, COM: comitative, CONJ: conjecture, CONT: continuative, EUPH: euphonic, FUT: future, ILLATIVE: illative, HORT: hortative, LIM: limitative, LOC: locative, NEG: negative, NMLZ: nominalizer, NX.PST: non-experience past, PROG: progressive, PST: past, PL: plural, REFL: reflexive, REP: reportative, SURP: surprise, TOP: topic

## 2. The Reportative *-si* as an illocutionary modifier

The use of the Reportative *-si* is illustrated by the examples in (3). This enclitic is used in folktales, (3a), as well as for talking about everyday events, (3b), including news reported on the radio, (3c). In each of these examples, the enclitic *-si* indicates that the speaker was told the information conveyed.

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|---|
| (3) a. Huk kutin- <b>si</b> huk forastero Pinchimuro ayllu-manta ch’in pajonal-kuna-pi<br>one time-REP one <i>forastero</i> Pinchimuro village-ABL quiet <i>pajonal</i> -PL-LOC<br>puri-sha-sqa.<br>walk-PROG-NX.PST<br>‘ <i>p</i> =One time a <i>forastero</i> from Pinchimuro was walking through quiet <i>pajonales</i> .’<br>EV: <i>sp</i> was told <i>p</i> (Condori Mamani 1996:39) |
| b. Mana-s phalay-ta ati-n-chu [. . .]<br>not-REP fly-ACC can-3-NEG<br><i>p</i> =‘It cannot fly.’<br>EV: <i>sp</i> was told <i>p</i> (conversation)  |
| c. Pay- <b>si</b> riki oficialmente riki kay cargu-ta umalli-nqa<br>she-REP right officially right this office-ACC head-3FUT<br><i>p</i> =‘She will head this office, right.’<br>EV: <i>sp</i> was told <i>p</i> (radio)  |

In the following I will provide four arguments for analyzing *-si* as an illocutionary operator, i.e. as not pertaining to the proposition expressed: (i) *-si* has always wide scope over negation, (ii) *-si* does not contribute to the truth conditions of the proposition expressed, (iii) *-si* cannot occur in embedded clauses, and (iv) *-si* gives rise to an ambiguity in content questions. In these respects, *-si* behaves just like illocutionary adverbs such as *fortunately* and *honestly* (see also Faller (2002)).

(i) **Scope of negation.** Illocutionary operators such as certain adverbs cannot be in the scope of propositional operators. Thus, the illocutionary adverb *fortunately* in (4) is not affected by negation, i.e. (4) cannot be interpreted as *It is not fortunate, that it is raining today*.

- (4) Fortunately, it isn’t raining today.

Likewise, the Reportative *-si* is always outside the scope of negation, and (5) cannot receive the evidential interpretation in (ii).

- (5) Ines-qa **mana-s** qaynunchaw ñaña-n-ta-**chu** watuku-rqa-n.  
Inés-TOP **not**-REP yesterday sister-3-ACC-**neg** visit-PST-3  
*p*= ‘Inés didn’t visit her sister yesterday.’  
EV: (i) speaker was told that Inés did not visit her sister yesterday  
(ii) # speaker was not told that Inés visited her sister yesterday

(ii) **Truth conditions.** Illocutionary operators do not contribute to the truth conditions of the sentence they occur in. Thus, if someone wanted to deny the truth of (4) by saying *that's not true*, they would only be denying that it isn't raining, not that the speaker of (4) thinks that that is fortunate. Likewise, challenging the truth of (5) only affects the claim that Inés visited her sister yesterday, not that the speaker of (5) was told this. Thus, (6a) is not a felicitous challenge of the truth of (5), whereas (6b) is.

- (6) a. Mana-**n** chiqaq-chu. #Mana-n chay-ta willa-rqa-sunki-chu.  
not-BPG true-NEG not-BPG this-ACC tell-PST-3S/2O-NEG  
'That's not true. #You were not told this.'
- b. Mana-**n** chiqaq-chu. Manta-n-lla-ta-**n** watuku-rqa-n.  
not-BPG true-NEG mother-3-LIM-ACC-**mi** visit-PST-3  
'That's not true. She only visited her mother.'

