

Remarks on Double Access Phenomena in English Finite Complement Clauses*

Yoshiaki Kaneko

Abstract

In this research I will discuss the double access (DA) phenomena in English finite complement clauses, where the content of the finite complement clause is interpreted to hold true at the utterance time as well as the event time of the matrix clause. Along the lines of Uribe-Echevarria (1994), I will propose that the DA reading is derived by the LF-movement of the complement clause, which applies to resolve the contradictory status of the syntactic structure of a DA sentence. The interpretation of DA follows from the chain formed by this LF-movement, the head of which corresponds to the interpretation anchored to the utterance time, and the tail of which corresponds to the interpretation anchored to the matrix event time.

Keywords: sequence of tense, double access, LF-movement of complement clauses, chain

1. Introduction

In this research I will discuss the double access (DA) phenomena in English finite complement clauses in relation to the sequence of tense

Yoshiaki Kaneko

(SOT) phenomena. The sentence (1) is an example of SOT and is ambiguous between the readings (2a) and (2b).

- (1) Taro said that Hanako was a college student.
- (2) a. Taro said, “Hanako is a college student.”
b. Taro said, “Hanako was a college student.”

Enç (1987) calls the reading in (2a) a *simultaneous reading*, and the one in (2b) a *shifted reading*, respectively.

When a complement clause with the present tense is embedded in a matrix clause which we would otherwise expect to license SOT, we find an instance of DA as in (3).

- (3) John heard that Mary is pregnant. (Hornstein (1990: 120))

In (3), the content of the complement clause, that is, Mary’s pregnancy is understood to hold true at the utterance time of (3) as well as the event time of John’s hearing of the news.

In what follows, I will present an analysis of DA on the basis of the analysis of SOT proposed in Kaneko (2014).

2. The Background for Analyzing Double Access

In this section, based on Kaneko (2014), I will present the general framework for temporal interpretation, and the analysis of SOT, which is a crucial background for analyzing DA.

2.1. The General Framework for Temporal Interpretation

In Kaneko (2014), the temporal interpretation is represented in terms of ordering relations among Evaluation Time (EvT), Reference Time (RT), and Event Time (ET) (cf. Reichenbach (1947)). I assume the following clausal structure relevant for temporal interpretation.

- (4) [P_{fmp} P_{fm}-<ST> [TP DP [T' T-<EvT_D> [ModP *will*-<RT_{will}> [PerfP Perf-<RT_{Perf}> [vP t_{DP} [v' [v-V-<ET>][vP t_V ...]]]]]]]]]

The functional projection at the top of the root clause is Performative Phrase (P_{fmp}), whose head contains Speech Time (ST). T contains EvT, the head Perf of Perfect Phrase (PerfP), RT_{Perf}, and V, Event Time (ET). The future modal *will* optionally occurs between TP and PerfP, and contains a modal Reference Time (RT_{will}, in this case), which indicates the time at which the future prediction in question is made.

Ordering relations between two times are determined by the temporal specifications of T, Perf, and *will*.

- (5) a. T-[+Pres(ent)]: RT is simultaneous with EvT. (RT, EvT)
 b. T-[+Past]: RT is anterior to EvT. (RT < EvT)
- (6) a. Perf-[-Perf] (=∅): ET_V is simultaneous with RT_{Perf}.
 (ET_V, RT_{Perf})
 b. Perf-[+Perf] (=have): ET_V is anterior to RT_{Perf}.
 (ET_V < RT_{Perf})
- (7) WILL: RT_{Perf} is posterior to RT_{will}. (RT_{will} < RT_{Perf})

When a clause is finite and T has the feature [+deictic], the evaluation

time of the deictic tense (=EvT_D) is identified with ST by the head Pfm of PfmP.

(8) The Identification of Deictic Evaluation Time

The head Pfm of PfmP specifies that EvT_D within its c-command domain is identical to ST. (ST=EvT_D)

By way of illustration, consider (9a). It has the syntactic structure (9b) and the temporal interpretation constructed by integrating the temporal information contained in (9b) is (10a). (I will occasionally use a linearized Reichenbachian representation like (10b) for ease of comprehension.)

