Cross-linguistic variations in the interpretation of tense in mirative sentence: A view from Japanese mirative expressions *nante/towa**

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Abstract

This chapter investigates the interpretation of tense in Japanese mirative sentences using *nante/towa* and considers cross-linguistic variation of mirativity in terms of tense. In Japanese, when *nante* or *towa* is combined with a proposition that contains the so-called non-past form *ru*, the sentence becomes ambiguous as having both a non-past (future/present) reading and a past reading. Based on a theory by Sawada & Sawada (2019), we argue that this ambiguity of tense is due to the conventional implicature of *nante/towa*: *nante/towa* can take a "non-tensed" proposition p and conventionally implies that (i) p is settled (i.e., p is/was true or predicted to be true) and (ii) the speaker did not expect such p. It will be shown that a basic analysis of *nante/towa* can apply to the English exclamatory *that*-clause, which also presents an ambiguity of tense, and at least partially to the Korean mirative *tani* sentence in which a past-oriented meaning can be represented based on the stem form of a verb.

Keywords:mirativity, exclamativity, (embedded) *nante/towa*, tense, ambiguity, English mirative *that*-clause , Korean *tani*, main clause phenomenon

1 Introduction

This paper investigates the interpretation of tense in Japanese mirative sentences containing *nante/towa* and considers cross-linguistic variations of the interpretation of tense in mirative sentence.

In English, there is a sentence exclamative like (1):

(1) (Wow,) John won the race! (Rett 2011: 430)

Rett (2011) claims that in English, exclamations like this (1) express that a particular proposition has violated the speaker's expectations and proposes an illocutionary force operator for an exclamation that is a function from propositions to expressive speech acts, as in (2b) (s_C stands for the speaker, w_C and t_C stand for the world and the time of utterance):

(2) a. $p = \lambda w : won_w(\text{john}, \iota x\ [\text{race}_w\ (x)])$

    b. E-FORCE (p), uttered by the s_C, is appropriate in a context C if p is salient and true in the w_C. When appropriate, E-FORCE(p) counts as an expression when the s_C had not expected that p.

<div align="right">(Rett 2011: 430)</div>

In (1) E-FORCE takes the proposition "John won the race" and expresses that the speaker had not expected John to win the race. Japanese also has exclamative sentence:

(3) John-ga   kat-ta!
     John-NOM win-PST
     'John won!'

In this paper, we will focus on another kind of Japanese mirative expression *nante/towa* that triggers exclamative meaning. An interesting point with *nante/towa* is that they have the property of ambiguity with regard to tense interpretation. When *nante* or *towa* is combined with a proposition that contains the *ru*-form, the sentence can be ambiguous between a non-past (future/present) reading and a past reading (NON.TNS = non-tensed, MIR = mirative):

(4) Taro-ga   paatii-ni ku-ru-{nante/towa}.
     Taro-NOM party-to come-NON.TNS-{MIR/MIR}
     a. Future reading: Taro is going to come to the party!
     b. Past reading: Taro came to the party!

In the future reading, the speaker is surprised about the scheduled plan that Taro will come to the party; whereas in the past reading, the speaker is surprised that Taro came to the party. The fact that there is a past reading in (4) is surprising because the *ru*-form is usually considered a non-past tense (NON.PST) form that represents the present (when it is attached to a stative verb) or the future (when it appears with a non-stative verb). If we delete *nante/towa* in (4), the sentence can only offer a future reading:

(5) Taro-ga   paatii-ni ku-ru.
    Taro-NOM party-to come-NON.PST
    Future reading: Taro is going to come to the party.

Why is it that the tense is not specified in (4)? What kind of mechanism is involved with the in-terpretation of *nante/towa*? What is the relationship between tense and the meaning of *nante/towa*?

Based on the research of Sawada & Sawada (2019), we will argue in sections 2 and 3 that the ambiguity of tense in a mirative sentence using *nante/towa* is due to the conventional implicature (CI) of *nante/towa*: *nante/towa* can take a "non-tensed" proposition p and conventionally implies that (i) p is settled (i.e., p is/was true or predicted to be true) and (ii) the speaker had not expected that p.[1] If p is interpreted as true at the level of CI, then the event described by p is interpreted as a past (or a present) event; if p is predicted to be true in the CI, then the event described by p is a future event.

Note that *nante/towa* can also be combined with a tensed proposition (e.g., a proposition with a past tense) or a speech act, but these uses have a slightly different pragmatic meaning. We will claim that *nante/towa* with a tensed proposition or a speech act sounds more indirect in that they are usually used in a situation wherein the speaker heard about the content of a proposition or a speech act.

In section 4, we will look at the case where *nante/towa* can be embedded under a "surprising predicate" and show that the proposed analysis of non-embedded *nante/towa* with a non-tensed proposition (*ru*-form) can naturally apply to the embedded *nante/towa* as well:

(6) Taro-ga   paatii-ni ku-ru-{nante/towa}   odoroki-da.
    Taro-NOM party-to come-NON.TNS-{MIR/MIR} surprising-PRED
    Future reading: It is surprising that Taro is going to come to the party!
    Past reading: It is surprising that Taro came to the party!

An interesting point is that this kind of tense-related ambiguity is not unique to Japanese *nante/towa*, but can be observed in mirative sentences in other languages as well.

In section 5, we will show that the phenomenon of the English exclamatory *that*-clause with the evaluative modal *should* (or *could*) displays the property of ambiguity in terms of tense, as shown in (7). We will also claim that the same analysis of *nante/towa* can apply to the English exclamatory *that*-clause:

(7) That Prof. Smith should come to the meeting.
    a. Future-oriented reading: The speaker is surprised about the plan that Prof. Smith will come to the meeting.
    b. Past-oriented reading: The speaker is surprised that Prof. Smith came to the meeting.

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[1]Theoretically, we will assume that the *ru*-form in the mirative *nante/towa* is a non-tensed (NON.TNS) plain form.

In chapter 6, we will look at the Korean mirative marker *tani* and show that although things are more complicated in that there is speaker-variation with regard to interpretation of the tense, there is a similarity to Japanese *nante/towa*. For example, in (8) we found that there were native speakers who considered that a sentence could be ambiguous between a future-oriented reading and a past-oriented reading (Group 1); however, there were also speakers who considered the sentence only has a past-oriented interpretation (Group 2):

(8) Chelswu-ka   o-tani.
Chelswu-NOM come-MIR

Native speakers of Group 1: 'I am surprised that Chelswu is going to come. (future-oriented reading)/ I am surprised that Chelswu came.' (past-oriented reading)

Native speakers of Group 2: 'I am surprised that Chelswu came.' (past-oriented reading only)

Although there is speaker variation, it will be shown that Korean *tani* shares the same semantic property as the Japanese *towa/nante* and the English exclamatory *that*-clause in that it is possible to convey a past-oriented mirative meaning without using a past tense morpheme.

This paper suggests that there are two types of proposition-based mirativity: a mirative expression that takes a tensed proposition and one that takes a non-tensed proposition and has flexible interpretation with regard to tense. We suggest that the latter type of mirative expressions are developed due to the grammaticalization from a complementizer.

2   Some empirical facts about Japanese *nante/towa*

This section considers the meanings of *nante/towa*. As for *nante*, there are several different meanings/uses but there is one mirative use that expresses a speaker's surprise and this mirative *nante* has two types, a complementizer *nante* and a sentence-final particle *nante*:[2]

(9) a. Taro-ga   make-ru-nante   bikkuri-da.
Taro-NOM lose-NON.TNS-MIR surprising-PRED

'It is surprising that Taro lost.'

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[2]As many dictionaries mention, *nante* can also express a speaker's dismissive attitude or low evaluation. As shown in the following examples, (i) expresses a speaker's low evaluation toward the modified noun, and (ii) expresses a speaker's low evaluation toward the given proposition/event:

(i) a. Shougatsu-nante   tsumaranai. (*Koujien Dictionary, 7th edition*)
New Year holidays-low.EVAL boring

'New Year holidays are boring.'

b. Iku-nante   i-tte   nai. (*Meikyou Dictionary, 2nd edition*)
Go-low.EVAL say-CON NEG

'I didn't say that I will go.'

b. Taro-ga   make-ru-nante.
      Taro-NOM lose-NON.TNS-MIR
      'It is surprising that Taro lost.'

Historically, it is possible to assume that the sentence-final particle *nante* has been grammaticalized as a result of omitting a main clause predicate (surprising predicate)(see also Maruyama (1996)).

As for *towa*, it is often assumed *towa* was developed from the case marking particle *to* plus the *kakarijoshi* 'rinking particle' *wa* (*Nihon Kokugo Daijiten, Dai Nihan* (Encyclopedia of Japanese language, 2nd edition). As the following examples show, *towa* also has a complementizer type and a sentence-final particle type:

(10)   a. Taro-ga   make-ru-towa   bikkuri-da.
           Taro-NOM lose-NON.TNS-MIR surprising-PRED
           'It is surprising that Taro lost.'

        b. Taro-ga   make-ru-towa.
           Taro-NOM lose-NON.TNS-MIR
           'It is surprising that Taro lost.'

Similar to the case of *nante*, it seems safe to assume that the sentence-final particle *towa* has been grammaticalized as the result of the omission of a main clause predicate (surprising predicate). In this section and section 3, we will first look at the shared meaning of *nante* and *towa* based on the sentence-final particle *nante/towa*. We will then discuss the interpretation of an embedded *nante/towa* in section 4.

