## Hanyang University cdaeho@hanyang.ac.kr

**Daeho Chung** 

Pre- vs. Post-verbal Asymmetries and the Syntax of Korean RDC

### Abstract

Among various important issues pertaining to the so-called right dislocated construction (RDC) in Korean are the basic word order and the grammatical relation the right dislocated (RDed) element assumes to the rest of the structure. In his series of papers, J.-S. Lee (2007a,b, 2008a, 2009a,b, 2010, 2011, 2012) proposes a mono-clausal analysis of Korean RDC, according to which the RDed element is a direct dependent of the preceding predicate and Korean conforms to Kayne's (1994) universal SVO word order hypothesis due to the very existence of the RDC. In contrast, Chung (2008a, 2009b, 2010, 2011) advocates a non-mono-clausal approach, as in Tanaka (2001) and Kato (2007) for Japanese RDC, according to which the RDed element is taken as a fragment of a continuing sentence to which massive ellipsis has applied, while the headfinality is preserved. The current work tries to show that RDed elements cannot be viewed as direct dependents of the preceding predicate due to various asymmetries observed between pre- vs. post-verbal positions, favoring a nonmono-clausal analysis of Korean RDC.

## **1. Introduction**

Predicates in Korean are generally fixed at the clause final position, although the dependents are freely ordered, as in (1). It is observed in Nam and Ko (1986: 250-251) and Huh (1988: 263) among others, however, that Korean allows the so-called right dislocated construction (RDC), in which some apparent part of the sentence may show up at the post-predicate position, as in (2).

- (1) a. Cheli-ka Yuni-lul manna-ess-ta (SOV) Ch.-NomY.-Acc meet-Pst-DE 'Cheli saw Yuni.'
  - b. Yuni-lul Cheli-ka manna-ess-ta (OSV)
- (2) a. Cheli-ka manna-ess-ta Yuni-lul (SVO)
  - b. Yuni-lul manna-ess-ta Cheli-ka (OVS)
  - c. manna-ess-ta Cheli-ka Yuni-lul (VSO)
  - d. manna-ess-e Yuni-lul Cheli-ka (VOS)

The RDC in Korean has recently received a great deal of attention as to the architecture of the structure. (See J.-S. Lee 2007a,b, 2008a, 2009a,b, 2010, 2011, 2012, Chung 2008a, 2009b, 2010, 2011, Lee and Yoon 2009, C.-H. Lee 2009, 2011, among others.)

Among various issues around the RDC are the basic word order in Koran and the grammatical relation the RDed element in the post-verbal position assumes with the rest of the construction. Lee (2007a,b, 2008a, 2009a,b, 2010, 2011, 2012) proposes a mono-clausal structure based on Kayne's (1994) universal SVO hypothesis and treats the RDed element as a direct dependent of the preceding predicate. According to this analysis, (2a) is taken as the base word order and all other structures in (1) and (2) are derived from (2a), In contrast, Chung (2008a, 2009b. 2010, 2011), basically following Tanaka's (2001) analysis of Japanese RDC, advocates a non-mono-clausal analysis, according to which the RDC is derived as follows:<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See also Kuno (1978), Whitman (2000), and Kato (2007), among others, for non-mono-clausal approaches. Chung (2008a, 2009b, 2010) postulates a null conjunction that conjoins two root clauses: [ $_{Root} ... e_i ... ] \& [_{Root} XP_i [-...t, ...]]$ . This paper does not opt for any particular version of nonmono-clausal analysis since the discussions may go through as far as the RDed element is taken as a fragmental expression.

(3) a. Parataxis of Clausal Copies, S1 and S2 [s1... ei ... Pred], [s2 ... XPi ... Pred]
b. Fronting in S2 [s1... ei ... Pred], [s2 XPi [s2 ... ti ... Pred]]
c. Ellipsis in S2 [s1... ei ... Pred], [s2 XPi [s2 ... ti ... Pred]]

First, two clauses/sentences, S1 and S2, are put together in an asyndetic form, as schematically represented in (3a).<sup>2</sup> Then, the RDed element undergoes fronting in S2, as in (3b). Finally, S2 undergoes a massive ellipsis, deleting all its content except for the fronted element, as in (3c), along the similar lines of Merchant's (2004) analysis of sentence fragments.

A crucial difference between the mono- vs. non-mono-clausal approaches lies in the treatment of the RDed element. A mono-clausal analysis as in J.-S. Lee (2007a,b, 2008a, 2009a,b, 2010, 2011, 2012) views it as a direct dependent of a predicate that precedes it. In contrast, a non-mono-clausal analysis as in Chung (2008a, 2009b. 2010, 2011) treats it as a fragmental element of a continuing sentence/clause.<sup>3</sup> Thus, under the latter approach, an RDed element has no direct thematic or modifying relation to the preceding predicate. They are only indirectly related due to the semantic identity of the two conjuncts of a paratactic coordinate structure.

It is expected under the former approach that the RDed element in a post-verbal position behaves like a pre-verbal counterpart except for the positional difference, i.e., the existence vs. lack of an EPP or edge feature in a certain functional category. This paper will show, however, that this expectation is not borne out. It will be illustrated that there are various asymmetric behaviors displayed between an RDed element in a postverbal position and its pre-verbal counterpart. These asymmetric behaviors will be shown to indicate that the RDed element (the post-verbal expression) is best analyzed as a fragmental element of a continuing sentence, not as a direct dependent of the overtly realized predicate.

## 2. Asymmetry in the Locus of RDed Elements

An interesting restriction the RDC in Korean displays is that RD is only to the right of a matrix predicate, i.e., only to the right of a matrix mood. For example, RD is banned in an embedded context. Consider the following examples.

