Island-sensitivity in Fragment Ellipsis in Japanese*

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This paper investigates the properties of Japanese fragment ellipsis (case-marked stripping and fragment answers in particular) with respect to island-sensitivity, and demonstrates that they can be accounted for by the ellipsis resolution mechanism proposed by Fukaya & Hoji (1999) and further adopted by Fukaya (2003, 2007, 2012), combined with what we call the local resolution strategy, originally proposed for sluicing by Merchant (2001). Merchant's (2004) theory of fragment ellipsis is then examined in light of Japanese data, and it is argued that it has empirical problems that have to be overcome by adopting the local resolution strategy, which results in undesirable redundancy in the system.

1. Introduction

In Fukaya 2007: chapter 2, 2012, I made a close investigation of readings available and unavailable in case-marked sluicing in Japanese and demonstrated that the pattern of availability can be accounted for by the analysis summarized in (1) (which was proposed by Fukaya & Hoji (1999), who in turn drew on Hoji 1990: chapter 5), combined with what we call the local resolution strategy, originally proposed for sluicing by Merchant (2001).

（1） a． The remnant in Japanese sluicing is base-generated in a position adjoined to an empty TP.
   b． In order for the remnant to be interpreted, a TP available in the discourse is copied onto the empty TP at LF.
   c． The copied TP must have an empty slot within it so that the remnant can be syntactically related to the position.
   d． A constituent within a TP can optionally undergo the LF operation *Constituent Raising (CR)*, which raises and adjoins the constituent to a TP that dominates it (cf. Reinhart 1991). As a result, a TP with an empty slot is created.
   e． CR is sensitive to syntactic islands (à la Reinhart 1991).

According to (1), the wh-phrase in Japanese case-marked sluicing does not undergo wh-movement, unlike the wh-phrase in English sluicing, and Constituent Raising (CR) at LF is the movement involved in the ellipsis resolution (see Fukaya 2007: chapter 2, 2012 for detailed discussion). CR takes place in the first conjunct and the resulting TP with an empty slot is

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copied onto the empty TP in case-marked sluicing. Since the relevant movement is not wh-movement but LF CR, it is naturally expected that the ellipsis resolution strategy assumed for case-marked sluicing carries over to ellipsis examples where a case-marked non-wh-phrase is stranded. Let us use *fragment ellipsis* as a cover term to refer to such examples, following Merchant's (2004) terminology.

　　In this paper, I will investigate island-sensitivity in fragment ellipsis in Japanese (case-marked stripping and fragment answers, to be more specific), and demonstrate that the analysis in (1) can account for the patterns of island-sensitivity in fragment ellipsis in Japanese as well. I will then examine Merchant's (2004) theory of fragment ellipsis in light of Japanese data and argue that it has empirical problems which have to be overcome by adopting what we call the local resolution strategy, which was originally proposed for sluicing by Merchant (2001). I will then claim that having the local resolution strategy would result in undesirable redundancy in the system because Merchant's (2004) theory advocates deletion-induced amelioration of island effects.

2. Case-marked fragments in Japanese

　　In this section I will discuss the properties of the constructions in Japanese illustrated in (2) and (3).

(2)　　　Tom-wa [John-ga　Susan-o　　suisensita　　to]　itteita　ga,
　　　　　Tom-TOP　John-NOM　Susan-ACC　recommended　that　said　　but
　　　　　boku-wa [Mary-o　(da)　to]　omotteita.
　　　　　I-TOP　　　Mary-ACC　(COP)　that thought
　　　　　'(lit.) Tom said that John recommended Susan, but I thought (it was) Mary.'

(3) a. A : John-wa　dare-o　　suisensita　　n　　desu ka?
　　　　　　　John-TOP　who-ACC　recommended that　COP　Q
　　　　　　　'Who did John recommend?'
　　　　　B : Mary-o　　desu.
　　　　　　　Mary-ACC　COP
　　　　　　　'(lit.) It's Mary.'
　　　b. A : John-wa　Susan-o　　suisensita　　n　　desu ka?
　　　　　　　John-TOP　Susan-ACC　recommended that　COP　Q
　　　　　　　'Did John recommend Susan?'
　　　　　B : Iya.　Mary-o　　desu.
　　　　　　　No　　Mary-ACC COP
　　　　　　　'No. Mary.'

The second conjuncts in (2) and (3) correspond to the non-elliptical sentences in (4) and (5), respectively.

（4）　boku-wa [*John-ga* Mary-o *suisensita*　　n　da to] omotteita.
　　　　I-TOP　　　John-NOM Mary-ACC recommended that COP that thought
　　　　'I thought John recommended Mary.'

（5）　*John-wa* Mary-o *suisensita*　　n　desu.
　　　　John-TOP Mary-ACC recommended that COP
　　　　'John recommended Mary.'

Let us refer to examples like (2) as *stripping*, following Hoji 1990 : chapter 5, who in turn adopted the term from Hankamer 1971/1979, and examples like (3) as *fragment answers*, following Merchant 2004.　In the following subsections, I will examine the properties of each of these constructions with respect to island-sensitivity.

2.1. Case-marked stripping

　　As I discussed in Fukaya 2007 : chapter 2, 2012, if the first conjunct has the structure in (6), where the correlate refers to the element in the first conjunct that corresponds to the wh-phrase in sluicing, and sluicing is accepted with matrix readings, it has been taken to be the evidence that there are no island effects in the past works on sluicing.

（6）　　… [ISLAND … correlate …] …

If we adopt the same criterion of island-insensitivity for stripping, case-marked stripping in Japanese does not seem to be sensitive to syntactic islands.　Consider (7).[1,2]

（7）　Bill-wa [CP [COMPLEX NP [*pro* itariya ryoori-o　　tukuru] hito]-ga
　　　　Bill-TOP　　　　　　　　Italian cuisine-ACC make　　person-NOM
　　　　yoku kono mise-ni kuru to]　itteita ga,
　　　　often this　shop-to come that said　　but
　　　　boku-wa [CP [huransu ryoori]-o da to]　omotteita.
　　　　I-TOP　　　　　French cuisine-ACC COP that thought
　　　　'(lit.) Bill told me that those who make Italian cuisine often come to this shop, but I thought French cuisine.'