2.1   Basic tense system of Japanese

This section introduces the basic properties of the Japanese tense system and clarifies the difference between the basic Japanese tense system and the interpretation of a tense within a sentence containing *nante/towa*. It is typically assumed in the literature that Japanese has two basic forms of tense: the *ru*-form (non-past form) and the *ta*-form (past form).

Let us first consider the interpretation of the *ru*-form. When the *ru*-form is used with a stative verb, it usually has a present interpretation; however, if the *ru*-form is used with a non-stative verb, it usually has a future interpretation:

(11)   *ru*-form (non-past form)

                with a stative verb (A):   with a non-stative verb (B):
                a present interpretation   a future interpretation
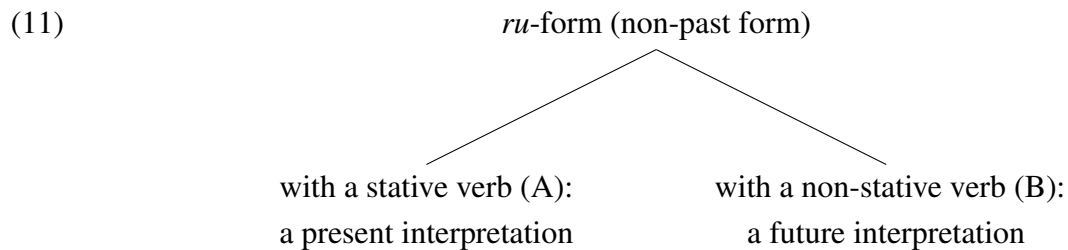
(12) is an example of using the *ru*-form with a stative verb and (13) shows use of the *ru*-form with a non-stative verb:

(12) (Present, with a stative verb)(=A)

Konnnani ryouri-ga   a-ru.
This much cuisine-NOM exist-NON.PST
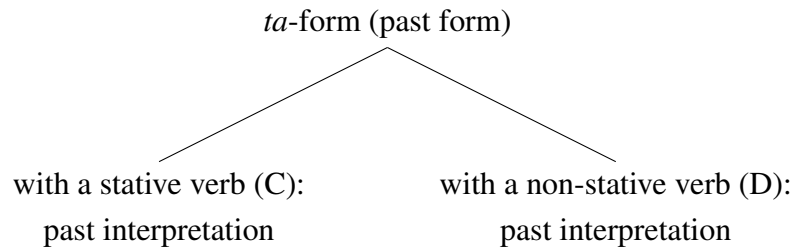
'There are so many dishes.'

(13) (Future, with a non-stative verb)(=B)

Ashita   Taro-ga   paatii-ni ku-ru.
Tomorrow Taro-NOM party-to come-NON.PST

'Taro will come to the party tomorrow.'

Next, let us consider the *ta*-form. Basically, *ta* is consistently interpreted as past with both stative and non-stative verbs.[3]

(14)   *ta*-form (past form)

        with a stative verb (C):   with a non-stative verb (D):
          past interpretation   past interpretation

The following are examples of *ta*-sentences (types C and D):

(15) (Past, with a stative verb) (=C)

Annani   ryouri-ga   a-tta.
That much cuisine-NOM exist-PST

'There were so many dishes.'

(16) (Past, with a non-stative verb)(=D)

Kinou   Taro-ga   paatii-ni ki-ta.
Yesterday Taro-NOM party-to come-PST

'Taro came to the party yesterday.'

Now let us consider the interpretation of *nante/towa*. The interpretation of tense radically changes with *nante/towa*. As the following example shows, when a stative verb + *ru* is combined with *nante/towa*, there can be both a present interpretation and a past interpretation:

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[3]There is also what are called the "present perfect'' use of *ta*, and a regular past use. We will not go into detail in this paper regarding the present perfect use.

(17)　(Stative verb + *ru*, with *nante/towa*)

    a. Konnani　ryouri-ga　　a-ru-{nante/towa}.
        This much cuisine-NOM exist-NON.TNS-{MIR/MIR}

        'There are so many dishes!' (present reading)

    b. Annani　ryouri-ga　　a-ru-{nante/towa}.
        That much cuisine-NOM exist-NON.TNS-{MIR/MIR}

        'There were so many dishes!' (past reading)

The sentences above are not ambiguous due to the meaning of the degree modifiers. *Anna* 'that much' is a recognitional (retrospective) demonstrative, and its degree is anchored to the past, while *konna* 'this much' is a deictic (spatial) demonstrative and its degree is anchored to current time.

When a non-stative verb + *ru* is combined with *nante/towa*, the sentence can have both future and past interpretations:

(18)　(Non-stative verb + *ru*, with *nante/towa*)

    a. Ashita　　asa　　6-ji-ni　　　Taro-ga　　gakkou-ni
        Tomorrow morning 6-o'clock-at Taro-NOM school-to
        ku-ru-{nante/towa}.
        come-NON.TNS-{MIR/MIR}

        'Taro will come to school at 6 a.m. tomorrow!' (future reading)

    b. Kinou　　asa　　6-ji-ni　　　Taro-ga　　gakkou-ni ku-ru-{nante/towa}.
        Yesterday morning 6-o'clock-at Taro-NOM school-to　come-NON.TNS-{MIR/MIR}

        'Taro came to school at 6 a.m. yesterday!' (past reading)

As shown in (17b) and (18b), if *nante/towa* is added, "a stative verb/non-stative verb + *ru*" can have a past interpretation. This suggests that the interpretation of tense with *nante/towa* is quite different from the interpretation of tense without *nante/towa*.

How can we explain these facts? In the following sections, we will explain the tense ambiguity of the *nante/towa* sentence by assuming that *ru* in the *nante/towa* sentence does not specify tense (i.e., it is a plain form) and *nante/towa* can take a non-tensed proposition as its argument.[4]

2.2　The mirative property of *nante/towa*

Let us consider the mirative property of *nante/towa* in more detail. According to DeLancey (1997: 369-370), mirativity refers to "the linguistic marking of an utterance as conveying information which is new or unexpected to the speaker." Further, according to Aikhenvald (2012: 437), across languages, the "mirative" encompasses the following values, each of which can be defined with

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[4]This is somewhat similar to English verbs such as *take*, in which the present tense form and the plain form are identical.

respect to the speaker, the audience (or addressee), or the main character: (i) sudden discovery, sudden revelation, or realization; (ii) surprise; (iii) unprepared mind; (iv) counterexpectation; and (v) new information.

The following contrast supports that a sentence with *nante/towa* conveys a mirative meaning (surprise/counterexpectation):

(19) (Federer is a world-class tennis player)

    a. Roger Federer-ga   make-ru-{towa/nante}.
       Roger Federer-NOM lose-NON.TNS-{MIR/MIR}

       'Roger Federer lost!'

    b. # Roger Federer-ga   kat-su-{towa/nante}.
        Roger Federer-NOM win-NON.TNS-{MIR/MIR}

       'Roger Federer won!'

Pragmatically, it would be surprising for Roger Federer to lose, while it is not surprising for Federer to win. [5]

Descriptively, we propose that the mirative *nante/towa* has a following pragmatic function:

(20) The pragmatic function of the mirative *nante/towa* (Descriptive): The Japanese *nante/towa* takes a "non-tensed" proposition p and conventionally implies that (i) p was true/is true or is predicted to be true and (ii) the speaker had not expected that p.

Strictly speaking, there seems to be a slight difference between *nante* and *towa* in meaning. Namely, *nante* is more emotional than *towa* in that *nante* additionally implies that it is hard for the speaker to accept p (although it is/was true or is expected to be true). In this paper, we will set aside this subtle difference. The meaning of *nante/towa* is a conventional implicature (CI) and is independent of "what is said" (Grice 1975; Potts 2005; McCready 2010; Gutzmann 2012; Sawada 2010, 2018). This idea is supported by the fact that a denial cannot target the speaker's attitude of surprise.

Note, however, that since the at-issue proposition in the *nante/towa* sentence (with the *ru*-form) can be ambiguous between a future/present reading and a past reading, the denial alone is not enough for signaling in what sense the listener is objecting to the speaker's utterance:

(21) A: John-ga   paatii-ni ku-ru-{nante/towa}.
      John-NOM party-to come-NON.TNS-{MIR/MIR}

     'John is going to come to the party!/John came to the party!'

     (CI: The speaker has not expected that John is going to come/came to the party.)

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[5]Sentence (19a) only has a past-oriented reading because it is pragmatically odd to consider that Roger Federer is scheduled to lose in the future.

B: Iya sore-wa nani-ka-no machigai-da.
No, that-TOP what-KA-GEN mistake-PRED

'No, that's some kind of mistake.'

It is possible that A is talking about a future event, but B is objecting to a past event. [6] To convey B's intention of denial, it is necessary to add information after a denial:

(22) (Future reading)

A: John-ga paatii-ni ku-ru-{nante/towa}.
John-NOM party-to come-NON.TNS-{MIR/MIR}

'John is going to come to the party!'

B: Iya sore-wa nani-ka-no machigai-da. John-wa ko-nai-yo.
No that-TOP what-KA-GEN mistake-PRED John-TOP come-NEG-Prt

'No, that's some kind of mistake. John will not come to the party.'

(23) (Past reading)

A: John-ga paatii-ni ku-ru-{nante/towa}.
John-NOM party-to come-NON.TNS-{MIR/MIR}

'John came to the party!'

B: Iya sore-wa nani-ka-no machigai-da. John-wa ko-nakat-ta-yo.
No, that-TOP what-KA-GEN mistake-PRED. John-TOP come-NEG-PST-Prt

'No, that's some kind of mistake. He didn't come to the party.'

