

## A reconsideration of the (non-)uniform syntax of Korean right-dislocation\*

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**Furuya, Kaori. 2018. A reconsideration of the (non-)uniform syntax of Korean right-dislocation.** *Linguistic Research* 35(2), 275-304. This paper investigates the clausal nature of Korean Right-Dislocation Constructions (RDCs) and reconsiders recent extant (non-)uniform analyses of RDCs. Since Korean is a *pro*-drop language, most of the literature on Korean RDCs assumes the preverbal empty category as *pro* or a trace out of movement in the constructions. However, recent literature has shown that null arguments can also be derived via argument ellipsis (e.g. Sakamoto 2016). The paper identifies the categorial statuses of preverbal empty categories and demonstrates similarities and differences between gapped and gapless RDCs that Ko (2016) and Ahn and Cho (2016, 2017) do not observe. It argues that a non-uniform analysis is most compatible to account for the distribution of empty categories of RDCs. The proposed analysis receives support from novel evidence based on (non-)parallelisms between RDCs and fragment answers. (University of North Texas)

**Keywords** right-dislocation, empty category, mono-clausal analysis, bi-clausal analysis, cleft construction, fragments

### 1. Introduction

Korean is a strict head-final language, and the verb comes at the end of a sentence. However, in colloquial speech an element can appear to the right of the verb, as shown in (1).

- (1) a. Cheli-ka sakwa-lul mek-ess-e.<sup>1</sup>  
C.-Nom apple-Acc eat-Pst-Dec

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1 The abbreviations used for glosses (besides proper nouns) are as follows: Acc: accusative, C: complementizer, Cop: copula, RC: relative clause suffix, Dat: dative, Dec: declarative, FP: final particle, Gen: genitive, Nom: nominative, Mod: modal, PNE: pre-nominal ending, Pst: past, Top: topic, Q: question.

- ‘Cheli ate an apple.’  
 b. Cheli-ka [e] mek-ess-e, sakwa-lul.  
 C.-Nom eat-Pst-Dec apple-Acc  
 ‘Cheli ate an apple.’ (Choe 1987:40, (1b))

Unlike the canonical clause (1a), the RDC (1b) is missing the object in the preverbal domain (represented with [e]) whereas on the right periphery exists the accusative-Case marked DP *sakwa-lul* [apple-Acc]. The latter kind of sentences is called Right-Dislocation Construction (RDC). Because (1a, b) differ from each other in terms of word order, there are debates on the clausal structures of RDCs. Moreover, although the status of a preverbal null element is often assumed as the empty pronominal element *pro* or a trace (or copy) out of movement in the literature of RDCs (e.g. Ko 2014 and references therein), it has been shown that null arguments are also derived via argument ellipsis, based on the fact that they can yield interpretations that pronominal elements (and traces) generally cannot have (Saito 2007; Takahashi 2006 and his subsequent work; Sakamoto 2016, among others). This suggests that there are at least three types of null categories: *pro*, a trace, and an argument ellipsis. Let us identify these empty categories in non-RDCs, shown in (2) – (4).

- (2) *Did Cheli eat the apple<sub>i</sub> on the table?*  
 Ung, Cheli-nun *pro<sub>i</sub>* mek-ess-e  
 yes Cheli-Top eat-Pst-Dec  
 ‘Yes, Cheli ate it<sub>i</sub>.’
- (3) *Did Cheli eat a pear or something?*  
 \*Ung, (Sakwa-luli) Cheli-nun *t<sub>i</sub>* mek-ess-e  
 yes apple-Acc Cheli-Top eat-Pst-Dec  
 ‘\*Yes, (An apple<sub>i</sub>) Cheli ate *t<sub>i</sub>*.’
- (4) *Did Cheli eat an apple or something?*  
 Ung, Cheli-nun [e]<sub>ellipsis</sub> mek-ess-e  
 yes Cheli-Top eat-Pst-Dec.  
 ‘Yes, Cheli ate something.’

Even though the surface strings appear to resemble each other, the preverbal null objects have distinct interpretations. In (2), the null object is coreferential with the referent previously introduced in the context and it only involves a strict interpretation. This null object is *pro*. In (3), the null object is associated with the scrambled DP, and the DP is not omissible for the intended reading. In this case, the empty category is a trace. In (4), the null object allows a sloppy interpretation as the English glosses indicate, and this interpretation is unexpected if *pro* occurs at the null argument position (Sakamoto 2016). This is a case of argument ellipsis. These observations of empty arguments in non-RDCs are summarized in (5).

- (5) a. the covert pronoun, *pro*  
 b. an argument ellipsis, [e]<sub>ellipsis</sub>  
 c. a trace of a moved element, *t*

One wonders whether preverbal null elements in RDCs as in (1b) could also be all the three types of empty categories listed in (5). If the answer is positive, RDCs do not differ from non-RDCs since both RDCs and non-RDCs equally exhibit the properties of the empty categories. If RDCs do not involve some types of empty categories, what would make RDCs different from other constructions? In turn, one also wonders if RDCs with distinct empty categories would correspondingly project distinct structures. Alternatively, despite having distinct types of empty categories, would RDCs uniformly project the same structure? Besides the issues of preverbal null arguments, although it has not been reported previously, Korean RDCs allow copula insertion to the right periphery in (6).

- (6) a. Cheli-ka {*kaul-ül* / [e]} mek-ess-e, *sakau-i-ta*.  
 C.-Nom fruit-Acc eat-Pst-Dec apple-Cop-Dec  
 ‘Cheli ate {*fruit* / [e]}, is an *apple*.’  
 b. Cheli-ka {*sakau-hul* / [e]} mek-ess-e, *sakau-i-ta*.  
 C.-Nom apple-Acc eat-Pst-Dec apple-Cop-Dec  
 ‘Cheli ate {*an apple* / [e]}, is an *apple*.’

In (6), regardless of whether a RDC has a null element (gapped RDC) or a DP (gapless RDC) preverbally, the postposed element is still possibly attached by the copula. The acceptability of the sentences is clear particularly when a noticeable pause is inserted between the verb and the postverbal DP. For example, in (6a) after placing a break between the verb and the postverbal DP it is perfectly fine to insert the copula to the right of *sakwa* ‘apple’ in the postverbal domain.

The main goal of this paper is to examine Korean RDCs in light of preverbal (null) elements relative to postverbal elements and to explore the syntax of RDCs that allows copula insertion to the right periphery as in (6). I show that RDCs may involve the three types of empty categories preverbally. I also demonstrate (non-)parallelisms between gapped and gapless RDCs. These findings are essential to an analysis of clausal structures of RDCs. I suggest that a non-uniform analysis is best to account for the distribution of empty categories in RDCs (cf. Yun 2014; Ko 2014, 2015, 2016; but Kuno 1978; Whitman 2000; Tanaka 2001; Yim 2013; Kim and Hong 2013; Ahn and Cho 2016, 2017; Ott and de Vries 2016; J-S Lee 2017; Lee and Lee 2017, 2018 for a uniform analysis, to name only a few). More specifically, while defending both a mono- and a bi-clausal analysis, apart from Ko (2014, 2015, 2016) I make a different distinction of gapped and gapless RDCs and propose an additional bi-clausal type. I offer supporting evidence, based on (non-)parallelisms between RDCs and fragment answers.

