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Defending a Move & Delete Analysis of Korean Extraposition

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Park, Myung-Kwan. (2023). Defending a move & delete analysis of Korean extraposition. *The Linguistic Association of Korea Journal*, *31*(3), 89-111. This paper defends a Move & Deletion analysis for Korean Extraposition advanced in Park and Kim (2009). Rejecting Abe's (2019) covert Move (scrambling) & Late Merge analysis proposed for Japanese Extraposition and concurring with Ko's (2022b) empirical assessments of Korean Extraposition that pose potential challenges to Abe's approach, we keep to the idea proposed in Park and Kim (*ibid*.) that only a relative clause (RC)/AP undergoes LBC-violating overt scrambling from the second clause, which is in turn subject to ellipsis thereby repairing an LBC violation. This analysis is shown to have several advantages. Unlike covert QR to derive Extraposition in English, scrambling feeding Extraposition in Korean can be successive-cyclic, thereby obviating the Right Roof Constraint in this language. Since in Korean there is no covert or overt movement of the NP modified by a RC, the NP is correctly predicted to have narrow scope below a higher scope-bearing element. As in Korean there is no Late Merge fed by covert movement, the R-expression contained in a relative clause always violates Binding Condition (C). We also show what Ko (2022a) terms 'deep LBC effects' arise not only in Korean and English and does not count as a challenge for the Move & Delete analysis in deriving Extraposition.

Key Words: extraposition, bi-clausal structure, move & delete, scrambling, QR, late merge

1. Introduction

In Korean, a relative clause (RC) is generally immediately followed by the noun phrase (NP) it modifies, as in (1a), but it can be apparently rightwards moved to the end

of the sentence, as in (1b):

(1) a. John-i [acwu yeppun] sinpwu-lul manna-ass-ta.
-NOM very pretty bride-ACC meet-PST-DCL
'John met a very pretty bride.'
b. John-i sinpwu-lul manna-ass-ta, [acwu yeppun].
-NOM bride-ACC meet-PST-DCL very pretty
'John met a bride, very pretty.'

Park (2017) argues that the process of rightward movement in (1b) is analogous to what is famously known as Extraposition in English, which generates the following sentences:

(2) a. I want to see someone armed and alert at every window.
b. I want to see someone at every window, armed and alert.
(3) a. Susan said something that nobody expected more than once.
b. Susan said something more than once, that nobody expected.

There is no shortage of syntactic approaches to Extraposition. The main ones are (rightward) A' movement, base generation, ellipsis, and stranding. They are given in (4), with selected references.

(4) Analytical approaches to extraposition:
a. A' movement (Baltin, 1978; Müller, 1995; Büring & Hartmann, 1997; Overfelt, 2015)
b. base generation (Culicover & Rochemont, 1990)
c. ellipsis (de Vries, 2002, 2009)
d. stranding (Kayne, 1994; Barbiers, 1995; Wilder, 1996; Sheehan, 2010)

Park's (2017) analysis of Korean RC Extraposition is grounded on the interaction of ellipsis and a locality on specifying coordination, continuing with Park and Kim's (2009) previous account for it. In this analysis, (1b) is derived in the following way.

(1b)′ John-i sinpwu-lul manna-ass-ta,
John-NOM bride-ACC meet-PST-DCL
[acwu yeppun] [~~John-i [t sinpwu-lul] manna-ass-ta~~].
very pretty John-NOM bride-ACC meet-PST-DCL

The underlying structure deriving the extraposed RC is composed of the two parallel clauses meeting a locality/economy requirement on specifying coordination (Otto & de Vries, 2016).[1] The RC at hand is extracted from the second clause that undergoes Sluicing/Fragmenting-like clausal ellipsis repairing a violation of the Left Branch Condition due to its extraction.

As given in (4), there are different approaches to Extraposition, and more recently, a new approach based on QR and Late Merge (LM) has been added to the existing ones, uncovering new empirical aspects of Extraposition. This new approach was initially proposed by Fox and Nissenbaum (1999), recently advanced by Fox (2017) and Overfelt (2017), and also extended by Abe (2019) to Japanese Extraposition or what Abe terms 'Japanese postverbal adnominal adjuncts.' The purpose of this paper is to assess the validity of the QR-cum-LM approach to Extraposition and show that the new empirical findings discovered by this approach can be subsumed under Park and Kim's (2009) and Park's (2017) previous analysis of Korean Extraposition at issue.

