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ON THE POSITION OF ECM SUBJECTS: A CASE STUDY FROM JAPANESE

Abstract

On the basis of new empirical data from Japanese, this paper argues that in the ECM construction where CP is projected in the embedded clause, the embedded subject undergoes A-movement to Spec of embedded CP, but not to the matrix object position. ECM subjects are argued to appear in a position sufficiently high to be Case-licensed by the matrix predicate, so that the Case feature of the ECM subject residing in the embedded CP is valued as accusative by the matrix verb. It is further suggested that A-movement of ECM subjects into the embedded CP is motivated by the C head retaining its EPP feature without feature inheritance from C to T.

Keywords

exceptional case marking; complementizer; A-movement; Japanese

1 Introduction

Exceptional Case Marking (ECM) constructions, where the subjects of embedded clauses are marked with accusative case, are found in many languages. ECM constructions have many properties that differ from those found in canonical subject marking constructions (most typically, nominative subject constructions). There are a number of theoretical issues surrounding ECM constructions, but among them, the present paper addresses the question of where ECM subjects are located in clause structure.

The discussion in this paper focuses on Japanese ECM constructions comprising a CP projection in the subordinate clause, unlike ECM constructions in languages like English. A representative example of the ECM construction in Japanese is given in (1a).

(1) a. *Ken-wa* [***Eri-o*** *kawai-i* *to*] *omot-te* *i-ru.*
Ken-TOP Eri-ACC cute-PRS COMP think-GER be-PRS
'Ken considers Eri to be cute.'
b. *Ken-wa* [***Eri-ga*** *kawai-i* *to*] *omot-te* *i-ru.*
Ken-TOP Eri-NOM cute-PRS COMP think-GER be-PRS
'Ken considers that Eri is cute.'

Notably, in Japanese, a complementizer is required for the subordinate clause of the ECM construction, just like embedded nominative-subject constructions. In languages like English, ECM constructions are often analyzed as taking TP-complements rather than CP-complements by virtue of the fact that a complementizer is not realized in any way. Obviously, this analysis cannot be extended to Japanese ECM constructions, which raises the theoretical question of where ECM subjects in Japanese are located and how their case marking is sanctioned. On the basis of *soo* 'so' replacement, it is shown that ECM subjects remain in the embedded clause. Furthermore, in light of *dake*-focusing, it is argued that while ECM subjects are not extracted from the embedded clause, they do undergo A-movement to Spec of the embedded CP, to which the matrix verb licensing their accusative Case can have access.

The discussion in this paper proceeds as follows. Section 2 discusses some crucial properties of Japanese ECM constructions and goes over issues on the position of ECM subjects in the Japanese literature. Section 3.1 presents empirical evidence that ECM subjects remain in the embedded clause with no A-movement into the matrix object position. Section 3.2 shows that ECM subjects are located in a higher structural position than nominative subjects, i.e. ECM subjects undergo A-movement into Spec of CP rather than Spec of TP. Section 4 shows that adverbial modification does not provide an argument for the "matrix object" view for ECM subjects. A conclusion is presented in Section 5.

2 Issues on the position of ECM subjects

In Japanese, subjects are most typically marked with nominative case, but can be marked with accusative case when they appear in the complement clauses of verbs like *iu* 'say' and *omou* 'think'. These verbs can construct Exceptional Case-Marking (ECM) constructions.[1]

1 Verbs like *omou* 'consider', *iu* 'say', *kangaeru* 'consider', *utagau* 'suspect', *sinziru* 'believe', *katei/soutei-suru* 'assume' etc. can take ECM complements or nominative subject complements. On the other hand, verbs such as *toru* 'take' and *minasu* 'regard' take ECM complements only. Verbs, which most typically take ECM complements, are *iu* and *omou*, the Japanese counterparts of English *say* and *think*, but in English, these verbs are not allowed to ECM complement clauses.

(2) a. *Ken-wa* [***Eri-o*** *kawai-i* *(*to*)] {*omot-te/it-te*} *i-ru.*
Ken-TOP Eri-ACC cute-PRS COMP think-GER/say-GER be-PRS
Literally: 'Ken thinks/says Eri to be cute.'
b. *Ken-wa* [***Eri-ga*** *kawai-i* *(*to*)] {*omot-te/it-te*} *i-ru.*
Ken-TOP Eri-NOM cute-PRS COMP think-GER/say-GER be-PRS
'Ken thinks/says that Eri is cute.'

The ECM construction with an accusatively-marked subject in (2a), just like the ordinary embedded clause with a nominative subject in (2b), needs to have a complementizer *to* 'that'. In languages like English, by contrast, no complementizer is allowed to appear in ECM constructions; accordingly, English ECM constructions are often analyzed as taking TP- rather than CP-complement structure (CHOMSKY 1986, BOŠKOVIĆ 1997, 2017; cf POSTAL 1974).

(3) a. *John believes/expects/considers* [*Mary/her to be honest*]
b. [$_{CP}$ *John believes/expects/considers* [$_{TP}$ *Mary/her to be honest*]]

While, in English, it is possible to analyze ECM constructions as possessing complement clauses with less than full clausal projections lacking CP, this analysis cannot be carried over to Japanese ECM constructions, given the fact that they do comprise a complementizer, indicating that a CP is projected. This raises the theoretical question of where ECM subjects are located in clause structure.

With regard to the position of ECM subjects, two major views are available in the Japanese literature.

