Deletion or Copying? Right Node Raising and Gapping*

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Sohn, Keun-Won. 2004. Deletin or Copying? Right Node Raising and Gapping. The Linguistic Association of Korea Journal, 12(4), 81-101. This paper discusses right node raising in Korean/Japanese and gapping in English, and provides a unified account for these constructions. Unlike Abe & Hoshi (1997), where a covert movement approach is adopted for both constructions, this paper proposes that overt movement, i.e. scrambling is involved in Korean/Japanese right node raising constructions while covert movement is involved in gapping constructions. It will be shown that this proposal captures various characteristics of right node raising which cannot be accounted for under the covert movement approach.

Key words: right node raising, gapping, remnant, postposition stranding, preposition stranding, LF copying, PF deletion

1. Introduction

This paper deals with the right node raising (RNR, henceforth) construction in Japanese/Korean and the gapping construction in English. The relevant examples are given below.

(1) a. John-ga Mary-ni, sosite Bill-ga Susan-ni kisusita Nom to and Nom to kissed 'John (kissed) Mary, and Bill kissed Susan.'

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- b. John-i Mary-eykey, kuliko Bill-i Susan-eykey khissuhayssta.

 Nom to and Nom to kissed
 'John (kissed) Mary, and Bill kissed Susan.'
- c. John kissed Mary, and Bill, Susan'John kissed Mary and Bill kissed Susan.'

A verb is elided in the first conjunct in Korean and Japanese RNR examples above, but the sentence is interpreted as if the gapped conjunct has the same verb as the one in the second conjunct. The English example shows the same point except that the gap appears in the second conjunct (See Ross(1970), Maling(1972) for the earlier discussion of these constructions.). This paper examines the previous analyses of these constructions and proposes a unified account for them.

2. Characteristics of gapping and RNR

2.1. Characteristics of gapping

Gapping has the properties summarized in (2).

- (2) a. Gapping is allowed only in coordinate structures.
 - b. In most cases of gapping, only two remnants are allowed.1)
 - c. Preposition stranding is not allowed in gapping.
 - d. The remnants should be clausemates (with a few predictable exceptions).²⁾
 - e. The verb can be gapped in the second conjunct, but not in the first conjunct.

Examples showing these properties are given below in (3-7).

¹⁾ There are some systematic exceptions to this restriction, as discussed in Sag (1976), but we will not discuss them in this paper. See Sag (1976) for these exceptional cases.

²⁾ But see Neijt (1981) and Pesetsky (1982) for a different view.

- (3) a. Alan went to N.Y. and Betsy, to Boston.
 - b. *Alan went to N.Y., after Betsy, to Boston,
 - c. *Alan kissed Mary, because Tom, Sue.
- (4) a.?*Alan gave Sandy a book, and Peter Betsy a magazine. b.?*Willie put the flowers in a vase, and Charlie the book
 - on the table.
- (5)Bill talked about Sue, and John, *(about) Mary.
- (6) ?* Jo thinks that the boy likes ice cream, and Tom (thinks that the boy likes) pizza.
- (7) a. John likes Mary and Bill, Sue.
 - b. *Iohn. Mary and Bill likes Sue.

2.2. Characteristics of RNR

RNR shows somewhat different characteristics from gapping. The characteristics of RNR are summarized in (8) and the examples (9-15) illustrate each of these characteristics.

- (8) a. RNR, just like gapping, is not allowed in the constructions other than coordination. (=(9))
 - b. There is no limit on the number of remnants and the remnants can change their order freely, unlike in gapping. (=(10))
 - c. Postposition stranding seems to be allowed in RNR. (=11))
 - d. The remnants need not be clausemates as long as there is no island between them. (=(12-14))
 - e. Unlike in gapping, the gap appears in the first conjunct in the RNR. (=(15))
- (9) a. *Betsy-ka Boston-ey [e] hwu-ey, Alan-i N.Y.-ey kassta Nom to after Nom '(Lit) After Besty [e] to Boston, Alan went to N.Y..'
 - b. *Tom-i Sue-eykey [e] ttaymwun-ey, Alan-i Mary-eykey khissuhaessta Nom Dat hecause Nom Dat kissed '(Lit) Because Tom [e] Sue, Alan kissed Mary.'

