

Mirative Past in Japanese

*Sumiyo Nishiguchi**

Tokyo University of Science, Kuki-city, Saitama, Japan

1. Non-Past Past

The past tense morpheme in simple Japanese sentences can receive non-past interpretations in contexts of the speaker expressing surprise at discovery, recalling something or at seeing the fulfillment of expectations (Mikami 1953; Kunihiro 1967; Teramura 1984; Machida 1989; Mo 1992; Inoue and Ogoshi 1997; Inoue 2001). For example, (1a) can be uttered when the speaker was looking for a book and has now found it. While the present tense may be used, the past tense is more natural, even without past reference. The bus in (1b) is still on its way. The utterance in (1c) is a shout at someone who is blocking the speaker's way at the time of speech, and the street vendor yells (1d) to a passersby who has not yet purchased anything. I consider the examples in (1c) and (1d) to be imperative uses of the past tense morpheme. The present paper primarily discusses non-past past¹ sentences such as those in (1a) and (1b), and then in section 4 expands the analysis to capture the imperative use shown in (1c) and (1d).²

- (1) a. A, koko-ni at-ta/#a-ru.
 oh here-LOC be-PST/be-PRES
 'Oh, it was here.'

* Email: nishiguchi@rs.tus.ac.jp

I am grateful to extensive comments provided by anonymous reviewers. Needless to say, all remaining errors are mine.

¹ In this paper, the non-past past particle *-ta* in Japanese is also referred to as the mirative past, mirative *-ta*, or past tense of discovery interchangeably.

² List of abbreviations in the glosses: ACC: accusative, BPG: best possible grounds, COMP: complementizer, COND: conditional, DECL: declarative, EVID: evidential, GEN: genitive, IMPF: imperfective, INF: infinitive, LOC: locative, MIR: mirative, NEG: negative, NOM: nominative, NONPST: nonpast, NX.PST: non-experienced past, PAR: particle, PRES: present, PROG: progressive, PST: past, SG: singular, SUBJ: subject, SUR: surprise, TOP: topic.

- b. A, basu-ga ki-ta.
 oh bus-NOM come-PST
 'Oh, the bus is coming.' (Lit. 'The bus has come.')
- c. Doi-ta, doi-ta.
 step.aside-PST step.aside-PST
 'Step aside, step aside!'
- d. Kat-ta, kat-ta.
 buy-PST buy-PST
 'Buy one, buy one!'

The structure of this paper is as follows: this section explains three major characteristics of the past tense of discovery in Japanese. Section 1.1 illustrates the temporal mismatch between matrix tense and future adverbs in English and Japanese. Section 1.2 categorizes the non-past past as a modal mirative marker. Section 1.3 identifies how mirative past sentences convey old information. Section 2 demonstrates that Ippolito's (2003) analysis on temporally mismatched matrix sentences in English applies to the non-past past in Japanese. Section 2.1 introduces Ippolito's approach and section 2.2 explains how the past tense is interpreted outside the proposition. Section 3 identifies different implicatures raised by mismatched matrix sentences in English and the past tense of discovery in Japanese. Section 4 outlines the analysis of the imperative use of the past tense morpheme. And section 5 concludes the paper.

1.1. Temporal Mismatch

In English, the past tense in *I was to have an exam tomorrow* refers to the past and indicates that, according to her agenda in the past, the speaker had an exam scheduled for the next day, and the exam might have been cancelled later on. On the contrary, in Japanese, *Tomorrow, it was that I take an exam*, as in (2), indicates that the speaker had forgotten about the exam before her utterance and she now remembers that the exam is scheduled for the next day. The exam is still on schedule at the time of the utterance.

- (2) Shimat-ta. Ashita-wa shiken-o uke-ru-no-dat-ta.
 close-PST tomorrow-TOP exam-ACC take-INF-COMP-DECL-PST
 'Oh, no! I forgot that I'd take an exam tomorrow.' (Lit. 'Tomorrow, it was that I take an exam').

The future adverb *tomorrow* interferes with the regular past tense, as in (3).

