Raising to Subject in Korean - Optionality, Locality and Restrictions*

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Although raising to subject has been often assumed to exist in Korean syntax, clear evidence for it is difficult to find. The main goal of this paper is to provide new evidence for it. I show that sentences involving the presumed raising in Korean are subject to various restrictions when it leads to changes in word order and/or Case but not when it does not. I interpret this as evidence for optional raising since the existence of these restrictions is not satisfactorily explained by the alternative accounts not employing raising and that similar restrictions also hold for raising to object in Korean. One question for the proposed raising analysis is why raising is subject to various restrictions in Korean, and I seek an answer by relating it to another important question for the raising analysis, i.e., how raising can be non-clause-bounded in Korean.

Keywords: raising to subject, non-clause-bounded A-movement, locality constraints, multiple subject constructions, processing

I. Introduction

In Chomskyan grammar, sentences like (1a) in English are analyzed as involving raising of the embedded subject to the matrix subject position from the D-structure as in (1b).

(1) a. John seems to be smart.

* I’d like to thank three anonymous reviewers for their comments.
** Professor
b. _ seems [John to be smart].

The sentence comparable to (1a) in Korean is (2a), and we can reasonably assume that its D-structure is (2b), comparable to (1b) in English.1

(2) a. Minho-ka ttokttokha-n kes kat-ta.2
   M-NOM smart-ADN C seem-DCL
   ‘Minho seems to be smart.’


The S-structure of sentence (2a), however, is not obvious. If the derivation of sentence (2a) is on a par with that in English, we expect it to be (3), and this is what has been often assumed, either explicitly or implicitly, in Korean syntax (Choi 1988, Um 2010, Lee 2010, etc.).

(3) Minho-ka, [t, ttokttokha-n kes] kat-ta.

Concluding so, however, seems too hasty given the absence of any clear evidence for raising in Korean. In particular, various language-specific facts of Korean syntax such as the absence of Case motivation for A-movement make raising unnecessary, at least in the obligatory sense. Given this, the challenge for the raising analysis of sentences like (2a) will be to find some clear evidence for raising, and this is what I will do in this paper. After discussing the problems and limitations of previous arguments for raising, I will present new evidence based on changes in word order and/or Case. I will show that sentences with raising predicates like *katta* are subject to various restrictions when the presumed raising results in changes in word order and/or Case but not when it does not do so. Based on the facts that the restrictions cannot be adequately explained by the alternative accounts and that similar restrictions have been observed for raising to object, I will interpret this observation as evidence that there exists optional raising to subject in Korean.

The proposed raising analysis, however, faces some problems, and I will address them in the remainder of the paper. To be specific, the two questions I will discuss are (i) why various restrictions hold for raising to subject in Korean

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1 This is so unless we take the mono-clausal analysis of such sentences. See section 3 for a related discussion.

2 I will analyze *kes* as a nominal complementizer. See H. Yoon (2012) for a related discussion on this.
and (ii) how it is possible for raising in Korean to be non-clause-bounded, violating the Tensed S Condition (TSC, henceforth) and the Specified Subject Condition (SSC, henceforth). I will suggest that the two questions are closely related and that the key to them can be found once we recognize the parallel between raising violating the TSC and/or the SSC and A'-movement violating Island Constraints: just like A'-movement violating Island Constraints is possible when various restrictions are satisfied, raising violating the TSC and/or the SSC is possible in Korean when the same kinds of restrictions are satisfied. In short, my claim is that movement violating locality constraints, whether A- or A'-movement, needs to satisfy various restrictions, which, ultimately, have a processing nature.

The organization of the paper is as follows. In section 2, I will show that raising to subject is not obligatory in Korean even if it is possible. In section 3, I will provide new evidence for raising after pointing out the problems of the previous arguments. In section 4, I will show that various restrictions hold for clear instances of raising to subject in Korean and discuss how it constitutes further evidence for raising. In section 5, I will discuss two further questions for the proposed raising analysis and suggest an answer. And finally in section 6, I will summarize the claims made in this paper.

