

## NOTES ON MOVEMENT OF ANTECEDENTS

### 1. Introduction

One issue in syntax hotly debated in recent years is how to treat what has traditionally been analyzed in terms of referential dependencies. One instance of this general issue has to do with the treatment of obligatory control. The traditional approach to obligatory control claims that the subject of the control complement clause is a phonetically null pronominal element called PRO and that this PRO is controlled by an element in the higher clause, as shown in (1a). On the other hand, since Hornstein's (1999, 2001) influential work, an alternative approach has been pursued by a number of researchers according to which the controller-PRO relation is replaced by a movement relation, so that the controller moves from the subject of the control complement, as shown in (1b), where the material surrounded by angled brackets shows an unpronounced copy of the moved element (for arguments for and against this analysis, see, for example, works cited in Takano (2010)).

- (1) a. John<sub>i</sub> tried [PRO<sub>i</sub> to leave].  
b. John tried [<John> to leave].

This move has also affected the analysis of binding relations. Thus, a number of authors propose that what has traditionally been analyzed in terms of binding be replaced by movement, in such a way that antecedents moves from the position of pronouns or reflexives (Hornstein (2001), Motomura (2001), Kayne (2002), Zwart (2002), Fujii (2007), Lasnik (2007), Miyamoto (2008)). According to this proposal, the binding relation between *John* and *he* in (2a) should be captured in terms of movement of *John* from the position of *he*, as shown in (2b).<sup>1</sup>

- (2) a. John<sub>i</sub> thinks that he<sub>i</sub> is smart.

- b. John thinks that <John> he is smart.

Hornstein (2001) and Kayne (2002) argue for the movement approach shown in (2b) by reducing the effects of binding conditions A, B, and C to properties of movement. One direct consequence of the movement approach, according to Kayne, is that it straightforwardly explains condition C effects of the kind shown in (3a) without appeal to condition C.

- (3) a. \* He<sub>i</sub> thinks that John<sub>i</sub> is smart.  
b. <John> he thinks that John is smart.

In the movement approach, the sentence in (3a), on the intended coreferential interpretation, involves a derivation illustrated in (3b), where *John* has moved from the matrix clause to the embedded clause. This movement is an instance of lowering, which is generally prohibited in syntax. Thus, the movement approach reduces this kind of condition C effect to the general property of movement. Hornstein and Kayne discuss other effects traditionally attributed to binding conditions A, B, and C, in an attempt to capture them in terms of properties of antecedent movement.

Given this background, it is important to ask whether there is other empirical evidence for antecedent movement. In this paper, I will present new empirical evidence for antecedent movement based on certain properties of multiple cleft constructions in Japanese.<sup>2</sup> I will show that to account for those properties, we need to consider antecedents to have moved from the position of the pronouns or reflexives they bind. The result will thus lend new support to the approach shown in (2b).

This paper is organized as follows. In section 2, I will discuss multiple cleft constructions in Japanese and show that they exhibit properties that support the hypothesis that the antecedent moves from the position of the pronoun/reflexive. In section 3, I will consider the nature of antecedent movement, again from the perspective of Japanese multiple

clefts, and suggest that antecedent movement is a new kind of A-movement in that it does not obey minimality, but it does obey island constraints. In section 4, I will summarize the discussion.

## 2. New Evidence for Antecedent Movement: Multiple Clefts in Japanese

In this section, I provide an argument in favor of antecedent movement from a novel perspective, by considering certain properties of cleft constructions in Japanese. Let us begin by looking at general properties of cleft constructions in Japanese.

Japanese has a cleft construction that freely allows multiple elements to appear in the focus position. The examples in (4b, c) are cleft sentences formed on the basis of the simple sentence in (4a).

- (4) a. Ken-ga    Mari-ni    hon-o    ageta.  
         Ken-Nom   Mari-Dat   book-Acc   gave  
         ‘Ken gave a book to Mari.’
- b. Ken-ga    hon-o    ageta no-wa    Mari-ni    da.  
         Ken-Nom   book-Acc   gave   Comp-Top   Mari-Dat   Cop  
         ‘It is to Mari that Ken gave a book.’
- c. Hon-o    ageta no-wa    Ken-ga    Mari-ni    da.  
         Book-Acc   gave   Comp-Top   Ken-Nom   Mari-Dat   Cop  
         (Lit.) ‘It is Ken to Mari that gave a book.’