(4) a. na-nun [Cheli-ka Yuni-lul manna-ess-ta-ko] I-Top Ch.-Nom Y.-Acc see-Pst-DE-C sayngkakha-n-ta think-Pres-DE (Intended) 'I think that Cheli saw Yuni.'
b.\*na-nun [Cheli-ka e<sub>i</sub> manna-ess-ta-ko I-Top Ch.-Nom see-Pst-DE-C Yuni-lul<sub>i</sub>] sayngkakha-n-ta

Y.-Acc think-Pres-DE (Intended) 'I think that Cheli saw Yuni.' c. na-nun [Cheli-ka e<sub>i</sub> manna-ess-ta-ko] I-Top Ch.-Nom see-Pst-DE-C sayngkakha-n-ta Yuni-lul<sub>i</sub><sup>4</sup> think-Pres-DE Y.-Acc

(Intended) 'I think that Cheli saw Yuni.'

(4a) is a normal word order under the traditional SOV word order hypothesis. (4b) results from placing the embedded object *Yuni-lul* at the right edge of the embedded clause. In (4c), RD placed the embedded object to the right of the matrix predicate. Sentences like (4b) are ungrammatical, while those like (4c) are grammatical.

The right edge restriction on the RDC is selfexplanatory under a non-mono-clausal analysis. As schematically represented in (3), the RDed element is analyzed as being positioned at the left periphery of a continuing sentence/clause, the second conjunct of a paratactic structure. The RDed

<sup>&</sup>lt;sup>2</sup> The RDed part can be overtly realized in the preceding clausal expression:  $[_{S1}$ ... XP<sub>i</sub> ... Pred],  $[_{S2}$  XP<sub>i</sub>  $\frac{1}{\{_{S2}$  ... t<sub>i</sub> ... Pred]}]. I will ignore the issue how XP<sub>i</sub> in S1 becomes a null element in the RDC. Pronominalization or NP deletion may be responsible. Yoon and Lee (2009) claim that there exists no null element at all in syntax.

One may be curious about the *raison d'être* for the clausal copy, especially in relation to the interpretation of the event doubling due to the clausal copy. I do not have any definite answer for this question, but I would like to point out the fact that natural languages do allow reduplication of expressions including a clausal element.

<sup>&</sup>lt;sup>3</sup> The architecture proposed in Yoon and Lee (2009) also implies no direct grammatical relation between the RDed element and the predicate. See also C.-H. Lee (2009, 2011), who claims that an intonation break may intervene between the predicate and the post-verbal element.

<sup>&</sup>lt;sup>4</sup> To the best of my knowledge, Choe (1987) first observed that an element can be RDed out of an embedded clause in Korean.

element is uniquely pronounced at the second sentence/clause to which massive ellipsis has applied, suppressing all other elements. In short, being a fragmental element, an RDed element cannot be embedded, which accounts for the contrast in grammaticality between (4b) and (4c).

J.-S. Lee's (2007a,b, 2008a, 2009a,b, 2010, 2011, 2012) mono-clausal analysis under the SVO word order hypothesis makes a special assumption to account for the right edge restriction on the RDC. To rule out the sentences like (4b), Lee (2010: 113, 2012:101) makes the following suggestion:<sup>5</sup>

(5) ... the Comp *-ko* signaling embeddedness selects its whole TP complement to be in its domain, so the TP has to be pied-pied to Spec CP.

He attributes the obligatory TP movement to the Principle of Locality of Selection proposed by Sportiche (1998), which states that selection must be satisfied in a strictly local relation, whether head-complement or head-specifier. In short, the TP movement instantiates a case of specifier selection, triggered by the EPP or Edge Feature in C (Chomsky 2000).

The suggestion made in (5), however, faces some non-trivial empirical and theoretical problems. First, there exist empirical challenges. As observed in Choe (1987: 41), RD can be multiply applied. As expected, RD may apply to an element of a previously RDed embedded clause, as shown in the following example:

(6) na-nun e<sub>j</sub> mit-nun-ta [Cheli-ka e<sub>i</sub> I-Top believe-Pres-DE Ch.-Nom cohaha-n-ta-ko]<sub>j</sub> Yuni-lul<sub>i</sub>. love-Pres-DE-C Y.-Acc 'I believe Cheli loves Yuni.'

RD out of a post-verbal embedded clause is also possible in sentence fragments. Consider the following examples:

- (7) A: ne cikum mwe-la-ko malha-ess-ni? you now what-be-C say-Pst-QE `What did you say a moment ago?'
  - B: [e<sub>i</sub> Yuni-lul cohaha-n-ta-ko] [Cheli-ka]<sub>i</sub> Y.-Acc love-Pres-DE-C Ch.-Nom 'That Cheli loves Yuni.'

The surface order in (6) and (7B) does not conform to Lee's suggestion in (5), according to which the whole MP has to be located in the specifier position of a complementizer.