(4) a. [$_{CP}$ Sub-ACC$_i$ [$_{CP}$ t_i/*pro*$_i$]]
b. [$_{CP}$ [$_{CP}$ Sub-ACC]]

One view is that ECM subjects appear in the matrix object position. This "matrix object" view is further divided into two types. One type of analysis holds that they are A-moved to the matrix object position from the subordinate clause (e.g., KUNO 1976, SAKAI 1998, TANAKA 2002). The other type of analysis maintains (e.g., HOJI 1991, TAKANO 2003) that ECM subjects are base-generated objects (and possibly bind the null subject *pro* in the embedded clause).[2] There is another view that ECM subjects are located in the embedded clause (e.g., KANEKO 1988, TAKEUCHI 2010, TAGUCHI 2015). Under the "embedded subject" view, ECM subjects are often claimed to be located in the embedded CP, unlike ordinary nominative subjects appearing in TP. In this connection, it is also worth noting that HIRAIWA (2005) has advanced the view that ECM subjects appear in the embedded CP, but that they are optionally raised to the matrix object position (by A-movement).

2 The "base-generation" analysis is often called a "prolepsis" analysis.

I argue, in line with the "embedded subject" analysis taking ECM subjects to remain in the subordinate clause, that ECM subjects occur in the complement clause, but that they undergo A-movement into the Spec of the embedded CP, as depicted in (5).

(5) [..... [$_{CP}$ SUBJ-ACC [$_{TP}$ ~~SUBJ-ACC~~ Pred]] *think*]
(A-movement)

It is reasonable to assume that the matrix verb values the Case feature of ECM subjects as accusative, so that they appear in the accusative case. This view gains plausibility from the fact that the ECM verbs *iu* 'say' and *omou* 'think' can take an accusative argument when they are used in a simple clause.

(6) *Ken-wa sono koto-o {it-ta/omot-ta}.*
Ken-TOP that matter-ACC say-PST/think-PST
Literally: 'Ken said/thought that matter.'

It is often claimed that syntactic operations across the complement domain of CP, i.e. a TP-boundary, are not possible. If the matrix verb is held responsible for the accusative marking of ECM subjects, there is a sense in which ECM subjects should undergo raising to CP, given the Phase Impenetrability Condition (PIC) (see CHOMSKY 2000, 2001).

(7) PHASE IMPENETRABILITY CONDITION (PIC)
In phase α with head H, the domain of H is not accessible to operations outside α, only H and its edge are accessible to such operations.

To be concrete, if an ECM subject appears in CP, as in (8a), the v head in the upper clause is allowed to value its Case feature as accusative. On the other hand, if the argument is located below TP, as in (8b), the upper v cannot value the Case feature on it, due to the PIC.

(8) a. [..... [$_{CP}$ SUBJ-ACC [$_{TP}$ Pred]] V-v]

b. *[..... [$_{CP}$ [$_{TP}$ SUBJ-ACC Pred]] V-v]
X

In the present perspective, if the upper verb is to value the Case feature of the ECM subject as accusative, the ECM subject needs to be raised to Spec of CP via A-movement.

Note that an EPP feature, which is a grammatical feature motivating A-movement, can be regarded as a kind of edge feature, and that C is a locus where edge features are assigned (see, e.g., Chomsky 2008, Richards 2007). While edge features on C are often construed as transferred to T by feature inheritance, it is theoretically plausible that C may retain them if feature inheritance does not take place. Thus, I suggest that in ECM constructions, the embedded C retains an EPP feature without feature inheritance from C to T; consequently, ECM subjects are A-moved to Spec of CP, which is a structural position sufficiently high to be Case-licensed by the upper predicate.

In the following discussions, I will present new empirical data pertaining to *soo* 'so' replacement, which supports the view that ECM subjects remain in the subordinate clause. The new data provide us with a substantial body of evidence that ECM subjects do not raise from the embedded clause to the matrix object position via A-movement. Furthermore, on the basis of data pertaining to *dake*-focusing, I suggest that ECM subjects undergo A-movement to CP in the subordinate clause but not any further, i.e. they do not undergo A-movement to the matrix object position (and they are not A-moved to the object position even optionally, contrary to the claim by Hiraiwa 2005).

3.1 Soo replacement

In this section, I will discuss empirical evidence for the main claims of the present paper. Specifically, on the basis of *soo* 'so' replacement, I show that ECM subjects are located in the embedded clause, i.e. they do not raise to the matrix object position by A-movement.

Empirical evidence that ECM subjects are not extracted from the subordinate clause via A-movement may be deduced from the facts of *soo* 'so' replacement. The examples in (9) illustrate how *soo* 'so' replacement applies.

(9) a. *Ken-wa* [*Eri-ga* *kawai-i* **(to)*] *it-ta.*
Ken-top Eri-nom cute-prs comp say-pst
'Ken said that Eri was cute.'
b. *Mari-mo* soo *it-ta.*
Mari-also so say-pst
'Mari said so. too.'
c. **Mari-mo* soo ***to*** *it-ta.*
Mari-also so comp say-pst
Literally: 'Mari said that so, too.'

Soo 'so' is an adverbial proform. When (9a) serves as an antecedent, (9b) can be derived by substituting *soo* for the embedded clause in (9a). If the complementizer remains undeleted under *soo* replacement, unacceptability results, as in (9c).

The adverbial proform *soo* can replace non-nominal antecedents, including an adjective predicate, an adverb, a small clause, etc. alongside CP. This brings up the question of what constituent *soo* replaces in (9b). Note that the complementizer *to* cannot be omitted, as in (9a), while it is not allowed to appear when *soo* replacement applies to the embedded clause, as shown in (9c). This fact indicates that in (9), *soo* replacement applies to CP—the constituent containing the complementizer.