- (10) a. Tom-i Mary-eykey kkoch-ul, kuliko Jo-ka Sue-eykey chayk-ul cwuessta

 Nom to flower-Acc and Nom Dat book-Acc gave
 'Tom [e] flowers to Mary, and Jo gave a book to Sue.'
 - b. John-i kkoch-ul thakca-ey, kuliko Bill-i chayk-ul sopha-ey nohassta Nom flower-Acc table-on and Nom book-Acc sofa-on put 'John [e] flowers on the table, and Bill put the book on the sofa.'
- (11) a. John-i Mary-(ey tayhay), kuliko Bill-i Sue-ey tayhay malhaessta Nom about and Nom about talked 'John [e] (about) Mary, and Bill talked about Sue.'
 - b. John-i Mary-(ttaymwuney), kuliko Bill-i Sue-ttaymwuney hwanassta Nom because of and Nom because of got angry 'John [e] because of Mary, and Bill got angry because of Sue.'
- (12) Tom-un phicca-lul, kuliko Jo-nun ayskrim-ul ku
 Top pizza-Acc and Top icecream-Acc the
 ay-ka cohahanta-ko sayngkakhanta
 boy-Nom like-comp think
 - '(Lit) Tom, pizza and Jo believes that the boy likes ice cream'
- (13) a.??John-i phiano-lul, kuliko Bill-i kitha-lul Mary-ka cal Nom piano-Acc and Nom guitar-Acc Nom well chintanun sasil-ul anta

play fact-Acc know

'John (knows the fact that Mary plays) piano (very well) and Bill knows the fact that Mary plays guitar very well.'

- b.??Tom-i phicca-lul, kuliko Jo-ka ayscrim-ul ku ai-ka
 Nom pizza-Acc and Nom icecream-Acc the boy-Acc
 cohahanun-ci alko sipehanta
 like-whether want to know
 - '*Tom, pizza and Jo wants to know whether the boy likes ice cream '
- (14) ??John-i chayk-ul, kuliko Mary-ka inhyeng-ul san tuy-ey
 Nom book-Acc and Nom doll-Acc buy after
 pap-ul mekessta.

meal-Acc had

'*John, a book and Mary had a meal after she bought a doll.'

- (15) a. John-i Mary-lul kuliko Bill-i Sue-lul saranghanta. Nom Acc and Nom Acc love 'Iohn [e] Mary and Bill loves Sue.'
 - b. *Iohn-i Mary-lul saranghanta kuliko Bill-i Sue-lul. 'John loves Mary, and Bill Sue.'

Notice that the order among remnants can be changed freely, as can be seen from the variants of (10a) given below.

- (10a') Mary-eykey Tom-i kkoch-ul, kuliko Sue-eykey Jo-ka chayk-ul cwuessta
- (10a") Mary-eykey kkoch-ul Tom-i, kuliko Sue-eykey chayk-ul Io-ka cwnessta

So far we have compared the characteristics of English gapping with those of Korean/Japanese RNR. In the next section, the previous analyses for these constructions will be critically examined.

3. Previous Analyses

3.1. Jayaseelan (1990), Lasnik & Saito (1991)

Jayaseelan (1990) and Lasnik & Saito (1991, L&S) note surprising similarities between gapping and Heavy NP shift and propose that gapping involves rightward movement of the second remnants followed by deletion. As mentioned in (2b) and illustrated in (4) that in most instances of gapping, only two remnants are allowed. According to Jayaseelan and L&S, this can be attributed to the impossibility of multiple rightward movement. The examples in (16) show this point clearly.

- (16) a. John built [the house he will live in] [with a hammer] yesterday.
 - b. *John built t1 t2 yesterday [with a hammer]2 [the house ...]1
 - c. *John built t1 t2 yesterday [the house ...]1 [with a hammer]2

Secondly, the impossibility of preposition stranding in gapping can also be accounted for if the relevant operation involved in gapping is rightward movement. As we can see from the contrast between (17b) and (17c), preposition stranding is possible in leftward movement while it is not in rightward movement.

- (17) a. I talked about [the man I recently met] yesterday.
 - b. *I talked about t1 yesterday [the man I recently met]1.
 - c. [The man I recently met]1 I talked about t1 yesterday.

