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The syntax of RC extraposition in Korean: Economy and repair*

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Park, Myung-Kwan, 2017. The syntax of RC extraposition in Korean: Economy and repair. Linguistic Research 34(1), 107-132. This paper investigates the syntax of relative clauses (RCs) in sentence-final position in Korean, which have been analyzed as RC right dislocation (RD)/afterthought by Park and Kim (2009) and Kim and Park (2010), Ko (2014, 2015), and Chung (2016). In this paper we argue that the construction in question is not RC RD but RC Extraposition, which behaves in the similar fashion as English or German RC/AP Extraposition. We propose, following the lead of Koster (2000), that 'extraposed' RCs in Korean are derived by moving out of the second conjunct minimally constructed and then elided after the comma as a specifying coordinator. To capture the local/proximate association between the 'extraposed' RC and its host, we suggest that structure building for both the first and the second conjuncts containing them is regulated by the economy principle on specifying coordination: the two conjuncts are constructed in a bottom-up mode as minimally as possible only up to the need of specifying coordination. However, there are cases where the economy principle on structure building in RC Extraposition is violated, and thus the apparently non-local dependency between the 'extraposed' RC and its host holds. We submit that these cases point to the fact that grammar entertains a strategy of repairing the grammatically-illicit derivation/representation. (Dongguk University)

Keywords relative clause, extraposition, right dislocation, specifying coordination, structure building, economy, repair

1. Introduction

Park and Kim (2009: 464) submit that one of the most important examples arguing against the movement analysis of the afterthought construction is the

^{*} I am grateful to the two anonymous reviewers of this journal for the helpful comments and suggestions. All the remaining errors are, of course, mine.

following one in (1) involving the Left Branch Condition (LBC), which bans the movement of left branching elements in a syntactic derivation.

- (1) John-i △ sinpwu-lul mannass-e, acwu yeppun.

 J-Nom bride-Acc met very pretty

 'John met a very pretty bride.'
- (2) *[acwu yeppun]_i, John-i t_i sinpwu-lul mannass-e. very pretty J-Nom bride-Acc met. 'John met a very pretty bride.'

As is well known, the left branching element in (2) cannot undergo movement leftwards to the beginning of the sentence, owing to the LBC. If the same element in (1) were able to undergo movement (rightwards) from the position marked with \triangle to the end of the sentence, the sentence would be bad, contrary to fact.

To account for the contrast between leftward and rightward movement of left branching elements, Park and Kim (2009, 464) go on to suggest that the afterthought or right dislocation (RD) construction in (1) is not derived from mono-clausal structure, but from bi-clausal structure (See, among others, Park and Kim (2016) for the analysis of multiple RD), and that despite the leftward movement of the left branching element to the beginning of the second clause, its derivational illicitness can be repaired by Sluicing-like ellipsis, represented by striking through the elided material in (3) (cf. Merchant (2001)).

(3) John-i △ sinpwu-lul mannass-e, [acwu yeppun]_i [John-i [t_i-sinpwu-lul] mannass-e].

In this paper we return to this issue, the apparently discontinuous modification of the preceding nominal host by the ensuing sentence-final adnominal appendix, focusing on how this construction is derived syntactically. To this end we first start with a review of the recent works such as both Ko (2014, 2015) and Chung (2016), who probe into the construction at issue in this paper. We then proceed to seek a proper analysis of the syntactic derivation of the construction concerned.

2. Ko's (2014, 2015) concatenation-cum-sideward movement analysis

Ko (2014, 2015) proposes to take a concatenation-cum-sideward movement approach to right dislocation of the relative clause (RC)1 associated with the host in the preceding clause as in (4):

(4) na-nun [han sonyen]-ul manna-ess-e, one boy-Acc meet-Pst-DE I-Top [acwu ttokttok-hako calsayngki-n]. handsome-RC smart-and very 'I met a boy who is very smart and handsome.'

In Ko's analysis, the sentence (4) undergoes the following two steps of derivation, putting aside other details:

(5) a. Concatenation

na-nun manna-ess-e ^ [[acwu ttokttok-hako calsayngki-n][han sonyen]]

b. Sideward movement (SD)

na-nun [han sonyen];-ul manna-ess-e ^ [[acwu ttokttok-hako calsayngki-n] e;] sideward movement

The RC andrelative head nominal complex is concatenated with the preceding clause as in (5a), and then only the relative head nominal is sideward moved into the latter. Ko's SD-based leftward movement approach to RD is assimilated to Kayne's (1994) stranding analysis of RC Extraposition in English, where the relative head nominal undergoes leftward movement, leaving behind the RC.

Since sideward movement was originally conceived to account for the leftward movement-based syntactic derivation of the parasitic gap (PG) construction in English, it is hard to see how Ko's concatenation-cum-sideward movement approach accounts for sentences like (2), repeated below, where the RC occurs in clause-initial position:

The wavy-underlined portion of the sentence in (4) may be analyzed as an adjective phrase (AP). But we just assume along with Ko (2014, 2015) and Chung (2016) that it is a relative clause.

(2) *[acwu yeppun]_i, John-i t_i sinpwu-lul mannass-e. very pretty J-Nom bride-Acc met.

'John met a very pretty bride.'

In contrast to (2), on the other hand, (6) has the relative head nominal occurring in clause-initial position and the RC occurring in clause-medial position.