- (3) (#Ashita/kino)(-wa), shiken-ga at-ta.
 tomorrow/yesterday-TOP exam-NOM be-PST
 'There was an exam tomorrow/yesterday.'

Such temporally mismatched future adverbs are not compatible with ‘real’ past tense with past reference but can co-occur with non-past past tense.

Temporal mismatch between the past tense morphology and a future adverbial *tomorrow* has been discussed in past studies (Ogihara 2000; Ippolito 2003, 2004; Higginbotham 2007). Ippolito (2003) calls such a temporal mismatch in *Originally, Charlie left tomorrow* as temporally mismatched matrix sentences. Higginbotham (2007) calls it indexical mismatch.

The future temporal adverb *tomorrow* has been known to be infelicitous with the regular past tense with past reference, as in (4b). However, (4a) is felicitous because it refers to Charlie’s cancelled plan for the future.

- (4) a. Originally, Charlie left tomorrow.
 b. Charlie played with Lucy (yesterday/#tomorrow).

1.2. Mirativity

In this paper, I argue that the past tense morpheme without a past reference in Japanese is a mirative modal marker. Mirativity (admirativity) refers to linguistic encoding of the speaker’s surprise and is related to unprepared mind, new information, and speaker’s unexpectedness (DeLancey 2001; Aikhenvald 2004). Mirativity marks whether the information represents knowledge which is new to the speaker or knowledge which is already integrated into the speaker’s picture of the world (DeLancey 2001). I take mirativity to be a part of evidentiality.

It has been observed that evidential markers are fused or composed with tense in Tariana (Aikhenvald 2004). Faller (2004) analyzes the past tense marker *-sqa* in Cuzco Quechua as an indirect evidential marker. The mirative use of *-sqa* is termed as *sudden discovery tense*, which may have present time reference. Example (5) is uttered by a speaker upon unexpectedly seeing Marya, who was not supposed to be there.³

- (5) Kay-pi-(má) ka-sha-**sqa** Marya-qa.
 this-LOC-SUR be-PROG-NX.PST Marya-TOP
 ‘Marya is here!’
 (Faller 2004:53)

-sqa is used for expressing a compliment to the cooking, as in example (6).

³ The word order of Cuzco Quechua, which belongs to Quechuan language family, is SOV.

- (6) Lawa-yki-qa smak-mi qa-**sqa!**
 soup-2-TOP nice-BPG be-NX.PST
 ‘Your soup is very tasty!’
 (Faller 2004:53)

According to DeLancey (2001), Hare (Athapaskan) *lō* is used at the sudden (direct) perception of an unexpected fact and “has the sense of surprise at an unanticipated situation,” as seen in (7).

- (7) e-we’ ghálayeda **lō**
 its-hide work.2SG.SUBJ.IMPF MIR
 ‘I see you’re working on hides!’
 (DeLancey 2001:376)

Furthermore, the Turkish past tense morpheme *miş* has a mirative use and expresses surprise (Slobin and Aksu 1982). When the speaker has just become aware of something which s/he was not conscious about, *miş* can be used for both eventive and stative predicates, as in (8) and (9), respectively. Example (8) can be an expression of surprise upon encountering concrete physical evidence that Kemal came.

- (8) Kemal gel-**miş**.
 Kemal come-MIR
 ‘Kemal came.’
 (Slobin and Aksu 1982:196)

- (9) Selma bura-da-**ymiş**.
 Selma here-LOC-MIR
 ‘Selma is here.’
 (Slobin and Aksu 1982:193)

In view of similar interpretations between the Japanese non-past past marker *-ta* and the mirative markers in other languages, it is plausible to consider the surprise past tense marker *-ta* to be a mirative (Sadanobu and Malchukov 2006).

Direct visual perception of an unexpected or expected fact triggers *-ta* of discovery or that of realization of the fulfilment of expectation.

- (10) (Finding a snake in a zoo.)
 Wa, koret-te hebi-dat-ta. Iwa-ja-nakat-ta.
 Oh this-PAR snake-be-PST rock-be-NEG-PST
 ‘Oh, this is a snake. It is not a rock.’

