Evidential Force in Quechua

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Amsterdam, 18-20 December 2000                  faller@csli.stanford.edu

I. Introduction

Terminology.

Evidentiality: the linguistic encoding of the speaker’s source of information.

Evidentiality: grammatical markers of evidentiality

Evidential Force: evidential value associated with a sentence.

Quechua Evidential Enclitics.

-mi/-n: Direct / Witnessed / Experiential

-si/-s: Reportative

-chá: Conjectural

(1) a. Ines-qa qaynunchay ñaña-n-ta-n watuku-rqa-n.
   Inés-top yesterday sister-3poss-acc-mi visit-pst1-3
   ‘(I have direct evidence that) Inés visited her sister yesterday.’

b. Ines-qa qaynunchay ñaña-n-ta-s watuku-sqa.
   Inés-top yesterday sister-3poss-acc-si visit-pst2
   ‘(I have reportative evidence that) Inés visited her sister yesterday.’

c. Ines-qa qaynunchay ñaña-n-ta-chá watuku-rqa-n.
   Inés-top yesterday sister-3poss-acc-chá visit-pst1-3
   ‘(I conjecture that) Inés visited her sister yesterday.’

Research question: Is evidential force in Quechua a conversational implicature, a truth-functional or an illocutionary phenomenon?

- Evidential force is not cancelable, and can therefore not be a conversational implicature. It is also not truth-functional, and can therefore not be a semantic operator (section II.)

- The illocutionary analysis of evidential force explains why evidential force does not interact (much) with Boolean operators and quantifiers, and why it does interact with the question operator (section III.)

II. Observations regarding cancellability of evidential force

- Some researchers, e.g. Nuckolls (1993), claim that the Direct evidential -mi marks speaker’s certainty. The evidential force of sentences containing -mi is then derived from the fact that, often, the speaker is certain because they have direct evidence.

1Abbreviations used in examples: 1: 1st person, 2: 2nd person, 3: 3rd person, 3pl: 3rd person plural, 2poss: 2nd person possessive, 3poss: 3rd person possessive, 3subj/2obj: 3rd person subject 2nd person object, ACC: accusative, ADD: additive, CONJ: conjunction, NEG: negative, PL: plural, PST: past tense, PST2: indirect past tense, TOP: topic

The data presented in this talk was collected by the author in Cusco, Peru. Financial support for this fieldwork was granted by NSF-BCS_9980223.
However, this cannot be a conversational implicature, because it is not cancelable:
(2)a.–c. are incoherent continuations of (1)a.–c. respectively.²

(2) a. Ichaqa mana chay-ta riku-rqa-ni-chu.
    not this see-PST1-1SG-NEG
   ‘But I did not see this.’

   not this tell-1OBJ-PST1-3PL-NEG
   ‘But I was not told this.’

   this tell-1OBJ-PST1-3PL
   ‘I was told this.’

Whether or not (1)a.–c. are true is independent of the kind of evidence the speaker
has. Thus, (3)a. is taken to deny the truth of all three examples in (1).

It is not possible to challenge the truth of a statement by explicitly claiming that
the speaker does not have the kind of evidence they indicate. For example, countering
(1)b. with (3)b. leads to an incoherent discourse.

     true-NEG mother-3POSS-LIM-NEG visit-PST-3
     ‘That’s not true. She only visited her mother.’

   true-NEG not this-tell-PST3 subj/2obj-NEG
   ‘That’s not true. You were not told this.’

III. Evidential force as an illocutionary phenomenon

1. Speech Acts, Boolean operations and quantifiers

Krifka (1999): Speech acts do not form a Boolean algebra. Complementation and
disjunction are undefined (see (4) and (5)). Only conjunction is defined (see (6)).

     not-yet go-2-yet-neg
     ‘Don’t go yet!’
     # ‘I don’t request you to go already.’

b. Imanaqtin mana mikhu-nki-chu?
     why not eat-2-neg
     ‘Why have you not eaten?’
     # ‘I’m not asking you whether you have eaten.’

²Since Quechua does not have a verb for conjecture, one way to deny that one has conjectural evidence
is to claim that one has another type of source of information.
Mayqen-ta Anna wayk’u-rqa-n? Utaq mayqen-ta Berta wayk’u-rqa-n? which-acc Anna cook-pst-3 or which-acc Berta cook-pst-3
# ‘Which (dish) did Anna cook? Or which did Berta cook?’