(6) *[han sonyen]_i-ul na-nun ^ [[acwu ttokttok-hako calsayngki-n] e_i] manna-ess-e

If we hold on to Ko's analysis, the question raised by the ungrammaticality of (6) is why it is impossible to apply concatenation and sideward movement within a single clause.

Ko's (2014, 2015) analysis confronts these problems, but she makes a very important observation: The RC in right dislocation is readily associated with the preceding object host, but not with the subject one, as follows:

(7) Subject-object asymmetry: relative clause (adapted from Ko 2015, her (61))
Cheli-ka Yengi-lul manna-ess-e,
C.-Nom Y.-Acc meet-Pst-DE

[RC ppalkah-ko khun moca-lul ssu-n].
red-and big hat-Acc wear-RC
'Cheli met Yengi, who wore a big red hat.'

[who=Yengi; *who=Cheli]

- (8) Subject-object asymmetry: genitive-marked phrase (adapted from Ko 2015, her (62))
 - a. Cheli-ka apeci-lul manna-ess-e, Yengi-uy.
 C.-Nom father-Acc meet-Pst-DE Y.-Gen
 'Cheli met Yengi's father.'
 - b. * Apeci-ka Cheli-lul manna-ess-e, <u>Yengi-uy.</u> father-Nom C.-Acc meet-Pst-DE Y.-Gen 'Yengi's father met Cheli.'

In (7), the RC is right dislocated (RD-ed), and in (8), the Genitive-marked element is, too. They exhibit a subject-object asymmetry in their association with the preceding hosts. Ko (2014, 2015) argues that the subject vs. object asymmetry in RD in Korean is analogous to the allegedly similar asymmetry in the parasitic gap (PG) construction in English, advocating her concatenation-cum-sideward movement approach to RD. But see Chung (2016) for the arguments against Ko's (2014, 2015) view on the parallelism between Korean RC RD and English PG, which are not rehearsed here. Since the subject-object asymmetry in RC RD is a starting point for Chung's (2016) study of RC RD, we immediately discuss it in the next section.

3. Chung's (2016) proximity/focus-based analysis

Chung (2016) starts to show that Ko's subject/object asymmetry in RC-RD is "not absolutely banned", drawing on the sentence in (9):

(9) (ceysam-uy)² senswu-ka kummeytal-ul tta-ess-ta. third-Gen player-Nom gold-medal-Acc win-Pst-DE [RC hwuposenswu myengtan-ey-to mos-kki-ten]. backup-player list-to-even not-belong-PNE 'A third player, who was not even listed as a backup player, won the gold medal.' (adapted from Chung (2015: 750, his (24))

Chung claims that the intervening object does not obstruct the modificational association of the RC appendix (i.e., the RD-ed element) with the preceding subject host, noting that the subject-object asymmetry in RD does not always hold.

Chung also denies the subject-object asymmetry in RD, noting that the nominal adjunct following the object element disrupts the association between the RC appendix and its preceding object/subject host, as in (10);3

² Chung (2016) notes that the ordinals like ceysam-uy 'third' are lexically contrastively focused.

As one of the anonymous reviewers notes, contrary to Chung (2016) it is possible to interpretively associate the RC appendix with its preceding object host despite the presence of the intervening PP hakkyo-eyse 'at school' in (10).

(10) *?Cheli-ka Yengi-lul hakkyo-eyse manna-ess-e,
C.-Nom Y.-Acc school-at meet-Pst-DE

[RC ppalkah-ko khun moca-lul ssu-n].

red-and big hat-Acc wear-RC

'Cheli met Yengi at school, who wore a big red hat.'

(adapted from Chung (2016: 361, his (20))

Noting that the subject-object asymmetry is not a right characterization in capturing the distribution of RCs in right dislocation, Chung also shows that scrambling of a potential host paves a way for another host's association with the RD-ed RC. The sentence in (11) makes a point:

(11) [Yengi-lul]_i Cheli-ka e_i sangtayha-lke-ya,
Y.-Acc C.-Nom compete-with-will-DE

[RC kacang kyenghemmanh-un].
most experienced-RC

'Cheli will compete with Yengi, who is the most experienced.'

[host=Cheli; ??host=Yengi]

(adapted from Chung (2016: 358, his (15b))

In (11), when the object element is scrambled, the subject element is now in proximity with and successfully enters into association with the RD-ed RC.

At this point it seems that the (linear) proximity between the RD-ed RC and the host is essential to the licensing of RD-ed RCs. Chung, however, goes on to argue that what matters in such licensing is not proximity but focus. Consider the following example:

(12) Q: nwu-ka Yengi-lul hakkyo-eyse manna-ess-ni? Who-Nom Y.-Acc meet-Pst-QE school-at 'Who met Yengi at school?' A: CHELI-ka Yengi-lul hakkyo-eyse manna-ess-e, C.-Nom Y.-Acc school-at meet-Pst-DE [RC ppalkah-ko khun moca-lul ssu-n]. red-and hat-Acc wear-RC big

'Cheli met Yengi at school, who wore a big red hat.'