The paper is structured as follows. Section 2 rehearses Abe's (2019) covert scrambling & LM approach to Japanese Extraposition. Section 3 reviews some empirical aspects of Korean Extraposition that Ko (2022b) takes to pose challenges to Abe's approach. Based on Ko's (2002b) empirical assessments of Abe's approach, Section 4 argues against it and goes on to propose an alternative analysis of Korean Extraposition. Section 4 uses the proposed alternative analysis of it to account for Ko's (2022b) empirical points. Section 5 wraps up with a summary and conclusion.

1) The comma (,) or em dash (—) is evidently taken to serve as a coordinator signaling that the second clause specifies the first clause (See also Koster (2000)).

2. Abe's (2019) Approach to Japanese Postverbal Adnominal Adjuncts

Abe (2019) for his analysis of Japanese postverbal adnominal adjuncts departs from Fox and Nissenbaum's (1999) account for English Extraposition in some respects. In the latter account, for example, the following sentence in (6a) is derived as represented in (5b):

(5) a. We saw a painting yesterday [by John].
b. We saw [a painting] yesterday [[~~a painting~~][by John]]
|_____①covert QR____↑ ↑②Late Merge

The two operations are critical in deriving the 'extraposed' PP adjunct. One is the covert QR that is analogous to Heavy NP Shift or Rightwards Focus Movement. By the nature of the covert QR, not the head but the tail of the chain formed by it is overtly realized. Crucially, the covertly QR-ed DP 'a painting' hosts the PP 'by John' that undergoes Late Merge.

Abe (2019) embraces Fox and Nissenbaum's (1999) covert movement and LM approach to account for Japanese Extraposition, but with some modifications. Unlike Fox and Nissenbaum, Abe assumes a bi-clausal structure to derive Japanese postverbal adnominal adjuncts, as follows:

(6) a. John-ga kinoo syoozyo-ni att yo, [siroi boosi-o kabutteiru].
John-NOM yesterday girl-DAT saw white hat-ACC is.wearing
'John saw a girl yesterday, who was wearing a white hat.'
b. John-ga kinoo syoozyo-ni att yo,
③PF-Ellipsis
[siroi boosi-o kabutteiru] [~~syoozyo-ni~~] [~~John-ga kinoo syoozyo-ni att yo~~]
↑②Late Merge ↑__①Covert leftward Scrambling__|

In Abe's approach to Japanese Extraposition, covert leftward scrambling rather than QR in English is postulated and, since a bi-clausal structure is assumed for the construction at issue, PF Ellipsis strips off the repeated structure of the second clause.

3. Ko's (2022b) Assessment of Abe's Approach to Japanese Extraposition

In her analysis of Korean Extraposition or what she calls Korean Adjunct Stranding, Ko (2022b) assesses the validity of Abe's approach to Japanese Extraposition. In her assessment, Ko compares Korean and English Extraposition, underscoring their differences in some empirical aspects. First, it is noted that an indefinite in object position only takes wide scope over an opaque verb when its adjunct modifier is extraposed:

(7) a. They are looking in vain for a book by Ronald Reagan. (The guy can't write.)
(look for >∃, ∃> look for)
b. #They are looking for a book in vain by Ronald Regan. (The guy can't write.)
(*look for >∃, ∃> look for) Fox and Nissenbaum (1999)

Unlike (7a) without Extraposition that is interpreted ambiguously, (7b) with PP Extraposition only has a reading of the opaque verb 'look for' taking wide scope over the indefinite 'a book'. In other words, the existence of 'a book' is necessarily presupposed in (7b), but not in (7a).

Ko (2022b) notes that in contrast to English Extraposition, its Korean counterpart as in (9b) retains the same indefinite scope reading that the non-Extraposition sentence in (8a) has.

(8) a. Fred-nun [koyangi kulim-i iss-nun] kapang-ul chacko iss-ess-e.
F.-TOP cat picture-NOM be-REL bag-ACC look.for be-PST-DCL
'Fred was looking for a bag that has a picture of a cat.'
(ambiguous, look for >∃, ∃> look for)
b. Fred-nun kapang-ul chacko iss-ess-e, [koyangi kulim-i iss-nun].
F.-TOP bag-ACC look. for be-PST-DCL cat picture-NOM be-REL
'Fred was looking for a bag that has a picture of a cat.'
(ambiguous, look for >∃, ∃> look for)

Second, it is also noted that the extraposition of an NP-modifying adjunct bleeds Binding Condition (C) (Culicover and Rochemont, 1990; Fox and Nissenbaum, 1999):

(9) a. *I sent her$_1$ my gifts [that Mary$_1$ didn't like] last years.
b. I sent her$_1$ my gifts last years [that Mary$_1$ didn't like].
(10) a. * I gave him$_1$ a picture [from John$_1$'s collection] yesterday.
b. I gave him$_1$ a picture yesterday [from John$_1$'s collection].