3 The semantics of *nante/towa* (non-embedded)

3.1 *Nante/towa* with a non-tensed proposition

Now let us analyze the meaning of *nante/towa* in a formal way based on the following example:

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[6]This kind of ambiguity never arises in English or Japanese exclamatory sentences. As the following example shows, the use of a simple denial is enough to deny A's assertion:

(i) A: (Wow,) John won the race!

   B: No, that's not true.

(ii) A: John-ga reesu-ni kat-ta!
   John-NOM race-at win-PAST

   'John won the race!'

   B: Iya sore-wa nani-ka-no machigai-da.
   No that-TOP what-KA-GEN mistake-PRED

   'No, that's some kind of mistake.'

The utterance of sentence exclamation can count as an assertion of the denoted proposition p in addition to having an illocutionary force of exclamation (Rett 2011), and the tense of the assertion is fixed.

(24) Taro-ga   paatii-ni ku-ru-{nante/towa}.
Taro-NOM party-to come-NON.TNS-{MIR/MIR}

    a. Future reading: Taro is going to come to the party!

    b. Past reading: Taro came to the party!

In the previous section, we claimed that the Japanese *nante/towa* takes a "non-tensed" proposition p and conventionally implies that p was true/is true or is predicted to be true and the speaker had not expected this fact p. We consider that this can be formalized based on the notion of "settledness" (Superscript a stands for an at-issue type, and superscript c stands for a CI type):

(25)   a. $p = \lambda t \lambda w$. Taro-come-to-the-party at t in w

        b. [[nante/towa]]: $\langle\langle i^a, \langle s^a, t^a \rangle\rangle, t^c \rangle = \lambda p.p$ is SETTLED in w_C and s_C had not expected that p

Here we define the notion of SETTLED as follows:

(26) p is SETTLED iff

    a. p is true sometime before t_0 or,

    b. p is true at t_0 or,

    c. p is predicated to be true sometime after t_0

Compositionally, *nante/towa* is combined with the "non-tensed" proposition via Potts' (2005) CI application in (27):

(27)   CI application (Potts 2005: 65)

$$\beta : \sigma^a$$
$$\bullet$$
$$\alpha(\beta) : \tau^c$$
$$\alpha : \langle \sigma^a, \tau^c \rangle \quad \beta : \sigma^a$$
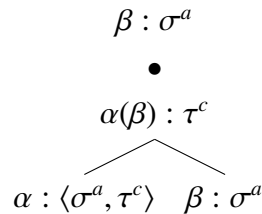
The important point is that this rule is a resource-insensitive application. An α that is of $\langle \sigma^a, \tau^c \rangle$ takes a β of type σ^a and returns τ^c. At the same time, a β is passed on to the mother node. Namely, β is used (consumed) twice. The bullet $\bullet$ is a metalogical device for separating independent lambda expressions. This rule ensures that the at-issue dimension is insensitive to the presence of adjoined CI operators.

If we combine *nante/towa* with a non-tensed proposition, we get the following logical structure:

(28)
$$\lambda t\lambda w. \text{Taro-come-to-the-party at } t \text{ in } w:$$
$$\langle i^a, \langle s^a, t^a\rangle\rangle$$
•
$$\text{nante/towa } (\lambda t\lambda w. \text{Taro-come-to-the-party at } t \text{ in } w): t^c$$

$$\lambda t\lambda w. \text{Taro-come-to-the-party at } t \text{ in } w: \qquad \text{C}$$
$$\langle i^a, \langle s^a, t^a\rangle\rangle \qquad \text{nante/towa: } \langle\langle i^a, \langle s^a, t^a\rangle\rangle, t^c\rangle$$
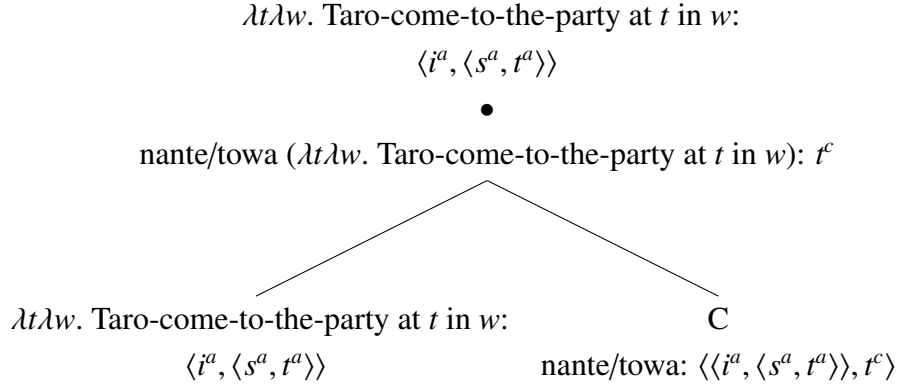
Note that here the "non-tensed" proposition is an argument of *nante/towa*, but at the same time, the non-tensed proposition is passed up to a higher level as an at-issue meaning (above •).

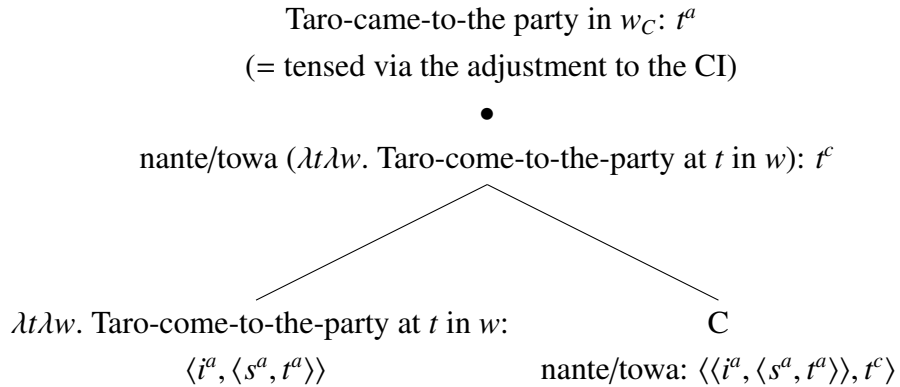How is the tense information specified in the at-issue dimension? Syntactically, *nante/towa* is a speech act operator placed at C (i.e., above TP). We claim that the information of tense in the at-issue proposition is specified via adjustment to the CI. If it is interpreted that *p* was true sometime before the utterance time in the CI level, then the event described by *p* is interpreted as a past event in the at-issue dimension; if it is interpreted that *p* is expected to be true in the CI level, then the event described by *p* is a future event in the at-issue dimension.

For example, (29) presents a situation in which the at-issue proposition is interpreted to be true in the past in the CI dimension:

(29) (Logical structure of (24), past interpretation)
$$\text{Taro-came-to-the party in } w_C: t^a$$
$$(= \text{tensed via the adjustment to the CI})$$
•
$$\text{nante/towa } (\lambda t\lambda w. \text{Taro-come-to-the-party at } t \text{ in } w): t^c$$

$$\lambda t\lambda w. \text{Taro-come-to-the-party at } t \text{ in } w: \qquad \text{C}$$
$$\langle i^a, \langle s^a, t^a\rangle\rangle \qquad \text{nante/towa: } \langle\langle i^a, \langle s^a, t^a\rangle\rangle, t^c\rangle$$

We consider that this can be viewed as a new kind of pragmatic intrusion into "what is said" (CI-intrusion into "what is said").

3.2 *Nante/towa* with a tensed proposition

In this paper, we have solely focused on examples in which *nante/towa* co-occurs with a proposition using the *ru*-form (non-tensed form). However, *nante/towa* can also be combined with a tensed proposition in the *ta*-form (past tense), as well:

(30) Taro-ga   paatii-ni ki-ta-{nante/towa}.
      Taro-NOM party-to come-PST-{MIR/MIR}
      Past reading: Taro came to the party!

Semantically, the above sentence is similar to the past reading in the *nante/towa* sentence with the *ru*-form:

(31) Taro-ga   paatii-ni ku-ru-{nante/towa}.
      Taro-NOM party-to come-NON.TNS-{MIR/MIR}
      Past reading: Taro came to the party!

However, it is important to note that there is a slight difference between (30) and (31). *Nante/towa* with the *ta*-form sounds more indirect than *nante/towa* using the *ru*-form. Intuitively, the *ta*-form is used with *nante/towa* in a situation in which the speaker hears indirectly that Taro came to the party or in which s/he is recalling the past event of Taro having come to the party. By contrast, *nante/towa* with *ru*-form is neutral regarding the indirectness of information. It can be used when a speaker has experienced the event directly, but it can also be used in a situation in which the speaker has heard indirectly that Taro came to the party or in which s/he is recalling a past event. We consider that *nante/towa* with the *ta*-form is more marked than *towa/nante* with the *ru*-form in that the past event is construed as an indirect remote event and cannot predicate about the utterance situation. It seems possible to explain this based on the division of pragmatic labor proposed by Horn (1984), which states that unmarked expressions are generally used to convey unmarked messages. Compositionally, the fact that the mirative *nante/towa* can take a tensed proposition (a proposition in the past tense) suggests that we must posit another lexical entry for *nante* and *towa*.

(32) a. $p = \lambda w$. Taro-come-to-the-party at PAST in w

      b. $[[\text{nante/towa}_{TENSED}]]: \langle\langle s^a, t^a \rangle, t^c \rangle = \lambda \mathbf{p}$. s_C had not expected that $\mathbf{p}$

3.3 *Nante/towa* that operates on a speech act

Note that the mirative *towa/nante* can also be combined with various speech acts including commands, questions, or requests, etc.:

(33) (Command)

      Ashita-madeni oe-ro-(da)-{nante/towa}.
      Tomorro-by   finish-IMP-(QUOT)-{MIR/MIR}

      'lit. "Finish by tomorrow!", which is not expected. (= I did not expect to hear, "Finish by tomorrow!"

