Notes on Fragments in English & Korean*

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Ahn, Hee-Don and Cho, Sungeun. 2009. Notes on Fragments in English and Korean. *Korean Journal of English Language and Linguistics*, Fragments convey the same propositional content that their full sentential counterparts have. We claim that fragments in English and Korean should be analyzed as full-fledged sentential structures that undergo ellipsis at PF. We show that the Move+Delete analysis is superior to alternative left-dislocation or cleft analyses in both languages. A wide range of empirical evidence has been added to support the (syntactic) ellipsis analysis of fragments: Case connectivity, distribution of NPI, and various binding phenomena peculiar to fragments.

Key Words: Fragments, Cleft, Left Dislocation, Binding, Case, NPI, Ellipsis

1. Introduction

Fragment answers to questions have all the properties of full sentences. The fragment that consists of non-sentential DP in (1b) conveys the same propositional content as the complete sentential answer like (2). That is, (1b) has the same assertoric force or truth value as its full sentential counterpart (2).

(1) A: Who did she see?
    B: John.

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(2) She saw John.

A non-trivial question that arises about the fact is how non-sentential XPs have the parallel propositional meaning that the full sentential counterparts have. Note that in contrast to the NP fragment in (1b), an NP in isolation usually denotes a reference or property but not proposition or assertion.

Merchant's (2001, 2004, 2006) ellipsis analysis accounts for propositional properties of fragment answers. He assumes that a fragmentary utterance such as (1b) is derived through movement of the remnant fragment prior to ellipsis of the full-fledged sentential structure TP, as shown in (3).

(3) [TP John] [TP she saw +]

In (3), the fragment John undergoes movement to a sentence-initial position, followed by TP ellipsis. According to Merchant (2001:675), the movement involved here has the properties independently identified for focus movements and similar left-peripheral movements like clitic-left dislocation. Hence, under ellipsis analysis, fragments are expected to convey the same propositional content as fully sentential answers, preserving the usual mapping of syntax and semantics. The ellipsis analysis is based on the structural uniformity: Uniform factors in interpretation must stem from uniform syntactic source.

Case connectivity, as noted in Merchant (2001, 2004), supports the ellipsis analysis. More specifically, the morphological case form of a fragment DP is exactly the same as the one we find in the corresponding DP in a fully sentential structure, as illustrated in (4).

(4) Whose car did you take?
   a. John’s. (cf. I took John’s.)
   b. *John. (cf. *I took John.)

Fragments in Korean also show parallel behavior with full answers. Park (2005) and Ahn & Cho (2005, 2006b-c) analyze fragments in Korean as
movement of remnant fragments followed by PF-deletion of the full-fledged sentential structure. As pointed out by Morgan (1989), case-matching connectivity observed in fragments supports the ellipsis analyses in Korean.

(5) Nwu-ka ku chay-k-ul sa-ss-ni?
   Who-Nom the book-Acc buy-Past-Q
   'Who bought the book?'
   a. Yenghi-ka.
      Yenghi-Nom
   b. *Yenghi-lul.
      Yenghi-Acc

(6) Yenghi-ka mwukwu-lul po-ass-ni?
   Yenghi-Nom who-Acc see-Past-Q
   'Who did Yenghi see?'
   a. *Yengswu-ka.
      Yengswu-Nom
   b. Yengswu-lul.
      Yengswu-Acc

This case connectivity fact supports the premise that fragments in Korean have sentential sources as indicated in the following structures.


    ▲


Numerous questions arise as to the nature of (syntactic) ellipsis analysis of fragments: First, if a fragment is derived by ellipsis, what does the structure before ellipsis look like? Second, is a phenomenon peculiar to fragments observed? This paper is organized as follows. Section 2 and 3 consider left dislocation analyses of fragments and cleft analyses of fragments, respectively, and show that neither analyses are appropriate for
fragments in English and Korean. Section 4 deals with binding phenomenon of fragments. Concluding remarks are presented in Section 5.

2. Against Left Dislocation Analyses of Fragments

One might possibly suggest that fragments are derived by left-dislocation (LD) prior to the ellipsis of sentential structure since the case morphology on the fragment is similar to the one on the left-dislocated (LDed) nominal. Note that fragment answers to subject questions in English require the accusative form of the pronoun, not the nominative form, as shown in (8).