The parallelism between Heavy NP Shift and gapping doesn't stop here. It is well known that there is a strong locality constraint for rightward movement, the so called right roof constraint (RRC). This is shown in (18b) where the rightward movement of embedded subject causes ungrammaticality. This RRC is relaxed for the ECM subject as is evidenced by the grammaticality of (18a).

(18) a. John believes t to be important [what Mary was studying] b. *John believes t is important [what Mary was studying]

L&S observe that exactly the same is true in gapping. (19a,b) show that the subject of an embedded clause cannot be a successful remnant while the subject of an infinitival clause can.

(19) a. John believes Gapping to be important, and Mary, Sluicing. b.?*John believes that Gapping is important, and Mary, Sluicing.

Based on this kind of considerations, the proponents of rightward movement in gapping assign the structure (20') for the example (20).

- (20) John kissed Mary, and Bill, Susan. (=2)
- (20') John [VP[VP kissed t1] Mary1] and Bill [VP[VP kissed t2] Susan2]

Up to now, we have considered rightward movement approach of

3.2 Abe & Hoshi (1997)

Abe & Hoshi's (1997, A&H) analysis is interesting in that they tried to provide a unified account for Japanese RNR and English gapping. The gist of their analysis is that there occurs LF copying in both constructions. The existence of examples like (19a) made them choose the LF copying approach for English gapping since in (19a) the correspondents, *i.e.* the counterparts of the remnants in the first conjunct, do not create a proper deletion site eligible for PF deletion. Notice that the parts excluding the correspondents *John* and *Gapping* do not form a constituent in overt syntax and thus cannot be a target of deletion. This in a sense forces A&H, just as it did Jayaseelan and L&S, to take the LF copying approach.

There are two important assumptions or conditions they adopt to account for RNR and gapping; the first is Saito's condition on adjunction sites and the second is the crossing constraint on gapping (CCG). Saito's condition on adjunction sites is based on head parameter and it is mainly proposed to account for the lack of rightward scrambling in Japanese and Korean. What this says is that the head inital or final requirement imposed by X'-theory must be preserved for adjunction operation. Thus an element must adjoin to the side of the category which is opposite to the head, where the head of XP is defined as X' and the head of X' as X. By adopting this condition, they can account for why both leftward and rightward adjunction are possible in English since English would allow right adjunction to X'-level and left adjunction to XP. However, in Japanese, both X and X' appear on the right side, which, in turn, means that only leftward adjunction is possible both on the X' and XP level in Japanese.

Their next assumption is CCG, which states that a contrasted element cannot cross another contrasted element. This CCG is taken to be a constraint on LF representation and is motivated from the examples

considered in Pesetsky (1982).

Pesetsky has a more general formulation of this constraint, but A&H restrict their concern just to gapping and RNR (the latter taken to be a kind of backward gapping by them). The definition of crossing is given in (22).³⁾

(22) A crosses B iff (i) A precedes B and one of A's traces follows B; or (ii) A follows B and one of A's traces precedes B

Now let's see how they account for the data in concern with these theoretical assumptions. First, the English data are considered in 3.2.1.

3.2.1 English

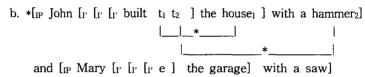
In English gapping, no preposition stranding is allowed from the second remnant since the second remnant undergoes rightward movement. As we can see in (23a), if the PP moves rightwards out of I' in the first conjunct, the correct copying site is created. Given that, in the full conjunct, *Bill* alone has to move rightward leaving the preposition *about* behind. This derivation is blocked since rightward movement cannot strand a preposition behind.

(23) a. $[_{IP}$ John $[_{I'}$ $[_{I'}$ talked $t_1]$ [about Bill] $_1$]], and $[_{IP}$ Mary $[_{I'}$ $[_{I'}$ e] about Susan]] b. $*[_{IP}$ John $[_{I'}$ $[_{I'}$ talked about t_1] Bill $_1$], and $[_{IP}$ Mary $[_{I'}$ $[_{I'}$ e] Susan]]

³⁾ Notice that this definition is based on linear order rather than hierarchical structure.

With the proposed CCG, A&H can account for why there can be only two remnants in gapping. For more than two remnants to be possible, multiple right adjunction to I'should be allowed. But this is not possible since multiple rightward movement would violate the CCG. (24b) shows that multiple rightward movement is necessary to get the word order in (24a).