(9) a. Bill will leave Tokyo tomorrow.

b. [_{PfmP} Pfm-<ST> [_{TP} Bill T-<EvT_D>-[+Pres] [_{ModP} will-<RT_{will}> [_{PerfP} Perf-<RT_{Perf}>-[-Perf] [_{VP} t_{Bill} [_{v'} [_v-leave-<ET_{leave}>] [_{VP} t_{leave} Tokyo tomorrow]]]]]]]]

(10) a. (ST=EvT_D) & (RT_{will}, EvT_D) & (RT_{will} < RT_{Perf}) & (ET_{leave}, RT_{Perf})

b. ST=EvT_D, RT_{will}_____ET_{leave}, RT_{Perf}

2.2. Sequence of Tense

In this subsection, I will review the analysis of SOT presented in Kaneko (2014), which is the crucial background for analyzing DA.

2.2.1. Licensing of SOT

In Kaneko (2014), the distribution of SOT is accounted for by two

Remarks on Double Access Phenomena in English Finite Complement Clauses

conditions, one of which is (11).

(11) The Licensing Condition for SOT

When the event time of a matrix attitude verb is anterior to ST (that is, refers to some time in the past), its finite complement clause is a potential SOT domain.

The condition (11) is intended to deal with instances such as (13) as well as typical instances of SOT such as (12).

(12) Jill said that she had too many commitments.

(Huddleston and Pullum (2002: 151))

(13) John has often believed/thought/said that he was unhappy.

(Stowell (2007: 143))

The temporal representations of the matrix clauses of (12) and (13) are (14a) and (15a), respectively.

(14) a. $(ST=EvT_D) \ \& \ (RT_{Perf} < EvT_D) \ \& \ (ET_{say}, RT_{Perf})$

b. $ET_{say}, RT_{Perf} \text{_____} ST=EvT_D$

(15) a. $(ST=EvT_D) \ \& \ (RT_{Perf}, EvT_D) \ \& \ (ET_{believe/think/say} < RT_{Perf})$

b. $ET_{believe/think/say} \text{_____} RT_{Perf}, EvT_D=ST$

All instances of ET_V in (14) and (15) are anterior to ST and satisfy the licensing condition (11).

The other condition is (16) below.

Yoshiaki Kaneko

(16) The Restriction on the Distribution of Deictic Past Tense

If a finite complement clause is a potential SOT domain, its tense must not be the deictic past tense T_D -[+Past].

The restriction (16) is proposed to capture the fact that when a past tense occurs in a potential SOT domain in the sense of (11), the complement clause must have either the simultaneous reading or the shifted reading (cf. Higginbotham (2002)).

(17) Gianni said that Maria was ill. (Higginbotham (2002: 208))

(18) *Two years ago, Gianni said that Maria was ill last year.

(ibid.)

As shown in (18), the past tense in the complement clause in (17) cannot refer to some past time between the utterance time and the event time of the matrix clause. In contrast, the past tense in relative clauses does not exhibit such a restriction.

(19) a. In 1989, Joseph met a woman who loved him then.

(Ogihara and Sharvit (2012: 641))

b. In 1989, Joseph met a woman who loved him in the 70s.

(ibid.)

c. In 1989, Joseph met a woman who loved him in the 90s.

(ibid.)

The contrast between (18) and (19) indicates that the past tense in a potential SOT domain is the past tense with the feature [-deictic].

2.2.2. Temporal Interpretation of SOT

Let us turn to the temporal interpretation of SOT. In Kaneko (2014), EvT of the non-deictic past tense ($=EvT_{ND}$) is not identified by Pfm, but by the matrix predicate.

(20) The Identification of Non-Deictic Evaluation Time

An attitude verb specifies that a non-deictic evaluation time EvT_{ND} of its complement clause is identical to its event time $ET_{matrixV}$. ($ET_{matrixV}=EvT_{ND}$)

Simultaneous reading of SOT is dealt with by (21) below.

(21) The SOT Adjustment Rule (Optional)

If the non-deictic past tense T_{ND} -[+Past] occurs in a potential SOT domain, convert $(RT < EvT_{ND})$ to (RT, EvT_{ND}) .

The SOT adjustment rule (21) converts anteriority of the non-deictic past tense T_{ND} -[+Past] into simultaneity.

Let us consider (22) for illustration. (22) has the syntactic structure (23), and the temporal representation is (24), in which EvT_{ND} is identified with ET_{say} .

(22) Gianni said that Maria was ill.

