# The Size of Clausal Complements of -mitai and -yoo in Japanese\*

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#### **Abstract**

In this study, we investigate some properties of clausal complements of Japanese evidential modals, with a special emphasis on *-mitai* and *-yoo*. They can appear with a clausal complement but behave differently regarding clausal ellipsis and clausal pro-forms: *-mitai* allows clausal ellipsis and the clausal pro-form *soo*; on the other hand, *-yoo* allows them only when a particle *no* precedes it. To explain the differences between *-mitai* and *-yoo* in clausal ellipsis and clausal pro-forms, we argue that these evidentials are different in the size of their clausal complements, proposing that *-mitai* takes a TP as its complement, while *-yoo* takes a Fin(ite)P as its complement.

#### 1 Introduction

This study investigates properties of clausal complements of the Japanese evidential modal expression *-mitai* and *-yoo*. They can take a clausal complement, marking inferential evidentiality, as shown in (1).

(1) Taro-ga asita nihon-ni kikoku-su-ru-{mitai/yoo}-da.
T-NOM tomorrow Japan-to return-do-PRS-{MITAI/YOO}-COP
'It seems that Taro is going back to Japan tomorrow.'

Because of their similarities in meaning, Narrog (2009:169) counts -mitai as a "stylistic variant" of -yoo.

In this study, we show that *-mitai* and *-yoo* behave differently regarding clausal ellipsis and clausal pro-forms, arguing that they are different in the size of their clausal complements. Specifically, we propose that *-mitai* takes a TP as its complement, while *-yoo* takes a FinP as its complement.

# 2 Clausal ellipsis and Clausal pro-forms

In this section, we show that *-mitai* and *-yoo* behave differently regarding clausal ellipsis and clausal pro-forms. As illustrated in (2), a clausal complement followed by *-mitai* (i.e. *Taro arrived*) can be elided as in (2B-a) or replaced by the clausal pro-form *soo* as in (2B-b).

(2) A. [Taro-ga ki-ta]<sub>1</sub>-mitai-da-ne.
[Taro-nom arrive-pst]-mitai-cop-sfp
'It seems that Taro has arrived.'

B. a.  $\Delta_1$  mitai-da-ne. b.  $soo_1$  mitai-da-ne. so MITAI-COP-SFP Lit. 'It seems so.'

<sup>\*</sup>The current research has been supported by JSPS KAKENHI Grant Number 22K13104 to Takayuki Akimoto as well as by JSPS KAKENHI Grant Number 21K20016 to Yuta Tatsumi. The abbreviations used in this paper are as follows: ADN = adnominal predicative copula; COP = copular; GEN = genitive; IMP = imperative marker; POL = politeness marker; PRS = present tense; PST = past tense; SFP = sentence final particle; TOP = topic marker; VOL = volitional marker.

On the other hand, a clausal complement of the evidential -yoo cannot be elided or replaced by the pro-form soo, as illustrated by the ungrammaticality of (3B-a) and (3B-b) in B's utterance. Importantly, however, -yoo allows clausal ellipsis when the particle no precedes it, as illustrated in (3B-c). In this connection, note that -yoo can follow the pre-nominal element so-no, which refers to the antecedent clause, as in (3B-d).

(3) A. [Taro-ga ki-ta]<sub>1</sub>-yoo-da-ne. [T-NOM arrive-PST]-YOO-COP-SFP 'It seems that Taro has arrived.'

> B. a.  $*\Delta_1$  yoo-da-ne. YOO-COP-SFP Lit.'It seems.' b.  $*soo_1$  yoo-da-ne. so YOO-COP-SFP Lit.'It seems so.'

c.  $\Delta_1$  no yoo-da-ne. NO YOO-COP-SFP Lit. 'It seems.' d.  $so_1$ -no yoo-da-ne.

d. so<sub>1</sub>-no yoo-da-ne. so-no yoo-cop-sfp Lit. 'It seems so.'

It should also be noted that *-mitai* does not allow the clausal ellipsis with *no* preceding it and the pro-form *so-no*, as shown in the ungrammaticality of (4B-a) and (4B-b).

(4) A. [Taro-ga ki-ta]<sub>1</sub>-mitai-da-ne. [T-NOM arrive-PST]-MITAI-COP-SFP 'It seems that Taro has arrived.'