[host=Cheli; *?host=Yengi] (adapted from Chung (2016: 358, his (24))

Chung claims that in the answer (A) sentence of the question-answer dialogue in (12), the subject host does not meet proximity to the RD-ed RC, but (information) focus on the subject host (signaled by capital letters) may override a violation of the proximity requirement.⁴ In this sentence, the intervening object or the nominal adjunct PP does not disrupt the association of the RC-ed RC with the preceding subject host, thanks to information focus on it.

However, we are suspicious of the decisive role of information focus that Chung claims comes into play in licensing the 'long-distance' association between the RC-ed RC and its host. Rather, we note that instead of (information) focus, the occurrence of a demonstrative like i 'this' or ku 'that' coming with the nominal host allows for the solid association between the RD-ed RC appendix and its host, as follows:

(13) A: nwu-ka Yengi-lul hakkyo-eyse manna-ess-ni? Who-Nom Y.-Acc school-at meet-Pst-OE 'Who met Yengi at school?'

B: KU/ku nyesek-i Yengi-lul hakkyo-eyse manna-ess-e, THAT/that guy-Nom Y.-Acc school-at meet-Pst-DE RC ppalkah-ko khun moca-lul ssu-n]. hat-Acc wear-RC red-and big

'Cheli met Yengi at school, who wore a big red hat.' [host=that guy; *?host=Yengi]

It seems that even when the speaker tries to recollect the identity of the host (thus, the host being construed as a speaker-known entity, but not as an entity in focus), the demonstrative coming with the nominal host has the function of making the containing host referentially less indeterminate, calling for the identification/

As one of the anonymous reviewers notes, in (12A) the RC appendix is interpretively associated with its preceding object host, though Chung (2016) claims that the presence of (information) focus on the subject preempts its association with the subject host.

specification/elaboration of its reference by the ensuing additive material (i.e., by the RD-ed RC in the construction at hand).

Note that a demonstrative can also occur naturally in the run-of-the-mill RD without involving information focus, as follows:

(14) without the preceding question clause:

 KU/ku
 nyesek-i
 Yengi-lul
 hakkyo-eyse
 manna-ess-e,

 THAT/that guy-Nom
 Y.-Acc
 school-at
 meet-Pst-DE

 [RC
 ppalkah-ko
 khun
 moca-lul
 ssu-n].

 red-and
 big
 hat-Acc
 wear-RC

 'That guy met Yengi at school, who wore a big red hat.'

[host=that guy; *?host=Yengi]

Another way of invalidating Chung's claim that focus is essential in licensing the association of the RD-ed RC with its host is to show that the empty category like *pro*, which is inherently not in focus, can act as a host for the RD-ed RC. In fact, based on the following dialogue in (15), Chung claims that the subject that receives information focus is uniquely associated with the RD-ed RC.

- (15) A: nwu-ka Yengi-lul_j sangtayha-lke-ya? who-Nom Y.-Acc compete-with-will-QE 'Who will compete with Yengi?'
 - B: Cheli-ka e_j sangtayha-lke-ya, [RC kacang kyenghemmanh-un].

 C.-Nom compete-with-will-DE most experienced-RC

 'Cheli will compete with Yengi, who is the most experienced.'

 [host=Cheli; *host=Yengi]

 (adapted from Chung (2016: 358, his (16))
 - B': Cheli-ka Yengi-lul sangtayha-lke-ya, [RC kacang kyenghemmanh-un].

 C.-Nom Y-Acc compete-with-will-DE most experienced-RC

 'Cheli will compete with Yengi, who is the most experienced.'

 [host=Cheli; ?*host=Yengi]

There is no disagreement about the strong preference for the RD-ed RC in (15B)

to associate with the overt subject host that receives information focus. But the fact is that given an appropriate context, the RD-ed RC in (16A) has no problem in being interpretively anchored to the empty category pro:5

(16) Context: The head teacher in her kindergarten office overheard one teacher scolding one of the kids noisily outside her office. The head teacher afterwards came out of her office and asked the following question (16Q) to the teachers nursing the kids. Another teacher came forward and answered by uttering (16A), intending to identify which teacher scolded the kid and also provide additional information about who that boy was.

```
namwula-ass-evo?
O: nwu-ka
              ai-lul
   who-Nom kid-Acc scold-Pst-Informal (Interrogative)
    'Who scolded the kid?'
A: kim sensayngnim-i
                                namwula-ass-evo.
    Kim teacher-Nom
                                scold-Pst-Informal
   sikkulepkey ttetul-te-n.
                talk-Pst-Rel
   noisily
    'Teacher Kim scolded him, the one who talked noisily.'
```

The acceptability of (16A) renders strong evidence showing that (information) focus on the host is not always what matters in its association with the RD-ed RC. In addition, it seems that, given a certain appropriate discourse context, the empty category pro does not require proximity with the following RD-ed RC that is intended to modify it, as follows:

```
(17) Q: han
             ai-ka
                        nwukwu-wa
                                      cenhwaha-yss-eyo?
                        who-with
                                      telephone-Pst-Inf
             kid-Nom
       one
        'Who did one kid telephone with?'
     A: ? [e] emma-wa
                           cenhwaha-yss-eyo, swuepcwunpimwu-lul
              mother-with
                           telephone-Pst-Inf
                                              class materials-Acc
```

As one of the anonymous reviewers notes, (16) and (17) sound unacceptable to him/her. But more than 10 native speakers we consulted rated these examples as acceptable.

an kacyeon. [e]
not brought

'(He) telephoned with his mother, the one who didn't bring class materials to school.'