In (4b) the dative object appears in the focus position between the topic marker and the copula and in (4c) the subject and the dative object appear there. In this paper, I refer to cleft constructions with multiple foci, as in (4c), as multiple clefts.

There are two important properties of the cleft construction exemplified in (4b, c) relevant for the present discussion. First, this type of cleft construction involves movement of the

focus element (Hoji (1987)).<sup>3</sup> Second, in multiple clefts, the focus elements must be clausemates (Koizumi (1995, 2000)).<sup>4</sup> The contrast between (6) and (7), both of which are formed on the basis of the sentence in (5), shows the second property.

(5) Masao-ga Yumi-ni [Ken-ga Mari-ni hon-o ageta to] itta.  
 Masao-Nom Yumi-Dat Ken-Nom Mari-Dat book-Acc gave Comp told  
 ‘Masao told Yumi that Ken gave a book to Mari.’

(6) a. [Ken-ga Mari-ni hon-o ageta to] itta no-wa  
 Ken-Nom Mari-Dat book-Acc gave Comp told Comp-Top  
 Masao-ga Yumi-ni da.  
 Masao-Nom Yumi-Dat COP  
 (Lit.) ‘It is Masao Yumi that told that Ken gave a book to Mari.’

b. Masao-ga Yumi-ni [Ken-ga ageta to] itta no-wa  
 Masao-Nom Yumi-Dat Ken-Nom gave Comp told Comp-Top  
 Mari-ni hon-o da.  
 Mari-Dat book-Acc Cop  
 (Lit.) ‘It is to Mari a book that Masao told Yumi that Ken gave.’

(7) a. \* Masao-ga [Ken-ga Mari-ni ageta to] itta no-wa  
 Masao-Nom Ken-Nom Mari-Dat gave Comp told Comp-Top  
 Yumi-ni hon-o da.  
 Yumi-Dat book-Acc Cop  
 (Lit.) ‘It is Yumi a book that Masao told that Ken gave to Mari.’

b. \* Yumi-ni [Ken-ga hon-o ageta to] itta no-wa  
 Yumi-Dat Ken-Nom book-Acc gave Comp told Comp-Top  
 Masao-ga Mari-ni da.  
 Masao-Nom Mari-Dat Cop

(Lit.) ‘It is Masao to Mari that told Yumi that Ken gave a book.’

In (6) the two focus elements come from the same clause, whereas in (7) they come from different clauses. Only the examples in (6) are grammatical. Thus, there is a clausemate restriction imposed on Japanese multiple clefts.

However, there are exceptions to this generalization. One exception has been pointed out in Takano (2002). There I observe that (8b) is acceptable, in contrast to (8a).<sup>5</sup>

(8) a. \* [Bill-ga a-eru to] omotteiru no-wa John-ga Mary-ni  
Bill-Nom meet-can Comp think Comp-Top John-Nom Mary-Dat  
da.

Cop

(Lit.) ‘It is John Mary that thinks that Bill can meet.’

(John thinks that Bill can meet Mary.)

b. [pro<sub>i</sub> a-eru to] omotteiru no-wa John<sub>i</sub>-ga Mary-ni da.  
meet-can that think Cop-Top John-Nom Mary-Dat COP

(Lit.) ‘It is John Mary that thinks that he can meet.’

(John thinks that he can meet Mary.)

The unacceptability of (8a) is consistent with the clausemate restriction, but the acceptability of (8b) constitutes an apparent counterexample to it. The crucial factor that makes (8b) acceptable seems to be the presence of a phonetically null pronoun (*pro*) bound by the matrix subject. In fact, the example is acceptable only on the reading on which the *pro* is bound by the matrix subject *John*; if the *pro* refers to some other person, the sentence is unacceptable.

Although I discussed only (8b) in Takano (2002), the effect is quite general (see also Kuno (2007)). For example, it is not just a *pro* that has this effect; the overt reflexive *zibun* also works the same way:<sup>6</sup>

(9) [Zibun<sub>i</sub>-ga a-eru to] omotteiru no-wa John<sub>i</sub>-ga Mary-ni da.

Self-Nom meet-can Comp think Comp-Top John-Nom Mary-Dat Cop

(Lit.) 'It is John Mary that thinks that he can meet.'

(John thinks that he can meet Mary.)

The following examples show the same point.

