

Korean Evidential *-te-*: Inference from Direct Evidence

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1. Introduction

Korean verbal ending *-te-* introduces different presuppositions depending on whether it appears with a tense marker (such as the past tense marker *-ass/ess-* or the future tense marker *-keyss-*) or not. When it appears without any tense marker, it introduces the presupposition¹ that the speaker has direct perceptive evidence relative to the ‘prejacent’² (hereafter direct evidential presupposition), as in (1):

- (1) Ecey pi-ka o-te-la.
Yesterday rain-NOM fall-*te*-DECL ‘Yesterday it rained’
Presupposition: speaker directly perceived (e.g., saw or heard) that it rained yesterday.

Note that (1) is interpreted as past, though there is no overt tense marker. That is, the eventuality denoted by the prejacent occurred before the utterance time t^* . This becomes clearer when we compare (1) with (2), where *-te-* is replaced by the past tense marker *-ass-*. (2) has the same interpretation as (1), except that in (2) we do not have any presupposition regarding evidentiality of the speaker at all.

- (2) Ecey pi-ka o-ass-ta.
Yesterday rain-NOM fall-PAST-DECL ‘Yesterday it rained’

The puzzling fact is that, when used with an overt tense marker, *-te-* seems to introduce a different presupposition. This is illustrated in (3). With the past tense marker *-ass-* or the future tense marker *-keyss-*, *-te-* introduces the presupposition that the speaker asserts the prejacent based on her inference (hereafter inferential evidential presupposition).

- (3) a. Ecey pi-ka o-ass-te-la.
Yesterday rain-NOM fall-PAST-*te*-DECL ‘Yesterday it rained’
Presupposition: speaker infers that it rained yesterday (e.g., by looking at the wet ground)
b. Nayil pi-ka o-keyss-te-la.
Tomorrow rain-NOM fall-FUT-*te*-DECL ‘Tomorrow it will rain’
Presupposition: speaker infers it will rain tomorrow (e.g., by looking at the gloomy sky)

Examples in (1)-(3) show the ‘mixed nature’ of *-te-*. It is not a run-of-the-mill past tense marker, since it introduces the evidential presupposition, and it can appear with a past tense marker *-ass-*. However, apparently it is not a run-of-the-mill evidential, either, because the prejacent of *-te-* may denote the evidentiality occurring before t^* (when used without any overt tense), and the

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¹ In this paper I simply assume that the semantic implication *-te-* introduces is a presupposition (see Lim 2010: Ch. 3 for further discussion)

² Throughout this paper, the term ‘prejacent’ is used to indicate the proposition abstracted from the context of *-te-*. I use this term strictly descriptively.

presupposition it introduces vary depending on whether a tense marker is overtly present or not.

Many previous studies, including Chung (2007) and Lee (2010), analyze *-te-* with the (at least implicit) assumption that the generalization made in (1)-(3) always holds when *-te-* is used. However, in Section 2, while introducing more data some of which were overlooked before, I will show that there are some crucial exceptions of this generalization (that is, *-te-* does not always refer to the past when used without overt tense markers, and *-te-* does not always introduce the direct evidential presupposition when used without overt tense markers). Then, in Section 3, I will propose that *-te-* is an evidential marker which introduces the presupposition that the speaker asserts the prejacent based on the *inference from her direct perceptive evidence*, and illustrate how this proposal can account for the pattern in (1) and (3), as well as the exceptions in Section 2. In Section 4, I will compare my proposal with two recent proposals on *-te-*, Chung (2007) and Lee (2010). Finally, in Section 5, I will conclude the paper and point out further implications my proposal has.

2. More data on *-te-*

In this section we will see some more data which are crucial - but sometimes are overlooked - to understand the semantics and pragmatics of *-te-*.