(iii) **Embedding.** Illocutionary operators cannot be embedded, as shown in (7).

- (7) If it is, \*fortunately, not raining, we will go.

The same restriction holds for the Reportative *-si* :

- (8) Mana-(\***si**) para-sha-n-chu chayqa ri-sun-chis.  
not-REP rain-PROG-3-NEG then go-1FUT-PL  
'If it is not raining we will go.'

(iv) **Ambiguity in content questions.** When certain illocutionary adverbs occur in questions, they become anchored to the addressee, instead of to the speaker as in assertions. This is illustrated for *honestly* in (9).

- (9) Honestly, who did Pilar visit?

The speaker of (9) is not asking his or her question claiming that (s)he is being honest, but rather asks the addressee to be honest when giving the answer. A similar, but more complex phenomenon can be observed with the Reportative *-si*. As shown in (10), content questions with *-si* are ambiguous, *-si* may be anchored to the speaker or to the addressee.<sup>4</sup>

- (10) May-pi-s kunan ka-sha-n-ku.  
where-REP now be-PROG-3-PL  
'Where are they now?'  
EV: (i) speaker asks on behalf of someone else (*-si* anchored to speaker)  
(ii) speaker expects answer to be based on reportative evidence (*-si* anchored to addressee)

<sup>4</sup>See Faller (2002) for an analysis of this ambiguity.

The above observations are difficult to account for if *-si* is analyzed as a propositional operator, but are predicted by its analysis as an illocutionary operator.<sup>5</sup> Faller (2002) analyzes *-si* as changing the speech act type ASSERTION of declarative sentences to the (new) type PRESENTATION. The sincerity conditions associated with this type are shown in (11).

- (11) *-si*: PRESENT(*p*)  
SINC={Bel(*sp*, *q*) ∧ *q* = ∃*sp*<sub>3</sub>.Say(*sp*<sub>3</sub>, *p*)}

A speaker using *-si* does not have to believe *p* to sincerely PRESENT *p*, but there must be someone else (*sp*<sub>3</sub>), who said *p*. If there is no other person who said *p*, the sentence with *-si* will not necessarily be false, but only insincere.

Similar arguments as the ones presented above for *-si* can be made for the other two evidential enclitics (see Faller (2002)). I assume in the following that all three evidential enclitics are illocutionary operators that modify the sincerity conditions of assertions.

### 3. Past tense *-sqa* is not an illocutionary operator

The past tense suffix *-sqa* also gives rise to evidential interpretations, and it is therefore a plausible hypothesis that it is of the same type as the evidential enclitics, i.e. an illocutionary modifier. In this section, I argue that it is of a different type. Before providing the arguments, the different interpretations *-sqa* gives rise to are illustrated.

#### The uses of *-sqa*:

- **Reportative.** Of the two past tense suffixes, *-sqa* is the one typically used in folktales. It is also used for reporting past events in every-day live, including news reporting, and tends to co-occur with the Reportative *-si* when the speaker has learned the information from other people.

- (12) a. Chay-**si** chay p'asna-qa uña ukukucha-ta wachaku-mu-**sqa**  
this-REP this girl-TOP cub bear-ACC give.birth-CISL-NX.PST  
'In this way, this girl gave birth to a bear cub.' (Cusihuaman 1976:170)
- b. Hinaspa chay-pi-s [...] hap'i-ra-pu-**sqa**-ku. kinsa-manta.  
then this-LOC-**si** [...] grab-HORT-BEN-NX.PST-PL three-ABL  
'Then, there, they, grabbed (him), three of them. (radio)
- b. Wawa-cha ka-sha-qti-lla-y-raq-**si** tiyu-y-qa wañu-pu-**sqa**.  
baby-DIM be-PROG-NMLZ-LIM-1-CONT-REP uncle-1-TOP die-BEN-NX.PST  
'My uncle died when I was still a baby.' (Cusihuaman 1976:170)

- **Inference from results.** *-sqa* is used for describing past events the result of which the speaker has observed.

