The book by Aoun and Li (2003) is divided into two parts. In part I, they discuss superiority effects in multiple wh-constructions, which have been regarded as a property of wh-movement: they prevent a wh-phrase from crossing over another wh-phrase. In the Minimalist Program, this phenomenon is accounted for under Attract Closest, which states that among phrases which can be raised to an attractor to check or match relevant features, the closest one must be attracted (the notion of closest is defined by c-command) (cf. Chomsky (1995)). However, on the basis of Lebanese Arabic data, Aoun and Li (2003) argue that superiority effects are observed even in multiple wh-constructions involving resumptive pronouns. Resumptive pronouns are assumed to be employed when no wh-movement relation is established between a wh-phrase in the Spec of CP and its base-generated (or variable) position (e.g. when islands intervene). In other words, although no movement is initiated in the case of resumption, superiority effects are still
detected. To explain this new and surprising observation, Aoun and Li claim that chains must be generated either derivationally or representationally and these two kinds of chains are subject to different rules. Derivational chains are constrained by the Minimal Link Condition, whereas representational chains are regulated by their new condition, "the Minimal Match Condition." There has been an attempt to assimilate representational conditions to derivational ones in the Minimalist Program as in Chomsky (1995). However, with a set of convincing data, Aoun and Li (2003) have shown that not only derivational but representational rules are needed in the Minimalist Program.

In part II, Aoun and Li discuss relative constructions in several languages such as English, Chinese, Lebanese Arabic and Japanese. As will be introduced later, there are two kinds of relative constructions, the matching and the promotion constructions, both of which assume the existence of movement. They claim that all of the languages above except Japanese allow both types of constructions. In other words, they argue that no movement is involved in the construction of relative clauses in Japanese following Murasugi (1991, 2000a, b). In this paper I would like to examine Aoun and Li's discussion of Japanese data carefully and to show that their conclusion about Japanese is wrong.

In the literature two types of analysis have been proposed with regard to relative constructions: the matching (or Head-raising) and the promotion (or adjunction) analysis. According to the matching analysis, which has been proposed by Lees (1960, 1961), Chomsky (1977), and Kuroda (1968), among others, nominal expressions which head relative clauses are base-generated in the head positions, and wh- -phrases or invisible operators move to the Spec of the relative clauses to match themselves with the nominal expressions. According to the promotion analysis, on the other hand, which has been suggested by Brame (1968), Schachter (1973), Vergnaud (1974), among others, the head of a relative clause is moved from within the relative clause, so no wh-phrase or operator movement is involved. Following Carlson (1977) and Åfarli (1994), Aoun and Li (2003) show that both the matching and the promotion analysis are necessary to account for all types of relative constructions in English. Specifically, Aoun and Li claim that while wh-relative constructions (i.e. relative clauses in which wh-phrases are used) are derived by the matching method, that-relative constructions (i.e. relative clauses in which 'that' is employed) are derived by the promotion method. They have come to this conclusion on the basis
of three types of evidence: (i) idiom chunks, (ii) binding, and (iii) scope interaction. As for Japanese, following Murasugi (2000a, b), Aoun and Li (2003) dismiss the existence of any type of movement in relative constructions, and hence, neither the matching nor the promotion analysis is necessary. In this paper I would like to challenge Aoun and Li’s (2003) conclusion about Japanese. I will argue that Japanese relative clauses can also be derived with the promotion analysis as in English by showing the existence of reconstruction with respect to idiom chunks, binding, and scope interaction, and by presenting another piece of evidence. This paper is organized as follows. I will present Aoun and Li’s (2003) analysis of English and Japanese relative constructions first. Then I will discuss Japanese relative constructions and show the necessity of the promotion method.

1. Aoun and Li (2003)

1.1. English Relative Clauses

In this section I will review Aoun and Li’s (2003) analysis of relative constructions in English first, and then in Japanese. They claim that the head of a relative clause can be moved from inside the relative clause, that is, the promotion analysis is available in the case of that-relative constructions. They present three pieces of evidence for this claim. First of all, a relative clause and its head can form an idiom chunk in a that-relative. Examine the following examples:

(1) a. The careful track that she’s keeping of her expenses pleases me.
   b. The headway that Mel made was impressive.
   c. I was offended by the lip service that was paid to civil liberties at the trial. (from Schachter (1973))

The examples above have idioms such as keep track of, make headway, and pay lip service to, and the NP parts of the idioms serve as the head of the relative clauses. Considering the fact that the idiomatic meanings are retained in all of the examples, each head is expected to be base-generated within and be raised across the relative clauses. In contrast, if wh-relatives are employed instead, all of the corresponding examples become ungrammatical:

(2) a. ??The careful track which she’s keeping of her expenses pleases me.
   b. ??The headway which Mel made was impressive.

c. ??I was offended by the lip service which was paid to the
civil liberties at the trial. (from Aoun and Li (2003: 110))

These facts suggest that the promotion method is available in that-relatives while it is unavailable in wh-relatives.