2.1. *-te-* always requires direct perceptive evidence

Suppose that a speaker adopts *-te-* with a tense marker to indicate her source of information. In this case, as we saw in Section 1, *-te-* introduces an inferential evidential presupposition. Lee (2010) points out that this inference should be based on the speaker's direct perception of some eventuality. In other words, *-te-* always requires direct perception of some eventuality, which may be the same as the eventuality denoted by the prejacent of *-te-* (in this case *-te-* introduces the direct evidential presupposition), or may be the evidence where the speaker's inference is based on (in this case *-te-* introduces the inferential evidential presupposition). The example in (4) supports Lee's (2010) claim:

- (4) (Scenario: John is sick, so he has stayed in his bed since yesterday and has not been outside at all. John's room does not have any window, so he could not see outside, either. Today he heard from his roommate that the ground is wet. John says to his friend on the phone...)
 #Ecey pi-ka o-ass-te-la
 Yesterday rain-NOM fall-PAST-*te*-DECL 'Yesterday it rained'
 Presupposition: the speaker infers from her direct perceptive evidence that it rained yesterday

Under the scenario in (4), John, the speaker, has heard from his roommate that the ground is wet, which is his reportative evidence. From this reportative evidence John may infer that it rained yesterday. However, John cannot utter (4) felicitously under this scenario, which means that *-te-* with an overt tense is not compatible with any kind of inference, but it is felicitous only when the speaker's inference should be based on direct perceptive evidence.

2.2. *-te-* may introduce inferential evidential presupposition without any overt tense

As mentioned above, many of the previous studies simply take it for granted that, when *-te-* is used without any overt tense marker, it always introduces the direct evidential presupposition, and its prejacent always denotes the eventuality in the past. However, in the following two subsections I will show that this is not the case. First let us consider the case where *-te-* without an overt tense introduces the inferential evidential presupposition, which is exemplified in (5):

- (5) (Scenario: Mary was sick, so she stayed in her bed all day long. Her room does not have any window, so she could not see outside at all. Now she saw that her roommate came home with a wet umbrella and a wet raincoat. She says to her friend on the phone...)
 Onul pakk-ey pi-ka o-te-la.
 Today outside-LOC rain-NOM fall-*te*-DECL 'Today it rained outside'
 Presupposition: the speaker infers from her direct evidence that it rained outside

In (5), Mary does not have direct perceptive evidence that it rained outside. If *-te-* without an overt tense is felicitous only when the speaker has direct perceptive evidence regarding the prejacent, (5) should be infelicitous, but, (5) is felicitous under the given scenario. This means that *-te-* may introduce the inferential evidential presupposition without any tense marker when the speaker has direct perceptive evidence from which she makes inference regarding the prejacent. In our example, since Mary does have direct perceptive evidence that her roommate came home with a wet umbrella and a wet raincoat, and since she can infer that today it rained outside, she can felicitously utter (5).

2.3. The prejacent of *-te-* may denote future eventuality without any overt tense

We also observe that, unlike what has been assumed in previous studies, the prejacent of *-te-* may refer to future eventuality even when it is used without any overt tense. This can be shown by providing appropriate scenarios to the following example, where *-te-* is used without any tense:

- (6) John-i WCCFL-eyse nonmwyn-ul palphyoha-te-la.
 John-NOM WCCFL-LOC paper-ACC present-*te*-DECL

(6) is ambiguous with respect to its temporal interpretation (as well as their evidential presupposition). First consider the scenario, where Mary went to the WCCFL meeting last week, and saw John present his paper. Under this scenario, Mary felicitously utter (6), with the interpretation of (7a) and the presupposition of (7b). In this case, the prejacent of (6) refers to the eventuality in the past, and (6) carries the direct evidential presupposition, as commonly assumed:

- (7) a. Interpretation: John presented a paper in WCCFL
 b. Presupposition: the speaker directly saw that John presented a paper in WCCFL

However, consider another scenario, where Mary saw the schedule of WCCFL which will be held tomorrow, and saw John's name on it. Under the second scenario, Mary may still felicitously utter (6), but with the interpretation of (8a) and the presupposition of (8b):

- (8) a. Interpretation: John is going to present a paper in WCCFL
 b. Presupposition: the speaker infers that John is going to present a paper in WCCFL from her direct evidence that John's name is on the schedule

We can see that, under the second scenario, the presupposition of (6), (8b), is an inferential evidential presupposition, which further confirms the observation made in Section 2.2. More importantly, we can also see that the prejacent of (6) now refers to the eventuality in the future, unlike the previous generalization made in Section 1. Note further that, without a tense marker, the prejacent of *-te-* can only refer to the eventuality in the near future. For example, suppose that Mary saw John's name on the schedule of WCCFL for the next year. In this case, (6) becomes more unacceptable.

