On the Semantics of Conjectural Questions*

Patrick Littell, Lisa Matthewson and Tyler Peterson

University of British Columbia

1. Introduction

In many languages with evidentials, the insertion of a conjectural/inferential evidential into a question creates a non-interrogative utterance, roughly translatable using ‘I wonder.’ The goal of this paper is to provide an analysis of this phenomenon in three Amerindian languages: St’át’imcets (Lillooet Salish), Nē?kepmxícín (Thompson Salish), and Gitksan (Tsimshianic).

Examples of the effect of a conjectural evidential on questions in these languages are given below: example (1)a. is an evidential assertion, (1)b. is an ordinary yes-no question, and (1)c. contains both the evidential and the yes-no question marker and is translated as a statement of uncertainty.

(1) St’át’imcets (Matthewson et al 2007)

a. lán=k’a kwán-ens-as
   already=INFÉR take-DIR-3.ERG
   ni=n-s-mets-cál=a
   DET.ABS=1sg.POSS-NOM=write-ACT=EXIS
   ‘She must have already got my letter.’

b. lán=ha kwán-ens-as ni=n-s-mets-cál=a
   already=YNYQ take-DIR-3.ERG DET.ABS=1sg.POSS-NOM=write-ACT=EXIS
   ‘Has she already got my letter?’

We are very grateful to St’át’imcets consultants Carl Alexander, Gertrude Ned, Laura Thevarge, Rose Agnes Whitley and the late Beverley Frank, Nē?kepmxícín consultants Patricia MacKay and Flora Erhardt, and Gitksan consultants Louise Wilson and Barbara Sennott. We are also very grateful to the members of the UBC Pragmatics Reading Group for helpful feedback (Meagan Louie, John Lyon, Scott Mackie, Ileana Paul, Amélie Reis Silva, Hotze Rullmann, Ryan Waldie), and thanks also to audiences at UBC, NYU and MOSAIC (Meeting of Semanticists Active in Canada, Ottawa). This research is supported by SSHRC grants #410-2005-0875 and #410-2007-1046, and The Endangered Language Documentation Programme. All examples not referenced are from fieldwork. The authors’ names are in alphabetical order.
The same effect is shown in (2)a. and b. for a wh-question:

(2) St’át’imcets

a. swat  ku=lhwál-ci-ts-as  ti=ts’úqwaz’am
who DET=leave-APPL-1sg.OBJ-3ERG DET=fish=EXIS
‘Who left me this fish?’

b. swá’t=as=k’a  ku=lhwál-ci-ts-as  ti=ts’úqwaz’am
who=INFER DET=leave-APPL-1sg.OBJ-3ERG DET=fish=EXIS
‘I wonder who left me this fish.’

Similar paradigms are given for Nlèʔkepmxícín (3) and (5):

(3) Nlèʔkepmxícín

a. y’e-mín-s=nke  e=Meagan  e=ti
   good-REL-3.sub=INFER DET=Meagan DET=tea
   ‘Meagan must like the tea. / Apparently, Meagan likes tea.’

b. kéʔ  k=s-y’e-mín=s  e=Meagan  e=ti
   whether IRL=NOM-good-REL=3.poss DET=Meagan DET=tea
   ‘Does Meagan like the tea?’

c. kéʔ=ws=nke  k=s-y’e-mín=s  e=Meagan
   whether=SBJN=INFER IRL=NOM-good-REL=3.poss DET=Meagan
   e=ti
   DET=tea
   ‘I wonder whether Meagan likes the tea.’

(4) a. s-xén’x=nke  xeiʔ
   NOM-rock=INFER DEM
   ‘That must be a rock.’

b. kéʔ  xeiʔ  k=s-xén’x=s
   whether DEM IRL=NOM-rock=3.poss
   ‘Is that a rock?’
c. \( k\text{é}? = ws \text{nke} \quad xe? \quad k = s\text{-}xen\text{-}s \)

whether=SBJN=INFER  DEM  IRL=NOM-rock-3.poss

‘Maybe it’s a rock.’

