

The Right Periphery in the Japanese CP*

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Rizzi (1997) proposed a split CP system on the basis of the syntactic facts of Italian discourse elements on left periphery such as topic and focus. This paper explores the Japanese CP system by means of the right peripheral elements such as modal forms and sentence final particles. We claim that there is at least four independent heads in the Japanese CP-system, C1 for Fin in Rizzi's sense, C2 for E-modals, C3 for U-modals, and C4 for Sentence Final Particles.

1. Introduction

This paper argues for the assumption of at least four independent heads, C1, C2, C3 and C4, in the CP-system in Japanese. This supports Rizzi's (1997) split CP-system. C1, which is the closest C-head to the TP, corresponds to Rizzi's (1997) Fin(ite) of the Fin(ite) Phrase. The head Fin is often morphologically realized with a formal nominalizer *no*. C2 and C3 are realized with modal forms, Epistemic-modals (henceforth

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E-modals) and Utterance-modals (henceforth U-modals). The right-most-peripheral head, C4, is realized with Sentence Final Particles (henceforth SFPs). We propose a syntactic structure (1) on the basis of the following: (i) linear order realization, (ii) embedding possibility, (iii) person restriction on matrix subjects, and (iv) the EPP-satisfaction on C.

- (1) [CP₄ [CP₃ [CP₂ [CP₁ [TP [v*P [VP V] v*] T] C1_{Fin}] C2_{E-modal}] C3_{U-modal}] C4_{SFP}].

This paper is organized as follows: Section 2 shows significant differences between Genuine-modals (henceforth G-modals) and Quasi-modals (henceforth Q-modals), and our research targets are restricted to G-modal forms only. In Section 3, the G-modals are further divided into two types of modals, E-modals and U-modals. In Section 4, we claim that it is not the E-modal head C2, but the U-modal head C3 that is involved in person restriction on matrix subjects. As a consequence, we support the adequacy for phonetically null modals, that is, \emptyset -modals. In Section 5, we attempt to map the properties of Japanese modals into syntactic structures. Section 6 proposes that SFPs should be treated as an independent C-head, C4. Furthermore, we discuss C1 as the head of Fin(ite) Phrase in Section 7. Section 8 presents a conclusion.

2. *Genuine-modals vs. Quasi-modals*

First, we shall begin with the discussion about the heads of modals, C2 and C3 in (1). This section shows important syntactic differences between G-modals and Q-modals.

In traditional Japanese linguistics ‘Kokugo-gaku’ and Japanese linguistics ‘Nihongo-gaku’, modal expressions have been divided into two types, G-modals and Q-modals. However, the formal distinctions between the two types of modals tended to be ignored in their analyses with their own semantic and pragmatic perspectives (Masuoka (1997), Nitta (1991), Nitta and Masuoka (1998)). Generative grammarians, on the other hand, have hardly reflected this dichotomy in their syntactic structures. We are sure that the formal distinction originally observed by traditional Japanese studies plays a significant role in distilling the genuine characteristics of Japanese modality from miscellaneous modal

types. Thus, in this paper, the target of our research is restricted to G-modals only.

The sentences in (2) indicate the characteristics of G-modals defined by Nitta (1991) and the corresponding examples are given in (3). In (3), Past morpheme *-ta* and Negative morpheme *-nai* are disallowed to follow G-modals, reflecting the characteristics (2b) and (2c).

- (2) The characteristics of Japanese Genuine-modals
- a. G-modals express speaker's psychological attitude toward the utterance.
 - b. no Pres.-Past Tense differentiation
 - c. no declarative-negative differentiation (Nitta (1991))
- (3) G-modals: *nasai* 'imperative', *masyoo* 'invitation',
daroo 'presumption'
- a. imperative forms

<i>iki-nasai</i>	/* <i>-nasai-ta</i>	/* <i>-nasai-nai</i>
go-G-modal	-G-modal-Past	-G-modal-Neg
'Go there!'		
 - b. invitation forms

<i>iki-masyoo</i>	/* <i>-masyoo-ta</i>	/* <i>-masyoo-nai</i> .
go-G-modal	-G-modal-Past	-G-modal-Neg
'Let's go.'		
 - c. presumption forms

<i>iku-daroo</i>	/* <i>-daroo-ta</i>	/* <i>-daroo-nai</i> .
go-G-modal	-G-modal-Past	-G-modal-Neg
'(I) will go (there).'		

Unlike G-modals, Q-modals show the property (2a) only. Q-modals have the Pres.-Past differentiation and the declarative-negative differentiation as illustrated in (4). That is why traditional grammarians call the modal forms *Quasi-modals*.