3. Proposal

Given the facts in Section 1 and 2, I propose the following lexical entry for *-te-*:

- (9) For any utterance context c^* ,
 $[[\text{-te-}]]^{c^*} = \lambda p_{st}. \lambda c$: there is a time interval t salient in c such that $t < t^*$, and at that t , the speaker s in c (s^c) acquires direct perceptive evidence, from which she infers p . p
 (where c^* is the triple of the utterance speaker, the utterance time, and the utterance world, $\langle s^*, t^*, w^* \rangle$, and c is a variable over contexts: see Kaplan 1989)

According to (9), *-te-* is a function from propositions to characters (function from contexts to propositions of type $\langle c, st \rangle$), with the definedness condition that there is a salient time interval t before the utterance time t , and at that t , s^c acquires direct perceptive evidence, from which s^c infers the prejacent p . If the definedness is satisfied by a context, it returns p itself. Two points should be made

here. First, unlike previous proposals like Lee (2010) or Song (1998), I analyze *-te-* as an inferential evidential which requires direct evidence. In the following subsection we will see how this lexical entry accounts for the direct evidential presupposition introduced by *-te-*. Second, as mentioned above, I assume that *-te-* is a function from propositions to characters, introducing a variable over contexts bound by lambda operator. This kind of lexical entry was originally proposed by Lim (2010) to explain the puzzle of the evidential perspective shift in interrogatives (Korean evidentials are anchored to the speaker in declaratives but are anchored to the addressee in interrogatives), but in this section I will show that this lexical entry can also explain the temporal interpretation of the prejacent with *-te-*.³

3.1. *-te-* without any overt tense

Consider (10), where *-te-* is used without any overt tense:

- (10) Pi-ka o-te-la.
 Rain-NOM fall-*te*-DECL ‘It rains’ (with evidential presupposition)

I assume that, when there is no overt tense, a covert anaphoric tense t_{pro} is used (cf. Partee 1984). Given this, the LF of (10) is (11):

- (11) [-*te-* [t_{pro} λw . it rains in w]]

I further assume that t_{pro} is a free variable, and it receives its value from the preceding salient time interval. Now there are two salient time intervals in (11): the one is t in the definedness condition on c in the lexical entry (9), which is the time when s^c acquires direct perceptive evidence; the other is t^* in c^* (the utterance time). In general, t_{pro} receives its value from t , since it is the closest time interval in the LF. In this case, since t is before t^* , the prejacent is interpreted as past. However, as a free variable, t_{pro} may also receive its value from t^* in c^* . I claim that in this case the prejacent is interpreted as referring to the eventuality in the near future, as (8): when receiving its value from t^* , it is interpreted as the present, which may further be interpreted as near future, just like present tense in English (like *I am going to school now*).⁴

Then how can the lexical entry for *-te-* in (9) introduce the direct evidential presupposition? Suppose that a speaker directly perceives the eventuality which can be denoted by a proposition p . From this direct perceptive evidence, the speaker may still ‘infer’ p (that is, the speaker makes a tautological inference $p \rightarrow p$), which makes the inferential evidential presupposition ‘look like’ the direct evidential presupposition. In the lexical entry in (9) above nothing prevents this inference. Therefore, I propose that the direct evidential presupposition of *-te-* is simply a special case of the inferential evidential presupposition involving tautological inference in the form of $p \rightarrow p$. This analysis allows us to explain the evidential presupposition in a unified way.

3.2. *-te-* with the past tense *-ass-*

Next, consider the case where *-te-* is used with the past tense marker *-ass-*, such as (12):

- (12) Pi-ka o-ass-te-la.
 Rain-NOM fall-PAST-*te*-DECL ‘It rained’ (with evidential presupposition)

I assume the following LF for (12), where t_{pro} is replaced by the past tense marker *-ass-*:

- (13) [-*te-* [-*ass-* λw . it rains in w]]

³ I assume that c in (9) is finally saturated by the utterance context c^* , due to sentence final endings. See Lim (2010: Ch.5.1.) for further discussion.