The contrast between (a)- and (b)-examples in (9) & (10) provides convincing evidence that in the surface structure the NP-modifying adjuncts in the (b)-examples are displaced outside the c-commanding domain of the object DP, but not placed in the lower positions.

Ko (2022b) notes that unlike English Extraposition, its Korean counterpart as in (11b) does not bleed Binding Condition (C) that rules out the non-extraposition sentence in (11a):

(11) a. *Nay-ka ecey ku-eykey$_1$ [John-i$_1$ kuli-n] kulim-ul cwu-ess-ta.
I-NOM yesterday he-DAT J.-NOM draw-REL picture-ACC give-PST-DCL
'I gave him a picture that John drew yesterday.'
b. *Nay-ka ecey ku-eykey$_1$ kulim-ul cwu-ess-ta [John-i$_1$ kuli-n].
I-NOM yesterday he-DAT picture-ACC give-PST-DCL J.-nom draw-REL
'I gave him a picture yesterday that John drew.'

Third, Newmeyer (2000) notes that pre-modifying APs cannot be extraposed from the nominals that they modify, no matter how heavy they are, as in (12):

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

As in (13) and (14), only post-modifying APs or RCs can undergo Extraposition:

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

While deeply embedded pre-modifying APs cannot be extraposed as in (12), Fox (2017) notes that post-modifying RCs can be more deeply embedded, but they can

undergo Extraposition as in (15b)

(15) a. We [[looked at [a house owned by [someone [who teaches at UCLA]]]] yesterday].
b. ?We [[[looked at [a house owned by someone]] yesterday] [who teaches at UCLA]].

Ko (2022b) notes that in this context, Korean Extraposition apparently does not behave in the same fashion as its English counterpart, as in (16):

(16) *Wuli-ka ecey nwukwunka-uy cip-ul poassta.
we-NOM yesterday someone-GEN house-ACC saw
[UCLA-eyse kaluchi-nun].
UCLA-at teach-REL
'We looked at someone's house who teaches at UCLA.'
(17) Wuli-ka ecey cip-ul poassta.
we-NOM yesterday house-ACC saw
[UCLA-eyse kaluchi-nun], nwukwunka-uy.
UCLA-at teach-REL someone-GEN
'We looked at someone's house who teaches at UCLA.'

Unlike (17), where the RC along with the Genitive-marked nominal it modifies can be extraposed, in (16) only the RC stranding the Genitive-marked nominal cannot be extraposed. Ko characterizes the ungrammaticality of the latter as stemming from 'deep LBC effects' since the RC is extraposed not from the man constituent of the sentence, but from the more deeply embedded Genitive-marked pre-nominal, that is, from the sub-constituent as part of the main constituent of the sentence.

To summarize, Ko argues that the different empirical aspects of Korean Extraposition from those of English Extraposition pose challenges to the covert scrambling & Late Merge Analysis of Korean Extraposition. We concur with Ko in regard to the empirical points that she makes with the examples presented in this section. In the next section, we bring out some problems with extending Abe's covert movement-cum-Late Merge approach to Korean Extraposition and explores an alternative approach to it.

4. The Validity of Covert Movement & Late Merge in Korean

It has been argued in great details in Saito (1985) and Hoji (1985) that the covert leftward scrambling that Abe (2019) adopts for his analysis of Japanese Extraposition would over-generate quantifier-scope readings in Japanese/Korean. As in (18), the two quantifiers in Korean do not interact, yielding the unambiguous reading reflecting the surface rigid word order between them.

(18) Haksayng han myeng-i sensayng-nim motwu-lul pinanha-yess-ta.
student one CLF-NOM teacher-HOR every-ACC blame-PST-DCL
'One student blamed every teacher.' (∃ > ∀; *∃ < ∀)

Since the overt scrambling of the object QP over the subject QP as in (19) gives rise to scopally ambiguous readings, overt scrambling has the same function as covert QR in English.

(19) sensayng-nim motwu-lul$_1$ [Haksayng han myeng-i t_1 pinanha-yess-ta].
teacher-HOR every-ACC student one CLF-NOM blame-PST-DCL
'One student blamed every teacher.' (∃ > ∀; ∃ < ∀)

Simply speaking, if covert leftward scrambling were allowed, only the unambiguous reading available to (18) could not be accounted for.