(34) (Question)

Ima sugu   kor-e-masu-ka-(da)-{nante/towa}.
Now Immediately come-CAN-PRED.POLITE-Q-(QUOT)-{MIR/MIR}

'lit. "Can you come immediately?", which is not expected. (= I did not expect to hear, "Can you come immediately?")

(35) (Request)

Sugu   ki-te   kudasai-(da)-{nante/towa}.
Immediately come-TE please-(QUOT)-MIR/MIR

'lit. "Please come here immediately", which is not expected. (I did not expect to hear, "Please come here immediately.")

The natural context for these examples is that in which the speaker quotes another person's utterance (command, request, etc.) and conveys the speaker's surprise at the speech act. There is also a native attitude toward the speaker of the quoted utterance which arises from the particle *da*. According to *Meikyo Kokugo Jiten, Dani ni han* (Meikyo Japanese dictionary, 2nd edition), this type of *da* is a quotation marker that repeats another's utterance and signals that the speaker considers it inappropriate and, moreover, has a negative evaluation/unexpected feeling toward the utterance.

Thus, the speech act attached to *nante/towa* has the flavor of a quotation. We consider this type of *nante/towa* a "quotative mirative marker."

Since there is a quotation, the speaker's feeling of surprise sounds indirect similarly to the case of *towa/nante* used with a tensed proposition.

3.4 Note on the deontic use of the mirative *nante/towa*

Finally, let us consider examples of the mirative *nante/towa* that have a deontic flavor. The mirative *nante/towa* can be used in a deontic context (to convey "should not p''):[7]

(36) a. (Non-deontic reading)

Shushoo-ga   jinin-suru-{nante/towa}.
Prime minister-NOM resignation-do-{MIR/MIR}

'The prime minister resigned/is going to resign!'

b. (Deontic reading)

Shushoo-ga   anna hatsugen-o   suru-{nante/towa}.
Prime minister-NOM such statement-ACC do-{MIR/MIR}

'The prime minister made such a statement!' (The prime minister should not say something like that.)

(37) a. (Non-deontic reading)

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[7]We thank Naoya Fujikawa for the valuable comments and discussion.

Shushoo-ga   jinin-suru-{nante/towa}   shinji-rare-nai.
Prime minister-NOM resignation-do-{MIR/MIR} believe-can-NEG

'I can't believe that the prime minister resigned/is going to resign!'

b. (Deontic reading)

Shushoo-ga   anna hatsugen-o   suru-{nante/towa} shinji-rare-nai.
Prime minister-NOM such statement-ACC do-{MIR/MIR}   believe-can-NEG

'I can't believe that the prime minister made such a statement!'

Unlike the (a) sentences, the (b) sentences have a deontic meaning. For example, in (36b), we can glean the deontic meaning that the prime minister should not make such statements. Should we consider that the deontic reading arises from a different semantic mechanism? We consider that both the (a) sentences (=non-deontic) and the (b) sentences have the same mirative meaning/CI (i.e., p is unexpected), and the deontic meaning is pragmatically derived via context. The deontic interpretation arises because there is an expectation that the prime minister should make a valuable remark. One piece of supporting evidence for the idea that deontic meaning is pragmatic comes from the fact that deontic meaning does not arise if we posit a different context. For example, if we replace *shushoo* 'prime mister ' with *Taro*, then a deontic reading does not arise:

(38)   (Context: We know that Taro is not good at presenting his own ideas, but today he made an excellent remark in the meeting.)

a. (Non-deontic reading)

Taro-ga   anna hatsugen-o   suru-{nante/towa}.
Taro-NOM such statement-ACC do-{MIR/MIR}

'Taro made such a statement!'

b. (Non-deontic reading)

Taro-ga   anna hatsugen-o   suru-{nante/towa} shinji-rare-nai.
Taro-NOM such statement-ACC do-{MIR/MIR}   believe-can-NEG

'I can't believe that Taro made such a statement!'

4   The embedded *nante/towa*

Interestingly, a *nante/towa* clause can be embedded under "surprising" predicates such as *odoroki-da* 'is surprising' and *shiji-rare-nai* 'can't believe':[8]

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[8]That *nante/towa* clause in (39) is syntactically embedded is supported by the fact that unlike non-embedded *nante* like (i), the sentence-final particle *ne* cannot be added after *nante/towa*, as in (ii):

(i)   (Non-embedded)

Taro-ga   paatii-ni ku-ru-{nante/towa}-ne.
Taro-NOM party-to come-NON.TNS-{MIR/MIR}-Prt

14

(39) a. (Watashi-ni-wa) [Taro-ga   paatii-ni ku-ru-{nante/towa}]
       I-to-TOP   Taro-NOM party-to come-NON.TNS-COMP.MIR/COMP.MIR
       odoroki-da.
       surprising-PRED

       Future reading: It is surprising to me that Taro is going to come to the party!

       Past reading: It is surprising to me that Taro came to the party!

    b. (Watashi-wa) [Taro-ga   paatii-ni ku-ru-nante/towa]
       I-to-TOP   Taro-NOM party-to come-NON.TNS-COMP.MIR/COMP.MIR
       shinji-rare-nai.
       believe-can-NEG

       Future reading: I can't believe that Taro is going to come to the party!

       Past reading: I can't believe that Taro came to the party!

In this case, the mirative *nante/towa* syntactically functions as a complementizer. Interestingly, similarly to the non-embedded *nante/towa*, the embedded *nante/towa* has both a future reading and a past reading (relative to the time of utterance).[9]

   The phenomenon in which the meaning of the embedded *nante/towa* clause can be ambiguous between future and past readings is surprising when the system of embedded tense in Japanese is considered. It is well known that in Japanese, the *ru*-form in a subordinate clause is "relative" (Comrie 1985) in that its tense is determined from the perspective of the time of the matrix clause

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       Future reading: Taro is going to come to the party!
       Past reading: Taro came to the party!

  (ii) (Embedded)

       Watashi-ni-wa [Taro-ga   paatii-ni ku-ru-{nante/towa}-(*ne)]   odoroki-da.
       I-to-TOP   Taro-NOM party-to come-NON.TNS-{COMP.MIR/COMP.MIR}-(Prt) surprising-PRED

       Future reading: It is surprising to me that Taro is going to come to the party!
       Past reading: It is surprising to me that Taro came to the party!

  [9]The existence of ambiguity can be confirmed by the test of denial:

  (i) A: Taro-ga   paatii-ni ku-ru-{nante/towa}   shinji-rare-nai.
         Taro-NOM party-to come-NON.TNS-COMP.MIR/COMP.MIR believe-can-NEG
         Future reading: I can't believe that Taro is going to come to the party!
      B: Iya sore-wa nani-ka-no   machigai-da. Kare-wa ko-nai-yo.
         No that-TOP what-KA-GEN mistake-PRED He-TOP come-NEG-Prt
         'No, that's some kind of mistake. He will not come to the party.'

  (ii) A: Taro-ga   paatii-ni ku-ru-{nante/towa}   shinji-rare-nai.
          Taro-NOM party-to come-NON.TNS-COMP.MIR/COMP.MIR believe-can-NEG
          Past reading: I can't believe that Taro came to the party!
       B: Iya sore-wa nani-ka-no   machigai-da. Kare-wa ko-nakat-ta-yo.
          No, that-TOP what-KA-GEN mistake-PRED. He-TOP come-NEG-PAST-Prt
          'No, that's some kind of mistake. He didn't come to the party.'

15

(e.g., Mihara 1992; Ogihara 1996; Masuoka & Takubo 2003; Kubota et al. 2009, etc.) (Or, we can say that *ru*-form can be "bound" by the tense in the matrix clause (Kusumoto 1999, 2005)). For example, in (40), the embedded event is interpreted as a future event in the past and in (41), the embedded event is interpreted as a past event that occurred at the same time as the event described by the main clause (= simultaneous interpretation):

(40) (Regular embedded *ru*-form, with a non-stative verb)

      Mary-wa [Taro-ga   paatii-ni ku-ru-to]   i-tta.
      Mary-TOP Taro-NOM party-to come-NON.TNS-that say-PST

      'Mary said that Taro would come to the party.' (relative future reading)

(41) (Regular embedded *ru*-form, with a stative verb)

      John-wa [Mary-ga   i-ru-to]   i-tta.
      John-TOP Mary-NOM BE-NON.TNS-that say-PST

      'John said that Mary was there.' (simultaneous reading)

The fact that (40) is not interpreted as future relative to the utterance time is corroborated by the fact that it is possible to say "but, actually she didn't come," after the sentence.[10]

    How can we analyze the difference between the usual embedded tense used in Japanese and the embedded *nante/towa*? We claim that the embedded *nante/towa* clause can be analyzed in the same way as the non-embedded *nante/towa*one. The embedded *nante/towa* clause can be analyzed as an embedded speech act (i.e., a main clause phenomenon), and the *ru*-form in the embedded clause is independently interpreted from the main clause. This means that we can use the same lexical item for *nante/towa* for the embedded case, as well (sp (= s_C) stands for a speaker and w_0 (= w_C) stands for a current world):