On the other hand, first-hand information triggers what is called *-ta* of recalling.

(11) (Looking at a calendar,)

Ashita-wa sajitsu-dat-ta.
tomorrow-TOP holiday-be-PST
'Tomorrow is holiday.'

Therefore, I propose an addition of the mirative marker *-ta* in (12d) to the classification of the Japanese evidential markers by Aoki (1986) in (12a–c).

(12) a. visible, tangible or audible evidence collected through his own senses to make inferences: *yo*

(i) Soto-wa ame-no-yo-da.
outside-TOP rain-GEN-EVID-DECL
'It seems to be raining outside.'

b. circumstantial: *rashi*

(ii) Chizu-ga machigat-tei-ta-rashii.
map-NOM wrong-PROG-PST-EVID
'It seems the map was wrong.'

c. hearsay or inferential about what occurred in the past: *so*

(iii) Chizu-ga machigat-tei-ta-so-da.
map-NOM wrong-PROG-PST-EVID-be
'I heard that the map was wrong.'

d. mirative, surprise from direct evidence: *-ta*

(iv) A, hebi-ga i-ta.⁴
oh snake-NOM be-EVID
'Oh, there is a snake here.'

1.3. Presupposition

Although non-past *-ta* sentences are usually simple sentences, they can be embedded under factive predicates such as *realize*:⁵

⁴ As a reviewer pointed out, the topic marker *-wa* raises the mirative reading of *-ta* in general. However, this example shows that it is not always the case.

⁵ A reviewer brought my attention to the fact that the past tense of discovery behaves differently from

- (13) Asu-ga shiken-dat-ta-to waka-reba, Ken-wa odoroku-daro.⁶
 tomorrow-NOM exam-be-PST-COMP realize-COND Ken-TOP surprise-will
 Lit. 'When he realizes that he had an exam tomorrow, Ken will be surprised.'

A predicate, such as *regret*, is a "hole" to presupposition that preserves the presupposition of the embedded sentences (Karttunen 1973). As shown in (14), negation does not cancel the presupposed content: that is, John insulted her.

- (14) a. John regrets he insulted her.
 b. John does not regret he insulted her.

According to Quirk, Greenbaum, Leech and Svartvik (1985), certain adverbs, called "content disjuncts," comment on the degree of truth and "present a comment on the truth value of what is said." Adverbs such as *clearly* and *definitely* express conviction while another group of disjuncts, such as *perhaps* and *possibly*, express some degree of doubt on the truth value of what is said. In non-presuppositional constructions, such as in (15a), *clearly/definitely* can be used to comment or negotiate on what is asserted – (15a) would mean that it was strongly true that John insulted her. On the other hand, these adverbs are incompatible with presuppositional predicates such as *regret* in (15b) because the truth value of the content is already presupposed.

other evidential markers in (10) with respect to the embeddability. Except for the mirative *-ta*, the only marker that allows direct attachment of the complementizer is *rashi* in (ii) below whose semantics may change in the embedded clause. Accounting for such different behavior falls outside of the scope of this paper.

- (i) *Soto-wa ame-no-yo(-da)-to wakat-ta.
 outside-TOP rain-GEN-EVID-DECL-COMP realize-PST
 'I realized that it seemed raining outside.'
- (ii) Chizu-ga machiga-tei-ta-rashii-to wakat-ta.
 map-NOM wrong-PROG-PST-EVID-COMP realize-PST
 'I realized that the map appeared to be wrong.'
- (iii) Chizu-ga machiga-tei-ta-so*(-da)-to wakat-ta.
 map-NOM wrong-PROG-PST-EVID-DECL-COMP realize-PST
 'I realized that the map appeared to be wrong.'
- (iv) Kumo-ga itan-dat-ta-to wakat-ta.
 spider-NOM be-be-PST-COMP realize-PST
 'I realized that there was a spider.'

⁶ I would like to thank an anonymous reviewer for providing me with this example.