(5) a. \( st\text{é}? \quad xe? \)

what  DEM

‘What is that?’

b. \( st\text{é}? = ws \text{nke} \quad xe? \)

what=SBJN=INFER  DEM

‘I don’t know what that is.’

Exactly the same effect on both yes-no and wh-questions is illustrated for Gitksan in (6) and (7):

(6) Gitksan

a. \( sdin=ima=hl \quad x\text{biist} \)

be.heavy=INFER=CND  box

‘The box might be heavy.’

b. \( nee=hl \quad sdin=hl \quad x\text{biist}=a \)

YNQ=CND  be.heavy=CND  box=INTERROG

‘Is the box heavy?’

c. \( nee=ima=hl \quad sdin=hl \quad x\text{biist}=a \)

YNQ=INFER=CND  be.heavy=CND  box=INTERROG

‘I wonder if the box is heavy.’

(7) a. \( n\text{aa} \quad 'an\text{-}t\quad gi'nam\text{-}(t)=hl \quad x\text{hlaw}\text{sxw} \quad 'as\quad John \)

who  S.REL-3  give-3=CND  shirt  PREP  John

‘Who gave this shirt to John?’

b. \( n\text{aa}=ima \quad 'an\text{-}t\quad gi'nam\text{-}(t)=hl \quad x\text{hlaw}\text{sxw} \quad 'as\quad John \)

who=INFER  S.REL-3  give-3=CND  shirt  PREP  John

‘I wonder who gave this shirt to John.’

Finally, although we do not analyze Cuzco Quechua in the current paper, the same phenomenon also exists there, at least for wh-questions, as shown in (8).

(8) Cuzco Quechua (Faller 2003: 26):

\( m\text{ay\text{-}pi\text{-}chá} \quad kunan \quad ka\text{-}sha\text{-}n\text{ku} \)

where-LOC-CONJ  now  be-PROG-3-PL

‘Where are they now?’

Evidential contribution: Speaker does not expect the hearer to know the answer;

‘Who knows...’
1.1 The Proposals

The first issue concerns the illocutionary force of questions that contain an evidential: are these utterances questions or assertions? In approaching this, it is necessary to start with the basics and review the three different but interrelated notions of question (Higginbotham 1996):

(9)  

**Syntactic:** An instance of a certain sort of linguistic structure.

**Semantic:** An utterance with a certain type of denotation.

**Pragmatic:** A particular sort of speech act.

We argue that what we call *Conjectural Questions* (CQs) are syntactically and semantically questions, but pragmatically they have the force of assertions.¹

The apparent reduced interrogative force of the CQs might suggest that they are some kind of rhetorical question. However, we argue that CQs are distinct from rhetorical questions, and form part of a three-way typology of Ordinary Questions, Rhetorical Questions, and Conjectural Questions. This gives us a three-way typology of question-types based on expectations of Speaker / Addressee knowledge of the answer:

<table>
<thead>
<tr>
<th>Question Type</th>
<th>Speaker</th>
<th>Addressee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordinary Questions</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Conjectural Questions</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Rhetorical Questions</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Table 0.1: Speaker and Addressee Knowledge Across Sentence Types

The final question is how we can derive the right semantics and pragmatics for Conjectural Questions. Ideally, we want to derive the meaning compositionally, using only the independently-needed semantics for the elements contained within CQs. We claim that this is attainable, given an independently motivated modal analysis of evidentials (Matthewson et al. 2007, Rullmann et al. 2008, Peterson 2009, 2010) The evidentials in Stʼátʼimcets and Gitksan are epistemic modals: they have a modal semantics but carry a presupposition that there is evidence of a certain type for the proposition they embed.² The evidential is applied to a question, which denotes the set of propositions which are its potential answers. The presuppositions carried by each proposition in the question denotation conjoin, so that the CQ as a whole presupposes everything presupposed by each of its members. The resulting conjoined presupposition entails that there is mixed evidence about the potential answers to the question, and therefore that the speaker does not expect the hearer to be able

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¹Recent work in Inquisitive Semantics suggests a fourth property: whether or not an utterance is *inquisitive*, a property shared by questions and some kinds of assertions, such as disjunctions (Groenendijk 2009). CQs do appear to be inquisitive, in that they raise the issue of which of a set of alternatives holds.