(42) a. $p = \lambda t \lambda w$. Taro-come-to-the-party at t in w

      b. [[nante/towa]]: $\langle\langle i^a, \langle s^a, t^a \rangle\rangle, t^c \rangle = \lambda p.p$ is SETTLED in w_0 and sp had not expected that
         p

    Recall that we defined the notion of SETTLED as follows:

(43) p is SETTLED iff

---

[10]However, in (40) it seems there can also be a reading in which the embedded *ru*-form is interpreted relative to the utterance time, as shown in (i):

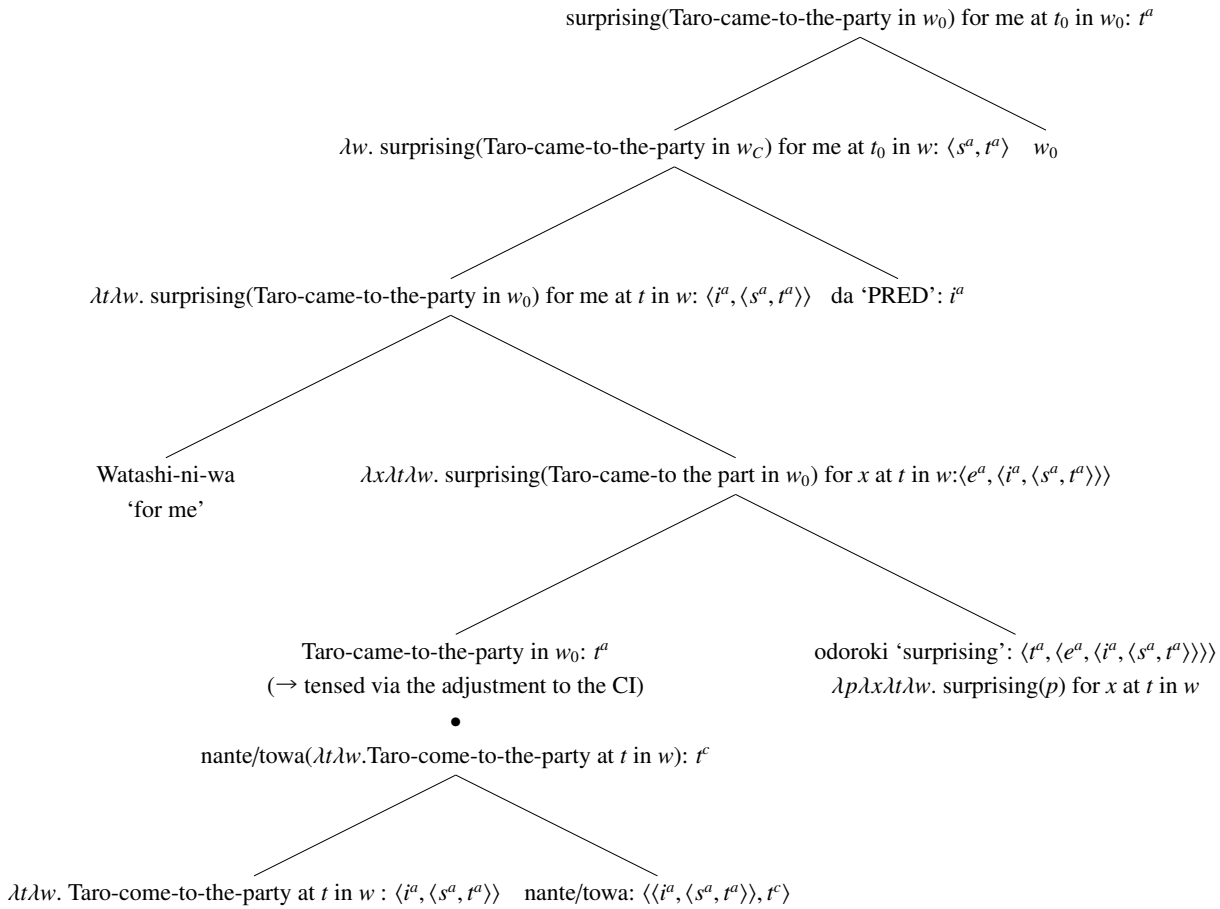(i)   Mary-wa [Taro-ga   ashita   paatii-ni ku-ru-to]   it-ta.
      Mary-TOP Taro-NOM tomorrow party-to come-NON.PST-that say-PST
      'Mary said that Taro will come to the party tomorrow.'

We will put this issue aside.

a. p is true sometime before t_0 or,

b. p is true at t_0 or,

c. p is predicated to be true sometime after t_0

Compositionally, just like the non-embedded *nante/towa*, the embedded *nante/towa* is combined with a non-tensed proposition via Potts' CI application. Namely, tense information of the proposition in the at-issue dimension (above •) is adjusted to the interpretation of CI meaning (a past reading or a future one). The tense-adjusted proposition is then combined with *shira-nakat-ta* 'didn't know' or *odoroki-da* 'surprising' that has a factive presupposition.

(44)

surprising(Taro-came-to-the-party in w_0) for me at t_0 in w_0: t^a

$\lambda w.$ surprising(Taro-came-to-the-party in w_C) for me at t_0 in w: $\langle s^a, t^a \rangle$ w_0

$\lambda t \lambda w.$ surprising(Taro-came-to-the-party in w_0) for me at t in w: $\langle i^a, \langle s^a, t^a \rangle \rangle$ da 'PRED': i^a

Watashi-ni-wa
'for me'

$\lambda x \lambda t \lambda w.$ surprising(Taro-came-to the part in w_0) for x at t in w:$\langle e^a, \langle i^a, \langle s^a, t^a \rangle \rangle \rangle$

Taro-came-to-the-party in w_0: t^a
($\rightarrow$ tensed via the adjustment to the CI)

odoroki 'surprising': $\langle t^a, \langle e^a, \langle i^a, \langle s^a, t^a \rangle \rangle \rangle \rangle$
$\lambda p \lambda x \lambda t \lambda w.$ surprising(p) for x at t in w

•
nante/towa($\lambda t \lambda w.$Taro-come-to-the-party at t in w): t^c

$\lambda t \lambda w.$ Taro-come-to-the-party at t in w : $\langle i^a, \langle s^a, t^a \rangle \rangle$ nante/towa: $\langle \langle i^a, \langle s^a, t^a \rangle \rangle, t^c \rangle$

So far, we have considered the case of embedded mirative *nante* and *towa*, but it is important to notice that the embedded *nante/towa* can have a non-mirative function, as well. As for *towa*, it is possible with the normal complementizer *to* plus a contrastive topic *wa*:

(45)   (Example with *to-wa*)

Hanako-wa   Jiro-ga ku-ru-to-wa   i-tta-ga,   Taro-ga
Hanako-TOP Jiro-ga come-NON.PST-that-CONT.TOP say-PST-but Taro-NOM

ku-ru-to-wa   iwa-nakat-ta
come-NON.PST-COMP-CONT.TOP say-NEG-PST

'Hanako said that Jiro would come, but she didn't say that Taro will come.'

The following sentence is ambiguous between a mirative reading and an evaluative (non-mirative) reading:

(46)   Taro-ga   ku-ru-{to-wa   / towa} omowa-nakat-ta.
        Taro-NOM come-NON.TNS-{COMP-CONT.TOP / MIR} think-NEG-PST
        The interpretation with *to-wa*: Taro didn't think that Taro would come.
        The interpretation with mirative *towa*: (a) I am surprised that Taro is going to come. / (b) I
        am surprised that Taro came.

The ambiguity of (46) can be resolved by adding adverbs or additional information. When the adverb *masaka* 'no kidding' is inserted, only a mirative interpretation is possible:

(47)   (With mirative *towa*, Mirative reading)

        Masaka   Taro-ga   ku-ru-towa   omowa-nakat-ta.
        No kidding Taro-NOM think-NON.TNS-MIR think-NEG-PST

        'No kidding! I didn't think that Taro is going to come!/I didn't think that Taro came!'

On the other hand, if we add contrastive information, only a contrastive reading is available:

(48)   (*To-wa*, contrastive reading)

        Taro-ga   ku-ru-to-wa   omowa-nakat-ta. Jiro-ga
        Taro-NOM come-NON.PST-COMP-CONT.TOP think-NEG-PST Jiro-NOM

        ku-ru-to-wa   omo-ttei-ta-ga.
        come-NON.PST-COMP-CONT.TOP think-PROG-PST-though

        'I didn't think that Taro would come, although I was thinking that Jiro will come.'

This sentence is natural in a situation where the speaker does not know whether Taro actually came/or is going to come.

The embedded *nante* also has a non-mirative use, which only expresses a negative evaluation toward the embedded proposition:[11]

---

[11]As mentioned in footnote 2, nante can also express a speaker's dismissive attitude or low evaluation.

(49) (Evaluative *nante*)

   Boku-ni-wa ano joukyou-de yame-ru-nante   i-e-nakat-ta.
   I-to-TOP   that situation-in quit-NON.PST-COMP.EVAL say-CAN-NEG-PST

   'I could not say that I would quit under that situation.'

In this sentence, there is no mirative interpretation. In terms of tense, the embedded *ru* is relative in that its tense is determined from the perspective of the time of the matrix clause. The following sentence can be ambiguous between a mirative interpretation and an evaluative (non-mirative) interpretation:

(50) Taro-ga   ku-ru   {nante   / nante}   omowa-nakat-ta.
      Taro-NOM come-NON.TNS EVAL.COMP / MIR.COMP think-NEG-PST
      Interpretation with the evaluative/non-mirative *nante*: Taro didn't think that Taro would come.
      Interpretation with the mirative *towa*: (a) I didn't think that Taro is going to come! / (b) I didn't think that Taro came!