　　　　　　　　　　　　　　　　　　　　(Based on Hoji 1990 : chapter 5 (114) & (116))

In (7), the correlate (i.e., *itariya ryoori-o* 'Italian cuisine-ACC') resides within the relative clause island (i.e., *[itariya ryoori-o tukuru hito]-ga* 'those who make Italian cuisine'), and the sentence seems to be acceptable with the matrix reading in (8).

1　In the discussion to follow, I will refer to the stripped NP in the second conjunct in stripping as the remnant and to the element in the first conjunct that corresponds to the remnant as the correlate for ease of reference.
2　The underline denotes the correlate.

(8)   I thought that those who make French cuisine often come to this shop.

   I argued in Fukaya 2007 : chapter 2, 2012 that in sluicing, island effects are obscured if the local and the non-local resolutions give rise to indistinguishable readings.[3]   Thus, in (9), for example, no island effect was detected.

(9)   [keisatu-wa [$_{\text{COMPLEX NP}}$ [pro_2 [aru giin]-ni   wairo-o   okutta]
             police-TOP   a congressman-to bribe-ACC gave
             otoko$_2$]-o   taihosita ga, boku-wa [dono giin-ni   ka] siranai.
             man   -ACC arrested but I-TOP   which Rep. -to Q   know:not
             'The police arrested the man who had given a bribe to a congressman, but I don't
             know which congressman.'

What is copied into the second conjunct is the relative clause TP after the CRing of the correlate *[aru giin]-ni* 'a congressman' within the clause (i.e., *[$_{TP}$ pro$_2$ t$_3$ wairo-o okutta]* 'he gave a bribe to') as indicated in (10), and the *pro$_2$* is interpreted as "the man the police arrested."   This gives rise to the interpretation in (11).

(10)   …boku-wa [$_{CP}$ [$_{TP}$ dono giin-ni
             I-TOP   which congressman-to
             [$_{TP}$ *pro$_2$ t$_3$ wairo-o   okutta*]] ka] siranai.
                     bribe-ACC gave   Q   know:not
             '…I don't know to which congressman he gave a bribe.'

(11)   I don't know to which congressman the man the police arrested gave a bribe.

This interpretation is indistinguishable from the interpretation given in (12) which the non-local resolution would give rise to.

(12)   I don't know which congressman is such that the police arrested the man who had
   given a bribe to him.

Although the syntactic structure that would give rise to the interpretation in (12) is unavailable because it would involve a movement operation across a syntactic island, the local resolution in (10) gives rise to a reading that is indistinguishable from the non-local reading in (12), yielding

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  3   A "resolution" refers to an operation (copying in the theory pursued here) that gives a structure
     to a missing part, and a "reading" refers to an interpretation obtained as a result of a resolution.
     A "local resolution" is an operation of copying onto the ellipsis site a TP resulting from CRing
     the correlate within an island in the first conjunct.   On the other hand, a "non-local resolution"
     is an operation of copying onto an ellipsis site a TP that *would* result from CRing the correlate
     across an island in the first conjunct if such movement were possible.

the apparent availability of the non-local reading.

If we extend the analysis summarized in (1) to ellipsis resolution in stripping, the apparent availability of the reading in (8) is as expected.　The second conjunct of (7) is base-generated as in (13).[4]

(13) a. boku-wa [$_{CP}$[$_{TP}$　[huransu ryoori]-o [$_{TP}$ ∅]] da to]　omotteita
　　　　I-TOP　　　　　　French cuisine-ACC　　　　　COP that thought
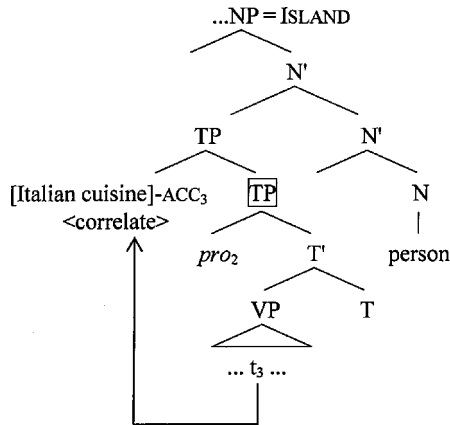　　　'I thought (it was) French cuisine.'

b.
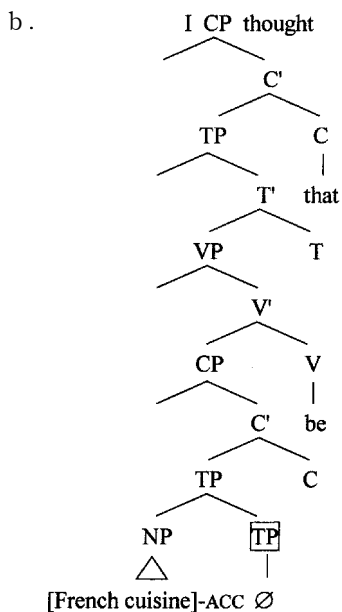
In order to give an interpretation to the empty TP (which is placed in a box in (13b)), some discourse-available TP must be copied onto it.　The TP that is copied on to it must have an empty slot within it so that the TP-adjoined NP *[huransu ryoori]-o* 'French cuisine-ACC' can be associated with it.　Thus, the correlate *[itariya ryoori]-o* 'Italian cuisine-ACC' must raise in the first conjunct.　As in the case of sluicing, since CR can raise a constituent to any TP that dominates it as long as it does not violate island conditions, it can raise the correlate within the relative-clause TP, as indicated in (14).

(14) a.　Bill-wa [$_{ISLAND}$ [$_{TP}$ [itariya ryoori]-o$_3$ [$_{TP}$ *pro$_2$* t$_3$ tukuru]] hito$_2$]-ga …
　　　　Bill-TOP　　　　　　Italian cuisine-ACC　　　　make　　person-NOM

4　In the tree diagrams to follow, I will translate the Japanese lexical items to English while preserving the structures in Japanese.

b.

...NP = ISLAND

N'

TP　　　　N'

[Italian cuisine]-ACC₃　TP　　　　N
<correlate>
　　　　　　　pro₂　　T'　　person

　　　　　　　　VP　　T

　　　　　　　... t₃ ...