(4) Q-modals: *-yoo* ‘presumption’, *-tagar* ‘desire’, *-beki* ‘obligation’

a. presumption forms

iku-yooda /^{OK}-yooda-(a)tta /^{OK}-yoode-nai
 go-Q-modal -Q-modal-Past -Q-modal-Neg
 ‘(Someone) seems to go (there).’

b. desire forms

iki-tagaru /^{OK}-taga(r)-(a)tta /^{OK}-tagar-anai
 go-Q-modal -Q-modal-Past -Q-modal-Neg
 ‘(Someone) wants to go (there).’

c. obligation forms

iku-bekida /^{OK}-bekid-atta /^{OK}-bekide-nai
 go-Q-modal -Q-modal-Past -Q-modal-Neg
 ‘(I/Someone) should go (there).’

Moreover, the two types of modal forms show completely different syntactic behaviors in their multiple occurrences in a simple sentence as in (5) and the word order relation between the modals and Tense morphemes as in (6). (5) shows that Q-modals can multiply occur in a simple sentence, whereas G-modals cannot.

(5) multiple occurrences

a. G-modals

*Taroo-ga daigaku-e iku-daroo-nasai-masyoo.
 Taro-Nom university-to go-G-modal-G-modal-G-modal

b. Q-modals

^{OK}Taroo-ga daigaku-e iki-tagaru-bekide-nak-atta-yooda.
 Taro-Nom university-to go-Q-modal-Q-modal-Neg-Past-Q-modal
 ‘It seems to me that Taro should not have wanted to go to university.’

With respect to their word order restriction, unlike Q-modals, Tense morpheme *-(at)ta* ‘Past’ cannot follow Genuine-modals as shown in (6).

(6) word order relations

a. G-modals

*iku-*daroo*-ta.

go-G-modal-Tense_{PAST}

b. Q-modals

^{OK}iku-*bekid*-atta.

go-Q-modal-Tense_{PAST}

‘(I) should have been there.’

In this paper, the target of our research is restricted to G-modals.

(7) is a list of G-modals, which we treat in this paper.

(7) G-modals

< examples >

		<forms>	<interpretation>
a.	Tabun, asu-wa hareru- <i>daroo</i> . probably tomorrow-Top fine-G-modal ‘It will probably be fine tomorrow.’	‘- <i>daroo</i> ’	presumption
b.	Osoraku, ame-wa furu- <i>mai</i> . perhaps rain-Top fall-G-modal ‘Perhaps, it won’t rain.’	‘- <i>mai</i> ’	negative presumption
c.	Taroo-mo ikude- <i>syoo</i> . Taro-also go-G-modal ‘Taro will go (there) with us.’	‘- <i>syoo</i> ’	presumption
d.	Hayaku, kotti-e ko- <i>i</i> . quickly here-to come-G modal ‘Come here quickly.’	‘(si)- <i>ro</i> ’, ‘(si)- <i>nasai</i> ’	imperatives
e.	koko-o wataru- <i>na</i> . here-Acc cross-G modal ‘Don’t cross here.’	‘(suru)- <i>na</i> ’	prohibition
f.	Issyoni, tabe- <i>masyoo</i> . together eat-G modal ‘Let’s eat (it) together.’	‘(si)- <i>masyoo</i> ’	invitation
g.	Ame, ame, fur- <i>e</i> , rain rain fall-G modal ‘Ask God to bless with rain!’	‘(suru)- <i>e</i> ’	desire

- h. Konna koto nidoto suru-*mai*. ‘(suru)-*mai*’ intension
 such a thing never do-G modal
 ‘I will never do such a thing.’
- i. Suguni si-*yoo*. ‘(si)-*yoo*’ intension
 right now do-G modal
 ‘I will do (it) right now.’

3. Two types of G-modals: E-modals vs. U-modals

The G-modals we observed in Section 2 are further divided into two types. Inoue (1976 and 2006) proposes a sentence structure containing Japanese modality as given in (8) and calls ④ in (8) *Epistemic-modals* ‘Ninsikiteki-modals’ and ⑤ *Utterance-modals* ‘Hatuwa/Dentatu-modals’.¹

(8) Hierarchical structures of Japanese Modality: Inoue (1976 and 2006)

Taroo-ga	zyobun-o	honyaku-si-	tei-ru	daroo	ne.
Taro-Nom	introduction-Acc	translate-do	Prog.-Pres.will	SFP.	
	①		②	③	④
	Proposition		Aspect	Tense	E
					U
					-modal
					-modal

‘Taro will be translating the introduction, won’t he.’

The similar classification of Japanese modality has been observed in the traditional Japanese studies, too. Nitta (1991) classifies Japanese modality into two types, *the modality for proposition* and *the modality for utterance*. See Inoue’s definitions of the two types of modals in fn1 below.

On the basis of Whitman (1989), Koizumi (1992) argues that Korean/Japanese-type language has a Modal Phrase (MP) between CP

¹ Inoue’s (2006) definitions of E-modals and U-modals are given in (i).

(i) a. *Epistemic-modals*:

E-modals express the speaker’s recognition of the content of the proposition. They presuppose neither the existence nor the involvement of addressees.

b. *Utterance-modals*:

U-modals express the speaker’s attitudes toward the utterance (communication, interrogative, imperative, invitation, prohibition, permission). Some modals of this type presuppose not only the existence of the addressee, but also the involvement of the addressees.

and IP, as shown in (9).

