

## Sentence Types and the Japanese Right Periphery\*

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### 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 [<sub>CP</sub> Hanako-ga Zi-roo-ni atta to] omotteiru  
T.-TOP H.-NOM Z.-DAT met *to* think  
'Taroo thinks that Hanako met Zi-roo'
- b. Taroo-wa [<sub>CP</sub> Hanako-ga dare-ni atta ka] tazuneta  
T.-TOP H.-NOM who-DAT met *ka* inquired  
'Taroo asked who Hanako met'
- c. Taroo-wa [<sub>CP</sub> Zi-roo-ni atta no]-o kookaisiteiru  
T.-TOP Z.-DAT met *no*-ACC regret  
'Taroo regrets that he met Zi-roo'

*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).<sup>1</sup>

- (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).

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<sup>1</sup> This is an extension of the analysis proposed in Kuno (1973, 1988). It becomes clear in the following pages where I depart from his analysis.

- (3) Taroo-wa Ziroo-ni [<sub>CP</sub> 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).<sup>2</sup> 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: *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 [<sub>CP</sub> 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).

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<sup>2</sup> 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 [CP [TP ...] *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, located between *no* and *ka* as in (8), that hosts thematic topics in its Spec.

(8) [CP [CP [CP [CP [TP ...] *no*] e<sub>[+TOPIC]</sub>] *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) [Force [(Topic\*) [(Focus) [(Topic\*) [Finite [TP ... ]]]]]]]

If *ka* is Force and *no* is Finite, Japanese is identical to Italian except for the presence of *to* and the absence of Focus.<sup>3</sup> I suggest then that the Japanese periphery is comparable to Italian with the addition of the highest C, *to*, which is equivalent to the Spanish *que* as a marker of ‘paraphrase’ or ‘report’ 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 complement 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.

### 2.1. The Parallelism of *to* and *que* with respect to Question Complements

<sup>3</sup> 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.

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 [<sub>CP</sub> 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).

- (11) a. Taroo-wa [<sub>CP</sub> [<sub>TP</sub> Hanako-ga kare-no ie-ni kuru] to/\*ka] omotteiru  
 T.-TOP H.-NOM he-GEN house-to come *to ka* think  
 ‘Taroo thinks *that* Hanako is coming to his house’
- b. Taroo-wa Ziroo-ni [<sub>CP</sub> [<sub>TP</sub> Hanako-ga kare-no ie-ni kuru] \*to/ka] tazuneta  
 T.-TOP Z.-DAT H.-NOM he-GEN house-to come *to ka* inquired  
 ‘Taroo asked Ziroo *if* Hanako is coming to his house’
- c. Taroo-wa [<sub>CP</sub> [<sub>TP</sub> 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* embeds a yes/no question in (12a) and a wh-question in (12b).

- (12) a. Taroo-wa Ziroo-ni [<sub>CP</sub> [<sub>CP</sub> [<sub>TP</sub> Hanako-ga kare-no ie-ni kuru] ka] to] tazuneta  
 T.-TOP Z.-DAT H.-NOM he-GEN house-to come *ka to* inquired  
 ‘*Lit.* Taroo asked Ziroo *that if* Hanako is coming to his house’
- b. Taroo-wa Ziroo-ni [<sub>CP</sub> [<sub>CP</sub> [<sub>TP</sub> 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’

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 [ $\pm$ 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’.

- (13) a. \*Taroo-wa [CP [CP [TP Hanako-ga kare-no ie-ni kuru] ka] to] siritagatteiru  
 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’
- b. \*Taroo-wa [CP [CP [TP dare-ga kare-no ie-ni kuru] ka] to] siritagatteiru  
 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.

- (16) a. ka-to: *kiku* ‘ask’, *situmonsuru* ‘question’, *yuu* ‘say’, *sakebu* ‘scream’, *omou* ‘think’  
 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 ikimasyoo 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.<sup>4</sup> 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.”’

He 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 of request vary in form in accordance with the degree of “politeness,” as illustrated in (19).

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<sup>4</sup> 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.

- (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* I.-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* I.-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* I.-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* I.-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).

- (21) a. \*Watasi-wa [<sub>NP</sub>[kinoo kaimasita] hon]-o yomimasita  
 I-TOP yesterday bought (polite) book-ACC read (polite)  
 ‘I read the book I bought yesterday’
- b. Watasi-wa [<sub>NP</sub>[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 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 as 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 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  
 knew(3sg.) *que* run(3sg.)  
 ‘He knew that he was running’



In a parallel context, the complementizer *no* is employed in Japanese, as shown in (25).<sup>5</sup>

- (25) Taroo-wa [<sub>CP</sub>[<sub>TP</sub>Hanako-ga soko-ni iru no]-o sitteita  
 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*.<sup>6</sup> 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  
*omou* ‘think’, *kangaeru* ‘consider’, *sinziru* ‘believe’, *yuu* ‘say’, *sakebu* ‘scream’,  
*syutyoosuru* ‘claim, insist’, *tazuneru* ‘inquire’, *kitaisuru* ‘expect’, *kanziru* ‘feel’
- b. predicates that take *no*-headed CP complements  
*wasureru* ‘forget’, *kookaisuru* ‘regret’, *miru* ‘see’, *matu* ‘wait’, *tamerau* ‘hesitate’,  
*kyohisuru* ‘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).