(23) [_{PfmP} Pfm [_{TP} Gianni T_D -[+Past] [_{PerfP} Perf-[-Perf]]_{vP} t_{Gianni} say [that [_{TP} Maria T_{ND} -[+Past] [_{PerfP} Perf-[-Perf]] t_{Maria} be ill]]]]]]]]

(24) Matrix CP: $(ST=EvT_D) \ \& \ (RT_{Perf} < EvT_D) \ \& \ (RT_{Perf}, ET_{say})$

Yoshiaki Kaneko

$$\begin{array}{l}
\text{Comp. CP: } (ET_{\text{say}}=EV_{T_{\text{ND}}}) \ \& \ \mathbf{(RT_{\text{Perf}} < EV_{T_{\text{ND}}})} \\
\qquad \qquad \qquad \& \ (RT_{\text{Perf}}, ET_{\text{be}}) \\
(25) \ \text{Matrix CP:} \qquad \qquad \qquad RT_{\text{Perf}}, ET_{\text{say}} \text{---} ST=EV_{T_{\text{D}}} \\
\qquad \qquad \qquad \qquad \qquad \qquad \parallel \\
\text{Comp. CP: } RT_{\text{Perf}}, ET_{\text{be}} \text{---} EV_{T_{\text{ND}}}= ET_{\text{say}}
\end{array}$$

The temporal representation (24) corresponds to the shifted reading of (22), as indicated by the boldfaced parenthesis in (24), which specifies that RT_{Perf} is anterior to $EV_{T_{\text{ND}}}(=ET_{\text{say}})$. If, on the other hand, the SOT adjustment rule (21) applies to (24), the temporal representation (26) is derived.

$$\begin{array}{l}
(26) \ \text{Matrix CP: } (ST=EV_{T_{\text{D}}}) \ \& \ (RT_{\text{Perf}} < EV_{T_{\text{D}}}) \ \& \ (RT_{\text{Perf}}, ET_{\text{say}}) \\
\text{Comp. CP: } (ET_{\text{say}}=EV_{T_{\text{ND}}}) \ \& \ \mathbf{(RT_{\text{Perf}}, EV_{T_{\text{ND}}})} \ \& \\
\qquad \qquad \qquad \qquad \qquad \qquad \mathbf{(RT_{\text{Perf}}, ET_{\text{be}})} \\
(27) \ \text{Matrix CP:} \qquad \qquad \qquad RT_{\text{Perf}}, ET_{\text{say}} \text{-----} ST=EV_{T_{\text{D}}} \\
\qquad \qquad \qquad \qquad \qquad \qquad \parallel \\
\text{Comp. CP: } RT_{\text{Perf}}, ET_{\text{be}}, EV_{T_{\text{ND}}}=ET_{\text{say}}
\end{array}$$

The representation (26) corresponds to the simultaneous reading of (22), as indicated by the boldfaced parenthesis in (26), which specifies that RT_{Perf} is simultaneous with $EV_{T_{\text{ND}}}$.

To summarize, the temporal interpretation of SOT is dealt with the identification of non-deictic EV_{T} by matrix verbs (20) and the SOT adjustment rule (21).

3. An Analysis of Double Access Phenomena

In this section, on the basis of the general framework of temporal interpretation and the analysis of SOT, I will present the analysis of DA.¹

3.1. The Present Tense of DA

DA is a phenomenon in which a present tense occurs in a potential SOT domain as in (28) and (29).

(28) Leo found out that Mary is pregnant.

(Wurmbrand (2014: 412))

(29) Leo found out that Mary will be pregnant.

(ibid.)

In (28), Mary's pregnancy is taken to hold true at the utterance time as well as the event time of the matrix clause. In (29), the prediction of Mary's pregnancy is understood to be valid at the utterance time as well as the event time of the matrix clause.

The present tense in a DA complement clause is not the non-deictic present tense but the deictic present tense, because if it were the non-deictic present tense, the future modal *will* in (30) could be used to make a prediction about a past time posterior to the event time of the matrix clause.

(30) Leo decided a week ago that he will go to the party

(*yesterday).

(Wurmbrand (2014: 413))

In light of this, Kaneko (2014) concludes that the present tense in

a DA complement is deictic, and proposes the restriction (31).

(31) The Restriction on the Distribution of Non-Deictic Present Tense

If a finite complement clause is embedded in a potential SOT domain, its tense must not be the non-deictic present tense $T_{ND-}[+Pres]$.