Delin (1992), in her discussion on *it*-clefts, demonstrates the non-negotiability of presupposed content by using the following examples. In presuppositional environments such as the complement of the verb *regret*, the adverbs that express some degree of doubt are infelicitous, as in (15b).

- (15) a. John clearly/definitely insulted her.
 b. ??John regrets that he clearly/definitely insulted her.⁷
 (Delin 1992:301)

As per Delin's test, the propositions in mirative *-ta* utterances are presupposed and non-negotiable since adverbs such as *tabun* "probably," *tashikani* "certainly," and *akirakani* "clearly" interfere with non-past *-ta* sentences. These adverbs can only be felicitously used when the truth value of the proposition it modifies is not presupposed.

- (16) a. #A, ashita-wa tabun/tashika-ni/akirakani Hanako-no tanjobi-dat-ta.
 oh, tomorrow-TOP probably/certainly/clearly Hanako-GEN birthday-be-PST
 'Oh, it is probably/certainly/clearly Hanako's birthday tomorrow.'
 b. A, #tabun/?tashikani/#akirakani hon-ga at-ta.
 oh perhaps/certainly/clearly book-NOM be-PST
 'Oh, the book is perhaps/certainly/clearly here.'

On the other hand, *yappari* 'as expected' can be added freely to non-past past sentences, suggesting that prior expectations are not in conflict with the non-past past tense and that the proposition is presupposed to be true:

- (17) a. A, yappari ki-ta.
 Oh as expected come-PST
 'Oh, (s/he) is coming as I thought.'

⁷ A reviewer brought the following seeming counterexample to Quirk et al.'s (1985) assertion, in which the presupposed content can be modified by *clearly*.

- (i) John does not regret that he clearly insulted her.

I assume that the negation associates with and "licenses" *clearly*, which is emphatic and introduces scalar endpoint of the degree of insult in this example. The relation between negation and *clearly* is comparable to the one between *not* and *much* in *John did not regret he spoke much*, in which the negation licenses the NPI *much*.

- b. Yappari koko-ni at-ta.
 as expected here-LOC be-PST
 '(The book) was here as I expected.'

Thus, the embeddability with the fact predicates, non-negotiability and compatibility with prior expectation suggest the presupposed content of the non-past past sentences.

2. Modal Use of Past

Now, this paper will compare the past tense of discovery in Japanese with mismatched matrix sentences in English. Referring to Ippolito (2003), this section argues that the non-past past tense in Japanese is a modal past that restricts the accessibility relation of the planning modal. This explains the temporal mismatch with future adverbs.

2.1. A Summary of Ippolito 2003

Ippolito (2003) discusses temporal mismatches in counterfactual conditionals and claims that the past tense is interpreted outside of the proposition in which it occurs. The past tense in the antecedent is interpreted inside the accessibility relation of the modal operator so that the future temporal adverb *tomorrow* does not interfere with it in (18).

(18) If Charlie had left for Paris tomorrow, he would have met my cousin there.

In order to strengthen her proposal, Ippolito extends her analysis to the tense mismatch in matrix sentences. In her analysis on temporally mismatched matrix sentences as in (19a), all sentences with a temporal mismatch are interpreted modally. The temporal mismatch between the past tense and the future adverbial in (19a) indicates that the past tense scopes out of the proposition. In (19b), the past tense locates the event in the past so that *tomorrow* cannot occur.

(19) a. Originally, Charlie left tomorrow.

(Ippolito 2003:179)

b. Charlie played with Lucy (yesterday/#tomorrow).

(Ippolito 2003:149)

In (19b), the past tense is interpreted clause-internally so that the future adverbial *tomorrow* is ungrammatical. On the other hand, in (19a), the past tense is interpreted outside of the clause so that *tomorrow* is admitted. The past tense is a temporal argument of the accessibility relation between the actual world and the possible worlds in which Charlie's departure is scheduled for the day after the day of utterance. Charlie's departure was planned at some point $g(2)$ in the past.