⁴ At the moment I do not know how the present tense is interpreted as near future: for me what matters here is that the present tense may refer to the near future, and this can explain the future eventuality of the prejacent of *-te-* without any tense marker.

Since the tense is overt, the prejacent obligatorily refers to the eventuality in the past. Furthermore, since the eventuality denoted by the prejacent has already occurred in the past, in general, the speaker does not directly observe it. This means that *-te-* with the past tense marker can only introduce the inferential evidential presupposition.⁵

3.3. *-te-* with the future tense *-keyss-*

Finally consider (14), where *-te-* is used with the future tense *-keyss-*:

- (14) Pi-ka o-keyss-te-la.
 Rain-NOM fall-FUT-*te*-DECL ‘It will rain’ (with evidential presupposition)

The LF of (14) is (15):

- (15) [*-te-* [*-keyss-* λw . it rains in w]]

Like (12) (and 13), the prejacent obligatorily refers to the eventuality in the future. Since this eventuality does not occur yet, the speaker cannot directly perceive it. This means that *-te-* with the future tense marker can only introduce the inferential evidential presupposition.

Summarizing the section, I analyze *-te-* as a function from propositions to characters, introducing a variable over contexts c bound by lambda operator, with the definedness condition that the speaker in c acquires direct perceptive evidence at time t before t^* , and from that direct perceptive evidence the speaker infers the prejacent p . I also showed that, with this definedness condition, two apparently different presuppositions of *-te-* can be explained in a unified way. I also accounted for the ambiguity of the temporal reading of the prejacent with *-te-* in a tenseless sentence such as (6) (also 1 and 10) by assuming a anaphoric tense, which can be bound either to t in c or t^* in c^* .

4. Previous analyses

In this section I briefly review two of previous analyses on *-te-*, and point out their problems.

4.1. *-te-* as spatiotemporal deictic tense: Chung (2007)

Chung (2007) claims *-te-* is not an evidential marker by itself, but is a spatial deictic past tense in the sense of Faller (2004). According to her, *-te-* “not only denotes a temporally deictic past time but also the speaker’s spatial deictic vantage point at the reference time” (Chung 2007: 189). In other words, informally speaking, it ‘locates’ the speaker in a certain spatial position and in a certain past time, where the speaker acquires a certain type of evidence relative to the prejacent.

Chung (2007) formalizes her idea by proposing the following lexical entry for *-te-*:

- (16) Spatial deictic past tense *-te-* (Chung 2007: 204)
 $[[\text{-te-}]]^c$ is only defined if c provides a unique salient spatiotemporal location L_c such that
 $\tau(L_c) < t_c \wedge L_c \subseteq P\text{-trace}(s_c)$
 If defined, then $[[\text{-te-}]]^c = L_c$
 (where t_c is the speech time, and s_c is the speaker of the context c , and $P\text{-trace}(s_c)$ is the speaker s_c ’s perceptual trace)

The next question is, if *-te-* itself is not an evidential marker, where does the evidential meaning come from? Chung (2007) claims that, when used with *-te-*, *-ass-* and *-keyss-* are used as inferential evidential markers. In addition to this, to account for the direct evidential presupposition of *-te-*

⁵ In this sense my analysis follows Lee’s (2010) analysis of *-te-* with *-ass-*, according to which the inferential evidential presupposition of *-te-* with *-ass-* is because the evidence acquisition time introduced by *-te-* does not overlap with the eventuality time denoted by *-ass-*. However, note that in my analysis the inferential evidential presupposition is more ‘basic’ than the direct evidential presupposition: the analysis in this subsection simply guarantees that the tautological inference is not allowed when *-te-* is used with *-ass-*.

without any tense, Chung (2007) further assumes a phonologically null direct evidential marker:

- (17) With *-te-*:
-ass-: inference based on result states
-keyss-: inference based on reasoning
 \emptyset : direct evidential

Furthermore, to explain the interpretation of *-ass-* and *-keyss-* when there is no *-te-*, Chung (2007) assumes the ambiguity of *-ass-/keyss-*: without *-te-*, they are used as regular tense/mood markers.