(10) $[\underbrace{[_{CP}\,[_{TP}\,\ldots\ldots\,]\,to]}_{soo}\,it\text{-}ta]$

Lower projections in the embedded clause are not candidates for *soo* replacement. TP might be regarded as undergoing *soo* replacement if the complementizer can be phonetically null, as in $[_{CP}\,[_{TP}\,soo\,]\,\varphi\,]$. Nonetheless, this possibility is excluded since the presence of an overt complementizer is required in (9a). Then, the fact that the complementizer *to* 'that' is elided alongside the embedded subject and the embedded predicate under *soo* replacement in (9b) shows that *soo* substitutes for the CP constituent of the subordinate clause.

If *soo* replaces the embedded CP, as represented in (10), it is possible to identify what constituent is included in the embedded clause by looking at *soo* replacement. In fact, by appealing to *soo* replacement, it can be readily shown that ECM subjects are located inside the embedded clause.[3]

To substantiate the present proposal, let us first look at the sentences in (11).

(11) a. *Watasi-wa* ***Ken-ni*** [PRO *soko-e* *ik-u* *to*] *it-ta.*
I-TOP Ken-DAT there-to go-PRS COMP say-PST
'I told Ken that I would go there.'

b. *Mari-wa* ***Ken-o*** *bakamono* *to* *yon-da.*
Mari-TOP Ken-ACC fool COMP call-PST
'Mari called Ken a fool.'

3 In Japanese, the pronoun *sore* 'it, that' is not usable for replacing a CP-constituent. Thus, (ib) is deviant when *sore* is taken to replace the embedded CP in (ia).

(i) a. *Ken-wa* [*Eri-ga* *kawai-i* *to*] *it-ta.*
Ken-TOP Eri-NOM cute-PRS COMP say-PST
'Ken said that Eri was cute.'

b. ?**Mari-mo* *sore-o* *it-ta.*
Mari-also it-ACC say-PST
'Mari said it.'

The deviance probably comes from a category mismatch between the antecedent and the pronoun. The sentence improves if *sono koto* 'that thing' is used instead of *sore* because *sono koto* is allowed to refer to the content of what is said. In the case of *sono koto*, what is referred to does not have to be a faithful reflection of the antecedent clause.

In (11a), the dative argument *Ken* appears as a complement of the verb *iu* 'say', and PRO is controlled by the matrix subject. In (11b), the accusative argument is selected by the verb *yobu* 'call'. The dative argument in (11a) and the accusative argument in (11b) can be postposed to the right of the complementizer.

(12) a. *Watasi-wa* [PRO *soko-ni* *ik-u* *to*] ***Ken-ni*** *it-ta.*
I-TOP there-to go-PRS COMP Ken-DAT say-PST
'I told Ken that I would go there.'

b. *Mari-wa* *bakamono* *to* ***Ken-o*** *yon-da.*
Mari-TOP fool COMP Ken-ACC call-PST
'Mari called Ken a fool.'

On the other hand, when the goal argument *soko-e* 'to there' in (11a) is placed to the right of the complementizer, the sentence is not acceptable.

(13) **Watasi-wa* *Ken-ni* [PRO *ik-u* *to*] *soko-e* *it-ta.*
I-TOP Ken-DAT go-PRS COMP there-to say-PST
Literally: 'I told Ken that I would go there.'

(13) is derived from (11a) by extracting the goal argument from the embedded clause, followed by the fronting of the embedded clause, as schematically illustrated in (14).

(14) a. $[_{CP}$ ..... *soko-e* $[_{CP}$... ~~*soko-e*~~ ...]]

b. $[_{CP}$ ... $[_{CP}$ ... ~~*soko-e*~~...$]_i$ *soko-e* t_i]

(13) is ruled out because it has the configuration where the extracted goal argument does not c-command its copy (created by movement) in the embedded clause (the Proper Binding Condition effect (Fiengo 1977). No such effect is observed in the examples in (12), which indicates that no copy of the postposed arguments has been created inside the embedded clauses.[4] This fact suggests that the dative argument in (11a) and the accusative argument in (11b) reside not in the embedded clause but in the matrix clause.

In (11a), the dative argument is selected by the upper verb, but the goal argument is selected by the lower verb. When *soo* replacement applies to the embedded clause of (15a)(= (11a)), (15b), which has an overt dative argument, can be derived, but (15c) with an overtly realized goal argument is not acceptable.

4 PRO does not have to be c-commanded by its antecedent.

(15) a. *Watasi-wa* *Ken-ni* [PRO *soko-e* *ik-u* *to*] *it-ta.*
I-TOP Ken-DAT there-to go-PRS COMP say-PST
'I told Ken that I would go there.'

b. *Masao-wa* ***Eri-ni*** soo *it-ta.*
Masao-TOP Eri-DAT so say-PST
'Masao told Eri so.'

c. **Masao-wa* *Ken-ni* ***soko-e*** soo *it-ta.*
Masao-TOP Ken-DAT there-to so say-PST
Literally: 'Masao told Ken so to there.'

The accusative argument in (11b) can also be overtly realized under *soo* replacement.

(16) a. *Mari-wa* *Ken-o* *bakamono* *to* *yon-da.*
Mari-TOP Ken-ACC fool COMP call-PST
'Mari called Ken a fool.'

b. *Ai-wa* ***Yuta-o*** soo *yon-da.*
Ai-TOP Yuta-ACC so call-PST
'Ai called Yuta so.'