One might try to derive these sentences by locating the two RDed elements at specifier positions of two different functional categories and raising the predicate to the head of a third functional category. For example, (6) might be said to have undergone the following derivation, after the embedded clause has been built up and the object has scrambled: <sup>6</sup>

(8) a. [Cheli-lul<sub>i</sub> [Yuni-ka t<sub>i</sub> coha-n-ta-ko]]

- b. [sayngkakha [Cheli-lul<sub>i</sub> [Yuni-ka t<sub>i</sub> coha-n-ta-ko]]] ⇒Move CP
- c. [Yuni-ka t<sub>i</sub> coha-n-ta-ko]<sub>j</sub> [sayngkakha [Cheli-lul<sub>i</sub> t<sub>j</sub>]]  $\Rightarrow$  Merge T(ense) -*n* and
- $[Chell-lul_i t_j]] \Rightarrow Merge T(ense) -n and$ Move V-v to T
- d. sayngkakhak-n [Yuni-ka t<sub>i</sub> coha-n-ta-ko]<sub>j</sub> [t<sub>k</sub> [Cheli-lul<sub>i</sub> t<sub>j</sub>]] ⇒Merge Subject and

M(ood) and Move T to M

- e. [sayngkakhak-n]₁-ta na-nun t₁ [Yuni-ka t<sub>i</sub> coha-n-ta-ko]<sub>j</sub> [t<sub>k</sub> [Cheli-lul<sub>i</sub> t<sub>j</sub>]] ⇒Subject Raising
- f.na-nun<sub>f</sub> [sayngkakhak-n]<sub>1</sub>-ta t<sub>f</sub> t<sub>l</sub> [Yuni-ka t<sub>i</sub> coha-n-ta-ko]<sub>i</sub> [t<sub>k</sub> [Cheli-lul<sub>i</sub> t<sub>i</sub>]]

Thus, it seems that sentences like (6) can be derived by Lee's SVO word order hypothesis.

Sentence fragments like (7B), however, may not be legitimate if ellipsis applies to a syntactic constituent only. Notice that  $na-nun_f$  and  $[sayngkakhak-n]_t-ta$  in (8f) do not form a

<sup>&</sup>lt;sup>5</sup> Lee (2012: 98) follows Koopman (2005) in assuming the following order of verbal affixes: C(omp)-T(ense)-v-M(ood)-Asp-V. This work, however, adopts a more conservative view, i.e., the V-v-T-M-C order. TP in (5) equals MP in the majority of literature.

<sup>&</sup>lt;sup>6</sup> Lee (2008: 224, fn 6) treats the verbal complex, for instance, *cohaha-n-ta* 'like-Pres-DE', as being introduced from the lexicon separately from C *-ko.*' Lee (2012: 99, his (42)), however, follows a projectionist view on all verbal endings (T and M as well as C). I abstract away from this issue, as the discussions remain unaffected.

constituent, as they are positioned in two different specifiers. Thus sentence fragments like (7B) would not be produced, contrary to fact. Furthermore, it will be shown below that introduction of a clausal excorporation process as in (8c) leads to a serious problem with respect to the asymmetric availability of such a process out of a pre- vs. post-verbal position. (See Section 4.)

The suggestion in (5) also faces theoretical difficulties. By the SVO order, Lee (2010, 2012) intends to mean the Spec-Head-Complement (SHC) order across all the categories, not just the 'subject-verb-object' word order. Thus, it is expected that every category is to have the SHC order in the base structure. It is evident, however, that the RDed element appears only to the right of the matrix clause, more precisely, to the right of a matrix mood. RD never applies to all other categories to the left of a (mood-inflected) matrix predicate. No other heads allow their dependents to appear to the right. For example, heads like N and P cannot precede their dependents, whether complement or specifier:

(9) a. {mikwuk-uy ilakh-uy kongkyek/\*mikwuk-U.S.-Gen Iraq-Gen attack/U.S. uy kongkyek ilakh-uy/\*ilakh-uy kongkyek -Gen attack Iraq-Gen/Iraq-Gen attack mikwuk-uy}-i impakha-ess-ta U.S.-Gen -Nom impend-Pres-DE 'U.S.'s attack on Iraq is impending.'
b. Cheli-ka {na poko/\*poko na} ku il-ul Ch.-Nom I to to I that work-Acc ha-ela-ko malha-ess-ta.<sup>7</sup> do-Imp-C say-Pst-DE

'Cheli told me to do the work.'

To maintain Lee's (2010, 2012) SHC word order hypothesis, it is required to assume that every head except for the mood in the matrix clause always selects its whole complement to its specifier position. This is theoretically burdensome at least for the following two reasons. First, it has to assume a SHC order as a basic word order even if this order never surfaces for the categories in a preverbal position. Second, no principled reason seems to be provided for the difference between the matrix vs. embedded mood, other than the stipulation in (5), i.e., that -ko (or Cs in general) takes its whole complement (=MP) in its specifier position due to the EPP (or Edge) feature in C. According to him, an MP with an RDed element cannot precede a C, due to the morphological requirement that C is to follow a verbal element. It will be observed in Section 3, however, that no embedded RDC is allowed even when an embedded predicate has the same inflectional endings as a matrix one, i.e., even if there is no overt C, contrary to the expectation. Notice that there should be no asymmetry with respect to the availability of an RDC, as far as the morphological compositions are identical.

# **3.** Asymmetry despite the Morphological Identity

There are cases in Korean in which an embedded clause ending is not different from the matrix one. Some question endings are cases in point. Consider the following sentences.

- (10) a. Cheli-ka onul ttena-ess-na? Ch.-Nom today leave-Pst-QE 'Did Cheli leave today?'
  - b. na-nun [Cheli-ka onul ttena-ess-na] I-Top Ch.-Nom today leave-Pst-QE kungkumha-ta. wondrous-DE 'I wonder whether Cheli left today.'
- (11) a. Chwungmukong-i etise censaha-ess-nunko? Ch.-Nom where die;in;battle-Pst-QE<sub>wh</sub> 'Where was Chwungmukong (Admiral Lee) killed in battle?'
  - b. ne-nun [Chwungmukong-i etise you-Top Ch.-Nom where censaha- ess-nunko] hwakinha-ess-na?<sup>8</sup> die;in;battle-Pst-QE<sub>wh</sub> confirm-Pst-QE<sub>yes/no</sub> 'Did you confirm where Chwungmukong was killed in action?'