(20) $[[t_2[\text{past}]]]^{g,c} = \text{defined only if } g(2) < t_c$; if defined, then $[[t_2[\text{past}]]]^{g,c} = g(2)$
(Ippolito 2003:157)

In *planning modal* sentences, as in (21a), the worlds quantified over by the modal operator are worlds compatible with what was necessarily scheduled in the actual world at a past time. The past tense restricts the accessibility relation of the modal operator as shown in (21b) and (21c), so that the matrix clause is tenseless. The past tense operator outscopes modal. Therefore, there is no problem with *tomorrow*.

(21) a. Charlie left tomorrow.

b. $[_{CP} [_{\text{covert modal}}]_{\langle st, \langle st, t \rangle \rangle} [R_{\langle s, \langle i, \langle st \rangle \rangle \rangle} (w_1)(t_2[\text{past}])]_{\langle st \rangle}]_{\langle st, t \rangle} [_{\lambda w_2} [\text{Charlie leaves tomorrow in } w_2]]_{\langle st \rangle}]$

c. $[[[_{CP}]]]^{g,c} = 1 \text{ iff } \forall w \in W [w \text{ is compatible with the plans in } w_c \text{ at } g(2) \rightarrow \text{Charlie leaves in } w]$ defined only if $g(2) < t_c$
(t_c : utterance time, w_c : actual world)

On the other hand, in *epistemic modal* sentences, as in (22a), the past tense is interpreted clause-internally. The interpretation of (22a) is that "in view of the circumstances at the time of utterance time, Charlie could possibly have left in the past," as given in (22b) and (22c). The clause-internal past tense cannot be used with *tomorrow*.

(22) a. Charlie could have left (*tomorrow).

b. $[_{CP} [_{\text{modal}}]_{\langle st, \langle st, t \rangle \rangle} [R_{\langle s, \langle i, \langle st \rangle \rangle \rangle} (w_1)(t_2)]_{\langle st \rangle}]_{\langle st, t \rangle} [_{\lambda w_2} [\text{Charlie left in } w_2]]_{\langle st \rangle}]$

c. $[[[_{CP}]]]^{g,c} = 1 \text{ iff } \forall w \in W [w \text{ is compatible with what the speaker knows in } w_c \text{ at } t_c \rightarrow \text{Charlie left in } w]$

Such scopal interactions between the past tense and modal operator explain (un)grammaticality of future adverbs. The past tense is a temporal argument of the planning modal so that the proposition itself is interpreted tenseless and is compatible

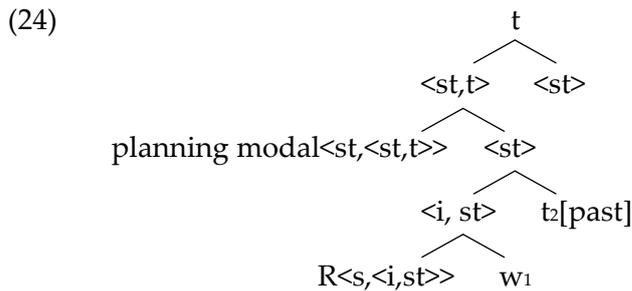
with the future adverb *tomorrow*. On the contrary, the time of evaluation of the epistemic modal is the utterance time. The past tense is interpreted clause-internally, which results in contradiction with the future adverb.

2.2. Meaning of Mirative Past

If we apply Ippolito’s (2003) analysis to the Japanese example (23c), the past tense is a temporal argument of the accessibility relation between the actual world and the possible worlds in which an exam is scheduled for the day after the day of utterance. The exam was scheduled at some point in the past.

- (23) a. (#Ashita/kino) shiken-ga at-ta.
 tomorrow/yesterday exam-NOM be-PST
 ‘There was an exam (tomorrow/yesterday).’
- b. I was to have an exam tomorrow.
- c. Shimatta. Ashita-wa shiken-dat-ta.
 closed tomorrow-TOP exam-be-PST
 ‘Oh, no! I had an exam tomorrow.’