The second piece of evidence for the promotion analysis for that-relative lies in a binding phenomenon. Consider the following examples:

(3)  
  a. John painted a flattering portrait of himself.  
  b. *Himself painted a flattering portrait of John.  
  c. The portrait of himself that John painted is extremely flattering.  

(Due to Binding Condition A, himself needs to be bound in its governing category, so the grammatical contrast between (3a) and (3b) follows. Interestingly, ‘himself’ in (3c) is bound by John. Since it is implausible to assume that the portrait of himself is base-generated in the head position, the promotion analysis is a natural conclusion. In other words, the portrait of himself is reconstructed into the base-generated position within the relative clause and there himself is bound by John. As expected, if the wh-relative counterpart is formed, it results in ungrammaticality as in (4):

(4) *The picture of himself which John painted in art class is impressive.  

(The binding fact above indicates that the promotion analysis is needed for that-relative constructions.

The third piece of evidence is found in scope interaction as follows:

(5)  
  a. Every doctor will examine two patients.  
  b. I phoned the two patients that every doctor will examine tomorrow.  

(5a) is ambiguous. The object QP (quantifier phrase), the two patients, can be interpreted as having either wide or narrow scope with respect to the subject QP, every doctor. If the object QP takes wide scope, there are only two patients for all doctors, whereas if the object QP takes narrow scope, there can be twice as many patients as doctors. Interestingly, (5b) is ambiguous in the same way as (5a). This fact suggests that two patients is reconstructed into the object position in the relative clause. Thus, the promotion method must have been applied in the derivation of (5b). If that is replaced with who as in (6), however, the ambiguity disappears:

(6) I phoned the two patients who every doctor will examine tomorrow.  

(from Aoun and Li (2003: 113))
(The) two patients has only wide scope with respect to every doctor. Hence, reconstruction is unavailable in wh-relative constructions such as (6).

On the basis of the three pieces of evidence shown above, Aoun and Li (2003) argue that both the matching and the promotion analysis are necessary and that wh-relative and that-relative employ the matching and the promotion method respectively in English. They apply the same argument to Chinese and Lebanese Arabic and claim that both the matching and the promotion analysis are necessary also in the two languages. Moreover, Aoun and Li argue that there are differences between English and Lebanese on one hand and Chinese on the other in terms of the application of the promotion method. Specifically, the raised head of a relative clause is DP in English and Lebanese Arabic whereas it is NP in Chinese. Because of limited space, I cannot go into the details of this argument, but Aoun and Li show that languages can be divided into two groups in terms of relative constructions, both of which can allow the application of the matching or the promotion method. However, they argue that a third group exists, where no movement is involved in relative constructions, and that Japanese belongs to this group.

1.2. Japanese Relative Clauses

Aoun and Li (2003) argue that Japanese relative clauses are completely different from English. That is to say, there is no movement involved in the relative constructions in Japanese. By applying two criteria to Japanese data, binding and scope interaction, Aoun and Li claim that no reconstruction, and hence, no movement is required in Japanese relative constructions.

Let us examine the following examples:

(7) Binding

*{NP [Johni-ga e j taipu-sita] [zibuni-no ronbun]i]

-Nom typed self-Gen paper

'Selfi's paper that Johni typed.'

(from Aoun and Li (2003: 197))

(8) Scope interaction

[[toyota-sae]-ga e j uttaeta] [hutatu-no kaisha]j]-ga

Toyota-even-Nom sued two-Gen company-Nom

tubureta

bankrupt
(The) two companies that even Toyota sued went bankrupt. 
(from Aoun and Li (2003: 198), who attribute the example to Hoji Hajime (p.c.))

(7) is ungrammatical. This fact suggests that zibun ‘self,’ which is an anaphor and needs to be bound by John, does not reconstruct into the relative clause. Hence, the promotion method does not seem to be applied there. Furthermore, (8) is unambiguous. Hutatu-no kaisha ‘two companies’ has only wide scope with respect to toyota-sae ‘even Toyota.’ As a result, there are only two sued companies. If the head were reconstructed into the relative clause, it would take narrow scope with respect to the subject, toyota-sae ‘even Toyota,’ and mean that more than two companies were sued. But the narrow scope reading is not available. Thus, this scope interaction phenomenon suggests that the promotion method is not applicable to Japanese relative clauses.

Aoun and Li (2003), following Murasugi (1991, 2000a, b), consider that Japanese relative clauses may have no movement at all. If this idea is correct, the unavailability of head reconstruction in the above data is naturally accounted for. Aoun and Li do not provide any data regarding idiom chunks in Japanese.

In this section Aoun and Li’s (2003) analyses of English and Japanese relative clauses have been presented. They argue that English can choose either the matching or the promotion method. As for Japanese, neither the reconstruction of an anaphor nor scope interaction seems to be available. Hence, Aoun and Li claim that Japanese relative clauses have no operator movement.