The embedded clauses in (10b) and (11b) are identical to the structures in (10a) and (11a), respectively. Such embedded interrogative clauses do not take any additional (declarative or

<sup>&</sup>lt;sup>7</sup> I intentionally chose *poko* 'to', a non-affixal particle, to avoid a morphological problem that may otherwise arise.

<sup>&</sup>lt;sup>8</sup> The examples in (11) are from Kyungnam Province Dialect. Suh (1987, Section 2.4.) reports that *-nunko* functions as a [+WH] QE in the embedded clause as well as in the matrix clause, although there is some subject person restriction in the matrix clause. (11b) is cited from Lee (1998: 131, his (120)).

interrogative) C. There being no overt marker signaling embeddeness, the suggestion made in (5) is irrelevant to such sentences. It is then expected in Lee's system that the embedded clauses in (10b) and (11b) should behave like (10a) and (11a) as to the availability of the RDC. This expectation is not borne out: RD is allowed in (10a) and (11a), but not in the embedded clauses in (10b) and (11b):

- (10)' a. Cheli-ka ttena-ess-na? onul Ch.-Nom leave-Pst-QE today 'Did Cheli leave today?'
  - b. \*na-nun [[Cheli-ka ttena-ess-na] onul] I-Top Ch.-Nomleave-Pst-QE today kungkumha-ta. wondrous-DE

'I wonder whether Cheli left today.'

- (11)' a.etise censaha-ess-nunko? Chwungmukong-i where die;in;action-Pst-QE<sub>wh</sub> Ch.-Nom 'Where was Chwungmukong killed in battle?'

Lee's system, which attributes the lack of the embedded RD to a lexical property of C, does not expect the non-availability of the RDC in (10)' and (11)'. Since the selectional restriction is lexically represented on C, the identical question endings are supposed to behave alike, contra fact.<sup>9</sup>

## 4. Asymmetry in Clausal Excorporation

RDC cannot be embedded, but RD out of an embedded clause is possible in Korean, as far as the RDed element appears at the right edge of the whole sentence, as in (4c), repeated as (12) below:

(12) na-nun [Cheli-ka e<sub>i</sub> manna-ess-ta-ko] I-Top Ch.-Nom see-Pst-DE-C sayngkakha-n-ta Yuni-lul<sub>i</sub> think-Pres-DE Y.-Acc (Intended) 'I think that Cheli saw Yuni.' Lee (2012, 103, fn 25, his (i)) tries to derive such a structure as follows. After an embedded clause is built up, the embedded object scrambles to the front as in (13a). The rest of derivation is illustrated in (13b) through (13d):

- (13) a. [Yuni-lul<sub>i</sub> [Cheli-ka t<sub>i</sub> manna-ess-ta-ko]] => Merge V-v
  - b. [sayngkakha-n-ta [Yuni-lul<sub>i</sub> [Cheli-ka t<sub>i</sub> manna-ess-ta-ko]]] =>Move CP
  - c. [Cheli-ka t<sub>i</sub> manna-ess-ta-ko]<sub>j</sub> [sayngkakhan-ta [Yuni-lul<sub>i</sub> t<sub>j</sub>]] => Merge Subject
  - d. na-nun [Cheli-ka t<sub>i</sub> manna-ess-ta-ko]<sub>j</sub> [sayngkakha-n-ta [Yuni-lul<sub>i</sub> t<sub>j</sub>]]

One crucial property of the derivation in (13) is that excorporation of an embedded clause is allowed after its object has scrambled. Notice that in (13a), the embedded object has scrambled within the embedded clause and in (13c) the whole embedded clause except for the object has been raised to the SPEC of the matrix V-v.

Such an excorporation device, however, comes across an immediate problem, when it is tried out of a pre-verbal embedded clause. Notice that Korean allows the following structure, in which the whole embedded CP including the scrambled embedded object appears between the matrix subject and matrix predicate:

(14)na-nun [Yuni-lul<sub>i</sub>[Cheli-ka t<sub>i</sub> manna-ess-ta-ko]]
I-Top Y.-Acc Ch.-Nom see-Pres-DE-C sayngkakha-n-ta think-Pres-DE
'I think that Cheli saw Yuni.'

Given the clausal excorporation as in (13c), it is expected under the SHC word order hypothesis that the embedded CP in (14) should be able to move to a higher position, leaving the scrambled object behind.<sup>10</sup> The expectation is not borne out, as shown below.

(15)\*[[Cheli-ka t<sub>i</sub> manna-ess-ta-ko]<sub>j</sub> [na-nun [Yuni-lul<sub>i</sub> e<sub>j</sub>] sayngkakha-n-ta]]]

A non-mono-clausal analysis of Korean RDC does

<sup>&</sup>lt;sup>9</sup> Even if there existed a null C in such an embedded interrogative clause, the embedded RDC should be accepted since a null C does not have to satisfy the morphological condition on an overt C: C must follow a verbal element.

<sup>&</sup>lt;sup>10</sup> It is noteworthy that extraction out of a specifier is permitted in Lee's system, or required if the so-called third factor principle in Lee (2012) is to be established.

not face any problem accounting for the grammatical status of sentences like (12) and ungrammatical status of sentences like (15). Sentences like (15) violate the so-called Proper Binding Condition (Fiengo 1977), or any principle that is responsible for the PBC effects, whatever it may be,<sup>11</sup> since  $t_i$  in (15), a trace, remains unbound. In contrast, sentences like (12) do not violate the condition since the RDed element does not belong to the preceding clause and  $e_i$  is not a trace.