(24) a. *John built the house with a hammer and Mary the garage with a saw.



Another similarity between rightward movement and gapping is the locality requirement. This locality can be overridden only when the infinitival subject is involved in both operations as shown in (25). This again supports treating gapping as an instance of rightward movement.

(25) a. John believes Gapping to be important, and Mary, Sluicing. b.?*John believes that Gapping is important, and Mary, Sluicing.

3.2.2 Japanese

Now let's turn our attention to Japanese. As we saw previously, postposition stranding is allowed in RNR. The relevant examples are given in (26).

- (26) a. John-ga Bill, sosite Mary-ga Susan-nituite hanasita 'John talked about Bill and Mary, Susan.'
 - b. Harry-ga imiron, sosite Alfonse-ga toogoron-o kenkyuusiteiru Nom semantics and Nom syntax-Acc is studying 'Harry studies semantics and Alfonse syntax.'

A&H attribute this to Huang's claim that covert P-stranding is universally allowed. As (27) shows, overt P-stranding is not allowed in Japanese. However, (28) seems to show that a *wh*-phrase can move up, leaving postposition behind. Assuming that there is LF wh-movement, we have to assume that the stranded postposition can proper-govern the trace of *donna riyuu*, thus satisfying ECP at LF.

- (27) *Susan1, Mary-ga t1-nituite hanasita
- (28) Mary-wa [John-ga donna riyuu-de sore-o nusunda] koto-o top Nom what reason-for it-Acc stole fact-Acc mondai-ni siteiru no problem-to make Q '(lit) Mary is making an issue out of the fact that John stole it

for what reason.'

For the subjacency effects showing up in the RNR construction, they assume that subjacency regulates LF (following Nishigauchi (1986,1990), Choe (1987), etc) and that the movement in the full conjunct to create the correct copying site violates this constraint.

(29) a.??Harry-ga imiron, sosite Alfonse-ga toogoron-o Nom semantic and Nom syntax-Acc kenkvuusiteiru gengogakusva-ni atta linguist - to met is studying 'Harry met a linguist who studies semantics and Alfonse syntax.' b.??John-ga suugaku, sosite Mary-ga eego - o benkyoosuru Nom math and Nom English-Acc studied mae -ni svokuzisita before ate 'John had a meal before he studied math, and Mary English.'

One potential problem for their analysis is that unlike English, Japanese allows more than two remnants freely. In fact, the number of remnants can go up much higher, under appropriate contexts. Furthermore, crossing of one focused item by another item also seems to be allowed in Japanese unlike in English. (30) and (31) illustrate these two aspects.

- (30) a. John-ga Bill-nituite, sosite Mary-ga Susan-nituite hanasita b. Bill-nituite John-ga, sosite Susan-nituite Mary-ga hanasita
- (31) Mary-ga nokogiri-de gareezi-o, sosite John-ga hammaa-de saw-with garage-Acc and Nom hammer-with Nom ie-o tukutta house-Acc built '(Lit) Mary, a garage with the saw, and John built a house with the hammer.'
- (32) shows that the order of remnants can also be freely changed.
 - (32) nokogiri-de gareezi-o Mary-ga, sosite hammaa-de ie-o John-ga tukutta

According to them, this kind of free crossing is allowed only within a clause, but not across the clause. That is, long distance crossing results in ungrammaticality. They provide (33) to support their point.

(33) *Mary-nituite John-ga, sosite Susan-nituite Bill-ga [CP [IP sono sensei-ga ti hanasita] to] omotteiru. 'John, about Mary and Bill thinks that the teacher talked about Susan.'

They attribute this difference between short crossing and long crossing to the nature of A/A'-movement. As has been pointed out by Pesetsky, crossing effects show up only between A'-movement. (34) clearly shows that A-movement is immune to crossing.

(34) John seems to Bill [t₁ to be intelligent] and Susan, to Nancy.

Now A&H's observation in (35) can be given some theoretical basis if

we appeal to the well established assumption that only clause internal scrambling can be A-movement (=36).