- (9) [CP [MP [IP Kanti-ga [VP Rika-ni nekkuresu-o age] ta] **daroo**] ne].
-Nom -Dat necklace-Acc give Past **Modal** SFP

‘Probably, Kanti gave a necklace to Rika.’

(Koizumi 1992: 409; the bold parts are added by Ueda)

In (9), *daroo* is generated as the head of MP, and SFP *-ne* as the head of C.

This paper, first, proposes that the MP given in (9) should be divided into at least two independent heads, C2 and C3 given in (1) in Section 1, each of which is headed by modal forms, E-modal forms and U-modal forms, respectively. As for SFPs, unlike Inoue (1976 and 2006), Nitta (1991), and Masuoka (2000), we do not recognize SFPs as a typical U-modal, but as another type of C-head, that is, C4. Therefore, in this section, we ignore SFPs, but detailed discussion for SFPs will be given in Section 6. Section 3 discusses which modal form listed in (7) belongs to which type of modals by means of a syntactic diagnosis, *embedding tests*.

3.1 Circumstantial *kara* ‘because’ clause

We shall begin with Koizumi’s (10). On the basis of Minami (1974), Koizumi (1992) mentions that some adjuncts such as *kara* ‘because’ allow for some members of Modal Phrase to occur in them, whereas COMP-elements such as Q-morpheme *ka* and SFP *ne* never occur in the clausal adjuncts.

(10) Circumstantial *kara* ‘because’ clause

- a. [MP kinoo-wa nerarenakat-ta **daroo**]-kara,
yesterday-Top can’t sleep-Past probable-because
kyoo-wa yasum-asete-age-yoo.
today-Top take a rest-make-give-let’s
‘Let’s give her/him a day off today [because we couldn’t sleep yesterday].’

- b. *[_{CP} Kinoo-wa nerarenakat-ta *ne*]-kara,
 yesterday-Top can't sleep-Past SFP-because
 kyoo-wa yasum-oo.
 today-Top take a rest-let's
 'Let's have a day off today [because we couldn't sleep yesterday, could we].'
 (Koizumi 1992: 419)

However, some G-modals listed in (7) are disallowed in the *kara*-adjunct clause on a par with the COMP-element in (10b). The results are given in (11) and (12).

(11) ^{OK}Embedding

- a. *-daroo* (presumption)
 [Tabun, asu-wa hareru-*daroo*]-kara,
 probably tomorrow-Top fine-G-modal-because
 kasa-wa oite-te-ik-oo.
 umbrella-Top leave-TE-go-will
 'I will leave my umbrella at home [because I suppose it would be fine tomorrow].'
- b. *-mai* (negative presumption)
 [Osoraku, ame-wa furu-*mai*]-kara,
 Perhaps rain-Top fall-G-modal-because
 kasa-wa oite-te-ik-oo.
 umbrella-Top leave-TE-go-will
 'I will leave my umbrella [because I suppose it won't rain].'
- c. *-syoo* (presumption)
 [Taroo-mo ikude-*syoo*]-kara, watasi-mo iki-masu.
 Taro-also go-G-modal-because I-also go-will
 'I will come with him, too [because I suppose Taro also might come].'

(12) *Embedding

- a. imperative forms of verbs: *-i*, *-nasai* (imperatives)
 *[Hayaku, kotti-e ko-*i*]-kara, ik-e-nai.
 quickly here-to come-G-modal-because go-can-not
- b. *-na* (prohibition)
 *[Koko-o wataru-*na*]-kara, watar-ta.
 here-Acc cross-G-modal-because cross-past

- c. **-masyoo** (invitation)
 *[Issyoni, tabe-**masyoo**]-kara, deki-nai.
 together eat-G-modal-because can-not
- d. imperative forms of verbs: **-e** (anxiety)
 *[Ame yo, fur-**e**]-kara, fur-anai.
 rain fall-G-modal-because fall-not
- e. **-yoo** (volition)
 *[Sugu si-**yoo**]-kara, si-nak-atta.
 right now do-G-modal-because do-not-Past

This diagnosis indicates that there are at least two types of G-modals. (11) is one modal-type and (12) the other. The former fits the syntactic type of the complement of the circumstantial *kara*, but the latter does not.

3.2 Paradoxical *ga* clause

According to Nitta (1991), paradoxical *ga* adjunct clause, which is one of Minami's (1974) C-level of subordinate clauses, does not semantically contain U-modality. If it is true, it is predictable that only E-modals can occur in the complement position of the paradoxical *ga* clause, whereas U-modals cannot. By means of the embedding test, we sort the modal forms in (7) into E-modals and U-modals. The results are given in (13) and (14).