(8) Who watered the plants?
   a. Me. (cf. *Me watered the plants.)
   b. *I. (cf. I watered the plants.)

A parallel case form is found in an LD structure as shown in (9) (Merchant 2004:703).

(9) a. Me, I watered the plants.
   b. *I, I watered the plants.

Note further that NPIs, which cannot be LDed as in (10B), cannot appear as fragment answers, either, as shown in (11b) (Merchant 2004:691).^2

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^1 Case form in (8a) seems to be related to focus property of the pronoun. We will not discuss the exact case licensing mechanism of focused pronoun here.
^2 Not all NPIs are unfrontable crosslinguistically. According to McClosky (1996), NPIs in Irish can be fronted in certain contexts, as shown in (i).
   (i) Rúid an bith má tháinig mé.
   thing any Neg[Past] bought I
   'I didn’t buy anything.'

NPIs in Irish, interestingly, can appear as fragment answers, as shown in (iiA).
   (ii) A: Cidhe (a) cheannaigh tú?
      what C bought you
(10) A: What didn’t Max read?
B: *Anything.
(11) a. Max didn’t read anything.
b. *Anything, Max didn’t read it.

Another similarity between these two constructions comes from the fact that LD and fragment may not occur in embedded clauses, as shown in (12) and (13).

(12) A: What do you think Max bought?
B: *I think a book.
(13) *I wonder whether the book which John put it on the table.

Thus, fragments seem to behave on a par with LDed elements in English.

However, despite similarities observed with pronoun case forms and no occurrence in embedded contexts, these two constructions aren’t exactly parallel. Merchant (2004) claims that left-dislocation is island-insensitive while a fragment is island-sensitive.

(14) Me, the FBI interviewed everyone I went to school with.
(15) [Looking at a photo of a couple, both applicants for intelligence jobs]
A: Did the FBI interview everyone she went to school with?
B: *No, him. (Merchant 2004:703-704)

'What did you buy?
B: Rud ar bith.
thing any
'Nothing.'

Thus, it seems that possibility of NPI fragments seems to correlate with their frontability, which lends another support to move+delete approach to fragments.

3 As pointed out by Youngjun Jang (pc), one may doubt whether a question like (10A) is felicitous. Given that question is typically assumed to have a conversational implicature of existence of something that satisfies the kernel of the question and that conversational implicature is cancellable, a question like (10A) is possible (cf. Merchant 2001:119-120).
The structure of (14) and (15B) can be depicted in (16a) and (16b), respectively.

(16) a. **Me, the FBI interviewed everyone I went to school with.**

b. *No, **him, the FBI interviewed everyone he went to school with**

As shown in (16a), the LDeD nominal me can have co-reference with I inside the complex noun phrase. By contrast, as shown in (16b), the fragment him cannot refer to its correlate <he> inside the complex noun phrase. The difference can be captured under the assumption that the LDeD nominal is base-generated in the left peripheral position, whereas the fragment is derived through movement to a clause-peripheral position.

Another argument that fragment is not derived from the LDeD construction comes from the fact that although multiple LD is not possible as in (17), multiple fragment (or multiple sluicing) seems to be marginally allowed, as shown in (18).4

(17) *John, Mary; he saw her. (Lasnik & Saito 1992)

(18) I know that in each instance one of the girls got something for one of the boys. But **which for which?** (Bolinger 1978:109)

In (17), John and Mary undergo multiple left-dislocation, which results in ill-formedness. By contrast, in (18), which and for which occur as multiple fragments, and the example containing multiple fragments is grammatical. The grammatical contrast between (17) and (18) supports our claim that fragments are not derived from the sentential structure involving LD.

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4 M. Park (2008) and B. Park (2008) assume that the two constructions, (pseudo-)sluicing and fragment can be unified. Merchant (2004:675) also shows that the derivation of fragment is parallel to sluicing. Here we remain agnostic with regard to the status of (matrix) sluicing.
Along the similar lines, one might also possibly suggest (Kwang-sup Kim, pc.) that non-case-marked fragments in Korean such as (19a) are derived from LD structure like (19b), since LDed nominals in Korean arguably occur without case markers (see related discussions in Kim 1998, Ahn 1999, Hong 2004, Ahn & Cho 2009a among others).