Given the two restrictions (16) and (31), we can present the distribution of finite tenses in potential SOT domains as (32) below.

(32) The Distribution of Finite Tenses in Potential SOT Domains

	Present	Past
Deictic	DA	excluded by (16)
Non-deictic	excluded by (31)	SOT

3.2. LF-Movement of DA Complement Clauses

Leder (1991: 315) observes that the DA sentence (33b) below is synonymous with (34), while the SOT sentence (33a) is not.

(33) a. John said that Mary was pregnant. (Leder (1991: 315))

b. John said that Mary is pregnant. (ibid.)

(34) Mary is pregnant, and John said so/announced that. (ibid.)

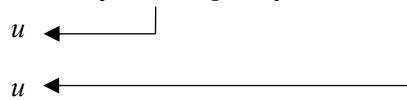
Leder (1991) also considers the present tense in DA complement clauses to be the deictic (parallel, in his terms) present tense, but proposes the

Remarks on Double Access Phenomena in English Finite Complement Clauses

single access analysis, under which the present tense in DA complement clauses is linked only to the utterance time (*u*), as illustrated below.

(35) John said Mary is happy.

(36) John say-PAST [Mary be-PRESENT happy]]



(Leder (1991: 319))

Leder (1991: 318-319) attributes the DA reading to “the same-saying” constraint on indirect discourse sentences (cf. Davidson (1968)).

In what follows, I present the double access analysis that captures his observation on (33) and (34) in a more straightforward way.²

Uribe-Echevarria (1994) observes that the negative polarity item *any* cannot appear in sentences such as (37c) below, though the matrix clause is a negative clause. Notice first that there is a difference in grammaticality between (37a, b) on the one hand, where the past tense occurs in potential SOT domains, and (37c) on the other hand, where the present form of *will* occurs in a potential SOT domain. She also points out that in (38) and (40), where the matrix tense is the present tense, the sentences are both grammatical irrespective of the difference in tense in the complement clauses. Notice further that (39), in which the complement clause does not contain *any*, is grammatical, though the tense combination in (39) is the same as that in (37c).

(37) a. Mary didn't say [that Ann would read any books tomorrow]. (Uribe-Echevarria (1994: 98))

- b. Mary didn't say [that Ann had read any books last week].
(ibid.)
- c. **/*?* Mary didn't say [that Ann will read any books
tomorrow]. (ibid.)
- (38) Mary will not say/believe [that Ann will read any books this
fall]. (ibid.)
- (39) Mary didn't say [that Ann will read these books tomorrow].
(ibid.: 100)
- (40) Mary doesn't think [that Ann read any books last week].
(ibid.)

In light of these observations, she argues that in sentences such as (37c) and (39), where the present form *will* appears in the complement clauses embedded in the matrix clauses with the past tense, the complement clauses undergo LF-movement, as illustrated in (41) and (42).

- (41) LF of (37c)
[CP that Ann will read any books tomorrow][Mary didn't say
 t_{CP}]
- (42) LF of (39)
[CP that Ann will read these books tomorrow][Mary didn't
say t_{CP}]

In (41), *any* is not contained in the scope of negation, resulting in ungrammaticality. In (42), in contrast, nothing induces such ill-formedness.

Remarks on Double Access Phenomena in English Finite Complement Clauses

Adopting the LF-movement approach of Uribe-Echevarria, I argue that the DA reading is brought about by the chain formed by the LF-movement of the complement clauses.³

Let us assume first that propositional attitude verbs such as *believe* and *say* have the following lexical property.

- (43) Obligatory Temporal Identification by Attitude Verbs
Propositional attitude verbs must identify EvT of their complement clauses.

Let us also assume the following restriction.

- (44) The Restriction on the Identification of EvT_D
EvT of deictic tenses must be identified with ST by Pfm.

Recall that the non-deictic present tense cannot occur in potential SOT domains due to the restriction (31), repeated below as (45).

- (45) The Restriction on the Distribution of Non-Deictic Present Tense
If a finite complement clause is embedded in a potential SOT domain, its tense must not be the non-deictic present tense T_{ND}-[+Pres].

The DA sentence (46), therefore, has the structure (47).

- (46) Leo found out that Mary is pregnant.

