

# An RP Analysis of ECM in Korean and Mongolian<sup>1</sup>

Sun-Woong Kim  
(Kwangwoon University)  
2020

## 1. Introduction

This study explores the syntactic properties of the ECM subject across languages in terms of the RP (Relator Phrase) analysis of den Dikken (2006, 2017a, 2017b). A typical ECM in English is given in (1) and its counterpart in Korean is in (2)

- (1) a. John believes [<sub>CP</sub> that Mary is pretty].  
b. John believes [<sub>TP</sub> Mary to be pretty].
- (2) a. Chelswu-ka [<sub>CP</sub> Yenghi-ka yeppu-tako] saykakhanta.  
C-nom Y-nom pretty-C think  
b. Chelswu-ka [<sub>CP</sub> *Yenghi-lul* yeppu-tako] saykakhanta.  
C-nom Y-acc pretty-C think

The case alternation of the embedded subject shown in (2) has been analyzed as an example of ECM in Korean. The categorial status of the embedded clause is also different. While (2b) has a full clausal CP as an embedded clause, (1b) has TP. The concern of this study is about the ECM subject. Differently from English, the embedded subject of ECM in Korean has been discussed to have A' properties. The NP-acc, *Yenghi-lul* in (2b) acts as a non-argument depending on the context. This is in contrast with the ECM of other typologically related languages. For example, the ECM-type case alternation is also found in closely related languages like Mongolian. Fong (2019), however, reported a number of A properties of the embedded subject in Mongolian in line with (1b) in English. According to Fong (2019), the embedded subject takes part in binding and preserves idiom interpretation in Mongolian. Many more pieces of evidence can be added in support of A properties. In contrast to A properties, tons of A'-properties of the embedded subject have been reported about Korean.

A research question is how come the ECM subject has dual properties at the same time and why languages differ about A/A' status of the subject? Traditionally, ECM is a descendant of SOR (Subject-to-Object Raising) in which the ECM subject eventually resides in A-position (object position) and hence has A-properties. ECM analyses assume that there is no actual movement but that the categorial status of the embedded clause is deficient so that Case can be assigned across the deficient TP. If the subject does not move, the ECM analysis will be comfortable with the A properties of the ECM subject. If that is the case, then, where do their A' properties come from? To accommodate the dual properties of the ECM subject, this paper proposes an RP (Relator Phrase) analysis advocated by den Dikken (2017b). To roughly illustrate the structure, look at (3) below:

---

<sup>1</sup> This paper has been greatly benefited by the discussion in the meetings of Syntax Reading Group of the Korean Generative Grammar Circle. The author appreciates their interest and comment on this paper. This work was supported by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2019S1A5A2A01036282).

(3) ... [RP Subject<sub>i</sub> [R' [CP O<sub>i</sub> [TP (*pro*<sub>i</sub>/pronoun<sub>i</sub>) ... T] C] R] V] ....

It will be argued in this paper that in (3) predication relation forms an RP, which is an inherent phase under den Dikken (2006, 2017a, 2017b).

The proposed analysis will be shown to explain the properties of Korean ECM eschewing the burden of deciding the status of Spec-CP. The dual property of the ECM subject is explained since it occupies two positions at the same time. What follows argues that ECM subject is base-generated in Spec-RP and it is related to the null operator O under predication relation in the sense of Browning (1991). If it is correct, A-properties of the ECM subject will be captured in Spec-RP and A'-properties will in Spec-CP. This solution makes use of already existing hypotheses about the argument status of each position and thus needs no extra cost. In Mongolian, the Subject in Spec-RP plays a pivotal role in syntax, producing A-property. It is not related to O which is assumed to be absent in Mongolian ECM. The embedded subject overtly moves to Spec-RP, dropping by Spec-CP which is assumed to A-position in this language.