This paper is organized as follows. Section 2 shows two properties of RDCs in light of preverbal empty categories and (non-)parallelisms between gapped and gapless RDCs. Section 3 argues for a non-uniform approach to analyzing RDCs. In a bi-clausal analysis, a structure may possibly involve a cleft for some RDCs and thus a copula can be inserted as in (6). In a mono-clausal analysis, right-dislocation of adnominal elements is examined in Korean and Japanese. Section 4 offers supporting arguments built on (non-)parallelisms between RDCs and fragment answers. Section 5 is the conclusion.

## 2. Syntactic properties of Korean RDCs

I discuss three types of preverbal null arguments in RDCs in 2.1, and (non-)similarities between gapless and gapped RDCs in 2.2. These observations

are to serve as the object studied in this article.

## 2.1 Identification of preverbal null arguments in RDCs

I demonstrate that RDCs can have three types of empty categories in (7) – (9).

- (7) *Did Yenghi meet Cheli?*  
 Ung Yenghi-nun *pro*<sub>i</sub> manna-ss-e, (Cheli-lul).  
 yes Y-Top meet-Pst-Dec C-Acc  
 ‘Yes, Yenghi met him<sub>i</sub>, (Cheli).’

- (8) *Did Cheli eat an apple or something?*  
 Ung Cheli-nun [e]<sub>ellipsis</sub> mek-ess-e, (sakwa-lul).  
 yes C-Top eat-Pst-Dec apple-Acc  
 ‘Yes, Cheli ate something, (an apple).’

- (9) *Did Cheli eat a pear or something?*  
 Cheli-nun *t*<sub>i</sub> mek-ess-e \*(sakwa-lul).  
 C-Top eat-Pst-Dec apple-Acc  
 ‘Cheli ate an apple.’

In (7), the null object is coreferential with the object previously introduced. This is a case of *pro*. In (8), the null object has a sloppy interpretation and thus it is an argument ellipsis (e.g. Saito 2007, Sakamoto 2016). Importantly, (potential) antecedents of *pro* in (7) and an argument ellipsis in (8) are introduced in the previous contexts, and the references of these null arguments are independent of those of the postposed DPs. In (9), since the information about Cheli’s eating an apple is not introduced previously the null argument is a trace of the postposed DP *sakwa-lul* [apple-Acc] and thus this DP cannot be omitted. This null argument cannot have a sloppy reading.<sup>2</sup>

2 The distinction between (7) and (9) is also observed in terms of prosodic structure. Yun (2014) reports that (7) has two focus peaks at the end of the verb and at the right-dislocated DP respectively, whereas (9) involves a single peak with the right-dislocated phrase deaccented.

I showed that the interpretations of null arguments in RDCs are non-uniform, as in the cases of non-RDCs. If a potential antecedent of a null element is introduced previously, the interpretation of the null element is either *pro* or an argument ellipsis. Significantly, in these cases the clauses stand by themselves without postverbal DPs. Otherwise, the postposed DP is newly introduced for the trace in the same sentence, and thus the postposed DP necessarily exists as antecedent in the sentence. Hence, despite the fact that surface strings are potentially ambiguous due to their surface similarities, the differences in light of interpretations of null arguments and the (im)possibility of omitting a postposed DP serve as a means of distinguishing among preverbal null arguments in RDCs.

## 2.2 Gapless RDCs vs. gapped RDCs

After critically reviewing Ko's (2015, 2016) and Ahn and Cho's (2016) distinctions of gapped and gapless RDCs for a (non-)uniform analysis of RDCs, I present similarities and differences between the two types of RDCs that have not been observed before.

Let us start with Ko's (2015, 2016) observation of two types of gapless RDCs in (10).

- (10) a. Cheli-ka **kwail-ul** mek-ess-e, **sakwa-lul**. [specificational RDC]  
 C.-Nom fruit-Acc eat-Pst-Dec apple-Acc  
 'Cheli ate some fruit, an apple.'
- b. Cheli-ka **sakwa-lul** mek-ess-e, **sakwa-lul**. [repetitive RDC]  
 C.-Nom apple-Acc eat-Pst-Dec apple-Acc  
 'Cheli ate an apple, an apple.' (Ko 2016: 2, (10))

In (10a) the preverbal object differs from the postverbal DP, and the latter specifies the meaning of the former. By contrast, in (10b) the preverbal object is identical to the DP on the right edge. Ko (2016) names (10a) *specificational* and (10b) *repetitive*.

Ko reports that the two types of gapless RDCs exhibit systematic

asymmetries between the two in terms of locality in (11) – (12).<sup>3</sup>

(11) Islands Effects

- a. Cheli-nun [**emma-ka** sacwu-n] cha-lul ilhepeli-esse, **emma-ka**.  
 C.-Top mom-Nom buy.give-RC car-Acc lost mom-Nom  
 ‘Cheli lost the car that his mother bought for him’  
 (Ahn and Cho 2015: 432, fn.3)
- b. \*Cheli-ka [**kacok-i** sacwu-n] cha-lul ilhepeli-ess-e, **emma-ka**.  
 C.-Nom family-Nom buy-RC car-Acc lose-Pst-Dec mom-Nom  
 ‘Cheli lost the car that his family bought for him, his mother, specifically.’  
 (Ko 2016: 7)

(12) Left Branch Condition

- a. Na-nun [**Yenghi-uy** emma-uy cha-lul] pilli-ess-e, **Yenghi-uy**.  
 I-Top Y.-Gen mother-Gen car-Acc borrow-Pst-Dec Y.-Gen  
 ‘I borrowed Yenghi’s mother’s car.’ (Ahn and Cho 2015: 433, fn. 5)
- b. \*Na-nun [**chinkwu-uy** emma-uy cha-lul] pilli-ess-e, **Yenghi-uy**.  
 I-Top friend-Gen mother-Gen car-Acc borrow-Pst-Dec Y.-Gen  
 ‘I borrowed a friend’s mother’s car, Yenghi’s.’ (Ko 2016: 19)

The repetitive RDC (11a) does not show island effects, unlike the specificational RDC (11b). Similarly, the repetitive RDC (12a) obviates Left Branch Condition effects (Ross 1986) while the specificational RDC (12b) does not. Ko (2016) claims that the ungrammaticality of specificational RDCs is compatible with that of gapped RDCs (13).

3 Ko (2016: 11) also reports the asymmetry with genitive marker in (i).

(i) Genitive Case Drop

- a. Yenghi-ka **Cheli-uy** emma-lul manness-tay, **Cheli-uy** / **Cheli**.  
 Y.-Nom C.-Gen mother-Acc met-Q<sub>hearsay</sub> C.-Gen C.  
 ‘Yenghi met Cheli’s mother.’
- b. Yenghi-ka **wulpannamcaay-uy** emma-lul manness-tay, ?**Cheli-uy** / \***Cheli**.  
 Y.-Nom our class boy-Gen mother-Acc met-Q<sub>hearsay</sub> C.-Gen C.  
 ‘Yenghi met the mother of somebody in our class.’

