

# Evidentials in Interrogatives: A Case Study of Korean\*

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**Abstract.** This paper concerns a puzzle about the interpretation of Korean direct evidential *-te-* in interrogatives which I call *evidential perspective shift in questions* ('origo shift of evidentials' in quesitons in Garrett 2001). This puzzle consists in the evidential being interpreted as regarding a source of information of the answerer rather than the questioner. Here I introduce a novel semantic approach to this phenomenon which derives it as a consequence of the interaction of the meaning of questions and of evidentials. I will also illustrate the conceptual and empirical advantages of this view over previous accounts.

#### 1 Introduction

Korean verbal ending -te- introduces the 'implication' that the utterer has direct evidence relative to the 'prejacent'. For example, unlike (1a), (1b) carries the implication that the speaker has direct evidence (or the speaker saw) that John looked at the speaker himself/herself. Furthermore, as shown in (1c), -te- also introduces a similar implication when used in questions.

- (1) a. John-i na-lul po-nta.

  \*\*John-NOM I-ACC see-DECL 'John looks at me.'
  - b. John-i na-lul po-te-la. *John*-NOM *I*-ACC *see-te*-DECL

    'John saw me.'

Implication: The speaker has direct evidence that John saw the speaker himself/herself

\* I thank audiences in California Universities Semantics and Pragmatics (November 21, 2009, UCSC) and in SuB 15 for their questions and comments. I am also indebted to the discussions with Jean-Roger Vergnaud, Andrew Simpson, Stephen Finlay, Barry Schein, Seungho Nam and Chungmin Lee. Special thanks go to Elena Guerzoni, whose detailed comments and suggestions to the earlier version of this work were greatly helpful. All remaining errors are mine, of course.

1 Throughout this paper, the term *implication* is used to avoid making any theoretical commitment to the question of whether it is truth-conditional presuppositional implicational or illocutionary.

I hroughout this paper, the term *implication* is used to avoid making any theoretical commitment to the question of whether it is truth-conditional, presuppositional, implicational, or illocutionary. I also extend the notion *prejacent* to indicate the propositional content of the sentence from the context of evidentials. I use this term in a purely descriptive way.

c. John-i na-lul po-te-nya?
 John-NOM I-ACC see-te-Q
 'Did John see me?'
 Implication: The addressee is expected to answer based on his/her direct evidence relative to whether John saw the speaker or not

(1) shows that evidentials behave like indexicals (Kaplan 1989): the implication it introduces varies depending on who the speaker is.<sup>2</sup> For example, if the utterer of (1b) is Bill, then it is Bill who has direct evidence, and if the utterer is Tom, then it is Tom who has direct evidence. Similarly, the denotation of the indexical, such as na 'I', is evaluated from the utter's perspective. Therefore, if the utterer of (1a) is Bill, then the sentence is true iff John looks at Bill, and if the utterer is Tom, then it is true iff John looks at Tom.

However, we find that the parallelism between indexicals and evidentials does not appear any more in questions. Both in the declarative (1b) and in the interrogative (1c), the pronoun na 'I' is interpreted as the utterer. However, the evidential implication introduced by -te- is 'shifted' from the speaker's perspective to the addressee's perspective: in (1b), it is the speaker who has the direct evidence, but in (1c), it is the addressee who is expected to have the direct evidence. Here we have a puzzle of the evidential perspective shift in questions: if both pronouns and evidentials exhibit indexicality, why are only evidentials shifted from the speaker's perspective to the addressee's perspective in questions?

This paper aims to solve this puzzle. Specifically, I will show that the facts illustrated above can be derived from the standard semantics of indexicals and questions by assuming a specific lexical entry for evidentials. To do that, first I will outline the theoretical assumptions of this paper: Kaplan's (1989) semantics of indexicals and Hamblin's (1973) semantics of questions (Section 2). Then I will make my own proposal and show how this proposal explains the puzzle (Section 3). Next I will compare my proposal with other (plausible but wrong, at least for Korean) proposals (Section 4). Finally I will conclude my paper and discuss theoretical implications and remaining problems (Section 5).