(19) Nwu-ka ku chayk-ul sa-ss-ni?
   Who-Nom the book-Acc buy-Past-Q
   'Who bought the book?'
   a. Yenghi.
   b. Yenghi, ku nye-ka ku chayk-ul sa-ss-e.
      Yenghi, she-Nom the book-Acc buy-Past-Dec
      'Yenghi, she bought the book.'

These two constructions are similar in that they do not occur in embedded contexts, as shown in (20).

(20) Ne-nun Chelswu-ka nwukwuk-lul manna-ss-ta-ko sayngkakha-ni?
   You-Top C.-Nom who-Acc meet-Past-Dec-Comp think-Q
   'Who do you think that Chelswu meet?'
      1-Top Yenghi think-Pres-Dec
      'Lit. I thought that Chelswu met Yenghi.'
   b. *Na-nun Yenghi Chelswu-ka (kyay-lul) manna-ss-ta-ko
      1-Top Yenghi C.-Nom her-Acc meet-Past-Dec-Comp
      sayngkakha-n-ta.
      think-Dec
      'Lit. I think that Yenghi, Chelswu met her.' (Ahn & Cho 2009a:65)

However, non-case-marked (non-CM) fragments and LDed nominals pattern differently in other respects. Ahn & Cho (2006a) observe that dislocated "is-phrases without overt cases in Korean, as is claimed to be LDed, exhibit
only D(iscourse)-linked interpretation, as shown in (21).

(21) a. Nwukwu, Yenghi-ka ecey manna-ss-ni?
    who Yenghi-Nom yesterday meet-Past-Q
    ‘Who is such that Yenghi meet (him/her)?’

b. Nwukwu, kekise chayk-ul manhi sa-ss-ni?
    who there book-Acc a lot buy-Past-Q
    ‘Who is such that he/her bought a lot of books?’

For those who do not accept (21) as natural, the examples in (21) become more acceptable if the wh-phrase is modified by D-link-inducing elements, as in (22).

(22) a. I cwung-eyse nwukwu Yenghi-ka ecey manna-ss-ni?
    this group-among who Yenghi-Nom yesterday meet-Past-Q
    ‘Which person of this group did Yenghi meet yesterday?’

b. I cwung-eyse nwukwu kekise chayk-ul manhi sa-ss-ni?
    this group-among who there book-Acc a lot buy-Past-Q
    ‘Which person of this group bought a lot of books there?’

As a result of domain specification like i cwung-eyse, (22a-b) seem to be more natural than (21a-b). In both (21) and (22), wh-phrases always have D-linked interpretations.5

Note, however, that the interpretation of non-CM wh-fragments is crucially not parallel to that of LDed wh-phrase, as shown in (23-24) (Ahn & Cho 2006b).

(23) A: Yenghi-ka ecey (etten salam-ul) manna-ss-ta.

5 According to Ahn & Cho (2006a), nominals with unpronounced case markers in dislocated positions correlate with LD. Under this analysis, an LDed nominal occupies a sentence-initial position, binding a resumptive pronoun (unpronounced pro) located in an original argument position. Hence, only D-linked reading arises in constructions with LDed wh-phrases in Korean, which are parallel to wh-resumption or wh-clitic doubling constructions found in many other languages (see Boeckx 2003 for extensive discussion). See Ahn & Cho (2009a) for full details of analysis.
Yenghi-Nom yesterday (some one-Acc) meet-Past-Dec
‘Yenghi met someone yesterday.’
B: Nwukwu?
‘Who?’
(24) A: (etten salam-i) kekise chayk-ul manhi sa-ss-ta.
(some one-Nom) there book-Acc a lot buy-Past-Dec
‘Someone bought a lot of books there.’
B: Nwukwu?
‘Who?’
Unlike LDeD wh-phrase nawkwu ‘who’ in (21-22), non-CM wh-fragment nawkwu in (23-24) has either D-linked or non-D-linked interpretation.
Further note that in the case of non-wh-phrase, non-CM fragments can refer to non-specific entities, as shown in (25B).