(13) E-modal forms (^{OK}embedding)

- a. **-daroo** (presumption)
 [Tabun, hareru-**daroo**-ga], kasa-o mot-te-ik-oo.
 probably fine-E-modal-conj.Paradox umbrella-Acc take-TE-go-will
 'I will take an umbrella with me [though it might probably be fine tomorrow].'
- b. **-mai** (negative presumption)
 [Osoraku, ame-wa furu-**mai**-ga],
 perhaps rain-Top fall-E-modal-conj.Paradox
 gogo kumoru kamosirenai.
 in the afternoon cloudy might
 'It might be cloudy in the afternoon [though it won't rain].'

- c. **-syoo** (presumption)
 [Taroo-mo ikude-**syoo**-ga], watasi-mo iki-masu.
 Taro-also go-E-modal-conj.Paradox I-also go-will
 ‘I will go together [though I suppose Taro also would go
 (there)].’

(14) U-modal forms (*embedding)

- a. imperative forms of verbs: **-i, -nasai** (imperatives)
 *[Hayaku, kotti-e ko-**i**-ga], ik-e-nai.
 Quickly here-to come-U-modal-conj.Paradox go-can-not
- b. **-na** (prohibition)
 *[Koko-o wataru-**na**-ga], watar-ta.
 here-Acc cross-U-modal-conj.Paradox cross-past
- c. **-masyoo** (invitation)
 *[Issyoni, tabe-**masyoo**-ga], deki-nai.
 together eat-U-modal-conj.Paradox can-not
- d. imperative forms of verbs: **-e** (anxiety)
 *[Ame yo, fur-**e**-ga], fur-anai.
 rain fall-U-modal-conj.Paradox fall-not
- e. **-yoo** (volition)
 *[Sugu si-**yoo**-ga], si-nak-atta.
 right now do-U-modal-conj.Paradox do-not-Past

The classification results shown in (13) and (14) are exactly the same as those in (11) and (12). That is, modals in (11) are E-modals and those in (12) are U-modals. The grammatical contrast in (11) vs. (12) and (13) vs. (14) can be treated as an internal selection of adjunct clauses if we assume that each modal form functions as the head of each of two modal phrases, CP_{2-E-modal} and CP_{3-U-modal}, and the CP_{2-E-modal} can be selected as a complement of circumstantial *kara* and paradoxical *ga*, but CP_{3-U-modal} cannot.

3.3 The co-occurrence between the two modals

Next, consider whether the two modals, E-modal forms and U-modal forms, co-occur in a sentence or not.

- (15) a. *iku-*daroo-mai*.
 V-E-modal-U-modal
 b. *iku-*desyoo-na*.
 V-E-modal-U-modal

As shown in (15), the two modal forms do not seem to co-occur in a sentence. As a consequence, some people might say that the two types of modal forms occupy one syntactic position because they are complementarily distributed. However, we will claim that each of U-modal forms and E-modal forms functions as an independent head for each modal phrase, that is, C2 and C3. We will discuss this point in terms of person restriction phenomena on subject noun phrases in Section 4.

4. Person Restrictions

This section discusses the relation between modal forms and person restrictions on subject noun phrases. What restricts the value of person on a subject nominal? First, we will observe person restriction phenomena in the sentences with the two types of modals in question. With respect to E-modal forms, in traditional Japanese linguistics, it has been observed that (16a-c) with 2nd person subject sound awkward when they are uttered to the addressee directly. If you were a fortuneteller, they might be possible.

(16) E-modal forms

- | | | | | |
|----|------------------------------|-----------------------|--------------------|---------------------|
| a. | {boku/*kimi/kare}-wa | iku- <i>daroo</i> . | (presumption) | [-2 nd] |
| | I / you / he-Top | go-will | | |
| | ‘I/he will go (there)’ | | | |
| b. | {boku/*kimi/kare}-wa | iku- <i>mai</i> . | (negative surmise) | [-2 nd] |
| | I / you / he-Top | go-never | | |
| | ‘I/he will never go (there)’ | | | |
| c. | {boku/*kimi/kare}-wa | iku-de- <i>syoo</i> . | (surmise) | [-2 nd] |
| | I / you / he-Top | go-will | | |
| | ‘I/you/he will go (there)’ | | | |

Next, consider U-modal forms.

(17) U-modal forms

- a. {*boku/kimi/*kare}-wa hayaku kotti-e ko-*i*. (imperatives)[+2nd]
I / you / he-Cont quickly here-to come-imperative
'You, not others, come here quickly'
- b. {*boku/kimi/*kare}-wa sonnakoto kinisuru-na. (prohibition)[+2nd]
I / you / he-Cont such a thing care-never
'You, not others, don't worry about such a thing.'
- c. {*boku/boku-tati/*kimi/*kare}-wa iki-*masyoo*. (invitation)[+1stpl]
I / we / you / he-Cont go-let's
'Let's go together.'

(16) and (17) might indicate that both modal forms, E-modals and U-modals, seemed to be involved in their person restrictions on each subject nominal. Contrary to the surface observation, we will claim that it is not E-modals, but only U-modals that cause the subject person restrictions. This will result in leading us to the idea that E-modals and U-modals simultaneously occur as an independent modal head in the same clause, whether they are phonetically realized or not.