<sup>5</sup>Faller (2002) provides arguments for not analyzing the meaning contributed by *-si* as a conversational implicature (it cannot be cancelled) or as a presuppositions. Let me also point out that none of these tests by itself shows conclusively that *-si* must be an illocutionary modifier. But the illocutionary analysis makes it easier to account for these data, and taken together they provide strong evidence in favor of the illocutionary analysis.

- (13) a. Q'iru p'aki-ku-**sqa-n**.  
cup break-REFL-NX.PST-BPG  
'The cup broke.'
- b. Marya-qa hamu-**sqa-n**.  
Marya-TOP come-NX.PST-BPG  
'Marya came.'

The example in (13a) is felicitous in a situation in which the speaker finds the pieces of the broken cup, but did not witness the breaking itself, and (13b) may be uttered by someone who answers the door, sees that it is Marya, and announces her arrival to other people in the room. Here, the speaker uses *-sqa*, because (s)he did not observe the actual coming, but only its end result, Marya's being at the door. *-sqa* can only be used for inferences from (the observation of) an end state to the event leading up to it.

- **Mirative.** Mirativity refers to the linguistic encoding the speaker's surprise or unexpectedness (DeLancey 2001). *-sqa* can also express mirativity.

- (14) Kay-pi-(**má**) ka-sha-**sqa** Marya-qa.  
this-LOC-SURP be-PROG-NX.PST Marya-TOP  
'Marya is here!'

The speaker of (14) is surprised at finding that Marya is here. Often, mirative *-sqa* is combined with the surprise enclitic *-má*. There are two important differences between this and the reportative and resultative uses of *-sqa*: (i) the speaker has direct evidence for the described eventuality *e*, and (ii) it may have present time reference; mirative examples like (14) would usually be uttered at the time the speaker is perceiving the surprising situation. Closely related is the use of *-sqa* for making compliments, which does however not necessarily involve an element of surprise. The speaker of (15) does not convey that they had thought the addressee was a bad cook.

- (15) Lawa-yki-qa sumaq-mi ka-**sqa**.  
soup-2-TOP nice-BPG be-NX.PST  
'Your soup is very tasty!'

- **Dreams.** *-sqa* can be used to report dreams (without the Reportative enclitic *-si*), as illustrated in (16).

- (16) Musqhuy-ni-y-pi mama-y rimapaya-wa-sha-**sqa**  
dream-EUPH-1-LOC mother-1 speak-1O-PROG-NX.PST  
'In my dream, my mother was speaking to me.'

(Cusihuaman 1976:170)

In the following, only the evidential, i.e. the reportative and resultative, uses of *-sqa* will be discussed.<sup>6</sup> Through a comparison with the indirect evidential enclitics I will argue that they and *-sqa* are not of the same type.

First note that a sentence can only receive a single evidential value. As shown in (17), two different evidential enclitics cannot co-occur in the same sentence.<sup>7</sup>

- (17) \*Pilar-wan-**mi** Inés-wan-**si** Qusqu-pi tiya-sha-n.  
Pilar-COM-BPG Inés-COM-REP Cusco-LOC live-PROG-3  
'Pilar and Inés live in Cusco.'  
intended EV: I have direct evidence for Pilar, and reportative evidence for Inés.

If *-sqa* were an evidential, we would expect that it can co-occur with the Reportative *-si* as well as with the Conjectural *-chá*, but it should not be able to co-occur with the enclitic for best possible grounds *-mi*. However, the data contradicts this prediction:

- (18) a. Para-sha-**sqa-n**.  
rain-PROG-NX.PST-BPG  
'It rained.'  
EV: *sp* was told/infers from result that it rained
- b. Para-sha-**sqa-s**.  
rain-PROG-NX.PST-REP  
'It rained.'  
EV: *sp* was told that it rained.
- c. \* Para-sha-**sqa-chá**.  
rain-PROG-NX.PST-CONJ  
intended EV: *sp* conjectures that it rained

*-mi* can, but *-chá* cannot co-occur with *-sqa*. This strongly suggests that *-sqa* is not an evidential. Naturally, any non-evidential analysis of *-sqa*, including the one to be proposed below, will also have to explain the pattern in (18). I will not do this in this paper for reasons of space. Let me point out, however, that, in contrast to an analysis of *-sqa* as an evidential, the analysis to be proposed does not in and of itself impose any co-occurrence restrictions with the evidential enclitics.