2. Japanese Relative Clauses Revisited

It has been shown in the previous section that Aoun and Li conclude that two pieces of evidence, binding and scope interaction data, point to the non-existence of promotion in the derivation of Japanese relative clauses, and suggest that Japanese relative clauses have no operator movement.\(^1\) In this section I would like to challenge this conclusion of Aoun and Li’s (2003). I will present four kinds of evidence: some to

\(^1\) Oka (1988) and Ishii (1991) present a few pieces of evidence for the existence of operator movement in Japanese relative constructions. Specifically, they argue
show the existence of movement and others to support the promotion analysis in Japanese. Specifically, I will offer new data in terms of idiom chunks, binding, and scope interaction, and will show that all of these data support the promotion analysis, and hence, movement. In addition, I will present another piece of evidence for the movement analysis. Then I will discuss why some scope interaction and binding data, which Aoun and Li (2003) presented to defend their claim (as shown in the previous section), do not exhibit reconstruction. I will claim that the intervention effect blocks scope interaction and that the head, if it projects up to DP, prevents itself from being reconstructed into a relative clause and ‘zibun’ makes the head DP.

2.1. New Data
I would like to start with idiom chunks. Consider the following sentences:

(9) a. John-ga kanninbukuro-no-o-ga kiretesimatta (koto).
   -Nom patience-Gen-string-Nom cut that
   ‘(Lit.) (that) John cut the patience’s string.’
   ‘John became angry.’

b. John-no-baai [e; kiretesimatta] kanninbukuru-no-o-wa
   -Gen-case cut patience-Gen-string-Top
   modosiyooganai.
   irreparable
   ‘(Lit.) In the case of John, the patience’s string which
   has been cut is irreparable.’
   ‘In the case of John, once John becomes angry, he
   becomes unstoppable.’

c. ??John-no-baai kanninbukuru-no-o-wa modosiyooganai.
   ‘(Lit.) In the case of John, the patience’s string is
   irreparable.’

(10) a. Mary-ga abunai hasi-o watatta (koto).
    -Nom dangerous bridge-Acc crossed that
    ‘(Lit.) (that) Mary crossed a dangerous bridge.’

for the matching analysis. I also believe that Japanese has the matching method. But I do not repeat their argument in this paper (except Ishii’s data of ‘kare-zisin’ in section 2.1) because the aim of this paper is to indicate the necessity of the promotion method in Japanese relative clauses.

That movie elegantly reconstructed

'(Lit.) That movie elegantly reconstructed the dangerous bridge that Mary crossed.'

'That movie elegantly reconstructed the way Mary ran the risk.'

c. ??Sono eiga-wa abunai hasi-o migotoni saigensita.

'That movie elegantly reconstructed the dangerous bridge.' Not 'that movie elegantly reconstructed the dangerous moment.'

The above examples include idioms such as kannninbukuro-no-o-ga kireru 'patience's string cut' → 'losing one's temper' and abunai hasi-o wataru 'cross a dangerous bridge' → 'run a risk.' As (9b) and (10b) show, the idiomatic meanings are retained even when relativization is applied. This fact suggests that the heads, kannninbukuro-no-o and abunai hasi, are reconstructed into the relative clauses, and hence, the promotion method is employed in (9b) and (10b). (9c) and (10c) indicate that the noun phrases alone do not present idiomatic meanings. For example, abunai hasi alone does not generate the idiomatic meaning, and hence, (10c) only has a literal interpretation, which says that that movie elegantly reconstructed the dangerous bridge, not the dangerous moment. As is the case with English, these data support not only the existence of movement but also the necessity of the promotion method in Japanese relative clauses.

The second evidence indicates the existence of movement in Japanese relative clauses, which is observed when the head includes saisho ‘first.’ Bhatt (2002) claims that the following relative construction is ambiguous:

(11) the first book that John said Tolstoy had written

(from Bhatt (2002: 57))

Bhatt argues that (11) has “high” and “low” readings. According to the “high” reading, the first book must be chosen out of the books about which John said that Tolstoy wrote them. For example, on several occasions, John may have said that Tolstoy had written a book as follows:

(12) In 1972 John said that Tolstoy wrote War and Peace.
In 1973 John said that Tolstoy wrote *Anna Karenina*.
In 1974 John said that Tolstoy wrote *Conversion*.
Since the "high" reading refers to Tolstoy's book that John commented on for the first time, *War and Peace* is the book referred to in (11) in the context of (12). Thus, the book does not have to be Tolstoy's first (published) book. On the other hand, the "low" reading is available when *first* is interpreted within the scope of *say*. Thus, according to John, *the first book* refers to the first book Tolstoy wrote. Hence, if John said that the first book by Tolstoy is *Conversion*, then *the first book* in the "low" reading refers to *Conversion*. According to the promotion analysis, the derivation is represented as follows:

(13) the first book, \(t'\), that John said \(t_i\) Tolstoy had written \(t_i\)

*First* can be reconstructed into either \(t''_i\) or \(t_i\). Bhatt claims that the first option gives the "high" reading and the second option generates the "low" reading.