If Ippolito’s analysis on mismatched matrix sentences applies to the Japanese matrix mirative, the past tense does have temporal contributions, that is, the time argument switches the evaluation time of the accessibility relations in the restrictor of the covert modal backward, as illustrated in (24). The exam was scheduled according to the past perspective. The speaker has found that the exam was scheduled in the past, for the next day.



(25) [covert modal_{<st,<st,t>>}[R_{<s,<i,st>>}(w₁)(t₂[past])]_{<st>}]_{<st,t>}[λw₂[I have an exam tomorrow in w₂]]_{<st>}

(26) [[(23c)]]^{g,c} = 1 iff ∀w ∈ W[w is compatible with what the speaker plans in w_c at g(2) → there is an exam tomorrow in w] defined only if g(2) < t_c

In (24) and (25), the accessibility relation of the modal combines with the actual world and the contextually salient past time, which is the restrictor of the modal. What is in the nuclear scope is a tenseless clause, a function from possible worlds to the truth-values. In all the worlds compatible with the speaker's plans at the actual world at the past salient time $g(t_2)$, the speaker has an exam scheduled tomorrow. Moreover, as pointed out by a reviewer, the covert modal operates at the CP level, since the past tense of discovery is interpreted as non-past in topicalized sentences, as seen in (23c).

The past tense is interpreted outside of the proposition so that it does not interfere with the future temporal adverb *tomorrow*. The past tense is interpreted in the domain of the modal operator, i.e. inside of the accessibility relation.

(27) a. A, hon-ga at-ta.
 Oh book-NOM be-PST
 'Oh, the book was here.'

b. covert modal_{<st<st,t>>} [R_{<st<st,t>>}(w₁)(t₂[past])]_{<st>}[λw₂[the book is on the table in w₂]]_{<st>}

In the accessible worlds from the actual world in the past ($g(2)$), the book was supposed to be on the table. This fact was forgotten or doubted until immediately before the utterance time. Ippolito's analysis provides a good explanation to the temporal mismatch in the mirative past sentences. The past tense is interpreted as a temporal argument of the accessibility relation of the modal so that it does not contribute to the interpretation of the proposition. However, the non-past past in Japanese differs from the mismatched matrix sentences in English in a significant way that is not predicted by Ippolito's analysis.

3. Different Conversational Implicatures

Even though the interpretation of the modal past is similar between temporally mismatched matrix sentences in English and sentences with the past tense of discovery in Japanese, Ippolito's analysis does not explain the different conversational implicatures between English mismatched matrix sentences and Japanese temporally mismatched past sentences. English mismatched matrix sentences such as (*Originally,*) *there was an exam tomorrow* give rise to conversational implicature, such that if the speaker used the past tense instead of the non-past tense, she would probably not in a position to use either the present or future tense morpheme, and that is why she used

the non-past past tense. That is, the schedule would not hold anymore at the time of utterance: the exam would have been cancelled or rescheduled, as in (28).

(28) There was an exam tomorrow but it was postponed. Thank goodness!

(29) Temporally mismatched matrix sentences in English:

Conversational implicature: The impossibility of the proposition at speech time

(30) a. $P \cap c_{t_2 < t_c} \neq \emptyset$

b. $P \cap c_{t_c} = \emptyset$

(P: presuppositions; the set of all worlds w such that the conjunction of all the presuppositions of p is true in w)

(31) context set $c_t = \{w \in W: w \in p \text{ for all } p \text{ that the speaker presupposes to be true at } t\}$

Nevertheless, the Japanese mirative past does not have such implicature, as the content of the proposition is presupposed and factive at the utterance time, as previously shown in section 1.3. The Japanese mirative past asserts that “the exam is scheduled for tomorrow or “the book is on the table,” both at the time of utterance.

(32) Temporally mismatched matrix mirative past sentences in Japanese:

Implicature: p was not known in common ground at t_2 and $t_2 < t_c$

(33) a. $P \cap c_{t_2 < t_c} = \emptyset$

b. $P \cap c_{t_c} \neq \emptyset$

(34) The book was here.

Implicature: The book’s presence was not in common ground.

