Sentence Types and the Japanese Right Periphery

Mamoru Saito
Nanzan University and University of Connecticut

1. Introduction

In this paper, I examine the complementizer system of Japanese and present a preliminary hypothesis on the structure of the Japanese right periphery. I discuss three complementizers, *to*, *ka*, and *no*. Examples of their occurrences are shown in (1).

(1) a. Taroo-wa [CP Hanako-ga Ziroo-ni atta to] omotteiru
    T.-TOP H.-NOM Z.-DAT met *to* think
    ‘Taroo thinks that Hanako met Ziroo’

b. Taroo-wa [CP Hanako-ga dare-ni atta ka] tazuneta
    T.-TOP H.-NOM who-DAT met *ka* inquired
    ‘Taroo asked who Hanako met’

c. Taroo-wa [CP Ziroo-ni atta no]-o kookaisiteiru
    T.-TOP Z.-DAT met *no*-ACC regret
    ‘Taroo regrets that he met Ziroo’

*To* is often considered the complementizer for embedded propositions as it appears in the CP complements of verbs such as *omou* ‘think’ and *yuu* ‘say’. However, I first show that it is employed for ‘paraphrases of quotes’ in the sense of Plann (1982) or ‘reports of direct discourse’ in the sense of Lahiri (1991). Given this, I reexamine *no* and argue that it instead is the complementizer for embedded propositions. The analysis to be proposed is summarized in (2).

(2) a. *To* is the complementizer for ‘paraphrases’ or ‘reports’ of direct discourse.
    b. *Ka* is the complementizer for questions.
    c. *No* is the complementizer for propositions.

A well-known peculiar property of *to* is that it can follow questions as in (3).
(3) Taroo-wa Ziroo-ni [CP dare-ga kare-no ie-ni kuru ka to] tazuneta  
T.-TOP Z.-DAT who-NOM he GEN house-TO come ka TO inquired  
‘Lit. Taroo asked Ziroo that who is coming to his house’

A similar phenomenon is observed in Spanish, as discussed in Plann (1982). In (4a) que heads a propositional CP but it precedes embedded questions in (4b-c).

(4) a. Sabía que corría  
   knew(3sg.) que run(3sg.)  
   ‘He knew that he was running’

   b. Te preguntan que para qué quieres el préstamo  
      you ask(3pl.) que for what want(2sg.) the loan  
      ‘They ask you what you want the loan for’

   c. Pensó que cuáles serían adecuados  
      thought(3sg.) que which ones would be appropriate  
      ‘He wondered which ones would be appropriate’

Examining examples of this kind in detail, Plann proposes that que is ambiguous between complementizers for propositions and for ‘paraphrases’ of quotes. According to her analysis, Spanish has three distinct complementizers as in (5).

(5) a. que for ‘paraphrases’ of quotes  
   b. Null [+Q] C for questions  
   c. que for propositions

What I propose in this paper is that Japanese has an identical complementizer system. Japanese in fact provides explicit evidence for Plann’s analysis as the three complementizers have distinct phonetic realizations in this language: To corresponds to que in (5a), ka is the [+Q] C, and no is the counterpart of que in (5c).

In the second part of the paper, I examine the co-occurrence restrictions on the three complementizers, to, ka and no. In addition to the ka-to sequence observed in (3), there are examples with all three complementizers, as shown in (6).

(6) Taroo-wa [CP kare-no imooto-ga soko-ni ita (no) ka (to)] minna-ni tazuneta  
T.-TOP he GEN sister-NOM there-in was no ka TO all-DAT inquired  
‘Taroo asked everyone if his sister was there’

The three complementizers always appear in the order no-ka-to, and this suggests the recursive CP structure in (7).

\[\text{\textsuperscript{2}}\text{ Thanks are due to Kensuke Takita for pointing out the relevance of Plann (1982) and the parallelism between the Japanese to and the Spanish que.}\]
(7) \([CP[CP[TP \ldots ] no] ka] to]\)

Then, I consider the distribution of thematic topics and present evidence that they can appear in CPs headed by to or ka, but not in CPs headed by no. This leads to the hypothesis that there is a Topic head that hosts thematic topics in its Spec and located between no and ka as in (8).

(8) \([CP[CP[CP[TP \ldots ] no] \epsilon_{\{TOPIC\}] ka] to]\)

The similarity between (8) and the structure of the Italian left periphery proposed in Rizzi (1997) is evident. His proposal is shown in (9).

(9) \([\text{Force} (\text{Topic}*) (\text{Focus}) (\text{Topic}*) (\text{Finite} [TP \ldots ])]])]

If ka is Force and no is Finite, Japanese is identical to Italian except for the presence of to and the absence of Focus.\(^3\) I suggest then that the Japanese right periphery is comparable to Italian with the addition of the highest C, to, that is equivalent to the Spanish que as a marker of 'paraphrases’ or 'reports’ of direct discourse. This conclusion, if correct, provides additional evidence for the universality of the structure of the left/right periphery.

In the following section, I discuss the parallelism between to and the Spanish que in some detail. As noted above, they can both take question CPs as complements. Rivero (1994) presents examples where imperatives follow que in support of Plann’s (1982) analysis. Kuno (1988) notes similar facts in Japanese and argues that the complements of to can be a “blended discourse,” which starts out as a regular embedded sentence and ends with a verb that expresses a request. I reexamine those facts and show that they too provide supporting evidence for Plann’s analysis. In Section 3, I turn to no. Kuno (1973) argues that the CPs headed by this complementizer typically carry factive presuppositions in the sense of Kiparsky and Kiparsky (1970). I first show that the distribution of no is much wider than his analysis implies. Then, I argue that it should be considered the complementizer for propositional complements. Section 4 concerns the structure of the Japanese right periphery. I discuss the co-occurrence restrictions on the three complementizers, to, ka and no, and also the distribution of thematic topics. This leads to the hypothesis on the structure of the Japanese right periphery alluded to above. Section 5 concludes the paper.

2. To as a Complementizer for Paraphrases of Direct Discourse

In this section, I examine cases where to takes questions and expressions of request as complements and argue that it is a complementizer for ‘paraphrase’ or ‘report’ of direct discourse just like que in Spanish. Section 2.1 concerns examples in which to follows questions and Section 2.2 deals with those in which it follows expressions of request.