- (13) a. \*Cheli-nun [sacwu-n] mokkeli-lul peli-ess-e, **emma-ka.**  
 C-Top bought-RC necklace-Acc throw.away-Pst-Dec mom-Nom  
 ‘Cheli threw away the necklace that (his) mother bought for him’.  
 (Ko 2014: 299)
- b. \*Na-nun [emma-uy cha-lul] pilli-ess-e, **Yenghi-uy.**  
 I-Top mother-Gen car-Acc borrow-Pst-Dec Y.-Gen  
 ‘I borrowed Yenghi’s mother’s car.’ (ibid: 302)

According to Ko, the gapped RDCs appear to show an island violation and a LBC violation as in the case of specificational RDCs. Based on these asymmetries, Ko (2015, 2016) classifies repetitive RDCs into one group and specificational and gapped RDCs into the other, in favor of a non-uniform analysis of RDCs.

Ko (2016: 25) argues that repetitive RDCs express information focus and convey non-presuppositional information, whereas specificational RDCs identify a subset of the contextually salient set. Ko proposes that different types of information structure can be represented differently in syntax, as illustrated in (14a, b).

- (14) a. [<sub>S1</sub> ... XP ... ] [<sub>S2</sub> XP<sub>i</sub> [<sub>S2</sub> ... t<sub>i</sub> ... ] ] for repetitive RDCs  
 b. [<sub>S</sub> ... t<sub>i</sub> ... ] XP<sub>i</sub> for specificational and gapped RDCs

(14a) consists of two identical clauses, in the latter of which XP is raised whereas the remaining is deleted at PF. (14b) is mono-clausal and XP is moved outside S. Given the distinction in (14), Ko (2016) maintains a representational approach to the bi-clausal analysis and argues that island violations are obviated under the identity requirement between S<sub>1</sub> and S<sub>2</sub> for (11a) and (12a), which is schematized in (15) (Ahn and Cho 2016; Merchant 2004 for English).

- (15) [<sub>S1</sub> XP<sub>i</sub> [ ... t<sub>i</sub> ... ] ] [<sub>S2</sub> XP<sub>i</sub> [<sub>S2</sub> [<sub>Island</sub> ... t<sub>i</sub> ... ] ] ] for repetitive RDCs

On the other hand, Ko (2016) employs a derivational approach to the mono-clausal analysis and argues that the ungrammaticality of (11b) and (12b) (as well as (13)) results from an island violation, shown in (16).



- (16) \* $[_S \text{ [island } \dots t_i \dots ] \text{ XP}_i ]$  for specificational and gapped RDCs

In (16), the movement of XP induces an island violation, and such a violation cannot be repaired at LF in a mono-clausal structure. In Ko's (2016) analysis, specificational RDCs and gapped RDCs differ from repetitive RDCs in light of clausal structure (as well as information structure) in that the former are derived from a mono-clausal structure whereas the latter involves a bi-clausal structure.

However, Ahn and Cho (2016) question Ko's (2016) analysis by reporting that repetitive RDCs are ungrammatical in (17), where postposed DPs are focused with the adverb *pwunmyenghi* 'clearly' and *-man* 'only' / *-cocha* 'even' (cf. Park and Kim 2016).

- (17) a. \*Cheli-nun[emma-ka sacwu-n] mukkeli-lul peli-ess-e,  
 C-Top mom-Nom bought-RC necklace-Acc throw.away-Pst-Dec  
**pwunmyenghi emma-ka.**  
 clearly mom-Nom  
 '(lit.) Cheli threw away the necklace that his mother bought for him, clearly his mother.'  
 (Ahn and Cho 2016: 223)
- b. \*Cheli-nun[emma-ka o-ci anh-ass-ki-ttaymwuney] hwakana-ass-e,  
 C-Top mom-Nom come-not-Pst-because get.angry-Pst-Dec  
**emma-man / -cocha.**  
 mom-only / even  
 '(lit.) Cheli got angry because his mom didn't come, only/even his mom'  
 (ibid: 223, fn. 5)

Since both sentences involve *emma* 'mother' pre- and postverbally, (17a, b) are repetitive RDCs. Yet, they are ungrammatical when the postposed elements have "contrastive" elements. Ahn and Cho (2016) also adopt a representational approach and suggest that both repetitive and specificational RDCs are equally derived from a bi-clausal structure. After assimilating Griffiths and Lipták's (2014) analysis of English sprouting to an analysis of fragment answers in Korean, Ahn and Cho extend the analysis to RDCs. I review only relevant points of Ahn and Cho's analysis of RDCs. In their analysis, a non-focus reading is crucial for LF repair operations. When TP involves a contrastive remnant, TP

ellipsis does not occur and an island violation remains at LF. In contrast, TP without a contrastive remnant is elided and thus an island violation is repaired. This contrast is schematized in (18).

- (18) a.  $*[S_1 \dots] [S_2 YP_1 / XP_1 \text{ with a contrastive reading } [TP \dots [Island \dots t_i \dots ]]]$   
 b.  $[S_1 \dots] [S_2 XP_1 \text{ } \neg [TP \dots [Island \dots t_i \dots ]]]$

In (18a),  $S_2$  includes a focus element and thus island effects exist at LF, leading to ungrammaticality. On the other hand, in (18b),  $S_2$  does not have a focus element and thus TP ellipsis occurs under identity between  $S_1$  and  $S_2$ , and an island violation is repaired at LF.

Ahn and Cho (2016) further suggest that the ungrammaticality of (13) results from the failure of establishing a scopal parallelism between  $S_1$  and  $S_2$  in (19).

- (19)  $*[S_1 \dots pro \dots] [S_2 XP_1 \text{ } [Island \dots t_i \dots ]]$

Ahn and Cho (2016: 220) argue that under the assumption that *pro* in Korean always takes low scope, repair does not occur at LF due to the lack of a scopal parallelism between  $S_1$  and  $S_2$  in (19). In Ahn and Cho's (2016) analysis, both gapped and gapless RDCs are equally treated in a bi-clausal structure, and RDCs may differ at the representational level (LF) since the availability of LF repair operations relies on the presence/absence of contrastive readings. (I return to their analysis of fragment answers in relation to RDCs in section 4.)

Some questions arise in Ko's (2015, 2016) and Ahn and Cho's (2016) analyses. Since they do not differentiate null arguments in RDCs, it is not clear whether all gapped RDCs (with *pro*, trace, and null ellipsis) are treated in the same clausal structure. Moreover, it is also mysterious whether different types of information structure are associated with a specific type of gapped RDCs as Ko (2015, 2016) claims for gapless (specificational and repetitive) RDCs or with specific representational operations at LF as Ahn and Cho (2016) argue. For the rest of this subsection, I offer a complete comparison between gapped and gapless RDCs in terms of information structure that both Ko (2015, 2016) and Ahn and Cho (2016) do not report. I also focus on semantic predication relations between pre- and postverbal elements to examine similarities and differences

between gapped and gapless RDCs. Let us consider (20) and (21).