Let us apply the same argument to Japanese data. Consider the following sentence:

(14) [John-ga [Torusutoy-ga \(t_i\) kaita to] itta] saisho-no honi-Nom Tolstoy-Nom wrote Comp said first-Gen book

(What is) the first book that John said that Tolstoy wrote (?)

(14) has both the "high" and "low" readings as in English. If Japanese relative constructions do not allow any type of movement and the head is base-generated in the surface position, it is not clear why and how the "low" reading is derived. For instance, according to Murasugi (2000a, b), Japanese relative clauses are derived by resumptive pronouns, and hence, no operator movement is required. If this analysis is correct, (14) would be represented as follows:

(15) [John-ga [Torusutoy-ga \(pro_i\) kaita to] itta] saisho-no honi

In (15), it is impossible for *saisho* 'first' to have the 'low' reading because *saisho*, according to Murasugi (2000a, b), is base-generated in the surface position and there is no possibility of reconstructing the head into the most deeply embedded clause, which is within the scope of itta. One might propose that resumptive pronouns in Japanese are exceptional and can copy certain semantic elements of an antecedent, so the resumptive pronoun in (15) includes the meaning of *first* and this process makes the "low" reading possible. Then, if this argument is correct, the following example, where a resumptive pronoun must be
introduced because of the existence of an island, is also expected to generate the “low” reading:

(16) [CP John-ga [CP [island Mary-ga (sore-o) yonda toki] naita -Nom -Nom it-Acc read when cried to itta] saisho-no honi(-wa nan desu ka?)]
Comp said first-Gen book-Top what is Q
‘(What is) the first book that John said that Mary cried when she read it(?)’

However, the prediction is not borne out; that is, (16) does not allow the “low” reading, where first is interpreted with ‘Mary’s reading.’ Only the high reading is possible, which is derived by interpreting first with ‘John’s saying.’ If the resumptive pronoun in (16) could somehow inherit the meaning of first, the “low” reading would be possible. But since (16) does not permit the “low” reading, resumptive pronouns cannot inherit the semantic content of antecedents. Accordingly, non-movement accounts such as Murasugi’s (2000a, b) cannot explain the contrast between (14) and (16). This fact, in turn, suggests the existence of movement in the Japanese relative contra Aoun and Li (2003) and Murasugi (2000a, b).

The third piece of evidence for the promotion method in Japanese is that scope interaction is observed contra Aoun and Li (2003). Compare the following sentences:

(17) [kinoo minna-ga ti zibun-no ie-de mita] eigano
yesterday everyone-Nom self-Gen home-at saw movie-Gen
name-o (zenbu) osiite3
name-Acc all tell.me

2 An intermediate reading is logically possible when first is interpreted in the intermediate CP, which would modify crying. But this reading is not available, either. I would like to thank an anonymous referee for pointing this reading out to me.

3 Minna ‘everyone’ can be a group-denoting expression as well as an individual-denoting expression, but I have added zibun ‘self’ to the example to only allow an individual-denoting expression. To illustrate this effect, compare the following examples:

(i) minna-ga booto-o motiageta.
everyone-Nom boat-Acc lifted
‘They lifted a boat.’
Tell me all the names of movies that everyone watched in his house.

The two boys who hit everyone were caught.

Part of the head in (17) serves as an object in the relative clause while the head in (18) corresponds to a subject in the relative clause. Thus, if reconstruction is available, (17), not (18), is expected to be ambiguous. As predicted, (17) is ambiguous. One reading says that there is the same set of movies which everyone watched in his house, in which the existential quantifier for 'movies' takes scope over the universal quantifier. The other reading says that everyone watched (possibly) different movies in his house, in which the universal quantifier takes scope over the existential quantifier. This scope interaction suggests the existence of the reconstruction of the head in the example, and hence, the existence of the promotion method in Japanese relative constructions. In contrast, the unambiguity of (18) is expected because the existential quantifier, the head, remains to c-command, and hence, to take scope over the universal quantifier even after reconstruction.

A disjunctive phrase also shows scope interaction as in (19):

(ii) minna-ga zibun-no booto-o motiageta.
everyone-Nom self-Gen boat-Acc lifted

Each of them lifted his boat.

(iii) minna-ga zibuntati-no booto-o motiageta.
everyone-Nom selves-Gen boat-Acc lifted

They lifted their boat.

(i) is ambiguous. One interpretation says that one boat was lifted by everyone. The other one says that everyone lifted his own boat, so more than one boat was lifted. However, if zibun 'self' is added as in (ii), only the latter interpretation, that is, individual-denoting minna, is allowed. Thus, the addition of zibun helps to disambiguate the interpretation of minna. The plural counterpart of zibun is zibuntati 'selves' and the addition of this phrase as in (iii) provides the former interpretation, that is, group-denoting minna, where everyone cooperated to lift one boat.