Again, we can resolve the above ambiguity by adding additional information. When the adverb *masaka* 'no kidding' is inserted, the mirative meaning becomes salient:

(51) (Mirative reading)

   Masaka   Taro-ga   ku-ru-nante   omowa-nakat-ta.
   No kidding Taro-NOM come-NON.TNS-MIR.COMP think-NEG-PST

   'I didn't think that Taro is going to come!' / 'I didn't think that Taro came!'

By contrast, if the adverb *anotoki* 'at that time' and the negative polarity item *mattaku* 'at all' are inserted, the non-mirative (evaluative reading) becomes salient (although a mirative reading may not be impossible):

(52) (Non-mirative (evaluative) reading)

   Anotoki   Taro-ga   ku-ru-nante   mattaku omowa-nakat-ta.
   At that time Taro-NOM come-NON.PST-EVAL.COMP at all   think-NEG-PST

   'At that time I didn't think at all that Taro would come.'

5   English exclamatory *that*-clause

In this chapter, we have discussed the ambiguity of tense in Japanese mirative sentences with *nante/towa*. Next, we will compare the Japanese *nante/towa* to an English exclamatory *that*-clause and show that our proposed analysis of *nante/towa* with regard to the interpretation of tense can apply to the English exclamatory *that*-clause.

19

5.1 Ambiguity of tense in the exclamatory *that*-clause (with *should*)

In English, there is an exclamatory *that*-clause that expresses a speaker's surprise (e.g. Behre 1955; Quirk et al. 1985; Grosz 2011; Sawada 2006). According to Quirk et al. (1985: 841), the exclamatory type of that-clauses "generally contain the putative *should* (or *could*) that may accompany expressions of surprise,":[12]

(53) a. That he should have left without asking me!

b. That you could ever want to marry such a man!

c. That it should come to this!

d. That I should live to see such ingratitude!
   (Quirk et al. 1985: 841)

Behre (1955: 14) observes that this type of structure may have originated, by omission, from more complete expressions.

Interestingly, as the following example shows, similarly to the Japanese *nante/towa*, a sentence with *that... should* (*could*) might be ambiguous between a past-oriented reading and a future-oriented reading when the sentence contains *should* (*could*) plus a verb stem:[13]

(54) That Prof. Smith should come to the meeting.

a. Future-oriented reading: The speaker is surprised about the plan that Prof. Smith will come to the meeting.

b. Past-oriented reading: The speaker is surprised that Prof. Smith came to the meeting.

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[12]Behre (1955) provides the following examples for exclamatory *that*-clauses:

(i) a. "To think that I should have worried all that time!" he exclaimed aloud ... Walpole, Wint. II 271.

b. "... To think it should come to that! Oh, God ... God!" B. Young, B1. D. 180.

c. "By gum! I've done it now. That Phyllis should know about it at all! That beast Ventnor!'' Galsworthy, Tales 145.

d. That Rosalind should have given her this, Rosalind whom she loved so utterly, Rosalind - -. Walpole, Wint. I 30. (Behre 1955: 24)

Quirk et al. (1985) also observes that *to* infinitive clauses convey kinds of illocutionary force similar to those for exclamatory *that*-clauses (see also Sawada 2006):

(ii) a. To think that she could be so ruthless!

b. To think that I was once a millionaire!

c. To think that they would turn me down!
   (Quirk et al. 1985: 841)

[13]In addition to future- and past-oriented mirative readings, this sentence can also have a (future- or past-oriented) dubitative reading: someone tells me that Prof. Smith will come to the meeting tomorrow (or came yesterday), and I am skeptical about this and want to express my doubt that he will/did. Thanks to Thomas Grano for his invaluable comment regarding this point.

We can distinguish the two readings in (54) by adding the temporal adverbs *yesterday/tomorrow*:

(55) a. That Prof. Smith should come to the meeting tomorrow! (future-oriented)

  b. That Prof. Smith should come to the meeting yesterday! (past-oriented)

Note that this kind of ambiguity can also be observed when the verb is the stative verb *be*:

(56) a. (Context: The speaker just noticed Prof. Smith.)
  That Prof. Smith should be here!

  b. (Context: The speaker is remembering that Prof. Smith was at the meeting.)
  That Prof. Smith should be there!

If the exclamatory *that*-clause has the perfective form *should have*, then only a past-oriented interpretation is possible:

(57) (Context: The speaker is remembering that Prof. Smith was at the meeting.)
  That Prof. Smith should have been there!

Similarly to the case of *nante/towa*, the exclamatory *that*-clause has a property of a CI:

(58) That Prof. Smith should come to the meeting.
  At-issue: Prof. Smith came to the meaning/Prof. Smith is going to come to the meeting.
  (CI: The speaker has not expected that Prof. Smith is going to come/came to the meeting.)

Note that a denial can only target the at-issue part of the sentence (cf. Grosz 2011):

(59) A: That Prof. Smith should come to the meeting yesterday!

  B: No that's false. He didn't come.

(60) A: That Prof. Smith should come to the meeting tomorrow!

  B: No that's false. He is not coming.

Although (59A) and (60A) are somewhat not at-issue, they can still be fairly naturally denied with, "No that's false" (Thomas Grano, personal communication).

The question is from where exactly is the mirative meaning derived. Is it "that" which derives the meaning of mirativity or it is "should" that derives such meaning? On the other hand, should we consider that the form/construction "that ... should" as a whole derives mirative meaning? We consider "that" as deriving the meaning of mirativity. As the following examples show, (61b) is okay with the mirative reading but (61c) is not (Thomas Grano, personal communication):

(61) a. That John should have left without asking me! (with both *that* and *should*, mirative)

  b. That John left without asking me! (without *should*, mirative)

c. John should have left without asking me! (without *that*, modal reading only)

This suggests that it is "that" which derives mirative meaning. This does not, however, mean that *should* is meaningless. Sawada (2006: 443) claims that this type of *should* (what he calls an evaluative *should*) expresses a mental conflict between the given proposition p and a speaker's assumption.[14] We consider that co-occurrence of the exclamatory *that* and the emotional *should* can be viewed as a phenomenon of expressive concord.

Based on the above discussions, we claim that similar to the Japanese *nante/towa*, the English exclamatory *that* can take a tensed proposition as in (62), and can also take a non-tensed proposition as in (63) (**p** stands for a tensed proposition of type $\langle s^a, t^a \rangle$):

(62) a. $\mathbf{p} = \lambda w$. Taro-come-to-the-party at PAST in w

     b. $[[\text{that}_{MIR.TENSED}]]: \langle\langle s^a, t^a \rangle, t^c \rangle = \lambda \mathbf{p}.$ s_C had not expected that $\mathbf{p}$

(63) a. $p = \lambda t \lambda w$. Taro-come-to-the-party at t in w

     b. $[[\text{that}_{MIR.TENSED}]]: \langle\langle i^a, \langle s^a, t^a \rangle\rangle, t^c \rangle = \lambda p.p$ is SETTLED in w_C and s_C had not expected that p
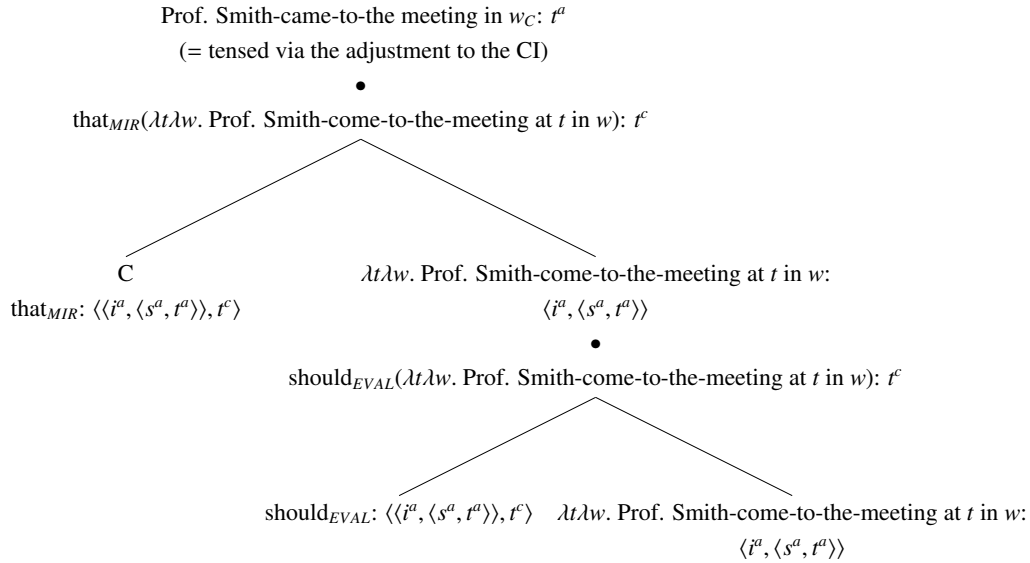
We consider that in the case of the following example, the exclamatory *that* takes a non-tensed proposition:

(64) That Prof. Smith should come to the meeting.

     a. Future-oriented reading: The speaker is surprised about the plan that Prof. Smith will come to the meeting.

     b. Past-oriented reading: The speaker is surprised that Prof. Smith came to the meeting.

