# The Direct Evidential *-te* in Korean: Its Interaction with Person and Experiencer Predicate\*

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**Summary.** This paper discusses the relations among the direct evidential *-te*, *person*, and experiencer predicates in Korean. The questions of the paper are: (i) how the three components are related with each other in the evidential sentences, and (ii) how the interactions of the three components can be formally analyzed to correctly license only the well-formed evidential sentences. I show that in direct evidential construction with a non-private predicate (e.g. 'soft'), the asserter (i.e. the speaker *na* 'I' in declarative or the addressee *ne* 'you' in question) must be the experiencer of the predicate, but there is no such constraint in direct evidential construction with a private predicate (e.g. 'sick'). Then, I propose an analysis of the experiencer predicates in the Minimal Recursion Semantics (MRS) (Copestake, et al., 2005) of Head-driven Phrase Structure Grammar (HPSG) (Pollard and Sag, 1994; Sag, *et al.*, 2003).

**Keywords:** evidentiality, indexicality, experiencer predicate, HPSG

## 1 Introduction

The direct evidential *-te* in Korean has been much studied (see e.g. Sohn, 1994; Cinque, 1999; Chung, 2006; Lim, 2011; Lee, 2011, and also see Japanese evidentials in Kuno, 1973; Kuroda, 1973; Tenny, 2006; McCready and Ogata, 2007; and evidentials in various African languages in Aikhenvald, 2004, among others). For example, in the following constrast between the non-evidential sentence and the direct evidential construction in (1), only the latter has the direct evidential implication that the assertion of the proposition is based on relevant direct evidence.

(1) Mary-ka ku sakwa-lul mek-ess-ta/mek-te-la.
 Mary-Nom the apple-Acc eat-Past-Dec/ eat-Te-Dec
 'Mary ate the apple.'/
 'Mary ate the apple.' <u>Implication</u>: the speaker has relevant direct evidence
 (e.g. the speaker saw the scene) on the asserted proposition that Mary ate the apple.

In addition to actions denoted by verbs, states of adjectives (e.g. experiencer predicates) can also be asserted based on relevant direct evidence, as illustrated in (2) and (3). However, as shown in (3b), it is not the case that the direct evidential constructions are always grammatical in Korean, which is less discussed in the literature (the empirical basis of the acceptability of the examples in (2) and (3) is discussed more in the next section).

HPSG 2012 Conference/Ellipsis Workshop, July 18-21, 2012, Chungnam National University, Daejeon, Korea Copyright @ 2012 by Juwon Lee

<sup>\*</sup> I would like to thank Stephen Wechsler for his valuable comments on earlier version of this paper. The helpful comments of the anonymous reviewers are also gratefully acknowledged. Any remaining errors are mine.

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(2) a. na/ ne/ ku-nun simcang-i aphu-ta.

I/ you/ he-Top heart-Nom sick-Dec

'My/ Your/ His heart is sick.'

b. na/ ne/ ku-nun simcang-i aphu-te-la.

I/ you/ he-Top heart-Nom sick-Te-Dec

'My/ Your/ His heart was sick (based on relevant direct evidence).'
(3) a. na/ ne/ ku-nun i peykay-ka pwutulep-ta.

I/ you/ he-Top this pillow-Nom soft-Dec

'This pillow felt soft to me/ you/ him.'

b. na/ *ne/ *ku-nun i peykay-ka pwutulep-te-la.

I/ you/ he-Top this pillow-Nom soft-Te-Dec

'This pillow felt soft to me/ *you/ *him (based on relevant direct evidence).'
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In (2) and (3), the several contrasts show the complex interactions between the direct evidential *-te*, personal pronouns, and experiencer predicates: from the minimal pairs in (3b), the type of the personal pronoun subject is a factor of the grammaticality, from the contrasts between (2b) and (3b), the type of the experiencer predicate is also important, and finally, the minimal pairs between (3a) and (3b) show that the existence of the direct evidential *-te* is also involved in the grammaticality (or acceptability) of the constructions.