---

\(^3\) The C heads in Japanese appear in the mirror image of Italian because of the head-parameter. As discussed below in Section 4, it is argued in Kuroda (1988) and Saito (2007) that Japanese allows multiple thematic topics. The basic pattern of focusing in Japanese is like English: Any phrase with stress is interpreted as focus in situ.
2.1. The Parallelism of to and que with respect to Question Complements

Another well-known property of to is that it is employed for direct discourse as well as indirect discourse. It follows a direct quotation in (10a), while it marks an indirect discourse in (10b).

(10) a. Hanako-ga, “Watasi-wa tensai da,” to itta/omotta (koto) H.-NOM I-TOP genius is to said/thought fact 
'(the fact that) Hanako said/thought, “I’m a genius.”'

b. Hanako-ga [CP zibun-ga tensai da to] itta/omotta (koto) H.-NOM self-NOM genius is to said/thought fact 
'(the fact that) Hanako said/thought that she is an genius’

A CP complement as in (10b) is usually considered to represent a proposition. This is because to heads the CP complements of typical bridge verbs, as noted above. On the other hand, a different complementizer ka is required for CP complements when the matrix verbs select questions. This is illustrated in (11).

‘Taroo thinks that Hanako is coming to his house’

‘Taroo asked Ziroo if Hanako is coming to his house’

c. Taroo-wa [CP [TP Hanako-ga kare-no ie-ni kuru] *to/ka] siritagatteiru T.-TOP H.-NOM he-GEN house-to come to ka want to know 
‘Taroo wants to know if Hanako is coming to his house’

The matrix verbs, tazuneru ‘inquire’ and siritagatteiru ‘want to know’, in (11b-c) select questions, and their CP complements must contain ka. It then looks like to is a [-Q] C while ka is a [+Q] C.

However, as noted above, the [+Q] C ka can be followed by to in some cases. To follows a yes/no question in (12a) and a wh-question in (12b).

‘Lit. Taroo asked Ziroo that if Hanako is coming to his house’

‘Lit. Taroo asked Ziroo that who is coming to his house’

As the matrix verb tazuneru ‘inquire’ selects for a question CP as shown in (11b), it appears that the verb and the question complementizer ka enter into selectional relation across to in (12). It is then
tempting to hypothesize that to is unspecified with respect to [±Q] and is transparent for the purpose of selection. But this cannot be the correct analysis because not all verbs that select questions allow the ka-to sequence. (13a-b) show that (12a-b) become ungrammatical when siritagatteiru ‘want to know’ is substituted for tazuneta ‘inquired’.

   T.-TOP   H.-NOM he-GEN house-to come ka to want to know
   ‘Lit. Taroo wants to know that if Hanako is coming to his house’

   T.-TOP   who-NOM he-GEN house-to come ka to want to know
   ‘Lit. Taroo wants to know that who is coming to his house’

It is then necessary to examine which matrix verbs allow the ka-to sequence to find out what is going on in examples such as (12).

At this point, Plann’s (1982) analysis of Spanish que mentioned above becomes quite relevant. The examples in (4b-c), where que takes a question CP complement, are repeated below as (14a-b).

(14) a. Te preguntan que para qué quieres el préstamo
   you ask(3pl.) que for what want(2sg.) the loan
   ‘They ask you what you want the loan for’

   b. Pensó que cuáles serían adecuados
   thought(3sg.) que which ones would be appropriate
   ‘He wondered which ones would be appropriate’

Plann notes that only a subset of those verbs that select for question CPs allow the presence of que. (15) shows some cases where que cannot occur.

(15) Ya supieron/entendieron/recordaron (*qui) por qué lo habías hecho
   already found out(3pl.)/understood(3pl.)/remember(3pl.) que why it had(2sg.) done
   ‘They already found out/understood/remembered why you had done it’

Examining more relevant examples, she draws the generalization that que can take a question CP as a complement only when the matrix verb is a verb of saying or thinking, that is, a verb that is compatible with direct quotation. Based on this, she goes on to propose that the que-headed CPs express paraphrases of direct discourse in this case.

Plann’s generalization and analysis are directly applicable to Japanese. A partial list of the matrix predicates that allow the ka-to sequence, that is, a to-headed CP with a question complement, is given in (16a). On the other hand, the predicates in (16b) are incompatible with the ka-to sequence.

b. *ka-to: tyoosasuru ‘investigate’, hakkensuru ‘discover’, rikaisuru ‘understand, siranai ‘don’t know’

The predicates in (16a) are verbs of saying and thinking, and those in (16b) are not. The former can occur with direct quotes, and the latter cannot, as illustrated in (17).

(17) a. Taroo-wa, “Boku-ga soko-ni ikimasuyoo ka” to itta  
          T.-TOP       I-NOM there-to shall go  ka  to said
          ‘Taroo said, “Shall I go there?”’

b. *Taroo-wa, “Dare-ga soko-ni ikimasu ka” to siranai  
          T.-TOP       who-NOM there-to go  ka  to not know
          ‘Lit. Taroo doesn’t know, “Who is going there?”’

Thus, to can take a question CP as a complement in exactly the same context as que. Then, it too should be analyzed as a complementizer for paraphrases of direct discourse. In the following subsection, I examine another peculiar property of to discussed in Kuno (1988). I show that it provides further evidence for this analysis of to, and also for the parallelism between to and que.

2.2. Kuno (1988) on Blended and Quasi-Direct Discourse

Kuno (1988) examines examples such as (18a), and argues that a to-headed CP complement can represent a “blended discourse,” which starts out as indirect and shifts to direct.

(18) a. Taroo-wa zibun-no uti-ni kite kure to Ziroo-ni itta  
          T.-TOP       self-GEN home-to come for me to Z.-DAT  said
          ‘Lit. Taroo said to Ziroo that come to self’s house’

b. Taroo-wa, “Boku-no uti-ni kite kure,” to Ziroo-ni itta  
          T.-TOP       I-GEN home-to come for me to Z.-DAT  said
          ‘Taroo said to Ziroo, “Come to my house.”’

Kuno assumes that the predicate of the embedded clause of (18a) represents a direct discourse as it expresses a request. On the other hand, the initial part of the clause must be indirect because zibun ‘self’ takes the matrix subject Taroo as its antecedent. If it were a direct quotation of Taroo’s utterance, the first person pronoun boku ‘I’ should occur instead of zibun as shown in (18b). In this subsection, I argue that Kuno’s “blended discourse” is indirect discourse, and that the grammaticality of examples such as (18a) is indeed predicted by the analysis of to as a complementizer for paraphrases of direct discourse.