We assume that *should* in this sentence is a CI expression and does not have an at-issue meaning. Compositionally, *should* is combined with a non-tensed proposition, but the non-tensed proposition is passed up to the above level due to Potts' CI application. The exclamatory *that* then takes the non-tensed proposition as its argument. The following structure shows the logical structure of (63) with a past-oriented reading:

(65) (Logical structure of (64), with a past-oriented interpretation)

---

[14] In the literature, various terminologies have been assigned for this kind of *should*. Jespersen (1949) calls it "emotional *should*;" Behre (1955) calls it "meditative-polemic *should*;" Aijmer (1972) calls it "emotive *should*;" Quirk et al. (1985) calls it "putative *should*;" and Palmer (1987) calls it "evaluative *should*."

Prof. Smith-came-to-the meeting in w_C: t^a
(= tensed via the adjustment to the CI)

•

$\text{that}_{MIR}(\lambda t\lambda w.$ Prof. Smith-come-to-the-meeting at t in w): t^c

C
that_{MIR}: $\langle\langle i^a, \langle s^a, t^a\rangle\rangle, t^c\rangle$

$\lambda t\lambda w.$ Prof. Smith-come-to-the-meeting at t in w:
$\langle i^a, \langle s^a, t^a\rangle\rangle$

•

$\text{should}_{EVAL}(\lambda t\lambda w.$ Prof. Smith-come-to-the-meeting at t in w): t^c

should_{EVAL}: $\langle\langle i^a, \langle s^a, t^a\rangle\rangle, t^c\rangle$ $\lambda t\lambda w.$ Prof. Smith-come-to-the-meeting at t in w:
$\langle i^a, \langle s^a, t^a\rangle\rangle$

Note that if there is no modal, the verb cannot be in plain form, as shown in the following contrast:

(66)   a. That Prof. Smith comes to the meeting! (with a third person singular present form)

b. *That Prof. Smith come to the meeting! (with a plain form)

This suggests that in English, in order to have an ambiguity, it is necessary to insert a CI modal. The exclamatory *that* co-occurs with the present tense and the sentence has a habitual meaning. (66b) means that it is surprising that Prof. Smith regularly comes to the meeting.
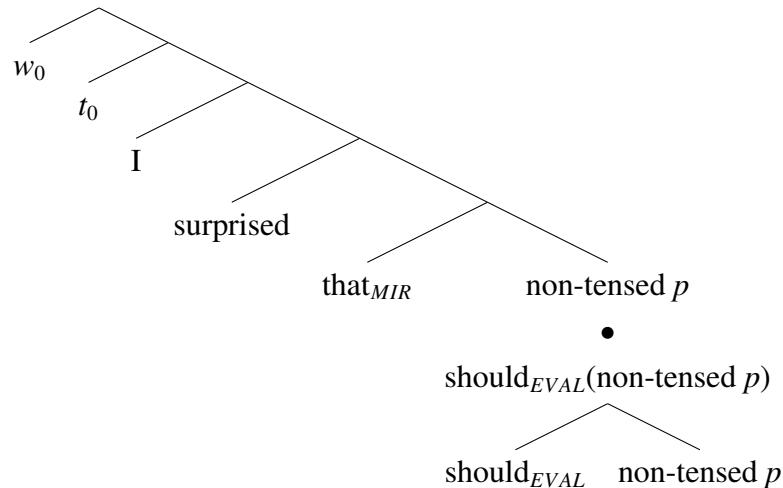
5.2   Embedded exclamatory *that*-clause

Interestingly, similarly to the Japanese *nante/towa*, ambiguous interpretations of tense can be observed in the embedded *that*-clause, as well, if there is an evaluative *should* in this embedded clause. The following example is natural as both a future-oriented reading and a past-oriented reading:

(67)   I am surprised that John should come to the meeting!
Future-oriented reading: The speaker is surprised about the plan that Prof. Smith will come to the meeting.
Past-oriented reading: The speaker is surprised that Prof. Smith came to the meeting.

The following figure shows the basic structure of (67):

(68)

$$w_0$$
$$t_0$$
I
surprised
that_{MIR} non-tensed p
•
$\text{should}_{EVAL}(\text{non-tensed } p)$

should_{EVAL} non-tensed p

Quirk et al. (1985: 1014) observed that in the embedded *that*-clause a past verb in the matrix clause does not necessarily affect the form of "should" in the subordinate clause, even though the subordinate clause refers to a past situation, as shown in (69a) (Quirk et al. (1985: 1015) also mentions that it is possible to use a perfective from, as shown in (69b)):

(69)   a. I was surprised that he should feel lonely when he was in California.

   b. I was surprised that he should have felt lonely when he was in California.
      (Quirk et al. 1985: 1015)

This suggests that the interpretation of tense in the embedded clause does not need to follow the rule of sequence of tense; furthermore, it is possible to extend analysis of the non-embedded exclamatory that-clause to the embedded case, as well.

5.3   Comparison with Grosz's (2011) analysis

Grosz (2011) discusses German and English optative /exclamatives, as in (70) and (71), and analyzes their meanings using the notion of scalarity and expressiveness:

(70)   (English)
   That you could ever want to marry such a man! (polar exclamative) (Quirk et al. 1985: 841; Grosz 2011)

(71)   (German)

   Mein Gott, dass der nicht verschlafen hat!
   My   God that he not   overslept   has

   lit. My God, that he didn't oversleep!
   a. paraphrase of optative reading: I hope [that he didn't oversleep].
   b. paraphrase of exclamative reading: I'm shocked [that he didn't oversleep].
   (Grosz 2011: 56)

Grosz (2011) proposes that the exclamative meanings of the English *that*-clause and German *dass*-clause is derived from a null operator EX that selects an invisible scale (an unlikelihood scale for a polar exclamative; a preference scale for an optative) and a proposition, and conveys that the modified proposition exceeds a salient threshold on that scale at the expressive dimension. [15]

Grosz (2011) posits the logical structure of the polar exclamative reading in (71) as in (72a), and the logical structure of the optative reading in (71) as in (72b):

(72)   a.   Logical structure of polar exclamative reading
       [[EX Scale$_{speaker-unlikelihood}$][that he didn't oversleep]]
       $\approx$ The prior unlikelihood of "he didn't oversleep" exceeds a contextually salient threshold. (Based on Grosz 2011: 57)

      b.   Logical structure of the optative reading
       [[EX Scale$_{speaker-preference}$][that he didn't oversleep]]
       $\approx$ The desirability of "he didn't oversleep" exceeds a contextually salient threshold. (Based on Grosz 2011: 57)

Grosz (2011) defines the scalar meaning of EX as follows:

(73)   For any scale S and proposition p, interpreted in relation to a context c and assignment function g, an utterance EX(S)(p) is felicitous iff
      $\forall q[\text{THRESHOLD}(c) >_S q \rightarrow p >_S q]$
      "EX expresses an emotion that captures the fact that p is higher on a (speaker-related) scale S than all contextually relevant alternatives q below a contextual threshold."
      where THRESHOLD(c) is a function from a context into a set of worlds/a proposition that counts as high with respect to a relevant scale S. (Grosz 2011: 69)

Grosz's scale-based approach and our approach are similar in that they both consider meaning triggered by the exclamatory *that*-clause as not part of "what is said," but as an expressive/CI. However, there are some fundamental differences between his approach and ours. First, Grosz (2011) considers that the null operator EX triggers a mirative force and *that* is semantically meaningless. This point is radically different from our analysis. We have analyzed *that* as a illocutionary force operator and noted that it triggers a mirative meaning.

Second, unlike our approach, Grosz considers the exclamatory *that*-clause as not having an at-issue component. Building on the mechanism of expression in Potts & Roeper (2006), Grosz (2011) proposes that the role of EX is to remove its complement from the level of descriptive at-issue meaning and shift it to the level of expressive meaning: i.e., an exclamation does not have

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[15]Grosz (2011) claims that EX can also be selected for an *if*-clause:

(i)   If only I had told them both a year ago! (Grosz 2011: 13)

descriptive content but rather expressive content (Grosz 2011: 152). By contrast, in Section 3, we claimed that a sentence with the exclamatory *that*-clause has both at-issue and CI components, and the at-issue component can be challenged by a denial.

Since the purpose of this paper is to consider the interpretation of tense in mirative expressions, we will not further discuss the differences between Grosz's approach and ours, but both approaches share the view that the exclamatory *that*-clause has a property of not-at-issue content (expressive/CI).

6   Korean *tani*

Let us now consider the case of a Korean mirative sentence with the mirative expression *tani*. In the literature, it is widely observed that the sentence-final particle *tani* functions as a mirative marker (e.g. Ahn 2016; Rhee & Koo 2020):

(74)   a. Ku-ka   cwuk-ess-ta. (non-mirative *ta*)
           He-NOM die-PST-DEC
           'He died.'

       b. Ku-ka   cwuk-ess-tani! (mirative *tani*)
           he-NOM die-PST-MIR
           'That he died! (I can't believe it!)' (Rhee and Koo 2020: 84)

According to Rhee & Koo (2020: 87), the mirative *tani* "grammaticalized from COMP through several steps, involving morphosyntactic and phonological reduction."

This section discusses the interpretation of tense in Korean mirative sentences with *tani* and shows that although there is speaker variation in the interpretation of tense, making things more complicated, Korean has a similar phenomenon as the Japanese *towa/nante* and English exclamatory *that*-clause.