A second argument against analyzing *-sqa* as an evidential of the same type as the indirect evidential enclitics is their different interpretations in content questions. As discussed in the previous section, the Reportative *-si* gives rise to an evidential ambiguity. The relevant example is repeated in (19a). As illustrated in (19b), the Conjectural gives rise to a question that does not expect an answer, i.e. it is a rhetorical question.

<sup>6</sup>I assume that the mirative use of *-sqa* is a pragmatic extension of its evidential use.

<sup>7</sup>This is not a morphosyntactic restriction, since the same enclitic can occur twice:

(i) Qaynunchay p'unchay-taq-**sis** huk wayna arma-ntin-**sis** kan-man ka-ra-n.  
yesterday day-CONTR-**si** one guy weapon-with-**si** be-COND be-PST1-3

'And yesterday there was a guy with a weapon.'

(radio)

- (19) a. May-pi-s kunan ka-sha-n-ku.  
 where-REP now be-PROG-3-PL  
 ‘Where are they now?’  
 EV: (i) speaker asks on behalf of someone else (-*si* anchored to speaker)  
 (ii) speaker expects answer to be based on reportative evidence (-*si* anchored to addressee)
- b. May-pi-**chá** kunan ka-sha-n-ku.  
 where-CONJ now be-PROG-3-PL  
 ‘Where are they now?’  
 EV: speaker does not expect the addressee to know the answer; ‘‘Who knows ...’’

In contrast, questions with *-sqa* are neither ambiguous nor rhetorical.

- (20) May-pi ka-sha-sqa-ku.  
 where be-PROG-NX.PST-PL  
 ‘Where were they?’

The speaker of (20) does not ask on somebody else’s behalf, nor does (s)he expect the answer to be based on a particular type of evidence. (20) is also not rhetorical, an answer is expected.

Furthermore, *-sqa* differs from the Reportative *-si* in that *-si* gives rise to *de re/de dicto* ambiguities, but *-sqa* does not. This is illustrated in (21).

- (21) a. Estados Unidos-pa rey-ni-n-si Peru-man hamu-**sqa**.  
 United States-GEN king-EUPH-3-REP Peru-ILL come-NX.PST  
*p* = ‘The king of the United States came to Peru.’  
 EV = *sp* was told that *p*
- b. Estados Unidos-pa rey-ni-n Peru-man hamu-**sqa**.  
 United States-GEN king-EUPH-3 Peru-ILL come-NX.PST  
*p* = ‘The king of the United States came to Peru.’  
 EV = *sp* was told/infers that *p*

The speaker of (21a) may believe him- or herself that there is a king of the United States (*de re*), or (s)he may not (*de dicto*). However, the speaker of (21b), in which the Reportative enclitic *-si* is omitted, must believe that there is a king of the US for the assertion to be sincere.

These differences between *-sqa* and the two indirect evidential enclitics suggest that it is of a different type. Recall that I have defined evidentiality as a relation between the speaker and the embedded proposition *p*. The data discussed suggests that *-sqa* does not establish such a relation, i.e. it is not an evidential according to my definition of evidentiality. The task now is to account for the evidential interpretations it gives rise to in a different way.

#### 4. Past tense *-sqa* as a spatio-temporal operator on events

In this section I will develop an analysis of *-sqa* that does not assume that *-sqa* encodes an evidential relation between the speaker and the proposition expressed *p*. Instead, I propose that *-sqa* is part of *p*. More precisely, I analyze *-sqa* as an operator on the event *e*, which locates *e* both in time and space. The evidential interpretations of *-sqa* can be derived from its spatial meaning.