- (47) [_{Pf_{mP}} P_{fm} [_{TP} Leo found out [_{CP} [_{TP} Mary T_D-[+Pres] be pregnant]]]]]

In (47), however, the matrix verb *find* cannot identify the EvT of the complement clause, because the EvT is contained in the deictic present tense and must be identified with ST. (47), as it stands, will lead to ungrammaticality because of the failure of satisfying the lexical requirement on the matrix verb *find*.

In order to circumvent this situation, the embedded CP in (46) undergoes LF-movement, resulting in the following derived structure under the copy theory of movement.

- (47) [_{Pf_{mP}} P_{fm} [_{CP} [_{TP} Mary T_D-[+Pres] be pregnant]] [_{TP} Leo found out [_{CP} [_{TP} Mary T_D-[+Pres] be pregnant]]]]]

Let us assume here that the feature [+deictic] of the T in the base position is deleted.

- (48) [_{Pf_{mP}} P_{fm} [_{CP} [_{TP} Mary T_D-[+Pres] be pregnant]] [_{TP} Leo found out [_{CP} [_{TP} Mary T_D-[+Pres] be pregnant]]]]]

Notice that the T with the feature [+deictic] in the moved CP and the T unspecified for [\pm deictic] in the base position are nondistinct, and the consistency of the chain formed by LF-movement in (48) is preserved.

In (48), the embedded T unspecified for [\pm deictic] does not violate the restriction (45). Its EvT can be identified by the matrix verb *find* under the following simplified version of (20), in which the reference

to the notion of “non-deictic” is dispensed with.

(49) The Identification of EvT of Complement Clauses

An attitude verb specifies that the EvT of its complement clause (=EvT_{CC}) is identical to its event time ET_{matrixV}.
(ET_{matrixV}=EvT_{CC})

Given the restriction in (44), EvT_{CC} cannot be EvT_D.

3.3. Temporal Interpretation of DA Sentences

Let us now see how the analysis proposed in 3.2 accounts for the temporal interpretation of DA sentences. Consider first (50).

(50) John said that Mary is pregnant. (=33b)

(51) LF of (50)

[_{Pf_{IMP}} Pfm-<ST> [_{CP} [_{TP} ... T_D-[+Pres]-<EvT_D> ...]]

Identification

[... said-<ET> ... [_{CP} [_{TP} ... T_D-[+Pres]-<EvT_D> ...]]]

Identification

The EvT_D of the moved CP (hereafter, the head CP) is identified with ST by Pfm, while the EvT_D of the CP in the base position (hereafter, the tale CP) is identified with ET_{say} by the matrix verb *say*. The present T_D of the head CP and the present T_D of the tale CP specify the simultaneity between RT_{Perf} and EvT_D and that between RT_{Perf} and EvT_D, respectively, as shown in (52) below. Notice that the reading of Mary’s pregnancy

simultaneous with the event time of the matrix clause comes from the simultaneity of the present T_D unlike the simultaneous reading of SOT cases, which is derived by the SOT Adjustment Rule in (21) above.

(52) Temporal Interpretation of (50)

Head CP: $(ST=EvT_D) \& (RT_{Perf}, EvT_D) \& (ET_{be}, RT_{Perf})$

Matrix CP: $(ST=EvT_D) \& (RT_{Perf} < EvT_D) \& (ET_{say}, RT_{Perf})$

Tale CP: $(ET_{say}=EvT_D) \& (RT_{Perf}, EvT_D) \& (ET_{be}, RT_{Perf})$

(53) Head CP: $ST=EvT_D, RT_{Perf}, ET_{be}$

||

Matrix CP: $ET_{say}, RT_{Perf} \text{_____} ST=EvT_D$

||

Tale CP: $ET_{say}=EvT_D, RT_{Perf}, ET_{be}$

Recall that Leder (1991) points out that the DA sentence (50) is synonymous with (55), while the SOT sentence (54) is not.