4 The numeral two is added to the existential quantifiers in the relevant examples to make the scope interaction clearer. I would like to thank an anonymous referee for suggesting this change.
As in the previous set of examples, the object is relativized in the former while the subject is relativized in the latter. Predictably, (19) is ambiguous and (20) is not. (19) has two readings. According to one reading, there is one buyer of two books, who is John or Mary, where the existential quantifier for ‘two books’ takes wide scope with respect to ‘John or Mary.’ In this case, only two books were bought. According to the other reading of (19), not only John but also Mary bought books (therefore, four books were bought) and the listener is asked to read two books which were bought by one of the two people, where the existential quantifier for ‘two books’ takes narrow scope with ‘John or Mary.’ This ambiguity indicates the existence of scope interaction. In contrast, the unambiguity of (20) is due to the fact that the scope relation does not change even after the reconstruction of the head. In other words, there is only one person who was cheated and this person is either John or Mary. Therefore, the other reading where both John and Mary were cheated is unavailable. The fact that (19) is ambiguous and (20) is not supports the claim that the promotion method is applicable to Japanese relative constructions. Later I will discuss why scope interaction is not observed under a certain condition.

The fourth piece of evidence for the promotion analysis is found in an anaphoric binding phenomenon. Although Aoun and Li (2003) present the ‘zibun’ (‘self’) data (cf. (7)) to support the non-movement analysis, there are other anaphoric items which indicate the promotion of the heads out of relative clauses. Examine the following examples:
Unlike zibun, anaphoric elements such as kare-zisin ‘himself’ and otagai ‘each other’ can be bound by their antecedents inside relative clauses as in (21) and (22). The grammaticality of the data suggests that the heads are reconstructed into the relative clauses and the anaphoric elements are c-commanded, and hence, bound by their antecedents. As for zibun, Ishii (1991) claims that it has more constraints than kare-zisin or otagai and cannot be reconstructed. However, I would like to present some data where even the reconstruction of zibun is observed. But before presenting this data, let me introduce a phenomenon called “stacking,” where the head of a relative clause contains another relative clause in itself. Consider the following example:

(23) I dreamed of [[several books] [which I saw yesterday]] [which I had hoped to buy]. (from Aoun and Li (2003: 115))

In this example several books serves the head of which I saw yesterday and several books which I saw yesterday serves the head of which I had hoped to buy. “Stacking” is also possible in Japanese:

(24) [Emi-ga ti tukamaeta] [[tj kuruma-o nusunda] [shoonen-ga]j]i
-Nom arrested car-Acc stole boy-Nom
muzaini natta.
not.guilty became
‘The boy who stole a car who Emi arrested was found not guilty.’

If an anaphoric element zibun ‘self’ is placed right in front of kuruma ‘car,’ it can refer to Emi as follows:

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5 Aoun and Li (2003: 197 fn. 6) consider that kare-zisin is not a true anaphor but an intensifier. But they do not provide a reason why it is not a true anaphor in the book.

6 This example is due to an anonymous referee. I would like to thank him or her for suggesting that I should include other anaphoric data than zibun to support the promotion analysis.
The antecedent of *zibun* must be a subject which c-commands it. Although *zibun* in the surface position in (25) is not c-commanded by *Emi*, it can refer to *Emi*. Therefore, the reconstruction of the entire relative clause, *zibun-no kuruma-o nusunda shoonen* ‘the boy who stole her car’ must be possible. Thus, this data supports the promotion analysis. Another example is the following:

(26) Keisatu-wa [daremo-gaₖ tᵢ mada attakotononai] [tᵢ zibunₖ-no musuko-o sewasitekureta] [sensei-o]ₖ taihosita.

‘The police arrested the teacher who took care of their sons who nobody has seen yet.’

Similarly, though *zibun* is not c-commanded by the antecedent *daremo-ga* ‘everyone-Nom’ in the surface position, it can refer to *daremo-ga*. Hence, the reconstruction of the whole relative clause *zibun-no musuko-o sewasitekureta sensei* ‘the teacher who took care of their sons’ must be possible. To sum up, the anaphoric elements in the heads (not only *kare-zisin* and *otagai* but also *zibun*) of relative clauses indicate the necessity of reconstruction, hence, of the promotion method in Japanese.