²Analysis of the Nte?kepmxcín evidential =nke is at a preliminary stage; see Mackie (2009) for some discussion. So far the Nte?kepmxcín evidential seems to pattern like a modal on the relevant tests.
to provide an answer. The outcome is a reduced interrogative force for CQs: the speaker is encoding that the hearer is probably not able to answer, and therefore the hearer is not required to answer.

2. **CQs are syntactically questions**

In this section we show that CQs have the structure associated (in the languages in question) with questions. The first piece of evidence for this claim is that in each of the three languages, CQs take the characteristic syntactic form of questions, with either a wh-element taking a particular sort of complement, or the usual yes-no question particle. Furthermore, results show that CQs syntactically embed in the same manner as ordinary questions:

(10) St’át’ímcets

\[
\text{aoz kw}=\text{swát-en-as } k=\text{Lisa } lh=\text{wa7}=\text{as}=\text{há}=\text{ká}
\]

\[
\text{NEG DET=NOM=know-DIR-3.ERG DET=Lisa HYP=IMPF=YQ=INFER}
\]

\[
\text{áma-s-as } k=\text{Rose } ku=tíh}
\]

\[
\text{good-CAUS-3.erg DET=Rose DET=tea}
\]

‘Lisa doesn’t know whether Rose likes tea.’

(11) Nēʔkepmxcín

\[
\text{teté? k}=\text{s-xek-s-t-és } ké?=\text{ws}=\text{nke}
\]

\[
\text{NEG IRL=NOM-know-CAUS-TR-3.sub whether=SBJN=INFER}
\]

\[
\text{k}=\text{s-y’e-mín-s } e \text{ tí}
\]

\[
\text{IRL=NOM-good-REL-3.poss DET tea}
\]

‘He doesn’t know whether she (could) like tea.’

(12) nee-tii=hl \text{ wiłaax-(t)=s } Henry ji \text{ ixsta-t-in-(t)=ima=s}

\[
\text{NEG-CONTR=CND know-3=PND Henry IRR taste-T-CAUS-3sg=MODAL=PND}
\]

\[
\text{Lisa}=\text{hl } x\text{-dii}
\]

\[
\text{Lisa=PND consume-tea}
\]

‘Henry doesn’t know if Lisa might like tea drinking.’

3. **CQs are semantically questions**

Not only are CQs syntactically questions, we claim that they denote the same sorts of things that questions denote. That CQs embed under predicates like KNOW, ASK, etc. in an identical manner to ordinary questions is *prima facie* evidence that they are of the same type. We adopt a fairly standard approach (Hamblin 1973; see Groenendijk and Stokhof

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3In St’át’ímcets, CQs strongly prefer the addition of subjunctive morphology. See Matthewson (2009) for discussion; Matthewson argues that it is the evidential, not the subjunctive, which achieves the reduced interrogative force.
1982, 1984 for an alternative view) to the semantics of questions: a question denotes a
set of propositions, each of which is a (partial) answer to the question. The question set
contains both true and false answers (as in Hamblin 1973, but unlike in Karttunen 1977):

(13) \[\text{does Hotze smoke}]^w = \{\text{that Hotze smokes, that Hotze does not smoke}\}

(14) \[\text{who left me the fish}]^w = \{\text{that Ryan left me this fish, that Meagan left me this fish,}
\text{that Ileana left me this fish,...} = \{p : \exists x[p = \text{that } x \text{ left me this fish}]\}

Assuming a modal analysis of the conjectural evidential (Matthewson et al. 2007),
the semantics of CQs are fairly straightforwardly handled by a Hamblin-set analysis:

(15) \[\text{who } \Diamond \text{ left me the fish}]^w = \{\text{that Ryan } \Diamond \text{ left me this fish, that Meagan } \Diamond \text{ left me this fish,}
\text{that Ileana } \Diamond \text{ left me this fish,...} = \{p : \exists x[p = \text{that } x \Diamond \text{ left me this fish}]\}

The presence of the modal already goes some way towards an intuitive ‘weakening’
of the interrogative force of the question. The speaker is asking only who could have
possibly left me the fish, rather than who did leave me the fish. We will see below that the
evidence presuppositions of the epistemic modals are responsible for a further weakening
of interrogative force.