(54) John said that Mary was pregnant. (=33a)

(55) Mary is pregnant, and John said so/announced that. (=34)

This observation is accounted for straightforwardly in terms of (51) and (52). The preceding clause in (55) corresponds to the head CP in (51) and the anaphoric expressions *so* and *that* in the second clause correspond to the tale CP. The referential relation between the first clause and the expressions *so* and *that* in (55) is captured by the fact that the head CP and the tale CP are the members of the same chain. The SOT sentence (54) does not undergo LF-movement of the complement

Remarks on Double Access Phenomena in English Finite Complement Clauses

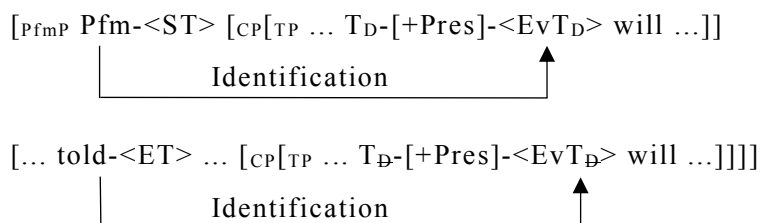
CP, because the past tense of the complement clause is non-deictic, the matrix verb *say* identifies its EvT_{ND} , and LF-movement is not required. Consequently, no chain of CP-movement is formed, resulting in the absence of the reading synonymous with (55).

Let us turn to (56), which contains the future *will* in the complement clause.

- (56) On Monday John told me that he will come to the meeting on Friday. (Baker (1995: 550))

(56) has the LF representation (57) after it undergoes LF-movement of the complement CP and the deletion of the feature [+deictic] of the T in the tale CP, and its temporal interpretation is represented as in (58).

- (57) LF of (56)



- (58) Temporal Interpretation of (56)

Head CP: $(ST=EvT_D) \ \& \ (RT_{will}, EvT_D) \ \& \ (RT_{will} < RT_{Perf}) \ \& \ (ET_{come}, RT_{Perf})$

Matrix CP: $(ST=EvT_D) \ \& \ (RT_{Perf} < EvT_D) \ \& \ (ET_{tell}, RT_{Perf})$

Tale CP: $(ET_{tell}=EvT_D) \ \& \ (RT_{will}, EvT_D) \ \& \ (RT_{will} < RT_{Perf}) \ \& \ (ET_{come}, RT_{Perf})$

Yoshiaki Kaneko

- (59) Head CP: $ST=EvT_D, RT_{will} \text{---} RT_{Perf}, ET_{come}$
 \parallel
 Matrix CP: $ET_{tell}, RT_{Perf} \text{---} ST=EvT_D$
 \parallel
 Tale CP: $ET_{tell}=EvT_{\mathcal{D}}, RT_{will} \text{---} RT_{Perf}, ET_{come}$

The EvT_D of the head CP is identified with ST by Pfm , and RT_{will} is simultaneous with $EvT_D=ST$. The prediction by *will* is made about the future relative to ST . The $EvT_{\mathcal{D}}$ of the tale CP, in contrast, is identified with ET_{tell} by the matrix verb *tell*. The prediction by *will* is made about the future relative to ET_{tell} , which is situated in the past.

Let us now consider (60).

- (60) Leo decided a week ago that he will go to the party
 (*yesterday). (=30)

(60) has the LF representation (61) after the application of LF-movement and the deletion of the feature [+deictic] of the T in the tale CP, and its temporal interpretation is (62).

- (61) LF of (60)
- $$[P_{fmp} Pfm-\langle ST \rangle [CP[TP \dots T_D-[+Pres]-\langle EvT_D \rangle will \dots]]]$$
- Identification
- $$[\dots decided-\langle ET \rangle \dots [CP[TP \dots T_{\mathcal{D}}-[+Pres]-\langle EvT_{\mathcal{D}} \rangle will \dots]]]$$
- Identification

Remarks on Double Access Phenomena in English Finite Complement Clauses

(62) Temporal Interpretation of (60)

Head CP: $(ST=EvT_D) \& (RT_{will}, EvT_D) \& (RT_{will} < RT_{Perf})$
 $\& (ET_{go}, RT_{Perf})$

Matrix CP: $(ST=EvT_D) \& (RT_{Perf} < EvT_D) \& (ET_{decide}, RT_{Perf})$

Tale CP: $(ET_{decide}=EvT_{\mathcal{D}}) \& (RT_{will}, EvT_{\mathcal{D}}) \&$
 $(RT_{will} < RT_{Perf}) \& (ET_{go}, RT_{Perf})$