The temporal meaning of *-sqa* is simply past tense, i.e. it locates the reference or topic time  $t_R$  before the time of speaking  $t_S$  (Klein 1994). I assume that untensed sentence radicals denote properties of eventualities. For example, the sentence radical *Marya fall* denotes the set of events *e* in which Marya falls:

$$(22) \quad \text{Marya fall: } \lambda e.fall(Marya)(e)$$

Tense operators take sentence radicals as their argument and specify a particular relation between  $t_R$  and  $t_S$ . For simplicity, I assume that  $t_R$  is the first argument of a tense operator;  $t_R$  may either be supplied by temporal frame adverbs such as *yesterday* or by the context. For a more elaborate compositional analysis of tense and frame adverbs see, for example, Abusch (1998) and Condoravdi (2002). Thus, the temporal meaning of *-sqa* PAST can be represented as (23).

$$(23) \quad \text{PAST: } \lambda t_R \lambda P \lambda e [P(e) \wedge t_R \prec t_S]$$

To derive, for example, the sentence *Marya fell* under the assumption that the context specifies  $t_R = \text{this morning}$  and  $t_S = \text{now}$ , PAST takes *this morning* and the sentence radical in (22) as its arguments:

$$(24) \quad \text{PAST}(\text{this morning})(\text{Marya fall}): \\ \lambda e [fall(Marya)(e) \wedge \text{this morning} \prec \text{now}]$$

Note that (24) does not tell us how the time of the event—which I assume to be given by its run-time  $\tau(e)$  (Krifka 1989)—relates to either  $t_S$  or  $t_R$ . Following Klein (1994) and Kiparsky (2002), I assume that  $\tau(e)$  is related to the time of speaking only indirectly, via its relation to  $t_R$ , and that it is aspect that determines the relation between  $t_R$  and  $\tau(e)$ . In the absence of an overt aspectual operator, I assume that  $\tau(e)$  is a subinterval of  $t_R$  by default (cf. Kiparsky (2002)). Moreover, the event variable in (24) must be existentially quantified, and I assume that this is done by the general process of existential closure. Thus, the final meaning of the sentence *Marya fell* is (25).

$$(25) \quad \exists e [fall(Marya)(e) \wedge \text{this morning} \prec \text{now} \wedge \tau(e) \subset \text{this morning}]$$

To this temporal meaning, I propose adding a spatial meaning, such that *-sqa* requires that *e* did not take place within the *perceptual field* of the speaker during topic time. Since the speaker did not perceive *e*, (s)he cannot base a proposition about *e* on direct evidence. I define the perceptual field of a person at time *t* as the set of locations *l* that (s)he has perceptual access to, where perception may involve any of the senses, not just sight. Consider for example (26).

- (26) Marya-qa urma-sqa-(s).  
 Marya-TOP fall-NX.PST-REP  
*p*='Marya fell.'

-sqa specifies that the event of Marya's falling happened outside the speaker's perceptual field at  $t_R$ . It follows that the speaker does not have direct evidence for the proposition  $p$ ='Marya fell' and must have learned  $p$  in some other, indirect, way. In (26), the manner in which  $p$  was acquired is overtly specified by the Reportative enclitic -si, though this is not obligatory.

To make the relationship between the location of  $e$  and the perceptual field of the speaker during  $t_R$  precise, I define two spatio-temporal trace functions,  $e$ -trace and  $P$ -trace.  $e$ -trace maps an eventuality  $e$  onto its space coordinates for each time interval  $t$  included in its run time  $\tau(e)$ .  $P$ -trace maps the speaker  $sp$  onto his or her perceptual field during his or her "run-time" (i.e. life-time). These functions are defined in (27).