Dismissing covert left scrambling as a strategy of feeding Late Merge in the derivation of Japanese/Korean Extraposition, we also doubt a rationale for applying Late Merge to a covertly moved element to derive Korean Extraposition constructions. The problem lies in the particular form of the inflectional ending on an AP/RC adjunct or a nominal possessor in Korean:

(20) a. [[Cheli-ka manna-**n**] salam]-i onul hakkyo-lul pangmwunhayssta.
Cheli-NOM meet-REL person-NOM today school-ACC visited
'The person who Cheli met visited my school today.'
b. [[Cheli-**uy**] appa]-ka onul hakkyo-lul pangmwunhayssta.

Cheli-GEN father-NOM today school-ACC visited
'Cheli's father visited my school today.'

As in (20a-b), NP-modifying APs or RCs in Korean are inflected with the relativizer '-n', and nominative possessives are inflected with the genitive Case/case particle '-uy'. These inflections are contextually determined in the presence of overtly realized, modified or possessed NPs together with modifying APs/RCs or nominal possessors.

Given that neither covert movement nor Late Merge is not a viable strategy in deriving Korean Extraposition, we resort to the proposal made in Kim and Park (2009) and Park (2017) that NP-modifying APs/RCs alone undergo leftward movement. Indeed, this movement violates the Left Branch Condition, but this violation can be repaired by clausal ellipsis, as schematically presented in (1b)', repeated below:

(1b)' John-i sinpwu-lul manna-ass-ta,
John-NOM bride-ACC meet-PST-DCL
[acwu yeppun] [~~John-i t sinpwu-lul manna-ass-ta~~].
very pretty John-NOM bride-ACC meet-PST-DCL
↑_____| ②LBC violation ③Repair by Ellipsis
①RC scrambling

The upshot we would like to make here is that when there is no covert movement in Korean, the ensuing Late Merge of a RC is in fact hard to postulate. In fact, there is an argument from the locality that an extraposed RC has with the preceding host clause. As a background this argument, in a neutral situation where the host NP in the preceding clause that the extraposed RC associates with doesn't carry focus, there is a proximity effect, as noted by Ko (2014) and Chung (2016). Thus, in the following example the extraposed RC associates not with the distant subject NP 'emma' but with the proximate object NP 'chinkwu'.

(21) Emma-ka chinkwu-lul mathu-eyse manna-ess-e,
Mother-NOM friend-ACC mart-at meet-PST-DLC
[$_{RC}$ ppalkah-ko khun moca-lul ssu-n].
red-and big hat-ACC wear-REL
'Mother met her friend at the mart, who wore a big red hat.'
[*?host=emma 'mother']

However, this proximate effect is suspended when the RC (alternatively together with the host NP) is repeated, as follows:

(22) [$_{RC}$ ppalkah-ko khun moca-lul ssu-n] emma-ka chinkwu-lul
red-and big hat-ACC wear-REL mother-NOM friend-ACC
mathu-eyse manna-ess-e, [$_{RC}$ ppalkah-ko khun moca-lul ssu-n].
mart-at meet-PST-DCL red-and big hat-ACC wear-REL
'Mother met her friend at the mart, who wore a big red hat.' [host='emma']

(23) Emma-ka chinkwu-lul mathu-eyse manna-ess-e,
Mother-NOM friend-ACC mart-at meet-PST-DCL
[$_{RC}$ ppalkah-ko khun moca-lul ssu-n] emma-ka.
red-and big hat-ACC wear-REL mother-NOM
'My mother met a friend at the mart, my mother who wore a big red hat.'
[host='emma']

In (22), only the RC is repeated, while in (23), the RC together with the host NP is repeated, as part of Extraposition, allowing itself to associate with the distant host NP.[2] (22) is analogous to (23) in the obviation of the proximate effect, implying that in the derivation of (22), the host NP as well as the RC is extracted from the second clause, like in (23) but unlike in (5)(=1b).

(24) [$_{RC}$ [ppalkah-ko khun moca-lul ssu-n] emma-ka] chinkwu-lul
mathu-eyse manna-ess-e, [[$_{RC}$ ppalkah-ko khun moca-lul ssu-n]
~~emma-ka~~]$_1$ [~~t$_1$ chinkwu-lul mathu-eyse manna-ess-e~~].
↑_____|

In (24), accompanying the process of deleting the second clause right after excavating the remnant, the optional elision of the NP that the RC modifies comes about via Max Elide (Park, 2016) or Extra Deletion (An, 2016). By contrast, in (5)(=1b) only the RC is

2) Ahn and Cho (2016) and Ko (2016) note that in Korean, right dislocation allows for the repetition of a host element and this case also induces island redemption effects, as in (i)
(i) Cheli-nun [emma-ka sacwu-n] cha-lul ilhepeliesse, emma-ka.
C.-TOP mom-NOM buy.give-REL car-ACC lost mom-NOM
'Cheli lost the car that his mother bought for him.' (A&C: 432, note 3)

extracted from the second clause that undergoes ellipsis, being subject to the locality that it has with the preceding host clause.