The subsequent sections argue that U-modals are involved in person restriction on subject nominals on the basis of two interesting diagnoses. One is the paradoxical *ga*-clause and the other is the clause with *ta*-ending 'Tense form-ending'.

4.1 Verification 1: Paradoxical *ga* clause (Nitta 1991)

As I mentioned in (13) and (14) in Section 3.2, paradoxical *ga* clause does not contain U-modal forms, but E-modal forms can appear in its clause. We have a prediction that if E-modals were involved in person restrictions observed in (16), the restrictions would remain even when the sentences with an E-modal form are embedded in the paradoxical *ga* clause. The facts are given in (18).

(18) E-modal forms are embedded in the paradoxical *ga* clause

- a. ^{OK}[Kimi-wa iku-*daroo* ga], boku-wa ik-anai.(presumption)
you-Cont. go-will though I-Cont. go-Neg
'You will go there, but I won't.'

- b. ^{OK}[Kimi-wa iku-*mai* ga], boku-wa ik. (presumption)
 you-Cont. go-never though I-Cont. go
 ‘You won’t go there, but I will.’
- c. ^{OK}[Kimi-wa iku-de-*syoo* ga], boku-wa ik-anai.(presumption)
 you-Cont. go-will though I-Cont. go-Neg
 ‘You will go there, but I won’t.’

(18) shows that the [-2nd] person restrictions in (13) disappear when the sentences are embedded in the paradoxical *ga* clauses. As Nitta (1991) observes, the utterances with a [+2nd] person subject in (13) sound awkward when we give the utterances to a [+2nd] person addressee directly, whereas those in (18) do not. This indicates that if a clause has no U-modality, then there is no person restriction within the clause. In other words, it is U-modality that causes person restriction on subject noun phrases. We might be able to assume the existence of a phonetically null C3-head, namely, a zero U-modal (\emptyset -U-modal) in (13), though only E-modal forms are phonetically realized.

In order to explain the contrast between (13) and (18), we should assume a zero-modal head related to person restriction, namely, C3 with \emptyset -U-modal. This suggests that in (13), we should assume a phrasal projection headed by the \emptyset -U-modal form, which is completely independent from the phrasal projection headed by E-modal forms.

4.2 Verification 2: Tense-form ending

The assumption of U-modal forms as an independent head from E-modal forms can be supported by the sentences only with the *ru/ta*-form without any modal forms. In (traditional) Japanese studies, it has been observed that [+2nd] person subjects are incompatible with the sentence ending with *ru/ta* ‘Tense-form ending’ without any modal forms and SFPs (Kamio (1990) and Nitta (1991)) as shown in (19).

- (19) *Kimi-ga yar-u.
 you-Nom do-Tense
 ‘You will do it.’

When you give the utterances in (19) to a [+2nd] person addressee directly, (19) sounds awkward. However, as illustrated in (20), the awkwardness

of (19) is moderated when (19) is embedded in *kara*-clause, in which E-modal forms are allowed, whereas U-modal forms are not.

- (20) ^{OK}[Kimi-ga yar-u]-kara
you-Nom do-Tense-because
kono kikaku-wa seikoo sur-u yo.
this project-Top success do-Tense SFP
‘This project will have a great success because you would lead it.’”

The crucial point is that the person restriction disappears under the circumstance where U-modals are disallowed. This indicates that as we claimed in the previous section, it is U-modals that are involved in person restriction phenomena in Japanese, which supports our assumption of the existence of phonetically-null U-modals (\emptyset -U-modals).

5. Mapping Modals into Syntactic Structures

5.1 Topic-*wa* and the EPP-satisfaction on C

In addition to the two points in the previous section, (i) the occurrence of two types of modals in paradoxical *ga*-clause and circumstantial *kara*-clause and (ii) subject person restriction, Section 5 further discusses co-occurrence between Topic *-wa* phrase and two types of modals and the EPP-satisfaction on C in terms of Hasegawa’s (2005) Spec-Head realization system: *Marking grammatical function: Spec vs. Head*.

5.2 Co-occurrence with Topic *-wa*

It has been widely assumed that Japanese *wa*-phrase has two meanings. One is the Topic reading. The other is the Contrastive reading. We focus our attention on the Topic reading here. (21) and (22) are the results of the appearance of Topic *wa*-phrase in the sentences with each modal. They indicate that Topic reading *wa*-phrases are disallowed when U-modal forms are phonetically realized. On the other hand, there is no such a restriction on E-modal forms.

(21) E-modal forms

- a. *-daroo* (presumption)

Boku-wa asu hasir-u-*daroo*- \emptyset .

I-Top tomorrow run-Tense-E-modal-U-modal

‘I will run tomorrow.’