(63) Head CP: $ST=EvT_D, RT_{will} ___ RT_{Perf}, ET_{go}$

||

Matrix CP: $ET_{decide}, RT_{Perf} ___ ST=EvT_D$

||

Tale CP: $ET_{decide}=EvT_{\mathcal{D}}, RT_{will} ___ RT_{Perf}, ET_{go}$

Consider the case in which the complement clause contains *yesterday*. The $EvT_{\mathcal{D}}$ of the tale CP is identified with ET_{decide} by the matrix verb *decide*. The prediction by *will* is made about the event of yesterday, which is the future relative to ET_{decide} , that is, a week ago. This temporal interpretation induces no contradiction. The EvT_D of the head CP is identified with ST by Pfm, and RT_{will} is simultaneous with $EvT_D=ST$. The prediction by *will* is made about the future relative to ST , which contradicts the meaning of *yesterday*. Recall that in the chain formed by LF-movement in DA sentences, each of the head and the tail of the chain must lead to a well-formed interpretation. As a consequence, (60) is ungrammatical when the complement clause contains *yesterday*.

3.4. Speculation on the Distribution of Finite Tenses in Complement Clauses

So far, we have argued on the basis of the two distributional

restrictions on finite tenses in SOT domains.

- (64) The Restriction on the Distribution of Deictic Past Tense
If a finite complement clause is a potential SOT domain, its tense must not be the deictic past tense T_D -[+Past].
- (65) The Restriction on the Distribution of Non-Deictic Present Tense
If a finite complement clause is embedded in a potential SOT domain, its tense must not be the non-deictic present tense T_{ND} -[+Pres].

However, in light of (43) and (44), repeated here as (66) and (67), respectively, we may propose a more general restriction on the distribution of finite tenses in complement clauses such as (68).

- (66) Obligatory Temporal Identification by Attitude Verbs
Propositional attitude verbs must identify EvT of their complement clauses.
- (67) The Restriction on the Identification of EvT_D
 EvT of deictic tenses must be identified with ST by Pfm .
- (68) Default Choices of Finite Tenses in Complement Clauses
Default choices of finite tenses in complement clauses are non-deictic tenses, that is, finite tenses with the feature [-deictic].

(64) will be subsumed under (68) as a particular case, and what remains to be specified about potential SOT domains is the restriction (65).

Remarks on Double Access Phenomena in English Finite Complement Clauses

If we adopt (68), however, there is one case that might present a counterexample to it. Leder (1999) points out that (69) is ambiguous between the readings of (70a) and (70b).

(69) In three days, John will announce that Bill will leave in a week. (Leder (1999: 314))

(70) a. In three days, John will say: “Bill will leave in a week.” (ibid.)

b. In three days, John will say: “Bill will leave in four days.” (ibid.)

Leder considers the tense of the complement clause under the reading of (70a) to be a non-deictic (serial, in his terms) tense, and that under the reading of (70b), a deictic (parallel, in his terms) tense. If the tense of the complement clause in (69) under the reading of (70b) were deictic as Leder claims, we could not hold (68) as it stands.

Leder analyzes the tense in question as a parallel (deictic) tense, because the interval expressed by the phrase *in a week* refers to the interval not from the matrix event time but from the utterance time. Notice, however, that in SOT cases, which are typical cases of non-deictic tenses, temporal adverbials can refer to temporal points or intervals linked to the utterance time. Consider (71) below.

(71) a. ORIGINAL: The lease expired *yesterday*.

b. REPORT: She said the lease had expired *yesterday/the day before/last Friday/two weeks ago/on 17 June*.

(Huddleston and Pullum (2002: 1026))

Suppose that the original was uttered on 18 June, and, therefore, *yesterday* refers to 17 June. According to Huddleston and Pullum (2002: 1026), “depending on when the report is uttered, any of the temporal expression in [ii] (our (71b) – YK) could be used to the day in question.” What is crucial for our discussion is that *yesterday* and *two weeks ago* in (71b) are typical deictic expressions linked to the utterance time.

To conclude, Leder’s claim based on the expression *in a week* is not strong enough to demonstrate that the embedded tense in question is a deictic tense, and we can hold (68) as a working hypothesis on the distribution of finite tenses in complement clauses.

4. Conclusion

In this research, I presented the analysis for double access phenomena in English on the basis of Kaneko (2014). I have shown that double access phenomena are accounted for by LF-movement of complement clauses, which applies to circumvent the contradictory situation caused by the lexical requirement on matrix verbs and the restriction on the distribution of the non-deictic present tense. I have also shown that the interpretation of double access sentences follows from the chain formed by LF-movement of complement clauses.