Now before closing this section, a word is in order why Korean and English differ in the way of executing Extraposition, particularly in the mode of moving an extraposed element. Korean employs scrambling, but English uses QR. Following Fox (1999), QR abides by the economy principle on movement, thereby targeting the first proposition-denoting node that immediately dominates a quantified phrase (QP). When a QP occurs within a VP, the economy principle on QR dictates that it undergoes QR to the immediate vP. When it occurs in subject position, its QP copy in VP internal position undergoes QR to the immediate vP too. Additionally, since QR cannot be successive cyclic (May 1977; 1985), Extraposition (and other kinds of rightward movement like Heavy NP Shift) is severely restricted, with its movement being restricted to the minimal node that QR targets. Though there are some works reporting the exceptions to it (cf. Tiedeman, 1995; Baltin, 2017; Overtfelt, 2015; Fox, 2017, among others), this generalization on rightward movement as an instance of QR has been well established (See Baltin (2017) for a review paper on the last four-decade studies of English Extraposition).

Unlike English, Korean employs scrambling since it has the same function as English QR, being able to disambiguate QP-interacting sentences as seen above. Furthermore, since scrambling can take a long-distance movement, it can apparently violate the Right Roof Constraint, but does not induce its effects, as expected. Though it is flexible in light of the domain it can reach, Korean rightward movement including Extraposition does not target a VP/vP node nor an embedded IP/CP. We suggest that this restriction follows from the Final-over-Final Condition in (25), which precludes rightward adjunction or coordination except for the root node:

(25) The Final-over-Final Condition (FOFC) (a revised one from Biberauer et al. (2014) original version[3]: 171)
A head-final phrase αP cannot dominate a head-initial phrase βP where α and β are heads in the g-projection.

3) Biberauer et al. (2014) original version of the FOFC goes as follows:
(i) The Final-over-Final Condition (FOFC):
A head-final phrase αP cannot dominate a head-initial phrase βP where α and β are heads in the same Extended Projection. (Biberauer et al., 2014, p. 171)

To summarize this section, neither leftward covert scrambling nor Late Merge is justified for the analysis of Korean Extraposition. Rather, overt scrambling as a counterpart of English QR is a right strategy for deriving postverbal adnominal adjuncts. Furthermore, RCs alone move out of the second clause where the violation of the LBC is repaired by ellipsis.

5. Accounting for Ko's (2022b) Empirical Points

As discussed in section 3, Ko (2022b) points out some empirical aspects of Korean Extraposition that potentially pose challenges for the analysis based on the covert movement of a host NP, followed by Late Merge of a RC to it. In this section, the analysis based on the overt movement of a RC alone from the second clause that is to undergo Ellipsis, as argued in section 4, is shown to provide an effective account for those remarkable three aspects of Korean Extraposition that are different from those of its English counterpart. The first empirical point that Ko (2022b) makes concerns (8b), repeated below, where despite its association with the extraposed RC, the indefinite NP either takes wide or narrow scope in relation to the opaque verb.

(8) a. Fred-nun [koyangi kulim-i iss-nun] kapang-ul
F.-TOP cat picture-NOM be-REL bag-ACC
chacko iss-ess-e.
look.for be-PST-DCL
'Fred was looking for a bag that has a picture of a cat.'
(ambiguous, look for >∃, ∃> look for)

b. Fred-nun kapang-ul chacko iss-ess-e,
F.-TOP bag-ACC look.for be-PST-DCL
[koyangi kulim-i iss-nun].
cat picture-NOM be-REL
'Fred was looking for a bag that has a picture of a cat.'
(ambiguous, look for >∃, ∃> look for)

These scope readings in (9b) follow from our analysis, where Korean Extraposition keeps the modified NP intact, moving only the RC from the second clause to be elided. Therefore, (9b) is predicted to have the same scope interpretations that the non-

Extraposition sentence in (9a) has. This prediction is achieved, rendering additional support to the movement of a RC alone in the process of executing Korean Extraposition.

The second empirical point that Ko (2022b) makes is that Korean Extraposition does not bleed Binding Condition (C) as in (11), repeated below.

(11) a. *Nay-ka ecey ku-eykey$_1$ [John-i$_1$ kuli-n] kulim-ul
I-NOM yesterday he-DAT J.-NOM draw-REL picture-ACC
cwu-ess-ta.
give-PST-DCL
'I gave him a picture that John drew yesterday.'
b. *Nay-ka ecey ku-eykey$_1$ kulim-ul cwu-ess-ta
I-NOM yesterday he-DAT picture-ACC give-PST-DCL
[John-i$_1$ kuli-n].
J.-nom draw-REL
'I gave him a picture yesterday that John drew.'