In (16b), the accusative argument, which is located in the matrix clause, can occur, since it is not replaced by *soo*.[5] The asymmetry in acceptability observed between (15b) and (15c) illustrates that when *soo* replaces the embedded clause, arguments included in the embedded clause cannot be manifested overtly.

Turning now to the question of how *soo* replacement applies when subjects in embedded clauses are marked with nominative case, observe that it is not possible to replace the embedded clause with *soo*, the embedded nominative subject being overtly realized, as illustrated in (17).

(17) a. *Ken-wa* [*Eri-ga* *kawai-i* *to*] *it-ta.*
Ken-TOP Eri-NOM cute-PRS COMP say-PST
'Ken said that Eri was cute.'

b. *Masao-mo* soo *it-ta.*
Masao-also so say-PST
'Masao said so, too.'

c. **Masao-wa* ***Mari-ga*** soo *it-ta.*
Masao-TOP Mari-NOM so say-PST
Literally: 'Masao said Mari so.'

When (17a) is an antecedent, (17b) is legitimate under *soo* replacement, but ungrammaticality results when the nominative subject is overtly realized, as in (17c).

5 *Soo* cannot refer to the sequence of the accusative argument + the *to*-complement if the antecedent is the clause with *yobu* 'call'; (16b) is rendered semantically deviant or incomplete in this context if the accusative argument, which does not refer to *Ken* in the antecedent clause, is dropped.

The same holds true of ECM subjects marked with accusative case. As shown in (18), the ECM subject cannot be realized under *soo* replacement.

(18) a. *Ken-wa* *Eri-o* *kawai-i* **(to)* *it-ta.*
Ken-TOP Eri-ACC cute-PRS COMP say-PST
Literally: 'Ken said Eri to be cute.'
b. *Masao-mo* soo *it-ta.*
Masao-also so say-PST
'Masao said so, too.'
c. **Masao-wa* ***Mari-o*** soo *it-ta.*
Masao-TOP Mari-ACC so say-PST
Literally: 'Masao said Mari so.'

(18b) is acceptable, for the entire material of the embedded clause is replaced by *soo*, but (18c), where the ECM subject remains undeleted, is unacceptable. Note again that in (18a), the complementizer *to* cannot be null, but when *soo* replacement takes place, the complementizer cannot be manifested.[6] This fact indicates that in (17) and (18), the CP containing the complementizer is replaced by *soo*, i.e. *soo* does not replace a lower projection within the embedded clause. The data in (17) and (18) show that *soo* replacement does not derive a legitimate sentence when it substitutes for the embedded clause with an ECM subject or a nominative subject being overtly realized. Given that a constituent in an embedded clause cannot be overtly manifested when the clause is replaced by *soo*, it follows that both nominative subject in (17a) and the ECM subject in (18a) occur in the embedded clause.[7]

The facts of *soo* replacement indicate that ECM subjects reside in the embedded clause, i.e. they are not extracted from the embedded clause. Note, however, that since *soo* replacement substitutes for CP, it cannot assess whether ECM subjects are raised to the embedded CP or stay below the embedded TP. In the next section, I

6 The complementizer *to* 'that' may select a clausal constituent, but can also be used as a direct quote marker. In either case, *soo* replacement may apply to the constituent containing the complementizer. Note, however, that the ECM complement clause cannot be a direct quote, for subjects cannot be marked with accusative case in non-embedded contexts.

(i) **Mari-o* *kawai-i.*
Mari-ACC cute-PRS
'Mari is cute.'

7 Both the nominative subject and the ECM subject cannot be postposed to the right of the complementizer, as in (i). This fact also indicates that the ECM subject resides in the embedded clause.

(i) a. **Ken-wa* [t_i *kawai-i* *to*] *Eri-ga*$_i$ *it-ta.*
Ken-TOP cute-PRS COMP Eri-NOM say-PST
'Ken said that Eri was cute.'
b. **Ken-wa* [t_i *kawai-i* *to*] *Eri-o*$_i$ *it-ta.*
Ken-TOP cute-PRS COMP Eri-ACC say-PST
Literally: 'Ken said Eri to be cute.'

will present another piece of empirical evidence suggesting that ECM subjects are raised to the specifier position of CP in the embedded clause.

3.2 Dake-focusing

In this section, drawing data from focusing by *dake* 'only', I will show that ECM subjects reside in Spec of CP in the embedded clause, i.e. they appear in a higher structural position than nominative subjects. I suggest that in ECM constructions, the embedded C retains an EPP feature, so that the ECM subject undergoes A-movement to Spec of the embedded CP. The facts of *dake*-focusing provide important empirical evidence that allows us to verify that the ECM subject resides in CP, but not below TP.

For the purpose of illustrating that ECM subjects occupy a higher structural position than nominative subjects, I will consider the facts of association of focus with *dake* placed at a clause end. One important property of the focus particle *dake* occurring to the right of tense is that its focusing domain extends over TP, so it can undergo association with arguments below TP.

To make the point, observe first that the particle *dake* can be associated with the nominative subject in (19a), but not with the topicalized subject in (19b), and thus, the subject-focus interpretation that only Ken is interesting is available for (19a), but not (19b).

(19) a. [$_{TP}$ ***Ken-ga*** *omosiro-i*] ***dake*** *da.*
Ken-NOM interesting-PRS only COP
'It is only that Ken is interesting.'

b. *[$_{CP}$ ***Ken-wa***$_i$ [$_{TP}$ t_i *omosiro-i*] ***dake*** *da*].
Ken-TOP interesting-PRS only COP
'As for Ken, it is only that he is interesting.'