2. Possibility of No Raising

In many languages like English, A-movement is driven by the lack of Case and thus is obligatory. This, however, is not the case in Korean. It has been already noted that A-movement in Korean may not have a Case motivation, unlike in other languages (J.-M. Yoon 1991, J. Yoon 1996). For example, the following data show that raising to object in Korean lacks a Case motivation.3

   I-TOP M-NOM smart-DCL-C think-PRS-DCL
   ‘I think Minho is smart’

3 In the Government and Binding Theory, sentences involving raising to object were analyzed in terms of exceptional Case marking for various theoretical reasons. This kind of analysis, however, is not a possibility for sentences like (4b) in Korean since the complement clauses in such sentences are CPs, not IPs. As a compromise, I claimed in J.-M. Yoon (1991) that the subject of the complement clause moves to the SpecCP and gets the Acc. Case from the matrix verb. Since the theoretical problems that prevented the raising analysis are no longer valid, I will assume sentences like (4b) involve raising to the matrix object position.
   I-TOP M-ACC smart-DCL-C think-PRS-DCL
   'I think Minho to be smart.'

The acceptability of (4a) shows that a Nom. Case is available inside the complement clause. The Acc. Case marking on Minho in (4b) thus shows that raising to object in Korean is not motivated by the lack of Case and thus is optional.

The same is true of sentences like (5a), whose D-structure is (5b).

(5) a. Minho-ka ttena-n kes kat-ta.
   M-NOM leave-ADN C seem-DCL
   'Minho seems to have left.'


Although the finite vs. non-finite distinction in Korean is not as clear as in other languages like English, we can view the complement kes clause as finite, considering that the predicate in it allows three different inflections marking present, past and future.4

(6) a. Minho-ka aphu-n kes kat-ta.
   M-NOM sick-ADN C seem-DCL
   'It seems that Minho is sick.'

b. Minho-ka aphu-ess te-n kes kat-ta.
   M-NOM sick-PST-ADN C seem-DCL
   'It seems that Minho was sick.'

c. Minho-ka ap hu-1 kes kat-ta.
   M-NOM sick-ADN C seem-DCL
   'It seems that Minho will be sick.'

4 Note also that even if the complement clause in sentences like (5) is non-finite, there is no question about the fact that the embedded subject Minho can be assigned a Nom. Case without undergoing raising to the matrix subject position. This is because even the subject of a non-finite clause can be assigned a Nom. Case in Korean, as shown below: in (i), the complement clause is clearly non-finite, but an overt NP marked with the Nom. Case can appear in the subject position.

   Professor Kim-TOP M-NOM that work-ACC do-C make-PST-DCL
   'Professor Kim made Minho do the work.'
When this is combined with the absence of an expletive in Korean, we may conclude that the S-structure of (5a) can be the same as its D-structure, i.e., raising may not take place.

Empirical evidence for this conclusion comes from sentences like (7) involving coordination.

(7) Minho-ka yoli-lul ha-ko Somi-ka selkeci-lul ha-n kes kat-ta.
M-NOM cooking-ACC do-and S-NOM washing dishes-ACC do-ADN C seem-DCL
'It appears that Minho cooked and Somi did the dishes'

Note that sentence (7) should have the D-structure as in (8) in order to have the indicated meaning.

(8) [[[Minho-ka yoli-lul ha]-ko [Somi-ka selkeci-lul ha]]-n kes] kat-ta.

From this D-structure, raising of the embedded subjects to the matrix subject position will not be possible since there are two different complement clause subjects, i.e., Minho and Somi, but there is only one matrix subject position.

One may say that the D-structure of (7) is not (8) involving coordination in the complement clause but (9a), from which the S-structure is derived by gapping, as shown in (9b).


Note, however, that the unacceptability of sentences like (10) shows that gapping as in (9b) will not be possible.

(10) *Minho-ka yoli-lul ha-ko Somi-ka selkeci-lul ha-ko sipeha-n-ta.
M-NOM cooking-ACC do-and S-NOM washing dishes-ACC do-C want-DCL
'Minho wants to do the cooking and Somi wants to do the dishes.'