Japanese matrix mirative past sentences do not imply the falsity of the proposition at speech time but it does give rise to another implicature in accordance with the Gricean Maxim of Quantity.

(35) Maxim of Quantity (Grice 1975):

Make your contribution as informative as is required for the current purposes of exchange. Do not make your contribution more informative than required.

(36) a. Statement on past belief on p : non-informative if he had believed p .

- b. Statement on past belief on p : informative if he had believed $\neg p$ or was not sure of p .

As stated in (37), the mirative past statements are not informative if both the speaker and the hearer had already believed p . Based on the assumption that the speaker should be informative enough, the utterance conveys the conversational implicature that the speaker had not believed p or was not sure of p .

- (37) a. English:

The speaker's utterance of

$[[\text{must}[R(w_1)(t_{2[\text{past}]})]] [\lambda w_2 [\text{there is a meeting tomorrow in } w_2]]]]]^{g,c}$

is less informative than the utterance

$[[\text{must}[R(w_1)(t_2)]] [\lambda w_2 [\text{there is a meeting tomorrow in } w_2]]]]^{g,c}$,

which gives rise to the implicature

$[[\text{must}[R(w_1)(t_2)]] [\lambda w_2 [\neg[\text{there is a meeting tomorrow in } w_2]]]]]^{g,c}$

- b. Japanese:

The speaker's utterance of

$[[\text{must}[R(w_1)(t_{2[\text{past}]})]] [\lambda w_2 [\text{there is a meeting tomorrow in } w_2]]]]]^{g,c}$

gives rise to the implicature that the speaker believed

$[[\neg\text{must}[R(w_1)(t_{2[\text{past}]})]] [\lambda w_2 [\text{there is a meeting tomorrow in } w_2]]]]]^{g,c}$

Assertion in mismatched matrix sentences imply that until the speech time, the speaker had not perfectly believed or had forgotten that the proposition held in the past. The assertion in mismatched matrix sentences is thus informative, even though the information is old.

The implicature of the modal past is cancellable, as the following examples show:

- (38) a. There was an exam tomorrow but it was postponed. Thank goodness!

- b. There was an exam tomorrow and there will be one as scheduled.

The utterance in (38a) suggests that the implicature that arises from the modal past is real, in that the exam was in fact postponed. However, the implicature is cancellable, rendering example (38b) felicitous. The speaker of (39a) was not ready when the bus came, while the speaker of (39b) expected the arrival of the bus. The implicature of uncertainty was cancelled.

- (39) a. A, basu-ga ki-ta. Jitsuwa kuru-to omot-te nak-at-ta.
oh bus-NOM come-PST in.fact come-COMP think-INF NEG-be-PST
'Oh, the bus is coming. In fact, I didn't expect it to come.'

- b. A, basu-ga ki-ta. Jitsuwa kuru-to omot-te-ta.
 oh bus-NOM come-PST in.fact come-COMP think-be-PST
 ‘Oh, the bus is coming. In fact, I expected it to come.’

4. Remarks on the Imperative Use of Past

The given analysis can be expanded to the imperative use of the past morpheme which does not have the past reference either, as mentioned in section 2.

- (40) a. Hashit-ta, hashi-ta.
 run-PST run-PST
 ‘Run!’
- b. Saa, hatara-i-ta, hatara-i-ta.
 let’s work-be-PST work-be-PST
 ‘Go back to work!’

Parallel to other past tense morphemes without the past reference, the covert modal, which is deontic, is present; this accounts for why the past tense is not interpreted inside of the proposition. The accessibility relation of the deontic modality takes the past tense as its argument. In view of the rules, the addressee was supposed to run or work.

An extensive discussion on the imperative use of the past tense morpheme is beyond the scope of this paper, and remains a topic for future research.

5. Conclusion

The past tense of discovery without past reference restricts the accessibility relation of the modal operator so that the past tense is interpreted outside of the clause and a temporal mismatch does not occur. This past is a modal past to which Ippolito’s (2003) analysis on temporally mismatched matrix sentences in English directly applies. Nevertheless, the non-past past tense in Japanese differs from English in conversational implicature. The non-past, mirative past implicates that the speaker was uncertain or was not sure of p out of a Gricean maxim of quantity, while temporally mismatched matrix sentences in English give rise to another implicature that the proposition does not hold at the utterance time.