## 2. ECM Subject

### 2.1. Korean vs Mongolian ECM

The embedded subject of the ECM in Korean is generally known to have A' properties. The gist is that the NP-acc, *Yenghi-lul* in (2b) acts as a kind of topic depending on the context. In contrast, the ECM subject of Mongolian is argued to have A properties (Fong 2019). To test this, let us assume that the creation of new antecedents for binding is a signature property of A-movement. Consider Korean examples regarding Condition (A):

- (4) a. \*ku kemsanun [Chelswu<sub>i</sub>-ka iwucoy-lako] caki<sub>i</sub>-uy caypan-eyse cungmyengha-ass-ta.  
 the prosecutor-top C-nom guilty-c self-gen trial-at demonstrate-pst-dec  
 'The prosecutor demonstrated that Chelswu was guilty in his trial.'  
 b. \*ku kemsanun [Chelswu<sub>i</sub>-lul iwucoy-lako] caki<sub>i</sub>-uy caypan-eyse cungmyengha-ass-ta.  
 the prosecutor-top C-acc guilty-c self-gen trial-at demonstrate-pst-dec  
 'The prosecutor demonstrated Chelswu to be guilty in his trial.'

This shows that the ECM subject is not in A-position unlike Mongolian. (4b) supports the idea that the ECM subject is in A'-position. These examples are in contrast with English (Lasnik 1993, Lasnik and Saito 1991). In (4b), *caki* is not bound by *Chelswu*, in the same way as it is in (4a). If the embedded subject is in A-position, (4b) would be wrongly predicted to be licit.

Condition (B) supports the same conclusion.

- (5) a. ?Yenghi-nun [Chelswu<sub>i</sub>-ka chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mitnun-ta.  
 Y-top C-nom genius-c he-gen mother-than firmly believe-pres-dec  
 'Yenghi believes that Chelswu is a genius more firmly than his mother.'  
 b. ?(?)Yenghi-nun [Chelswu<sub>i</sub>-lul chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mitnun-ta.  
 Y-top C-acc genius-c his mother-than firmly believe-pres-dec  
 'Yenghi believes Chelswu to be a genius more firmly than his mother.'

(5a) satisfies Condition (B) since the pronoun *ku* is not c-commanded by *Chelswu* in the embedded clause, satisfying Condition (B). However, in (5b), if *Chelswu* is in A-position, the sentence is wrongly predicted to be ungrammatical. With respect to binding, the ECM subject does not seem to have A-properties.

Now let us consider Mongolian ECM. In Mongolian, the embedded subject takes part in binding and preserves idiom interpretation (Fong 2019). Mongolian, a typologically related language with Korean, shows that the ECM subject has A-properties.

- (6) a. *Öör-iin-kh n' \*i<sub>j</sub> bagsh oyuutan бүр(-iig)i sain oyuutan gej khel-sen.*  
 self-gen-epth poss.3 teacher student every(-acc)good student c say-pst  
 'His/Her teacher said that every student is a good student.'
- b. *Oyutan бүр-iigi öör-iin-kh n'i bagsh [t sain oyuutan gej ] khel-sen.*  
 student every-acc self-gen-epth poss.3 teacher [t good student c] say-pst  
 'Their teacher said that every student is a good student.'
- (For every student x, x's teacher said that x is a good student.)

(6a) shows that in Mongolian, regardless of the Case marker, the embedded subject can be bound by a QP in the matrix clause. However, if the embedded subject is raised to the matrix clause initial position, the bound variable interpretation becomes possible. Fong (2019) argues that (6b) implies that the ECM subject drops by A-position on its way to the matrix clause-initial position. Fong (2019) assumes that the intermediate landing site is Spec-CP, which turns out to be A-position in Mongolian.

The second piece of evidence that the ECM subject in Mongolian involves A-position property is regarding idiom interpretation.

- (7) *Dorj chang-aar Bat-iin nüd(-iig) oree deer-ee gar-san gej khel-sen.*  
 Dorj loud-instr Bat-gen eye(-acc) top on-refl.poss climb-pst comp say-pst  
 'Dorj said loudly that Bat was very surprised.'
- (Lit.: 'Dorj said loudly that Bat's eyes climbed on top of themselves.')

(7) shows that idiom interpretation is maintained regardless of Case alternation of the ECM subject in Mongolian (unlike in Korean). If the idiom interpretation is a diagnostic for A-position (7) shows that the ECM subject is in A-position in Mongolian. We have different conclusions about the ECM subject with respect to Korean and Mongolian.