# 2 Theoretical Backgrounds

## 2.1 Semantics of Indexicals: Kaplan (1989)

Kaplan's (1989) theory of indexicals is intended to explain the difference between (2a) and (2b):

<sup>&</sup>lt;sup>2</sup> Higginbotham (2009) also pointed out this characteristics under the term *First-person authority*.

- (2) a. He must be rich.
  - b. The President of GM must be rich.

Suppose that (2a) is uttered with pointing out John as the reference of *he*. At the time of utterance, the reference of *he* does not vary over world of evaluation, and therefore, (2a) is true iff, at the time of the utterance, in every epistemic alternative of the speaker, John is rich. In contrast, (2b) (with *de dicto* reading), is true iff in every epistemic alternative of the speaker, the president of GM is rich, no matter who the president of GM might be in that world. Here the reference of the definite description *the President of GM* may vary depending on the worlds of evaluation (in one world it may be John, while in the other world it may be Mary, and so forth).

To account for the difference between indexicals and other definite descriptions, Kaplan (1989) proposes that indexicals (like I, here and now), receive world-independent but context-dependent denotations. Once the reference of an indexical is established within an utterance context, it behaves like a rigid designator across worlds of evaluation (Kripke 1980). To formalize this idea, Kaplan proposes two-step semantics, where the meaning of a sentence, which grammar generates, is called character, a function from contexts to intensions. Then a character is evaluated via two steps. First, characters are applied to the context, resulting in intensions. Second, intensions are applied to worlds of evaluation, resulting in extensions. In terms of type-driven semantics, this idea can be formalized as (3). In addition to this, following common practice, I assume the utterance context c is a triple which contains the world, the time, and the speaker of utterance, as in (4).

- (3) a. The character of  $\phi$ :  $\llbracket \phi \rrbracket_{\chi} = \lambda c. \lambda w. \llbracket \phi \rrbracket^{c,w}$ b. The intension of  $\phi$  at context c:  $\llbracket \phi \rrbracket^{c}_{\varphi} = \lambda w. \llbracket \phi \rrbracket^{c,w}$
- (4) Utterance context  $c = \langle w^c, t^c, s^c \rangle^4$

Let us see how this system works with concrete examples. First consider (5).

(5) I am rich.

In Kaplan's proposal, the pronoun I is interpreted as the speaker of the utterance  $s^*$  in the utterance context  $c^*$ :

(6) 
$$[I]^{c^*} = [I]^{< w^*, t^*, s^* >} = s^*$$

<sup>&</sup>lt;sup>3</sup> (3) is from von Fintel (2005). For the original formalization see Kaplan (1989: Ch.XVIII).

<sup>&</sup>lt;sup>4</sup> I only specify relevant parameters: for my purpose, other parameter such as the place of utterance is not required.

Therefore, the truth-condition of (5) differs depending who the speaker is in  $c^*$ , as illustrated in (7). For example, if Mary utters (5) in  $c^*$ , then since I refers to Mary, (5) is true if and only if Mary is rich in  $c^*$ . Similarly, if Tom utters (5) in  $c^*$ , I refers to Tom, and (5) is true if and only if Tom is rich in  $c^*$ .

- (7) a. If  $s^*$  is Mary, then  $[I]^{c^*} = [I]^{< w^*, t^*, s^* >} = Mary$ Therefore, (5) is true if and only if Mary is rich in  $c^*$ 
  - b. If  $s^*$  is Tom, then  $[\![I]\!]^{c^*} = [\![I]\!]^{< w^*, t^*, s^* >} = Tom$ Therefore, (5) is true if and only if Tom is rich in  $c^*$

Given this, let us further see how this system works for evidentials, which also exhibit indexicality, as we saw in the introduction. Consider (8), for example, where the declarative *John-i Bill-ul po-te-la* 'John saw Bill' contains *-te-*, and is uttered in the context  $c^*$ . Then (8) carries the implication that the speaker  $s^*$  in  $c^*$  has direct evidence that John saw Bill.