- (27)  $e$ -trace( $e$ ) =  $\{ \langle t, l \rangle \mid t \subseteq \tau(e) \wedge AT(e, t, l) \}$   
 $P$ -trace( $sp$ ) =  $\{ \langle t, l \rangle \mid t \subseteq \tau(sp) \wedge PERCEIVE(sp, t, l) \}$

The predicate  $AT(e, t, l)$ , which is modelled on Verkuyl and Zwarts' (1992) predicate  $AT$ , is true iff the eventuality  $e$  takes place at location  $l$  at time  $t$ .  $PERCEIVE(sp, t, l)$  is true iff  $sp$  perceives  $l$  at  $t$ . Given these two functions, the meaning of -sqa can now be defined as in (28).

- (28) -sqa:  $\lambda t_R \lambda P \lambda e. P(e) \wedge t_R \prec t_S \wedge$   
 $\neg \forall \langle t, l \rangle [t \subseteq t_R \wedge \langle t, l \rangle \in e\text{-trace}(e) \longrightarrow \langle t, l \rangle \in P\text{-trace}(sp)]$

Given (28), the meaning of (26) can be calculated by applying -sqa to the sentence radical *Marya fall*, adding the default aspectual relation and applying existential closure. The result is given in (29).

- (29)  $\exists e [fall(Marya)(e) \wedge this\ morning \prec now \wedge \tau(e) \subseteq t_R \wedge$   
 $\neg \forall \langle t, l \rangle [t \subseteq t_R \wedge \langle t, l \rangle \in e\text{-trace}(e) \longrightarrow \langle t, l \rangle \in P\text{-trace}(sp)]]$

It is useful to visualize the relationship between  $e$ -trace and  $P$ -trace with the help of a time-space diagram (the horizontal axis orders time intervals  $t$ , the vertical axis locations  $l$ ). For example, Fig. 1 illustrates a situation in which  $e$ -trace is completely outside  $P$ -trace, and thus fulfills the spatial truth conditions of -sqa.

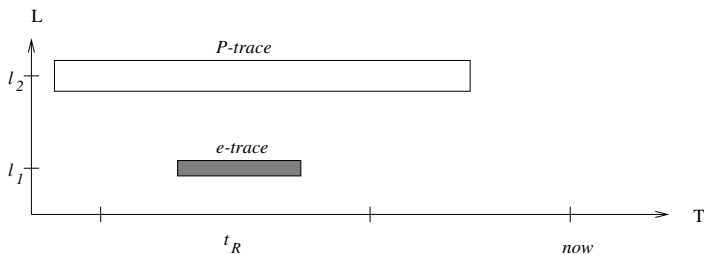


Figure 1: Time-space diagram of  $e$ -trace and  $P$ -trace

The situation depicted in Fig. 1 is representative of the reportative uses of -sqa, as in the examples (12). In each of these examples, the described event took place at a location to which the speaker did not have perceptual access during topic time.

In the resultative uses of -sqa the described eventuality also takes place outside the speaker's perceptual field, but its result falls within it. This situation can be diagrammed as in Fig. 2.

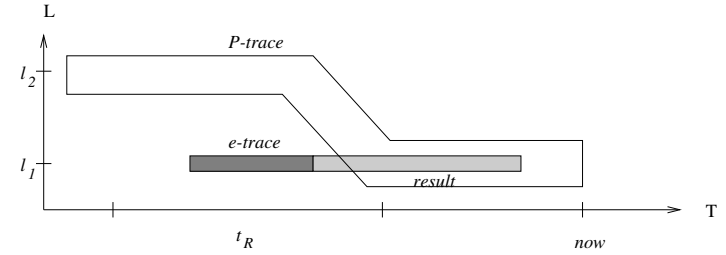


Figure 2: Result state overlapping with  $P$ -trace

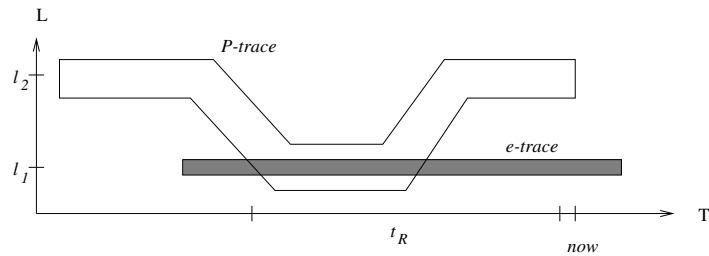
Fig. 2 depicts the situations described by the examples in (13). The result state that is perceived by the speaker are the broken pieces of the cup in (13a), and Marya's being at the door in (13b). From the perception of these states the speaker can infer the events leading up to them, and assert these using -sqa.