- (10) a. \* Ken<sub>i</sub>-ga [pro<sub>i</sub>/zibun<sub>i</sub>-ga iku to] itta no-wa  
Ken-Nom self-Nom go Comp told Comp-Top  
Yumi-ni America-e da.  
Yumi-Dat America-to Cop

(Lit.) 'It is Yumi to America that Ken told that he would go.'

(Ken told Yumi that he would go to America.)

- b. Yumi-ni [pro<sub>i</sub>/zibun<sub>i</sub>-ga iku to] itta no-wa  
Yumi-Dat self-Nom go Comp told Comp-Top  
Ken<sub>i</sub>-ga America-e da.  
Ken-Nom America-to Cop

(Lit.) 'It is Ken to America that told Yumi that he would go.'

(Ken told Yumi that he would go to America.)

- (11) a. \* Yumi<sub>i</sub>-ni [pro<sub>i</sub> iku-beki da to] itta no-wa  
Yumi-Dat go-should Cop Comp told Comp-Top  
Ken-ga Amerika-e da.  
Ken-Nom America-to Cop

(Lit.) 'It is Ken to America that told Yumi that she should go.'

(Ken told Yumi that she should go to America.)

- b. Ken-ga [pro<sub>i</sub> iku-beki da to] itta no-wa  
Ken-Nom go-should Cop Comp told Comp-Top  
Yumi<sub>i</sub>-ni Amerika-e da.

Yumi-Dat America-to Cop

(Lit.) 'It is Yumi to America that Ken told that she should go.'

(Ken told Yumi that she should go to America.)

The deviance of (10a) and (11a) can be attributed to the clausemate restriction, given that the two focus elements come from different clauses. The improved status of (10b) and (11b), on the other hand, apparently runs counter to this restriction. The factor distinguishing (10a)/(11a) and (10b)/(11b) is the presence/absence of a binding relation between the focus element from the matrix clause and a pro/reflexive in the embedded clause.<sup>7</sup>

Furthermore, apparent counterexamples to the clausemate restriction are not limited to cases having a pro/reflexive in the subject of the embedded clause. They can also be found in cases where a pro/reflexive is in the object of the embedded clause. The examples in (12) duplicate the patterns in (8) and (9).

(12) a. \* [Masao-ga Mari-o suisensu-beki da to] omotteiru

Masao-Nom Mari-Acc recommend-should Cop Comp think

no-wa Ken-ga sono kaisya-ni da.

Cop-Top Ken-Nom that company-Dat Cop

(Lit.) 'It is Ken to that company that thinks that Masao should recommend Mari.'

(Ken thinks that Masao should recommend Mari to that company.)

b. [zibun<sub>i</sub>-ga Mari-o suisensu-beki da to] omotteiru

self-Nom Mari-Acc recommend-should Cop Comp think

no-wa Ken<sub>i</sub>-ga sono kaisya-ni da.

Cop-Top Ken-Nom that company-Dat Cop

(Lit.) 'It is Ken to that company that thinks that he should recommend Mari.'

(Ken thinks that he should recommend Mari to that company.)

Now observe (13).

- (13) ? [Masao-ga zibun<sub>i</sub>-o suisensu-beki da to] omotteiru  
Masao-Nom self-Acc recommend-should Cop Comp think  
no-wa Ken<sub>i</sub>-ga sono kaisya-ni da.  
Cop-Top Ken-Nom that company-Dat Cop  
(Lit.) ‘It is Ken to that company that thinks that Masao should recommend  
him.’

(Ken thinks that Masao should recommend him to that company.)

This examples, like the one in (12b), improves on (12a) though the reflexive is placed in the direct object of the embedded clause.<sup>8</sup>

So far we have seen that the presence of a pronominal (a pro or a reflexive) in an embedded clause that is bound by the matrix element saves the example from violating the clausemate restriction. However, it is not the case that the mere presence of a bound pronominal in an embedded clause ensures this effect.<sup>9</sup> To see this, let us consider (14).

- (14) a. \* [Masao-ga [Yumi-ga au koto]-o yurusu-beki da to]  
Masao-Nom Yumi-Nom meet Comp-Acc permit-should Cop Comp  
omotteiru no-wa Ken-ga Mari-ni da.  
think Comp-Top Ken-Nom Mari-Dat Cop  
(Lit.) ‘It is Ken Mari that thinks that Masao should permit Yumi to meet.’  
(Ken thinks that Masao should permit Yumi to meet Mari.)