As discussed by KISHIMOTO (2009), a nominative subject resides in Spec of TP, and a topicalized subject appears in CP (see also KISHIMOTO 2017).[8] In (19b), *dake* placed

8 Topicalization can be conceived of as involving operator movement into CP. That topicalization does not count as A-movement is confirmed by the fact that it does not give rise to a new binding possibility for reflexive *zibun* 'self'.

(i) a. **Sensei-ga* *zibun*$_i$*-no* *heya-de* *seito*$_i$*-o* *home-ta.*
teacher-NOM self-GEN room-in pupil-ACC praise-PST
Literally: 'The teacher praised the pupil in self's room.'

b. *Seito*$_i$*-ga* *zibun*$_i$*-no* *heya-de* t_i *home-rare-ta.*
pupil-NOM self-GEN cute-PRS praise-PASS-PST
Literally: 'The pupil was praised in self's room.'

c. **Seito*$_i$*-o/*Seito*$_i$*-wa* *sensei-ga* *zibun*$_i$*-no* *heya-de* t_i *home-ta.*
pupil-ACC/pupil-TOP teacher-NOM self-GEN room-in praise-PST
Literally: 'The pupil, the teacher praised in self"s room.'

In (ia), *seito* 'pupil' cannot bind the reflexive *zibun* 'self', but if this argument is moved to the subject position by A-movement, it can bind the reflexive, as shown in (ib). No such effect is brought about by

at the end of the tensed adjective predicate can be associated with the embedded nominative subject, which suggests that TP lies within the focusing domain of *dake*. By contrast, the topicalized subject in (19b) cannot be the focus of *dake*, which illustrates that the focusing domain of *dake* does not extend over CP. With this in mind, consider the pair of the sentences in (20).

(20) a. *Mari-wa* [***Ken-ga*** *omosiro-i* ***dake*** *da* *to*] *it-ta.*
Mari-TOP Ken-NOM interesting-PRS only COP COMP say-PST
'Mari said that only Ken is interesting.'

b. *Mari-wa* [***Ken-o*** *omosiro-i* ***dake*** *da* *to*] *it-ta.*
Mari-TOP Ken-ACC interesting-PRS only COP COMP say-PST
Literally: 'Mari said Ken to only be interesting.'

In (20a), the interpretation that only Ken is interesting can be otained, which indicates that *dake* can be associated with the nominative subject. In (20b), the interpretation that only Ken is interesting is not possible, showing that the focus of *dake* cannot fall on the accusative-marked ECM subject.

Furthermore, observe that *dake* can be associated with the first nominative argument of the embedded clause in (21).

(21) *Mari-wa* [***Ken-ga*** *me-ga* *waru-i* ***dake*** *da* *to*] *it-ta.*
Mari-TOP Ken-NOM eye-NOM bad-PRS only COP COMP say-PST
'Mary said that only Ken has a bad eyesight.'

In (21), the nominative argument *Ken* is a so-called major subject. This major subject is licensed with a possessive relation to the second nominative argument, which is the thematic subject of the embedded predicate *warui* 'bad'. Syntactically, the major subject appears by adjunction to TP and is an element with which clause-final *dake* can be associated (KISHIMOTO 2009). Thus (21) can have the interpretation that only Ken has a bad eyesight.

Recall that the ECM subject remains in the embedded clause, as discussed in Section 3. Furthermore, the fact that *dake* can be associated with a nominative subject located in Spec of TP and a major subject (adjoined to TP) shows that the focusing domain of *dake* extends over TP.

(22) a. *[..... $[_{CP}$ DP-ACC $[_{TP}$ Pred-*dake*]] V]
b. [..... $[_{CP}$ $[_{TP}$ DP-NOM Pred-*dake*]] V]
(focus domain of *dake*)

topicalization and scrambling, as seen in (ic). The fact suggests that CP can offer both A-position and operator position, which raises the question of whether CP offers a single landing site or two distinct sites for the two types of movement. For reasons of space, I will not discuss this question in the present paper.

Unlike nominative subjects and nominative major subjects, accusative-marked ECM subjects fall outside the focus domain of *dake*. This shows that ECM subjects are located in CP, which is projected over TP.

There is good reason to believe that ECM subjects undergo A-movement to Spec of the embedded CP rather than Spec of the embedded TP. This view gains plausibility from the fact that ECM subjects can be turned into matrix subjects when direct passivization applies to the matrix predicate, as in (23).

(23) *Ken-ga* *minna-ni* *kasiko-i* *to* *iw-are-te* *i-ru.*
Ken-NOM everyone-by smart-PRS COMP say-PASS-GER be-PRS
'Ken is said to be smart by everyone.'

Broadly speaking, passive movement is induced when a transitive predicate, which can Case-license an object, is rendered into a passive form. In a simple passive clause like (24), A-movement is induced, since a passivized transitive verb cannot Case-license its object.

(24) *Ken-ga* *minna-ni* *home-are-ta.*
Ken-NOM everyone-by praise-PASS-PST
'Ken was praised by everyone.'

When the matrix verb is passivized in the ECM construction, as in (23), the ECM subject is turned into a matrix subject, just in the same way as an object of the transitive verb. In view of this fact, it is reasonable to state that the ECM subject appears in the Spec of CP in the subordinate clause via A-movement from a predicate-internal position. The ECM subject occurs in Spec of embedded CP, which counts as an A-position, and therefore, it can be rendered as a matrix subject when the matrix verb is passivized.[9]

It is a generally-accepted assumption that an EPP feature motivates A-movement. An EPP feature can be construed as a kind of edge feature assigned to C, which is transmitted to from C to T by feature inheritance (Chomsky 2008, Richards

9 An argument cannot be extracted from within the embedded clause which has an ECM subject, as illustrated in (i).

(i) **Ano* *kodomo-ni*$_i$ *Mari-wa* [***Ken-o*** t$_i$ *ama-i* *to*] *it-ta.*
that child-to Mari-TOP Ken-ACC indulgent-PRS COMP say-PST
'To that child, Mari said that Ken was indulgent.'