To summarize briefly, I analyze -sqa as a past tense marker which also specifies the spatial location of  $e$  in relation to the speaker such that  $e$  is outside the speaker's perceptual field. No reference is made to the type of source of information by which the speaker acquired the proposition  $p$  describing  $e$ . Nevertheless, the fact that -sqa locates  $e$  outside the perceptual field gives rise to the necessary inference that the speaker has indirect evidence for  $p$ . It is important to note, however, that this inference is not part of the meaning encoded by -sqa. That is -sqa gives rise to evidential interpretations without being an evidential in the sense adopted in this paper.

Note that the definition of -sqa allows for the possibility that part of  $e$ -trace is contained in  $P$ -trace. -sqa can indeed be used in such cases. An example is the following. Assume that I had visited my friend Mario who lives in a different town, and that a few weeks later I'm asked how Mario is doing. I can then reply with (30).

- (30) Mario-qa allin-mi ka-sha-sqa.  
 Mario-TOP good-BPG be-PROG-NX.PST  
 'Mario was/is fine.'

This is unexpected given that I have direct evidence that he was fine during my visit. However, what is crucial for the use of -sqa in such situations is that there has passed some time between the period of direct evidence and the time of speaking, during which I have no evidence for the truth of  $p$ . Thus, for (30) to be felicitous, I should not have any evidence about Mario's well-being in the weeks that have passed between my visit and my uttering (30). This situation can be diagrammed as in Fig. 3.

Figure 3: Partial overlap of *e-trace* and *P-trace*

As shown in Fig. 3, for the truth conditions of *-sqa* to be fulfilled, it is necessary that the topic time  $t_R$  extends beyond the visit, i.e. the period of direct evidence. If  $t_R$  were co-extensive with the visit, *e-trace* would be fully contained in *P-trace* during topic time, and the truth conditions of *-sqa* would not be met. That  $t_R$  does indeed extend beyond the visit itself is shown by the fact that it is not possible to explicitly set  $t_R$  to the time of the visit:

- (31) \* Mario-q wasi-n-pi ka-sha-qti-y allin-mi ka-sha-sqa  
 Mario-GEN house-3-LOC be-PROG-NMLZ-1 good-BPG be-PROG-NX.PST  
 ‘When I was at Mario’s house, he was fine.’

Furthermore, when asked what the difference is between (30) and (32), containing *-rqa*, consultants say that in (32) the speaker conveys that Mario has not been fine since.

- (32) Mario-qa allin-mi ka-sha-rqa-n.  
 Mario-TOP good-BPG be-PROG-PST-3  
 ‘Mario was fine.’

In contrast, with (30) the speaker is taken to convey that Mario is still fine now. This also suggests that the reference time for the sentence with *-sqa* extends beyond the visit itself. In fact, it suggests that  $t_R$  extends up to *now*. In this use then, *-sqa* comes close to being a universal perfect, and a better gloss might be *Mario has been well* or even *Mario is well*.

It is well known that perfect markers often also mark evidential distinctions (Anderson 1982), and one might therefore consider analyzing *-sqa* as a perfect. However, this use of *-sqa* appears to be more marginal than its clearly past tense uses, and I therefore maintain that *-sqa* is a past tense (see Faller (2003) for a more detailed argument).

In summary, the truth conditions proposed in (28) for *-sqa* account for the range of interpretations sentences containing *-sqa* can receive, i.e. they allow for reportative and resultative interpretations, as well as for cases of partial direct evidence. These evidential interpretations are a consequence of the spatial meaning component, and arise without giving *-sqa* the status of a genuine evidential.