Recall that in Korean, there is no covert scrambling nor covert QR of the NP that an RC modifies, therefore there is no point of the scrambling process feeding the Late Merge of the RC. Entering into morphological agreement relation with it, the RC needs to be inserted, adjoining to the object NP in situ. Therefore, the R-expression within the RC in Korean invites a violation of Binding Condition (C), in the same fashion that its counterpart in the complement clause of English does, as in (26a):

(26) a. *Whose claim [that John$_1$ likes Mary] did he$_1$ deny t?
b. Which claim [that John$_1$ made t] did he$_1$ later deny t?
(Lebeaux, 1991, p. 211)

In short, the R-expression inside the RC of (11a) violates Binding Condition (C) when the RC is in underlying position, in the same fashion as the non-Extraposition sentence in (11a).

The third point that Ko (2022b) notes is what she calls 'deep LBC effects.' In initial appearance, Korean differs from English in light of deep LBC effects because (16) of Korean is ungrammatical, but (15b) of English is grammatical. But (15b) of English is not exactly a counterpart of (16), in that as Fox (2017) notes, covert QR moves the relative

head out of the embedded structure. If the RC itself needs to be moved out of the embedded structure without the aid of QR, Extraposition in English is also impossible as in (12b).[4] Thus, (12b) is exactly a counterpart of (16).

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

(15) a. We [[looked at [a house owned by [someone [who teaches at UCLA]]]] yesterday].
b. ?We [[[looked at [a house owned by someone]] yesterday] [who teaches at UCLA]].

(16) *Wuli-ka ecey nwukwunka-uy cip-ul possta.
we-NOM yesterday someone-GEN house-ACC saw
[UCLA-eyse kaluchi-nun].
UCLA-at teach-REL
'We looked at someone's house who teaches at UCLA.'

The unextractability of an adjunct from within the embedded structure even to be elided needs to be explicated in great details. The generalization we draw from 'deep LBC effects' in Korean and English is that the elements at the left (in Korean) and right (in English) edge of nominals as major (i.e., not embedded) clausal constituents can undergo Extraposition, but they cannot when they are further more deeply embedded. We suggest that the fact that such elements can undergo Extraposition indicates that only their otherwise illicit movement from the periphery of the major clausal constituent nominals can be repaired by ellipsis. This means that if some elements are moved not from the periphery of but from the further inside of major clausal constituent nominals, their chain links recorded with *-marking cannot be repaired by ellipsis, eventually yielding ungrammatical sentences (See Lasnik (2001) for the discussion on the restrictive effects of repair-by-ellipsis). We just assume that elements like nominal-internal adjuncts

4) Likewise, Barros et al. (2013) also note that Sluicing cannot extract an AP from within a DP to be elided. Thus, the stranded AP 'how tall' in (ia) is not derived from the underlying structure in (ib), but from that in (ic), only allowing for a predicative reading.
(i) a. John met a tall man, but I'm not sure [how tall].
b. *John met a tall man, but I'm not sure how tall he met a t man.
c. John met a tall man, but I'm not sure [[how tall] [~~he is t~~]].

are spelled out immediately upon their (Pair) Merge, and thus when the nominal structure embedding them is completed, they are not available as elements that undergo Extraposition. However, even when the nominal structure embedding them is completed, the nominal-modifying left-edge adjunct RCs and Genitive-marked nominals in Korean (and the nominal-modifying right-edge adjunct RCs and APs in English) are accessible as the elements that undergo Extraposition.

6. Apparent Challenges to the Bi-Clausal Analysis of Right Dislocation

We have assumed that Korean Extraposition derives from bi-clausal structure composed of the first host clause and the second clause that undergoes clausal ellipsis after the excavation of a RC or AP remnant from it. In Park and Kim (2009) the bi-clausal structure was adopted for right dislocation (RD) in general, whose paradigmatic example is as follows:

(27) a. Chelswu-ka mek-ess-ta, sakwa-lul.
Chelswu-NOM eat-PST-DCL apple-ACC
'Chelswu ate an apple.' (Choe 1987:40)
b. Chelswu-ka mek-ess-ta, [sakwa-lul] [~~Chelswu-ka t mek-ess-ta~~]
↑_①Overt Scrambling_| ②Ellipsis

(27a) is derived in a now familiar way via Move & Delete; The 'right dislocated' element 'sakwa-lul' undergoes Move from the second clause, which is in turn subject to Delete. Ko (2022a) raises some challenges to this Move & Delete account for right dislocation. In this section, by addressing these challenges, we reinforce the validity of the Move & Delete account, which is an underpinning of Extraposition.