4. CQs are not pragmatically questions

An Ordinary Question has three features: first, an OQ is a request by the speaker for
information from the addressee. Secondly, its answer is not known to the Speaker, but the
Speaker thinks the Addressee may know it. Thirdly, an OQ requires an answer in order
for the dialogue to be felicitous (Caponigro and Sprouse 2007). More technically, when
an interrogative clause \(f\) is uttered in a world \(w\), the utterer thereby requests to be told
which of the propositions in \([f]^w\) are true in \(w\) (von Fintel and Heim 2007). However,
not everything that is a syntactic or semantic question is, by this definition, a pragmatic
question. Consider an Ordinary Question vs. a Rhetorical Question (RQ) (cf. Caponigro
and Sprouse 2007):

(16) a. ‘John looks like an interesting syntactician.’
   \textbf{OQ: ‘What does he know about semantics?’}
   [Possible answers: He knows a lot about semantics; He doesn’t know a lot
   about semantics; etc.]

b. ‘I don’t think we should have John on our short list.’
   \textbf{RQ: ‘(After all,) what does he know about semantics?’}
   [Implicates he knows nothing about semantics.]

RQs and OQs are syntactically and semantically the same, but pragmatically differ-
ent (Sadock 1971; Han 2002; Sprouse 2007, Caponigro and Sprouse 2007): an RQ differs
from an OQ in that the answer is known to the Speaker and the Addressee, and they both
also know that the other knows the answer as well. In terms of the requirement for an answer, RQs also differ from OQs in that they can have, but do not require an answer. CQs are similar to RQs in these respects. They have same syntactic form and alternative semantics as OQs, but the sentential force of a declarative. CQs can have, but do not require an answer. For the CQ in (17)a., either the Speaker or the Addressee can respond with (17)b.:

(17) Gitksan

a. *na=ima 'an-t stil-(t)=s John=a*
   who=INF S.REL-3 accompany-3=PND John=INTERROG
   ‘I wonder who went with John.’

b. *Bill=ima ('an-t stil-(t)=s John=a)*
   Bill=INF S.REL-3 accompany-3=PND John=INTERROG
   ‘Maybe it was Bill (who went with John.).’

However, CQs are not acceptable in RQ situations, as shown in (18) for St’át’imcets.

(18) St’át’imcets

Context: Your daughter is struggling with learning how to hang ts’wan (wind-dried salmon). She starts to get frustrated and you say:

*tsun-tsin=lhkán=ha kw=s=cuz’ lil’q*
say(DIR)=1.sg.SUBJ=YNQ DET=NOM=going.to easy
‘Did I tell you it would be easy?’

Moreover, CQs differ from RQs in terms of Addressee knowledge. In an RQ, typically both the Speaker and Addressee know the answer. CQs, in contrast, are typically bad in situations in which the Addressee can be assumed to know the answer (cf. also Rocci 2007:147). This is shown not only in (18), but in other cases of Addressee knowledge such as (19) – (21).

(19) St’át’imcets

?? *lan=acw=há=k’a q’a7*
   already=2sg.SBJN=YNQ=INF SBJN=INF SBJN=eat
   ‘I wonder if you’ve already eaten.’

(20) Nłe?kepmxcín

?? *kèʔ=ws=nke k=s-y’e-min-x” w e=tí*
   whether=conj=INF IRL=NOM-good-REL-2.sub DET=tea
   ‘I wonder whether you like the tea.’
(21) Gitksan

nee=ima=hl  \textit{xw}dax-n=a
YNQ=INF\textit{ER}=CND  hungry-2sg=INTERROG
‘I wonder if you’re hungry.’

In N\textit{e}kepmxcín, 2nd person \textit{plural} CQs are fine – most likely since each Addressee can’t be presumed to know the internal states of the other Addressees.

(22) N\textit{e}kepmxcín

\textit{ké}?=ws=nke  \textit{k}=s-tëyt=wp
whether=SBJN=INF\textit{ER}  IRL=NOM-hungry=2.pl.conj
‘I wonder whether you (pl.) are hungry.’