Although Kuno analyzes the embedded clause of (18a) as “blended discourse,” he also points out that the direct part cannot be a direct quotation of Taroo’s utterance. Note first that expressions

---

4 It seems that complementizers of this kind are quite widespread. See, for example, Jayaseelan (2008) for relevant discussion on Malayalam, and Grewendorf and Poletto (2009) for a similar phenomenon in Cimbrian, a German dialect spoken in northeastern Italy.
of request vary in form in accordance with the degree of "politeness," as illustrated in (19).

(19) a. #Taroo-wa, “Boku-no uti-ni kite kure,” to Ito-sensei-ni itta
   T.-TOP I-GEN home-to come for me to 1.-Prof.-DAT said
   ‘Taroo said to Prof. Ito, “Come to my house.”’

   b. Taroo-wa, “Watasi-no uti-ni oide itadakemasu ka” to Ito-sensei-ni itta
   T.-TOP I-GEN home-to come for me (polite) ka to 1.-Prof.-DAT said
   ‘Taroo said to Prof. Ito, “Could you to come to my house?”’

(19a) is not an appropriate utterance of Taroo, a student, to his teacher, Prof. Ito, because kite kure ‘come for me’ is a non-polite, neutral expression. (19b) shows what Taroo would actually say in this context. What Kuno observes is that the judgments, interestingly, are reversed when direct discourse is turned into “blended discourse.” (20) confirms this observation.

(20) a. Taroo-wa zibun-no uti-ni kite kure to Ito-sensei-ni itta
   T.-TOP self-GEN home-to come for me to 1.-Prof.-DAT said
   ‘Lit. Taroo said to Prof. Ito that come to self’s house’

   b. *Taroo-wa zibun-no uti-ni oide itadakemasu ka to Ito-sensei-ni itta
   T.-TOP self-GEN home-to come for me (polite) ka to 1.-Prof.-DAT said
   ‘Lit. Taroo said to Prof. Ito that could you to come to my house?’

(20a) contains the non-polite, neutral form, kite kure ‘come for me’, and is perfectly grammatical. On the other hand, (20b) with the polite form is not. Kuno concludes then that the direct part of “blended discourse” is not precisely direct but only “quasi-direct.”

Kuno goes on to discuss why polite expressions are not allowed in “blended discourse.” His answer is that this is because polite forms of verbs do not appear in embedded clauses, as shown in (21).

   I-TOP yesterday bought (polite) book-ACC read (polite)
   ‘I read the book I bought yesterday’

   b. Watasi-wa [NP [kinoo katta] hon]-o yomimasita
   I-TOP yesterday bought (neutral) book-ACC read (polite)
   ‘I read the book I bought yesterday’

The sentences in (20) are polite expressions as the matrix verb is in the polite form. Yet, the verb in the relative clause must be in the neutral form as the contrast between (21a) and (21b) indicates. Kuno’s analysis is that the polite form of the expression of request in (20b) is excluded for the same reason.

This analysis, interestingly, suggests that “blended discourse” is after all indirect discourse. This is so because it patterns with embedded clauses while direct discourse is known to have matrix
properties. Then, the remaining question is why to can embed a sentence expressing a request. This is mysterious if a CP headed by to stands for a proposition. The following English example is totally out:

(22) *John said to Mary that (please) come to his house

However, the answer is straightforward given the analysis of to proposed in the preceding subsection. To, unlike that, is a complementizer for paraphrases of direct discourse. The direct discourse that is paraphrased can be an expression of request as well as a question. Hence, the analysis predicts correctly that an expression of request can appear as the complement of to just like a question can.

It was argued in the preceding subsection that to is just like que in Spanish. Then, it is predicted that “blended discourse” is observed in Spanish as well. This prediction is indeed borne out. Rivero (1994) presents examples in which que takes imperative complements in support of Plann’s (1982) analysis. One of her examples is shown in (23a), together with its direct discourse counterpart in (23b).

(23) a. Dijo que a no molestarle
     said (3sg.) que to not bother-him
     ‘He said not to bother him’

   b. Dijo, “A no molestarme!”
     said (3sg.) to not bother-me
     ‘He said, “Don’t bother me!”’

In (23a), the embedded object clitic can corefer with the matrix subject, and in this case, the embedded clause must represent indirect discourse despite the fact that it is an imperative. Rivero’s conclusion is in fact identical to the one drawn above for “blended discourse” in Japanese. As que can be a complementizer for paraphrases of direct discourse, it is not at all surprising that it can take imperatives as well as questions as complements. Thus, the comparison of Kuno (1988) and Rivero (1994) leads to another parallelism between to and que.

3. No as a Complementizer for Propositions

It was shown above that to can be a complementizer for paraphrases of direct discourse exactly like que. According to Plann (1982), que is ambiguous between a complementizer for paraphrases and a complementizer for propositions. In this section, I argue that to is specialized for the former function. More precisely, I argue that there is a division of labor between to and another complementizer no: to is for paraphrases and no is for propositions.

3.1. Clausal Complements Designating States, Events, and Actions

An example of que with an embedded proposition was shown in (4a), repeated below as (24).
(24) Sabía que corría.
    'He knew that he was running'

In a parallel context, the complementizer no is employed in Japanese, as shown in (25).\(^5\)

(25) Taroo-wa [\(\text{CP}[\text{TP Hanako-ga soko-ni iru no]-o siitteita}\)]
    T.-TOP H.-NOM there-in is no-ACC knew
    'Taroo knew that Hanako was there'

This raises the possibility that to, unlike que, is unambiguously a complementizer for paraphrases of direct discourse, and that no is the complementizer for propositions. In this section, I argue that this is indeed the case.

Discussing the distributions of to and no, Kuno (1973) presents a rough generalization that no is associated with a factive presupposition in the sense of Kiparsky and Kiparsky (1970) while this is never the case with to.\(^6\) However, the distribution of no is much wider than this suggests. Partial lists of the predicates that take to-headed CP complements and those that appear with no-headed CPs are shown in (26).