- b. *-mai* (negative presumption)

Sono tegami-wa todok-u-*mai*- \emptyset .

the letter-Top arrive-Tense-E-modal-U-modal

‘The letter won’t reach me.’

- c. *-syoo* (presumption)

Boku-wa daigaku-e ik-u-de-*syoo*- \emptyset .

I-Top university-to go-Tense-DE-E-modal-U-modal

‘I will go university.’

(22) U-modal forms *-ro*, *-nasai* (imperatives)

- a. *Kimi-wa/^{OK} \emptyset kotti-e ki-*nasai*. (^{OK}as a contrastive reading)

you-Top here-to come-U-modal

‘Come here.’

- b. *-na* (prohibition)

*Kimi-wa/^{OK} \emptyset hair-u-*na*. (^{OK}as a contrastive reading)

you-Top enter-U-modal

‘Keep out.’

- c. *-masyoo* (invitation) (^{OK}as a contrastive reading)

*Issyoni, watasitati-wa/^{OK} \emptyset tabe-*masyoo*.

together we-Top eat-U-modal.

‘Let’s eat (it) together.’

In (22), even if *wa*-phrases are possible, they must have a contrastive reading only. The most neutral interpretation of each sentence is caused by a phonetically-null subject form (\emptyset -subject), whose person is specified or restricted by the head of U-modal. (23) is a summary of the co-occurrence relation between Topic *wa*-phrase and two types of modals.

- (23) The Topic *wa*-subjects, which have the person AGREE relation with a U-modal form, are incompatible with a phonetically realized U-modal form in a sentence.

We sum up the properties of Japanese modals as Table 1. How can we map the properties given in (24) to the syntactic structure?

(24) Syntactic properties of the two types of Japanese modals

	E-Modal forms	U-Modal forms	
AGREEing Topic- <i>wa</i>	possible	impossible	
Embedding	possible	impossible	
Person Restriction on Subjects	none	present	
	∅	a. <i>-ro</i> (imperatives)	[+2 nd]
	∅	b. <i>-na</i> (prohibition)	[+2 nd]
	∅	c. <i>-masyoo</i> (invitation)	[+1 st pl.]
	∅	d. <i>-ro</i> (desire)	[-2 nd]
	∅	e. <i>-(y)oo</i> (intention)	[+1 st]
	g. <i>-daroo</i> (presumption)	∅	[-2 nd]
	h. <i>-mai</i> (negative presumption)	∅	[-2 nd]
	i. <i>-syoo</i> (presumption)	∅	[-2 nd]
	j. ∅ (affirmation)	∅	[-2 nd]

Table 1

5.3 The EPP-satisfaction and head realization

Hasegawa (2005) proposes an analysis called *Marking grammatical functions: Spec vs. Head* given in (25).

(25) A particular grammatical function, such as question, is MORPHOLOGICALLY marked EITHER by Head OR by Spec.

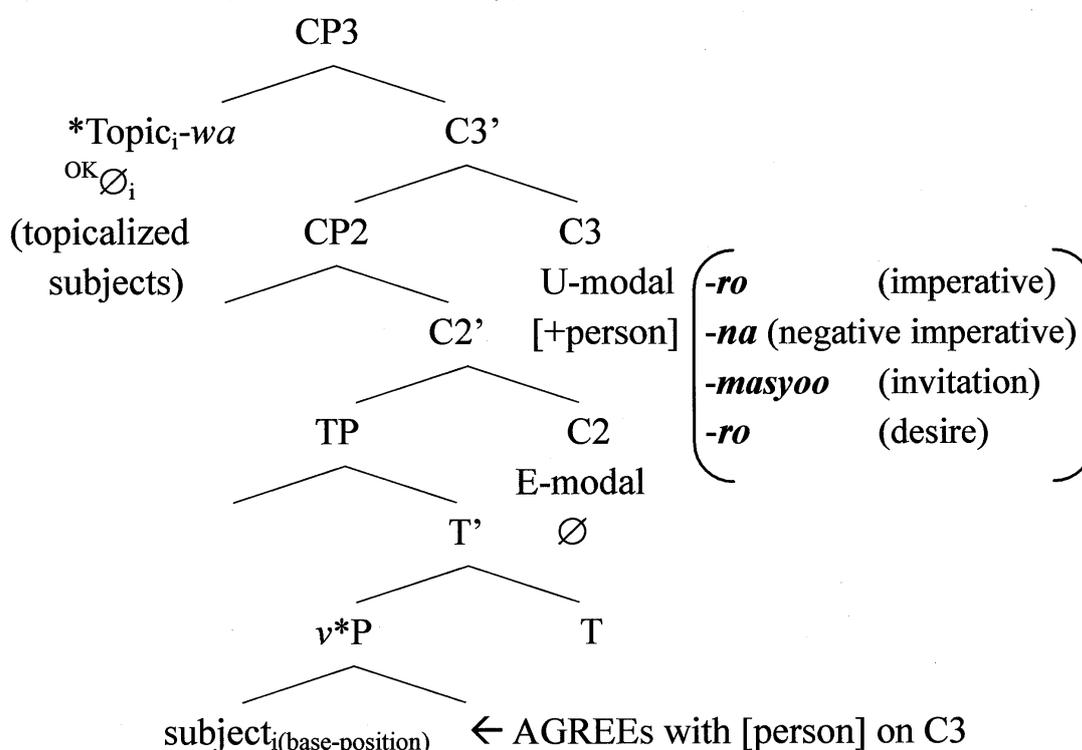
(Hasegawa (2005): 39)

We propose that AGREEing Topic *wa*-phrases appear in the Spec of U-modal, [Spec, CP3], and the Spec-Head realization is subject to Hasegawa's (25).