In (17A), the intervening overt element makes it a little difficult but not impossible for the RD-ed RC to associated with the empty category subject *pro*.

In addition to the problem with his characterization of the host that the RD-ed RC associates with, Chung (2016) is short of providing a syntactic derivation of RD-ed RCs. Thus, it is hard to figure out how what he calls (information) focus plays out in the course of deriving RD-ed RCs in syntax.

Besides these problems, at some point of his paper when discussing such examples as (10) and (11) Chung relies on the notion of proximity in the association of RD-ed RCs with their hosts. If proximity is the right characterization for the association of RD-ed RCs with their hosts and is overridden by what he calls (information) focus, Chung's analysis has to answer why such overriding effects do not obtain in left dislocation as in (18):

(18)*[LD-ed RC ppalkah-ko khun moca-lul ssu-n hat-Acc wear-RC red-and big KU nyesek-i manna-ess-e. Yengi-lul hakkyo-eyse Y.-Acc school-at guy-Nom meet-Pst-DE that 'That guy met Yengi at school, who wore a big red hat.' [host=Cheli; *?host=Yengi]

4. RC/AP - Extraposition in cross-linguistic perspectives

Since this paper is concerned with the occurrence of RC or AP in sentence-final position in Korean, to get cross-linguistic perspectives of the same or similar phenomena we briefly go over some literature on it, particularly focusing on English and German. Since the occurrence of AP or RC in sentence-final position has been unanimously discussed under the rubric of Extraposition rather than RD, we keep to this terminology.

First, Dowty (1996) notes that the non-restrictive/appositive RC may undergo

Extraposition, even crossing the intervening DP embedded inside PP, as in (19):

(19) Non-restrictive relative clauses

The President appeared shortly at the party, who had just come from an important meeting.

In addition, AP's can be extraposed as in (20). It is worth noting that the AP's extraposed in (20) are structurally not pre-modifiers but post-modifiers:

- (20) Modificational adjectives
 - a. I want to see someone at every window armed and alert.
 - b. Nothing ever shows up on her table even remotely palatable. (adapted from (Stucky 1987: 388))

Unlike Dowty (1996), however, Newmeyer (2000) notes that simple APs cannot be extraposed from the nominals that they modify, no matter how heavy they are, as in (21):

- (21) a. An extremely peculiar-looking man dropped by today.
 - b. *A man dropped by today extremely peculiar-looking.

Since the difference between (20a-b) and (21b) lies in the positional aspect of APs, we can conclude that not pre-modifying but post-modifying APs in English are susceptible to Extraposition.

Samek-Lodovici (1998) also considers two ways of deriving RCs or APs in sentence-final position: (i) Extraposition; (ii) Stranding (i.e., RCs or APs in sentence-final position are stranded after the leftward movement of the relative head nominal). For example, (22a-b) show how relative clauses allow for extraposition and stranding in English.

- (22) Full RCs allow for extraposition and stranding:
 - a. RC Extraposition: I gave [DP a dog t₁] to Mary [that I bought in Milan]₁.
 - b. RC Etranding by NP-raising: [a man]₁ arrived [DP t₁ [that I met in

Milan]].

But (23a-b) show that APs disallow both operations (Doherty (1993)).

- (23) Adjectival modifiers disallow for both extraposition and stranding:
 - a. AP Extraposition: *I gave [DP a [NP t1 dog]] to Mary [unusually cute]1.
 - b. AP Stranding by NP-raising: *[a man]₁ arrived [DP t₁ [unusually tall]].

Now turning to Extraposition in German, Poschmann and Wagner (2016) note that Extraposition of a non-restrictive RC across an intervening DP is generally taken to be illicit in German (Zifonoun 2001; Holler 2005; Konopka 2006), as in (24).

- (24) a. Maria hat Fred getroffen, der wie immer eine rosa Fliege trug.

 Maria has Fred met who as always a pink bow tie 'Maria met Fred, who as always was wearing a pink bow tie.'
 - b. *Ihren Freund hat Emma auf dem Stadtfest getroffen, her friend has Emma at the city festival der wie immer eine rote Krawatte trug. who was always a pink tie was wearing 'Emma met her friend at the city festival, who by the way was wearing a red tie.'

They note, however, that unlike in English, Extraposition of a restrictive RC across an DP in German is usually judged as grammatical in German (Zifonoun 2001). But speaking of English, Huddleston and Pullum (2002: 1066) for example, judge the sentences in (25a) and (25b) as equally acceptable, showing that a restrictive RC in English is also allowed to be extraposed across an intervening DP (embedded inside PP) in some limited environments:

- (25) a. A stranger who looked like Uncle Oswald came into the room.
 - b. A stranger came into the room, who looked like Uncle Oswald.

Poschmann and Wagner (2016) go on to claim that non-restrictive RCs may undergo Extraposition in some contexts. In this regard, they cite Smits (1989:185),

who notes that Extraposition of non-restrictive RCs in German seems to improve in acceptability if they 'have some specific type of meaning, continuative, resultative, or contrastive and maybe some others as well, with respect to the rest of the sentence.' If the non-restrictive RC describes an event that either temporally follows or elaborates on the event described in the matrix clause and continues the narrative, Extraposition over longer distances improves as in (26a), and even might become obligatory as in (26b) ((26a) and (26b) taken from Holler 2005: 149-150). Holler keeps to the convention in the German literature of naming such RCs weiterfuhrend 'continuative' distinguishes non-restrictive and them from RCs 'non-continuative' reading.