(26) a. predicates that take to-headed CP complements
    syutyoosuru ‘claim, insist’, tazuneru ‘inquire’, kitaisuru ‘expect’, kanziru ‘feel’

b. predicates that take no-headed CP complements
    kyojisuru ‘refuse’, ukeireru ‘accept’, kitaisuru ‘expect’, kanziru ‘feel’

predicates that take no-headed CP subjects
    akiraka ‘clear’, kanoo ‘possible’, kantan ‘easy’, muzukasii ‘difficult’, taihen ‘big deal’

Typical factive verbs such as wasureru ‘forget’ and kookaisuru ‘regret’ take CP complements headed by no. But they are clearly a minority in (26b).

Then, what would be the proper characterization of the distributions of to and no? First, the predicates in (26a) are all verbs of saying and thinking. They are indeed all compatible with direct quotation. A couple of examples are given in (27).

---

\(^5\) No is nominal in nature and requires a Case marker when it heads a CP in an argument position. I present Murasugi’s (1991) argument in the following subsection that it should still be considered a complementizer rather than a noun.

\(^6\) He also considers koto, which has a similar but not identical distribution as no. I do not discuss it here as it is fairly clear that it is a noun.
(27) a. Taroo-wa, “Boku-no uti-ni atumatte kure,” to sakenda
   T.-TOP I-GEN house-at gather for me to screamed
   ‘Taroo screamed, “Gather at my house!”’

   H.-TOP I-NOM T.-DAT meet to insisted
   ‘Hanako insisted, “I will go see Taroo.”’

It seems then that to always serves as a complementizer for paraphrases of direct discourse when it heads a complement CP.

The no-headed CPs that appear with the predicates in (26b), on the other hand, all seem to represent events, states, or actions. For example, one regrets a past event or a present state, sees a present event or state, waits for a future event or state, and hesitates to perform an action. The same can be said of those no-headed CPs in the subject position. What can be clear is the existence (or non-existence) of an event or state in the past, present, or future. Similarly, what can be easy or difficult is to perform a certain action. In short, those CPs headed by no seem to always represent propositions. This is consistent with Kuno’s observation that factive verbs take no-headed CPs and never to-headed CPs as complements. Only sentences that express propositions can be presupposed to be true. Hence, those verbs are compatible only with no-headed CPs.

Then, there is a division of labor between to and no: to is the complementizer for paraphrases of direct discourse while no is the complementizer for propositions. An additional piece of evidence for this can be found in data from child language. As discussed extensively in the acquisition literature, the overgeneration of no in relative clauses is widely observed with 2-4 year olds. The following examples are from Murasugi (1991):

(28) a. [ohana motteru *[no] wanwa (2;6)
   flower have no doggie
   ‘the doggie that is holding flowers’

   b. [buta-san tataiteru *[no] taiko (2;11)
   Mr. Pig is hitting no drum
   ‘the drum that the pig is playing’

These examples are ungrammatical in adult Japanese with no. Murasugi examines the properties of the overgenerated no in detail, and argues that it is a complementizer. According to her analysis, relative clauses are TPs in adult Japanese. However, children at one point hypothesize that they are CPs, just like English relative clauses, and hence, place no in their head positions. They only later discover that there is no position for a complementizer in Japanese relatives and cease to overgenerate no.

One question that arises with this analysis is why no, and not to, is overgenerated in the head positions of relative clauses. Murasugi (2009) addresses this question, referring to Schachter’s (1973) observation that many languages employ the same complementizer in relative clauses and
clefts. No appears in Japanese clefts as shown in (29).

(29)  [CP Nimotu-ga todoita no]-wa Nagoya-kara da
      package-NOM arrived no-TOP N.-from is
      ‘It is from Nagoya that a package arrived’

Then, given Schachter’s generalization, it is not surprising that children overgenerate no. But one may ask further why it is that no, and not to, is employed in clefts and children’s relative clauses. And for this, the analysis of to as a complementizer for paraphrases of direct discourse provides a clear answer. The subject CP of a cleft sentence expresses a proposition and is not a paraphrase of direct discourse. Hence, no must be employed. There is simply no way for to to appear in this context. Similarly, a relative clause does not paraphrase a direct discourse. Then, children could not overgenerate to in relative clauses. This account holds if to is never a complementizer for propositions and is employed exclusively as a complementizer for paraphrases of direct discourse, as argued here.

3.2. The Nominal Nature of no and its Complementizer Status

I argued above that no is the complementizer for propositions in Japanese. A CP headed by no requires Case when it is in an argument position as noted in Footnote 5, and it is often called a ‘nominalizer’ in part for this reason. Although whether no is a complementizer or a noun does not affect the overall discussion in this paper, I would like to briefly comment on its complementizer status in this subsection.

The Case property of no just mentioned clearly indicates that no is nominal in nature. However, it does not provide decisive evidence that it is a noun. First, it is known that complementizers vary with respect to their Case properties. For example, as discussed in detail in Stowell (1981), English CPs headed by that do not appear in typical Case positions like the object position of a preposition, but there is no such restriction with question CPs. Relevant examples are shown in (30).

(30) a.  *They talked about [CP that Mary is a genius]
       b.  They talked about [CP whether Mary is a genius]

Thus, Stowell concludes that that-headed CPs cannot be Case marked while question CPs can be. Note that question CPs only allow Case and do not require Case. The following examples are perfectly grammatical though the embedded CPs are not in Case positions:

(31) a.  They wonder [CP whether Mary is a genius] (cf. *They wonder it)
       b.  It was debated [CP whether Mary is a genius] (cf. *It was debated it)

A parallel observation can be made with no-headed CPs and question CPs in Japanese. Thus, the former cannot appear in the object position of a postposition but the latter can, as shown in (32).

---

7 Another relevant fact is that the predicates that take no-headed CP complements correspond roughly to those in English that take gerunds as complements. See Rosenbaum (1967) for detailed discussion on the latter.
(32) a. *Karera-wa [CP Hanako-ga soko-ni iku to]-nituite kangaeta
   they-TOP H.-NOM there-to go to-about considered
   ‘They thought about Hanako going there’

   b. Karera-wa [CP Hanako-ga soko-ni iku beki ka]-nituite kangaeta
      they-TOP H.-NOM there-to go should ka-about considered
      ‘They thought about whether Hanako should go there’

However, no adds to the paradigm in the case of Japanese. That is, to resists Case, ka allows Case, and no requires Case, as shown in (33).8

(33) a. Karera-wa [CP Hanako-ga soko-ni iku to](*o) omotta
      they-TOP H.-NOM there-to go to-ACC thought
      ‘They thought that Hanako was going there’

   b. Karera-wa [CP Hanako-ga doko-ni iku beki ka](*o) kentoosita
      they-TOP H.-NOM where-to go should ka-ACC discussed
      ‘They discussed where Hanako should go’

   c. Karera-wa [CP Hanako-ga soko-ni iru no](-o) kanzita
      they-TOP H.-NOM there-in is no-ACC felt
      ‘They felt that Hanako was there’

Thus, the three-way distinction in (34) obtains.