Apparently, *ano kodomo-ni* cannot be extracted from the embedded clause by scrambling because CP is filled by the ECM subject. This is similar to the *wh*-island effect in English (e.g., *?*What did John wonder who bought?*). Given this fact, it is plausible to assume that an ECM subject in Japanese occupies the same structural position as does a *wh*-phrase in English. Nevertheless, a moved *wh*-phrase does not show ECM phenomena. In the present perspective, a *wh*-phrase, even if it occurs in CP, is not amenable to Case licensing by the matrix predicate because the *wh*-phrase is Case-licensed in the pre-*wh*-movement site.

2007), it is plausible to state that if T has an EPP requirement as a result of feature inheritance, a subject undergoes A-movement to TP. On the other hand, it is also possible to postulate that a subject is attracted to CP when C retains an EPP feature without feature inheritance.

(25) a. [... [$_{CP}$ [$_{TP}$ SUBJ-NOM [$_{PredP}$ ~~SUBJ-NOM~~ Pred]]]]

b. [... [$_{CP}$ SUBJ-ACC [$_{TP}$ [$_{PredP}$ ~~SUBJ-ACC~~ Pred]]]]

In ECM constructions, the embedded C can be regarded as retaining the EPP feature because ECM subjects are moved into Spec of CP via A-movement, i.e. Spec of the embedded CP of the ECM constructions counts as an A-position, as suggested by a number of researchers (e.g., TANAKA 2002, TAKEUCHI 2010).[10] If ECM subjects appear in Spec of CP, to which the upper v can have access, it is naturally expected that they are marked with accusative case, and can be turned into matrix subjects when passivization applies to the matrix predicate.[11]

10 In the Government and Binding framework, Case is assigned to Spec of TP, so that a subject is moved into this position to receive Case. In CHOMSKY (1995), Case is licensed by long distance Agree, so that subject raising is not regarded as targeting a Case position, but in BOŠKOVIĆ (2007), it is proposed that Case is valued in Spec of TP. In BOŠKOVIĆ's analysis, subject raising can be seen as movement into a Case position. In any event, A-movement can be regarded as Case-related movement.

11 The facts of NPI licensing provides another piece of evidence. As seen in (i), a contrast in acceptability is observed with regard to the licensing of NPI *amari* 'very' according to whether the subject is marked with nominative case or accusative case.

(i) a. *Ken-wa* [[***amari*** *yuunoona* *hito-ga*] *kaityoo-no* *kooho* de
Ken-TOP very efficient man-NOM president-GEN candidate COP
na-i *to*] *it-ta.*
NEG-PRS COMP say-PST
'Ken said that not very efficient men were candidates for the president.'

b. **Ken-wa* [[***amari*** *yuunoona* *hito-o*] *kaityoo-no* *kooho* *de*
Ken-TOP very efficient man-ACC president-GEN candidate COP
na-i *to*] *it-ta.*
NEG-PRS COMP say-PST
Literally: 'Ken said very efficient men not to be candidates for the president.'

In (ia), the nominative subject with *amari* is licensed by the negator *nai* appearing in the embedded clause. By contrast, the ECM subject with *amari* is not licensed in (ib). The difference in acceptability between (ia) and (ib) is naturally expected if the ECM subject is located in CP while the nominative subject fills in TP. Incidentally, the NPI *amari* in an embedded clause can be licensed by a matrix negation, as in (ii).

(ii) *Ken-wa* [*koko-ni* ***amari*** *kasikoi* *gakusei-ga* *ir-u* *to*]
Ken-TOP here-in very smart student-NOM be-PRS COMP
omot-te ***i-na-i***.
think-GER be-NEG-PRS
'Ken does not think there are not very smart students here.'

The fact indicates that the NPI licensing of *amari* is possible across a finite clause, suggesting that it is not constrained by the PIC. (This is similar to the NPI licensing of *any* in English, which allows a higher

4 The absence of A-movement into the matrix object position

In this section, I will discuss the facts of matrix adverb modification in ECM constructions. As argued by Kuno (1976) and others, matrix adverbs can intervene between ECM subjects and the embedded predicates. This fact is often taken to be one important argument for the "matrix object" analysis taking ECM subjects to appear in the matrix object position, since a matrix adverb cannot be placed after the embedded subject marked with nominative case. Although the facts of matrix adverb modification lead Hiraiwa (2005) to claim that ECM subjects can be moved into the matrix object position optionally, I will argue instead that ECM subjects can precede matrix adverbs because they can be scrambled into the matrix clause across the adverbs.

To begin, observe the contrast in acceptability that arises in adverbial placement. A matrix modal adverb like *orokanakotoni* 'stupidly' modifying the matrix clause can be placed after an ECM subject, as illustrated in (26).

(26) *Ken-wa* *Eri-o* *orokanakotoni* *baka-da* *to* *it-ta.*
Ken-TOP Eri-ACC stupidly foolish-PRS COMP say-PST
Literally: 'Ken said stupidly Eri to be foolish.'

The modal adverb cannot appear between the embedded subject and the predicate when the subject is marked with nominative case, as shown by the unacceptability of (27).