(26) a. Extraposed

Ihre Lehrerin wollten die Kinder besuchen, die nicht aber Their teacher wanted the children visit who but not zu Hause war.

at home was

'The children wanted to visit their teacher, who was not at home.'

b. Non-Extraposed

Ihre Lehrerin, die aber nicht Hause war, wollten zu Their teacher, who but not home wanted was, die Kinder besuchen.

the children visit

'The children wanted to visit their teacher, who was not at home,'

Through the experimental study using acceptability judgment, Poschmann and Wagner (2016) also show that Extraposition was rated as better when the material separating the RC from its relative head remained unaccented, with the relative head being contextually salient. Poschmann and Wagner note that this effect arose regardless of whether the extraposed RC is restrictive or non-restrictive.

The lesson we learn from considering RC/AP extraposition in English and German is that RC and AP may undergo extraposition only when they are post-modifiers, and that both restrictive and non-restrictive RCs may equally be extraposed even over long distances when the relative head is contextually salient and the material between it and the extraposed RC is unaccented while the extraposed RC bears 'some specific type of meaning' with the preceding clause.

5. Proposal: The syntax of comma - specifying coordination - for RC Extraposition in Korean

From now on, we concentrate on the syntactic operation of deriving the construction at issue in Korean, which we name RC Extraposition rather than RC RD. Note that like German, Korean as a head-final language has RC Extraposition where a verb intervenes between the relative head and the 'extraposed' RC.

We submit that the comma (,) plays an instrumental role in the structural formation of RC Extraposition. In the construction at hand, the comma is an asyndetic coordinating conjunction that has the role of connecting the relative head nominal and the 'extraposed' RC. Since the 'extraposed' RC has the role of specifying/identifying/elaborating on what is introduced by the relative head nominal appendix, the comma is often called specifying coordinator (following the lead of Koster (2000)). We assume that discourse-functionally, the relative head nominal host (i.e., something to be specified) precedes the 'extraposed' RC. In other words, the former is part of the first conjunct before the specifying coordinator (i.e., the comma), and the latter is part of the second conjunct after it. On the other hand, left-dislocated RCs as seen above cannot take the specifying coordinator strategy, thus having taken the literal movement only to violate the left branch condition.

Narrowing down to structure building for the RC Extraposition construction, we suggest that the two conjuncts before/after the specifying coordinator are constructed simultaneously in a parallel fashion. The Korean RC Extraposition construction at hand provides convincing evidence that the larger structure than just the RC is built in the second conjunct, since the RC in Korean is inflected in a particularly way with an inflectional relativizing morpheme, -n/-nun-/-1. We view the inflection on the RC in Korean as parallel to the Case inflection on nominals in this language. Thus, the relative head nominal that determines the inflectional form of the RC is also constructed in the second conjunct. Futhermore, the occurrence of specifying coordinator dictates that the size of the first conjunct is commensurate with that of the second conjunct: namely, if the former is VP, the latter is VP.

We propose that the size of the two conjuncts conjoined together by the

specifying coordinator is also regulated by the economy principle that comes into play in building the structure of the two conjuncts. Specifically, the economy principle at work for structure building in the formation of the RC Extraposition construction is stated as follows:

(27)Economy on RC Extraposition⁶ The first maximal projection containing the host constitutes the first conjunct, and the first maximal projection properly containing the corresponding RC appendix constitutes the second conjunct.

Schematically, the first and the second conjuncts undergo structure building in the following mode:

Note that when the two conjuncts are built, the RC appendix in the second conjunct undergoes extraction to its periphery. For example, the sentence in (1) can be realized as in (29), where the RC is added to the relative head nominal inside the second conjunct composed of the VP repeated from the first conjunct after the comma (with the inflectional Tense and Mood markers added to the verb in the second conjunct to make the sentence grammatical).

(29)sinpwu-lul mannass-e, John-i △ J-Nom bride-Acc met sinpwu-lul mannass-e. acwu yeppun bride-Acc very pretty met 'John met a very pretty bride.'

Note that, as schematized in (28), the repeated or parallelly built second conjunct undergoes ellipsis after the newly added information of RC is extracted from it. In

The concept of the economy principle in (27) is proposed on the basis of Johnson's (1985) analysis of Extraposition in English and Toosarvandani's (2012) analysis of Gapping in English.

other words, along the same line of analysis of deriving the Fragment construction in English (Merchant (2004)), (29) feeds into ellipsis, with the result of (30) (i.e., (1)) being derived by eliding the repeated VP in the second conjunct.

(30) John-i △ sinpwu-lul mannass-e,

J-Nom bride-Acc met

[acwu yeppun sinpwu-lul]1 [yr t₁ manna].

very pretty bride-Acc met

'John met a very pretty bride.'

This derivation involves the extraction of the RC plus the relative head nominal from the second conjunct VP. Note that in (30), Max-Elide or Extra Deletion⁷ (cf. Park (2016); An (2016)) applies to the relative head nominal immediately after the second conjunct VP undergoes elision.