(34) To cannot appear in a Case position.
    Ka can appear in a Case position.
    No must appear in a Case position.

It seems difficult to account for this based on the categorial difference between a complementizer and a noun. The whole paradigm instead seems to reflect the lexical properties of the specific items.

Stronger arguments for the complementizer status of no are presented in Murasugi (1991). One of them is based on children’s overgeneration of no, discussed above. The relevant examples in (28) are repeated below in (35).

(35) a. [ohana motteru *no] wanwa (2;6)
       flower have no doggie
       ‘the doggie that is holding flowers’

   b. [buta-san tataiteru *no] taiko (2;11)
      Mr. Pig is hitting no drum
      ‘the drum that the pig is playing’

---

8 The accusative -o is often omitted in colloquial style. But the contrast between (33b) and (33c) is quite clear. The former is grammatical without -o in any register.
In order to examine the category of the overgenerated *no*, Murasugi considers three possibilities; the genitive Case marker, a pronoun, and a complementizer, which are all homophonous and realized as *no*. The genitive *no* appears after any NP or PP within a nominal projection, as illustrated in (36).

(36) a. Taroo-no hon  
    T.-GEN book  
    ‘Taroo’s book’

b. Hanako-no yooroppa-e-no ryokoo  
    H.-GEN Europe-to-GEN trip  
    ‘Hanako’s trip to Europe’

c. midori-iro-no kuruma  
    green-color-GEN car  
    ‘a green car’

The pronoun *no*, which roughly corresponds in meaning to *one* in English, is observed in examples like (37a-b).

(37) a. mizukasii no  
    difficult one  
    ‘a difficult one’

b. [Taroo-ga katta] no  
    T.-NOM bought one  
    ‘the one that Taroo bought’

Murasugi first excludes the genitive *no* by observing the overgeneration pattern in Toyama Dialect, where the genitive is *no* as in most other dialects but the pronoun and the complementizer are realized as *ga*. As the Toyama Dialect speaking children overgenerate *ga* as in (38), the *no* in (35) cannot be the genitive Case marker.

(38) [anpanman tuitoru *ga] koppu (2;11)  
    (a character) attach *ga* cup  
    ‘a cup that is pictured with “anpanman”’

Then, she presents an argument that it is not a pronoun either. Note first that if the “relative clauses” in (35) and (38) are headed by the pronoun *no/ga*, they must be NPs. This means that the genitive *no* is required between those “relatives” and the head noun. Murasugi shows through an experimental study that those children who overgenerate *no/ga* in relative clauses never fail to insert the genitive *no* after an NP modifying an N. Then, if the “relative clauses” are indeed NPs, the children must insert the genitive *no* after those “relatives,” but they never do. She concludes then that the overgenerated *no/ga* cannot be a pronoun and hence must be a complementizer.

This argument against the analysis of the overgenerated *no/ga* as a pronoun suggests simultaneously that the “complementizer *no/ga*” cannot be a noun. Suppose that the children...
overgenerate the “complementizer no/ga” in relative clauses as Murasugi argued. If the “complementizer no/ga” is a noun, then the “relative clauses” must be NPs. Then, again, the children must insert the genitive no after those “relative clauses.” Since they do not, it is clear that the children do not consider the “complementizer no/ga” a noun. What the children overgenerate must be no/ga of the category complementizer. This presents indirect but strong evidence that the no/ga in question is a complementizer in adult grammar as well.

4. Preliminary Notes on the Japanese Right Periphery

It was argued in the preceding sections that Japanese has the three complementizers in (39).

(39) a. To is the complementizer for paraphrases of direct discourse in the sense of Plann (1982).
   b. Ka is the complementizer for CPs that represent questions.
   c. No is a complementizer for CPs that represent propositions.

In Section 4.1, I consider the hierarchical relation among those complementizers and suggest that no is the Finite head. Then, in Section 4.2, I argue that there is a Topic head above the Finite no and below ka, which I consider to be a Force head. This leads to the conclusion that the Japanese right periphery is remarkably similar in structure to the Italian left periphery proposed in Rizzi (1997).

4.1. CP Recursion at the Right Periphery

As noted above, an embedded CP in Japanese can contain a sequence of the complementizers, ka and to. Another example is shown in (40).

(40) Taroo-wa [CP kare-no imooto-ga soko-ni ita ka (to)] minna-ni tazuneta
    T.-TOP he-GEN sister-NOM there-in was ka to all-DAT inquired
    ‘Taroo asked everyone if his sister was there’

The number of complementizers in a single CP is not limited to two. There are in fact cases where all three complementizers appear. (40), for example, can have no preceding ka, as in (41).

(41) Taroo-wa [CP kare-no imooto-ga soko-ni ita (no) ka (to)] minna-ni tazuneta
    T.-TOP he-GEN sister-NOM there-in was no ka to all-DAT inquired
    ‘Taroo asked everyone if his sister was there’

This example instantiates three kinds of complementizer sequences, no-ka, ka-to, and no-ka-to. Whenever there are multiple complementizers, their order is fixed in this way. This suggests that Japanese CPs can have the recursive structure in (42).

(42) [CP [CP [CP … no] ka] to]

The structure in (42) undoubtedly has a semantic basis. Ka can select a CP headed by no as a question can be formed on a proposition. To, in turn, can select a CP headed by ka as to embeds a paraphrase of a direct discourse and the direct discourse can be a question, as discussed in detail in
Section 2. One case that (42) allows but is missing is the no-to sequence. (43) is ungrammatical with no.

(43) Taroo-wa [CP kare-no imooto-ga soko-ni ita (*no) to] omotta
     T.-TOP he-GEN sister-NOM there-in was no to thought
     ‘Taroo thought that his sister was there’

This too is expected because a no-headed CP represents a proposition while to embeds a paraphrase of direct discourse. Other orderings of complementizers are plausibly excluded in similar ways. For example, the ka-no sequence is illicit as the content of a proposition cannot be a question.