(20) *Did Cheli eat a pear or something?* (Information focus)

- a. Cheli-nun **kwail-ul** mek-ess-e, (**sakwa-lul**).  
 C.-Top fruit-Acc eat-Pst-Dec apple-Acc  
 ‘Cheli ate fruit, (an apple).’
- b. Cheli-nun **sakwa-lul<sub>i</sub>** mek-ess-e, (**sakwa-lul<sub>i</sub>**).  
 C.-Top apple-Acc eat-Pst-Dec apple-Acc  
 ‘Cheli ate *an apple*, (*an apple*).’
- c. Cheli-nun [e]<sub>ellipsis</sub> mek-ess-e, (**sakwa-lul**).  
 C.-Top eat-Pst-Dec apple-Acc  
 ‘Cheli ate something, (an apple).’

(21) *Did Cheli eat the fruit on the table?* (Identificational focus)

- a. Cheli-nun **kwail-ul** mek-ess-e, (**sakwa-lul**).  
 C.-Top fruit-Acc eat-Pst-Dec apple-Acc  
 ‘Cheli ate the fruit, (an apple).’
- b. Cheli-nun **kwail-lul<sub>i</sub>** mek-ess-e, (**kwail-lul<sub>i</sub>**).  
 C.-Top fruit-Acc eat-Pst-Dec fruit-Acc  
 ‘Cheli ate the fruit, (the fruit).’
- c. Cheli-nun *pro<sub>i</sub>* mek-ess-e (**kwail-lul<sub>i</sub>**).  
 C.-Top eat-Pst-Dec fruit-Acc  
 ‘Cheli ate it, (the fruit).’

Crucially, the gapless and gapped RDCs are both grammatical for information focus and specificational focus readings respectively. Nonetheless, semantic predicational relations between a pre- and a postverbal DP are not uniform. The predicational relations in (20a, c) have specificational readings when the argument ellipsis in (20c) is interpreted as in *something that Cheli ate is an apple* since the postverbal DP *sakwa* ‘apple’ specifies the meaning of the null object with an indefinite reading. By contrast, the relation in (20b) yields an equative reading. Likewise, the predicational relations in (21b, c) involve equative readings whereas the relation in (21a) has a specificational reading. The summary of these observations is shown in (22) and (23).



- (25) A Capped and Gapless RDCs
- a. [<sub>S</sub> ... XP<sub>i</sub> / *pro*<sub>i</sub> / YP / [e]<sub>ellipsis</sub> ... verb] (XP<sub>i</sub>)
  - b. [<sub>S</sub> ... t<sub>i</sub> ... verb] \*(XP<sub>i</sub>)

In (25a), *S* is a complete clause in and by itself, and can stand alone without the postposed element. In this case, a preverbal element can be in semantic predication relation with the postverbal element for a specificational or an equative reading. On the other hand, in (25b) the reference of a trace should be necessarily dependent on the postposed XP in the same clause and thus XP is not omissible. No predication relation is created here.

To summarize, after reviewing Ko's (2015, 2016) and Ahn and Cho's (2016) observations of gapped and gapless RDCs I showed (non-)parallelisms that they do not observe. I demonstrated that gapless and gapped RDCs can be used for information focus and specificational focus in the same way. Moreover, in light of semantic predication relations, a specificational RDC resembles a gapped RDC with an argument ellipsis whereas a repetitive RDC is similar to a gapped RDC with *pro*. On the other hand, a RDC with a trace cannot establish a predication relation. These findings are significant to explore the clausal structures of RDCs.

In the following section, I look into the schemes in (25a, b), and offer a non-uniform analysis of RDCs.

### 3. Analysis of two types of RDCs

I offer a non-uniform analysis in a derivational approach. In 3.1, I closely examine (25a) and propose an additional type of a bi-clausal structure with a cleft for the second clause in a RDC with *pro* or an argument ellipsis along with a gapless RDC. In 3.2, I look into (25b) and defend a mono-clausal analysis of a RDC with a trace with a microscopic comparison of Korean and Japanese RDCs that involve adnominal elements postverbally.

#### 3.1 A new bi-clausal structure

I analyze (25a), repeated as (26), for both gapless and gapped RDCs.

(26) [<sub>S1</sub> XP<sub>i</sub> / *pro*<sub>i</sub> / YP/ [e]<sub>ellipsis</sub> verb ] (XP<sub>i</sub>)

One possible analysis is that the postposed element is generated in a mono-clausal structure (e.g. C-H Lee 2013; J-S Lee 2017; Takita 2014). However, a mono-clausal structure cannot account for the fact that RDCs in (27) allow copula insertion (cf. (6)).

- (27) a. Cheli-ka {**sakwa-lul** / *pro*} mek-ess-e, **sakwa-i-ta**.  
 C-Nom apple-Acc eat-Pst-Dec apple-Cop-Dec  
 ‘Cheli ate {the apple / *pro*}, the apple.’
- b. Cheli-ka {**kwail-ul** / [e]<sub>ellipsis</sub>} mek-ess-e, **sakwa-i-ta**.  
 C-Nom fruit-Acc eat-Pst-Dec apple-Cop-Dec  
 ‘Cheli ate {fruit / [e]<sub>ellipsis</sub>}, an apple.’

Significantly, it is possible to add the copula to the right periphery in (27). The possibility of copula insertion is problematic to a mono-clausal structure since two distinct verbs can appear in the constructions. On the other hand, a bi-clausal analysis accommodates this possibility. In the rest of this subsection, I examine gapless RDCs in a bi-clausal analysis since they are obvious in terms of the interpretation of a preverbal element relative to a postverbal element, while the same analysis is also applied to a RDC with *pro* or an argument ellipsis. Yet, the prevailing bi-clausal analysis as in (14a) fails to account for the possibility of copula insertion due to the presence of two distinct verbs in (27). Alternatively, I suggest that (27a, b) can possibly be paraphrased with clefts with S<sub>1</sub> as presuppositional to S<sub>2</sub> in (28) and (29) respectively.

- (28) [<sub>S1</sub> Cheli-ka sakwa-lul mek-ess-e]  
 [<sub>S2</sub> [Cheli-ka mek-n kes-un] sakwa-i-ta]
- (29) [<sub>S1</sub> Cheli-ka kwail-ul mek-ess-e]  
 [<sub>S2</sub> [Cheli-ka mek-n kes-un] sakwa-i-ta]

In (28) and (29), S<sub>2</sub> is a cleft that involves S<sub>1</sub> as a clefted clause. Based on the cleft interpretations and the possibility of copula insertion, I adopt (30) for (27).