But there is an alternative derivation where only the RC instead of the containing relative head nominal undergoes extraction out of ellipsis, as in (31):

John-i △ sinpwu-lul mannass-e,

J-Nom bride-Acc met

[acwu yeppun]₁ [_{VP} [t₁ sinpwu-lul] manna].

very pretty bride-Acc met

'John met a very pretty bride.'

This line of analysis holds on to Park and Kim's (2009) andKim and Park's (2010) analysis relying on so-called repair by ellipsis. In the derivation of (31), the left branching RC that normally cannot move because of the LBC violation is apparently allowed to move because its illegal record of Move can be repaired by the subsequent operation of Elide (see Merchant (2008)).

Between (30) using Max-Elide/Extra Deletion and (31) using repair-by-ellipsis, which is correct for the derivation of 'extraposed' RCs? We argue that the latter is.

Park (2016) and An (2016) suggest that Max-Elide/Extra Deletion applies subsequently to TP-ellipsis (Sluicing/Fragmenting), as schematically presented below:

⁽i) [$[x_P \leftarrow]_{t^-} = [x_P \xrightarrow{XP_t}]$] Max-Elide/Extra Deletion fragmented/sluiced.

Recall that Chung (2016) claims that in (10), repeated below, the RC is hardly associated with the subject host:

(10)Cheli-ka Yengi-lul hakkyo-eyse manna-ess-e, Cheli-Nom Y.-Acc school-at meet-Pst-DE [RC ppalkah-ko khun moca-lul ssu-n]. red-and hat-Acc wear-RC big 'Cheli met Yengi at school, who wore a big red hat.'

[*?host=Cheli]

However, the situation is different in (32) and (33) below, where either the RC or the relative head nominal is repeated at the right edge of the sentence. In these examples, the RC in sentence-final position can be readily associated with the preceding relative head nominal host.

- (32)RC ppalkah-ko khun moca-lul ssu-n] Cheli-ka Yengi-lul red-and big hat-Acc wear-RC Cheli-Nom Y.-Acc hakkyo-eyse manna-ess-e, [RC ppalkah-ko khun moca-lul ssu-n]. meet-Pst-DE red-and wear-RC school-at big hat-Acc 'Cheli met Yengi at school, who wore a big red hat.' [host=Cheli]
- (33)Cheli-ka Yengi-lul hakkyo-eyse manna-ess-e, Cheli-Nom Y.-Acc school-at meet-Pst-DE [RC ppalkah-ko khun moca-lul ssu-n] Cheli-ka. hat-Acc wear-RC red-and big Cheli-Nom 'Cheli met Yengi at school, who wore a big red hat.' [host=Cheli]

We argue that what distinguishes (10) from (32) and (33) is the economy principle in (27), which plays out in the structure building of the two conjuncts. The economy principle in (27) regulates the former, but it does not regulate the latter. When neither the relative head nominal nor the RC is repeated in the second conjunct as in RC Extraposition of (10), the correct derivation is not (30) but (31), where the element extracted out of ellipsis is only the RC. By contrast, when either the relative head nominal or the RC is repeated in the second conjunct as in what we will call RC RD of (32) and (33), without being subject to the economy principle in (27) the head nominal containing the RC is extracted out of ellipsis not to the VP, but to the beginning of the sentence (i.e., to the TP), as follows:

- (32)' [RC ppalkah-ko khun moca-lul ssu-n] Cheli-ka Yengi-lul hakkyo-eyse manna-ess-e, [[RC ppalkah-ko khun moca-lul ssu-n] Cheli-ka]]₁ [t—Yengi-lul-hakkyo-eyse manna-ess-e].
- (33)' Cheli-ka Yengi-lul manna-ess-e, [[RC ppalkah-ko khun moca-lul ssu-n] **Cheli-ka**] [-t_t Yengi-lul hakkyo-eyse manna-ess-e].

In this structure, elision of the relative head nominal extracted to the beginning of the second conjunct clause is made by Max-Elide/Extra Deletion. Note that in this analysis, non-local dependency (or the apparent violation of the economy principle in (27)) between the RD-ed RC and its associate relative head nominal follows from the suggestion made here that in this genuine kind of RD, not only the relative head nominal host but also the RC appendix together undergo extraction out of the clause to be elided.

This kind of pattern — when the RC in the first conjunct or the relative head nominal in the second conjunct is overtly realized/repeated (or the RC or relative head correlate of the appendix is realized), the dependency of the RD-ed RC with its host may be non-local — can also be found in the polarity answer-accompanied Fragment construction. In (34), the RC is repeated as a fragment, and in (35), the RC as a fragment has its correlate in the preceding question clause. Note that in these examples, the fragment RC may be non-local with its relative head nominal.

(34) Repetitive RD: 'Merger'-type of RC Fragmenting/RD

Q: [RC ppalkah-ko khun moca-lul ssu-n] Cheli-ka
red-and big hat-Acc wear-RC Cheli-Nom
Yengi-lul mwun-eyse manna-ess-ni?
Y.-Acc gate-at meet-Pst-Q

⁸ See Park and Shin (2013) for the RD analysis of the [Ung 'yes'/Ani 'no', XP] fragment construction.

'Did Cheli, who wore a big red hat, meet Yengi at the gate?'

A: ung, [RC ppalkah-ko khun moca-lul ssu-n]. red-and big hat-Acc wear-RC ves 'Yes, (Cheli,) who wore a big red hat.'