(8) [John-i Bill-ul po-te-la] $^{c^*}$ John-NOM Bill-ACC see-te-DECL
'John saw Bill'
Implication:  $s^*$  in  $c^*$  has direct evidence that John saw Bill.

The implication introduced by *-te-* is speaker-dependent: it varies depending on the speaker  $s^*$  in  $c^*$ . For example, as illustrated in (9), if  $s^*$  is Mary, then the implication is that Mary has direct evidence that John saw Bill, and if  $s^*$  is Tom, then the implication is that Tom has direct evidence that John saw Bill.

- (9) a. If the utterer of (8) is Mary, then  $s^*$  is Mary. The implication of (8): Mary has dir. evi. that John saw Bill.
  - b. If the utterer of (8) is Tom, then  $s^*$  is Tom. The implication of (8): Tom has dir. evi. that John saw Bill.

### 2.2 Semantics of Questions: Hamblin (1973)

Hamblin (1973) assumes that a question denotes the set of its possible answers, that is, the set of propositions. The shift from propositions to sets thereof is due to the semantics of *wh*-words. For example, in yes/no questions, Hamblin assumes the lexical entry (10) for (either overt or covert) *whether*, where it maps every proposition to the set containing it and its negation:<sup>5</sup>

(10) 
$$\| \text{ whether } \| = \{ \lambda p_{st}.p_{st}, \lambda p_{st}.\sim p_{st} \}$$

 $<sup>\</sup>frac{5}{5}$  For simplicity I only focus on yes/no questions, but my proposal can easily extend to wh-questions.

Since a *wh*-word denotes a set of individuals, properties, or functions taking propositions, in different stages of semantic computation, we may find one of the three cases in (11): either the function is in a set (11a), the argument is in a set (11b), or both are in different sets (11c).

(11) a. 
$$[ [\alpha_{<\sigma,\tau>}] [\{\beta:\beta\in D_{\sigma}\}] ]$$
  
b.  $[ [\{\alpha:\alpha\in D_{<\sigma,\tau>}\}] [\beta_{\sigma}] ]$   
c.  $[ [\{\alpha:\alpha\in D_{<\sigma,\tau>}\}] [\{\beta:\beta\in D_{\sigma}\}] ]$ 

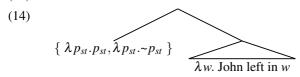
Since, in these cases, the usual functional application (FA) rule does not work any more, Hamblin (1973) proposes a new rule, that is, a set-tolerant FA rule, or a point-wise FA rule. This rule can be implemented into type-driven semantics as (12), a rendition of Hamblin's rule made by Heim & von Fintel (2001).

- (12) Pointwise Functional Application Rule (PFA)
  - If  $\alpha$  is a branching node and  $\{\beta, \gamma\}$  is the set of its daughters, then:
  - a.  $\llbracket \alpha \rrbracket_{\mathfrak{C}} = \lambda w$ .  $\llbracket \beta \rrbracket_{\mathfrak{C}}(w)(\llbracket \gamma \rrbracket_{\mathfrak{C}}(w))$
  - b. or  $\{\lambda w. \llbracket \bar{\beta} \rrbracket \epsilon(w)(x(w)): x \in \llbracket \gamma \rrbracket \epsilon \}$
  - c. or  $\{\lambda w. f(w)([\![\gamma]\!]_{\mathfrak{c}}(w)): f \in [\![\beta]\!]_{\mathfrak{c}}\}$
  - d. or  $\{\lambda w. f(w)(x(w)): f \in [\beta]\}$  &  $x \in [\gamma]$  whichever is defined.

By these rules, in (11a), each argument in the set  $\beta$  can combine with the function  $\alpha$ , returning a set of elements of type  $\tau$ . Similarly, in (11b), each function in the set  $\alpha$  can combine with the function  $\beta$ , returning a set of elements of type  $\tau$ , and in (11c), each function in the set  $\alpha$  can combine with each argument in a set  $\beta$ , returning a set of elements of type  $\tau$ .