## 2.2. Proleptic Properties and Korean ECM

It is widely agreed among Korean researchers that Korean ECM has topic-like Major Subject properties that can be linked to prolepsis (Yoon 2007, Choi 2017). Proleptic accusatives refer to the construction the matrix of which has an accusative object that is semantically related to the element in the embedded clause. Examples are given in (8) (van Koppan et al 2016):

- (8) een argument waar-van ik denk dat **het** belangrijk is. (Dutch)  
 an argument which-of I think that it important is  
 'an argument of which I think that it is important'

As shown by the Dutch (and English) example, the proleptic accusative construction is characterized by the accusative object in the matrix and its resumptive pronoun in the embedded clause. According to van Koppen et al. (2016), the proleptic accusatives are found in many languages, living or dead, like Dutch, Middle Dutch, Classical Greek, Latin, Nahuatl, etc. They also add Japanese (and possibly Korean) ECM constructions. For the purpose of discussion, compare Korean with English. Below are examples of English (Davies 2005):

- (9) a. Haley believes about Aubrey<sub>i</sub> that he<sub>i</sub> is the best candidate for the job.  
 b. Ariel knows about Jungmin<sub>i</sub> that the principal will give her<sub>i</sub> an award.

The only surface difference between the English examples in (9) and the Korean prolepsis examples in (10) is that in the latter the embedded pronoun is optional. (Yoon 2007. See Fong 2019 for Mongolian examples)

- (10) a. Ne-nun Cheli-lul/Cheli-eytayhay ettehkey sayngkakhani?  
 you-top C-acc/C-regarding how think-Q  
 'What do you think about/of Cheli?'  
 b. Na-nun Cheli-lul/Cheli-eytayhay (kunyeseke-i) tollassta-ko sayngkakhay  
 I-top C-ACC/C-regarding that guy-nom crazy-C think  
 'I think Cheli is crazy.' [parenthesis mine]

This paper argues that although there has been a considerable amount of debate on the identity of prolepsis in Korean, if it is assumed that Korean has it, it can be nicely subsumed under the RP analysis of the Korean ECM. That is, the proleptic property, A' property in other words, comes from the A'-property of Spec-CP in Korean, which is occupied by a null operator in the structure under consideration. To be concrete, this paper argues that the following examples in (11) are the proleptic accusatives in Korean, which are non-distinct with the ECM in (12).

- (11) a. John-un Mary-lul kunye-ka yepputako sayngkakhanta.<sup>2</sup>  
 J-top M-acc she-nom pretty-c think-dec  
 'John thinks that Mary is pretty.'  
 b. Mary-nun John-ul Bill-i ku-lul ttaylyesstako sayngkakhanta.  
 M-top J-acc B-nom he-acc hit-c think-dec  
 'Mary thinks that Bill hit John.'  
 (12) a. John-un Mary-lul yepputako sayngkakhanta.  
 J-top M-acc pretty-c think-dec  
 'John thinks that Mary is pretty.'  
 b. Mary-nun John-ul Bill-i ttaylyesstako sayngkakhanta.

---

<sup>2</sup> Some Koreans take this is not quite grammatical, but many others including the author accept it as grammatical.

M-top J-acc B-nom hit-c think-dec  
 'Mary thinks that Bill hit John.'

To repeat, this paper argues that Korean has the proleptic accusatives, and they are non-distinct with the ECM.

### 2.3. Korean ECM: A-property?

Many researchers reported a number of mixed properties of the embedded subject in Korean line with that in English. In contrast to the claim by Fong (2019) about ECM in Mongolian, ECM in Korean sometimes show quite an opposite property. First, in fact, Yoon (2007) claims that idiom interpretation is not maintained in Korean ECM.<sup>3</sup>

- (13) a. Hankwuksalam-un cakun kochwu-ka maypta-ko sayngkakhan-ta.  
 Koreans-top small pepper-nom hot-c think-dec  
 b. Hankwuksalam-un cakun kochwu-lul maypta-ko sayngkakhan-ta.  
 Koreans-top small pepper-acc hot-c thinks-dec  
 Literal reading; Small peppers are hot.  
 Idiomatic reading: Size/height is not a measure of toughness.  
 (13a: idiomatic, literal; 13b: \*?/?idiomatic, literal)

Differently from Yoon (2007), however, some Koreans including me take (13b) not as bad as Yoon (2007) judges. In other words, to their ears, (13b) still has its idiomatic reading. This means that the test based on idioms are shaky and inconclusive, not as solid as Yoon (2007) argues. (13b) can be a piece of evidence that Korean ECM can have A properties as well.