OQs, RQs, and CQs all have an interrogative syntax and semantics. Then what distinguishes them? We claim that the difference is rooted in the nature of Speaker and Addressee knowledge.

In sum, a CQ differs from an OQ and RQ in that it is a statement expressing uncertainty or wondering. An CQ is unlike both an OQ and an RQ in that its answer is not known to the Speaker or the Addressee, and they both also think that the other does not know the answer. A CQ invites, but does not require, an answer from the Addressee, and may be answered by either the Speaker or the Addressee, similar to an RQ. These claims are summarized in Table 0.2:

<table>
<thead>
<tr>
<th></th>
<th>Speaker knows answer</th>
<th>Addressee knows answer</th>
<th>Answer required</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{Ordinary Questions}</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>\textit{Conjectural Questions}</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>\textit{Rhetorical Questions}</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Table 0.2: Speaker and Addressee Knowledge Across Sentence Types with Answer Requirement

5. Analysis

We have two main goals: the first is to derive the reduced interrogative force of CQs from the semantics of CQs, rather than by positing the presence or absence of an invisible speech-act-operator for which we don’t have syntactic or semantic evidence. Secondly, we want to use only independently-needed aspects of the meanings of evidentials (Section 5.1) and questions (Section 5.2) to derive the right semantics and pragmatics for CQs. Our central claim is that CQs have the semantics of ordinary questions, but exhibit a reduced interrogative force in the pragmatics due to their evidential presuppositions.
5.1 Analysis of evidentials

The evidentials which create CQs in St’át’imcets, Nlëk’epmxcín and Gitksan are indirect evidentials. They require some sort of inferential evidence for the proposition, which may be based on observable results, and/or on mental reasoning.

(23) St’át’imcets

\textit{Context: You look in the fridge for cake and discover there is none left.}

\begin{align*}
\text{ts’aqw-an’-ás} = k’a = tu7 & \quad k = \text{Lenny} \quad ti = kíks-a \\
\text{eat-DIR-3.erg = INFER = then} & \quad \text{DET = Lenny} \quad \text{DET = cake-EXIS}
\end{align*}

‘Lenny must have eaten the cake.’ \hfill (Matthewson et al. 2007)

(24) Gitksan

\textit{Context: You look in the fridge for some hoxs (fish) to make soup, and it’s gone.}

\begin{align*}
gub-i-(t) = ima = s & \quad \text{Sheila} = \text{hl} \quad \text{hoxs} \\
\text{eat-TR-3 = INFER = PND} & \quad \text{Sheila} = \text{CND} \quad \text{hoxs}
\end{align*}

‘Sheila might’ve eaten the hoxs.’

(25) Nlëk’epmxcín

\textit{Context: The speaker’s mother is missing.}

\begin{align*}
x^w := x^w & \quad \text{asít} = nke \quad e = n-s-kix\text{ze} \\
\text{RED-walk = INFER = just} & \quad \text{DET = 1.poss-NOM-mother}
\end{align*}

‘Maybe my mother went for a walk.’

The evidentials have the semantics of epistemic modals, with an added presupposition about evidence type (Matthewson et al. 2007). The denotation we assume for St’át’imcets \(k’a\) is given in (26), and for Gitksan =\(ima\) in (??). As noted above, we assume for current purposes that Nlëk’epmxcín \(nke\) is similar in the relevant respects.

(26) Semantics of St’át’imcets \(k’a\) and Gitksan =\(ima\)

\([k’ / =ima]_{c,w}\) is only defined if \(c\) provides a modal base \(B\) such that for all worlds \(w' \in B(w)\), if the \textbf{inferential} evidence in \(w\) holds in \(w'\), and \(f\) is a choice function such that \(f(B(w)) \subseteq B(w)\).