Let us see how Hamblin's (1973) semantics of questions actually works with a concrete example, that is (13), whose LF is (14):

## (13) Did John leave?



Here the proposition *that John left* needs to combine with each of two functions in the set denoted by *whether*, which can be done via PFA (12c). Therefore, (14) is computed as shown in (15), where we can see that the denotation of (13) is a set of two possible answers (or two propositions), that is, *that John left* and *that John did not leave*, as expected:

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(15)  [ (13) ]_{\mathcal{E}} = [ \text{Did John leave?} ]_{\mathcal{E}} = [ \text{Whether (John left)} ]_{\mathcal{E}} 
= \{ f(\lambda w. \text{ John left in } w): f \in \{ \lambda p_{st}.p_{st}, \lambda p_{st}.\sim p_{st} \} \} 
= \{ [\lambda p_{st}.p_{st}](\lambda w. \text{ John left in } w), [\lambda p_{st}.\sim p_{st}](\lambda w. \text{ John left in } w) \} 
= \{ \lambda w. \text{ John left in } w, \lambda w. \text{ John did not leave in } w \}
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## 3 Proposal

Given the backgrounds shown above, I propose that the lexical entry for *-te-* is (16), where *-te-* takes a proposition as its argument and returns a character:<sup>6</sup>

(16) For any utterance context  $c^*$ ,  $[\![ -te- ]\!]^{c^*} = \lambda p_{st} \cdot \lambda c : s^c \text{ has only direct evidence relative to } p. p$ (where c is a variable over contexts: a triple of  $< w^c, t^c, s^c >$ )

According to (16), for any utterance context  $c^*$ , -te- takes a proposition as its argument and returns a partial character with the definedness condition (that is presupposition) that the speaker in c only has direct perceptive evidence that p. When this partial character is applied to a context with the definedness condition satisfied, it returns the proposition p itself.

This proposal makes the following two predictions. First, if the resulting character is immediately applied to  $c^*$ , the evidential presupposition relates to the utterance context  $c^*$ , and is anchored to the utterance speaker  $s^*$ . In this case, both evidentials and indexicals are interpreted from  $s^*$ 's perspective. Second, when characters of this sort are not directly uttered (for example, when they are members of a set of answers), these characters are not directly applied to the uterance context  $c^*$ . In this case, indexicals are still interpreted from  $s^*$ 's perspective, whereas evidential presuppositions are not interpreted from  $s^*$ 's perspective. In the rest of this section, I will show that the first prediction is borne out in declaratives, and the second prediction is borne out in questions.

#### 3.1 -te- in Declaratives

First consider (17).

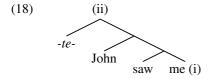
(17) John-i na-lul po-te-la. *John*-NOM *I*-ACC *see-te*-DECL

'John saw me'

Presupposition: the speaker has direct evidence that John saw the speaker himself/herself

The LF of (17) is (18):

<sup>&</sup>lt;sup>6</sup> For simplicity I ignore the temporal interpretation of *-te-*. Readers interested in this issue are referred to Chung (2007) and Lee (2010), *inter alia*.



For any utterance context  $c^*$  (i.e., the triple  $< w^*, t^*, s^* >$ ), the denotation of (18) is derived as follows:

(19) a. 
$$[(i)]^{c^*} = [me]^{c^*} = s^{*7}$$
  
b.  $[(ii)]^{c^*} = [(17)]^{c^*}$   
 $= [-te^-]^{c^*} ([John \ saw \ me]^{c^*})$  (by Intensional FA and (19a))  
 $= [-te^-]^{c^*} (\lambda w. \ John \ saw \ s^* \ in \ w)$  (by (16) and FA)  
 $= \lambda c$ :  $s^c$  has direct evidence that J. saw  $s^*$ .  $\lambda w$ . J. saw  $s^*$  in  $w$ 

Here we can see that the evidential presupposition that the speaker in c has only direct evidence that John saw  $s^*$ , is anchored to the context c, which is still bound by  $\lambda$ . When the speaker  $s^*$  in  $c^*$  utters (17), he/she applies this character to  $c^*$  with the result in (20).