Second, binding seems to be obtained in Korean. Look at the following examples with respect to Conditon (B), reproduced from (5):

- (14) a. ?Yenghi-nun [Chelswu<sub>i</sub>-ka chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mitnun<sub>ta</sub>.  
 Y-top C-nom genius-c he-gen mother-than firmly believes  
 'Yenghi believes that Chelswu is a genius more firmly than his mother.'  
 b. (?Y)enghi-nun [Chelswu<sub>i</sub>-lul chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mitnun<sub>ta</sub>.  
 Y-top C-acc genius-c his mother-than firmly believes  
 'Yenghi believes Chelswu to be a genius more firmly than his mother.'

The fact is that there is speaker variation about the status of the examples in (14b). At least to

---

<sup>3</sup> Tests about idiom interpretation are not as solid as has been argued it to be. In contrast to the examples discussed above, the following example seems more or less to keep its idiomatic reading.

- (i) a. John-i olhay seuwltay-eyse miyekkwuk-ul mekessta.  
 J-nom this year SNU-at seaweed soup-acc ate-dec  
 'John ate seaweed soup at SNU this year.'  
 (Idiomatic: John failed to get admission from SNU this year.)  
 b. Mmiyekkwuk-ul John-i olhay seuwltay-eyse mekessta.  
 seaweed soup-acc J-nom this year SNU-at ate-dec

(ib) can be interpreted both idiomatically and literally to my and some of my colleagues' ears. This is probably because the adverbial *seuwltay-eyse* forces the idiomatic interpretation due to the world knowledge about college entrance and *miyekkwuk* in Korean culture. Therefore, tests based on idioms must be carefully controlled.

those who take the example bad, it can be the evidence that the ECM subject is in A-position so that it brings about Condition (B) violation.

The major evidence of A-properties of ECM subject argued for Mongolian by Fong (2019) seem to work in Korean with respect to some examples. So the question is how come the embedded subject of ECM in Korean has both A and A' properties but Mongolian has only A-properties.

### 3. Proposal

#### 3.1. Proposed Analysis

To accommodate the mixed A/A'-properties the ECM subject across languages, this paper proposes an RP (Relator Phrase) analysis advocated by den Dikken (2017b). To roughly illustrate the structure, consider (15) below:

(15) ... [RP Subject<sub>i</sub> [R' [CP O<sub>i</sub> [TP (*pro*<sub>i</sub>/pronoun<sub>i</sub>) ... T] C] R] V] ....

Den Dikken(2017b) originally proposed that his RP is advantageous in explaining the hyperraising construction, the most typical example of which is given in (16):

(16) o João parece que 'ta doente (Brazilian Portuguese)

the João seems.3sg that be.3sg sick

'John seems *like/as if/as* though he's sick.' (literal)

'João seems to be sick.'

The gist of the proposal is that the subject is base-generated in the matrix clause and from there it binds the pronoun in the embedded clause as a bound variable.<sup>4</sup>

(17) [RP Subject<sub>i</sub> [R [CP [TP pronoun<sub>i</sub> ...

The proposed analysis can be applied to explain the dual properties of Korean ECM avoiding the complicated matter of decision about the status of Spec-CP. The dual property of the ECM subject is explained through the analysis in which it occupies two positions at the same time. The ECM subject is base-generated in Spec-RP and it is related to the null operator O in a predication relation argued in Browning (1991). If it is correct, A-properties of the ECM subject is captured in Spec-RP and its A'-properties in Spec-CP. This solution makes use of already existing hypotheses about the argumenthood of each position. Let me highlight the major claims of the proposed analysis: Predication relation forms an RP, which is an inherent phase under den Dikken (2006, 2017a, 2017b); The ECM subject is base-