If defined, \([k’ / =ima]_{c,w} = \lambda f_{(s,t)}. \lambda p_{(s,t)}. \forall w'[w' \in f(B(w)) \rightarrow p(w') = 1].\)
According to the denotation in (26), evidentials in St’át’imcets and Gitksan introduce a presupposition that there is inferential evidence for the embedded proposition. In (26), for example, the presupposition is that the speaker has inferential evidence that Sheila ate the ts’al. When the evidential is defined, it introduces universal quantification over a subset of the worlds in the epistemic modal base. The subset of modal base worlds (picked out by the choice function \( f \)) are asserted to all be worlds in which the embedded proposition is true. Depending on how big a subset of modal base worlds is quantified over, the modal claim has varying strengths – anything ranging from a weak ‘might’ to a strong ‘must’. In (26), for example, the assertion is that Sheila might have or must have eaten the ts’al. See Matthewson et al. (2007), Rullmann et al. (2008), Peterson (2009, 2010) for details and discussion.\(^4\)

5.2 Analysis of questions

As above, we assume the commonly-used Hamblin (1973) semantics for questions. This will underlie our claim that the presupposition introduced by a question is the conjunction of the presuppositions introduced by the statements in its Hamblin set. (For a similar idea, namely that a question presupposes all the presuppositions of its sub-constituents, see Guerzoni 2003.) Usually, one cannot detect this conjunction of presuppositions, as each proposition in the question set introduces exactly the same presupposition. This is illustrated in (27) and (28):

(27) Does Henry smoke too?
   {that Henry smokes too, that Henry doesn’t smoke too}
   (all propositions in the question set presuppose that some salient \( x \) other than Henry smokes)

(28) Has Patrick stopped embezzling funds?
   {that Patrick has stopped embezzling funds, that Patrick has not stopped embezzling funds}
   (all propositions in the question set presuppose that Patrick has been embezzling funds)

However, the interesting cases are where each member of the Hamblin set introduces a different presupposition.

(29) Who here doesn’t drink anymore?
   {that Tyler doesn’t drink any more, that Lisa doesn’t drink any more, ...}

\(^4\)Peterson (2010) actually gives a slightly different denotation for =ima, which utilizes an ordering source rather than a choice function over the modal base as a means of achieving variable quantificational force, and which captures the variable quantificational force using an existential rather than a universal quantifier. These details do not affect the main point here.
(presupposes of each $x$ in the contextually salient group that $x$ used to drink$^5$)

(30) Who went to Paris again?
   \{that Scott went to Paris again, that Edna went to Paris again, ...\}
   (presupposes of each $x$ in the contextually salient group that $x$ has been to Paris)

   Evidence that the combined presupposition exists is found in the interpretations in (31)a,b. The exclusive particle only presupposes that its embedded proposition is true (get reference about only). The conjoined presupposition of (31)a. is therefore that each country has two cities. While this is not true for strictly every country in the world (cf. Vatican City or Tuvalu), the assumption is nevertheless fairly commonly held, and therefore the question is felicitous. (31)b., however, is odd: although some countries do have two capital cities (e.g., Bolivia, Swaziland) it is definitely infelicitous to presuppose this of each country.

(31) a. Which countries have only two cities?
   \{that Canada has only two cities, that Iceland has only two cities, ...\}
   (presupposes of each country $x$ that $x$ has two cities.)

   b. #Which countries have only two capitals?
   \{that Canada has only two capital cities, that Iceland has only two capital cities, ...\}
   (presupposes of each country $x$ that $x$ has two capitals.)

5.3 Putting it together: Conjectural Questions

Assuming that questions presuppose the conjunction of the presuppositions of their partial answers and evidentials introduce presuppositions of evidence, we predict the reduction of interrogative force. The denotations and presuppositions of a yes-no question and a wh-question are illustrated in (32) and (33) respectively:

(32) St’át’imcets

\[
\begin{align*}
\text{man’c-em=}&\, h’a=k’a & k=\text{Hotze} \\
\text{smoke-MID=}&\, \text{YNQ=INFER} & \text{DET=Hotze} \\
\end{align*}
\]

‘I wonder if Hotze smokes.’