In this subsection four kinds of data have been presented to support the existence of operator movement in Japanese relative constructions. They are idiom chunks, heads which have first, scope interaction, and anaphoric binding. I have presented the first two groups of data, both of which Aoun and Li (2003) do not mention, as additional evidence for the movement analysis. I have shown that the idiom chunk data indicate the necessity of the promotion analysis. Furthermore, I have also presented data on scope interaction and anaphoric binding and argued that Japanese relative constructions employ the reconstruction of heads. However, Aoun and Li argue that those two phenomena indicate otherwise as reviewed in the previous section. That is to say, they claim that Japanese relative constructions do not allow scope interaction and the use of anaphoric elements in the head. Although I agree with their judgment of their data, I consider that the unavailability of recon-
struction in their examples is due to some other factors. Therefore, what remains to be analyzed is why Japanese relative constructions do not show scope interaction and the reconstruction of anaphoric elements under certain circumstances such as those found in (7) and (8). I will discuss this question next.

2.2. The Intervention Effect

In this subsection I will explain why scope interaction is blocked under a certain condition. Consider the following data, on the basis of which Aoun and Li (2003) argue for the non-existence of the reconstruction of the heads in Japanese relative clauses:

(27) 
\[ \text{[toyota-sae]-ga e} \text{ uttaeta} \ [\text{hutatu-no kaisha}]_j\text{-ga} \]
\[ \text{Toyota-even-Nom sued two-Gen company-Nom} \]
\[ \text{tubureta.} \quad (= \text{(8)}) \]
\[ \text{bankrupt} \]
\[ \text{'The two companies that even Toyota sued went bankrupt.'} \]

I agree with their judgment (more specifically, Hoji’s judgment). (27) does not show scope interaction between ‘even Toyota’ and ‘two companies,’ and only the reading in which ‘two companies’ takes scope over ‘even Toyota’ is available. However, I argue that the unavailability of scope interaction is due to the intervention effect, which prevents wh-movement under a certain condition. According to Hagstrom (1998), interveners such as *ka, mo, and sae* may block the movement of wh-phrases.  

Examine the following examples:

(28) *daremo-ga nani-o tukatta no?
\[ \text{everyone-Nom what-Acc used Q} \]
\[ \text{‘What did everyone use?’} \]

(29) *Ken ka Mary-ga nani-o tukatta no?
\[ \text{-Nom what-Acc used Q} \]
\[ \text{or} \]
\[ \text{‘What did Ken or Mary use?’} \]

(30) ?*John-wa Mary-ni-sae nani-o okutta no?
\[ \text{-Top -Dat-even what-Acc sent Q} \]
\[ \text{‘What did John send even to Mary?’ (from Yanagida (1998),} \]
\[ \text{which is cited in Hagstrom (1998))} \]

Actually, Hagstrom (1998) claims that it is not a wh-phrase but the question particle ‘*ka*’ that is raised in Japanese *wh*-questions. However, whether his claim or the current claim is chosen, the present paper is unaffected.
The three examples above are all ungrammatical because there are interveners between wh-phrases and CP. Furthermore, they are all unambiguous: the interveners never take scope over the wh-phrases. According to Hagstrom (1998), the intervention effect in wh-questions is due to the Minimal Link Condition (cf. Chomsky (1995)). In other words, interveners such as mo, ka, and sae prevent C and a wh-phrase from entering checking configuration if they are placed between C and a wh-phrase. Therefore, if the wh-phrases are scrambled and placed before the interveners, the examples become grammatical as follows:

(31) nani-o_{i} daremo-ga ti tukatta no?
    what-Acc everyone-Nom used Q
    'What did everyone use?'

(32) nani-o_{i} Ken ka Mary-ga ti tukatta no?
    what-Acc or -Nom used Q
    'What did Ken or Mary use?'

(33) John-wa nani-o_{i} Mary-ni-sae ti okutta no?
    -Top what-Acc -Dat-even sent Q
    'What did John send even to Mary?'

As for the interpretation, the wh-phrases remain to take scope over the interveners; that is, the examples continue to be unambiguous.

Bearing these facts in mind, consider (27) again. As in (30), sae intervenes in the movement of the relative operator to the Spec of CP. Thus, it is possible that the unavailability of scope interaction in relative clauses such as (27) is related to the use of interveners. This prediction is indeed borne out. If interveners are inserted in the ambiguous data introduced above, the ambiguity disappears:

(34) [kinoo daremo-ga ti zibun-no ie-de mita] eiga-no
    yesterday everyone-Nom self-Gen home-at saw movie-Gen
    name-Acc all tell.me
    'Tell me all the names of movies that everyone watched in
    his house.'
    only 'movies' >> 'every'

(35) [kinoo John ka Mary-ga ti katta] nisatu-no hon-o yonde
    yesterday or -Nom bought two-Gen book-Acc read

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8 I would like to thank an anonymous reviewer for pointing out this fact to me.
kudasai. (cf. (19))
please
‘Please read (for us) two books that John or Mary bought yesterday.’
only ‘two books’ >> ‘John or Mary’
The examples above contain an intervener: daremo ‘everyone’ in (34) and ka ‘or’ in (35). Minna ‘everyone’ in (17), which is not an intervener, is replaced with daremo, which is an intervener as in (28), in (34). Matawa ‘or’ in (19), which is not an intervener, is replaced with ka, which is an intervener as in (29), in (35). As a result, both of the sentences become unambiguous as in (34) and (35). For example, one reading in which everyone watched the same set of movies is available whereas the other reading in which everyone watched different sets of movies is unavailable in (34). Accordingly, the claim that the unavailability of scope interaction is related to the use of interveners seems to be correct. Hence, the unavailability of scope interaction in (27) seems to be due to the intervener sae. Therefore, data such as (27) do not argue against the promotion analysis in Japanese.