B. a.  $*\Delta_1$  no mitai-da-ne. NO MITAI-COP-SFP

'It looks like Taro has arrived.'

b. \*  $so_1$ -no mitai-da-ne. SO-NO MITAI-COP-SFP

'It looks like Taro has arrived.'

One may consider that *so-no* in (3B-d) is a demonstrative element, and (3B-c) is derived from (3B-d) by partial deletion of *so-no*. However, Japanese demonstratives do not allow particle stranding ellipsis, as shown in (5B).

(5) A. Sono gakusei-wa moo kita-ka-na? that student-TOP already came-Q-SFP 'Has the student come yet?'

B. \* Δ -no gakusei-wa kita-yo.

-GEN student-TOP came-sFP

Int. 'That student has come.'

The data discussed so far are summarized in Table 1. *Mitai* allows both clausal ellipsis and the clausal pro-form *soo*, while *-yoo* allows clausal ellipsis with the particle *no* preceding it and the pro-form *so-no*.

Table 1: clausal ellipsis & clausal pro-forms

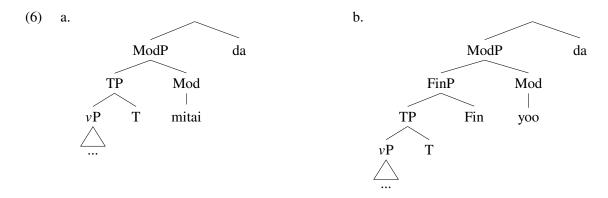
	clausal ellipsis	clausal proform
$[\ldots]_1$ -mitai	$\Delta_1$ (*-no) mitai	{soo <sub>1</sub> /*so-no <sub>1</sub> } mitai
$[\ldots]_1$ -yoo	$\Delta_1$ *(-no) yoo	$\{*soo_1/so-no_1\}$ yoo

The question arises as to why *-mitai* and *-yoo* show such a difference in clausal ellipsis and clausal pro-forms. In the next section, we propose that clausal complements they select are different in their sizes.

## 3 The clausal syntax of -mitai and -yoo

### 3.1 Proposal

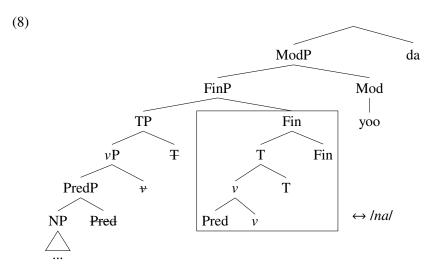
To explain the differences summarized in Table 1 in the previous section, we propose that *-mitai* and *-yoo* take clausal complements of different sizes. As shown in (6a,b), we assume that *-mitai* takes a TP as its complement, while *-yoo* takes a FinP as its complement.



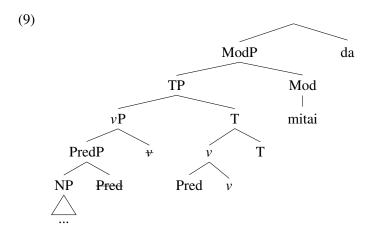
Supporting evidence for the structures in (6a,b) comes from predicate adnominal forms (a.k.a. *Rentaikei*). As shown in (7a), the adjectival noun *genki* 'fine' must combine directly with *-mitai* when it is used as a predicate. However, the same adjectival noun must be followed by a adnominal suffix *-na*, when it forms a predicate together with *-yoo*, as in (7b).

- (7) a. Taro-wa genki-(\*na)-mitai-da.
  T-TOP fine-ADN-MITAI-COP
  'Taro seems to be doing well.'
  - b. Taro-wa genki-\*(na)-yoo-da.
    T-TOP fine-ADN-YOO-COP
    'Taro seems to be doing well.'

Hiraiwa (2005) and Mihara (2012) argue that adnominal forms occur when a predicate successively moves to the Fin head. Following their analyses, we propose that the adnominal suffix -na appears only with -yoo because -yoo has a FinP as its complement. We assume in line with Nishiyama (1999) that the clausal structure of adjectival nouns includes a PredP headed by a predicative copula and a vP headed by a dummy copula. The structure for (7b) is given in (8). After head movement takes place, the Pred-v-T-Fin complex is realized as na (a la Distributed Morphology; Halle & Marantz (1993)).