Given that I have used four types of “tests” to argue that the Reportative *-si* is an illocutionary operator in section 2, one would now want to apply these tests to *-sqa* to show that

it is indeed part of the proposition expressed *p* as I have claimed. In particular, one would want to show that *-sqa* falls under the scope of negation and is affected by a denial of the truth of an assertion by another person, as well as that it can be embedded (I have already shown that *-sqa* does not lead to ambiguities in content questions). To start with the latter, it turns out that *-sqa* can also not be embedded in the antecedent of *if*-clauses, at least not in the case of hypothetical *if*-clauses such as (33).

- (33) \*Mana para-sqa-chu chayqa ri-sun-chis.  
 not-REP rain-NX.PST-NEG then go-1FUT-PL  
 ‘If it didn’t rain we will go.’

But this does not necessarily mean that *-sqa* is not part of *p*. An alternative explanation is to assume that *-sqa* is a *realis* marker.<sup>8</sup> There is independent evidence in support of this assumption, for example, the impossibility of *-chá* and *-sqa* occurring in the same clause mentioned in section 3. Moreover, *-sqa* cannot co-occur with the so-called conditional mood marker *-man*, whereas the neutral past tense *-rqa* can:

- (34) Para-sha-n-man ka-rqa-n/\*ka-sqa.  
 rain-PROG-3-COND be-PST-3/be-NX.PST  
 ‘It might have rained.’

It is thus a matter of further work to argue in detail for the assumption that *-sqa* is *realis*. Regarding the question of whether *-sqa* can be in the scope of negation and outside challenges, the proposed analysis predicts that the spatial meaning of *-sqa* should fall within their scope. This is indeed the case, though perhaps not entirely unproblematic. Consider (35).

- (35) Mana para-sqa-chu  
 not rain-NX.PST-NEG  
 ‘It did not rain’

If we assume that the sentence negation denies the existence of a raining event, then it follows that there was no raining event outside the perceptual field of the speaker—nor was there such an event within the perceptual field. However, the analysis also predicts that it should be possible to just negate that the raining event took place outside the speaker’s perceptual field, i.e. this sentence should be true if there was a raining event within the perceptual field. This is to my knowledge not a possible interpretation of negative sentences with *-sqa*. Again, it is a matter of further research to determine the scoping possibilities of *-sqa* with respect to other propositional operators. The important observation here is that *-sqa* can occur in the scope of negation, but the evidential enclitics cannot.

<sup>8</sup>This is not a possible explanation for the impossibility of the evidential enclitics occurring in *if*-clauses.

## 5. Conclusion

In the preceding sections I have shown that Quechua possesses two types of operators that give rise to evidential contrasts. There is a set of evidential enclitics which encode an evidential relation between the speaker and the proposition expressed on the illocutionary level. In addition, there is the past tense marker *-sqa* which leads to interpretations of indirect evidence. I have argued that these interpretations are not due to *-sqa* encoding an evidential relation between the speaker and the proposition, and I have proposed an analysis of this marker as an operator which locates the eventuality described both temporally and spatially. It is the spatial meaning of *-sqa*, which requires that the described eventuality be outside the speaker's perceptual field at topic time, which gives rise to the observed indirect evidential interpretations without actually encoding these interpretations.

The Quechua suffix *-sqa* is not the only one of its kind in a cross-linguistic perspective; many languages have tense/aspect markers with the same or similar clusters of meanings described for *-sqa* in this paper (Aksu-Koç and Slobin 1986, Chafe and Nichols 1986, Johanson and Utas 2000, Dendale and Tasmowski 2001, Tatevosov 2001). These markers have been analyzed in different ways by different researchers, but it is to be hoped that those markers that truly have the same range of meanings can be given a uniform analysis. I therefore put forth as a research hypothesis that at least some of these markers are amenable to an analysis along the lines proposed here for *-sqa*, i.e. that their evidential interpretations are not encoded but arise from a more basic spatial meaning. Ultimately then, I claim, we have to distinguish between true evidentiality, which I define as a linguistically encoded relation between the speaker and the proposition expressed, and evidential interpretations that arise only indirectly on the basis of non-evidential encoded meaning aspects.

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