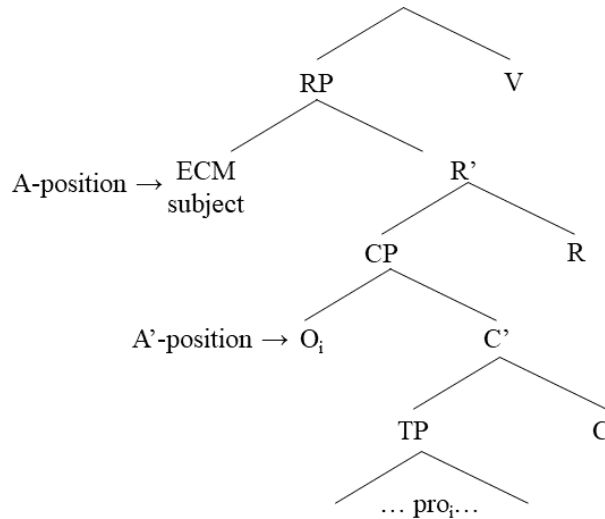
---

<sup>4</sup> The bound variable nature of the pronoun is evidenced by the obligatory sloppy identity reading when is followed by an elided clause.

(i) John<sub>i</sub> seems like he<sub>j</sub> is sick and Sue<sub>j</sub> does <seem like she<sub>j</sub>'s sick>, too.  
(John = he; Sue = she)

generated in Spec-RP, which is A-position by definition; R in Korean ECM is null or C+R if C moves up to R; A null operator (O) is assumed to move from inside the embedded CP to its edge, Spec-CP, which is A'-position; The null operator binds *pro* or pronoun as a bound variable; The ECM subject is related to the embedded CP in terms of predication. This is illustrated in (18) below:<sup>5</sup>

(18)



### 3.2. Explanandum

It is widely agreed among Korean researchers that it has topic-like Major Subject properties that can be linked to prolepsis. To recapitulate, in a prolepsis construction, a DP with a non-subject case is base-generated inside the matrix clause and the DP is resumed by a pronoun in the embedded clause (Davies 2005). Consider Korean examples below, reproduced from (10):

- (19) a. Ne-nun Cheli-lul/Cheli-eytayhay ettehkey sayngkakha-ni?  
 you-top C-acc/C-regarding how think-Q  
 'What do you think about/of Cheli?'  
 b. Na-nun Cheli-lul/Cheli-eytayhay (kunyese-k-i) tollassta-ko sayngkakhay  
 I-top C-ACC/C-regarding that guy-nom crazy-C think  
 'I think Cheli is crazy.' [parenthesis mine]

Although there has been a considerable amount of debate on the identity of prolepsis in Korean, if it is assumed that Korean has it, it can be nicely subsumed under the RP analysis of the Korean ECM. That is, the propletic property, A' property in other words, comes from the A'-property of Spec-CP in Korean, which is occupied by a null operator in the structure under consideration.

Independently from this track of analysis, an alternative is recently proposed by Fong

<sup>5</sup> This analysis is an extension of den Dikken's (2017b) recent proposal about hyperraising and copyraising in an attempt to remove the NP movement component from them.

(2019). He proposes a hyperraising analysis which assumes that Mongolian ECM is well explained under the view that ECM subject undergoes hyperraising.

- (20) a. It seems that John is smart.  
 b. John seems to be smart.  
 c. John seems that he is smart.
- (21) a. Bat [ margaash Dulmaa nom unsh-n gej] khel-sen. (Mongolian)  
 Bat tomorrow Dulmaa.nom book read-n.pst comp] say-pst  
 b. Bat [margaash Dulmaa-g nom unsh-n] khel-sen.  
 Bat tomorrow Dulmaa-acc book read-n.pst] say-pst  
 'Bat said that Dulmaa will read a book tomorrow.'

Fong (2019) adopts a movement analysis of the ECM subject to Spec-CP. She, however, has a couple of problems. One problem is that her analysis lacks generality across languages. The analysis does not hold beyond Mongolian (and some languages discussed therein). For instance, the basic paradigm given in (7) does not hold for Korean in the least. The ECM in Korean has a vast amount of research accumulated about the case alternation possibility of the subject. The early known constraint is that stative/dynamic distinction is valid (Lee 1992) but other various factors make the whole picture quite complicated (Choi 2017 and references therein). The other problem is the status of Spec-CP. Although the position has widely been accepted A'-position, she extensively argues that the Spec-CP in Mongolian is A-position.