## 5. Asymmetry in Leftward Extraction out of a CP

According to the system Lee adopts, the OV order is derived from VO order. With this in mind, observe that there is an asymmetry between the pre- vs. post-verbal positions, with respect to extraction. Extraction is allowed out of an embedded CP in a pre-verbal position, but not out of a post-verbal (RDed) position, as shown in the following examples:

- (16) [Cheli-lul]<sub>i</sub> na-nun [Yuni-ka e<sub>i</sub> coha-n-ta-ko] Ch.-Acc I-Top Y.-Nom like-Pres-DE-C sayngkakha-n-ta think-Pres-DE 'I think Yuni likes Cheli.'
  (17) \*[Cheli-lul]<sub>i</sub> na-nun sayngkakha-n-ta
- (17)\*[Chen-Iul]<sub>i</sub> ha-nun sayngkakha-n-ta
   Ch.-Acc I-Top think-Pres-DE
   [Yuni-ka e<sub>i</sub> coha-n-ta-ko]
   Y.-Nom like-Pres-DE-C
   'I think Yuni likes Cheli.'<sup>12</sup>

This contrast is unexpected under the SVO word

(i) a.[Cheli-eykey]<sub>i</sub> na-nun [Yuni-ka e<sub>i</sub> cenhwaha-ess-ta-ko] Ch.-Dat I-Top Y.-Nom call-Past-DE-C sayngkakha-n-ta think-Pres-DE I think Yuni called Cheli.'
b.\*[Cheli-eykey]<sub>i</sub> na-nun sayngkakha-n-ta Ch.-Dat I-Top think-Pres-DE order hypothesis. There seems to be no reason to block the sentence in (17).<sup>13</sup> It should be derived, when the embedded object scrambles to the clause initial position, subsequently to the SPEC of the matrix V-v, and then to the sentence initial position.

Under a non-mono-clausal analysis, however, the ungrammaticality of the RDC in (17) naturally follows. Notice that the RDC consists of two (or more) clausal elements and the post-verbal elements belong to the second clause. Thus, the RDC will be illegitimate if the RDC minus the post-verbal element is illegitimate. This is exactly the case for (17), as shown below.

(18) \*[Cheli-lul] na-nun sayngkakha-n-ta

(18) is ungrammatical with the intended reading.

There could be various attempts to derive (17) but they all seem to fail under a non-mono-clausal approach to the RDC. First, the fronted nominal cannot be thought of as the direct complement of the verb *sayngkakha* 'to think' since the verb selects a clausal complement. (This will also violate the so-called parallelism requirement on coordination, given that RDC takes a coordinate structure. Notice that the RDed element is a CP, not an NP.) Second, one might think of a derivation in which *Cheli-lul* is extracted out of a CP in a pre-verbal position, while the rest of the clause undergoes ellipsis, as follows:

(19) \*[Cheli-lul]<sub>i</sub> na-nun <del>[<sub>CP</sub> ... e<sub>i</sub> ...]</del> sayngkakha-n-ta // [Yuni-ka e<sub>i</sub> coha-n-ta-ko]

This derivation is not permitted, given some restriction on the locus of [+E], the ellipsis triggering feature. According to Merchant (2004) and Ahn and Cho (2009a,b), ellipsis cannot apply to a complement of a lexical category since the feature resides only at a functional category.<sup>14</sup> Third, one might try to derive it by moving the embedded CP first and then deleting all other elements except for the object, as follows:

(20) [<sub>CP</sub> <del>Yuni ka</del> [Cheli-lul] <del>coha n ta ko</del>]<sub>i</sub> na-nun e<sub>i</sub> sayngkakha-n-ta // [Yuni-ka e<sub>i</sub> coha-n-ta-ko]

<sup>&</sup>lt;sup>11</sup> Kim (2012) resorts to Fox and Pesetsky's (2005) Principle of Order Preservation.

<sup>&</sup>lt;sup>12</sup> One of the reviewers finds (17) acceptable. I suspect that, if it is acceptable at all, the fronted element is extracted from the matrix clause, out of the so-called major object position, not from the embedded clause. A clearer contrast emerges when the fronted element is a dative NP, which hardly functions as a major object:

<sup>[</sup>Yuni-ka ei cenhwaha-ess-ta-ko]

Y.-Nom call-Past-DE-C

<sup>&#</sup>x27;I think Yuni called Cheli.'

<sup>&</sup>lt;sup>13</sup> Extraction should be more readily available out of a complement clause than out of a specifier clause, due to the CED effects.

<sup>&</sup>lt;sup>14</sup> See Park (2009) for a different solution.

As pointed out in Chung (2011), this is not legitimate, either, because ellipsis has applied to a non-constituent expression.

Therefore, there seems to be no way to derive the structure in (17) under a non-mono-clausal analysis of the RDC. Thus, the restriction on the extraction out of a post-verbal, i.e., RDed, embedded clause, naturally follows without making any stipulation.

## 6. Asymmetry in Permissible Expressions

It is interesting to observe that some expressions are acceptable only in a post-verbal position, and some others only in a pre-verbal position. (See Section 6.1. and 6.2., respectively.) This would be unexpected under a mono-clausal analysis, since there is no reason to distinguish a post- vs. preverbal position, except for the word order variation due to the presence or lack of the EPP feature.