(30)  $[_{S1} XP_i / pro_i / YP / [e]_{\text{ellipsis}} ] [_{S2} = \text{Cleft} ([\text{presuppositional clause} = S_1]) XP_i (\text{Cop})]$

As for the derivation of a cleft in the second clause of (30), following Hiraiwa and Ishihara's (2012) analysis, I assume that a clefted constituent *sakwa* 'apple' obtains accusative Case in vP in (31a) and undergoes focus movement to Spec, FocP in (31b), while the remaining is raised to Spec, TopP in (31c) (I refer the reader to Hiraiwa and Ishihara (2012) for further discussion) (cf. Kim and Sells 2013).<sup>4</sup>

(31) a.  $[_{vP} sakwa-lul_i [_{VP} \dots t_i \dots ]]$   
 b.  $[_{FocP} sakwa-lul_i [_{XP} \dots t_j \dots ] \text{ Cop}]$   
 c.  $[_{TopP} [_{XP} \dots ]_k [_{FocP} sakwa-lul t_k \dots ] \text{ Cop}]$

The word orders of (27a, b) are derived by deleting the clefted clauses (i.e. presuppositional clauses) (Ross 1969, Takahashi 1994, Hiraiwa and Ishihara 2012, among others) along with the combination of a Case marker and the copula in (32a, b) respectively.

(32) a.  $[_{S1} \text{Cheli-ka } \mathbf{sakwa-lul} \text{ mek-ess-e}]$   
 $[_{S2} [\text{Cheli-ka } \text{mek-n } \text{kes-un}] \text{ sakwa-lul-i-ta}]$   
 b.  $[_{S1} \text{Cheli-ka } \mathbf{kwail-ul} \text{ mek-ess-e}]$   
 $[_{S2} [\text{Cheli-ka } \text{mek-n } \text{kes-un}] \text{ sakwa-lul-i-ta}]$

One might object to the analysis with a cleft in (30)/(32) since a Case-marked DP cannot function as a cleft constituent in Korean. However, this objection does not weaken the proposed analysis since it does not suggest that clefts are unavailable in RDCs. Consider Japanese clefts in (33), where there exists a variation in the acceptability of sentences with distinct Case-markers attached to focused phrases; the nominative marker *-ga* shows very low acceptability in (33a); the accusative marker *-o* is accepted by some speakers in (33b); and the dative marker *-ni* does not seem to be restricted in (33c).

4 Hiraiwa and Ishihara (2012) employ a Split-CP hypothesis in (31). However, I treat both FocP and TopP as Ss in this paper.

- (33) a. [[e]<sub>i</sub> Mari-ni ringo-o ageta-no]-wa Naoya(\*-ga)<sub>i</sub> da.  
 Mari-Dat apple-Acc gave-C-Top Naoya-Nom Cop  
 ‘It was Naoya that gave Mari an apple.’
- b. [Naoya-ga Mari-ni [e]<sub>i</sub> ageta-no]-wa ringo(%-o)<sub>i</sub> da.  
 Naoya-Nom Mari-Dat gave-C-Top apple-Acc Cop  
 ‘It was an apple that Naoya gave to Mari.’
- c. [Naoya-ga [e]<sub>i</sub> ringo-o ageta-no]-wa Mari(-ni)<sub>i</sub> da.  
 Naoya-Nom apple-Acc gave-C-Top Mari-Dat Cop  
 ‘It was Mari that Naoya gave an apple to.’

(Hiraiwa and Ishihara 2012: 144, (33))

The difference in acceptability of Case-marking may mean that some Case markers are incompatible with the copula. Yet, DPs with no Case marker are possible to appear as focused constituents both in Korean and Japanese, as observed in (28), (29) and (33).

Moreover, Case-marked DPs are not always prohibited from existing in the focus position in Korean. In a cleft with multiple foci, a DP that is not directly followed by the copula requires Case-marking in (34a, b). Additionally, the dative marker possibly appears next to the copula in (34b), as the Japanese counterpart in (33c).

- (34) a. John-i cwu-n kes-un [Mary\*(-eykey) chayk]-i-ta.  
 J.-Nom give-PNE thing-Top M-Dat book-Cop-Dec  
 ‘What John gave was books to Mary.’
- b. John-i cwu-n kes-un [chayk\*(-ul) Mary-eykey]-i-ta.  
 J.-Nom give-PNE thing-Top book-Acc M-Dat-Cop-Dec  
 ‘What John gave was books to Mary.’ (Adapted from Chung 2015: 596, (34))

Under the proposed analysis with a cleft, let us examine the contrast in island effects between repetitive and specificational RDCs in (11), repeated as (35).

- (35) a. Cheli-nun [emma-ka sacwu-n] cha-lul ilhепeliesse, emma-ka.  
 C-Top mom-Nom buy.give-RC car-Acc lost mom-Nom



- ‘Cheli lost the car that *his mother* bought for him’  
 b. \*Cheli-ka [kacok-i sacwu-n] cha-lu ilhepeli-ess-e, emma-ka.  
 C.-Nom family-Nom buy-RC car-Acc lose-Pst-Dec mom-Nom  
 ‘Cheli lost the car that his family bought for him, his mother, specifically.’

Unlike (35a, b), the Japanese counterparts in (36a, b) appear to show no difference between the two.

- (36) a. ?\*John-ga [Mary-ga Bill-ni ageta hon-o ] nusunda yo, Bill-ni.  
 J-Nom M-Nom B-Dat gave book-Acc stole-Prt B-Dat  
 ‘John stole the book that Mary gave to Bill, to Bill.’ (Tanaka 2001: 556)  
 b. \*John-ga [Mary-ga ano tomodati-ni ageta hon-o] nusunda yo, Bill-ni.  
 J-Nom M-Nom the friend-Dat gave book-Acc stole-Prt B-Dat  
 ‘John stole the book that Mary gave to the friend, to Bill.’

I claim that the difference between (35a) and (35b) lies in structure (i.e. interpretation), rather than in language variation between (35) and (36). To my intuition, as shown with the English glosses, (35a, b) can be interpreted in (37a, b) respectively, which are schematized in (38a, b).

- (37) a. Cheli-nun [emma-ka<sub>i</sub> sacwu-n] cha-lul ilhepeliess-e, ([ t<sub>i</sub> cha-lul  
 C.-Top mom-Nom buy.give-RC car-Acc lost car-Acc  
 sacwu-n kes-un]) emma<sub>i</sub>(-i-ta).  
 buy.give-Mod Kes-Top mom-Cop-Dec  
 ‘Cheli lost the car that his mother<sub>i</sub> bought for him, (it is) his mother<sub>i</sub> ([who  
 t<sub>i</sub> bought the car]).’  
 b. \*Cheli-nun [kacok-<sub>i</sub> sacwu-n] cha-lul ilhepeliess-e, (Cheli-ka  
 C.-Top family-Nom buy.give-RC car-Acc lost C-Nom  
 [[ t<sub>i</sub> t<sub>j</sub> sacwu-n] cha-lul<sub>j</sub>] lhepeli-n kes-un) emma<sub>i</sub>(-i-ta).  
 buy.give-RC car-Acc] lost-Mod Kes-Top mom-Cop-Dec  
 ‘\*Cheli lost the car that his family bought for him, (it is) his mother<sub>i</sub> (that  
 Cheli lost [the car<sub>j</sub> [that t<sub>i</sub> bought t<sub>j</sub>]])’

- (38) a. [S<sub>1</sub> ... ] [S<sub>2</sub> = Cleft ( [ ... t<sub>i</sub> ... ] ) XP<sub>i</sub> (Cop) ]

- b. \* $[S_1 \dots]$   $[S_2 = \text{Cleft} \quad ([\text{island} \dots t_i \dots]) \quad XP_i \quad (\text{Cop}) \quad ]$

In (38a, b) XP in  $S_2$  is equally a cleft constituent moved out of the clefted clause. Yet, unlike (38a), (38b) is ungrammatical. The ungrammaticality of (38b) results from an island violation caused by XP. Contra Ahn and Cho (2016), even when it is deleted at PF, the violation remains at LF and repair-by-deletion does not apply here. Likewise, I also attribute the ungrammaticality of (12), (13) and (36) (possibly along with (17)) to island effects, independently of distinct focus readings at the representational level. Since both specificational and repetitive RDCs can have the same types of information structure as observed in 2.2, LF representations for specificational and repetitive RDCs should be identical to each other in terms of information structure.