In this paper, I investigate the relations between the direct evidential *-te*, *person*, and experiencer predicates. The two main questions which I aim to answer are: (i) how exactly the three components are related with each other in the evidential sentences, and (ii) how the interactions of the three components can be formally analyzed to correctly license only the well-formed evidential sentences. Regarding these two issues, I show that in Korean direct evidential construction with a non-private predicate (e.g. 'soft'), the asserter (i.e. the speaker *na* 'I' in declarative or the addressee *ne* 'you' in question) must be the experiencer of the predicate, but there is no such constraint in direct evidential construction with a private predicate (e.g. 'sick'). Based on the constraints, I propose an analysis of the experiencer predicates in the framework of the Minimal Recursion Semantics (MRS) (Copestake, *et al.*, 2005) of Headdriven Phrase Structure Grammar (HPSG) (Pollard and Sag, 1994; Sag, *et al.*, 2003).

## 2 Grammaticality vs. awkwardness

The direct experience predicates denote some sensation or experiences of subjects. In the declarative sentences (4a) (from Tenny, 2006), the Japanese predicate of direct experience (i.e. *samui* 'cold') restricts its subject to the first-person (i.e. *watashi* 'I'). However, when the same predicate of direct experience is used in a question, as in (4b), the predicate restricts its subject to the second-person (i.e. *anata* 'you') (Kuno, 1973 cited in Tenny, 2006).

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(4) a. Watashi/*anata/*kare wa samui desu
I/ you/ he Top cold Cop
'I am cold.'/*'You are cold.'/*'He is cold.'
b. *Watashi/ anata/*kare wa samui desu-ka?
I/ you/ he Top cold Cop-Que
*'Am I cold?'/'Are you cold?'/*'Is he cold?'
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According to Tenny (2006: 248), the starred sentences in (4) are clearly *ungrammatical* while some corresponding English sentences may appear somewhat *odd*. In the footnote 3 of Tenny (2006), the author says, "Chungmin Lee informs me that these facts in Japanese are largely parallel to the facts in Korean." However, in the footnote 4 of Tenny (2006), the author also

says, "Some speakers have informed me that among younger Japanese, sentences like *Kare wa samui desu* are not as bad; the phenomenon may be disappearing in the language."

Similarly, the Korean sentences corresponding to (4a) seem to be *not as bad* (even though the second-person or third-person subject may sound somewhat *awkward* without a plausible context). We can find empirical data supporting it; the subject of a direct experience predicate can be second-person, as in (5a), or third-person, as in (5b) (from Google).

(5) a. twi tol-a po-nun ne-nun pwulanha-ta. back turn-Comp see-Rel you-Top anxious-Dec 'You, turning and looking back, are anxious.'
b. nwun-ey teph-i-myen ku-nun chwup-ta. snow-in cover-Pass-if he-Top cold-Dec

'If covered in snow, he is cold.'

So, there seems to be less person restriction related with the experiencer predicates in Korean. If a context (e.g. which is associated with evidence about the state of the experiencer) is explicitly given, as in (5), such the experiencer predicate sentences sound better.

Then, we can expect that in a Korean question, the first-person pronoun or the third-person pronoun can be the subjects of the experiencer predicates (unlike Japanese sentences in (4b)). This is verified below (data from Google):

- (6) a. **na**-nun **chwuwun-ka**? son-ul po-ni kwayen ttelli-ko iss-ess-ta.

  I-Top cold-Que? hand-Acc see-when indeed shiver-Comp Prog-Past-Dec 'Am *I cold*? When I saw my hand, it was shivering indeed.'
  - b. **ku**-nun/ **Dahay**-nun **oylowun-ka**? he-Top/ Dahay-Top lonely-Que? 'Is *he/ Dahay* (female name) *lonely*?'

The empirical data in (5) and (6) suggest that the restriction on the personal pronoun subject in declarative and question with experiencer predicate is a matter of *the degree of awkwardness*, rather than a matter of *grammaticality* (at least in Korean). That is, if an appropriate context is given, such the sentences become more natural. Consider the sentences in (7a), which are almost same as (3a). The contexts in (7a) make the sentences to be more natural than (3a) without a context.