Yenghi-Nom yesterday home-at (someone-Acc) meet-Past-Dec
‘Yenghi met (someone) at home yesterday.’
B: namca?
man ‘A man?’

The LDeD nominals, by contrast, must be interpreted as specific, as seen in (26). 6

(26) a.? Namca, Yenghi-ka ecce (kay-lul) cize eyse manda-ss-ta.
Man, Yenghi-Nom yesterday him-Acc home-at meet-Past-Dec
‘A man, Yenghi met him at home yesterday.’
b. Etten/Ku namca, Yenghi-ka ecce (kay-lul) cize eyse manda-ss-ta.
some/the man, Y.-Nom yesterday him-Acc home-at meet-Past-Dec

6 Wh-phrase in Korean generally cannot variable-bind “overt” pronoun (cf. Montalbetti 1984, Hong 1985, Boedkx 2004). For this reason, a resumptive pronoun bound by the dislocated wh-phrase cannot be overt (but must be pro). However, in the case of non-wh-phrase, resumptive pronoun can be either overt or covert.
'A certain man/The man, Yenghi met him at home yesterday.'

Due to the semantic difference mentioned above, the alternative LD analysis to non-CM fragments is not tenable, and we conclude that move-and-delete analysis is also plausible for non-CM fragments in Korean.

Morgan (1989) also presents a set of examples to show that non-CM fragments do not parallel their non-elliptical sentential counterparts in Korean:

(27) Nwuk-ka ku chayk-ul sa-ss-ni?
    Who-Nom the book-Acc buy-Past-Q
    'Who bought that book?'
    a. Yengswu.
    b. *Yengswu ku chayk-ul sa-ss-e.
       Yengswu the book-Acc buy-Past-Dec
       'Yengswu, he bought the book.'

(28) Nwukwu-lul Yenghi-ka po-ass-ni?
    Who-Acc Yenghi-Nom see-Past-Q
    'Who did Yenghi see?'
    a. Yengswu.
       Yengswu Yenghi-Nom see-Past-Dec

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7 We have slightly modified his original data to avoid unnecessary complications that may arise with respect to bare object NPs in Korean (see Ahn & Cho 2009a for full discussion of this issue). The following is the original example in Morgan (1989).

(i) Nwukwul po-ass-ni?
    Who-Acc see-Past-Q
    a. Yengswu.
       Yengswu see-Past-Dec

The ill-formedness of (ib) is related to absence of accusative case marker -ul. Note that case markers in Korean are generally ommissible in informal colloquial speech. When declarative morpheme -ul is replaced by an informal form -e, the sentence involving case marker omission sounds far better, as shown in (ib')

(i) b'. Yengswu po-ass-e.
    Yengswu see-Past-Dec
Note that (27b) and (28b) themselves are not unacceptable in isolation, but they are only unacceptable as answers to the questions. Ahn & Cho (2006a, 2009a) analyze the subject and dislocated bare NPs in Korean as instances of left-dislocation. If so, the bare NPs in (27b)/(28b) are LDeD nominals that are semantically specific or old information, hence they cannot be an answer to the w/+-question requiring new information or informational focus. Non-CM fragments in Korean as in (27a)/(28a), by contrast, have no semantic restrictions like LDeD NPs, which gives another support to our proposal that fragments, either CM or non-CM, are all derived from garden-variety of movement operations.

Another argument that fragment is not derived from LD is related to multiplicity of fragments.

(29) A: Nwu-ka mwuess-ul sa-ss-ni?
    who-Nom what-Acc buy-Past-Q
    'Who bought what?'
B: Yenghi-ka chayk-ul.
    Yenghi-Nom book-Acc
    'Yenghi bought a book.'