Given the hierarchy in (42), it is tempting to compare it with the structure of the Italian left periphery proposed in Rizzi (1997). As noted at the outset of the paper, he proposes the structure in (44).

(44) [Force [(Topic*) [(Focus) [(Topic*) [Finite [TP ... ]]]]]

Ka, being the question marker, is plausibly a Force head. To occupies a higher C position that does not appear in (44). Let us call this C ‘Report’, following Lahiri (1991). Finally, no is analyzed as Finite in Hiraiwa and Ishihara (2002). As it occupies the lowest C position in (42), this fits the hierarchy in (44) well. Further, the children’s overgeneration of no in relative clauses discussed above receives a straightforward interpretation under this analysis. Although it is a bit unclear what force relative clauses have, it is not surprising if children produce relative clauses as FiniteP. Then, they would overgenerate no in the head position. In the remainder of this subsection, I introduce another piece of suggestive evidence from Matsumoto (2010) for this analysis of no.

Matsumoto examines the types of sentential complements no can take and shows that they are more limited when compared with ka and to. In particular, she argues that the complement of no must be headed by a morphologically overt T. She first notes that there are modal-like words that do not inflect for tense. Daroo ‘it is probably the case that’ in (45) is one such element.

(45) a. Taroo-wa soko-ni iru daroo
     T.-TOP there-at is daroo
     ‘Taroo probably is there’

b. Taroo-wa soko-ni ita daroo
     T.-TOP there-at was daroo
     ‘Taroo probably was there’

The complement of daroo can be in present or past, but daroo itself does not carry tense. And interestingly, sentences headed by daroo can be embedded under ka or to, but not under no. This is shown in (46).

---

9 Thanks to Adriana Belletti for pointing out the relevance of Hiraiwa and Ishihara (2002) in this context. I do not discuss their argument here because it is based on an attractive and yet controversial analysis of Japanese clefts.
(46) a. Taroo-wa [\text{CP} ame-ga huru (daroo) ka] kangaeta
   T.-NOM rain-NOM fall \text{daroo} ka considered
   ‘Taroo considered whether it would rain’

b. Taroo-wa [\text{CP} ame-ga huru (daroo) to] omotta
   T.-TOP rain-NOM fall \text{daroo} to thought
   ‘Taroo thought that it would rain’

c. Taroo-wa [\text{CP} ame-ga huru (*\text{daroo} no]-o kitaïsita
   T.-TOP rain-NOM fall \text{daroo no}-ACC expected
   ‘Taroo hoped that it would rain’

The ungrammaticality of (46c) with \text{daroo} is likely to be due to the incompatibility of it and \text{no}. The example is fine without \text{daroo}. Further, as Matsumoto points out, it becomes grammatical also when the formal noun \text{koto} is substituted for \text{no} as in (47).

(47) Taroo-wa [ame-ga huru (daroo) koto]-o kitaïsita
   T.-TOP rain-NOM fall \text{daroo} N-ACC expected
   ‘Taroo hoped that it would rain’

Although \text{koto} literally means ‘matter’, ‘state’ or ‘fact’, it has little semantic content in this context.\textsuperscript{10} Thus, there is basically no difference in meaning between (46c) and (47). It seems then that (46c) is out because \text{no}, specifically, cannot take a clausal complement headed by \text{daroo}.

On the basis of observations like this, Matsumoto concludes that \text{no} can only take clausal complements that are headed by Tense. This is expected if \text{no} is Finite, because Finite is by definition the C that is closely related with T. Matsumoto’s discussion thus provides suggestive evidence that \text{no} is in fact the Finite head.

4.2. The Position of Topic in the CP Structure

The hypothesis arrived at so far on the Japanese right periphery is shown in (48).

(48) [… [… [… Finite (no)] Force (ka)] Report (to)]

In this subsection, I consider how Topic fits into this structure. More specifically, I argue that Topic heads can be generated above Finite and below Force as in (49).

(49) [… [… [… [… Finite (no)] (Topic*)] Force (ka)] Report (to)]

A classical analysis of topic and focus in Japanese is found in Kuno (1973). Any stressed phrase receives focus interpretation in situ in this language. But Kuno discusses one case where focus interpretation seems to arise in a specific position in the sentence. Let us consider the examples in (50) for illustration.

\textsuperscript{10} Kuno (1973) considers it a complementizer, as noted in Footnote 6.
(50) a. Hanako-ga sono hon-o yonde ita
   H.-NOM that book-ACC reading was
   ‘Hanako was reading that book’

b. Hanako-ga sono hon-ga suki da
   H.-NOM that book-NOM like
   ‘It is Hanako that likes that book’

(50a) can be a neutral description of a past progressive event. On the other hand, (50b) only has the interpretation with focus on the subject Hanako. Examining examples of this kind extensively, Kuno proposes the generalization that matrix-initial nominative phrase receives focus when the predicate is stative. The generalization is on matrix clauses and it does not apply to embedded clauses. Thus, Hanako need not be interpreted as focus when (50b) is embedded as in (51).

(51) Taroo-ga [NP [Hanako-suki na] hon]-o katta (koto)
   T.-NOM that book-ACC bought fact
   ‘(the fact that) Taroo bought a book that Hanako likes’

Kuno (1973) also discusses topics that are marked by the particle -wa, and notes that they can receive two distinct interpretations. Taroo in (52a), for example, can be interpreted as a thematic topic or as a contrastive topic.

(52) a. Taroo-wa sono hon-o yonda
   T.-TOP that book-ACC read
   A. ‘As for Taroo, he read that book’ (thematic topic)
   B. ‘Taroo read that book, but I don’t know about the other people’ (contrastive topic)

b. Taroo-ga sono hon-wa yonda
   T.-NOM that book-TOP read
   ‘Taroo read that book, but I don’t know about the other books’ (contrastive topic)

However, he observes at the same time that while the contrastive topic interpretation is always available, only a sentence-initial wa-phrase can be construed as a thematic topic. The object is marked by -wa in (52b), and it can only be a contrastive topic. It must be placed at the sentence-initial position as in (53) to receive the thematic topic interpretation.