The lower TP with an empty slot is then copied into the second conjunct, yielding the structure in (15).

(15)　a.　boku-wa [_CP [_TP [huransu ryoori]-o [_TP *pro* t₃ tukuru]] (no)　da　to]
　　　　　I-TOP　　　　　French cuisine-ACC　　　　　make　　that COP that
　　　　　omotteita
　　　　　thought
　　　　　'I thought that they make French cuisine.'

b.

I CP thought

C'

TP　　C

T'　　that

VP　　T

V'

CP　　V

C'　　be

TP　　C

NP　　TP

[French cuisine]-ACC *pro₂*　T'
<remnant>

VP　　T

... t₃ ...

associated
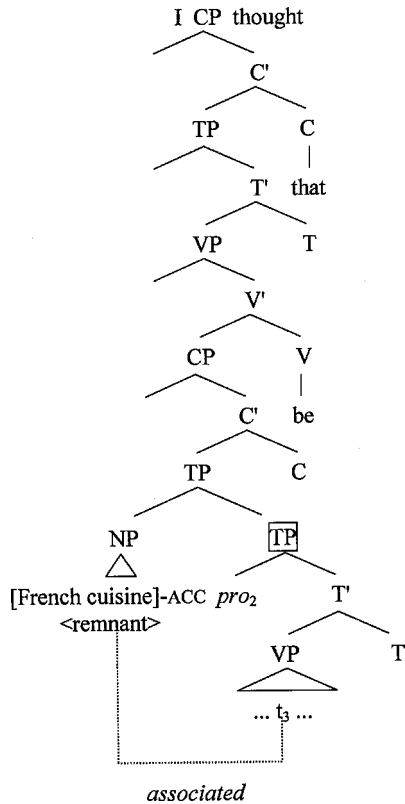
The pro_2, functioning as an E-type pronoun, as proposed by Merchant (2001 : chapter 5), can be interpreted as "those people under discussion (who make some cuisine and often come to this shop)," and (15) thus gives rise to the reading in (16).

(16)　　　I thought that those people under discussion (who make some cuisine and often come to this shop) make French cuisine.

If CR could raise a constituent across a syntactic island, the structure in (17) would obtain in the first conjunct.

(17)　a．Bill-wa [$_{CP}$ [$_{TP}$ <u>itariya ryoori</u>-o$_3$
　　　　　　Bill-TOP　　　　Italian cuisine-ACC
　　　　　[$_{TP}$ [$_{COMPLEX NP}$ [pro t$_3$ tukuru] hito]-ga
　　　　　　　　　　　　　　　make　person-NOM
　　　　　yoku kono mise-ni kuru]] to] itteita
　　　　　often this　shop-to come　that said
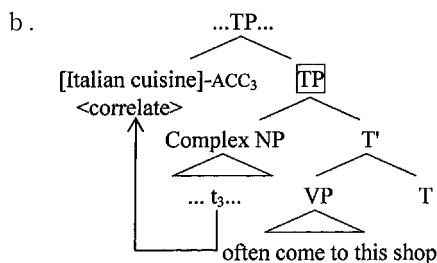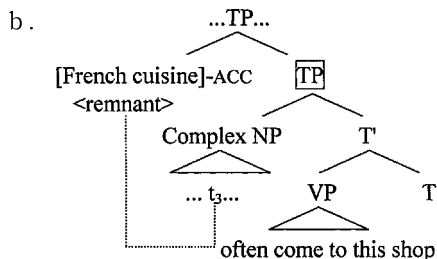　　　b.

The lower TP would then be copied onto the empty TP in the first conjunct as in (18).

(18)　a．boku-wa [$_{CP}$ [$_{TP}$ [huransu ryoori]-o [$_{TP}$ [$_{COMPLEX NP}$ [pro t$_3$ tukuru] hito]-ga
　　　　　I-TOP　　　　　French cuisine-ACC　　　　　　　　　　make　person-NOM
　　　　　yoku kono mise-ni kuru]] (no) da　to] omotteita
　　　　　often this　shop-to come　　that COP that thought
　　　b.

The structure in (18) would then give rise to the interpretation in (19).

(19)　　　I thought that those who make French cuisine often come to this shop.

Notice that this interpretation is not distinguishable from that in (16). As in the case of sluicing, the availability of the local reading that is indistinguishable from the non-local reading makes the non-local reading appear to be available, although the syntactic structure that would give rise to the non-local reading is unavailable because of an island violation.

If this extension of the analysis of sluicing to stripping is on the right track, it is expected that island effects are detectable in cases where the local and the non-local resolutions give rise to distinct interpretations, as in the cases of sluicing with a correlate modified by *hoka-no* 'else' and wh-correlate sluicing where the correlate and the remnant are made contrastive by modification.[5] To be more precise, it is predicted that the non-local reading is not available in examples where the local and the non-local resolutions give rise to distinct interpretations.

The prediction is indeed borne out.[6] Consider (20).

(20)　　　[$_{TP}$ [itariya ryoori-o　　tukuru hito]-ga　　yoku kono mise-ni　kuru]
　　　　　Italian cuisine-ACC make　person-NOM often this　shop-to come
　　　　　rasii　　ga, [$_{TP}$ boku-wa [$_{CP}$[huransu ryoori]-o-mo　　da to] omotteita].
　　　　　seems but　　I-TOP　　　　French　cuisine-ACC-also COP that thought
　　　　　'(lit.) I hear that those who make Italian cuisine often come to this shop, but I thought French cuisine as well.'

　　　　　　　　　　　　　　　　　　　　(Based on Hoji 1990 : chapter 5 (114) & (116))

Notice that in (20) the stripped NP is marked with *mo* 'also'. First, let us consider the local resolution. CR raises *[itariya ryoori]-o* 'Italian cuisine-ACC' in the first conjunct, and the resulting TP with an empty slot is copied onto the empty TP in the second conjunct. This yields the structure in (21).