As shown in (29B), multiple fragment is possible in Korean. By contrast, multiple LD as shown in (30) is not possible, which indicates another difference between the syntax of LD and fragments.8 9

8 Ahn & Cho (2009a) account for the impossibility of multiple left dislocation under the assumption that the position for the hanging topic left dislocation in Korean is restricted to one base-generated position per sentence.
9 The following multiple fragments in (i) are also possible parallel to (29B).
(i) A: Chelswu-ka mwueess-ul nwukwu-eykey cvu-ess-ni?
    C-Nom what-Acc who-Dat give-Past-Q
    'What did Chelswu give to whom?'
B: Ku chayk-ul Yenghi-eykey.
    the book-Acc Y-Dat
    'Chelswu gave the book to Yenghi.'
An anonymous reviewer seems to suspect that the non-elliptical version might be the following multiple LD example.
(30) *Ku chayk Yenghi nay-ka ecey ku ke-1ul cwuess-ni?
The book Yenghi I-Nom yesterday the thing-Acc gave-Q?
‘As for the book, did I give it to Yenghi?’ (Ahn & Cho 2009a:65)

3. Against Cleft Analyses of Fragments

One might, however, possibly posit that fragments are derived from cleft structure (cf. M. Park 2008). Merchant (2001:119-120) shows that fragment answers do not have the same properties as pivots of clefts: They don’t enforce exhaustivity the way the pivot of a cleft does nor do they have the same propositional properties. A cleft is generally assumed to have a true existential presupposition, whereas a question is typically assumed to have a conversational implicature of existence of something that satisfies the kernel of the question. This difference is observed with the following contrast (# indicates semantic ill-formedness).

(31) a. Q: What did the burglar take?
   A: Nothing.
   b. #It was nothing that the burglar took.

(32) a. Q: What did he do to help you?
   A: Nothing at all.
   b. #It was nothing at all that he did to help us.

As shown in (31) and (32), negative quantifiers can occur in fragmentary utterances whereas they cannot occur in the pivot of clefts.

the book-Acc Y.-Dat I-Nom it-Acc her-Dat give-Past-Dec
  ‘Chelswu gave the book to Yenghi.’
However, (ii) sounds ill-formed to our ears, hence it cannot be analyzed as non-elliptical version of (iB). As discussed in the text, we suggest that the non-elliptical counterpart of (1B) is the example including multiple focus movement as shown in (iii).

(iii) Ku chayk-ul Yenghi-eykey nay-ka cwu-ess-ta.
    the book-Acc Y.-Dat I-Nom give-Past-Dec
    ‘Chelswu gave the book to Yenghi.’
The cleft analysis of Korean fragments may assume that (33a) is derived from the cleft in (33b).

(33)  

John-i  mwueuss-ul  mek-ess-ni?  
John-Nom what-\text{-Acc}  eat-Past-Q  
a. Swupak.  
'Water melon.'  
John-Nom eat-\text{-Rel}  Nm-\text{-Top}  water  melon-Cop-Dec  
'It was a water melon that John ate.'

Note, however, that unlike the CM-fragments as shown in (34a), a pivot of a cleft in (34b) cannot be overtly case-marked (cf. B. Park 2005, 2008).10

10 An anonymous reviewer points out the possibility that the ill-formedness of (34b) results from the morphological incompatibility between Case marker -ul and -i-ta 'Cop-Dec'. (s)he suggests that postposition -eykey can occur with -i-ta. But the following sentence sounds somewhat degraded to us.

(j)?Chelswu-ka  semswul-ul  cvu-n  kes-un  Yenghi-ekkey-i-ta.  
Chelswu-Nom  gift-Acc  give-\text{-Rel}  NM-\text{-Top}  Y.-Dat-Cop-Dec  
'Whom Chelswu gave a gift was Yenghi.'

The degraded example in (j) also supports that fragments cannot be analyzed as a pivot of the hidden cleft in Korean.

(ii) Chelswu-ka  encey  kyehoy-ey  ka-ni?  
C.-Nom  when  church-to  go-Q  
'When does Chelswu go to church?'  
a. Ilyoi-ey.  
'Sunday-on'  'On Sunday.'  
C.-Nom  church-to  go-REL  NM-\text{-Top}  Sunday-on-Cop-Dec  
'When Chelswu goes to church is on Sunday.'  
ilyoi-ey 'on Sunday' as a fragment answer is well-formed although it cannot occur in cleft structure. The similar contrast is observed in (iii).