= \{that Hotze might smoke [presupposing there is inferential evidence that Hotze smokes], that Hotze might not smoke [presupposing there is inferential evidence that Hotze doesn’t smoke]\}

$^5$Judgments about (29) and (31) have proven slightly variable, with a small subset of people allowing these questions in situations in which not every person in the group used to drink, or had visited Paris in the past. We think this is due to people limiting the set of entities asked-of to only include those for whom the presupposition obtains. This is analogous to quantifier domain restriction with nominals (‘Every man loves his wife’).
swát=as=k’a ku=lhwál-ci-ts-as ti=ts’úqwaz’=a
who=SBJN=INFER DET=leave-APPL-1sg.obj-3.erg DET=fish=EXIS

‘I wonder who left me this fish.’

= {that Ryan might have left me this fish [presupposing there is inferential evidence that Ryan left me this fish], that Meagan might have left me this fish [presupposing there is inferential evidence that Meagan left me this fish], that Ileana might have left me this fish [presupposing there is inferential evidence that Ileana left me this fish], ...} = {p : ∃x[p = that x might have left me this fish [presupposing there is inferential evidence that x left me this fish]]}

The conjoined presupposition of (33) is that there is inferential evidence that Ryan left me this fish, and there is inferential evidence that Meagan left me this fish, and there is inferential evidence that Ileana left me this fish, and so on. We suggest that a speaker who utters a question but at the same time makes explicit that she believes the evidence is utterly mixed (even contradictory), is indicating her belief that the hearer is not in a position to answer the question.

We need to make more precise exactly how this effect is achieved in conversation, specifically how a CQ indicates that the speaker believes the hearer is not in a position to answer a CQ question. We claim that there is a Gricean effect that arises in questions such as (33): consider a slightly different context where the speaker requires an answer. In this case, it would be simpler and more succinct for the speaker to simply utter a regular OQ, which requires an answer from the addressee in order for the discourse to be felicitous. CQs are more complex constructions than OQs, and by using an evidential in a question, a speaker is implicating that the speaker was not in a position to utter an OQ, and thus that the hearer is assumed to lack an answer to the question.

6. Summary and Further Issues

CQs have the syntax and semantics of ordinary questions; they denote sets of propositions. The presuppositions introduced by the evidential are carried by each proposition in the question denotation, and conjoin with each other. The CQ as a whole presupposes everything presupposed by each of its members. The resulting conjoined presupposition entails that there is mixed evidence about the question at hand. Our claim is that the presupposition of mixed evidence functions to indicate reduced confidence on the speaker’s part that the hearer is in a position to know the true answer. Consider, for example, that even if you think you know who left me the fish in (33), the existence of conflicting evidence indicating that perhaps someone else left me the fish will decrease your confidence in your belief. Thus, while the conjoined presupposition of a CQ does not strictly rule out hearer knowledge of the true answer, pragmatically it functions to encode lack of confidence that the true answer is known – since, if the speaker simply trusts the hearer to know the true answer and is asking to be told it, s/he could use the simpler Ordinary Question for this purpose.
One issue to be further considered is the exact status of the evidence restriction introduced by evidentials. It seems clear that the evidence restriction is not-at-issue content (see, e.g., Potts 2005), but is it really a presupposition, as we have claimed? Murray (2009a,b) argues that the evidence restriction of an evidential is asserted, not presupposed.

It is true that the evidence restriction of an evidential is not a typical common-ground presupposition in the sense of Stalnaker (1974). Thus, if a speaker utters a sentence containing an inferential evidential, s/he does not have to assume that the proposition that the speaker has inferential evidence for the embedded proposition is already in the common ground. For St’át’imcets, it is no surprise that the evidence restriction we model as a presupposition does not require addressee knowledge prior to the utterance: Matthewson (2008) argues that the language as a whole lacks any Stalnakerian presuppositions which place constraints on the common ground. Gitksan, however, does appear to have Stalnakerian presuppositions elsewhere in the grammar, so the question of the status of evidential restrictions is an important one here.

One obvious solution is to assume that evidential presuppositions will, by necessity, need to be accommodated. Note that evidential presuppositions are in this respect on a par with other aspects of meaning which are often analyzed as presuppositions, for example the features on tenses and pronouns (Heim get date, Kratzer 1998, Heim and Kratzer 1998). It may be that temporal, pronominal and evidential features are not truly presuppositional, but are some other type of not-at-issue content. For example, perhaps the evidential claim is part of not-at-issue expressive meaning (Potts 2005, Kratzer 1999), similar to the speaker commitments which arise with discourse particles (Kratzer and Matthewson 2009).