(21) a. boku-wa [$_{CP}$ [$_{TP}$ [huransu ryoori]-o-mo
　　　　　I-TOP　　　　　　　French　cuisine-ACC-also
　　　　　[$_{TP}$ *pro* t$_3$ tukuru]] (no)　da to] omotteita
　　　　　　　　　　make　　　that COP that thought
　　　　　'I thought that they make French cuisine as well.'

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b.

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              I CP  thought
                 /\
                   C'
                  /\
              TP      C
             /\       |
                 T'   that
                /\
            VP      T
           /\
               V'
              /\
          CP      V
         /\       |
             C'   be
            /\
        TP      C
       /\
     NP    [TP]
     /\    /\
[French cuisine]  pro₂    T'
   -ACC-also            /\
   <remnant>        VP      T
                   /\
                  ... t₃ ...
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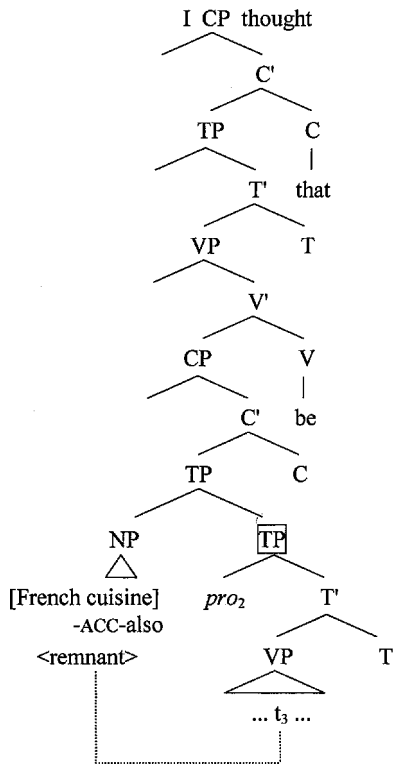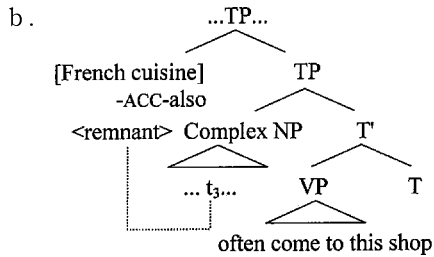
With the *pro* interpreted as "those people under discussion (who make Italian cuisine and often come to this shop)," (21) gives rise to the reading in (22).

(22)　　I thought that those people under discussion (who make Italian cuisine and often come to this shop) also make French cuisine. [the non-covariant reading]

Under the interpretation in (22), just one group of people is involved.　They make French cuisine as well as Italian cuisine, and they often come to this shop.　Let us call this the non-covariant reading.　This is the reading that (20) gives rise to.

　　　If the non-local resolution were possible, it would yield the structure in the second conjunct as in (23).

(23)　a．boku-wa [$_{CP}$ [$_{TP}$ [huransu ryoori]-o₃-mo
　　　　I-TOP　　　　　　　French　cuisine-ACC-also
　　　　[$_{TP}$ [$_{COMPLEX NP}$ [*pro* t₃ tukuru] hito]-ga
　　　　　　　　　　　　　　　make　person-NOM
　　　　yoku kono mise-ni kuru]] (no) da to] omotteita
　　　　often this　shop-to come　　that COP that thought

b .