- (18) Without *-te-*:
-ass-: perfective(anterior) tense
-keyss-: regular mood marker

Obviously, Chung's (2007) analysis has several problems. First of all, it is unclear why *-ass-* and *-keyss-* are used as evidential markers *only when* they appear with *-te-*, and why a covert direct evidential marker is used *only when -te-* is used. Furthermore, it predicts that the sentence where *-te-* is used without a tense marker should carry the direct evidential presupposition (due to the covert direct evidential marker), contrary to what we saw in Section 2.2 and 2.3: *-te-* may also introduce the inferential evidential presupposition, even without any tense.

4.2. *-te-* as epistemic modal: Lee (2010)

Lee (2010) shows that the semantic behavior of *-te-* is similar to that of epistemic modals. First, the negation of the prejacent in the immediately following sentence is infelicitous (Lee 2010: 296):

- (19) a. It must have been raining. #It did not rain.
 b. Pi-ka o-te-la. #Pi-ka an o-ass-e.
 Rain-NOM fall-*te*-DECL rain-NOM NEG fall-PAST-DECL
 'It was raining (with direct evidentiality). #It didn't rain'

Second, neither of them is compatible with the first-person subject (Lee 2010: 297):

- (20) a. Mary/#I must be going to school.
 b. Mary-ka / #nay-ka hakkyo-ey ka-te-la.
 Mary-NOM / I-NOM school-LOC go-*te*-DECL
 'Mary / #I was going to school' (with direct evidentiality)

Finally, both show modal subordination (Roberts 1989), as in (21) (Lee 2010: 299):

- (21) a. A thief might break into the house. He #will/would take the silver.
 b. Totwuk-i tul-ess-te-la. Ku-nun khi-ka #cak-ta /
 Thief-NOM break.in-PAST-*te*-DECL he-TOP height-NOM short-DECL
 cak-um.ey.thulimeps-ta.
 short-must-DECL
 'A thief broke in (with inferential evidentiality). #He is short / he must be short'

Based on these examples, Lee (2010) claims that *-te-* is an epistemic necessity modal (cf. Kratzer 1991) with the semantic components regarding its direct evidentiality and its temporal interpretation (indicating that the speaker acquires direct perceptive evidence before the utterance time). According to her, the lexical entry for *-te-* is (22):

- (22) $[[\text{-te-}]] = \lambda P_{\langle s, \langle t, t \rangle \rangle}. \lambda w. \lambda t. \exists t'' [t'' < t \wedge \forall w' [w' \in \text{BEST}(SO, ST/DX, w, t'' \rightarrow P(w')(t''))]]$
 (where *BEST* is the function which maps world-time pairs (*w*, *t*) to sets of worlds which are the most highly ranked with respect to the stereotypical/doxastic ordering source *ST/DX* (*w*, *t*) in the sensory observation modal base *SO*(*w*, *t*))

She further explains two different evidential presuppositions introduced by *-te-* in terms of the interaction between *-te-* and tense markers. Suppose the evidence acquisition time and the time of the eventuality denoted by the prejacent overlap. Then since the speaker may directly observe the eventuality, *-te-* introduces the direct evidential presupposition. However, if they do not overlap, then the speaker cannot directly observe the eventuality, and therefore she can only infer what happened (or what will happen) at the time of eventuality from her direct perceptive evidence.