- (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!”’

<sup>5</sup> *No* is nominal in nature and requires a Case marker when it heads a CP in an argument position. I present one of Murasugi’s (1991) arguments in the following subsection that it should still be considered a complementizer rather than a noun.

<sup>6</sup> He also considers *koto*, which has a similar, though not identical, distribution as *no*. I do not discuss it here as it is fairly clear that it is a noun.

- b. Hanako-wa, “Watasi-ga Taroo-ni au,” *to* syutyoosita  
 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) [<sub>CP</sub> 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 it is nominal in nature.<sup>7</sup> 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 [<sub>CP</sub> that Mary is a genius]  
 b. They talked about [<sub>CP</sub> 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 [<sub>CP</sub> whether Mary is a genius] (cf. \*They wonder it)  
 b. It was debated [<sub>CP</sub> whether Mary is a genius] (cf. \*It was debated it)

A parallel observation can be made with *to*-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).

- (32) a. \*Karera-wa [<sub>CP</sub> Hanako-ga soko-ni iku to]-nituite kangaeta  
 they-TOP H.-NOM there-to go *to*-about considered

<sup>7</sup> 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.

‘They thought about Hanako going there’

- b. Karera-wa [<sub>CP</sub> 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).<sup>8</sup>

- (33) a. Karera-wa [<sub>CP</sub> 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 [<sub>CP</sub> 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 [<sub>CP</sub> 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’

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

<sup>8</sup> 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.

*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 constitutes indirect but strong evidence that the “complementizer *no/ga*” is not a noun but is indeed 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, following Hiraiwa and Ishihara (2002), 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 discussed 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 [<sub>CP</sub> 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 [<sub>CP</sub> 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) [<sub>CP</sub> [<sub>CP</sub> [<sub>CP</sub> ... *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 [<sub>CP</sub> 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 this paper, he proposes the structure in (44).

- (44) [Force [(Topic\*) [(Focus) [(Topic\*) [Finite [<sub>TP</sub> ... ]]]]]]]

*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.<sup>9</sup> Further, the children’s overgeneration of *no* in relative clauses discussed above receives a straightforward interpretation under this analysis. It is unclear what force relative clauses have, and it is unlikely that children consider relative clauses ForceP. On the other hand, it is not surprising if children produce them 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).

<sup>9</sup> 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 [<sub>CP</sub> ame-ga huru (daroo) ka] kangaeta  
 T.-NOM rain-NOM fall *daroo ka* considered  
 ‘Taroo considered whether it would rain’
- b. Taroo-wa [<sub>CP</sub> ame-ga huru (daroo) to] omotta  
 T.-TOP rain-NOM fall *daroo to* thought  
 ‘Taroo thought that it would rain’
- c. Taroo-wa [<sub>CP</sub> ame-ga huru (\*daroo) no]-o kitaisita  
 T.-TOP rain-NOM fall *daroo no*-ACC expected  
 ‘Taroo hoped that it would rain’

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

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

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

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

<sup>10</sup> 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*.<sup>11</sup> Examining examples of this kind extensively, Kuno proposes the generalization that a 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 [<sub>NP</sub> [Hanako-ga suki na] hon]-o katta (koto)  
 T.-NOM H.-NOM like 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)

He observes in addition 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 too, sentence-initial means matrix-initial. The topic in the initial position of the relative clause in (54) cannot be construed as a thematic topic.

<sup>11</sup> Kuno (1973) refers to this kind of focus as ‘exhaustive-listing focus’.

- (54) Taroo-ga [<sub>NP</sub> [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 [<sub>CP</sub> 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 [<sub>CP</sub> 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 [<sub>CP</sub> 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 [<sub>CP</sub> 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 or at least can refer 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.<sup>12</sup>

The contrast between (54) and (57) indeed suggests that there is a specific position 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:<sup>13</sup>

(58) [... [<sub>TopicP</sub> Thematic Topic [<sub>Topic'</sub> [<sub>TP</sub> ...] Topic]] 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 [<sub>CP</sub> 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)

<sup>12</sup> Heycock (2008), for example, does take this kind of exceptions seriously and suggests that a detailed comparison with embedded verb-second in German may prove fruitful.

<sup>13</sup> 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 [<sub>CP</sub> 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 [<sub>CP</sub> Hanako-wa zibun-no hon-o katta ka] tazuneta koto  
 T.-NOM H.-TOP self-GEN book-ACC bought *ka* inquired fact  
 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 [<sub>CP</sub> 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 Topic head is located within a *ka*-headed CP. This leads to the more refined CP structure in (61).

- (61) [<sub>CP</sub> ... [<sub>CP</sub> ... [<sub>CP</sub> thematic topic [<sub>C</sub> [<sub>CP</sub> [<sub>TP</sub> ...] 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)  $t_i$  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.<sup>14</sup>

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 [<sub>TP</sub> ... ] ] ] ] ] ] ] ]

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

(65) [ ... [ ... [ ... [ ... [<sub>TP</sub> ... ] Finite] (Topic\*)] Force] Report]

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 is 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 to 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 the basis of (64) and (65). 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.

<sup>14</sup> 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 occupying the Spec position of the higher TopicP.

## 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 that 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.

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