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                           ...TP...
                          /      \
        [French cuisine]          TP
           -ACC-also            /    \
      <remnant>  Complex NP        T'
                  /  \           /    \
             ... t₃...          VP      T
                              /    \
                       often come to this shop
```

This structure would then give rise to the interpretation in (24).

(24)   I thought that French cuisine is also such that those who make it often come to this
        shop. [the covariant reading]

This interpretation is equivalent to "I thought that those who make French cuisine also often
come to this shop (in addition to those who make Italian cuisine)".   Thus, if what the speaker
thought is correct, two distinct groups of people who often come to this shop are involved ; one
is a group of people who make Italian cuisine, and the other is a group of people make French
cuisine.   Let us call it the covariant reading because the group of people co-varies with the kind
of cuisine.   Notice that this reading is distinct from the local reading given in (22). This
non-local reading is unavailable for (20), which indicates the unavailability of the structure in
(23). This is what is predicted in our analysis because the CR across a syntactic island in the
first conjunct, which would provide the necessary TP for (23), is not possible as indicated in (1e).

2.2.   Fragment answers

     The second type of fragment ellipsis is fragment answers.   There are two subtypes of
them : the type where the corresponding question is a wh-interrogative and the other where it
is a yes-no interrogative.   Since both subtypes exhibit the same properties with respect to
island-sensitivity, let us examine wh-interrogatives, the English version of which was discussed
in Merchant 2004.   Consider (25).

(25) A : John-wa dare-ni [sono hon]-o   watasita n   desu ka?
           John-TOP who-DAT that book-ACC handed   that COP Q
           'Who did John hand the book to?'
      B : John-wa Mary-ni [sono hon]-o   watasimasita.
           John-TOP Mary-DAT that book-ACC handed
           'John handed the book to Mary.'
      B': Mary-ni   desu.
           Mary-DAT COP
           'To Mary.'

As an answer to the wh-interrogative in (25A), (25B') as well as (25B) is acceptable.   Let us now
look into the island-sensitivity of the type of answers in (25B').

　　　Since Japanese is a wh-in-situ language, the wh-interrogative can be formed where the wh-phrase resides within a syntactic island as in (26).

(26)　　John-wa [$_{\mathrm{ISLAND}}$ dare-ni moratta hon]-o　nakusita n　desu ka?
　　　　John-TOP　　　who-DAT received book-ACC lost　　that COP　Q
　　　　'(lit.) John lost the book that was given by who?'

One possible answer to this question is (27a), where the entire clause is repeated, and another is (27b), where the complex NP is repeated.[7]

(27)　a. John-wa [$_{\mathrm{ISLAND}}$ Mary-ni moratta hon]-o　nakusita n　desu.
　　　　　John-TOP　　　Mary-DAT received book-ACC lost　　that COP
　　　　　'John lost the book that was given by Mary.'
　　　b. [$_{\mathrm{ISLAND}}$ Mary-ni moratta hon]-o　desu.
　　　　　　　Mary-DAT received book-ACC COP
　　　　　'The book that was given by Mary.'

7　Nishigauchi (1990, 1999 : section 2.4) claims that the availability of answers like (27b) constitutes evidence for his LF pied-piping analysis.　In his theory, (26) is represented as in (i).
　(i)　a. [$_{\mathrm{CP}}$ [$_{\mathrm{DP}}$ [$_{\mathrm{CP}}$ dare-ni$_i$ [$_{\mathrm{CP}}$ [$_{\mathrm{IP}}$ t$_i$ moratta]]] hon-o]$_j$
　　　　　　　　　who-DAT　　　　received　　book-ACC
　　　　　[$_{\mathrm{IP}}$ John-wa t$_j$ nakusita] n]　desu ka?
　　　　　　John-TOP　　lost　　　that COP　Q
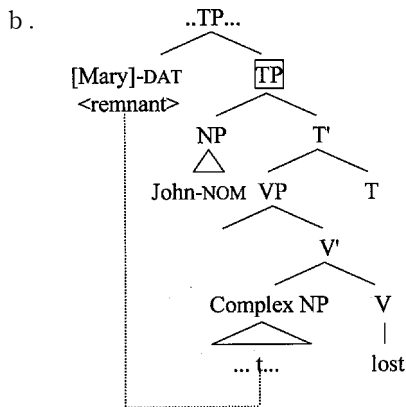　　　　　'(lit.) John lost a book that who gave him?'
　　　b.
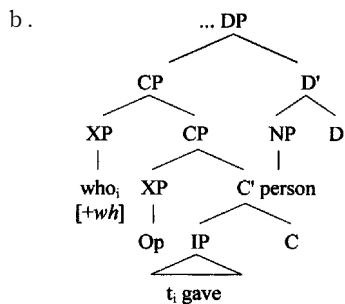
According to his theory, the wh-phrase first moves out of the relative clause (which he assumes to be a CP) and adjoins to it (see (i-b)). Then the wh-feature of the wh-phrase percolates up to the entire complex DP, thereby letting the entire DP bear the wh-feature.　This makes it possible for the entire DP to undergo wh-movement into SpecCP of the matrix clause at LF.　Although his theory employs movement of a wh-phrase, it is only within an island, not out of an island, and thus it can basically be made compatible with the account of wh-interpretation assumed here, as far as island effects are concerned.　The reader is referred to Nishigauchi 1990, 1999 for the LF pied-piping analysis and also to Kuno & Masunaga 1986 and von Stechow 1996 for counterarguments.

What is interesting is that still another type of answer is possible, i.e., an answer where only the NP that corresponds to the wh-phrase appears in the answer, as in (28).[8]

(28)　　　Mary-ni　desu.
　　　　　Mary-DAT COP
　　　　　'Mary.'

As in Fukaya 2003, 2007 : chapter 2, 2012, I assume, following Baker 1970, that wh-in-situ takes scope at the position of the Q-morpheme *ka/no* in C without moving to the Spec of CP.　Hence, no movement is assumed to be involved in the interrogative.　In the answer part, on the other hand, a TP must be reconstructed because the NP along with the case marker on it needs to be interpreted by being associated with a position within the θ-domain of a verb.　In (28), for example, *Mary-ni* 'Mary-DAT' has to be associated with a position within the θ-domain of the verb *moratta* 'received'.　If what is reconstructed had to correspond to the entire clause, as illustrated in (29), our theory would predict that (28) is unavailable because the wh-phrase in the interrogative has to raise across an island via CR in order to give rise to a TP that can be copied into the answer part (the TP in the box in (29b)).

(29)　a．[TP Mary-ni [TP John-wa [t moratta hon]-o　nakusita]] (n)　desu.
　　　　　　Mary-DAT　John-TOP　received book-ACC lost　　　that COP

b．

The availability of short answers like (28) appears to indicate that no island effects are observed in fragment answers.　I claim, however, that as in the case of case-marked stripping, the availability of examples like (28) is due to the availability of the local resolution which gives rise to a reading that is equivalent to the one that the non-local resolution would yield.　Thus, the actual representation of (28), I maintain, is as in (30).

(30)　a．[$_{TP}$ Mary-ni [$_{TP}$ *pro*$_1$ t *pro*$_2$ moratta]] (n)　desu.
　　　　　Mary-DAT　　　　　　　　　　received　that COP

b.
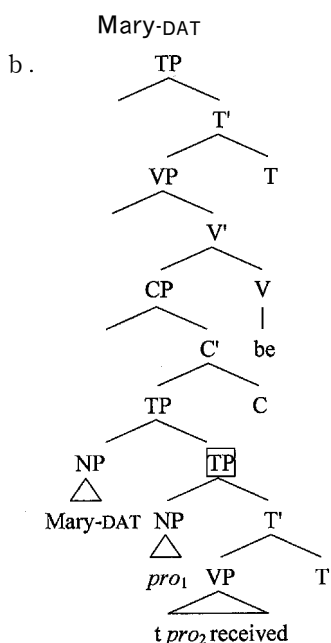
By CRing the wh-phrase within the complex NP in (26), we obtain *[$_{TP}$ pro$_1$ t pro$_2$ moratta]*. This TP is copied onto the empty TP to which the remnant NP, i.e., *Mary-ni* 'Mary-DAT', is adjoined, resulting in (30).　With the *pro*$_1$ and *pro*$_2$ interpreted as "John" and "the book that John lost, " respectively, (30) yields the interpretation in (31).

(31)　　　John had received the book he lost from Mary.

The non-local resolution in (29) would yield the interpretation in (32).

(32)　　　John lost the book he had received from Mary.

Note that the interpretation in (31) is indistinguishable from (32).　I thus claim that just as in the case of stripping without *mo* 'also', the availability of apparent island-violating cases are illusory.　The non-local resolution is syntactically blocked, but since the local resolution yields a reading that is indistinguishable from the reading that the non-local resolution would give rise to, we feel that we get the non-local reading.

2.3. Summary

In this section, we have examined the properties of two types of fragment ellipsis in Japanese (case-marked stripping and fragment answers) summarized in (33), and shown that they can be accounted for by adopting the analysis summarized in (1), along with the local resolution strategy, originally proposed by Merchant (2001).

(33)　a．Case-marked stripping without *mo* 'also' and case-marked fragment answers :
　　　　　The local and the non-local readings are indistinguishable ; hence apparent island-insensitivity results.
　　　b．Case-marked stripping with *mo* 'also' :
　　　　　The local and the non-local readings are distinguishable, and the local reading (i.e., the non-covariant reading) is available while the non-local reading (i.e., the covariant reading) is not.

3. Merchant's (2004) theory of fragment ellipsis

Merchant (2004) investigates the properties of fragment ellipsis in English, including those fragment answers in (34) and (35), and proposes an analysis of fragment ellipsis along the lines of the analysis of sluicing proposed in Merchant 2008.

(34)　(＝Merchant 2004 : (37a-b))
　　　a．Who did she see?
　　　b．John.

(35)　(＝Merchant 2004 : (72))
　　　a．Who was Peter talking with?
　　　b．Mary.

Let us first summarize Merchant's (2008) analysis of sluicing. He adopts the particular implementation of ellipsis resolution he developed in Merchant 2001 : chapters 1 & 2. In essence, he attributes ellipsis phenomena to the feature E residing on a functional head. This feature E instructs the phonological component not to parse its complement. The relevant part of the second conjunct of (36a), for example, is assumed to have the structure in (36b) prior to Spell-Out, with the E feature residing on C.

(36)　a．John saw someone, but I don't know who.

b.