We leave this issue for future research, but note that our core idea may still carry over to a revised analysis of evidential presuppositions: whether or not they are “presuppositions” in the classical sense of this term, it may still be the case that these evidential restrictions distribute to each proposition in the question set and result in an inference of ‘mixed evidence’, deriving the reduced interrogative force along the lines suggested above.\(^6\)

Further work also needs to be done to expand this account to include other types of evidentials. The conjectural/inferential evidential is not the only evidential to appear in questions, but it the only one to have this ‘I wonder’ effect.\(^7\) ‘Reportative Questions’, for example, are straightforward questions meaning something like ‘Have you heard ...?’. Examples of this are found in Nlèʔkpmxčínin (35) and Gitksan in (36).

\(^6\)Hotze Rullmann (p.c.) points out that the expressive meaning of epithets (cf. Potts 2005) does not seem to project in the way we would want in questions. For example, the speaker of (i) is not committed to the claim that each of the addressees is a bastard:

(34) Which bastard among you guys left the door open?

Further research is clearly required.

\(^7\)Compare, however, Cheyenne (Murray 2009b), in which it appears to be the reportative, rather than the conjectural, that has this effect. Why this same effect would be caused by different evidentials in different languages is another pressing issue for future research.
(35) Nłeʔkepmxcín

Context: There is a new professor in the department, and the students are curious about her personality.

a. kéʔ xeʔ k=s-y’é-s
   whether DEM IRL=NOM-good-3.poss
   ‘Is she nice?’

b. kéʔ=ekʷu xeʔ k=s-y’é-s
   whether=REPORT DEM IRL=NOM-good-3.poss
   ‘Are they saying she’s nice?’

(36) Gitksan

Context: You and a friend are taking the overnight bus to Prince George. You can’t remember what time you arrive, but your friend booked the tickets and she might know.

a. taxgwi tim bakw-mì
   when FUT arrive.pl-1pl
   ‘When is it we’ll get there?’

b. taxgwi=kat tim bakw-mì
   when=REPORT FUT arrive.pl-1pl
   ‘When is it (did they say/did you hear) we’ll get there?’

c. silkwsax t’aahlakw=kat
   noon tomorrow=REPORT
   ‘(I heard/They said) at noon tomorrow.’

Our account as sketched above predicts that these questions would introduce conjoined presuppositions, too, to the effect that there is mixed or contradictory reportative evidence, in the same way that conjectural questions introduce a conjoined presupposition that there is mixed or contradictory conjectural evidence. However, in none of these reportative questions does there appear to be any not-at-issue meaning akin to ‘reports are mixed’, nor does there appear to be any resulting signal that the speaker does not expect the addressee to be able to answer.

The account above will thus need to be refined and expanded to properly account for evidentials other than the conjectural evidential, with the eventual goal of accounting for Conjectural Questions as a unified phenomenon. One possible direction to pursue is refocussing on the meanings of individual evidentials and taking in to account their paradigmatic relation to one another in terms of specific kinds of inferential evidence they encode. For example, in Gitksan both the modal =ima and reportative =kat are inferential evidentials, but =kat encodes a more specific kind of inferential evidentiality, specifically that the inferential evidence must be a report. Gitksan also has a sensory evidential, niakw, which
is also a more specific type of inferential evidential. Neither *nakw* nor *=kat* can convey a ‘wonder’ interpretation when put into a question. This could be because the kinds of evidential information encoded by *nakw* nor *=kat* are too specific to allow for any kind of controversy. In other words, only the ‘weakest’ evidential can be used in a CQ.

References

von Fintel, Kai and Irene Heim 2007. Intensional semantics. lecture notes. Ms., MIT.
Heim, Irene. 1999. Notes on interrogatives. Lecture notes, MIT.


Department of Linguistics
2613 West Mall, Totem Fields Studios
University of British Columbia
Vancouver, British Columbia
V6T 1Z4, Canada

littell@interchange.ubc.ca
lisamatt@interchange.ubc.ca
t.r.g.peterson@hum.leidenuniv.nl