## 6.1. Expressions Only in a Post-verbal Position

Some expressions are acceptable only in a postverbal position. As shown below, possessives and relative clauses cannot appear in a pre-verbal position unless they are accompanied by their head noun. However, they can show up at the right edge of a sentence, with or without the head noun.<sup>15</sup>

- (21) A: Cheli-nun Yuni-uy phal-ul cap-ess-ta. Ch.-Top Y.-Gen arm-Acc grab-Pst-DE 'Cheli grabbed Yuni in the arm.'
  - B: Byeli-to Swunhi-uy \*(phal-ul) cap-ess-ta. B.-also S.-Gen (arm-Acc) grab-Pst-DE 'Byeli also grabbed Yuni in the arm.'
- (22) A:Cheli-nun U.S.-eyse o-n phyenci-lul Ch.-Top U.S.-from come-Rel letter-Acc path-ess-ta. receive-Pst-DE 'Cheli received a letter from the U.S.'
  - B: Yuni-to [U.K.-eyse o-n] \*(phyenci-lul) Y.-also U.K.-from come-Rel (letter-Acc) path-ess-ta receive-Pst-DE

'Yuni also received a letter from the U.K.'

(21)' A: Cheli-nun Yuni-uy phal-ul cap-ess-ta. Ch.-Top Y.-Gen arm-Acc grab-Pst-DE 'Cheli grabbed Yuni in the arm.'

- B: Byeli-to cap-ess-ta Swunhi-uy (phal-ul) B.-also grab-Pst-DE S.-Gen (arm-Acc) 'Byeli also grabbed Yuni in the arm.'
- (22)' A: Cheli-nun U.S.-eyse o-n phyenci-lul Ch.-Top U.S.-from come-Rel letter-Acc path-ess-ta. receive-Pst-DE 'Cheli received a letter from the U.S.'
  B: Yuni-to path-ess-ta Y.-also receive-Pst-DE U.K.-eyse o-n] (phyenci-lul) U.K.-from come-Rel (letter-Acc)

'Yuni also received a letter from the U.K.'

(21B)' and (22B)' do not sound perfect without the head nouns within the parentheses but they are qualitatively better than (21B) and (22B).

This contrast in the acceptability of the prenominal expressions (possessives and relative clauses) between the pre- vs. post-verbal position can hardly be accounted for by Lee's theory based on the SVO word order hypothesis. There seems to be no principled reason why an expression is acceptable in a post-verbal position but it becomes unacceptable in a pre-verbal position.

With a non-mono clausal analysis there is some room for explaining the contrast. As the RDed element is treated as a fragment of a continuing sentence/clause, sentences in (21B)' and (22B)' even without their head nouns are expected to be acceptable. Notice that possessives and relative clauses may show up as fragments in Korean.

- (23) A: Cheli-ka nwukwu-uy phal-ul cap-ess-ni? Ch.-Nom who-Gen arm-Acc grab-Pst-QE 'Who did Cheli grab in the arm?
  - B; Yuni(-uy). Y.-(Gen) 'Yuni's'
- (24) A:Cheli-ka eti-se o-n phyenci-lul Ch.-Nom where-from come-Rel letter-Acc path-ess-ni? receive-Pst-QE

'A letter from where did Cheli receive?'

B: U.S.-eyse o-n (phyenci) U.S.-from come-Rel (letter) '(A letter) from the U.S.'

No matter what theory is responsible for the formal restriction on fragments in Korean, the same story can be carried over to the salvation effects of the

<sup>&</sup>lt;sup>15</sup> Park (2012: 220ff) also observes that Korean allows 'left branch extraction under fragmenting'.

#### RDC in (21B)' and (22B)'.

Similarly, the contrast in the following pair of sentences points in favor of a non-mono-clausal analysis rather than a mono-clausal analysis based on the SVO word order hypothesis.<sup>16</sup>

- (25) a. na-eykey-to anay-ka philyoha-e,
  I-to-also wife-Nom need-DE
  [yeppu-ko ton-to cal pel-nun].
  pretty-and money-also well make-Rel
  'I also need a wife who is pretty and makes a lot of money as well.'
  - b. \*na-eykey-to anay-ka [yeppu-ko
    I-to-also wife-Nom pretty-and
    ton-to cal pel-nun] philyoha-e
    money-also well make-Rel need-DE
    'I also need a wife who is pretty and makes a
    lot of money as well.'

A mono-clausal analysis based on the universal SHC word order hypothesis would have to derive (25a) by extracting the head noun from the post-verbal relative construction, leaving the relative clause behind. An analogous extraction of a head noun out of a relative construction in a pre-verbal position, however, leads to ungrammaticality. It is not clear under this analysis what prevents (25b) from being derived from (26) by extracting the head noun.<sup>17</sup>

(26) na-eykey-to [[yeppu-ko ton-to cal I-to-also pretty-and money-aslo well pel-nun] anay]-ka philyoha-e. make-Rel wife-Nom need-DE
'I also need a wife who is pretty and makes a lot of money as well.'

Under a non-mono-clausal analysis, the RDed element in (25a) is simply a fragmental expression of a continuing clause. Thus, the salvation effects can be attributed to a property of sentence fragments, however it may be explained.

#### 6.2. Expressions Only in a Pre-verbal Position

Let us now turn to a case where a post-verbal position tolerates a narrower range of expressions than a pre-verbal position. Choe (1987) observes that a wh-phrase cannot be RDed, as shown in the following example, (adapted from Choe 1987: 42, her (11)):

(27) a. Cheli-ka mwues-ul po-ess-upnikka Ch.-Nom what-Acc see-Pst-QE 'What did Cheli see?'
b.\*Cheli-ka po-ess-upnikka, mwues-ul Ch.-Nom see-Pst-QE what-Acc

If the VO vs. OV order difference simply follows from the presence or absence of the EPP feature at a functional category, there should not be such an order restriction on RDed wh-phrases.

Being aware of this restriction, Lee (2009: 150, his (46)) resorts to the following condition:

(28) The Q marker [DC: e.g., *-upnikka* in (27)] must follow an overt wh-phrase for the proper formation of phonological deaccenting.