References

- Aikhenvald, Alexandra Y. 2004. *Evidentiality*. Oxford: Oxford University Press.
- Aoki, Haruo. 1986. Evidentials in Japanese. In *Evidentiality: The linguistic coding of epistemology*, ed. by Wallace Chafe and Johanna Nichols, 223–238. Norwood, NJ: Ablex.
- DeLancey, Scott. 2001. The mirative and evidentiality. *Journal of Pragmatics* 33:369–382.
- Delin, Judy. 1992. Properties of *it*-cleft presupposition. *Journal of Semantics* 9:289–306.
- Faller, Martina. 2004. The deictic core of ‘non-experienced past’ in Cuzco Quechua. *Journal of Semantics* 21:45–85.
- Grice, Paul. 1975. Logic and conversation. In *Syntax and semantics 3: Speech acts*, ed. by Peter Cole and Jerry L. Morgan, 41–58. NY: Academic Press.
- Higginbotham, James. 2007. The anaphoric theory of tense. In *Proceedings of SALT 16*. Ithaca, NY: Cornell University.
- Inoue, Masaru. 2001. Gendai nihongo no *ta* [*ta* in contemporary Japanese]. In *Ta no Gengogaku* [Linguistics of *ta*], ed. by Tsukuba Gengo Bunka Forum, 97–163. Tokyo: Hituzi Syobo.
- Inoue, Masaru, and Naoki Ogoshi. 1997. Kakokei no shiyo ni kakawaru goyoronteki yoin: Nihongo to chosengo no baai [Pragmatic factors for the use of past tense: In Japanese and Korean]. *Nihongo Kagaku* 1:37–52.
- Ippolito, Michela. 2003. Presuppositions and implicatures in counterfactuals. *Natural Language Semantics* 11:145–186.
- Ippolito, Michela. 2004. Imperfect modality. In *The syntax of time*, ed. by Jacqueline Guéron and Jacqueline Lecarme, 359–388. Cambridge, MA: MIT Press.
- Karttunen, Lauri. 1973. Presupposition of compound sentences. *Linguistic Inquiry* 4:169–193.
- Kunihiro, Tetsuya. 1967. *Kozoteki imiron* [Structural semantics]. Tokyo: Sansendo.
- Machida, Ken. 1989. *Nihongo no Jisei to asupekuto* [Tense and aspect in Japanese]. Tokyo: Arc.
- Mikami, Akira. 1953/1972. *Gendai goho josetsu* [Introduction to contemporary grammar]. Tokyo: Kuroshio.
- Mo, Sejong. 1992. Hakken, omoidashi-ni-okeru *ru*-kei-to *ta*-kei [*Ru*-form and *ta*-form at discovery and recalling]. *Nihongogaku* 12:88–97.
- Ogihara, Toshiyuki. 2000. Counterfactuals, temporal adverbs, and association with focus. In *Proceedings of SALT 10*, 115–131. Ithaca, NY: CLS Publications, Cornell University.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartvik. 1985. *A comprehensive grammar of the English language*. London: Longman.
- Sadanobu, Toshiyuki, and Andrej Malchukov. 2006. Modal extensions of aspecto-temporal forms in Japanese. Paper presented at CHRONOS 7, University of Antwerp.
- Slobin, Dan, and Ayhan Aksu. 1982. Tense, aspect, modality, and more in Turkish evidentials. In *Tense-aspect: Between semantics and pragmatics*, ed. by Paul J. Hopper, 185–200. Amsterdam: John Benjamins.
- Teramura, Hideo. 1984. *Nihongo no shintakusu to imi II* [Japanese syntax and semantics II]. Tokyo: Kuroshio.

To cite this article:

Nishiguchi, Sumiyo. 2014. Mirative past in Japanese. *Semantics-Syntax Interface* 1(2):118–132.