Lawa-yki-ta mikhuy! Utaq mate-yki-ta ukyay!
soup-2poss-acc eat or tea-2-poss-acc drink
# ‘Eat your soup! Or drink your tea!’

Mayqen-ta Angel wayk’u-rqa-n? Mayqen-ta taq Berta wayk’u-rqa-n?
which-acc Angel cook-pst-3 which-acc conj Berta cook-pst-3
Which (dish) did Angel cook? And which did Berta cook?

Lawa-yki-ta mikhuy! Mate-yki-ta pas ukyay!
soup-acc eat tea-acc add drink!
‘Eat your soup! And drink your tea!’

Universal quantifiers can scope out of questions, resulting in the so-called pair-list reading, but existential quantifiers cannot, see (7)a. and b. respectively.

Q: Mayqen-ta llapan irqi-kuna wayk’u-rqa-nku?
Q: which-acc all child-pl cook-pst-3pl
‘Q: Which (dish) did every child cook?’

A: Angel-qa papa-ta n Berta-taq sara-ta n Carlos-taq
A: Angel-top potatoe-acc-mi Berta-conj corn-acc-mi Carlos-conj
tarwi-ta n wayk’u-rqa-nku.
tarwi-acc-mi cook-pst-3pl
‘A: Angel the potatoes, Berta the corn and Carlos the tarwi.’

Q: Mayqen-ta wakin irqi-kuna wayk’u-rqa-nku?
Q: which-acc some child-pl cook-pst-3pl
‘Q: Which (dish) did some children cook?’

A: Angel-qa papa-ta n Berta-taq sara-ta n wayk’u-rqa-nku.
A: Angel-top potatoe-acc-mi Berta-conj corn-acc-mi cook-pst-3pl
# A: Angel the potatoes, and Berta the corn.’

The analysis of evidential force as an illocutionary phenomenon predicts that, if any semantic operators can scope over it, then it will only be conjunction and universal quantifiers.

(8) shows that sentence negation cannot negate evidential force and (9) shows that disjunctions cannot scope over evidential force.
(8) Ines-qa mana-n/-s/- chá qaynunchaw ñaña-n-ta  
Inés-TOP not-mi/-si/- chá yesterday sister-3POS-ACC  
watuku-rqa-n-chu/watuku-sqa-chu.  
visit-pst-3-neg/visit-pst2-neg  
(i) ‘(I have direct/reportative/conjectural evidence that) Inés didn’t visit her sister yesterday.’  
(ii) ‘(I do not have direct/reportative/conjectural evidence that) Inés visited her sister yesterday.’

(9) Ines-mi/-si/chá utaq Juan-mi/-si/- chá llalli-rqa-n/llalli-sqa.  
Ines-mi/-si/chá or Juan-mi/-si/- chá win-pst-3/win-pst2  
(i) ‘(I have direct/reportative/conjectural evidence that) Inés or Juan won.’  
(ii) ‘(I have direct/reportative/conjectural evidence that) Inés won or (I have direct/reportative/conjectural evidence that) Juan won.’  

► For conjunction and universal quantifiers, however, a wide scope interpretation can be assigned, see (10) and (11).

(10) Ines-wan-mi/-si/- chá Juan-wan-mi/-si/- chá llalli-rqa-nku/llalli-sqa-ku.  
Ines-with Juan-with win-pst-3pl-mi/-si/- chá  
(i) ‘(I have direct/reportative/conjectural evidence that) Inés and Juan won.’  
(ii) ‘(I have direct/reportative/conjectural evidence that) Inés won and (I have direct/reportative/conjectural evidence that) Juan won.’

(11) Llapan irqi-kuna-n/-s/- chá mikhu-rqa-nku.  
all child-pl-mi/-si/- chá eat-pst-3pl  
(i) ‘(I have direct/reportative/conjectural evidence that) all children [= Marya, Inés and Pawlu] ate.’  
(ii) ‘For all children, (I have direct/reportative/conjectural evidence that) that they ate. [= (I have direct/reportative/conjectural evidence that) Marya ate and (I have direct/reportative/conjectural evidence that) Inés ate and (I have direct/reportative/conjectural evidence that) that Pawlu ate.]’