(iii) Chelswu-ka  ediey  ka-ss-ni?  
C.-Nom  where  go-Past-Q  
'Where did Chelswu go?'  
a. hakkyo-ey.  
School-to  'to school.'  
b. *Chelswu-ka  ka-n  kes-un  hakkyo-ey-i-ta.  
C.-Nom  go-REL  NM-\text{-Top}  school-to-Cop-Dec
(34) John-i n'wues-ul mek-ess-ni?
    John-Nom what-Acc eat-Past-Q
    ’What did John eat?’
    a. Swupak-ul.
       watermelon-Acc
       ’Water melon.’
       John-Nom eat-Rel Nim-Top water melon-Acc-Cop-Dec
       ’It was a water melon that John ate.’

Thus, CM-fragments at least cannot be analyzed as a pivot of the hidden cleft in Korean.

Another problem for the cleft analyses is related to NPIs in fragment utterances. Unlike English, NPIs in Korean can appear as fragment answers as shown in (35a). By contrast, the NPI cannot appear in the cleft construction as shown in (35b). Thus, cleft-based analyses of fragments don’t seem to account for the discrepancy.

(35) Yenghi-ka ecey n'wukwu-lul manna-ss-ni?
    Yenghi-Nom yesterday who-Acc meet-Past-Q
    ’Who did Yenghi meet yesterday?’
    a. Amwuto.
       anybody
       (cf. amwuto Yenghi-ka ecey an manna-ss-ta.)
       Anybody Yenghi-Nom yesterday not meet-Past-Dec
       ’Lit, Anybody, Yenghi didn’t meet yesterday.’
    b. *Yenghi-ka ecey (an) manna-n kes-un
       Yenghi-Nom yesterday (not) meet-Rel NM-Top
       amwuto-i-ta

‘Where Chelswu goes is school.’
In sum, it is not clear the source of ill-formedness in (34b) is solely due to the morphological selectional restriction.
anybody-Cop-Dec

'Lit, It was anybody that Yenghi didn’t meet yesterday.'

Furthermore, as pointed out by B. Park (2008:523), another argument that fragment isn’t derived from cleft is related to multiplicity of fragments. Consider the grammatical contrast between (36a) and (36b).

(36) Nwu-ka mweess-ul sa-ss-ni?
    who-Nom what-Acc buy-Past-Q
    'Who bought what?'
       Yenghi-Nom book-Acc
       'Yenghi bought a book.'
    b. "San-kes-un Yenghi-ka chayk-(ul)-i-ta.
       bought-Nm-Top Yenghi-Nom book-Acc-Cop-Dec
       'Lit, It was Yenghi, a book that bought.'

As shown in (36), multiple fragment is possible, while multiple cleft is not, which indicates another distinct syntax of cleft and fragment structures.

Another difference between these two constructions comes from the fact that cleft is possible in an embedded context as in (37a) while fragment isn’t as in (37a'), which confirms further syntactic difference between fragment and cleft constructions.11

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11 As pointed out by an anonymous reviewer, the following sentence is well-formed.

(i) Na-nun Yenghi-la-ko sayngkakha-n-ta.
    I-Nom Y.-Cop-Comp think-Pres-Dec
    'I think that it was Yenghi that Chelswu met.'

(ii) Na-nun Chelswu-n-namnam kus-un Yenghi-la-ko sayngkakha-n-ta.
    I-Nom C.-Nom meet-Rel NM-Top Y.-Cop-Comp think-Pres-Dec
    'I think that it was Yenghi that Chelswu met.'
(37) Q: Ne-nun Chelswu-ka mwukul-lul manna-ss-ta-ko
    You-Top C.-Nom who-Acc meet-Past-Dec-Com
    sayngkakha-ni?
    think-Q
    'Who do you think that Chelswu meet?'
A. Na-nun Chelswu-ka manna-n-kes-un Yenghi-la-ko
    You-Top C.-Nom meet-Rel Nm-Top Y.-Cop-Comp
    sayngkakha-n-ta.
    think-Pres-Dec
    'I think that it was Yenghi that Chelswu met.'
A'. Na-nun Yenghi-lul [Chelswu-ka la manna ss-ta-ko]
    1-Top Y.-Acc C.-Nom meet-Past-Dec-Comp
    sayngkakha-n-ta
    think-Pres-Dec
    'I thought that Chelswu met Yenghi.'