(53) Sono hon-wa Taroo-ga yonda
   that book-TOP T.-NOM read
   A. ‘As for that book, Taroo read it’ (thematic topic)
   B. ‘Taroo read that book, but I don’t know about the other books’ (contrastive topic)

Kuno notes that here also, sentence-initial means matrix-initial. The topic in the initial position of the relative clause in (54) cannot be construed as a thematic topic.

---

11 Kuno (1973) refers to this kind of focus as ‘exhaustive-listing focus’.
(54) Taroo-ga [NP [Hanako-wa suki na] hon]-o katta (koto)
T.-NOM H.-TOP like book-ACC bought fact
‘Taroo bought a book that Hanako, though probably not the others, like’ (contrastive topic)

Building on Kuno’s observations, Heycock (1994) argues that there is no sentence-initial focus position in Japanese and proposes to analyze the focus interpretation discussed above in the mapping from syntax to information structure. This analysis is extended to thematic topics in Heycock (2008). The strongest piece of evidence for this approach is that those focus and thematic topic interpretations are matrix phenomena. If there were focus and topic positions in Japanese, then they would be expected to occur in embedded clauses as well as matrix clauses. This is indeed the case in Italian, as the following example from Rizzi (1997) shows:

(55) Credo che a Gianni, QUESTO, domani, gli dovremmo dire
I believe that to Gianni this tomorrow we should say
‘I believe that we should say this to Gianni tomorrow’

In this example, a Gianni and domani are topics and questo is a focus in the complement CP. On the other hand, if foci and thematic topics are represented in the information structure, it is not surprising that they occur only in matrix clauses.

Heycock’s argument is well taken for the obligatory focus interpretation of sentence-initial nominative phrases as it is indeed observed only in matrix clauses. It was shown in (51) that it is not observed in a relative clause. Other types of embedded clauses exhibit the same pattern as shown in (56).

(56) a. Taroo-ga [CP Hanako-ga sono hon-ga suki na no]-o wasureteita koto
T.-NOM H.-NOM that book-NOM like no-ACC forgot fact
‘the fact that Taroo forgot that Hanako likes that book’

b. Taroo-ga [CP Hanako-ga sono hon-ga suki da to] sinziteiru koto
T.-NOM H.-NOM that book-NOM like to believe fact
‘the fact that Taroo believes that Hanako likes that book’

In these examples, focus interpretation is not forced on the embedded subject Hanako. However, it has been known that there are cases where thematic topics occur in embedded clauses. Typical examples are shown in (57).

(57) a. Taroo-ga [CP Hanako-wa zibun-no uti-ni kuru to] sinziteiru koto
T.-NOM H.-TOP self-GEN home-to come to believe fact
A. ‘the fact that Taroo believes that as for Hanako, she is coming to his house’
   (thematic topic)
B. ‘the fact that Taroo believes that Hanako, though probably not the others, is coming to his house’ (contrastive topic)
b. Taroo-ga [CP Hanako-wa zibun-no uti-ni ita to] itta koto
   T.-NOM       H.-TOP       self-GEN home-at was to said fact
A. ‘the fact that Taroo said that as for Hanako, she was at his house’ (thematic topic)
B. ‘the fact that Taroo said that Hanako, though probably not the others, was at his house’
   (contrastive topic)

In both of these examples, Hanako can easily be construed as a thematic topic although it is
embedded within a to-headed CP. Examples like these are often just mentioned in footnotes as
exceptions. But they seem to provide an important clue for the analysis of thematic topics. First, the
embedded CPs in (57) clearly represent indirect discourse as the reflexive zibun ‘self’ refers to the
matrix subject. Hence, the interpretive property of these examples cannot be attributed to the fact
that to can be a marker of direct quotation. Secondly, these examples are after all very similar to the
Italian (55), which shows that embedded CPs can contain positions for foci and in particular
topics.\(^\text{12}\)

The contrast between (54) and (57) indeed suggests that there are specific positions for thematic
topics. (54) shows that thematic topics cannot occur in relative clauses, which I assume are TPs.
(57), on the other hand, suggest that they can be located within CPs headed by to, which are the
largest CPs according to the recursive CP structure in (48). Then, if thematic topics occupy the Spec
position of a Topic head, the following structure accommodates the data discussed so far.\(^\text{13}\)

(58) \[\ldots \quad \text{[TopicP Thematic Topic \text{[Topic\text{'} [TP \ldots \text{Topic}\text{]} \text{Report (to)}]]} \]

The position for thematic topics is outside TP, and hence they cannot occur in relative clauses. But
they can be present in CPs headed by to because the position is contained within to-headed CPs.
Given this kind of reasoning, it should be possible to pinpoint the location of the Topic head by
examining whether thematic topics are possible in other types of CPs. Although the relevant data
require subtle judgment in some cases, they indicate that the Topic head is located just above Finite
and just below Force.

First, examples such as those in (59) show that thematic topics cannot be licensed within
no-headed CPs.

(59) a. Taroo-ga [CP Hanako-wa zibun-no uti-ni kuru no]-o wasureteita koto
   T.-NOM       H.-TOP       self-GEN home-to come no-ACC forgot fact
   ‘the fact that Taroo had forgotten that Hanako, though probably not the others, was
   coming to his house’ (contrastive topic)

\(^\text{12}\) Heycock (2008), for example, does take this kind of exceptions seriously and suggests that detailed
comparison with embedded verb-second in German may prove fruitful.

\(^\text{13}\) S.-Y. Kuroda assumed over the years that thematic topics are located in CP Spec. Thus, the proposal made
here is a refinement of his analysis. See in particular Kuroda (1988) for relevant discussion.
b. Taroo-ga [CP Hanako-wa zibun-no uti-ni hairu no] o mita koto
   T.-NOM   H.-TOP  self-GEN house-to enter no-ACC saw fact
   ‘the fact that Taroo saw Hanako, though not the others, enter his house’
   (contrastive topic)

In both (59a) and (59b), the contrastive topic interpretation is forced on the embedded subject Hanako. This indicates that the Topic head is not contained within a CP headed by no, or more straightforwardly, a FiniteP.