According to him, phonological deaccenting is formed with a falling intonation. In other words, (27b) is ruled out due to the fact that the QE cannot have a falling intonation because of the lack of a wh-phrase to its left.

Notice, however, that RD is not allowed even out of an embedded wh-question whose QE has little to do with an intonation contour.<sup>18</sup>

(29) a. na-nun [Cheli-ka etise o-ess-nunci] I-Top Ch.-Nom where come-Pst-QE kwungkumha-ta wondrous-DE 'I wonder where Cheli comes from.'

<sup>&</sup>lt;sup>16</sup> (25a) is cited from Yoon and Lee (2009).

<sup>&</sup>lt;sup>17</sup> A reviewer points out to me that the ungrammatical status of (25b) may be merely an instance of CED effects since the head noun is extracted out of a relative construction that has previously moved to a SPEC position in Lee's system. If, however, CED works at all in his system, grammatical sentences like (16) are to be incorrectly excluded as well. See footnote 10 also.

<sup>&</sup>lt;sup>18</sup> Jung (2012) reports that embedded wh-interrogatives in Busan Dialect do show a falling contour. However, in order for Lee's (2009) theory to be right about the restriction of whphrases in the RDC, it is yet to be confirmed whether the falling contour is unique to the embedded wh-interrogatives or its presence is due to the edge of a prosodic unit. Furthermore, it has to be checked whether phonological deaccenting (pitch lowering or compression) is solely induced by a wh-phrase or not. It is also noteworthy that deaccenting itself does not license a [+WH] C. As pointed out by Hee-Don Ahn (p.c.), sentences like (27b) and (29b) are ungrammatical even when deaccenting is forcefully imposed on the relevant [+WH] C.

b. \*na-nun [Cheli-ka e<sub>i</sub> o-ess-nunci] I-Top Ch.-Nom come-Pst-QE kwungkumha-ta, etise<sub>i</sub> wondrous-DE where 'I wonder where Cheli comes from.'

The SVO word order hypothesis expects sentences like (29b) to be legitimately derived, along the similar lines of derivation of (8) in Section 2, since the RDed wh-phrase has undergone scrambling in the embedded clause and then the embedded clause has moved to the SPEC of the matrix verb, leaving the wh-phrase behind.

A non-mono clausal analysis of the RDC may account for the contrast under the condition that a QE must have an overt wh-phrase in its domain. (See Chung 2008b for detail.) Notice that the QE remains unlicensed, since no overt wh-phrase is available at all in the domain of the QE. Note that, under a non-mono-sentential analysis of Korean RDC, the wh-phrase in (29b) belongs to a separate sentence/clause to which a massive size of ellipsis has applied.

## 7. Conclusion

This work has observed various asymmetric behaviors between pre- vs. post-verbal positions in the so-called right dislocated construction (RDC) in Korean. The existence of such asymmetries has shown to be readily accommodated when the RDed element is viewed as a fragmental element rather than as a direct dependent of the preceding predicate, favoring a non-mono-clausal approach to the construction. Thus, the RDC in Korean does not necessarily constitute evidence for the claim that the Korean language conforms to the universal SHC word order hypothesis, pace Lee (2007a,b, 2008a, 2009a,b, 2010, 2011, 2012), although there is no need to posit a rightward movement, lending only partial support to Kayne's (1994) LCA.

## Acknowledgements

An earlier version of this work was presented at the spring conference of the Korea Generative Grammar Circle on May 26, 2012 at Sungshin Women's University. I would like to thank all the audience at the conference, especially Yeun-Jin Jung and Sang-Geun Lee for their valuable comments. I also would like to thank Hee-Don Ahn and Chungmin Lee and the three PACLIC 26 reviewers for their constructive comments and questions. All remaining errors are solely mine.

## References

- Ahn, Hee-Don and Seungun Cho. 2009a. On CP Ellipsis: A Reply to Chung (2009). *Proceedings of 2009* Spring Joint Conference of the Linguistic Association of Korea, Modern Grammar Circle, and Korean Generative Grammar Circle, 142-150.
- Ahn, Hee-Don and Seungun Cho. 2009b. On the Absence of CP Ellipsis in English and Korean. *Korean Journal of Linguistics*, 34.2: 267-281.
- Ahn, Hee-Don and Seungun Cho. 2010. More on the Absence of CP Ellipsis: A Reply to Park (2009). *Studies in Generative Grammar*, 20: 549-576.
- Choe, Hyon Sook. 1987. Successive-cyclic rightward movement in Korean. S. Kuno *et als* (eds.), *Harvard Studies in Korean Linguistics II*, 40-56.
- Choi, Hyon-Pai. 1989. *Wulimalpon* 'Grammar of Our Language'. Seoul, Korea: Cengumunhwasa. (15th edition. The first edition was published in 1937.)
- Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. R. Marin, D. Michaels, and J. Uriagereka (eds.), *Step by Step: Essays on Minimalist Syntax*, 89-155. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 2005. Three Factors in Language Design. *Linguistic Inquiry*, 36: 1-22.
- Chung, Daeho. 2008a. On the Syntax of Non-final Predicate Constructions in Korean. Proceedings of the 2008 Joint Conference of the Discourse and Cognitive Linguistics Society of Korea, the Linguistics Society of Korea, the Korean Generative Grammar Circle, and the Chungang University Humanities Institute, 6-16.
- Chung, Daeho. 2008b. Agree but Not Necessarily at the Same Time. *Studies in Generative Grammar*, 18: 509-524.
- Chung, Daeho. 2009a. Do not Target a Predicate: It is not a Constituent. Paper Presented at the 6th WAFL, Nagoya, Japan.
- Chung, Daeho. 2009b. An Elliptical Coordination Analysis of the Right Dislocated Construction in Korean. *The Linguistic Association of Korea Journal*, 17(4): 1-23.
- Chung, Daeho. 2010. Replies to Lee (2009): In Defense of a Double Clause Approach to the Right Dislocated Construction in Korean. *Studies in Modern Grammar*. 61: 167-196.
- Chung, Daeho. 2011. A Constituency-based

Explanation of Syntactic Restrictions on Korean Predicates. *Linguistic Research*, 28(1): 393-407.