I found that Lee's (2010) analysis is more plausible than Chung's (2007), but I also believe that it still has some problems. Most of all, her examples above are not strong enough to support her claim that *-te-* is an epistemic necessity modal. With my lexical entry for *-te-*, each example can also be accounted for as follows. The infelicity of (19b) is just because it is unnatural to deny what has just been asserted (remember that my lexical entry for *-te-* in 9 takes a proposition and returns a character with a definedness condition: if a context which the character takes as its argument satisfies the definedness condition, it returns the original proposition itself).⁶ The infelicity of (20b) is because it is unnatural to make inference about the speaker's own experience. Finally, the infelicity of (21b) is also explained in a pragmatic way. An assertion without any evidential marker normally carries the implication that it is based on the speaker's strongest available evidence. However, *-te-* indicates that the speaker's assertion is based on weaker (inferential) evidence. Therefore it is unnatural for the assertion without *-te-* directly follows the assertion with *-te-*. In addition to this, under Lee's (2010) analysis, it is also unclear how to explain the examples we saw in Section 2.2 and 2.3, where *-te-* without any tense introduces the inferential evidential presupposition, and the prejacent of *-te-* without any tense is interpreted as referring to the eventuality in the near future.⁷

5. Conclusion and further implications

In this paper I proposed that, when a speaker adopts *-te-*, it introduces the definedness condition on the context that the speaker acquired direct perceptive evidence at some time interval before the utterance time, and from that evidence she makes inference where her assertion is based on. With this proposal, I explained the temporal interpretation of the prejacent of *-te-*, with an additional assumption that when there is no overt tense a covert anaphoric tense is used. I also proposed that the direct perceptive evidential presupposition introduced by *-te-* is a special case of the inferential evidential presupposition: the speaker makes tautological inference from her direct perceptive evidence. Finally, I showed that previous analyses of *-te-* have conceptual as well as empirical problems.

Before concluding this paper, I discuss two additional implications of my proposal, both of which are interesting puzzles by themselves.

5.1. Unexpectedness implication triggered by *-te-*

According to my analysis, the direct evidential presupposition of *-te-* is due to the tautological inference of the form $p \rightarrow p$ from the direct perception of the eventuality denoted by the prejacent p . However, this inference is obviously redundant. Furthermore, as mentioned in Section 4.3, a sentence without any evidential marker is in general interpreted as based on the best possible evidence, which is direct perceptive evidence. Then there seems no need to use *-te-* to specify direct perceptive evidence, even with a redundant inference.

However, this redundancy leads us to another interesting prediction: if a speaker adopts *-te-* to indicate that her assertion of the prejacent p is based on direct perception of the eventuality denoted by

⁶ Note that my analysis of the first person constraint on *-te-* can also easily account for the case where the first person constraint on *-te-* (or so-called non-equi subject constraint) is removed. Many authors, including Chung (2007) and Lee (2010), point out that the first person subject (referring to the speaker) can be used with *-te-* when the speaker is not responsible for her own behavior (e.g., when she got drunk or she was unconscious). Under my analysis, this is the case where the speaker should *infer* what she did based on the result, since she does not have any idea (and therefore does not have any direct perceptive evidence) of what she did.

⁷ Besides of these problems, both Lee (2010) and Chung (2007) does not consider the puzzle of the evidential perspective shift in interrogatives, which can easily be solved if we assume Korean evidentials are functions from propositions to characters, like *-te-* in (9): see Lim (2010: Ch. 4) for further discussion.

p , since the speaker asserts p in a more complicated and redundant manner than usual, the sentence with *-te-* may carry the additional implication (I use this term to remain neutral to the nature of this extra meaning component) that it is unusual, unexpected and/or surprising for the eventuality denoted by p to happen (cf. the conversational maxim of manner in Grice 1975 or the notion of M implicature in Levinson 2000).

It is hard to test whether a sentence actually carries the unexpectedness/surprise implication (since every assertion is ‘unexpected’, in some sense, as far as it introduces new information which is not shared between conversational participants to the common ground). Nevertheless, at least some Korean speakers have the intuition that *-te-* without any overt tense marker actually triggers this implication. They also agree that *-te-* without a tense may carry a specific type of intonation, such as raising tone on *-te-*, which is commonly adopted in Korean to express the unexpectedness or surprise. This may be tested by some experiment, but I will leave this for the topic of future research.