(27) **Ken-wa* [*Eri-ga* *orokanakotoni* *baka-da*] *to* *it-ta.*
Ken-TOP Eri-NOM stupidly foolish-PRS COMP say-PST
Literally: 'Ken said that Eri was stupidly foolish.'

(27) is not acceptable because the modal adverb cannot modify the upper matrix clause. At first sight, it looks as though the facts are consonant with the view taking the ECM subject to move into the matrix object position. On the contrary, I suggest that (26) does not argue for the 'matrix object' view, and that the modal adverb can follow the ECM subject in (26) because the subject can be moved into the matrix clause via scrambling, but not via A-movement, as represented in (28).

(28) [... SUBJ-ACC ... ADV [$_{CP}$ ~~SUBJ-ACC~~ [$_{TP}$ .... Pred]] *omou*]
(scrambling)

negation to license it (e.g., *John did not think that Mary ate anything.*). It might be possible to account for this fact by postulating that long distance Agree can be implemented if it simply involves Neg-feature matching, but I will leave this question open in this paper.

If scrambling starts out from an A-position and involves adjunction to some constituent (Saito 1985), the ECM subject cannot occur in the matrix object position (as a consequence of A-movement).[12] Under the present view, the contrast in acceptability between (26) and (27) comes from a difference in the possibility of

12 It is sometimes claimed (e.g., Saito 1992, Miyagawa 1997) that clause-internal scrambling counts as A-movement on the grounds that it can feed new binding possibilities, as in (i).

(i) a. **Otagai-no sensei-ga [Ken-to Eri]-ni at-ta.*
each.other-GEN teacher-NOM Ken-and Eri-DAT meet- PST
'Each other's teachers met Ken and Eri.'
b. *[Ken-to Eri]-ni$_i$ otagai-no sensei-ga* t$_i$ *at-ta.*
Ken-and Eri-DAT each.other-GEN teacher-NOM meet- PST
'Ken and Eri, each other's teachers met.'

In (ia), the object cannot bind the reciprocal *otagai* 'each other', but once the object is scrambled across the subject, *otagai* is allowed to be bound by the object, as in (ib). While it is often claimed that only A-movement can create new binding possibilities, a caution needs to be exercised in the case of *otagai* binding. The examples in (i) show that topicalization gives rise to the same effect.

(ii) *[Ken-to Eri]-ni-wa$_i$ [otagai-no sensei]-ga* t$_i$ *at-ta.*
Ken-and Eri-DAT-TOP each.other-GEN teacher-NOM meet- PST
'With Ken and Eri, each other's teachers met.'

In (ii), the argument with *ni* 'to' is selected by the verb, which suggests that it has undergone movement from a clause-internal position to the clause-initial topic position, although a topic without a postposition can be base-generated in the topic position (Saito 1985). This type of topicalization involves operator movement (non-A-movement), but still the fronted topic can bind the reciprocal, as in (ii).

Note further that the effect of creating new binding possibilities is observed when the reciprocal is embedded in a DP, but that no such effect is obtained when the reciprocal is not embedded. (iii) shows that a scrambled object does not feed a new binding possibility.

(iii) a. **Otagai-ga [Ken-to Eri]-o sake-te i-ta.*
each.other-NOM Ken-and Eri-ACC avoid-GER be- PST
Literally: 'Each other avoided Ken and Eri.'
b. **[Ken-to Eri]-o$_i$ otagai-ga* t$_i$ *sake-te i-ta.*
Ken-and Eri-ACC each.other-NOM avoid-GER be- PST
Literally: 'Ken and Eri, each other avoided.'

(iv) shows that topicalization behaves on a par with scrambling.

(iv) a. **Otagai-ga [Ken-to Eri]-ni at-ta.*
each.other-NOM Ken-and Eri-DAT meet-PST
'Each other met Ken and Eri.'
b. **[Ken-to Eri]-ni-wa$_i$ otagai-ga* t$_i$ *at-ta.*
Ken-and Eri-DAT-TOP each.other-NOM meet-PST
Literally: 'With Ken and Eri, each other met.'

The possibility of reciprocal binding is not affected by scrambling and topicalization in this context. On the other hand, reciprocal binding is made available if an argument undergoes A-movement, as in (v).

(v) *[Ken-to Eri]-ga$_i$ otagai-ni* t$_i$ *sake-rare-te it-ta.*
Ken-TOP Eri-NOM each.other-by avoid-PASS-GER say-PST
'Ken and Eri were avoided by each other.'

This shows that scrambling and A-movement do not pattern together in creating new binding possibilities. Given the discrepancy observed between (iiib) and (v), it is reasonable to state that the creation of new binding possibilities for reciprocal *otagai* observed in (i) does not provide definite evidence for the claimed status of scrambling.

scrambling. The fact that the accusative subject can be scrambled into the matrix clause is confirmed by the examples in (29).

(29) a. **Ken-ga*$_i$ *sensei-wa* [t_i *baka-da* *to*] *it-ta.*
Ken-NOM teacher-TOP fool-PRS COMP say-PST
Literally: 'Ken, the teacher said that was foolish.'

b. *Ken-o*$_i$ *sensei-wa* [t_i *baka-da* *to*] *it-ta.*
Ken-ACC teacher-TOP fool-PRS COMP say-PST
Literally: 'Ken, the teacher said to be foolish.'

The two examples in (29) differ minimally in the choice of case marking on the subject moved to the front of the sentence. The data illustrate that the ECM subject, but not the nominative subject, can be scrambled out of the embedded clause. This being so, the difference in acceptability between (26) and (27) can be attributed to the fact that an ECM subject, but not a nominative subject, may be extracted from the embedded clause via scrambling.