- (35) Crossing is possible in clause internal LF movement, but not in long distance LF movement.
- (36) Mahajan (1990), Saito (1992)

 Clause internal scrambling is an instance of A-movement

 Clause external scrambling is an instance of A'-movement

One problem is that scrambling is an overt operation occurring in overt syntax while the operation A&H are assuming occur in covert syntax. This forces A&H to assume (37).

(37) Chains created after copying at LF can also have properties of scrambling with respect to A/A' distinctions.

We should notice that the nature of (37) is quite dubious, simply reflecting the observation made for scrambling. In the section to come, I will propose an analysis which doesn't have to appeal to (37).

3.2.3 Problems in A&H

Although A&H's analysis is interesting, it has several problems, some of which are not remediable at all. First, they have no account for the clustering effects typical of right node raising constructions. Consider the following.

- (38) a. John-ni hana-o, sosite Bill-ni tyoko-o Mary-ga okutta to flower-Acc and to chocolate-Acc Nom gave 'Flowers, to John and Mary gave a chocolate to Bill'
 - b. *John-ni hana-o, sosite Bill-ni Mary-ga tyoko-o okutta
 - c. *John-ni hana-o, sosite Mary-ga Bill-ni tyoko-o okutta
- (39) a. John-ga Mary-nituite, sosite Bill-ga Susan-nituitei [sono sensei-ga ti hanasita to] omotteiru.

'John, about Mary and Bill thinks that the teacher talked about Susan.'

b. *Iohn-ga Mary-nituite, sosite Bill-ga [sono sensei-ga Susan-nituite hanasita tol omotteiru.

The clustering effects shown above can be summarized in the following way.

(40) Generalization

In the RNR construction, nothing can intervene the sequence A-B-and-A'-B' in X-A-B-and-A'-B'-Y (where X, Y are variables; A, B remnants and A', B' correspondents)

Notice that exactly the same kind of construction (=(19a) reintroduced as (41) below) is legitimate in English gapping. If both gapping and RNR involve LF copying, there seems to be no way to account for why Japanese does not allow LF movement of the second correspondent to raise high enough so that a copying site can be created.

(41) John believes Gapping to be important, and Mary, Sluicing. (=19a)

The second problem with A&H's analysis is that they don't have any account for comp-deletion facts, as they admit themselves.

- (42) a. John said that we should go to London, and Bill [v e] that we should go to Paris.
 - b. John said we should go to London, and Bill [v] e that we should go to Paris.
 - c. *John said that we should go to London, and Bill [v e] we should go to Paris.
 - d. *Iohn said we should go to London, and Bill [v e] we should go to Paris.
- (43) a. John-ga Koobe-ni iku te, soide Mary-ga Tookyoo-ni iku te, yuuta Nom -to go Comp and Nom -to go Comp said

'John said that he was going to Kobe, and Mary said that she was going to Tokyo.'

- b. *John-ga Koobe-ni iku te, soide Mary-ga Tookyoo-ni iku [Comp e], yuuta
- c. *John-ga Koobe-ni iku [comp e], soide Mary-ga Tookyoo-ni iku te, yuuta
- d. *John-ga Koobe-ni iku [comp e], soide Mary-ga Tookyoo-ni iku [comp e], yuuta

As they have argued that RNR and gapping are the same phenomenon, they should be given the same LF copying account and thus, (42b) should be as good as (43b). But this is not the case.

The next problem with A&H concerns the postposition stranding facts. The possibility of postposition stranding in Japanese plays a very important role in their analysis since it provids a main motivation for treating RNR as involving LF operation; more precisely LF movement in the full conjunct followed by LF copying into the gapped conjunct. But there is a flaw in their argument since there is evidence that their analysis is based on incomplete paradigm. Consider the following.

- (44) a. John-ga Bill-nituite, sosite Mary-ga Susan-nituite hanasita
 - b. Bill-nituite John-ga, sosite Susan-nituitei Mary-ga ti hanasita
- (45) a. John-ga Bill(-nituite), sosite Mary-ga Susan-nituite hanasita
 - b. Bill-nituite John(-ga), sosite Susan-nituite, Mary-ga ti hanasita
 - c. *John__ Bill-nituite, sosite Mary-ga Susan-nituite hanasita
 - d. *Bill___ John-ga, sosite Susan-nituite; Mary-ga ti hanasita

From (44), we can see that the order can be freely changed among remnants and correspondents. Keeping this in mind, consider (45). The postposition *nituite*(about) in (45a) and the Nom Case marker *ga* in (45b) can be deleted, which is expected under A&H's LF movement approach. However, the postposition or Case marker in the first remnant cannot be deleted as shown in (45c,d). These examples should be fine since at LF, the counterpart of the remnant without postposition can

move up, leaving postposition behind. There seems to be no way for A&H to account for the ungrammaticality of this example, and postposition stranding facts no longer provide a motivation for the LF treatment of RNR.