- Fiengo, Robert. 1977. On Trace Theory. *Linguistic Inquiry*, 8: 35-61.
- Fox, Danny and David Pesetsky. 2005. Cyclic Linearization of Syntactic Structure. *Theoretical Linguistics*, 31: 1-45.
- Huh, Woong. 1988. *Kwukehak* 'Korean Grammar'. Seoul, Korea: Saymmunhwasa.
- Jung, Yeun-Jin. 2012. On the Nature of Wh-Prosody and its Syntactic Dependency. *Korean Journal of Linguistics*, 37(2): 417-444.
- Kato, Takaomi. 2007. On the Nature of the Left Branch Condition: Syntactic or Phonological? Paper presented at the 9th Seoul International Conference on Generative Grammar.
- Kayne, Richard. 1994. *The Anti-Symmetry of Syntax*. Cambridge: MIT Press.
- Kim, Rhanghyeyun. 2012. Order Preservation Justifies Remnant Movement. Paper presented at the 1st World Congress of Scholars of English Linguistics. June 26-30, 2012, Hanyang University.
- Koopman, Hilda. 2005. Korean (and Japanese) Morphology from a Syntactic Perspective. *Linguistic Inquiry* 36: 601-635.
- Kuno, Susumu. 1978. *Danwa-no Bunpoo* 'Grammar of Dicourse'. Tokyo: Taishukan Shoten.
- Lee, Chung-hoon. 2009. Hankwuke Hwupochwung Kwumwunuy Kwuco 'The Structure of Korean Afterthought Constructions', *Emwunyenkwu*, 142: 31-54.
- Lee, Chung-Hoon. 2011. The Structure,  $\Omega$  Head and Gap in Korean Afterthought Constructions. *Studies in Modern Grammar*, 64: 95-116.
- Lee, Jeong-Shik. 2007a. Deriving SOV from SVO in Korean. *The Linguistic Association of Korea Journal*, 15: 1-20.
- Lee, Jeong-Shik. 2007b. LCA, Linearization, and Phasehood. Proceedings of the 2007 Fall Joint Conference of the Linguistic Association of Korea, the Korean Association for the Studies of English Language and Linguistics, and the Society of Modern Grammar, 102-119.
- Lee, Jeong-Shik. 2008. Minimizing Spell-out Material in the Phase. *Studies in Modern Grammar*, 52: 213-240.
- Lee, Joeng-Shik. 2009a. Right Dislocated Constructions: A Single Clause Analysis. Proceedings of 2009 Spring Joint Conference of the Linguistic

Association of Korea, Modern Grammar Circle, and Korean Generative Grammar Circle, 249-257.

- Lee, Jeong-Shik. 2009b. A Verb-initial Single Clause Analysis of Right-dislocated Constructions in Korean. *Studies in Modern Grammar*, 57: 127-157.
- Lee, Jeong-Shik. 2010. On the Absence of Embedded Predicate Ellipsis in Korean. *The Linguistic Association of Korea Journal*, 18: 125-145.
- Lee, Jeong-Shik. 2011. Some Loopholes of the Double Clause Approach to the Right Dislocated Construction in Korean. *Studies in Modern Grammar*, 63: 113-146.
- Lee, Jeong-Shik. 2012. Speculations on Typological Variation from a Third Factor Perspective. *Studies in Generative Grammar*, 22(1): 77-112.
- Lee, Youngmin. 1998. *Kwuke Uymunmunuy Thongsalon* 'The Syntax of Korean Interrogatives'. Seoul, Korea: Pokosa
- Merchant, Jason. 2004. Fragments and Ellipsis. *Linguistics and Philosophy*, 27: 661-738.
- Nam, Ki-Shim and Yong-Keun Ko. 1986. Phyocwun Kwuke Munpeplon 'Standard Korean Grammar'. Seoul, Korea: Thap Press.
- Park, Myung-Kwan. 2009. An (Impossible) Excursion into Matrix [Spec, vP] out of an Elided Complement Clause in Korean. *Korean Journal of Linguistics*, 34(4): 895-917.
- Park, Myung-Kwan. 2002. Left Branch Extraction in Fragment and Truncated Cleft Constructions of Korean. *Studies in Generative Grammar*, 22(1): 219-233.
- Sportiche, Dominique. 1998. Atoms and Partitions of Clause Structure. London: Routledge.
- Suh, Chung-Mok. 1987. Kwuke Uymwunmwun Yenkwu 'A Study on the Interrogative Sentences in Korean', Thap Press, Seoul, Korea.
- Tanaka, Hedekazu. 2001. Right Dislocation in English and Japanese. *Journal of Linguistics*, 37: 551-579.
- Yoon, J. Hye-Suk and Wooseung Lee. 2009. The Architecture of Right Dislocation in Korean and Japanese. ms. University of Illinois, Urbana-Champaign.
- Whitman, John. 2000. Right Dislocation in English and Japanese. Ken-ichi Takami, Ako Kamio, and John Whitman (eds)., Syntactic and functional explorations: In honor of Susumu Kuno, 445-470. Tokyo: Jurosio Publishers.