5.2. Exceptional *de se* reading triggered by *-te-*

A more interesting implication of my proposal comes from the interaction of *-te-* with the anaphor *caki*, which is usually translated as ‘self’. Consider two scenarios in (23), where only in (23a) Pavarotti knows that the singer is himself (therefore Pavarotti has *de se* ascriptions only in 23a). Note that, (24), where *caki* appears in the embedded proposition under *sayngkakha-* ‘think’, is acceptable only under (24a). This means that *caki* is a *de se* anaphor when used as a long distance anaphor (two scenarios in 23 are from Anand 2006: 9, which is originated from Chierchia 1989).

- (23) a. Pavarotti is listening to himself singing *La donna e mobile* and is impressed by his own skill. He thinks, “I have to admit it: I really am a genius!”
 b. Pavarotti is listening to a performer singing *La donna e mobile*, and is impressed by his artistry. He thinks, “This performer is a genius! I could learn a lot from him.” Unbeknownst to him, he is the performer he is listening to.
- (24) Pavarotti-nun caki-ka chenjay-la-ko sayngkakha-ess-ta.
 Pavarotti-TOP self-NOM genius-DECL-COMP think-PAST-DECL
 ‘Pavarotti believed that he was a genius’ (fine under 23a, but unacceptable under 23b)

Given this, consider the scenario in (25).

- (25) Bill and John are close friends to each other. They know each other’s children well, and their children go to the same school. Once Bill and John were invited to the school. In the school, when both Bill and John were looking at a class in a distance, they saw one kid making troubles during a class: walking around, yelling at classmates, etc. After that class, worrying that his own son might not take the class well due to that troublesome kid, Bill came to Tom, the teacher of that class, and told him to scold the kid who was making troubles in the class. However, John also found that, unbeknownst to Bill, the kid was actually Bill’s son.

Note that, under (25), John may say (26b), where *-te-* is used, but he cannot felicitously say (26a), where *-te-* is not used (IMP: imperative ending):

- (26) a. #Bill_i-i Tom-eykey caki_i-uy atul-ul honnay-la-ko malha-ess-ta.
 Bill-TOP Tom-DAT self-GEN son-ACC scold-IMP-COMP said-PAST-DECL
 (intended) ‘Bill_i told Tom to scold self_i’s son’
 b. Bill_i-i Tom-eykey caki_i-uy atul-ul honnay-la-ko malha-te-la.
 Bill-TOP Tom-DAT self-GEN son-ACC scold-IMP-COMP said-*te*-DECL
 ‘Bill_i told Tom to scold self_i’s son’ (with evidential presupposition)

Under the scenario (25), the attitude holder Bill does not have the appropriate *de se* ascriptions, and therefore it is expected that *caki* cannot refer to Bill, as in (26a). However, when *-te-* is used, as we see in (26b), *caki* can still be anchored to the attitude holder. This means that the speaker’s state of

knowledge, which is indicated by *-te-*, can also license the long-distance anaphoric use of *caki*. In this sense, the *de se* reading involving *caki* and *-te-* is different from the commonly discussed *de se* reading involves PRO or other logophoric pronouns (c.f. Chierchia 1989, Anand 2006, among others). Furthermore, since *caki* shows the similar behavior to other *de se* pronouns when the attitude holder has appropriate *de se* ascriptions, as shown in (23) and (24), it is actually the semantic of *-te-* which is responsible for this exceptional *de se* reading.

I do not think the lexical entries for *-te-* proposed by Chung (2007) or Lee (2010) can explain this exceptional *de se* reading triggered by *-te-*, but it is unclear how my proposal can explain this, either. One possible analysis of the exceptional *de se* reading with my lexical entry for *-te-* may go as follows. Many authors, including Anand (2006), try to analyze *de se* reading of certain pronouns in terms of Kaplan's (1969) acquaintance relation: a pronoun can be read as *de se* only when the attitude holder has some acquaintance relation with the pronoun. Now, we may further speculate that the context variable *c* in *-te-* introduces some acquaintance relation (in terms of the definedness condition, for example), which further specifies that *caki* is anchored to the attitude holder. At the moment I do not have any answer how to formalize this speculation, or how to revise my lexical entry for *-te-* accordingly, and therefore I also leave this for future research. However, as far as I can see, my lexical entry for *-te-* seems to give us a more correct answer to the puzzle of exceptional *de se* reading in (25) and (26).

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