To sum up, it has been shown that the use of interveners makes scope interaction unavailable in both wh-questions and relative clauses in Japanese. However, it is also important to be aware of the difference between the intervention effect in wh-questions and the intervention effect in relative constructions. The intervention effect makes wh-questions ungrammatical as in (28), (29) and (30) while it does not make relative constructions ungrammatical as in (27), (34) and (35). The most reasonable account of the difference is to assume that scrambling is applied before relativization in (27), (34) and (35) as scrambling is applied before wh-movement in (31), (32) and (33). Hence, there is no difference between the derivation of wh-questions and that of relative clauses in terms of the intervention effect. Accordingly, the lack of scope interaction in certain relative clauses, if they contain interveners, does not refute the promotion analysis.

2.3. The Head as Non-DP
There is another type of data which is presented to argue against the promotion approach by Aoun and Li (2003). The anaphoric element zibun ‘self’ cannot refer to a subject in a relative clause under a certain condition. The example is repeated below:
If the promotion analysis is correct, the head, *zibun-no ronbun* ‘self’s paper,’ is reconstructed into the base-generated position and bound by *John*. But *zibun* cannot refer to *John*, and hence, the reconstruction of the head is impossible in (36). However, we have also introduced above some examples in which the reconstruction of *zibun* is possible. One of the examples is repeated below:

(37) *[NP [Emi-k-ga ti tukamaeta] [NP [ti zibun_k-no kuruma-o nusunda] -Nom arrested self-Gen car-Acc stole [NP shoonen-ga]_i muzaini natta. boy-Nom not.guilty became ‘The boy who stole her car who Emi arrested was found not guilty.’

(37) shows that *zibun* in the head can refer to a subject in a relative clause if it is deeply embedded. This contrast may suggest that the head does not project high enough to include *zibun* in (36). I assume that *zibun* needs DP projection whereas the head in the promotion method cannot project up to DP. According to Watanabe (2003), the DP structure of Japanese is the following:

(38)

Suppose that *zibun-no ‘self-Gen’* appears in the Spec of DP and the head of a relative clause can project up to QP (Quantifier Phrase) in the promotion method. Then, it is impossible to raise *zibun-no ronbun ‘self’s paper’* in (36) because the existence of *zibun* requires the head to project up to DP. Hence, *zibun* cannot refer to the subject. On the other hand, *zibun* in (37) does not require the head to project up to DP because it is embedded in the head, not heading the head, and hence, the reconstruction of the head is possible and *zibun* can refer to *Emi* as in (39):
Thus, if the above assumption is correct, the unavailability of reconstruction in (36) does not argue against the promotion analysis in Japanese.

However, it is possible to use zibun in the Spec of the head in relative constructions as follows:

(40) Johni-wa [Georgej-ga kowasita] [DP zibun_i/-no jitensha]-ni-Top -Nom broke self-Gen bicycle-Dat notteiru.

 ride on

'John rides on his bicycle, which George broke.'

As (40) shows, if zibun refers to a subject in a matrix clause, it is possible to use zibun in the Spec of the head. In other words, DP can head a relative clause. However, I claim that relative clauses headed by DP are non-restrictive relative clauses. Since non-restrictive relative clauses are not part of the trees which they adjoined to, examples such as (40), if their embedded clauses are non-restrictive, do not argue against the promotion analysis. Before showing that (40) contains a non-restrictive relative clause, let us contrast the following English examples:

(41) Mary thinks that John rides on the bicycle which George broke. But George didn’t break any bicycle.

(42) #Mary thinks that John rides on the bicycle, which George broke. But George didn’t break any bicycle.

The relative clause in (41) is restrictive whereas the one in (42) is non-restrictive. There is one difference in terms of presupposition: the speaker does not presuppose that George broke a bicycle in (41) while s/he presupposes that George broke a bicycle in (42). Hence, (42) is inappropriate. As this data show, non-restrictive relative clauses are presupposed by the speaker even if they are embedded under the intensional verb. Then compare the following examples:

notteiru to] omotteiru ga, George-wa jitensha-o       
ride.on Comp think though -Top bicycle-Acc        
kowasiteinai.

didn’t.break

‘Mary thinks that John rides on the bicycle which George 
broke, but George didn’t break a bicycle.’