On the other hand, the following examples suggest that the thematic interpretation of topics is possible within ka-headed CPs:

(60) a. Taroo-ga [CP Hanako-wa zibun-no hon-o katta ka] tazuneta koto
   A. ‘the fact that Taroo asked if as for Hanako, she bought his book’ (thematic topic)
   B. ‘the fact that Taroo asked if Hanako, though probably not the others, bought his book’
      (contrastive topic)

b. Taroo-ga [CP Hanako-wa zibun-no uti-ni kuru no ka] siritagatteiru koto
   T.-NOM   H.-TOP  self-GEN home-to come no ka want-to-know fact
   A. ‘the fact that Taroo wants to know if as for Hanako, she is coming to his house’
      (thematic topic)
   B. ‘the fact that Taroo wants to know if Hanako, though probably not the others, is coming to his house’ (contrastive topic)

It seems then that the position for thematic topics, and hence, the Topic head are located within a ka-headed CP. This leads to the more refined CP structure in (61).

(61) [CP … [CP … [CP thematic topic [C’ [CP [TP …] Finite (no)] Topic]] Force (ka)] Report (to)]

(61) predicts correctly that thematic topics can occur in CPs headed by to or ka, but not in CPs headed by no or TPs.

Further, there is evidence that the Topic projection is recursive just as in Italian. As noted above, Kuno (1973) proposed a generalization that only a sentence-initial wa-phrase can be construed as a thematic topic. This is consistent with (62), where only the subject can receive thematic interpretation.

(62) Hanako-wa (kyonen) Teruabibu-e-wa itta
    H.-TOP last year Tel Aviv-to-TOP went
    A. ‘As for Hanako, she went to Tel Aviv, but I don’t know about the other places’
       (Hanako-thematic, Tel Aviv-contrastive)
    B. ‘Hanako went to Tel Aviv, but I don’t know about the other people and the other places’
       (Hanako-contrastive, Tel Aviv-contrastive)

Teruabibu-e ‘to Tel Aviv’ is not sentence-initial, and it can only be a contrastive topic. However,
Kuroda (1988) points out that multiple thematic topics are possible when the second topic is preposed over the first. (63) confirms this observation.

(63) Teruabibu-e-wa, [Hanako-wa (kyonen) ③ itta]
Tel Aviv-to-TOP H.-TOP last year went
A. ‘As for Tel Aviv, Hanako went there, but I don’t know about the other people’
   (Tel Aviv-thematic, Hanako-contrastive)
B. ‘As for Hanako, she went to Tel Aviv, but I don’t know about the other places’
   (Tel Aviv-contrastive, Hanako-thematic)
C. ‘As for Tel Aviv and as for Hanako, she went there’
   (Tel Aviv-thematic, Hanako-thematic)
D. ‘Hanako went to Tel Aviv, but I don’t know about the other places and the other people’
   (Tel Aviv-contrastive, Hanako-contrastive)

(63) is four-ways ambiguous as indicated: each of the two topics can receive thematic or contrastive interpretation. The interpretation that is important here is the one in C, where both Teruabibu-e ‘to Tel Aviv’ and Hanako are construed as thematic topics. This shows that multiple thematic topics can occur in a single clause contrary to Kuno’s generalization. Given the analysis presented above, it implies that the Topic projection can be recursive.14

The discussion above indicates that the CP system of Japanese is remarkably similar to that in Italian. Rizzi’s (1997) proposal in (44) for Italian is repeated below in (64).

(64) [ … Force [ … (Topic*) [ … (Focus) [ … (Topic*) [ … Finite [TP … ] ] ] ] ] ]

The structure for Japanese in a parallel format is as in (65).


There are only two differences aside from the linear order. One is the presence of the Report head in Japanese, as discussed in detail in Section 2. It seems clear that there is a parameter here. Spanish and Japanese have it, but Italian and English do not. The other concerns the absence of the Focus head in Japanese. For this also, there is likely to be a parameter. That is, languages may vary with respect the presence/absence of the Focus head within the C system. It would be much too hasty to propose a concrete hypothesis on the possible variations in the left/right periphery just on this basis. Nevertheless, the preliminary investigation in this paper suggests that the CP structure is fairly rigid across languages with the locus of variation in Report, Focus, and possibly Topic.

---

14 See Saito (2007) for detailed discussion of examples like (63). It is suggested there that thematic topics are licensed clause-initially, and the interpretation in B obtains when the contrastive topic is scrambled over the clause-initial thematic topic. One question that remains is why the two wa-phrases in (62) cannot both be in Spec positions of Top heads and be construed as thematic topics. Although I do not have a clear account for this, I suspect that some sort of crossing constraint is at work, preventing the subject topic from moving to the higher TopicP spec.
5. Conclusion

In this paper, I have examined the complementizer system of Japanese and presented a preliminary hypothesis on the structure of the Japanese right periphery. I first proposed that to is not a complementizer for embedded propositions as widely assumed, but is a complementizer for ‘paraphrases’ or ‘reports’ of direct discourse just like que in Spanish. I showed that Plann’s (1982) analysis of que is directly applicable to this complementizer. I then argued that no, which Kuno (1973) associates with factivity, has a wide distribution and should be considered the normal complementizer for embedded propositions. As noted above, these descriptive results provide explicit evidence for Plann’s (1982) proposal on Spanish. She proposes that Spanish has three complementizers; que for paraphrases, null C for questions, and que for propositions. Those three are not only present but have distinct phonetic realizations, to, ka and no, in Japanese.

In the second part of the paper, I first considered examples where to, ka and no co-occur, and suggested the three complementizers are hierarchically organized as in (48), repeated below in (66).

(66)  [... [...] [... Finite (no)] Force (ka)] Report (to)]

I then reexamined the distribution of thematic topics, and showed that they are not limited to the matrix-initial position as widely believed. I argued that they occur not only in to-headed CPs as sometimes observed but also in ka-headed CPs. This led to the hypothesis that there is a Topic projection located above FiniteP and below ForceP. Based on Kuroda’s (1988) observation that multiple thematic topics are possible, I proposed finally that the Japanese right periphery has the structure in (67).

(67)  [... [...] [... [...] Finite (no)] (Topic*)] Force (ka)] Report (to)]

As repeatedly noted, this is quite similar to the structure of the Italian left periphery proposed in Rizzi (1997). Further work is required to discover the precise structure of the Japanese right periphery. But this paper has demonstrated that it is quite rich, much more so than has been assumed, and that it is comparable to Spanish and Italian. Then, it seems fairly clear that its investigation can contribute fruitfully to the research project initiated by Rizzi (1997) on the universal properties and possible variations in the left/right periphery.

References