4. Proposal

In this section, we show that a PF deletion approach has to be chosen over A&H's LF copying approach for RNR constructions. We propose following Sohn (1994) that the RNR construction is formed from overt movement in both conjuncts followed by PF deletion. The relevant movement, I suggest, is scrambling in overt syntax unlike Sohn (1994) where the movement was taken to be focus movement.⁴⁾

According to this proposal, Japanese RNR example (1a) would have a representation (1a') in overt syntax. Both conjuncts appear without any gap in the beginning, and there is multiple scrambling of the remnants and correspondents in both conjuncts. When this representation feeds the PF, deletion can occur in the first conjunct, giving the correct output (1a).

- (1a) John-ga Mary-ni, sosite Bill-ga Susan-ni kisusita
- (1a') [IP John-ga₁ [IP Mary-ni₂ [IP t₁ t₂ kisusita]]] sosite [IP Bill-ga₃ [IP Susan-ni₄ [IP t₃ t₄ kisusita]]]

4.1. Accounting for the characteristics of RNR

4.1.1. clustering effects

The proposed analysis can readily account for the clustering facts we observed previously. To repeat, all the remnants and correspondents must cluster in the initial position of both conjuncts. The relevant

⁴⁾ Also see Kim (1997), where it is argued following Sohn (1994), that the relevant movement is overt focus movement.

examples are given in (46).

- (46) a. John-ni hana-o, sosite Bill-ni tyoko-o Mary-ga okutta to flower-Acc and to chocolate-Acc Nom gave 'Flowers, to John and Mary gave a chocolate to Bill'
 - b. *John-ni hana-o, sosite Bill-ni Mary-ga tyoko-o okutta
 - c. *John-ni hana-o, sosite Mary-ga Bill-ni tyoko-o okutta

We take this to be evidence for overt treatment of the RNR construction. All the remnants and correspondents must cluster in the conjunct initial position as in (46'a) to create a proper deletion site. Otherwise, PF deletion would not be possible since, as shown in (46b'), the identity requirement for deletion is not satisfied.

- (46a') [IP John-ni₁ [IP hana-o₂ [IP Mary-ga t₁ t₂ okutta]]] sosite [IP Bill-ni₃ [IP tyoko-o₄ [IP Mary-ga t₃ t₄ okutta]]]
- (46b') [_{IP} John-ni₁ [_{IP} hana-o₂ [_{IP} Mary-ga t₁ t₂ okutta]]] sosite [_{IP} Bill-ni₃ [_{IP} Mary-ga t₃ tyoko-o okutta]]

4.1.2 Comp deletion facts

The proposed analysis also provides an answer to the comp-deletion facts. It is different from A&H in that RNR involves an overt operation and gapping, a covert operation. Examples (42) and (43) are reintroduced below as (47) and (48).

- (47) a. John said that we should go to London, and Bill [v e] that we should go to Paris.
 - b. John said we should go to London, and Bill [v] e] that we should go to Paris.
 - c. *John said that we should go to London, and Bill [v e] we should go to Paris.
 - d. *John said we should go to London, and Bill [v] e we should go to Paris.

- (48) a. John-ga Koobe-ni iku te, soide Mary-ga Tookyoo-ni iku te, yuuta Nom -to go Comp and -to go Comp said 'Iohn said that he was going to Kobe, and Mary said that she was going to Tokyo.'
 - b. *John-ga Koobe-ni iku te, soide Mary-ga Tookyoo-ni iku [comp e], vuuta
 - c. *John-ga Koobe-ni iku [comp e], soide Mary-ga Tookyoo-ni iku te, yuuta
 - d. *John-ga Koobe-ni iku [comp e], soide Mary-ga Tookyoo-ni iku [comp e], yuuta

Our concern here is why there is a contrast between (47b) and (48b). What seems to be going on in comp-deletion cases is that when a clause is overtly dislocated, the complementizer within that clause cannot be deleted. The generalization is stated in (49).5)

(49) A complementizer cannot be omitted from a dislocated clause.