```
         ... CP
         /\
[DP who]2   C'
          /\
         C   [TP]
        [E]  /\
            t'2  TP
                /\
            John saw t2
```
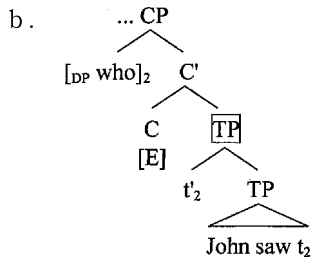
Although the full-fledged structure exists throughout the syntactic derivation of (36a), the feature E on C instructs the phonological component to skip the parsing of the boxed TP ; hence, it is not pronounced.　In his theory, this is the totality of ellipsis.　Merchant argues that under this hypothesis it is not necessary to postulate an independent component of grammar that deals with deletion.　He also assumes that wh-movement proceeds successive-cyclically, adjoining the wh-phrase to the intermediate maximal projections and leaving traces behind.

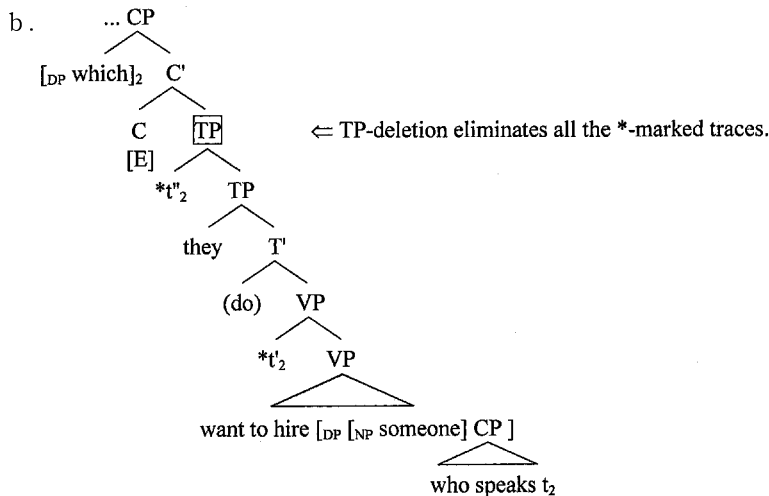Let us now consider cases where an extraction takes place out of an island.　His crucial assumption is that intermediate traces of island-escaping XPs are marked with the feature * and that this feature is PF-uninterpretable.　Thus, unless the feature * is eliminated from the PF representation, the derivation crashes at the PF interface.　In the case of sluicing, since E needs to reside in C in order to leave the TP in its complement unpronounced, all the *-marked intermediate traces are eliminated, as illustrated in (37).[9]

(37)　(Cf. Merchant 2008 : (49))

　　a.　They want to hire someone who speaks a Balkan language, but I don't remember which.

　　b.

```
         ... CP
         /\
[DP which]2   C'
            /\
           C   [TP]        ⇐ TP-deletion eliminates all the *-marked traces.
          [E]  /\
            *t"2  TP
                 /\
              they  T'
                   /\
                 (do)  VP
                      /\
                   *t'2   VP
                         /\
         want to hire [DP [NP someone] CP ]
                              /\
                         who speaks t2
```

9　Fox & Lasnik's (2003) proposal is similar to Merchant's in that island effects are ameliorated by deletion.　Under their system, wh-movement involved in sluicing is not successive-cyclic, maximal projections that do not host wh-movement as intermediate landing sites constitute islands, and the island effects are nullified by the deletion of such maximal projections.

　　　Turning to fragment answers, Merchant proposes that they be analyzed as having moved to a clause-peripheral position via A'-movement, followed by the "eliding" of TP.　He assumes that the fragment moves successive-cyclically, adjoining to intermediate maximal projections and leaving traces there.[10]　He also assumes that the final landing site of the fragment is the Spec of some functional category above CP.[11]　Thus, (34b), for example, is analyzed as in (38).

(38)