First, QP -QP/NEG interactions in RD are differentiated from scrambling in available readings. This difference between RD and scrambling proper is crucially attributed to the (scope) parallelism that is at work in the bi-clausal structure of specifying coordination for RD, but not scrambling. In (28a), regular scrambling of the QP over the negation retains ambiguous readings that their interaction gives rise to. In (28b), however, RD-generating scrambling of a QP over the negation in the second clause allows only the wide scope

reading of a QP over the negation. This arises because the elision of the negation as part of the second clause disallows the scope of the negation over the QP. Since there is no scope interaction in the first clause, only the available scope reading available to the QP in the second clause prevails.

(28) QP-NEG interactions (Chung, 2009, p. 11; Ko, 2014, p. 283):
a. Twul-ta Cheli-ka __ manna-ci ani-ha-yess-e. [scrambling]
two-all C.-NOM meet-CI NEG-do-PST-DCL
'Cheli did not meet two of them.' (two > NEG, NEG > two)
b. Cheli-ka __ manna-ci ani-ha-yess-e, twul ta. [RDC]
C.-NOM met-CI NEG-do-PST-DCL two all
'Cheli met neither of them.' (two > Neg, *Neg > two)

The QP-QP interaction in (29) also behaves in the same fashion. Regular scrambling of a QP over another QP gives rise to ambiguous readings as in (29a), but its counterpart that generates RD does not, allowing for the narrow-scope group reading of the right-dislocated (RD-ed) QP. Since as pointed out above there is no scope interaction in the first clause of (29b), by dint of parallelism the RD-generating scrambling of the object QP over the subject QP does not result in their interaction, thus eventually giving rise to the narrow-scope group reading of the right-dislocated/scrambled QP.[5)]

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5) Ko (2022a) notes that Fragmenting constructions in Korean as in (ia) and (ib), taken from (Ko, *ibid.*), behave in the analogous fashion as (28) and (29) in QP-NEG/QP interactions:
(i) A: Mary-ka motwu ta an manna-ss-ni? [Fragmenting]
M.-NOM all NEG meet-PST-Q
(Lit.) 'Didn't Mary meet all/any of them?' (all > Neg, Neg > all)
B: Ung. motwu ta.
Yes. all (of them).
(Lit.) 'Yes, Mary did not meet all of them.' (all > Neg, *Neg > all)
(='No, Mary didn't meet any of them.')
(ii) A: Two ai-ka mwues-ul po-ass-ni? [Fragmenting]
two child-NOM what-ACC see-PST-Q
'What did two children watch?'
B: motun yenghwa-lul(-yo).
all movies-ACC-POL
'All the movies.' (*all > 2, 2 >all)

(29) QP-QP interactions (Choi, 2008; Ko & Choi, 2009; Ko, 2014, p. 284):
a. Motun yenghwa-lul twu ai-ka __ po-ass-e-yo. [scrambling]
all movies-ACC two child-NOM see-PST-DCL-POL
'Two children watched all the movies.' (all > 2, 2 > all)
b. Twu ai-ka __ po-ass-e-yo, motun yenghwa-lul. [RDC]
two child-NOM see-PST-DCL-POL all movies-ACC
'Two children watched all the movies.' (*all > 2, 2 > all)

Second, Ko (2022a) also notes that there is a difference between RD and Fragmenting in licensing NPIs.

(30) A: Cheli-ka nwukwu-lul manna-ss-ni?
C.-NOM who-ACC meet-PST-Q
'Who did Cheli meet?'
B: Amwuto. [Fragmenting]
'anyone'
'Anyone.'
(31) a. *Cheli-ka manna-ss-e, amwuto. [RD]
C.-NOM meet-PST-DCL anyone
'Cheli met anyone.'
b. Cheli-ka manna-ci anh-ass-e, amwuto. [RD]
C.-NOM meet-CI NOT.do-PST-DCL anyone
'Cheli didn't anyone.'

In (30) of Fragmenting, the standing-alone fragment NPI associates with the preceding sentence that contains a Q-marker, whereas in the grammatical example (31b) of RD, the RD-ed NPI associates with the preceding clause that contains a negation. We suggest that the Q-marker in the first question sentence of (30) is a manifestation of the sigma (Σ) category that encompasses a sentence polarity as well as a question force (Chomsky, 1957; Laka, 1990). Meeting the identity in ellipsis with the Q-particle through the shared feature of Σ, the negation to be elided as part of the second answer sentence can license the standing-alone NPI (Watanabe 2004; Chung 2012; Park, 2013 for the similar line of analysis). By contrast, since the first clause of RD in (31a) is a positive statement, its second clause is absolutely a positive statement, which cannot license the RD-ed NPI at

any point of derivation.