► Only for conjunction and universal quantifiers is an interpretation in which they have scope over evidential force possible (interpretations (ii) in (10) and (11)).

► What is the difference between the reading in which evidential force has wide scope over the conjunction/universal quantifier, and the reading in which it has narrow scope?

Let’s distinguish between evidence types, that is DIRECT, REPORTATIVE, CONJECTURE, and evidence tokens, the specific evidence the speaker bases his or her utterance on.

Hypothesis:  
(i) wide scope of evidential force: speaker has a single evidence token for the entire

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3Note that the verb form with past tense -sqa is generally used with the Reportative -si, and the verb form with past tense -rqa is generally used with the Direct evidential -mi and the Conjectural - chá
proposition.
(ii) narrow scope of evidential force: speaker has potentially distinct evidence tokens for each conjunct/each member of the restriction.

► This ambiguity might mean:
DIRECT: (i) the conjuncts form part of a single event which the speaker observed
(ii) the conjunctions describe different events each of which the speaker observed
REPORTATIVE: (i) the speaker has a single reportative source
(ii) the speaker has distinct reportative sources for each conjunct
CONJECTURAL: (i) the speaker bases their conjecture on a single set of premisses
(ii) the speaker makes distinct conjectures based on distinct sets of premises.

► The fact that scopal interactions between evidential force and semantic operators is restricted in this manner, is a further argument against its analysis as a semantic operator.

2. Evidential force in content questions

► If evidential force is analyzed as an illocutionary operator, we can also expect scope ambiguities with other illocutionary operators.

(12) Pi-ta-s who-acc Inés-si-top watuku-sqa?
(i) ‘(Someone else wants to know) Who did Inés visit?’
(ii) ‘(I assume you will know from someone else) Who did Inés visit?’

► (12) is ambiguous as indicated by the glosses.
Hypothesis: This ambiguity corresponds to a scope ambiguity between the Reportative REP and the question operator QUEST.

► Origo: the locus of the evidential evaluation (Garrett 1998). Usually, the speaker is the origo. However, in (12)(ii), the hearer is the origo.

► For the Direct evidential -mi and the Conjectural -chá, it is not as clear that there exists a similar ambiguity with QUEST. For -mi, the origo ambiguity might partially be interpreted in terms of authority:
origo=speaker: speaker asks with authority.
origo=hearer: speaker expects hearer to base their answer on direct evidence.

IV. Conclusion

► I have argued that evidential force in Quechua is best analyzed as an illocutionary phenomenon. It is cancellable and cannot therefore not be analyzed as a conversational implicature; evidential force does not have truth-functional effects and does not interact (much) with semantic operators, and cannot therefore also not be analyzed as a semantic operator. The illocutionary analysis accounts for these facts, as well as for the observed scope ambiguity with the question operator.
The illocutionary analysis can possibly be extended to evidential force in other languages. Support for this hypothesis comes from de Haan’s (1999) observation that cross-linguistically sentence negation is always within the scope of evidential force.

The discussion in this talk also shows that by limiting most of the formal semantic and pragmatic research efforts to familiar languages, some phenomena do not receive the attention they deserve. Only few researchers have investigated evidentiality from a perspective of modern semantic and pragmatic theory.

V. Further Work

Formalization. Krifka’s (1999) framework for analyzing speech acts seems to be promising to analyze evidential force as an illocutionary phenomenon. However, one will probably have to modify/extend it. As a first attempt, one might try to represent the ambiguity between the question operator and the reportative force as in (13).

\begin{align*}
(13) \quad & \text{a. REP QUEST}(\lambda p. \exists y[p = \land Visit(I, y)]) \\
& \text{b. QUEST REP} (\lambda p. \exists y[p = \land Visit(I, y)])
\end{align*}

But it is clear that this will not do because of type mismatches.

Further research is needed on the question of what kind of illocutionary operator evidential force is. Is it on a par with speech act verbs, or is it better analyzed as a speech act modifier similar to speech act adverbs such as obviously, frankly, etc.?

Evidentials can cross-linguistically not occur in subordinate clause. It would be interesting if the analysis of evidential force as an illocutionary operator could shed some light on why this is so.

References