```
                    FP
                   /\
        [DP John]2   F'
                   /\
                  F   CP
                     /\
                   t''2  CP
                        /\
                       C   [TP]
                      [E]  /\
                         t'2  TP
                             /\
                           she saw t2
```
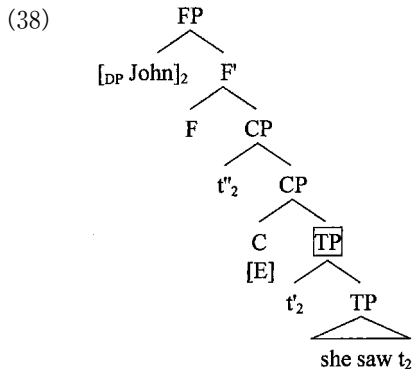
　　　One cannot use regular wh-interrogatives to test island-sensitivity in fragment answers because an island constraint would be violated in the first conjunct, as illustrated in (39A).

(39)　A : *[Which Balkan language]₃ does Abby want to hire someone who speaks t₃?
　　　B : Greek.

Merchant employs two strategies to circumvent this problem and demonstrates that island effects persist in fragment ellipsis even though the answer is elided to the exclusion of the fragment.　The first strategy is to use question-answer pairs in multiple questions, as in (40). Note that multiple fragment answers are possible across a clause-boundary.

(40)　(＝Merchant 2004 : (91b))
　　　A : Which lawyer said he was representing which war criminal?
　　　B : Johnnie Cochran Slobodan Milosevic, and Alan Dershowitz Ariel Sharon.

Multiple fragment answers, however, are impossible across an island, as in (41).

　10　Merchant (2004) assumes that the intermediate landing sites are Spec of a maximal projection for fragment answers, while Merchant (2008) assumes that those are positions adjoined to maximal projections for sluicing.　Since the choice between the Spec and the adjoined positions is immaterial, I simply extended his theory of sluicing to fragment answers in the main text for the sake of consistency.

　11　Merchant (2004 : 675) suggests that it may be the Spec of FocusP in Rizzi's (1997) theory.

(41)　(＝Merchant 2004 : (92a, c))

　　　A : Which committee member wants to hire someone who speaks which language?
　　　B : *Abby Greek, and Ben Albanian.

　　The second strategy he utilizes is fragment answers to implicit salient questions (cf. Morgan 1973).　"Asking a yes-no question with an intonation rise on a particular constituent […] can give rise to an implicit constituent question where the appropriate wh-phrase replaces the accented constituent" (Merchant 2004 : 687).　In (42), for example, "the answerer can take it that the questioner may be interested in the answer to the question 'What language(s) does Abby speak?' in addition to the narrower answer to her yes-no question ; hence the felicity of either continuation in [(42B)] or [(42B')]" (Merchant 2004 : 687-8).　Note that the correlate resides within an embedded clause in (42A).

(42)　(＝Merchant 2004 : (85))

　　　A : Did Abby claim she speaks *Greek* fluently?
　　　B : No, Albanian.
　　　B' : No, she claimed she speaks *Albanian* fluently.

According to Merchant, fragment answers are impossible when the stressed correlate occurs within an island, as in (43)–(44).[12]

(43)　(＝Merchant 2004 : (87))

　　　A : Does Abby speak the same Balkan language that *Ben* speaks?
　　　B : *No, Charlie.
　　　B' : No, she speaks the same Balkan language that *Charlie* speaks.

(44)　(＝Merchant 2004 : (180))

　　　A : Did Abby like the candidate who referred to *Chomsky*?
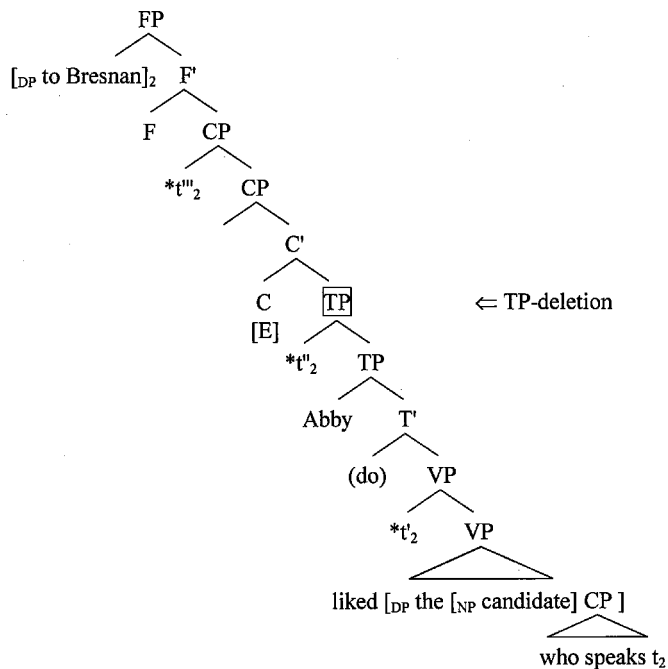　　　B : *No, to *Bresnan*.
　　　B' : No, she liked the candidate who referred to *Bresnan*.

　　His system is set up in such a way that it can account for the island-sensitivity in these examples.　The fragment answer in (44B), for example, is assumed to have the structure as in (45).

12　For further discussion about examples as in (43) - (44), see Fukaya 2007 : chapter 6 section 6.3. 2.

(45)

```
                                FP
                              /    \
                  [DP to Bresnan]2   F'
                                   /   \
                                  F     CP
                                 / \
                              *t'''2   CP
                                      /  \
                                         C'
                                       /    \
                                      C      [TP]      ⇐ TP-deletion
                                     [E]    /   \
                                         *t''2    TP
                                               /    \
                                            Abby     T'
                                                   /    \
                                                (do)     VP
                                                        /   \
                                                      *t'2    VP
                                                            /      \
                                          liked [DP the [NP candidate] CP ]
                                                             /    \
                                                        who speaks t2
```
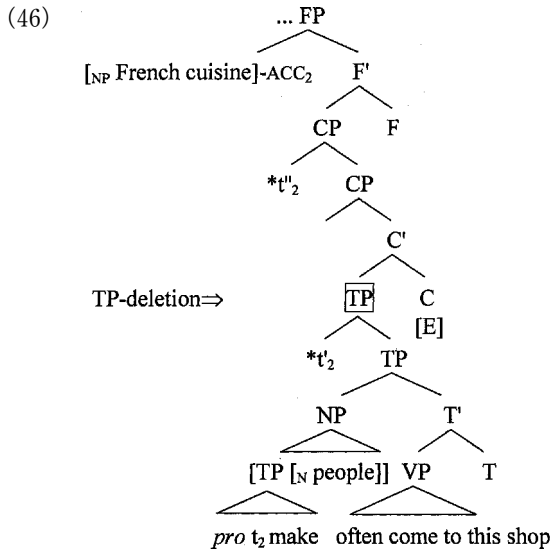
Since the feature E is assumed to reside on C, the boxed TP is unpronounced, leaving $*t'''_2$ undeleted.   This *-marked trace, he claims, causes a PF crash.

In the rest of this section, I will assess Merchant's theory with respect to the Japanese fragment ellipsis data discussed in the previous section.   Both our analysis, which is based on Merchant's (2001) proposal, and Merchant's (2004) rule out the non-local resolution ; it is ruled out by island-violating CR in the former and by the existence of a *-marked trace in the latter. Thus, both analyses correctly predict the lack of non-local readings in cases where the local and the non-local readings are distinguishable.

However, Merchant's (2004) theory, as it is proposed, cannot account for the apparent island-insensitivity in Japanese fragment ellipsis.   It has to adopt the local resolution strategy to account for the apparent island-insensitivity.   I showed in section 2 that stripping without *mo* 'also' and fragment answers do not appear to exhibit island-sensitivity, as illustrated in (7) and (26)/(28).   Under Merchant's theory, the complement of the verb *omotteita* 'thought' of the second conjunct in (7), for example, is analyzed as having the structure in (46).

(46)