- (7) a. **na/ ne/ ku**-nun i peykay-ka **pwutulep**-ciman aninchek-ha-ko iss-ta. I/ you/ he-Top this pillow-Nom soft-but not.pretend-do-Comp Prog-Dec 'This pillow *feels soft* to *me/ you/ him*, but I am/ you are/ he is pretending that it does feel soft.'
  - b. **na/ ne/ ku**-nun ku koki-ka **masiss-**ciman aninchek-ha-ko iss-ta. I/ you/ he-Top the meat-Acc tasty-but not.pretend-do-Comp Prog-Dec 'The meat *tastes good* to *me/ you/ him*, but I am/ you are/ he is pretending that it does not taste good.'

In (8a) below, the context (i.e. the medical examination results) makes the direct evidential constructions (with *aphu*-'sick', a private predicate) to be more natural. However, in (8b), even if the relevant context is given, the direct evidential constructions (with *masiss*- 'tasty', a non-private predicate) sound still very bad.

(8) a. kemsakyelkwa-lul po-nikka **ne/ku**-nun simcang-i manhi **aphu-te-la**. . examination.result-Acc see-since you/he-Top heart-Nom very sick-Te-Dec.

- 'Your/ His heart was very sick according to the medical examination results (based on the relevant direct evidence, i.e. the medical examination results).
- b. \*mek-nun mosup-ul po-nikka **ne/ ku**-nun ku koki-ka cengmal **masiss-te-la**. eat-Rel scene-Acc see-since you/ he-Top the meat-Nom really tasty-te-Dec 'The meat *tastes* really *good* to *you/ him* according to my observation (based on the relevant direct evidence, i.e. seeing/observation).'

In (8b), the three components (i.e. personal pronouns, experiencer predicates, and the direct evidential *-te*) are responsible for the ungrammaticality. Each component is discussed in the following three sections.

# 3 Personal pronouns in Korean

The basic paradigm of Korean pronouns is presented in the following table:

PersonSingularPluralFirstna 'I'wuli(-tul) 'weSecondne 'you.SG'nehuy(-tul) 'you.PL'Thirdku 'he', kunye 'she'ku-tul 'they', kunye-tul 'they.FEM'

Table 1: Personal Pronouns in Korean

Korean has some honorific or humble forms of pronouns, but they are not included in the table; only basic personal pronouns are given in the table. For the first- or second-person plural pronoun, the plural marker -tul is optional, since they already have the distinguished forms from the singular counterparts (i.e. na vs. wuli, ne vs. nehuy). However, in case of the third-person plural pronouns, the plural marker -tul is required.

The main point of the person indexicals is that the first- and second-person pronouns (i.e. speech act participant indexicals) are speaker-dependent: their interpretations vary depending on who the speaker is (see e.g. Kaplan, 1977; Wechsler, 2010): for instance, in Korean, na 'I' always refers to the speaker, and ne 'you' always refers to the addressee. However, the referents of the third-person pronouns normally exclude speaker and addressee (see Wechsler, 2010). In interrogative, the first- and second-person pronouns are also anchored to the speaker and addressee, respectively, which is a crucial difference from evidential.

## 4 Two types of experiencer predicates

In (9a), the second nominative phrase (i.e. 'mind-Nom') of the inalienable possession relation is optional (without a significant meaning difference), but an alienable possession relation (e.g. 'picture-Nom') cannot occur in the position. However, in (9b), an alienable possession relation is required as the second nominative complement (e.g. 'pillow-Nom'): if the second nominative phrase is omitted, then the sentence has a different interpretation (i.e. Tom is rough) and the predicate 'rough' is not an experiencer predicate anymore, but a predicative adjective describing Tom's character.

- (9) a. Tom-un (maum-i) **oylop**-ta.
  - Tom-Top mind-Nom lonely-Dec
  - 'Tom is lonely.'/ 'Tom's mind is lonely.'
  - b. Tom-un (i peykay-ka) **kkachilkkachilha-**ta.
    - Tom-Top (this pillow-Nom) rough-Dec
    - 'This pillow feels rough to Tom.'
    - 'Tom is *rough* (not as an experiencer predicate).'