6.1   The interpretation of tense in sentences with *tani*

When the mirative *tani* is combined with a verb stem, there is speaker-variation with regard to interpretation of tense. For example, when we ask the interpretation of the following sentence with *o-tani* 'come-MIR,' we find that native speakers were split into two groups in terms of tense interpretation:

(75)   (Group 1: Native speakers who allow ambiguity)

       Chelswu-ka   o-tani.
       Chelswu-NOM come-MIR

'I am surprised that Chelswu is going to come.' (future-oriented reading)

'I am surprised that Chelswu came.' (past-oriented reading)

(76) (Group 2: Native speakers who do not allow ambiguity)

Chelswu-ka   o-tani.
Chelswu-NOM come-MIR

'I am surprised that Chelswu came.' (past-oriented reading)

Native speakers in Group 1 considered the sentence as ambiguous between future-oriented and past-oriented readings, while native speakers in Group 2 considered only the past-oriented inter-pretation.[16] We asked eight native speakers of Korean regarding interpretation of the above *o-tani* sentence. Four speakers interpreted the text like (75)(= Group 1) and four native speakers shared the interpretation of (76)(= Group 2).[17] We do not see this kind of variation in the Japanese *nante/towa* or English exclamatory *that*-clause.

For native speakers in Group 2 (non-ambiguity group), in order to express a future-oriented reading, it was necessary to use *o-n-tani* 'come-PRES-MIR':

(77) (Future-oriented reading)

Chelswu-ka   o-n-tani.
Chelswu-NOM come-PRES-MIR

The speaker is surprised about the plan that Chelswu will come.

This point can be confirmed by the co-occurrence with temporal adverbs. For native speakers of Group 2, *o-tani* 'come-MIR' is odd when it co-occurs with *nayil* 'tomorrow,' while it is natural with *ecey* 'yesterday':

(78) (with *o-tani*)

a. (For native speakers of Group 2)

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[16]Note that if the verb stem of the mirative sentence is *ci* 'lose,' there is usually only a past-oriented reading. However, in the context of fortune-telling, a future-oriented one is possible:

(i) Loce pheytele-ka   ci-tani.
Roger Federer-NOM lose-MIR
'I am surprised that Roger Federer lost.'

The future-oriented reading is odd because it suggests that Federer's loss has already been planned before the game.

[17]For native speakers of Groups 1 and 2, it is possible to express a past-oriented reading using the past form *wass* 'came':

(1) Chelswu-ka   wass-tani.
Chelswu-NOM came-MIR
'The speaker is surprised that Chelswu came.' (past-oriented reading)

* Nayil　　　Chelswu-ka　　　o-tani.
　　　Tomorrow Chelswu-NOM come-MIR

　　'Intended. I am surprised that Chelswu is coming tomorrow!'

b. Ecey　　　　Chelswu-ka　　　o-tani.
　　Yesterday Chelswu-NOM come-MIR

　　'I am surprised that Chelswu came!'

On the other hand, for native speakers of Group 2, it is perfectly natural to use *o-n-tani* 'come-PRES-MIR' with *nayil* 'tomorrow,' but it is odd to use the same with *ecey* 'yesterday':

(79)　(For native speakers in Group 2, with *o-n-tani*)

a. Nayil　　　chelswu-ka　　　o-n-tani.
　　Tomorrow Chelswu-NOM come-PRES-MIR

　　'I am surprised that Chelswu is coming tomorrow!'

b. * Ecey　　　chelswu-ka　　　o-n-tani.
　　　Yesterday Chelswu-NOM come-PRES-MIR

　　'Intended. I am surprised that Chelswu came yesterday!'

These facts support the idea that for Group 2 native speakers, *o-n-tani* only has a future-oriented reading and *o-tani* only has a past-oriented reading.

6.2　The embedded *tani*

Speaker variation was also found in the embedded *tani*. We asked some native speakers about the following interpretation of the embedded sentence and found that some speakers allow for both past-oriented and future-oriented interpretations, while others only allow for a past-oriented interpretation:

(80)　Chelswu-ka　　　o-tani　　　mit-ki-ci-ka　　　　　anhnunta.
　　　Chelswu-NOM come-MIR believe-PASS-CI-NOM NEG

　　　Native speakers (Group 1): 'I am surprised that Chelswu is going to come. (future-oriented reading)/ I am surprised that Chelswu came.' (past-oriented reading)
　　　Native speakers (Group 2): 'I am surprised that Chelswu came.' (past-oriented reading)

As for the case of *o-n-tani*, there was no speaker variation and only the future-oriented reading was available:

(81)　Chelswu-ka　　　o-n-tani　　　　mit-ki-ci-ka　　　　　anhnunta.
　　　Chelswu-NOM come-present.MIR believe-PASS-CI-NOM NEG

　　　The speaker is surprised about the plan that Chelswu will come.（future-oriented reading）

6.3 Discussion

How can we explain speaker variation in terms of the interpretation of tense in the Korean *tani* (with a plain verb form)? It seems that speakers who allow for ambiguity (= Group 1) use the same semantic mechanism as in the Japanese *nante/towa* or English exclamatory *that*-clause. *Tani* can take a non-tensed proposition.[18]

By contrast, we consider that for native speakers in Group 2 there is a division of labor/segregation between V$_{stem}$-*tani* and V$_{stem}$-*n-tani*. V$_{stem}$-*tani* cannot express a future-oriented reading for them because there is a dedicated form V-*n-tani*. Since V$_{stem}$ (e.g. *o* 'come') is a plain form, the proposition with V$_{stem}$ is non-tensed. In principle, it should be possible to have a future-oriented reading (depending on context), but for the native speakers in Group 2 the division between V$_{stem}$ (e.g. *o* 'come') and V$_{stem}$-n (e.g. *o-n* 'come-PRES') has been conventionalized and a future-oriented reading is no longer available in V$_{stem}$-*tani*.

7 Conclusion

This paper investigated the meaning and use of the Japanese mirative expressions *nante/ towa*. We observed that when *nante* or *towa* is combined with a proposition that contains the so-called non-past form *ru*, the sentence can be ambiguous between a future/present reading and a past reading. We explained the ambiguous interpretation of *nante/towa* based on the implicature of *nante/towa*. Namely, the Japanese *nante/towa* takes a non-tensed proposition *p* (i.e., *ru*-form does not specify a tense) and conventionally implies that (i) *p* is settled (i.e., *p* is/was true or predicted to be true) and (ii) the speaker had not expected that to be the case *p*. In this paper, we also look at a case in which *p* + *nante/towa* is embedded in a surprising predicate, showing that we can analyze both the embedded and non-embedded *nante/towa* in a uniform way. This suggests that the embedded *nante/towa* clause is an instance of a main clause phenomenon.

The phenomenon of *nante/towa* is theoretically important in that it demonstrates a rich interaction between at-issue meaning and CI (pragmatics). In the literature, CI and at-issue meanings are logically and compositionally independent. An at-issue proposition is part of "what is said" in the sense of Grice (1975), while CI is not part of "what is said." However, in the phenomenon of *nante/towa*, the tense of at-issue proposition is influenced by the CI triggering expression *nante/towa*. This can be viewed as a new kind of pragmatic intrusion into "what is said" (CI-intrusion into "what is said").

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[18]One puzzling point is that some native speakers in Group 1 considered an asymmetry between the sentence of *o-tani* with *nayil* 'tomorrow' and of *o-tani* with *ecey* 'yesterday.' We expected that Group 1 native speakers, who allow ambiguity in the *tani* sentence without a temporal adverb (=75), would consider both *nayil* 'tomorrow' and *ecey* 'yesterday' as naturally occurring in the *tani* sentence (=75). However, two out of four speakers in Group 1 considered that it is unnatural to use *o-tani* with the adverb *ecey* 'yesterday.' It is still unclear why this kind of asymmetry occurred. We would like to leave this question for future research.

In this paper, we looked at data in English and Korean and showed that the phenomenon of ambiguity of tense in mirative language is not unique to Japanese *nante/towa*. We showed that a similar phenomena can be observed in the English exclamatory *that*-clause and the Korean *tani*. In the case of Korean *tani*, there was speaker variation with regard to the availability of tense ambiguity. It is possible to say that the Korean *tani* and the English exclamatory *that*-clause are similar to the Japanese *nante/towa* in that all can convey a past interpretation and mirative meaning without using a past tense morphology.

Finally, let us consider the following fundamental question. Why it is that Japanese *nante/towa*, English exclamatory *that*-clause, and Korean *tani* can express a non-tense specified mirative meaning? Although this is a tentative idea, we consider this as having to do with their historical developments. Japanese *nante/towa*, English exclamatory *that*, and Korean *tani* all originated from a complementizer that introduces a subordinate clause. The subordinate clause is not the main clause, thus it is "incomplete" in that the interpretation of tense is affected/restricted by tense in the main clause. We think this is the key to explaining the availability of tense ambiguity. Of course, since they are no longer pure complementizers, they can also be selected for a tensed proposition (independently), but they still hold the property of incompleteness in that they can be combined with a non-tensed proposition. If this analysis is correct, it is possible to predict the ambiguity of tense in mirative sentences only when a mirative expression is historically derived from a complementizer. This is still a speculation and more empirical and theoretical investigations will be, of course, necessary.

Abbreviations: The following abbreviations are used for example glosses: ACC: accusative, CI: Korean *ci*, COMP: complementizer, CON: conjunctive particle, CONT: contrastive, DAT: dative, DEC: declarative, EVAL: evaluative, GEN: genitive, IMP: imperative, IND: indicative, KA: interrogative particle, MIR: mirative; NEG: negation, negative, NOM: nominative, NON.PST: non-past tense, NON.TNS: non-tensed, PASS: passive, POLITE: polite, PRED: predicative, PRES: present, PROG: progressive, Prt: particle, PST: past, QUOT: quotative, REP: reported, SG: singular, PROG: progressive, Japanese *teiru* (effectual) form, TOP: topic.

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