```
                    ... FP
                   /    \
  [NP French cuisine]-ACC2   F'
                          /   \
                        CP     F
                       /  \
                    *t''2   CP
                            \
                             C'
                            /  \
TP-deletion⇒            [TP]    C
                        /  \    [E]
                     *t'2    TP
                           /    \
                         NP      T'
                        /  \    /  \
              [TP [N people]]  VP    T
              /    \      /    \
           pro  t2 make  often come to this shop
```
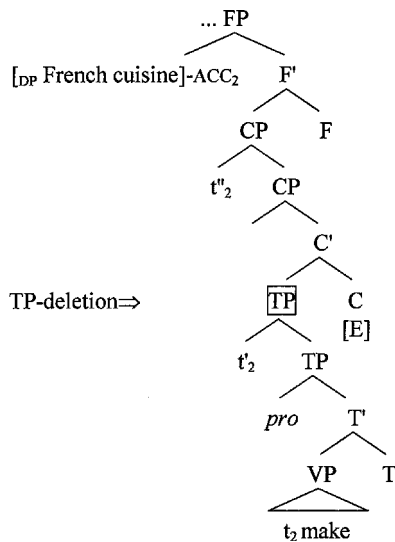
The TP which is the complement of C is not parsed in the phonological component, making the *-marked trace it dominates invisible at the PF interface.　The *-marked trace that is adjoined to CP, however, survives, making the derivation crash at PF.　(28) as a reply to (26) is also assumed to have a similar derivation.　Hence, these examples would be predicted to be unacceptable under Merchant's (2004) fragment theory, contrary to the fact.

　　Under our theory, it is assumed that in fragment ellipsis the correlate can raise and adjoin to any TP that dominates it as long as it does not cross an island.　Thus, the correlate can raise within an island without crossing it.　As we saw in section 2, the relevant portion of the second conjunct of (7), for example, is to be represented as in (15).　The *pro* is interpreted as "those people under discussion (who make some cuisine and often come to this shop)," and (15) gives rise to the reading in (16), which is indistinguishable from the reading in (19), which the non-local resolution would yield.　The former reading thus gives us an illusion that the latter is available.

　　Note that the contrast in island-sensitivity observed in case-marked striping in Japanese as in (7) and (20) cannot be accommodated without some ad hoc stipulations under Merchant's (2004) approach because the only distinction between them is the absence in the former and the presence in the latter of *mo* 'also' and thus there is no way to attribute the distinction to the type of the remnant or the correlate, unlike the cases of contrast sluicing discussed in Merchant 2008.[13]　This makes it necessary to resort to the local resolution strategy even under his theory. To be more specific, it would have to allow the complement of the verb *omotteita* 'thought' of the second conjunct in (7) to be analyzed as having the structure in (47) instead in order to accommodate the facts.

13　Merchant (2008) claims that the focus movement that takes place in the first conjunct in contrast sluicing is sensitive to islands.

(47)

```
                    ... FP
                   /    \
  [DP French cuisine]-ACC₂   F'
                          /    \
                        CP      F
                       /  \
                     t''₂   CP
                           /  \
                              C'
                             /  \
TP-deletion⇒              [TP]    C
                         /  \    [E]
                       t'₂    TP
                            /   \
                          pro    T'
                                /  \
                              VP    T
                             /  \
                          t₂ make
```

Since the trace that is left undeleted is not *-marked, the structure in (47) is well-formed. *Pro* is interpreted as "those people under discussion (who make some cuisine and often come to this shop)," and (47) gives rise to the reading in (16). Merchant's theory thus has to resort to the local resolution strategy in order to account for these data. If grammar allows the local resolution strategy to account for the apparent island-insensitivity, then the island-insensitivity will be redundantly attributed to the local resolution strategy *and* to the island repair by deletion, under approaches which advocate amelioration by deletion, such as Merchant's (2004, 2008).

To summarize, I have demonstrated in this section that Merchant's (2004) theory as it is proposed cannot account for the apparent island-insensitivity in stripping without *mo* 'also' and fragment answers in Japanese. I have also shown that in order to accommodate the range of Japanese data discussed here, it is necessary to assume a version of the local resolution strategy even under Merchant's (2004) system.

4. Summary

In this paper, I have investigated the properties of two types of fragment ellipsis in Japanese : case-marked stripping and fragment answers. Although case-marked stripping and fragment answers appear to be insensitive to syntactic islands at first glance, some type of case-marked stripping has been shown to be indeed sensitive to a syntactic island, through an investigation of cases where the local and the non-local resolutions give rise to distinct readings. I have then shown that the properties of Japanese fragment ellipsis can be captured by the theory pursued in Fukaya & Hoji 1999 and Fukaya 2003, 2007, 2012 combined with the local resolution strategy, which was originally proposed by Merchant (2001) and have been further pursued in Fukaya 2003, 2007, 2012. I have also examined Merchant's (2004) theory of fragment ellipsis in light of the fragment ellipsis data in Japanese and demonstrated that the local

resolution strategy must also be postulated even under Merchant's (2004) system in order to account for those facts, which results in undesirable redundancy in the system.

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