Third, as noted by Ko (2022a), there is an additional contrast between RD and Fragmenting in light of island sensitivity, as follows:

(32) *Cheli-nun [__ sacwu-n] mokkeli-lul peli-ess-e, emma(-ka).
C.-TOP buy-ADN nextlace-ACC throw.away-PST-DCL mommy-NOM
'Cheli threw away the necklace that his mother bought for him.'
(Ko 2014: 299) [RD]

(33) A: Cheli-nun [nwu-ka sacwu-n] mokkeli-lul peli-ess-ni?
C.-TOP who-NOM buy-ADN nextlace-ACC throw.away-PST-Q
(Lit.) 'Who is such that Cheli threw away the necklace that the person bought for him?'
(=) 'Who bought the necklace that Cheli threw away?'
B: Emma(-ka).
mommy-NOM [Fragmenting]
'Mommy.' (Ko, 2022a, p. 13)

This contrast follows from the now celebrated distinction between Sprouting- and Merger-type of ellipsis (particularly, Sluicing), attributed to Chung, Ladusaw, and McCloskey (1995). The occurrence of an overt correlate to the remnant moved out of ellipsis obviates the latter's island violation. However, the absence of such a correlate incurs an island violation. This is the exact reason that (32) is ruled out because there is no correlate to the RD-ed remnant. By contrast, the existence of a correlate to the fragment answer in the antecedent clause in (33) lifts an island violation.

Likewise, there is a contrast between the two constructions in regard to 'deep LBC effects', as follows:

(34) a. Na-nun [[__] cha-lul] pilli-ess-e, Yenghi-uy.
I-TOP car-ACC borrow-PST-DECL Y.-GEN
'I borrowed Yenghi's car.' [RD]
b. *Na-nun [[__ emma-uy] cha-lul] pilli-ess-e, Yenghi-uy.
I-TOP mommy-GEN car-ACC borrow-PST-DECL Y.-GEN
'I borrowed Yenghi's mother's car.' [RD]

(35) A: Ne-nun [[nwukwu-uy emma-uy] cha-lul] pilli-ess-ni?
You-TOP who-GEN mommy-GEN car-ACC borrow-PST-Q
'Whose mother's car did you borrow?'
B: Yenghi-uy.
Y.-GEN [Fragmenting]
'Yenghi's' (Ko, 2022a, pp. 13-14)

In Korean, like RCs, Genitive-marked RD-ed nominals as in (34a) can be understood to have undergone Extraposition, since both of them occur at the left edge of the nominals they modify. Their parallelism is outstanding, in that Genitive-marked RD-ed nominals as well as RCs cannot undergo Extraposition when they are not at the edge of the nominals they modify, but more deeply embedded, as in (34b). As suggested above, only the elements at the edge of the nominals they modify can be repaired by ellipsis when they move out of the nominals. When they are more deeply embedded inside nominals, they are not accessible as moving elements since they are already spelled out before being probed from outside. But deep LBC effects do not arise in Fragmenting where an answering fragment has an overt correlate in the preceding question sentence. To repeat, the overt correlate obviates deploying the movement strategy, hence no island effects like deep LBC effects in Merger-type of Fragmenting constructions.

7. Summary and Conclusion

This paper has investigated Korean Extraposition, taking a comparative syntactic approach to it vis-à-vis its English counterpart. We have started with critically reviewing Abe's (2019) covert scrambling & Late Merge approach to Japanese Extraposition and assessing Ko's (2022b) empirical aspects of Korean Extraposition that pose potential challenges to Abe's approach. Arguing that covert scrambling and Late Merge are not empirically motivated in Korean, we resort to the Move and Delete approach as a viable strategy in deriving Korean Extraposition. The gist of this approach is that Korean Extraposition initially has bi-clausal structure and is derived by overt scrambling of a RC/AP alone from the second clause that is to undergo clausal ellipsis. It accounts for the ambiguous interpretation of an indefinite host NP w.r.t. negation since it is in-situ, for the bleeding effects of BC (C) since a RC/AP does not use Late Merge, and for the deep LBC

effects since an RC/AP needs to undergo literal movement in the absence of its correlate. To the extent that these accounts are successful, these empirical aspects of Korean Extraposition render compelling or conclusive evidence supporting a Move and Delete approach to the construction at issue.

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