'Merger'-type of RC Fragmenting (35)

- Q: [etten] nyesek-i Yengi-lul myengtong-eyse manna-ess-ni? which guy-Nom Y.-Acc M-in meet-Pst-O 'Which guy met Yengi in Myengdong?'
- A: [RC ppalkah-ko khun moca-lul ssu-n]. red-and hat-Acc wear-RC big '(That guy,) who wore a big red hat.'

By contrast, in (36) and (37), the RC fragment does not have its correlate in the preceding question or statement sentence. Note that in these examples, the RC fragment cannot be associated with the distant NP, which is not the object but the subject of the preceding sentence.

- (36)'Sprouting'-type of RC Fragmenting/RD
 - O: haksayng-i kim sensayngnim-ul myengtong-eyse po-ass-ni? student-Nom Kim teacher-Acc Myengdong-in see-Pst-Q 'Did a student see Teacher Kim in Myengdong?'
 - A: *?ung, ppalkah-ko khun mocalul ssun. red-and big hat-Acc wear-RC yes 'Yes, (a student) who wore a big red hat.'
- 'Sprouting'-type of RC Fragmenting (37)
 - A: haksayng-i kim sensayngnim-ul myengtong-eyse po-ass-ciyo? student-Nom Kim teacher-Acc Myengdong-in see-Pst-DE 'Did a student see Teacher Kim in Myengdong?'
 - B: *?ung, ppalkahko khun mocalul ssun. red-and hat-Acc wear-RC ves big 'Yes, (a student) who wore a big red hat.'

In sum, in contrast to RC RD and 'Merger'-type of RC Fragmenting, RC Extraposition and 'Sprouting'-type of RC Fragmenting relies on repair by ellipsis after the LBC violation is incurred by the movement of the left-branching RC. Note that RC Extraposition and 'Sprouting'-type of RC Fragmenting are subject to the economy principle in (27). Thus, (36) and (37) are ruled out owing to a violation of this principle.

In passing, the LBC-violating movement and repair-by-ellipsis strategy is also taken advantage of by RC/AP Extraposition in English. In the following sentences, repeated from (20) and (25), AP or RC Extraposition in English is derived in the same fashion using repair-by-ellipsis.

- (38) a. I want to see someone armed and alert at every window.
 - b. I want to see someone at every window, armed and alert.
- (39) a. A stranger who looked like Uncle Oswald came into the room.
 - b. A stranger came into the room, who looked like Uncle Oswald.

The second conjunct is constructed, and the AP or RC alone is leftward-moved to its periphery in violation of the LBC, which is in turn repaired by ellipsis. Note that the structural make-up in English where the relative head nominal occurs before the AP or RC bleeds Max-Elide/Extra Deletion, impling that LBC-violating extraction followed by repair-by-ellipsis is the only way of deriving AP/RC Extraposition in English (and also in Korean).

We finally turn to the focus overriding effects where, as Chung (2016) notes, focus on the relative head host enables the RC to associate with its host located not proximately but distantly, or to the specification-seeking effects where, as examined in the previous section, a battery of structural/non-structural factors such as the use of a demonstrative before the relative head nominal, contextually provided pragmatic information, de-accenting on the material between the relative head nominal and the 'extraposed' RC, etc. facilitate the association between the RC in the second conjunct and its host in the first conjunct. We suggest that these effects arise because the economy principle on structure building in Extraposition in (27) is essentially not an inviolable but a violable principle, which is characteristic of the syntax of specifying coordination. In other words, as we have seen, RC Extraposition in general tends to obey the economy principle in (27), building the two conjuncts

minimally sufficiently enough to associate the RC in the second conjunct with its relative head host in the first conjunct. But this principle on RC Extraposition may not be obeyed, and to compensate for this disobedience, a cue is provided that signals the non-local association of the RC with its relative head host. The two differing roles of the obeyance and the disobedience of the economy principle on structure building in the formation of RC Extraposition seems to be understood in the same fashion as those of the non-resumptive/gap and the resumptive/overt pronoun strategies that wh-dependency in English utilizes.9 As generally known, wh-dependency in English is syntactically derived via literal wh-movement in obevance of syntactic constraints on wh-movement, but it also takes the resumptive/over pronoun strategy especially when it does not respect syntactic constraints on wh-movement. In the same vein, RC Extraposition in general obeys the economy principle on structure building in (27), but when it is violated in the course of structure building, the illicit structure constructed for RC Extraposition is 'repaired' by resort to afore-mentioned structural/non-structural devices such as the use of a demonstrative before the relative head nominal, contextually provided pragmatic information, de-accenting on the material between the relative head nominal and the 'extraposed' RC, etc.

In addition to the examples, discussed in the previous section, where RC Extraposition does not comply with the economy principle on structure building in

Alternatively, the obeyance and the disobedience of the economy principle on structure building in the formation of RC Extraposition in Korean is comparable to the obeyance and the disobedience of the Superiority Condition in English (cf. Pesetsky (1987, 2000)).

⁽i) a. Who read what? b. *What1 did who read t1?

⁽ii) a. Which book₁ did who read t₁?

b. What₁ did which person read t₁?