- b. ? [Masao-ga [zibun<sub>i</sub>-ga au koto]-o yurusu-beki da to]  
Masao-Nom self-Nom meet Comp-Acc permit-should Cop Comp  
omotteiru no-wa Ken<sub>i</sub>-ga Mari-ni da.  
think Comp-Top Ken-Nom Mari-Dat Cop



(Lit.) ‘It is Ken Mari that thinks that Masao should permit him to meet.’

(Ken thinks that Masao should permit him to meet Mari.)

Each of these examples contains two embedded clauses. (14a) violates the clausemate restriction and is indeed unacceptable. (14b), on the other hand, has a pronominal bound by the matrix subject in the lower embedded clause and it does improve on (14a). Compare now (14b) with (15).

(15) \* [zibun<sub>i</sub>-ga [Masao-ga au koto]-o yurusu-beki da to]  
self-Nom Masao-Nom meet Comp-Acc permit-should Cop Comp  
omotteiru no-wa Ken<sub>i</sub>-ga Mari-ni da.  
think Comp-Top Ken-Nom Mari-Dat Cop

(Lit.) ‘It is Ken Mari that thinks that he should permit Masao to meet.’

(Ken thinks that he should permit Masao to meet Mari.)

Like (14b), (15) has a pronominal bound by the matrix subject, but here it is in the higher embedded clause and the sentence is much worse than (14b). This shows that the mere presence of a bound pronominal does not save the example from violating the clausemate restriction. In fact, the examples that we have seen so far indicate that the saving effect can be seen only when the bound pronominal is a clausemate with the focus element from an embedded clause. In (8b), (9), (10b), (11b), (12b), (13), and (14b), this situation obtains, but in (15), it does not.

These observations lead us to the following generalization about the clausemate restriction on multiple clefts.<sup>10</sup>

(16) X, Y = focus elements

When X is from the matrix clause and Y is from an embedded clause, the sentence is acceptable only if (i) there is a pronominal bound by X and (ii) the pronominal is a clausemate with Y.

The next question is, why should this be the case?

We can derive this generalization straightforwardly under a movement approach to binding, in which the antecedent moves from the position of the pronominal it binds. Thus, under this approach, the example in (17a) receives the analyses given in (17b, c).

- (17) a. Ken<sub>i</sub>-ga [pro<sub>i</sub>/zibun<sub>i</sub>-ga Mari-ni a-eru to] omotteiru.  
Ken-Nom self-Nom Mari-Dat meet-can Comp think  
'Ken thinks that he can meet Mari.'
- b. Ken-ga [<Ken-ga> pro Mari-ni a-eru to] omotteiru
- c. Ken-ga [<Ken-ga> zibun-ga Mari-ni a-eru to] omotteiru

In the analyses in (17b, c), the unpronounced copy of *Ken* and *Mari* are clausemates. Thus, there is a stage in the derivation at which *Ken* and *Mari* are clausemates. Then the generalization in (16) falls into place: the apparent exceptions to the clausemate restriction all meet the restriction before movement of the matrix element.

Note that we cannot achieve the same result under a non-movement approach to binding, where the relevant matrix element stays in the matrix clause throughout the derivation. In such an analysis, (8b), (9), (10b), (11b), (12b), (13), and (14b) would violate the clausemate restriction and hence their acceptability would be left unaccounted for.

Given that movement of antecedents plays an essential role in deriving the generalization in (16), the present proposal constitutes new evidence for positing antecedent movement.

### 3. On the Nature of Antecedent Movement

Having seen that multiple clefts in Japanese provide new evidence for antecedent movement, I turn to exploring the nature of antecedent movement, again on the basis of Japanese multiple clefts. The purpose of this section is to provide a few observations, leaving a fuller discussion and an explanation for future work.

There are two consequences about the nature of antecedent movement that follow immediately from the proposal in the previous section. First, the cases falling under (16) show that A-movement out of a CP is possible. In those cases, the antecedent moves out of an embedded clause that is clearly a CP (as evidenced by the presence of an overt complementizer). It is also clear that the antecedent undergoes A-movement, given that it moves to a  $\theta$ -position in the matrix clause. Bošković (2007) and others cited there claim, on various grounds, that A-movement should be allowed to take place out of a CP. The present proposal lends additional support to their claim.