*This is a revised and extended version of Kaneko (2016), which is based on the paper read at the 33rd Conference of the English Linguistics Society of Japan, held at Kansai Gaidai University in 2015. I would like to thank for valuable comments from the audience. Thanks also go to Etsuro Shima and Ryosuke Sato for helpful comments on drafts of this paper. This

Remarks on Double Access Phenomena in English Finite Complement Clauses

work was supported by Grant-in-Aid for Scientific Research (C), No. 15K02589 from Japan Society for the Promotion of Science.

Notes

1) I will not discuss analyses of SOT and DA from the perspective of formal semantics such as Abush (1997) and Ogihara (1996). See Ogihara and Sharvit (2012) for discussion on these analyses. See also Enç (1987, 2004) and Khomitsevich (2008) for generative approaches on these topics.

2) The proposal in 4.2 is a detailed substantiation of the approach suggested briefly in Kaneko (2014: 50, note 14).

3) DA is not one of the main topics in Uribe-Echevarria (1994), and is only briefly referred to in Appendix.

4) Recall that Uribe-Echevarria (1994) observes that a sentence parallel to (69) does not exhibit a LF-movement effect, as shown in (i).

(i) Mary will not say/believe [that Ann will read any books this fall]. (= (38))

This indicates that sentences such as (i) and (69) are not instances of DA sentences.

Yoshiaki Kaneko

References

- Abush, Dorit (1997) "Sequence of Tense and Temporal De Re," *Linguistics and Philosophy* 20, 1-50.
- Baker, Carl L. (1995) *English Syntax*, 2nd ed., MIT Press, Cambridge, Mass.
- Davidson, Donald (1968) "On Saying That," *Synthese* 19, 130-146.
- Enç, Mürvet (1987) "Anchoring Conditions for Tense," *Linguistic Inquiry* 18, 633-657.
- Enç, Mürvet (2004) "Rethinking Past Tense," *The Syntax of Time*, ed. by Jacqueline Guéron and Jacqueline Lecarme, 204-215, MIT Press, Cambridge, Mass.
- Higginbotham, James (2002) "Why is Sequence of Tense Obligatory?" *Logical Form and Language*, ed. by Gerhard Preyer and George Peter, 207-227, Oxford University Press, Oxford.
- Hornstein, Norvert (1990) *As Time Goes By: Tense and Universal Grammar*, MIT Press, Cambridge, Mass.
- Huddleston, Rodney and Geoffrey K. Pullum (2002) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.
- Kaneko, Yoshiaki (2014) "Remarks on Sequence of Tense in English," *Explorations in English Linguistics* 28, 27-55.
- Kaneko, Yoshiaki (2016) "Teikei Hobusetsu ni okeru Jisei no Icchi to Nijū Sessyoku ni tsuite (On Sequence of Tense and Double Access in Finite Complement Clauses)," *JELS* 33, 45-51.
- Khomitsevich, Olga (2008) *Dependencies across Phases: From Sequence of Tense to Restriction on Movement*, LOT, Utrecht.
- Leder, Harry (1991) *Tense and Temporal Order*, Doctoral dissertation, MIT.

Remarks on Double Access Phenomena in English Finite Complement Clauses

- Ogihara, Toshiyuki (1996) *Tense, Attitudes, and Scope*, Kluwer Academic Publishers, Dordrecht.
- Ogihara, Toshiyuki and Yael Sharvit (2012) “Chapter 22: Embedded Tenses,” *The Oxford Handbook of Tense and Aspect*, ed. by Robert I. Binnik, 638-668, Oxford University Press, Oxford.
- Reichenbach, Hans (1947) *Elements of Symbolic Logic*, Macmillan, New York.
- Stowell, Tim (2007) “Sequence of Perfect,” *Recent Advances in the Syntax and Semantics of Tense, Aspect and Modality*, ed. by Louis de Saussure, Jacque Moeschler, and Genoveva Puskás, 123-146, Mouton de Gruyter, Berlin.
- Uribe-Echevarria, Marria (1994) *Interface Licensing Conditions on Negative Polarity Items: A Theory of Polarity and Tense Interactions*, Doctoral dissertation, University of Connecticut.
- Wurmbrand, Susi (2014) “Tense and Aspect in English Infinitives,” *Linguistic Inquiry* 45, 403-447.

Graduate School of Arts and Letters

Tohoku University

27-1 Kawauchi, Aoba-ku, Sendai, Miyagi, 980-8576

E-mail: y-a.kaneko@m.tohoku.ac.jp