To be clear, I claim that the proposed structure with a cleft in (30) is an additional bi-clausal analysis of some RDCs along with the prevailing bi-clausal analysis (that assumes the duplication of a clause in sequence). It is not always the case that the proposed analysis and the prevailing bi-clausal analysis uniformly account for RDCs. RDCs with the duplication of a verb in (39a, b) are explained in the prevailing bi-clausal analysis in (39c), unlike in the proposed analysis in (39d).

- (39) a. Cheli-ka {**sakwa-lul** / *pro*} mek-ess-e, **sakwa-lul** mek-ess-e.  
 C.-Nom apple-Acc eat-Pst-Dec apple-Acc eat-Pst-Dec  
 ‘Cheli ate {an apple / *pro*}, ate an apple.’  
 b. Cheli-ka {**kwail-ul** / [ $e$ ]<sub>ellipsis</sub>} mek-ess-e, **sakwa-lul** mek-ess-e.  
 C.-Nom fruit-Acc eat-Pst-Dec apple-Acc eat-Pst-Dec  
 ‘Cheli ate {fruit / [ $e$ ]<sub>ellipsis</sub>}, ate an apple.’  
 c.  $[S_1 \dots]$   $[S_2 \quad vP_i \quad [S_2 \text{---} t_i \text{---}]]$   
 d. \* $[S_1 \dots]$   $[S_2 = \text{Cleft} \quad ( \text{---} t_i \text{---} ) \quad vP_i \quad (\text{Cop})]$

To sum up, based on the possibility of copula insertion to the right periphery I argued for an additional bi-clausal analysis. I claimed that the second clause can possibly be a cleft for some RDCs, where a focused phrase is moved out of a cleft clause. In this case, island effects result from movement of the cleft constituent in  $S_2$  in syntax.

### 3.2 A mono-clausal structure with microscopic differences between Korean and Japanese

Now I examine (25b), repeated as (40).

(40) [S ...  $t_i$  ... verb] \*(XP<sub>i</sub>)

In (40) the postposed element in the RDC should obligatorily serve as antecedent of the trace. Here I adopt a mono-clausal structure. In the literature of RDCs, both leftward and rightward movement of XP along with its base-generation have been proposed cross-linguistically (Simon 1989; Takita 2014 for Japanese, Ko and Cho 2009; C-H Lee 2013; Ko 2016; J-S Lee 2017 for Korean, Mahajan 1997; Manetta 2012 for Hindi, Simpson and Choudhury 2015 for Hindi and Bengali, among others). Although a detailed analysis of (40) including the directionality of movement of XP in (40) is beyond the scope of this paper, I offer an argument for a mono-clausal structure (40) with right-dislocation of adnominal elements.<sup>5</sup>

Postposing some adnominal elements is grammatical in Korean and Japanese in (41) – (43).

- (41) Postposing of adjectival modifiers
- a. Yenghi-ka [DP [e] cha]-lul sass-ta [XP maywu khun].  
 Y.-Nom car-Acc bought-Dec very big  
 'Yenghi bought a very big car.'
- b. Hanako-ga [DP [e] kuruma]-o katta-yo, [XP sugoku ookii].  
 H.-Nom car-Acc bought-FP very big  
 'Hanako bought a very big car.' (Shimojo 1995: 110, (41b))

5 One might state that a mono-clausal analysis with base-generation may possibly account for the derivation of (40) (C-H Lee 2013; J-S Lee 2017; and Takita 2014). However, it is not clear why a postverbal element is linked with a null argument by being base-generated on the right periphery in RDCs. If a base-generation analysis of RDCs denies the presence of a preverbal null element as a trace preverbally, it is also mysterious why RDCs differ from non-RDCs in light of null arguments. I do not pursue a base-generation analysis in this paper.

## (42) Postposing of demonstratives

- a. \*Na-nun machimnay<sub>[DP [e] yenghwa]</sub>-lul poass-ta, [<sub>XP ce</sub>].  
 I-Top finally movie-Acc watched-Dec that  
 'I finally watched that movie.'
- b. Watasi-wa tsuini <sub>[DP [e] eega]</sub>-o mita -yo, [<sub>XP ano</sub>].  
 I-Top finally movie-Acc watched-FP that  
 'I finally watched that movie.' (Shimojo 1995: 110, (42b))

## (43) Postposing of relative clauses

- a. ??Chelswu-ka<sub>[DP [e] cha]</sub>-lul wuncenhayess-ta, [<sub>CP ecey sa-n</sub>].  
 C-Nom car-Acc drove-Dec yesterday bought-RC  
 'Chelswu drove the car that he bought yesterday.'
- b. Taro-ga<sub>[DP [e] kuruma]</sub>-o untensita-yo, [<sub>CP kinou katta</sub>].  
 T.-Nom car-Acc drove-FP yesterday bought  
 'Taro drove the car that he bought yesterday.' (Kamada 2009: 13, (43b))

Obviously, in (41a, b) both languages allow adjectival modifiers alone to appear postverbally even though the nominals that they modify remain preverbally (Kog 2014, 2015; Park and Kim 2009; Chung 2016). On the other hand, in (42a) the Korean demonstrative *ce* 'that' cannot appear in the postverbal domain apart from the noun *yenghwa* 'movie', whereas in (42b) the Japanese demonstrative *ano* 'that' can be postposed to the right periphery. In (43a), the right-dislocation of the Korean relative clause by itself is degraded. In contrast, the Japanese counterpart in (43b) is grammatical (Manetta 2012 for Hindi). These contrasts indicate that adnominal elements are not always right-dislocated to the right periphery in Korean, as opposed to Japanese (which I return shortly). Yet, it is also clear that some adnominal elements can appear on the right periphery in both languages. The preverbal empty category (that is understood to be associated with a postposed adnominal element) cannot be an argument ellipsis since the postverbal adnominal element is not an argument. It cannot be *pro* either since an adnominal modifier as in (41) and (43) is not referential. I suggest that preverbal null elements in (41) – (43) are traces of postposed adnominal elements. Put differently, right-dislocation of adnominal elements on the right edge are derived via movement, in favor of (40).

To support this claim, let us look at (44) and (45).