The other consequence is that movement of antecedents shows no minimality effects. This can be seen clearly in (10b), (13), and (14b), where A-movement of the antecedent crosses an intervening argument (a matrix object in the case of (10b) and an embedded subject in the case of (13) and (14)). Kayne (2002: 161) has already suggested that there are no minimality effects with antecedent movement. The proposal here thus supports Kayne's suggestion on independent grounds.

Let us turn now to a property of antecedent movement that has not been noted in previous studies. The relevant property has to do with the locality of antecedent movement in terms of syntactic islands.

We have already noted that antecedent movement can cross a CP boundary and hence that it can be long distance. Let us also observe (18).

- (18) a. \* [Masao-ga au-beki da to] omotteiru no-wa  
 Masao-Nom meet-should Cop Comp think Comp-Top  
 Ken-ga Mari-ni da.  
 Ken-Nom Mari-Dat COP  
 (Lit.) 'It is Ken Mari that thinks that Masao should meet.'  
 (Ken thinks that Masao should meet Mari.)

b. [zibun<sub>i</sub>-ga au-beki da to] omotteiru no-wa Ken<sub>i</sub>-ga  
 self-Nom meet-should Cop Comp think Comp-Top Ken-Nom

Mari-ni da.

Mari-Dat Cop

(Lit.) 'It is Ken Mari that thinks that he should meet.'

(Ken thinks that he should meet Mari.)

c. ? [[zibun<sub>i</sub>-no tomodati-ga] au-beki da to] omotteiru no-wa  
 self-Gen friend-Nom meet-should Cop Comp think Comp-Top

Ken<sub>i</sub>-ga Mari-ni da.

Ken-Nom Mari-Dat Cop

(Lit.) 'It is Ken Mari that thinks that his friend should meet.'

(Ken thinks that his friend should meet Mari.)

d. ? [[[zibun<sub>i</sub>-no tomodati-no] hahaoya-ga] au-beki da to] omotteiru  
 self-Gen friend-Gen mother-Nom meet-should Cop Comp think

no-wa Ken<sub>i</sub>-ga Mari-ni da.

Comp-Top Ken-Nom Mari-Dat Cop

(Lit.) 'It is Ken Mari that thinks that his friend's mother should meet.'

(Ken thinks that his friend's mother should meet Mari.)

We have seen that multiple clefts show contrasts like the one between (18a) and (18b). The improvement of (18b) over (18a) is due to the presence in the embedded clause of a reflexive bound by the matrix subject. The reflexive in (18b) is a subject of the embedded clause. The examples in (18c, d) show that the same saving effect that is seen in (18b) can be seen when the reflexive is a possessor of the subject noun (18c) and is further embedded in the subject DP (18d).

Consider also (19), which is repeated from (14b).

- (19) ? [Masao-ga [zibun<sub>i</sub>-ga au koto]-o yurusu-beki da to]  
 Masao-Nom self-Nom meet Comp-Acc permit-should Cop Comp  
 omotteiru no-wa Ken<sub>i</sub>-ga Mari-ni da.  
 think Comp-Top Ken-Nom Mari-Dat Cop  
 (Lit.) ‘It is Ken Mari that thinks that Masao will permit him to meet.’  
 (Ken thinks that Masao will permit him to meet Mari.)

This example has two embedded clauses, and one focus element comes from the matrix clause and the other from the most deeply embedded clause, thus apparently violating the clausemate restriction. The acceptability of (19) is due to the fact that there is a reflexive in the most deeply embedded clause bound by the focus element from the matrix clause.

From the perspective of movement of antecedents, the grammatical status of (18c, d) and (19) backs up the observation that antecedent movement can be long distance, crossing DP or CP boundaries. However, the sentence degrades significantly if the antecedent crosses a syntactic island, as in (20).

- (20) a. \* [[zibun<sub>i</sub>-no kawari-ni] Masao-ga au-beki da to] omotteiru  
 self-Gen stead-in Masao-Nom meet-should Cop Comp think  
 no-wa Ken<sub>i</sub>-ga Mari-ni da.  
 Comp-Top Ken-Nom Mari-Dat Cop  
 (Lit.) ‘It is Ken Mari that thinks that Masao should meet instead of him.’  
 (Ken thinks that Masao should meet Mari instead of him.)
- b. \* [[zibun<sub>i</sub>-to] issyoni Masao-ga au-beki da to] omotteiru  
 self-with together Masao-Nom meet-should Cop Comp think  
 no-wa Ken<sub>i</sub>-ga Mari-ni da.  
 Comp-Top Ken-Nom Mari-Dat Cop  
 (Lit.) ‘It is Ken Mari that thinks that Masao should meet together with

him.’