(20) 
$$[[(17)]]^{c^*} = [\lambda c: s^c \text{ has dir. evi. that J. saw } s^*. \lambda w. \text{ J. saw } s^* \text{ in } w](c^*)$$

$$= \lambda w. \text{ J. saw } s^* \text{ in } w \text{ (presupposition: } s^* \text{ has dir. evi. that J. saw } s^*)$$

When the context  $s^*$  satisfies the presupposition that  $s^*$  has direct evidence that John saw  $s^*$ , we get the proposition that John saw  $s^*$  in w. Now we can see that the first prediction is borne out in declaratives: both evidentials and indexicals are interpreted from  $s^*$ 's perspective.

#### 3.2 -te- in Questions

Consider the following question:

(21) John-i na-lul po-te-nya?

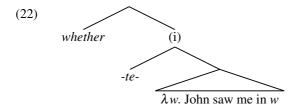
John-NOM I-ACC see-te-Q

'Did John see me?'

In the question like (21), in principle, we have two possible logical forms, with respect to the relative scope between *whether* and the evidential *-te-*. First consider the case where *whether* takes wide scope over *-te-*, which is (22).

<sup>&</sup>lt;sup>7</sup> A careful reader may wonder how the pronoun gets its denotation from the utterance context. I assume that this is done by Korean sentence final declarative/interrogative endings, which vary depending on the utterance context. For a detailed explanation, see Lim (2010: Ch.5.1).

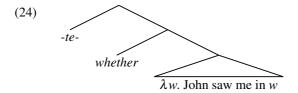
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At the node (i), we have the following character which is of type  $\langle c, st \rangle$ :

(23)  $\lambda c$ :  $s^c$  has dir. evi. that J. saw  $s^*$ .  $\lambda w$ . J. saw  $s^*$  in w

This is the same character as that in declaratives: see (19). However, each function in *whether* needs a proposition, and not a character, as its argument: see (10). Therefore, we have type mismatch. This means that, for the logical form to be interpretable, *-te-* should take wide scope over *whether* as in (24):



As in declaratives, for any utterance context  $c^*$ , me denotes the speaker  $s^*$ . Then the question whether John saw me is computed as we saw in Section 2.2, resulting in the set of two propositions in (25):

(25) { $\lambda w$ . John saw  $s^*$  in w,  $\lambda w$ . John did not see  $s^*$  in w}

-te-, as a function taking a proposition and returning a partial character (of type  $\langle c, st \rangle$ ), combines with each proposition in this set via PFA, and returns a set of two characters in (26):

(26)  $\{\lambda c: s^c \text{ has dir. evi. that J. saw } s^* \text{ in } w: \lambda w. \text{ J. saw } s^* \text{ in } w, \lambda c: s^c \text{ has dir. evi. that J. didn't see } s^* \text{ in } w: \lambda w. \text{ J. didn't see } s^* \text{ in } w\}$ 

At this point, let us recall the pragmatics of questions in general. In Hamblin's semantics of questions, to ask a question is to present a set of answers to the addressee. When doing so, none of the answers is directly uttered by the questioner: each answer can be directly uttered only when the addressee chooses it as a true answer. This holds *no matter what the type of the answers may be*, either propositions or characters. Therefore, it follows that the characters in the set of answers are *not directly uttered by the questioner*:

This said, consider (26) again. Here we have the set of two characters, where pronouns are interpreted from  $s^*$ 's perspective, whereas the evidential presupposition is anchored to  $s^c$  in c, which is still bound by  $\lambda$ . None of the characters in this set is uttered directly by  $s^*$ , the questioner, but each character in (26) can be uttered only when the addressee chooses one of them as a true answer. When chosen, the character as a true answer is uttered by the addressee. Then it is applied to the addressee's context, and the evidential presupposition is anchored to the addressee's perspective. Here we can see that the second prediction is borne out: indexicals are still interpreted from  $s^*$ 's perspective, but evidential presuppositions are not interpreted from  $s^*$ 's perspective.