When the experiencer is omitted as in (10a), the omitted experiencer can be interpreted as first-, second- or third-person pronoun (although the first-person pronoun seems to be most natural). However, in (10b), the interpretation of the omitted experiencer is restricted to the speaker.

```
(10) a. maum-i oylop-ta.
mind-Nom lonely-Dec
'My/ Your/ His mind is lonely.'
b. peykay-ka kkachilkkachilha-ta.
pillow-Nom soft-Dec
'The pillow feels rough to me.'
```

Based on the syntactic and semantic differences, the experiencer predicates (in Korean) can be classified into two types (cf. English experiencer predicates in Pesetsky, 1987): (i) private predicate (e.g. *oylop-ta* 'lonely' or *aphu-ta* 'sick' representing the state of subject), and (ii) non-private predicate (e.g. *kkachilkkachilha-ta* 'rough' or *pwutulep-ta* 'soft' denoting the state of an entity (e.g. 'pillow') that the subject experiences).

#### 5 The direct evidential *-te* in Korean

Evidentials have a property of indexicality (i.e. speaker-dependent): *the speaker* has evidence on an asserted proposition (see e.g. Garrett, 2001; McCready and Ogata, 2007; Lim, 2010). However, evidential is shifted in interrogatives (unlike *you* and *I*): e.g. in declarative, the evidential *-te* is anchored to the speaker, but in question, it is anchored to the addressee (see e.g. Lim, 2010). So, in declarative, the speaker is the utterer and asserter, but in interrogative, the speaker is the utterer, but the addressee is the asserter: i.e. evidentials are always anchored to the asserter (see Lim, 2010).