### 3.3. Movement Issue Revisited

The approaches to the ECM subject differ about its movement. The ECM subject was analyzed to move from its original position to the matrix object position in the same way as Raising to Object (ROT, or Subject-to-Object Raising (SOR)) in English. Movement approaches, however, face many challenges as noted in Yoon (2007). One robust problem is that the movement is island-insensitive.

- (22) Na-nun Mary-lul hanunil-i mopemcekila-ko sayngkakhanta.  
 I-top M-acc doing-nom exemplary-c think-dec  
 'I think that what Mary does is exemplary.'
- (23) Na-nun Mary-lul ttenaki cen-ey mannassta.  
 I-top M-acc leave-n before met-dec  
 I met Mary before she left.

(22) has a complex NP island; (23) has an adjunct island and the acc-marked NP does not cause problems with respect to islands.

These examples show that the ECM subject is not island-sensitive, which argues against movement analysis.

The second problem has to do with reconstruction. As for reconstruction, consider that a raised nominal does not reconstruct.

- (24) a. ?Na-nun caki<sub>i</sub> sensayng-uy chwuchense-ka citohaksayngtul<sub>i</sub>-eykey  
 I-top self teacher-gen letter-nom advisees-dat  
 kakkak kongkay-toy-eyahanta-ko sayngkakhanta.



each release-pass-must-c thinks

'I believe that their teacher's letters of recommendations should be released to each advisee.'

- b. \*Na-nun caki<sub>i</sub> sensayng-uy chwuchense-lul citohaksayngtul<sub>i</sub>-eykey  
I-top self teacher-gen letter-acc advisees-dat  
kakkak kongkay-toy-eyahanta-ko sayngkakhanta.  
each release-pass-must-c thinks

Bound variable reading is not possible with NP-acc as in (24b). This argues against raising because if NP-acc is raised, it would have been reconstructed and (24b) is falsely predicted to be good.

Recall that Yoon (2007) proposed that the ECM subject undergoes major subject raising. But when the observed A-properties of the ECM subject are considered, his proposal is problematic because it cannot explain the height effect with respect to A-properties of Mongolian. Fong (2019) proposes that the movement in Mongolian is A-movement to Spec-CP. This is, however, a very costly assumption because Spec-CP has every reason to be A'-position. On top of it, Fong's (2019) solution has no crosslinguistic motivation in that it does not explain the A'-properties of Korean ECM. So, this paper adopts the RP analysis of den Dikken (2006, 2017a, 2017b) to accommodate the dual properties of Korean ECM and the single A-property of Mongolian ECM. In early 90's, influential arguments were made in support of the existence of AgroP above the embedded clause (TP) to explain the height effect of the ECM subject in English (Chomsky and Lasnik 1993, Lasnik 1993). The movement analysis gets further support from binding. Consider the following sentences (Branigan 1992).

(25)a. Joan believes [<sub>i</sub>he<sub>i</sub> is a genius] even more fervently than Bob<sub>i</sub> does.

b. \*Joan believes [<sub>i</sub>him<sub>i</sub> to be a genius] even more fervently than Bob<sub>i</sub> does.

(26)a. The king declared him to be an outlaw even more eagerly than Marcel's own squire had.

b. The king declared that he was an outlaw even more eagerly than Marcel's own squire had.

In (25a) *he* cannot c-command *Bob*, since the former is in the embedded clause LF. On the other hand, in (25b), *him* can c-command *Bob* resulting in Condition (C) violation, since the former is raised. The same explanation holds for the sentences in (26).

(27) a. ?The DA proved [*the defendants* to be guilty] during *each other's* trials.

b. ?\*The DA proved [that *the defendants* were guilty] during *each other's* trials.

In (27a), the antecedent, *the defendants*, c-commands *each other*, satisfying Condition (A). In (27b), the antecedent cannot c-command *each other*, resulting in the violation Condition (A).