To summarize, in this section, I proposed that *-te-* is a function from propositions to characters, introducing a definedness condition that the speaker has direct evidence relative to the prejacent. Furthermore, *-te-* takes wide scope over *wh-*words, and a question containing *-te-* denotes a set of characters and not a set of propositions (as standardly assumed). I have also shown that, once we assume that *-te-* is a function from propositions to characters, we can derive the evidential perspective shift in questions from the semantics of *-te-* and its interaction with the semantics and pragmatics of questions in general, without any fundamental revision of Hamblin's (1973) semantics of questions or Kaplan's (1989) semantics of indexicals.

## 4 Comparison with Other Proposals

In this section I discuss possible alternatives of my proposal in this paper, and show why my proposal has theoretical as well as empirical advantages over these alternatives.

## 4.1 Potential Pragmatic Alternative

One might choose to account for the evidential perspective shift in questions in terms of the pragmatics of questions, rather than the semantic account I proposed above. The potential pragmatic account is as follows. Suppose that a questioner asks a question to an answerer about the issue P (the term *issue* is also used descriptively here). In genuine information-seeking circumstances, the questioner is ignorant of P. This means that, typically, the questioner has no evidence relative to P, no matter what the type of evidence may be. Therefore the evidential cannot be anchored to the questioner. However, for the addressee to answer the question, he/she is expected to have evidence relative to P. Hence, the evidential perspective shift.

This kind of pragmatic account makes the following prediction. Suppose that a questioner's state of information is limited: that is, the speaker only has reportative evidence about P, which is weaker than direct perceptive evidence.

In this case, it is reasonable for the questioner to ask a question to the addressee, who is expected to have stronger evidence, that is direct perceptive evidence. Then it is expected in the pragmatic account that the questioner would use the reportative evidential marker in his/her question, to indicate his/her own weak evidence, without anchoring it to the answerer. This prediction is not borne out, however. Consider the following scenario.

(27) John is a detective and is investigating a case of embezzlement in a company. While interviewing several employees in the company, John heard that Mary is the one who embezzled the money. Finally, he interviewed Mary and asked a question...

Then imagine that John asked the following question under (27):

(28) #Tangsin-i ton-ul hoynglyengha-ess-ta-pnikka? you-NOM money-ACC embezzle-PAST-ta-Q 'Did you embezzle the money?'

The pragmatic account predicts that, under (27), the example (28), where Korean reportative evidential -ta- (Lim 2010) is used in a question, would be felicitous: since the speaker only has reportative evidence, and the addressee obviously has stronger evidence (since she is the embezzler), the reportative evidential -ta- should be anchored to the speaker. However, as indicated in (28), this prediction is not borne out, and under (27), (28) is simply infelicitous. This indicates that in Korean, the perspective shift of evidentials in questions obligatorily occurs, and therefore the pragmatic alternative does not explain Korean facts: we need an account based on the semantics, as proposed above.

## 4.2 Garrett (2001) on Tibetan

Garrett (2001) discusses the evidential perspective shift in Tibetan (which he calls *the origo shift*), and claims that, to account for the shift, the extension of a question should be modified as the set of assertions rather than the set of propositions, as shown in (29) (from Garrett 2001: 237):

(29) The revised extension of *Who left?*Answer-Set(*Who left?*) =  $\{A_{< h,s>} \mid \lambda x$ . Content(A) = x left $\}$ In words: the answer set for *Who left?* is the set of assertions A from h to s such that there is x such that the content of A is that x left.