(Ken thinks that Masao should meet Mari together with him.)

c. \* [[zibun<sub>i</sub>-to Masao-ga] au-beki da to] omotteiru

self-with Masao-Nom meet-should Cop Comp think

no-wa Ken<sub>i</sub>-ga Mari-ni da.

Comp-Top Ken-Nom Mari-Dat Cop

(Lit.) ‘It is Ken Mari that thinks that he and Masao should meet.’

(Ken thinks that he and Masao should meet Mari.)

d. \* [[zibun<sub>i</sub>-ka Masao-ga] au-beki da to] omotteiru

self-or Masao-Nom meet-should Cop Comp think

no-wa Ken<sub>i</sub>-ga Mari-ni da.

Comp-Top Ken-Nom Mari-Dat Cop

(Lit.) ‘It is Ken Mari that thinks that he or Masao should meet.’

(Ken thinks that he or Masao should meet Mari.)

In (20a, b) the reflexive is embedded in an adjunct PP headed by *ni* ‘in’ and *to* ‘with,’ respectively. In (20c, d) it is embedded in a coordinate structure.<sup>11</sup> Note that the examples in (20), like those in (18b-d) and (19), meet the generalization in (16). Yet the examples in (20) are much worse than those in (18b-d) and (19).

The same pattern can be seen in (21).

(21) a. \* [Masao-ga yorokobaseta to] itta no-wa Ken-ga

Masao-Nom pleased Comp said Comp-Top Ken-Nom

Mari-o da.

Mari-Acc Cop

(Lit.) ‘It is Ken Mari that said that Masao pleased’

(Ken said that Masao pleased Mari.)

- b. [zibun<sub>i</sub>-ga yorokobaseta to] itta no-wa Ken<sub>i</sub>-ga Mari-o  
 self-Nom pleased Comp said Comp-Top Ken-Nom Mari-Acc  
 da.  
 COP  
 (Lit.) ‘It is Ken Mari that said that he pleased’  
 (Ken said that he pleased Mari.)
- c. \* [[[zibun<sub>i</sub>-kara-no] tegami-ga] yorokobaseta to] itta no-wa  
 self-from-Gen letter-Nom pleased Comp said Comp-Top  
 Ken<sub>i</sub>-ga Mari-o da.  
 Ken-Nom Mari-Acc COP  
 (Lit.) ‘It is Ken Mari that said that a letter from him pleased’  
 (Ken said that a letter from him pleased Mari.)

The fact that (21c) is significantly worse than (21b) indicates that the saving effect cannot be seen when the reflexive is embedded in an adjunct PP inside the subject DP.

The contrast between (18b-d), (19), and (21b) on the one hand and (20) and (21c) on the other falls into place if movement of the antecedent *Ken* from the position of the reflexive *zibun* obeys island constraints. Adjuncts and coordinate structures constitute syntactic islands and *zibun* is embedded in those islands in (20) and (21c). As a result, those sentences necessarily violate either island constraints or the clausemate restriction.<sup>12</sup>

The discussion in this section suggests that movement of antecedents exhibits island effects, contra Hornstein (2001: 176-179) and Kayne (2002: note 42). Since island effects are one of the well-known signs of movement, this discovery makes the hypothesis that antecedents move from the position of pronominals even more convincing.

At the same time, this claim leads to important questions. We have seen that antecedent movement does not show minimality effects. Putting these observations together, we reach

the conclusion in (22).

(22) Antecedent movement shows island effects but no minimality effects.

Thus, antecedent movement looks like a completely new kind of A-movement not attested in previous studies.

If correct, this conclusion raises important questions: why should this be the case?, how can it be explained?, why does antecedent movement behave exactly this way, not the way other A-movement behaves?, what is special about antecedent movement?, how can grammatical cases like (23), where *zibun* and its antecedent are separated by a syntactic island (cf. (20a)), be explained?, what will the theory of movement be like to accommodate these properties of antecedent movement?, and so on.