In (26), when U-modal forms are phonetically realized, the EPP-feature of C3 is satisfied with the U-modal head X^0 by external merge. Thus, Spec of C3 cannot be projected. That is why Topic *wa*-phrase is incompatible with U-modal realization.

(26) CASE1: U-modal forms are phonetically realized

(matrix clause only)



(27) is the structure, in which E-modal forms are phonetically realized with the zero U-modal form (\emptyset -U-modal). This \emptyset -U-modal is involved in subject person restriction.

(29) *Ik-e-yo.*

go-U-modal_(imperative)-SFP

‘Get out!’

Third, unlike U-modals, SFPs cannot have any relation with the subject of a proposition:

(30) a. *Taroo-ga it-ta-wa.*

Taro-Nom go-Past-SFP

‘Taro went (there).’

b. *Taroo-ga it-ta-ze.*

Taro-Nom go-Past-SFP

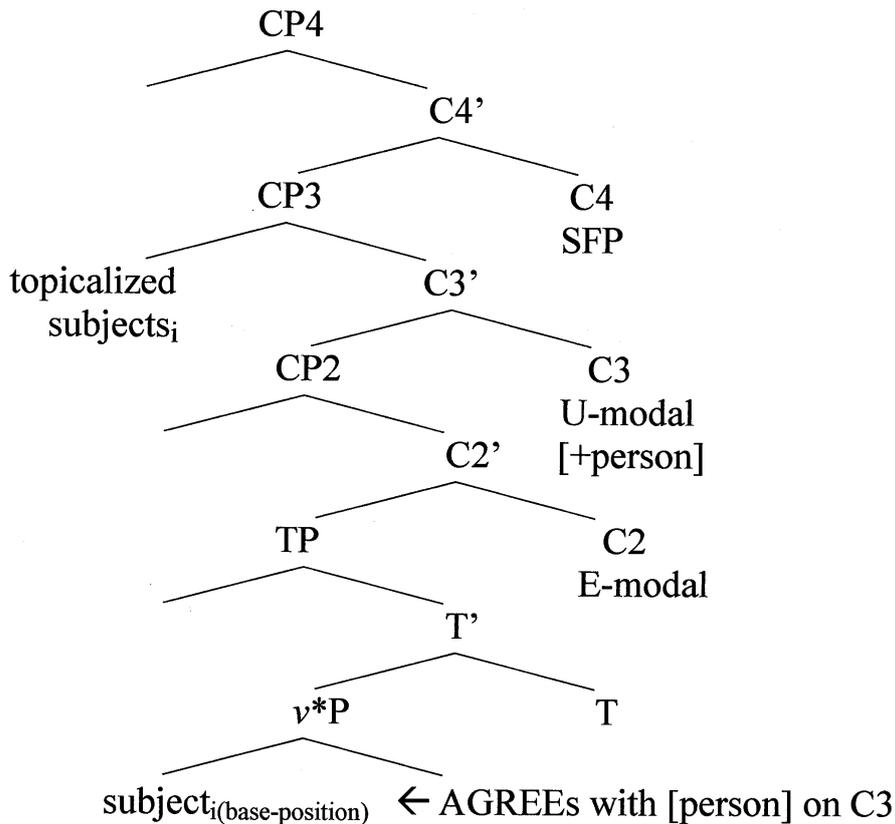
‘Taro went (there).’

In (30), SFP *-wa* in the (a) sentence expresses that the speaker is female, while *-ze* in the (b) sentence expresses the speaker is male. They cannot refer to their subjects in the proposition, whereas typical U-modals we have treated so far can have a grammatical/structural relation with the subjects in [Spec, *v*P] with respect to [person].

Endo (2007 and 2008) also points out that unlike French subject-participle agreement, Japanese SFPs does not agree with the subject of a proposition, but with the speaker.

Therefore, SFPs should be treated as an independent head from other U-modals in the sentence structure and we propose (31) for Japanese CP-system.