Garrett's (2001) approach bears several problems. First, since both the speaker parameter and the addressee parameter is specified in each answer, it seems to predict that the shift is optional: it can be either anchored to the speaker or

to the addressee. However, the evidential perspective shift in Korean is obligatory, as we saw in Section 4.1. Second, it is unclear how to compositionally derive the extension in (29). Finally, again, since both parameters are specified in each answer, Garrett (2001) predicts that, when there is a shift, indexicals should also shift, but at least in Korean questions the shift of indexicals does not occur. Therefore we can conclude that Garret's proposal do not extend to Korean facts. §

### 4.3 Faller (2002) on Cuzco Quechua

Discussing Cuzco Quechua reportative evidential -si- in questions, Faller (2002) observes that a question with -si- is ambiguous between two readings, introducing different implications, as shown in (30) (from Faller 2002: 230):

- (30) Pi-ta-s Inés-qa watuku-sqa? who-ACC-si Inés-TOP visit-PAST2 'Who did Inés visit?'
  - (i) Speaker indicates that somebody else is asking.
  - (ii) Speaker expects hearer to have indirect evidence for his/her answer

The reading (i) is similar to the (indirect) quotation of the question: the speaker indicates that somebody else is asking. The reading (ii) is the shifted reading, similar to the evidential perspective shift in questions discussed in this paper. To solve this problem, Faller (2002) assumes that the speech act QUEST(ION) is a request of an assertion to the addressee:

Then Faller assumes scope ambiguity between different illocutionary acts. In reading (i), the operator EVI takes wide scope over the operator REQUEST, and in reading (ii) REQUEST takes wide scope over EVI:

(32) a. Reading (i): EVI (REQUEST (ASSERT $_h(q)$ )) (speaker-anchored)

b. Reading (ii): REQUEST (EVI (ASSERT $_h(q)$ )) (addressee-

anchored)

A question immediately follows from (32): Can we find the similar ambiguity in a question with a different evidential marker in Cuzco Quechua? Faller's (2002) answer is positive, and her example is (33), where the BPG (best-possible-ground) evidential *-mi*- is used in a question (from Faller 2002: 230,

<sup>&</sup>lt;sup>8</sup> Note that, due to the similar reason, McCready's (2007) analysis does not extend to Korean facts, either. McCready (2007) analyzes the perspective shift in some Japanese dialects, but in these dialects, when the evidential perspective is shifted, indexicals are also shifted, unlike Korean.

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ex.189a):

(33) Pi-ta-n Inés-qa watuku-sqa? who-ACC-mi Inés-TOP visit-PAST2 'Who did Inés visit?'

- (i) The speaker has the best possible grounds for asking
- (ii) The speaker expects the hearer to base his/her answer on the best possible grounds

The problem in (33) is that, as Faller herself agrees, the ambiguity with -mi- in a question is less clear. Specifically, what does it mean that "the speaker has the best possible grounds for asking"? According to Faller (2002), the speaker may have 'the best possible grounds for asking' in two cases. First, we may imagine the scenario where a teacher is asking a question (34a) to his/her students. Here the speaker has authority over the hearer and therefore has the best possible grounds for demanding an answer. Second, we may imagine the scenario where a customer is asking a question (34b) to a merchant. In this case the speaker has very good reasons for wanting to know the answer, and therefore has the best possible grounds to ask a question.

- (34) a. Hayk'a-n iskay yapa-sqa iskay-man?

  how-much-mi two add-PP to-Illa

  'How much is two plus two?' (Faller 2002: 232, ex.193a)
  - b. Hayk'a-n vale-n chay?

    how-much-mi cost-3 this

    'How much does this cost?' (Faller 2002: 232, ex.193b)

However, in both examples, the addressee-anchored reading of *-mi*- is equally available, and therefore it is unclear whether two questions in (34) actually the addressee-anchored reading or the speaker-anchored reading. Faller (2002) also agrees that there are ambiguities in (some) questions with *-mi*- between the speaker-anchored reading and the addressee-anchored reading, which seems to me that Faller's account of the shift based on scope ambiguity is less plausible.<sup>9</sup>

Finally, even though Faller manages to solve all the problems pointed out above, Korean does not show such an ambiguity as Cuzco Quechua. For example, in (35), where the reportative evidential *-ta-* is used in a question, we see that it only has the reading (ii), that is, the addressee-anchored reading. This means that, no matter what Faller's analysis on Cuzco Quechua evidentials in questions may be, it cannot extend to Korean facts.

 $<sup>^9</sup>$  The natural question at this point is how to account for the ambiguity of si in (30). To me the lexical ambiguity seems plausible, but more investigation is required.