(44) #Maryi-wa [Johnj-ga [Georgek-ga kowasita] [DP zibun\j/*k-no           
-Top -Nom -Nom broke self-Gen           
jitensha]-ni notteiru to] omotteiru ga, George-wa           
bicycle-Dat ride.on Comp think though -Top           
jitensha-o kowasiteinai.                   
bicycle-Acc didn’t.break

‘Mary thinks that John rides on the bicycle, which George 
broke, but George didn’t break a bicycle.’

The same contrast as (41) and (42) is observed between (43) and (44). 
In other words, the relative clause in (44) is presupposed by the speak-
er. Hence, it must be non-restrictive. The discussion here indicates 
that if the head includes ‘zibun’ in its Spec, its relative clause must be 
non-restrictive. This fact supports the claim that the head which has 
zibun in its Spec (or its head) cannot be reconstructed into a relative 
clause because the raised head does not project up to DP in the promo-
tion method.9 To conclude this argument, let us consider other 
anaphoric elements in the Spec of the head, such as kare-zisin ‘himself’ 
and otagai ‘each other,’ the reconstruction of which is possible, unlike 
zibun. Examine the following examples:

(45) Maryi-wa [Johnj-ga [Georgek-ga kowasita]           
-Top -Nom -Nom broke           
[DP kare-zisin\k-no jitensha]-ni notteiru to] omotteiru 
  himself-Gen bicycle-Dat ride.on Comp think           
ga, George-wa jitensha-o kowasiteinai.           
  though -Top bicycle-Acc didn’t.break

‘(Lit.) Mary thinks that John rides on himself\k’s bicycle that

9 In fact, this conclusion about Japanese is the same as Aoun and Li’s (2003) 
conclusion about Chinese relative clauses. I disagree with their conclusion that 
Chinese does not show scope interaction, and hence, the head of a relative clause is 
not QP but NP. However, I cannot include the discussion of Chinese relative claus-
eses because of limited space.
George\textsubscript{k} broke, but George didn’t break a bicycle.’

(46) Mary\textsubscript{i}-wa [John\textsubscript{j}-ga [George to Larry\textsubscript{k}-ga kowasita] -Nom and -Nom broke [DP otagai-no jitensha]-ni notteiru to] omotteiru each other-Gen bicycle-Dat ride on Comp think ga, George to Larry-wa jitensha-o kowasitainai. though -Top bicycle-Acc didn’t break

‘Mary thinks that John rides on each other’s bicycle which George and Larry broke, but George and Larry didn’t break a bicycle.’

(45) and (46) show that the relative clauses headed by kare-zisin and otagai are restrictive. Hence, the content of the relative clauses is not presupposed by the speaker in the context above, which indicates that the reconstruction of the heads is possible with anaphoric elements such as kare-zisin and otagai. Hence, those anaphoric elements do not project up to DP unlike zibun and do not require non-restrictive relative clauses. Therefore, no contradiction is observed in (45) and (46).

In the last two subsections I have elucidated circumstances where the reconstruction of the head of a relative clause into the base-generated position is prevented in Japanese. There are two such cases. The first case arises when an intervener intervenes between C and the base-generated position of the head. The second case is when zibun is employed in the Spec of the head. The unavailability of reconstruction is due to the fact that relative clauses headed by ‘zibun’ are non-restrictive.

In this paper Aoun and Li’s (2003) discussion of relative constructions has been discussed. Their analysis of English, Lebanese Arabic and Chinese is backed up with plenty of data and is convincing. But their analysis of Japanese demands more thorough analysis. As a result, they have reached the wrong conclusion. To show this, I have presented a new set of data which indicates the necessity of the promotion method in Japanese relative constructions. Furthermore, two kinds of data (i.e. scope interaction and the binding of zibun) which Aoun and Li (2003) presented to support the non-operator movement approach in Japanese have been reexamined, and it has been demonstrated that the two kinds of data do not justify Aoun and Li’s claim. Accordingly, Japanese relative constructions can employ the promotion method as in English although the head in the promotion method does not project up to DP unlike in English, which prevents zibun in the (Spec of the) head
from being reconstructed into a relative clause.

As mentioned at the beginning of the present paper, Aoun and Li (2003) argue that languages can be divided into three types in terms of relative constructions. The first two types are derived from movement and allow both the matching and the promotion method. English and Lebanese Arabic belong to one of the two and Chinese belongs to the other. The difference is that the head projects up to DP in English and Lebanese Arabic, whereas the head does not in Chinese (specifically, the head projects up to NP in Chinese). Apart from those two types, there is a third type. The third type does not require any movement for its relative constructions and, according to Aoun and Li, Japanese belongs here. However, if the present paper is correct, it is unnecessary to posit the third type. It even implies that every language has movement methods to derive relative constructions. This implication may be extreme and controversial, but it is worth investigating.

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Department of British and American Studies
Aichi Prefectural University
1522–3 Nagakute
Aichi 480–1198
e-mail: hmorita@for.aichi-pu.ac.jp