(23) Ken<sub>i</sub>-ga [[zibun<sub>i</sub>-no kawari-ni] Masao-ga Mari-ni au-beki da  
Ken-Nom self-Gen stead-in Masao-Nom Mari-Dat meet-should Cop  
to] omotteiru.  
Comp think  
'Ken thinks that Masao should meet Mari instead of him.'

These questions set a stage for further inquiry and I hope that future research from this perspective will provide us with new insight into the nature of antecedent movement and the theory of movement in human language.<sup>13</sup>

#### 4. Summary

In this paper, I have discussed, from the perspective of multiple clefts in Japanese, the hypothesis that the relation between pronominals and their antecedents involves movement of the antecedent from the position of the pronominal. I have shown that certain properties of Japanese multiple clefts provide new empirical evidence for this hypothesis. I have also suggested that antecedent movement exhibits the puzzling property of obeying island



constraints but not minimality.

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## FOOTNOTES

<sup>1</sup> There are two major proposals about what exactly happens in the subject of the embedded clause. Hornstein (2001) assimilates it to obligatory control, claiming that *John* is merged directly into the subject  $\theta$ -position of the embedded clause and moves from there, with its copy spelled out as the pronoun *he*. Kayne (2002) proposes an alternative in which *he* and *John* get merged first to form a constituent and this constituent is merged into the embedded subject position, and then *John* moves out of this constituent (in fact, Kayne proposes the same analysis for obligatory control; thus, in this analysis, *John* and PRO in (1) form a constituent, this constituent is merged into the embedded subject position, and *John* moves out of this constituent to the matrix subject position). In this paper, I remain neutral on the choice between the two analyses.

<sup>2</sup> There are two previous studies based on Japanese that argue for antecedent movement. Motomura (2001) proposes that certain properties of the Japanese reflexive *zibun* can be derived in a uniform way under the hypothesis that the antecedent undergoes overt A-movement from the position of *zibun*. Miyamoto (2008) also argues for antecedent movement by proposing that the effects of bound pronouns on scope interactions between *wh*-phrases and quantifiers in English of the kind discussed by Sloan (1991) can be accounted for by positing antecedent movement (see also Lasnik (2007)), and extends the analysis to similar effects caused by Japanese *zibun*.

<sup>3</sup> To be precise, Hoji (1987) proposes an analysis in which the focus element is base-generated in the focus position and a null operator corresponding to the focus element moves inside the presuppositional clause. In this analysis, the sentence in (4b) has the structure shown in (i).

- (i)  $[_{CP} Op_i [_{TP} Ken-ga <OP> hon-o ageta] no]-wa Mari_i-ni da.$

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An alternative analysis has been proposed and defended by Hasegawa (1997, 2011) and Hiraiwa and Ishihara (2002, 2012) according to which the focus element itself moves (leftward) to a focus position, followed by (leftward) movement (topicalization) of a remnant to a higher topic position. In this analysis, the sentence in (4b) is derived as shown in (ii).

- (ii) a. Ken-ga Mari-ni hon-o ageta no da. → movement of focus phrase  
 b. Mari-ni Ken-ga <Mari-ni> hon-o ageta no da. → topicalization of remnant  
 c. [<sub>x</sub> Ken-ga <Mari-ni> hon-o ageta no]-wa Mari-ni <X> da.

Here I am not committed to either alternative, though I use the term “movement of the focus element” for expository purposes.

<sup>4</sup> There are two major proposals to derive this generalization. One proposal is made by Koizumi (1995, 2000) and Kuwabara (1996), and an alternative is proposed by Takano (2002). For present purposes, it is sufficient to simply assume the generalization.

<sup>5</sup> The judgments are relative. The example in (8a) sounds better than those in (7), but I abstract away from this difference, marking (8a) with a star. What is important is the contrast between (8a), which is degraded, and (8b), which is perfectly acceptable. The same reservation holds throughout this paper.

<sup>6</sup> In fact, Takano (2002: note 16), I judged (9) to be slightly degraded, as compared with (8b). Although there may be a slight difference between the two in this direction, I believe now that (9) is fairly acceptable and contrasts significantly with (8a). As also noted in Takano (2002: note 16), the sentence becomes unacceptable if we replace *zibun* in (9) with the overt pronoun *kare* ‘he’:

- (i) \* Kare<sub>i</sub>-ga a-eru to omotteiru no-wa John<sub>i</sub>-ga Mary-ni da.  
 He-Nom meet-can Comp think Comp-Top John-Nom Mary-Dat Cop  
 (Lit.) ‘It is John Mary that thinks that he can meet.’