- (35) Inés-nun nwukwu-lul manna-ess-ta-ni?

  Inés-TOP who-ACC meet-PAST-ta-Q

  'Who did Inés meet?'
  - (i) The speaker indicates that somebody else is asking
  - (ii) The speaker expects the addressee to have indirect evidence for his/her answer

Summarizing this section, I have shown that the simple-minded pragmatics-based account does not explain the evidential perspective shift in questions in Korean, since in Korean the shift is obligatory in questions. Furthermore, I also showed my semantics-based proposal can capture the perspective shift in Korean questions better than other proposals made for other languages.

## 5 Conclusion and Remaining Issues

In this paper, I showed that the evidential perspective shift in questions in Korean should be explained in terms of semantics rather than of pragmatics, because the shift obligatorily occurs when an evidential marker appears in a question. I also explained the perspective shift by assuming that Korean evidentials are functions from propositions to characters, without making any fundamental revision to Hamblin's (1973) semantics of questions or Kaplan's (1989) semantics of indexicals.

There are several open questions which are not clearly answered in this paper. One of such questions is about similarities and the differences between evidentials and other perspective-anchored items such as expressives and utterance-modifying adverbials (Amaral, Roberts & Smith 2007, Potts 2005, Potts 2007, Harris & Potts 2009, *i.a.*). The main difference between these perspective-dependent items and Korean evidentials is that the former allow the optional shift in questions, but the latter are obligatorily shifted in questions. Since we have already seen that Korean evidentials in questions are obligatorily anchored to the addressee's perspective, in this conclusion I will only show examples containing other perspective-related items. First, consider (36), where the expressive *pilemekul* 'damn' appears in a question.

(36) Ne-nun ku pilemekul il-ul kumantwu-ess-ni? *You*-TOP *that damn job*-ACC *quit*-PAST-Q 'Did you quit that damn job?'

In (36), the implication introduced by *pilemekul* can be interpreted in two ways - the speaker may think that the addressee's job is pretty bad, or the addressee may think that his/her own job is pretty bad. This shows that the perspective

shift in (36) is optional, unlike the shift triggered by -te-.

The utterance modifying adverbial like *solcikhi* 'honestly' triggers an optional shift in questions, unlike *-te-*. Consider the following question.

(37) Solcikhi, John-i ne-lul manna-ess-ni? *Honestly John*-NOM *you*-ACC *meet*-PAST-Q 'Honestly, did John meet you?'

When *solcikhi* is anchored to the addressee, (36) carries the implication that the speaker asks the addressee to answer in an honest way. When it is anchored to the speaker, however, (36) carries the implication that the speaker's curiosity in asking the question is genuine (or, he/she really does not know anything about the answer). This ambiguity shows that, in Korean, utterance-modifying adverbs are also optionally shifted in questions, unlike evidentials.

The previous two examples suggest to us that (at least) in Korean, evidentials are different from other perspective-anchored items with respect to whether they are shifted optionally or obligatorily in questions: evidentials are obligatorily shifted, but others are optionally shifted. This difference may be due to the difference of implications they introduce: as shown above, Korean evidentials are presupposition triggers, whereas expressives and utterance-modifying adverbials introduce conventional implicatures (Potts 2005) or expressive meanings (Potts 2007, Harris & Potts 2009). However, this account leads us to another question. Presuppositions are usually regarded as information which is already given and is shared by conversation participants, but in many cases, evidentials seem to introduce some new information to the common ground. If evidential implications are presuppositions, how can they introduce new information to the common ground?

This question is uneasy to answer. Because of this, Murray (to appear) posits another level of meaning, that is, non-at-issue assertion. However, scholars such as Stalnaker (2002) and Schlenker (2007) propose that a certain type of presuppositions can systematically introduce new information to the common ground, and for the moment I assume that in Korean, the implications introduced by evidentials are such presuppositions. Even though we still need to investigate what kind of presuppositions can introduce new information, but with other possible questions, I leave this question for future research.

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