(44) *What did Yenghi do?*

- a. Yenghi-nun [DP  $t_i$  cha-lul] sass-ta, [maywu khun]<sub>i</sub>.  
 Y.-Top car-Acc bought-Dec very big  
 ‘Yenghi bought a very big car.’
- b. \*Yenghi-nun [DP [XP maywu  $t_i$  ] cha-lul] sass-ta, [khun]<sub>i</sub>.  
 Y.-Top very car-Acc bought-Dec big  
 ‘Yenghi bought a very big car.’

(45) *What did you buy?*

- a. Na-nun [DP  $t_i$  cha-lul] pilli-ess-e **Yenghi-uy**<sub>i</sub>.  
 I-Top car-Acc borrow-Pst-Dec Y-Gen  
 ‘I borrowed Yenghi’s car.’
- b. \*Na-nun [DP [DP  $t_i$  emma-uy] cha-lul] pilli-ess-e **Yenghi-uy**<sub>i</sub>.  
 I-Top mother-Gen car-Acc borrow-Pst-Dec Y-Gen  
 ‘I borrowed Yenghi’s mother’s car.’ (Adapted from Ko 2014: 302, (45))

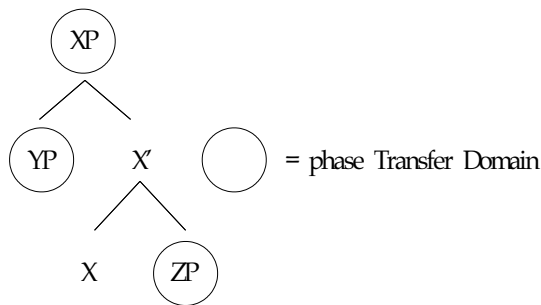
In (44a) the adjectival modifier can appear outside the DP postverbally. In contrast, in (44b) the adjective modifier cannot exist postverbally apart from its own modifier. Likewise, in (45a) the possessor can be postposed out of the DP. Yet, in (45b) the possessor cannot be outside the DP that is located in the larger DP. This phenomenon indicates that an adnominal element can be outside the host DP, but not further. I assimilate the phenomenon to Bošković’s (2016) observation in (46) and (47).

- (46) a. Pametne<sub>i</sub> on cijeni [NP  $t_i$  prijatelje]. Serbo-Croatian  
 smart he appreciates friends  
 b. \*Pametnih<sub>i</sub> on cijeni [NP prijatelje [  $t_i$  studenata]]  
 smart he appreciates friends students  
 ‘He appreciates friends of smart students.’ (Bošković 2016: 42, (46))

- (47) a. Of who(m)<sub>i</sub> did you see [NP friends  $t_i$  ]?  
 b. ?\*Who<sub>i</sub> did you see [NP enemies [ of friends of  $t_i$  ]]? (ibid. 41, (47))

Bošković (2016) argues that the highest projection in the thematic domain of a lexical head and the highest projection in the non-thematic domain function as phases (e.g. Baltin 1981 for the same line of argument in Government and Binding framework). Phases are transferred to spell-out multiple times by successive-cyclic movement, as shown in (48) (cf. Chomsky 2001 and his subsequent work).

(48) Bošković's (2016) phase theory



Under the multiple spell-out framework, not only XP but also YP and ZP in its Spec and complement are phases, and they can undergo movement whereas any element inside the phases cannot. In this analysis, the moved adnominal modifiers in (46a) and (47a) (corresponding to YP in (48)) are phases, and their movement out of NP is grammatical. On the other hand, movement of the adnominal modifiers out of phases is ungrammatical in (46b) and (47b). Both types of movement are schematized in (49).

- (49) a. ...  $XP_i$  ... [<sub>phase</sub> ...  $t_i$  ... ]  
 b. \* ...  $XP_i$  ... [<sub>phase</sub> ... [<sub>phase</sub> ...  $t_i$  ... ] ]

Given this framework of a phase theory, the adnominal elements in (44a) and (45a) are phases and undergo movement without crossing any phase boundary. Thus, the sentences are grammatical. On the other hand, the counterparts in (44b) and (45b) are derived by crossing phases, leading to ungrammaticality. This is in favor of (40). Notice that Ko's (2014, 2015) analysis with sideward movement and Chung's (2016) proximity-based analysis cannot account for the

ungrammaticality in (44) and (45) since movement out of a phase is irrelevant in these analyses and thus they would make a wrong prediction for these examples.

Why is the right-dislocation of Korean demonstratives and relative clauses ungrammatical or degraded in (42a) and (43a)? I attribute this phenomenon to a PF-filter that constrains on extraposition of a relatively “non-heavy” constituent that appears to the right of its canonical position (Baltin 2005 for a review). The Korean demonstrative *æ* ‘that’ is not a “heavy” element and prevented from appearing at the right periphery. I assume that this holds for the relative clause in (43a). The PF-filter also accounts for the contrast in right-dislocation of Korean adjectival modifiers reported by Park and Kim (2009) in (50).

- (50) a. John-i<sub>[DP]</sub> [e]sinpwu-lul<sub>[XP]</sub> manass-ta<sub>[XP]</sub> acwu yeppun].  
       J-Nom       bride-Acc   met-Dec       very pretty  
       ‘John met a very pretty bride.’  
       b. ?\*John-i<sub>[DP]</sub> [e]sinpwu-lul<sub>[XP]</sub> manass-ta<sub>[XP]</sub> yeppun].  
       J-Nom       bride-Acc   met-Dec       pretty  
       ‘John met a very pretty bride.’

(Park and Kim 2009: 32-33 with their judgements, (50))

In (50a, b) the adjectival modifiers are postposed to the right periphery and yet the grammaticality differs between the two. The “heavy” modifier *acwu yeppun* ‘very pretty’ in (50a) is grammatical, whereas the “non-heavy” counterpart *yeppun* ‘pretty’ is degraded in (50b). Park and Kim (2009: 32) state that short forms are generally not viable options as right-dislocated elements; heavy forms are generally required of them. This statement is consistent with the PF-filter for the Korean examples. Note that the PF-filter is a language-specific constraint for Korean RDCs, and thus the Japanese counterparts are grammatical.

I examined right-dislocation of adnominal elements in a mono-clausal analysis in Korean and Japanese. In Bošković’s (2016) framework of a phase theory, I argued that adnominal elements undergo movement and thus that their crossing a phase induces ungrammaticality. Although the proposed analysis in (40) is silent to the direction of movement, the ungrammaticality would not be repaired at a later stage of the derivation or LF whether adnominal elements

undergo leftward or rightward movement in a mono-clausal analysis.

#### 4. (Non-)parallelism between RDCs and fragment answers

To support the proposed non-uniform analysis of RDCs, I show (non-)parallelisms between RDCs and fragment answers. Let us review Ahn and Cho's (2016, 2017) claim that RDCs are in parallel to fragment answers with the example (51).

- (51) a. Chelswu-ka nwukwu-lul manna-ss-ni?  
 C.-Nom who-Acc meet-Pst-Q  
 'Who did Chelswu meet?'  
 b. Yenghi-lul.  
 Y.-Acc  
 'Chelswu met Yenghi.' (Ahn and Cho 2016: 216, (51))

When someone asks the question in (51a), in reply the short answer in (51b) is possible. In Ahn and Cho's analysis, (51b) is derived from the combination of movement and PF deletion, shown in (52).