I adopt the idea that evidentials are like presupposition (Mathewson, *et al.*, 2007; Lim, 2010): the evidential implication of *-te* cannot be negated or questioned, and *-te* cannot be used plausibly when the truth or falsity of the proposition is known (see Faller, 2002; Matthewson, *et al.*, 2007; Lim, 2010). The following shows the negative counterparts of the examples in (2b) and (3b):

```
(11) a. na/ne/ku-nun simcang-i an aphu-te-la.

I/ you/ he-Top heart-Nom Neg sick-Te-Dec

'My/ Your/ His heart was not sick (based on relevant direct evidence).'

b. na/*ne/*ku-nun i peykay-ka an pwutulep-te-la.

I/you/he-Top this pillow-Nom Neg soft-Te-Dec

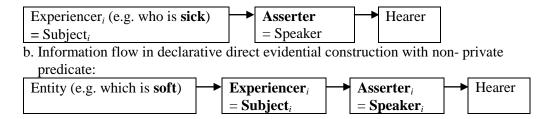
'This pillow did not feel soft to me/ *you/ *him (based on relevant direct evidence).'
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In (11), the direct evidential implications are not negated, but are still included in the meanings of the constructions. In the question forms (13), the implications are not questioned, either.

## 6 The direct evidential *-te*, personal pronouns and experiencer predicates

Based on the properties of the three components shown, we can see that in direct evidential construction with private predicate (e.g. *sick*), the asserter does not need to be the experiencer (subject), but in direct evidential sentence with non-private predicate (e.g. *soft*), the asserter must be the experiencer (subject). This difference is illustrated in the following diagrams:

(12) a. Information flow in declarative direct evidential construction with private predicate:



In (12a), the asserter is adjacent to the experiencer, so the asserter can have access to the direct evidence on the state of the experiencer. But in (12b), the asserter is not adjacent to the entity (whose property is described by the predicate), so in order to have the effect of being adjacent to the entity, the asserter must be co-indexed with the experiencer, which is adjacent to the entity.

## 7 Predictions

From the general (adjacency) constraint in (12), it is predicted that in interrogative direct evidential construction with private predicate (e.g. *sick* or *lonely*), any personal pronoun can be the subject, but in interrogative direct evidential construction with non-private predicate (e.g. *soft*), only the second-person pronoun *ne* 'you' (i.e. the asserter in question) can be the subject, which is confirmed as below:

(13) a. na/ ne/ ku-nun manhi oylop-te-nya?

I/you/he-Top very lonely-te-Que

'Was I/ Were you/ Was he very lonely?'

<u>Implication</u>: the addressee is expected to answer based on relevant direct evidence.

b. \*na/ ne/ \*ku-nun i peykay-ka manhi pwutulep-te-nya?

I/you/he-Top this pillow-Nom very soft-Te-Que

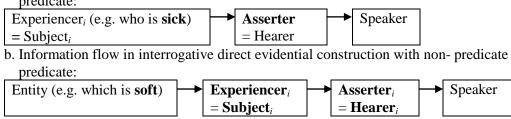
'Did this pillow *feel* very *soft* to \**me/you/* \**him?*'

Implication: the addressee is expected to answer based on relevant direct evidence.

In (13a), when the subject is *na* 'I', it may sound awkward. Since generally we know about sensation of ourselves better than other people, it seems not to be very natural to ask other people about some sensation or states of ourselves. However, if a plausible context is given (e.g. situations in which the speaker asks a medical doctor about his or her state or the speaker is testing to know whether the addressee knows about the speaker's state), then the sentence sounds better.

Then, the information flow of the interrogative direct evidential constructions can be represented with the following diagrams:

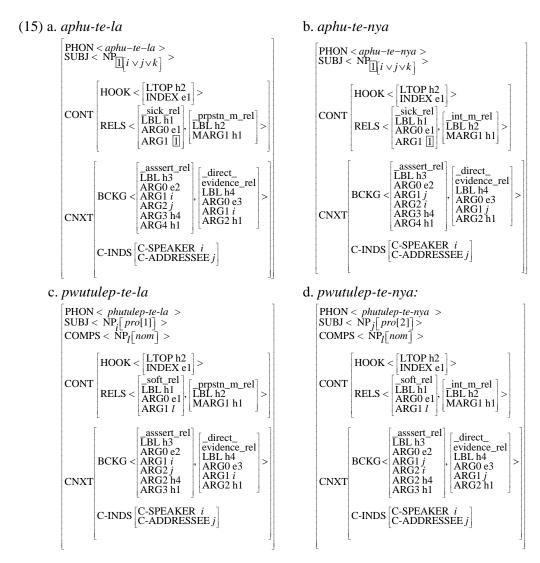
(14) a. Information flow in interrogative direct evidential construction with private predicate:



In (14b), it is required that the asserter (i.e. the hearer in the interrogative) should be adjacent to the entity (by the co-indexation with the experiencer/subject).

# 8 An analysis of the direct evidential constructions

I propose the following lexical items of the Korean experiencer predicates (which can be generated from the basic forms of the adjectives by derivational and inflectional lexical rules):



In BCKG (Background) of CNXT (Context) of every lexical item, [\_assert\_rel] and [\_direct\_evidnece\_rel] are included. And in declaratives (15a,c), C(ontext)-SPEAKER (indexed with *i*) is the asserter, but in interrogatives (15b,d), C-ADDRESSEE (indexed with *j*) is the asserter. As for non-private predicates in (15c,d), the asserter is co-indexed with the subject/experiencer (i.e. the first-person pronoun in (15c) and the second-person pronoun in (15d)), and a nominative NP (i.e. the entity which has the property denoted by a predicate) is required as a complement. The private predicates in (15a,b) has no constraint on the subject index: i.e. the subject can be either speaker, addressee or another third person. Since direct evidence is obtained basically by observations (e.g. seeing, hearing, touching), the [\_direct\_evidence\_rel] in all the lexical items is interpreted as an event whose agent is co-indexed with the asserter.

#### 9 Conclusion

In Korean direct evidential construction with non-private predicate (e.g. 'soft'), the asserter (i.e.

the speaker *na* 'I' in declarative or the addressee *ne* 'you' in question) must be the experiencer of the predicate, but there is no such constraint in direct evidential construction with private predicate (e.g. 'sick'). This can be accounted for by the generalization about the direct evidential construction: i.e. the asserter must have access to direct evidence about the property or state denoted by an experiencer predicate. In terms of the diagrams above, the asserter must be adjacent to the property or state denoted by an experiencer predicate.

The next question that I can pursue is whether the semantic, pragmatic and syntactic interactions between personal pronouns and direct evidentiality can be applied to other kinds of predicates and other languages (e.g. Japanese).

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