Negative polarity item (NPI) licensing gives further support to the movement analysis

(28) a. ?The DA proved [*none of the defendants* to be guilty] during *any* of the trials.

b. ?\*The DA proved [that *none of the defendants* were guilty] during *any* of the trials.

Under the assumption that NPIs like *any* must be licensed by being c-commanded by its antecedent, if the antecedent *none of the defendants* is raised to the matrix, it will be able to c-command *any*. In (28b), since the antecedent remains in the embedded clause, it does not c-command *any*, failing to satisfy its licensing requirement.

Those contrasts discussed above about English are not found in Korean (Kim 1996). Condition (B) provides supporting evidence for the same conclusion. Consider the following sentences:

- (29) a. ?Yenghi-nun [Chelswu<sub>i</sub>-ka chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mit-nun-ta.  
 Y-top C-nom genius-c he-gen mother-than firmly believe-pres-dec  
 'Yenghi believes that Chelswu is a genius more firmly than his mother.'  
 b. ?Yenghi-nun [Chelswu<sub>i</sub>-lul chencay-lako] ku<sub>i</sub>-uy emeni-pota kwutkey mit-nun-ta.  
 Y-top C-acc genius-c his mother-than firmly believe-pres-dec  
 'Yenghi believes Chelswu to be a genius more firmly than his mother.'

(29a) is grammatical since the pronoun *ku* is not c-commanded by *Chelswu* in the embedded clause, satisfying Condition (B). However, in (29b), if *Chelswu* is in a position from which it can c-command *ku* then the sentence is wrongly predicted to be ungrammatical.

Condition (C) provides additional support to the same conclusion.

- (30) a. ?Yenghi-nun [ku<sub>i</sub> -ka chencay-lako] Chelswu<sub>i</sub>-uy emeni-pota kwutkey mit-nun-ta.  
 Y-top he-nom genius-c C-gen mother-than firmly believe-pres-dec  
 'Yenghi believes that he is a genius more firmly than Chelswu's mother.'  
 b. ?Yenghi-nun [ku<sub>i</sub> -lul chencay-lako] Chelswu<sub>i</sub>-uy emeni-pota kwutkey mit-nun-ta.  
 Y-top he-acc genius-c C-gen mother-than firmly believe-pres-dec  
 'Yenghi believes him to be a genius more firmly than Chelswu's mother.'

Since *Chelswu* is not c-commanded by *ku*, (30a) is grammatical satisfying Condition (C). In (30b), on the other hand, if *ku* is raised to the matrix, the sentence is wrongly predicted to be ungrammatical in violation of Condition (C).

NPI licensing provides further evidence against the movement analysis. Korean NPIs are subject to a kind of locality requirement that NPI and its antecedent should be in the same clause (Choe 1988 and Lee 1992).

- (31) a. Chelswu-ka *amwukesto* sa-ci an-ha-ass-ta.  
 C-nom anything buy-n not-do-pst-dec (n=nominalizer)  
 'Chelswu did not buy anything.'  
 b. Yenghi-ka[Chelswu-ka *amwukesto* sa-ci an-ha-ass-ta-ko] mit-ess-ta.  
 Y-nom C-nom anything buy-n not-do-pst-dec-c believe-pst-dec  
 'Yenghi believed that Chelswu did not buy anything.'  
 c. \*Yenghi-ka [Chelswu-ka *amwukesto* sa-ass-ta-ko] mit-ci an-ha-ass-ta.  
 Y-nom C-nom anything buy-pst-dec-c believe-n not-do-pst-dec  
 '(intended reading) Yenghi did not believe that Chelswu bought anything.'
- (32) a. *Amwuto* ton-ul hwumchi-ci an-ass-ta.  
 anyone money-acc steal-n not-pst-dec  
 '(intended reading) Anyone did not steal money.'

- b. Chelswu-ka [*amwuto* ton-ul hwumchi-ci *an-ha-ass-ta-ko*] mit-ess-ta.  
 C-nom anyone money-acc steal-n not-do-pst-dec-c believe-pst-dec  
 'Chelswu believed that anyone did not steal money.'
- c. \*Chelswu-ka [*amwuto* ton-ul hwumchi-ess-ta-ko] mit-ci *an-ha-ass-ta*.  
 C-nom anyone money-acc steal-pst-dec-c believe-n not-do-pst-dec  
 'Chelswu did not believe that anyone stole money.'