In (1b), the traversing of one wh-phrase over another violates the Superiority Condition, but as Pesetsky (2000) notes, when the moving or wh-in-situ phrase is D-linked as in (2a) or (2b), it obviates a violation of the Condition. In light of derivational syntax, the acceptability of (2a) and (2b) points to the fact that a certain violation of the Superiority Condition in a syntactic derivation does not result immediately in discarding that derivation. But note that the rescue of the derivation in question entails D-linking on the moving or wh-in-situ phrase. Along the analogous line of analysis for the examples in (2), the economy principle on structure building in the formation of RC Extraposition in Korean may be violated, but at this case, the host that the RC appendix associates with anew is re-characterized by the structural/non-structural devices mentioned in the text.

- (27), we add one more example of such kind as in (40).
 - (40) na-nun [Yengi-ka [HAN sonyen]-ul manna-ess-tako]
 I-Top Y.-Nom ONE boy-Acc meet-Pst-Comp
 tut-ess-e, [acwu ttokttok-hako calsayngki-n].
 heard-Pst-DE very smart-and handsome-RC
 'I head that Yengi met a boy who is very smart and handsome.'

In (40), the 'extraposed' RC is associated with the embedded object host, which is apparently in violation of the well-known Right Roof Constraint (See Ross (1967)). Though this constraint is violated, in (40) some other factors such as focus on the numeral or the absence of an intervening potential host come together to repair such a violation.

Now, leaving this section, we briefly look into the Extraposition of the Genitive-marked nominal, initially discussed by Ko (2014, 2015). As shown by the contrast between (41) and (42), the Genitive-marked nominal is associated with the 'bare' nominal as in (41), but it cannot be with the nominal embedded inside another nominal as in (42):

Specification on NP-internal NP:

- (41) Lack of LBC (adapted from Ko 2015: 33, her (59))

 Na-nun [cha]-lul pilliesse, [Yengi-uy emma-uy].

 I-Top car-Acc borrowed Y.-Gen mother-Gen

 'I borrowed Yengi's mother's car.'
- (42) Emergence of LBC due to embedding (adapted from Ko 2015: 33, her (60))

 *Na-nun [[emma-uy] cha-lul] pilli-ess-e, [Yengi-uy].

 I-Top mommy-Gen car-Acc borrow-Pst-DE Y.-Gen

 'I borrowed Yengi's mother's car.'

This contrast follows naturally from the economy principle on structure building in the formation of Extraposition. In (41), the first maximal projection containing the nominal host is the VP, in compliance with the principle in (27), but in (42), the first maximal projection containing the host nominal is the NP, thus resulting in

violating the principle in (27).10

Note, however, that in this kind of Extraposition, the principle in (27) can also be obviated as in examples like (43):

(43) na-nun hoswu-uv ketayham-ey nolla-ass-e, I-Top lake-Gen hugeness-at surprised-Pst-DE, kentay-uy. Kunkook U.-Gen

(43) seems to be flawless in an appropriate context (Say, when we stroll beside the lake at Kunkook University, so that the lake is perceived as a salient entity to the

'I am surprised at the hugeness of the lake, Kunkook University's.'

despite the initial violation of the economy principle in (27).

interlocutors). Thus, such a contextual information gives rise to amelioration effects

6. Conclusion

This paper started with a review of the recent works on RC Extraposition in Korean by Ko (2014, 2015) and Chung (2016). We first showed that Ko's (2014, 2015) concatenation-cum-sideward movement approach to what she takes as RC RD wrongly predicts the left dislocation of a RC to be grammatically licit. We then demonstrated that in line with Ko (2014, 2015), Chung (2016) is right in his observation that the dependency between the RD-ed RC and its host is local/proximate, but departing Ko's observation, information focus on the host enables the RD-ed RC to associate with it non-locally/non-proximately. We argued against information focus effects of establishing the non-local association between them, noting that the association can indeed come about even over long distances by virtue of other structural/non-structural factors such

¹⁰ The impossibility of the pre-modifying AP being 'extraposed' in English, as in (ib) below, can be accounted for in the parallel way.

⁽i) a. An extremely peculiar-looking man dropped by today. b. *A man dropped by today, extremely peculiar-looking.

The DP-internal status of the pre-modifying AP is to blame for the illicit AP extraposition in (ib).

as the use of a demonstrative before the relative head nominal, contextually provided pragmatic information, de-accenting on the material between the relative head nominal and the RD-ed RC, etc.

Departing from Ko (2014, 2015) and Chung (2016), we went to take the construction at issue in this paper to be not RC RD but RC Extraposition. We showed that RC Extraposition is derived by two conjuncts being built and the apparently 'extraposed' RC being moved out of the second conjunct to be elided. We proposed that the economy principle plays out in structure building for the two conjuncts in RC Extraposition, constructing the two conjuncts as minimally as possible, which in turn accounts for the locality/proximity between the 'extraposed' RD and its host. We argued, however, that the economy principle on structure building in RC Extraposition is violable, but its violation is made up for by the repair strategy using afore-mentioned devices such as the use of a demonstrative before the relative head nominal, contextually provided pragmatic information, de-accenting on the material between the relative head nominal and the 'extraposed' RC, etc. We also argued that not Max-Elide/Extra Deletion but repair-by-ellipsis correctly derives the grammatically licit form of 'extraposed' left-branching RC in Korean and English in spite of the apparent violation of the LBC.

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