(31) CP-system

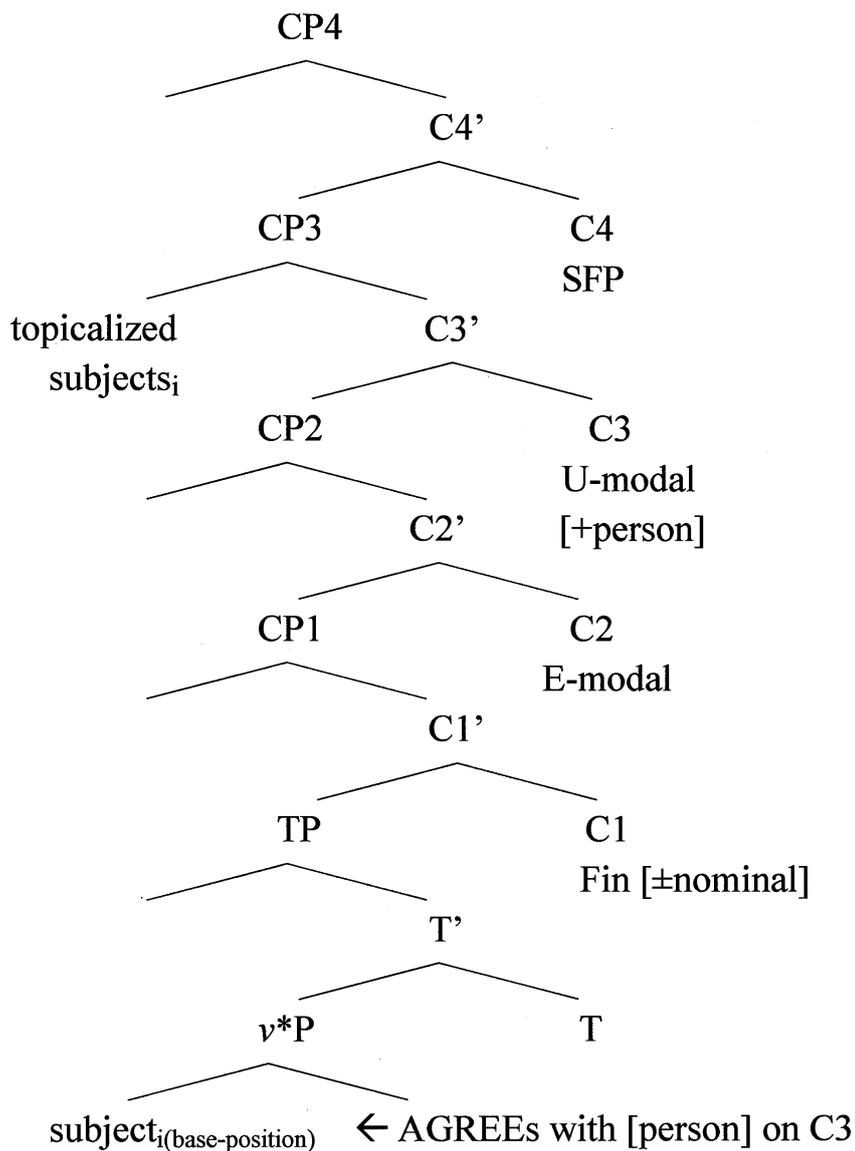


7. C1 as a Fin(ite) Head

In Section 7, we introduce an additional C head, namely, C1, following Endo (2007 and 2008). Endo (2007 and 2008) argues for an alternate view proposed by Rizzi and Shlonsky (2006) such that the Subject Criterion, that is, the EPP, can be satisfied with the nominal Fin(ite) head in the CP-domain. Endo suggests that in discourse sensitive languages such as Japanese, a certain type of SFPs can satisfy the subject condition through the nominal Fin(ite) head, which is optionally phonetically realized as *no*. Therefore, C4 headed by SFPs needs its licenser Fin(ite) head, that is, C1. Endo discusses that the C1 can satisfy the EPP when SFPs with nominal property selects the nominal Fin(ite) head in Japanese. There is a correlation between C4 and C1 with respect to [+nominal].

We, finally, get the following Japanese phrase structure:

(32) CP-system



8. Conclusion

We argued for the split CP-system and proposed the structure given in (1)=(32) on the basis of the facts of Japanese modal forms and Sentence Final Particles. First, we divided modal forms into G(enuine)-modals and Q(uasi)-modals and we decided to treat the G-modals only in this paper, because the formal discrimination between the two modals plays a significant role in distilling the genuine characteristics of Japanese modality from diverse modal expressions. Furthermore, the G-modal forms are divided into two types, E(pistemic)-modals and U(tterance)-modals. We claimed that each modal form syntactically

functions as independent heads in terms of the following three points: (i) the occurrences of two types of modals in paradoxical *ga*/circumstantial *kara*-clause, (ii) person restrictions on subject NPs, and (iii) the EPP-satisfaction on C. We further discussed SFPs function as an independent head in the CP-system in Japanese. In addition to the three functional C heads, following Rizzi and Shlonsky (2006) and Endo (2007 and 2008), we introduced another C head, Fin(ite). We proposed the sentence structure containing at least four functional heads which gives a unified account to the properties of Japanese modals observed in this paper and traditional Japanese linguistics.

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