On the other hand, *-mitai* takes a TP as its complement under the current analysis. *Mitai* never follows the adnominal suffix *-na* because a complement clause of *-mitai* cannot create the complex head containing the Fin head (i.e. [Pred-v-T-Fin]), as shown in (9).



# 3.2 Analysis

The proposed analysis can capture the differences between the modal *-mitai* and *-yoo* (i.e. (2)/(4) and (3)). First, we assume that clausal ellipsis targets a TP (Merchant 2001). Similarly, we hypothesize that the clausal pro-form so(o) takes a TP as its semantic antecedent. The relevant structures are given in (10) and (11). Here, *-mitai* and *-yoo* occurs in the Mod head.

(10) a. 
$$\Delta$$
-mitai(-dane) :  $[ModP] = [ModP] = [$ 

Hiraiwa & Ishihara (2002, 2012) propose that the Fin head can be realized as -no in some cases. Following their analysis, we propose that if there is no T-to-Fin movement, the Fin head alone is realized as -no. Under the current analysis, -mitai takes a TP as its complement, lacking the Fin head in the clausal complement, so that -no never precedes in the elliptical constructions with -mitai. Recall that we assume that when a predicate successively head-moves to the Fin head (Hiraiwa 2005; Mihara 2012), the resulting complex head (Pred-v-T-Fin) is realized as the adnominal particle -na. Then, the fact that an elided clausal compliment and the pro-nominal pro-form so(o) cannot be followed by the adnominal particle -na as in (12Ba-b) but by the particle -no as in (12Bc-d) can be captured by assuming that the Pred-to-v-to-T-to-Fin movement is blocked in the elliptical constructions.

In light of this, it is worth noting that in non-elliptical examples, the particle -no cannot intervene between -yoo and its clausal complement, as in (13).

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(13) Taro-ga asita nihon-ni kikoku-su-ru-(*no)-{mitai/yoo}-da.
T-nom tomorrow Japan-to return-do-prs-(*no)-{mitai/yoo}-cop
'It seems that Taro is going back to Japan tomorrow.'
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This pattern can also be explained under the current analysis. We hypothesize that the Fin head can be realized as *-no* only when there is no (overt) T-to-Fin movement. In this respect, *-no* in the Fin head is similar to *do*-support in English. On standard assumptions, the T head moves to Fin if there is no independent factor that would block the relevant movement. The structure is given in (14).

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(14) \left[ ModP \left[ FinP \left[ TP \right] \right] \right] \left[ Fin V-v-T-Fin \right] \left[ Mod yoo \right] \right] da
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In (14), the Fin head cannot be realized as the particle *-no* because it forms a complex head by (overt) T-to-Fin movement. The same is true for predicate adnominal forms preceding *-yoo*.

## 4 Saito (2020, 2021)

In this section, we review a different analysis of *-mitai* and *-yoo* proposed by Saito (2020, 2021). He shows that *-mitai* and *-yoo* behave differently regarding their compatibility with imperative forms, volitional forms and polite forms. The relevant examples are given in (15a-c). Unlike *-mitai*, *-yoo* cannot follow the imperative form *a-e*, the volitional from *a-oo* and the polite form *ai-mas-u*.

```
(15) a. [[ asita a-e]-{mitai/*yoo}-na] hito
tomorrow meet-IMP-{MITAI/YOO}-ADN person

'(a) person like (the) one who you should meet tomorrow'

b. [[ asita a-oo]-{mitai/*yoo}-na] hito
tomorrow meet-vol-{MITAI/YOO}-ADN person

'(a) person like (the) one who I/we will meet tomorrow'

c. [[ asita ai-mas-u]-{mitai/*yoo}-na] hito
tomorrow meet-pol-prs-{MITAI/YOO}-ADN person
```

Assuming that imperatives, volitionals and politeness is implemented in the CP-domain or in some projection higher than TP (e.g. Rizzi 1997; Miyagawa 2012), Saito (2020, 2021) proposes that *-mitai* takes a CP as its complement while *-yoo* takes a TP as its complement. The relevant structures are given in (16).