4. Evidence for Movement Analysis: Binding

This section discusses binding phenomena specific to fragments. We first consider Merchant's (2004) analysis of binding in fragments in English, and deal with fragments in Korean in connection to binding facts. Merchant (2004:680) argues that reflexives in fragments show a distribution regulated by the Binding Theory parallel to their correlates in fragmentary sentential complement (the judgment is his):

(38) Who does John like?
    a. Himself.
    b. John likes himself.
(39) Who does John think Sue will invite?
    a. ??Himself.
    b. ??John thinks Sue will invite himself.
However, note that although the fragments are derived through movement of remnants, (38b) and (39b) don’t involve movement. Instead, (40a) and (40b) are rather assumed to be fully sentential correlates of (38a) and (39a) respectively, if the fragments are derived by movement and deletion.

(40) a. Himself John likes.
    b. Himself John thinks Sue will invite.

If (39a) correlates with (40b), we doubt whether (39a) is grammatically degraded on a par with (39b), contra Merchant’s judgment, since (40b) is much more acceptable than (39b). Although Merchant (2004) judges (39a) ungrammatical, it is grammatical for many other speakers.\textsuperscript{12} Consider a similar phenomenon below as widely discussed in Barss (1986), for example.

(41) [Which picture of himself\textsubscript{1/ii}] does John think that Bill will sell?

\[\text{\textsuperscript{i}}\] In (41) himself can be bound by Bill before which picture of himself undergoes movement. It can further be bound by John when which picture of himself is in Spec-C of the embedded clause. In the same reasoning, himself in (40b) can be bound by John when it undergoes successive cyclic movement as shown in (42).

(42) Himself [John thinks t Sue will invite t.

\[\text{\textsuperscript{i}}\] As a result, (40b) is acceptable, so is (39a).\textsuperscript{13} (42) parallels (41) in that

\textsuperscript{12} An anonymous reviewer also points out that many native speakers judge (39a) grammatical.

\textsuperscript{13} Merchant (2004) also presents connectivity data concerning Binding Principle B and C.

(j) Who did John try to shave?
successive cyclic movement of *himself* may create an environment where Binding Principle A is satisfied.

In Korean, on the other hand, anaphors which cannot occur in subject positions in fully sentential answers can occur in the same position in their fragment answers (Ahn & Cho 2006:126).

(43) Nwu-ka Chelswu-wa Yenghi-lul pihanhay-ss-ni?
    Who-Nom Chelswu-and Yenghi-Acc criticize-Past-Q
    'Who criticized Chelswu and Yenghi?'
    a. Selo-ka.
        each other-Nom
        each other-Nom Chelswu-and Yenghi-Acc criticize-Past-Dec
        'Lit, Each other criticized Chelswu and Yenghi.'

(44) Nwu-ka Chelswu-wa Yenghi-lul pihanhay-ss-ni?
    Who-Nom Chelswu-and Yenghi-Acc criticize-Past-Q
    'Who criticized Chelswu and Yenghi?'
        each-Nom
        each-Nom Chelswu-and Yenghi-Acc criticize-Past-Dec
        'Lit, Each criticized Chelswu and Yenghi.'

(45) Nwu-ka Chelswu-lul pihanhay-ss-ni?
    Who-Nom Chelswu-Acc criticize-Past-Q
    'Who criticized Chelswu?'
    a. *Him.
    b. John tried to shave him.

(ii) Where is he staying?
    a. *In John's apartment.
    b. He is staying in John's apartment.

It is not clear, however, (iiia) should be ruled out on a par with (iib) as a Principle C violation. Suppose (iiia) is derived via move-delete in the following way,

(iii) In John's apartment, he is staying <in john's apartment>.

R-expression *John* in the elliptical structure may behave like a pronoun via vehicle change effects (Fiengo & May 1994). Then, (iiia) is predicted to be fully acceptable as (iv), contrary to Merchant's judgment.