In light of the results of *soo* replacement, it can be readily confirmed that in (26), the ECM subject is scrambled into the matrix clause. Recall that ECM subjects can be rendered as matrix subjects under direct passivization. When an ECM subject is turned into a passive subject, as in (30a), *soo* can replace the embedded clause while the passive subject remaining undeleted, as shown in (30b).

(30) a. *Sensei-kara* *Eri-ga* *kawai-i* *to* *iw-are-te* *i-ru.*
teacher-from Eri-NOM pretty-PRS COMP say-PASS-GER be-PRS
'Eri is said to be pretty by the teachers.'

b. *Tomodati-kara-wa* ***Hanako-ga*** soo *iw-are-te* *i-ru.*
friend-from-TOP Hanako-NOM so say-PASS-GER be-PRS
Literally: 'Hanako is said so by her friends.'

In (30a), the passivized subject is moved to Spec of the matrix TP from within the embedded clause as a result of A-movement. Obviously, (30b) is well formed because *soo* replacement is implemented on a constituent structure where the subject of the embedded predicate is located in the highest A-position, i.e. in the matrix subject position, as a result of A-movement.

An ECM subject scrambled to the clause initial position behaves differently in respect to *soo* replacement. (31) shows that the scrambled ECM subject cannot be pronounced under *soo* replacement.

(31) a. ***Eri-o*** *sensei-ga* *kasiko-i* *to* *it-ta.*
Eri-ACC teacher-NOM smart-PRS COMP say-PST
Literally: 'Eri, the teacher said to be smart.'

b. *Tomodati-mo* soo *it-ta.*
friend-also so say-PST
'Her friend said so. too.'
c. ****Mari-o*** tomodati-wa soo *it-ta.*
Mari-ACC friend-TOP so say-PST
Literally: 'Mari, her friend said so, too.'

In (31a), the ECM subject has been scrambled to the front of the sentence, which is a non-A-position. In this case, the relevant configuration to which *soo* replacement applies is its pre-scrambling structure. This means that *soo* replacement is implemented on the constituent structure in which the scrambled object is located in the embedded clause. Thus, (31b), which does not have an overt ECM subject, is acceptable, but (31c) is excluded because the scrambled ECM subject is overtly manifested under *soo* replacement.

The generalization that covers the examples in (26) and (27) is that an argument extracted from the embedded clause via A-movement may be overtly realized under *soo* replacement, while an argument scrambled out of the subordinate clause may not. Accordingly, *soo* replacement allows us to determine whether the ECM subject is moved to the matrix clause by scrambling or by A-movement in (26), which has the ECM subject occurring to the left of the matrix adverb *orokanakotoni* 'stupidly'. With this in mind, let us consider how *soo* replacement applies to (26), replicated as (32a).

(32) a. *Ken-wa* *Eri-o* *orokanakotoni* *kawai-i* *to* *it-ta.*
Ken-TOP Eri-ACC stupidly cute-PRS COMP say-PST
Literally: 'Ken stupidly said Eri to be cute.'
b. *Mari-mo* *orokanakotoni* soo *it-ta.*
Mari-also stupidly so say-PST
literally: 'Mari stupidly said so. too.'
c. **Mari-wa* ***Ai-o*** *orokanakotoni* soo *it-ta.*
Mari-TOP Ai-ACC stupidly so say-PST
Literally: 'Mari stupidly said Ai so, too.'

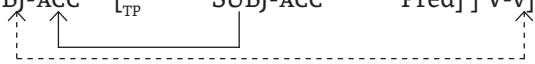
When (32a) is an antecedent, *soo* replacement is successful if the ECM subject is not spelled out, as in (32b). On the other hand, (32c), in which the ECM subject is realized overtly under *soo* replacement, is unacceptable. Since the data in (32) pattern with the data in (31), which involve scrambling, it can be concluded that the ECM subject in (32a) (= (26)) is moved to the left of the adverb by scrambling and not by A-movement. Given this, the contrast in acceptability between (26) and (27) with regard to the matrix adverb modification is attributed to the fact that the accusative subject has been scrambled into the matrix clause, while the nominative subject stays in the embedded clause. In a nutshell, the data show that ECM subjects are

moved into the matrix clause via scrambling, but not A-movement, and that they are not A-moved to the matrix object position even optionally, contrary to the claim by Hiraiwa (2005).

5 Conclusion

In this paper, it has been argued that ECM subjects come to occupy Spec of embedded CP via A-movement in ECM constructions where the embedded clause has a CP projection (in a language like Japanese). ECM subjects are not A-moved into the matrix object position, while they can undergo A-movement into the matrix subject position (when passiviziation applies to the matrix verb) or can be scrambled into the matrix clause. It has been suggested that ECM subjects are moved into Spec of embedded CP via A-movement on the grounds that the embedded C retains its EPP feature without feature inheritance from C to T. Since Spec of CP is visible to the matrix verb, the Case feature of the ECM subject residing in the embedded CP can be valued as 'accusative' by the matrix verb.

(33) [[..... [$_{CP}$ SUBJ-ACC [$_{TP}$ ~~SUBJ-ACC~~ Pred]] V-v] T]



The new empirical data pertaining to *soo* replacement provide solid evidence showing that ECM subjects are not extracted from the embedded CP. On the basis of the facts of *dake*-focusing, it has also been shown that ECM subjects occur in a higher position than nominative subjects. All in all, the discussion shows that in ECM constructions which include a CP projection in the subordinate clause, the ECM subject is moved to Spec of the embedded CP from its predicate-internal position as a consequence of A-movement.

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