- (52) [Yenghi-lul<sub>i</sub> [~~Chelswu-ka t<sub>i</sub> manna-ss-e~~]] (ibid. 216)

In order to derive the word order of (51b), the element *Yenghi-lul* undergoes leftward scrambling and the remaining is deleted at PF. Ahn and Cho (2016, 2017) suggest that the RDC (53) has the same process, schematized in (54).

- (53) Chelswu-ka manna-ss-e Yenghi-lul.  
 C.-Nom meet-Pst-Dec Y.-Acc  
 'Chelswu met Yenghi.' (ibid. 216)

- (54) [<sub>Host</sub> Chelswu-ka *pro*<sub>i</sub> manna-ss-e]  
 [<sub>Appendix</sub> Yenghi-lul<sub>i</sub> Chelswu-ka — t<sub>i</sub> — manna-ss-e] (ibid. 216)



In Ahn and Cho's (2016, 2017) analysis, in (54) the first clause contains *pro* that is coreferential with the postverbal DP *Yenghi-lul* in the second clause, and this DP in the second clause is scrambled to the left while the rest is deleted for the correct word order of (53).

However, contrary to Ahn and Cho's analysis in (54) *pro* is used only anaphorically in Korean — it is not used cataphorically (see 2.1). Moreover, although Ahn and Cho do not pay attention to the contexts where the fragment answer (51) and the RDC (53)/(54) with *pro* are examined, the covert pronoun cannot occur in the same context as in (51) due to the lack of an antecedent for *pro*. This suggests that the comparison between a fragment answer (51b) and the RDC with *pro* (53)/(54) does not seem to be plausible. In the same context as (51), (53) should involve a trace, as shown in (55).

- (55) *Who did Chelswu meet?*  
 a. *Chelswu-nun [e] manna-ss-e \*(Yenghi-lul).*  
    C-Top           met-Pst-Dec Yenghi -Acc  
    'Cheli met Yenghi.'  
 b. [*Cheli-nun t<sub>i</sub> manna-ss-e*] *Yenghi-lul<sub>i</sub>*

In (55b), the empty object is a trace of the postposed DP and this DP on the right edge is not deletable. What is significant here is that there is no parallelism (besides movement) between the schemes in (56) and (57).

- (56) [<sub>S</sub> *Fragment<sub>i</sub>* [~~←←←*t<sub>i</sub>*→→→~~] ]                   for (51b)  
 (57) [<sub>S</sub> *t<sub>i</sub>* ] *XP<sub>i</sub>*   for (55a)

Let us compare a fragment answer and a RDC with *pro* in (58).

- (58) *Did Chelswu really meet Yenghi-lul?*  
 a. (Ung) *Yenghi-lul.*  
    (yes) Y-Acc  
    '(Yes) Yenghi.'

- b. (Ung) Chelswu-nun *pro*<sub>i</sub> manna-ss-e, (Yenghi-lul<sub>i</sub>).  
 (yes) Y-Top meet-Pst-Dec Y-Acc  
 '(Yes,) Yenghi met him, (Yenghi).'

In (58a, b), both a fragment answer and a RDC are possible to reply to the question italicized in English. In Ahn and Cho's (2016, 2017) analysis, I assume (59) and (60) for (58a) and (58b) respectively.

(59) [Yenghi-lul<sub>i</sub> [<sub>XP</sub> Chelswu-ka —<sub>t<sub>i</sub></sub>— manna-ss-e]]

(60) [<sub>S1</sub> Chelswu-ka *pro*<sub>i</sub> manna-ss-e]  
 [<sub>S2</sub> Yenghi-lul<sub>i</sub> [ ~~Chelswu-ka —<sub>t<sub>i</sub></sub>— manna-ss-e~~ ]]

In (59), the object is scrambled to the left while PF deletion is applied to the remaining constituent. The same process is observed in S<sub>2</sub> of (60). Importantly, these comparisons between RDCs and fragment answers support the proposed non-uniform analysis of RDCs.

Let us look at one more property of fragment answers in (61), where it is fine to add the copula to the fragment answer.

- (61) *Did Chelswu really meet Yenghi-luli?*  
 Yenghi-i-ta.  
 Y.-Cop-Dec  
 'It is Yenghi.'

Based on the possibility of copula insertion and the possible interpretation in (61), I suggest a cleft construction for the fragment answer, schematized in (62) (see also Ahn and Cho 2017 for a cleft interpretation of a fragment answer with the copula).

(62) [<sub>XP</sub> ~~Chelswu-ka —<sub>t<sub>i</sub></sub>— manna-n kes-un~~] Yenghi<sub>i</sub>-i-ta.

(62) involves a cleft construction, where the presuppositional clausal constituent XP can be deleted at PF. What is relevant to the proposed analysis of RDCs is

that if Ahn and Cho's (2016, 2017) claim for parallelisms between fragment answers and RDCs (with *pro*) is correct to support a bi-clausal structure, it is also possible to maintain the proposed analysis of a RDC with a cleft in (30). Since fragment answers can be in a cleft construction, and some RDCs can likewise involve clefts for the second clauses of a bi-clausal structure.

To summarize, I elaborated on Ahn and Cho's (2016, 2017) analysis of RDCs associated with fragment answers and showed that a RDC with *pro* can be in parallel to fragment answers. However, a RDC with a trace is incompatible with their analysis of fragments. This argument upholds the proposed non-uniform analysis. Moreover, if the assimilation of a fragment analysis to RDCs by Ahn and Cho is on the right track, the proposed analysis of a RDC with a cleft also receives support, due to the possibility of a cleft analysis for fragment answers.

## 5. Conclusion

I examined Korean RDCs in light of preverbal (empty) categories relative to postverbal elements, and argued for a non-uniform analysis of the constructions. I showed that preverbal null elements in RDCs are possibly a trace, *pro*, or an argument ellipsis as in the case of non-RDCs. Only in the case of a RDC with a trace, a postposed element is not omissible in given contexts since it serves as antecedent of the trace in the same clause. In contrast, a RDC with *pro* or an argument ellipsis exhibits that these null arguments are not referentially dependent on the postposed element. Moreover, contra Ko (2015, 2016) and Ahn and Cho (2016), I demonstrated that there exists no difference between gapped RDCs and gapless RDCs in terms of information structure and semantic predication relations between elements pre- and postverbally except that a RDC with a trace is incompatible with gapless RDCs in terms of semantic predication relations. What the present paper offers is only a rough outline of the possibility of a non-uniform analysis of RDCs. Nevertheless, to the extent that the non-uniform analysis that I have suggested is successful, it yields three important results. A RDC with a trace has a mono-clausal structure while a RDC with *pro* or an argument ellipsis is bi-clausal. Secondly, the second clause of RDCs in a bi-clausal structure may be possibly a cleft, as opposed to RDCs in

a mono-clausal structure. Thirdly, both parallelisms and non-parallelisms exist between fragment answers and RDCs since the latter are not always bi-clausal.

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