(iv) He is staying in his apartment.
a. Caki-ka.
   Himself-Nom

   Himself-Nom Chelswu-Acc criticize-Past-Dec

'Lit, Himself criticized Chelswu.'

Although the fully sentential answers including the subject anaphors in (43b), (44b) and (45b) are all ruled out, the corresponding fragment answers are all fully acceptable in the similar environment as in (43a), (44a) and (45a).

Ahn & Cho (2006c) propose that the fragment answer (43a), for example, may have the structure like (46), which is derived by (PF-vacuous) object scrambling followed by subject movement and TP-ellipsis resulting in satisfaction of Binding Principle A.\textsuperscript{14}

\[
\begin{array}{c}
\text{FP} \\
\text{solo-ka} \\
\text{TP} \\
\text{F} \\
\end{array}
\]

\[
\begin{array}{c}
\text{Chelswu-wa Yenghi-lul} \\
\text{Binding A Satisfaction} \\
\end{array}
\]

If Binding Principle A can be satisfied at any point of derivation (Lebeaux 1994, Saito 2003), the remnant fragment in (46) can satisfy Binding Principle A.\textsuperscript{15} Presence of anaphor in fragments also argues

\textsuperscript{14} \emph{t}_2 seems to bind the R-expression \emph{Chelswu-wo Yenghi-ful}. The amelioration of Binding Principle C in fragments seems to be attributed to the so-called vehicle change effects in elliptical contexts (Fiengo & May 1994, Merchant 2003, 2004 and others). Ahn & Cho (2006c) claim that the elided clause contains a \([+\text{pronominal}]\) empty category (EC), \emph{Pro}, that corresponds to the R-expression \emph{Chelswu-wo Yenghi-ful} in the antecedent clause.

\textsuperscript{15} Ahn & Cho (2006c) assume that object scrambling doesn't occur in (43b), (44b)
against an LD analysis of fragments since both English and Korean don’t allow anaphors to occur in the left dislocated position, as shown in (47).\(^\text{17}\)

\[(47)\]
\[
\begin{align*}
\text{a.} & \text{ `Himself}(\text{\textsubscript{i/f}}) \text{ John, thinks that Bill likes himself(\textsubscript{i/f}).} \\
\text{b.} & \text{ `Caki}(\text{\textsubscript{i/f}}) \text{ Sue}-\text{ka Bill}-\text{i kyay}(\text{\textsubscript{i/f}}) \text{lul pipanhay-as-ta-ko sayngkak-hay.} \\
& \text{ himself S.-Nom B.-Nom him-Acc criticize-Past-Dec-C think-Dec} \\
& \text{ `Himself, Sue thinks that Bill criticized him.'}
\end{align*}
\]

5. Concluding Remarks

In this paper we have explored the nature of fragmentary utterances in English and Korean. We claimed that fragments in these languages should be analyzed as the remnants of full-fledged sentential structures that undergo ellipsis a la Merchant (2004). We have shown that the move+delete analysis is superior to alternative left-dislocation or cleft analyses in number of respects. Numerous pieces of empirical evidence have been adduced to support the (syntactic) ellipsis

\(^{16}\)An anonymous reviewer points out that the analysis of subject anaphor fragment like (43a) should also be problematic for the move–delete analysis. Space limitations prevent us from portraying concrete analysis here. See Ahn & Cho (2006c) and Ahn & Cho (2009b) for full analysis of binding fragments in Korean. See also related scope facts in fragments discussed in-depth in Ahn & Cho (2009c).

\(^{17}\)As a clefted constituent, however, anaphors can occur in English and Korean.

(i) a. It was himself that John nominated.
\[\text{Chelswu-ka pipanhia-n kes-un caki-yess-ta.}\]
\[\text{Chelswu-Nom criticize-Rel Nnp-Top himself-Past-Dec}\]
\[\text{‘It was himself that Chelswu criticized.’}\]

Thus, it seems that the evidence concerning anaphors only holds against LD analysis of fragment.
analysis of fragments: Namely, case connectivity, distribution of NPI, D-linking, multiplicity, embedding possibility, and various binding phenomena peculiar to fragments.

References

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