Now we can say that (46b) is fine since 'that-clause' is not moved yet in overt syntax. (47b) is degraded since Comp deletion occurred in a dislocated clause. Other characteristics of RNR also follow naturally under the overt movement approach. Non-clausemate remnants are allowed since scrambling can be unbounded. RNR shows island sensitivity since the relevant operation involved, i.e. scrambling, obeys Subjacency and ECP.

4.1.3. multiple remnants

Next, multiple remnants are allowed since multiple scrambling is possible.

⁵⁾ It is well known that the complementizer that is obligatory in the dislocated sentence as shown below.

⁽i) a. John believes (that) Mary is not a thief.

b. John believes with all his heart *(that) Mary is not a thief.

- (50) Mary-ga nokogiri-de gareezi-o, sosite John-ga hammaa-de ie-o tukutta (=31)
- (50') [IP Mary-ga1 [IP nokogiri-de2 [IP gareezi-O3 [IP t1 t2 t3 tukutta]]]] sosite [IP John-ga4 [IP hammaa-de5 [IP gareezi-O6 [IP t4 t5 t6 tukutta]]]]

The A/A' distinction also follows without assuming A&H's (46). Supposing that A&H's observation is correct, we can simply say that the contrast between clause internal crossing and long distance crossing with regard to CCG is due to the nature of scrambling itself, without assuming the dubious principle (37).

4.1.4. postposition stranding

The overt scrambling approach has no difficulty accommodating (51b). Since scrambling can't move an NP leaving a postposition behind, (51b) simply can't be allowed.

(51) a. John-ga Bill(-nituite), sosite Mary-ga Susan-nituite hanasita b. Bill*(-nituite) John-ga, sosite Susan-nituitei Mary-ga hanasita

On the other hand, the scrambling approach has the burden of accounting for the status of (50a), if it is really grammatical. What I suggest is (51).

(52) Postposition stranding may be a PF phenomenon; conjunction takes the whole contrasted part as one unit, optionally deleting the postposition on the last NP.

The idea that postposition stranding is not a syntactic phenomenon, but a PF phenomenon is not improbable. Whenever postposition stranding is allowed, we seem to regard the whole conjunct as one phonetic unit, a kind of nominal phrase. When this is not possible, the postposition stranding is not allowed any more as shown in (53–54).6)7)

- (53) Sue-ka velsimhi John-*(ey tayhaye) kuliko Bill-i kensenguro Nom passionately Nom indifferently about and Daisy-ev tayhaye malhavssta about talked
- '(Lit)Sue talked about John passionately and Bill, Daisy indifferently' (54) Bill-i ecey Mary-eykey kunye-uy tongsayng?*(-ey tayhaye), Nom vestereday Dat she-Gen vounger sister about kuliko Tom-i onul Sue-evkey kunye-uv enni-ey tayhaye mwulessta. she-Gen sister-about and Nom today Dat asked 'Bill (asked) Mary about her vounger sister vesterday and Tom asked Sue about her older sister today.'

Hence, it seems not clear whether postposition stranding is a real phenomenon and it remains to see why these conflicting sets of data exist.

5. Conclusion

In this paper, we examined English gapping and Korean/Japanese RNR construction and tried to provide a unified account for them. Unlike A&H, who argued for the LF copying approach for both types of constructions, it was claimed that Japanese/Korean RNR involves PF deletion followed by scrambling while English gapping involves LF operation. There are some remaining questions to be answered and we leave them to future research.

⁶⁾ The Japanese counterparts of these examples are also a bit degraded, compared to the counterpart of (47a). Hence, there is a reason to believe that something is going on in the direction outlined in the text in both languages.

⁷⁾ Recently, Chung (2003) proposed a multi-dominance approach to the RNR construction based on an interesting set of data. He assumes that postposition stranding is real, rather than taking it to be an epiphenomenon as was suggested in this paper. Although the approach mainly based on plurality issues seems to be interesting, there still are nontrivial issues regarding the status of the multi-dominance approach. For this reason I will not discuss this new type of analysis on RNR in this paper.

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