Now, consider the following ECM examples:

- (33) a. \*Chelswu-nun [*amwuna(-ka)* Chomsky-lul *man-na-ass-ta-ko*] mit-ci *an-ha-ass-ta*.  
 C-top anyone(-nom) C-acc meet-pst-dec-c believe-n not-do-pst-dec  
 'Chelswu did not believe that anyone meet Chomsky.'
- b. \*Chelswu-nun [*amwuna(-lul)* Chomsky-lul *man-na-ass-ta-ko*] mit-ci *an-ha-ass-ta*.  
 C-top anyone(-acc) C-acc meet-pst-dec-c believe-n not-do-pst-dec  
 'Chelswu did not believe anyone to meet Chomsky.'

If the embedded subject *amwuna* is raised to the matrix, then (33b) would be wrongly predicted to be grammatical, since both an NPI and its antecedent are in the same matrix clause.

Examples given in (29-33) argue against the height effect view of the ECM subject in Korean. This paper argues that the RP analysis can take care of this difference nicely in that Spec-RP is still under the matrix VP. Structure-wise, the NP in Spec-RP cannot c-command whatever element in the matrix VP.

#### 4. Conclusion

So far, the dual properties of the ECM subject in Korean have been discussed and explained in terms of the RP (Relator Phrase) analysis of den Dikken (2006, 2017a, 2017b). One robust challenge of the ECM in Korean is that the categorial status of the embedded clause is different from that of typical ECM in English. Korean has a full clausal CP as an embedded clause while English has TP. Furthermore, the embedded subject of ECM in Korean has been discussed to have both A and A' properties. To accommodate the dual properties of Korean ECM, this paper proposed the following: Predication relation forms an RP, which is an inherent phase a la den Dikken (2006, 2017a, 2017b); The ECM subject is base-generated in Spec-RP, which is A-position by definition; R in Korean ECM is null or C+R if C moves up to R; A null operator (O) is assumed to move from inside the embedded CP to its edge, Spec-CP, which is A'-position; The null operator binds *pro* or pronoun as a bound variable; The ECM subject is related to the embedded CP in terms of . The proposed analysis is extended to Mongolian ECM with a special reference to the difference with Korean.

#### References

- Branigan, Phil. 1992. Subjects and complementizers. Doctoral dissertation, MIT.
- Browning, Marguerite Ann. 1991. *Null operator constructions*. New York: Garland.
- Choe, H.-S. 1988. Restructuring parameters and complex predicates: A transformational approach. Doctoral dissertation, MIT.
- Choi, Kiyong. 2017. *Generative syntax: Case and markers in Korean* [In Korean]. Hankook

Pub.: Seoul.

- Davies, William. 2005. Madurese prolepsis and its implications for a typology of raising. *Language* 81:3, 645–665.
- Dikken, Marcel den. 2006. *Relators and linkers: The syntax of predication, predicate inversion, and the copula*. Cambridge, MA: MIT Press.
- Dikken, Marcel den. 2017a. *Dependency and directionality*. Cambridge: Cambridge University Press.
- Dikken, Marcel den. 2017b. Predication in the syntax of hyperraising and copy raising. *Acta Linguistica cademica* 64:1, 3–43.
- Fong, Suzana. 2019. Proper movement through Spec-CP: An argument from hyperraising in Mongolian. *Glossa: a journal of general linguistics* 4:1, 30. 1–42.
- Lasnik, Howard and Mamoru Saito. 1991. On the subject of infinitives, *CLS* 27.
- Lasnik, Howard. 1993. Lectures on minimalist syntax, *UConn Working Papers in Linguistics, Occasional Papers 1*, Uconn.
- Lee, Rhang, K. 1992. Negative polarity items licensing and the nature of neg projection," Ms., UConn, Storrs.
- van Koppen, Marjo, Lucas Seuren, and Mark de Vries. 2016. The Proleptic Accusative as an exceptional case marking construction. Ms.
- Yoon, James. 2007. Raising of major arguments in Korean and Japanese. *Natural Language & Linguistic Theory* 25:3, 615–653.