(Saito 2021:123-124)

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(16) Saito (2020, 2021)

a. mitai : [ModP [CP [TP ... T] C] [Mod mitai]]

b. yoo : [ModP [TP ... T] [Mod yoo]]
```

'(a) person like (the) one who I will meet tomorrow'

Recall that we have argued that *-mitai* takes a TP-complement and *-yoo* takes a FinP(CP) complement, contrary to Saito's analysis. In light of this, it should be noted that *-mitai* and *-yoo* in (15) are different from the modal expressions we have discussed in the current paper. First of all, *-mitai* and *-yoo* in (15) are used as a part of a prenominal modifier. In predicative environments, *-mitai* and *-yoo* never combine with imperatives, volitionals and polite forms, as shown in (17).

```
(17) a. * [[ asita a-e]-{mitai/yoo} da.
tomorrow meet-IMP-{MITAI/YOO} COP
Lit. 'It seems that you should meet tomorrow.'
b. * [[ asita a-oo]-{mitai/yoo} da.
tomorrow meet-vol-{MITAI/YOO} COP
Lit. 'It seems that we will meet tomorrow.'
c. * [[ asita ai-mas-u]-{mitai/yoo} da.
tomorrow meet-pol-prs-{MITAI/YOO} COP
Lit. 'It seems that someone meets tomorrow.'
```

The contrast between (15) and (17) shows that *-mitai* and *-yoo* analyzed by Saito (2020, 2021) must be distinguished from our modal *-mitai* and *-yoo* discussed in the present paper. Notice also that in Saito's examples, *-mitai* and *-yoo* are interpreted as suffixes which yield adjectival pre-nominal modifiers. They are more similar to *like* or *-ish* and lack modal meanings. It is also worth noting that the contrast Saito (2020, 2021) observed in (15) is also observed with non-clausal elements. In (18), *-mitai* and *-yoo* take the nominal expression *isya* 'doctor' as its complement, but *-yoo* cannot directly follow the nominal expression, unlike *-mitai*.<sup>1</sup>

```
(18) [isya-{mitai/*yoo}-na] hito doctor-{MITAI/YOO}-ADN person '(a) person like a doctor'
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Given these data, we conclude that *-mitai* and *-yoo* that Saito (2020, 2021) analyzed are prenominal modification markers and independent from the modal *-mitai* and *-yoo*, which always takes a clausal complement, discussed in the current paper.

#### 5 Conclusion

This study investigated the clausal complements of evidential modals *-mitai* and *-yoo* in Japanese. Both *-mitai* and *-yoo* take a clausal complement. However, it was shown that they are different in sizes of their clausal complements on the basis of the data on clausal ellipsis and clausal pro-forms. In particular, we argued that *-mitai* takes a TP complement, while *-yoo* takes a FinP complement, which can account for the fact that *-mitai* allows clausal ellipsis and the clausal pro-form *soo*; *-yoo* allows them only when a particle *no* precedes it.

<sup>1</sup>In order for the ungrammatical sentence with -yoo in (18) to be grammatical, -yoo must be preceded by a particle no as in (i).

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(i) [ isya-{mitai/no-yoo}-na] hito doctor-{MITAI/NO-YOO}-ADN person '(a) person like a doctor'
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In light of this, it should be noted that, in our judgments, the grammaticality of (15a-c) with -yoo significantly improves when a particle no precedes -yoo.

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(ii) a. [[ asita a-e]-{mitai/no-yoo}-na] hito tomorrow meet-IMP-{MITAI/NO-YOO}-ADN person

'(a) person like (the) one who you should meet tomorrow'

b. [[ asita a-oo]-{mitai/no-yoo}-na] hito tomorrow meet-VOL-{MITAI/NO-YOO}-ADN person

'(a) person like (the) one who I/we will meet tomorrow'

c. [[ asita ai-mas-u]-{mitai/no-yoo}-na] hito tomorrow meet-POL-PRS-{MITAI/NO-YOO}-ADN person

'(a) person like (the) one who I will meet tomorrow'
```

We will leave the reason why this is the case as well as the properties of the particle *no* that occurs with non-clausal elements to future research.

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