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(John thinks that he can meet Mary.)

However, it seems that (i) is unacceptable for reasons having nothing to do with multiple clefting. It is very hard, to begin with, for *kare* in the presuppositional clause to be interpreted as coreferential with a focus element, as shown in (ii).

- (ii) Mary-ga kare-no syasin-o miseta no-wa John-ni da.  
Mary-Nom he-Gen picture-Acc showed Comp-Top John-Dat Cop  
'It is to John that Mary showed his picture.'

The cleft sentence in (ii) has a single focus. The sentence is acceptable if *kare* takes a discourse antecedent, but is unacceptable if it takes *John* as its antecedent. The sentence in (i) is probably unacceptable for whatever reason makes coreference between *kare* and *John* impossible in (ii).

<sup>7</sup> We cannot use the reflexive *zibun* in the embedded subject in (11) because *zibun* is subject-oriented and hence cannot have a matrix object as its antecedent.

<sup>8</sup> There may be a slight difference between (12b) and (13), such that (13) is a little worse than (12b). Here I take the improvement of (13) over (12a) to be an important fact that calls for an explanation. Note also that it is not easy to use a *pro* in place of *zibun* in (13) due to the intervening fact that coreference between *Ken* and the embedded object *pro* is hard to get. This is because coreference between the matrix subject and the embedded object *pro* is not natural in its non-cleft counterpart in (i) (see Kuroda (1965), Huang (1984), and Hasegawa (1985) for discussion of this fact in Japanese).

- (i) Ken-ga [Masao-ga sono kaisya-ni pro suisensu-beki da to]  
Ken-Nom Masao-Nom that company-Dat recommend-should Cop Comp  
omotteiru.  
think

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‘Ken thinks that Masao should recommend him/her/them/etc. to that company.’

It is very hard to interpret the pro in (i) to refer to Ken.

<sup>9</sup> I am indebted to Mamoru Saito (personal communication) for bringing this point to my attention.

<sup>10</sup> Kuno (2007) puts forward a similar generalization. While Kuno’s generalization is restricted to cases where the “pronominal” in (16) is phonetically null (i.e., PRO, pro, or trace), the present generalization also covers cases where it is overt (i.e., *zibun*). I thank Hideaki Yamashita (personal communication) for bringing Kuno’s work to my attention.

<sup>11</sup> Thanks to Kensuke Takita for pointing out the cases involving coordinate structures to me.

<sup>12</sup> Consider (i) below.

- (i) \* [[*zibun*<sub>i</sub>-ga sitteiru] hito-ga] au-beki da to] omotteiru  
self-Nom know person-Nom meet-should Cop Comp think  
no-wa Ken<sub>i</sub>-ga Mari-ni da.  
Comp-Top Ken-Nom Mari-Dat Cop  
(Lit.) ‘It is Ken Mari that thinks that someone he knows should meet.’  
(Ken thinks that someone he knows should meet Mari.)

Here *zibun* is embedded in a relative clause and the sentence is unacceptable. However, as pointed out to me by Mamoru Saito, we cannot attribute the unacceptability of (i) to an island effect, given that *zibun* and the base position of *Mari* are in different clauses in (i), violating the generalization in (16).

<sup>13</sup> Abe (2009, 2012) also proposes a movement analysis of binding for null subjects in Japanese in which the antecedent moves from the subject of an embedded clause to the subject of the higher clause. However, Abe claims that this movement of the antecedent is local in that it cannot cross an argument. At present it is not clear how we can reconcile the



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present claim with the evidence Abe adduces in support of his claim. This is another area that we need to look at in future research.

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## Abstract

Hornstein (2001) and Kayne (2002) propose that referential dependencies between pronouns/reflexives and their antecedents, which have traditionally been captured in terms of binding, be analyzed as deriving from movement of the antecedent from the position of the pronoun/reflexive. This paper provides a novel empirical argument for this proposal based on facts about multiple cleft constructions in Japanese. It is shown that certain properties of these constructions follow straightforwardly under the hypothesis that the antecedent moves from the position of the pronoun/reflexive it binds. It is also pointed out that movement of the antecedent in those cases reveals striking properties, namely, that it obeys island constraints, but not minimality.

Keywords: island effects, Japanese, minimality, movement of antecedents, multiple clefts