Assuming that (11a) is the D-structure of (10), if gapping as in (11b) is possible, sentence (10) should be acceptable in the given meaning.

(11) a. [[[Minho-ka [PRO yoli-lul ha-ko] sipeha]-ko [Somi-ka [PRO selkeci-lul

b. [[[Minho-ka [PRO yoli-lul ha-ko] sipeha]-ko [Somi-ka [PRO selkeci-lul


I will take this as evidence for the implausibility of the gapping analysis for sentences like (7).

To summarize, I have shown in this section that there are both theoretical and empirical grounds to say that the subjects of complement clauses in sentences like (5a) in Korean can stay in-situ. This, in turn, will mean that even if there exists raising to subject in Korean, it will be optional, similar to raising to object. Granting this, the next question is if raising is ever possible in Korean. Considering that the subject of a finite embedded clause can undergo optional raising to object in Korean, as shown in (4a-b), we expect that the comparable optional raising will be also possible to the subject position. The problem, however, is that unlike in raising to object, there is no clear indication of raising in sentences like (2a), there being no change in Case and/or word order.

3. Searching for Evidence for Raising

3.1. Previous Arguments for Raising and the Problems

One argument provided for raising is the honorific agreement in sentences like (12a), whose D-structure is (12b) (Um 2010, Choi 2016).

    father-NOM a lot sick-ADN C seem-HON-DCL
    ‘My father seems to be sick a lot.’

b. _____ [apenim-i manhi ahu-si-n kes] kat-ta.

Given that subject-verb agreement takes place under the clause-mate relation, the presence of the honorific marker ~si on the matrix verb in (12a) seems to indicate that the subject of the complement clause has undergone raising to the matrix subject position, as shown in (13).

(13) Apenim-i, [t, manhi ahu-n kes] katu-si-ta.

This argument, however, loses its force for the following reasons.
It is well-known that honorific agreement in Korean is not entirely syntactic but has a pragmatic nature. In particular, sentences like (14) will pose a problem for taking honorific agreement as evidence for raising.

(14) Apenim-i yoli-lul ha-ko emenim-i selkeci-lul ha-n kes katu-si-ta.
C seem-HON-DCL

'It appears that my father cooked and my mother did the dishes.'

We have already seen in section 2 that sentences like (14) cannot involve raising, meaning that its S-structure is as in (15).

(15) [[apenim-i yoli-lul ha]-ko [emenim-i selkeci-lul ha]-n kes] katu-si-ta.

Despite this, we observe that the matrix verb *katta* in (15) is marked with ~si.

Sentences like (16) also show that honorific agreement is possible without raising.

M-to father-NOM millionaire-be-ADN C seem-HON-DCL

'It seems to Minho that his father is a millionaire.'

Given that *Minho-eykey* in (16) is an element selected by the matrix verb, the word order in (16) clearly shows that the subject *apenim-i* is inside the complement clause. Nevertheless, the matrix predicate *katta* is marked with ~si, showing, again, that honorific agreement in Korean is not a syntactic phenomenon necessarily taking place under the clause-mate condition and thus cannot constitute conclusive evidence for raising.

Another piece of evidence we may entertain as evidence for raising is sentences like (17a) with a negative polarity item (NPI, henceforth). Words like *amwuto* are NPIs in Korean, and assuming that NPI licensing requires a clause-mate condition at S-structure, the acceptability of sentences like (17a) seems to indicate that the embedded subject *amwuto* has undergone raising to the matrix clause as in (17b) (Choi 1988, Um 2010, Choe 2016).

anybody come-ADN C seem-C not-DCL
'It seems that nobody will come.'
b. Amwuto, [t, o-1 kes] kat-ci anh-ta.

This argument, however, loses its force given sentences like (18a), whose S-structure will be (18b) under the raising analysis.

M-NOM anybody meet-ADN C seem-C Neg-DCL
'It seems that Minho didn’t meet anybody.'

Note that what undergoes raising in (18b) is the subject Minho, not amwuto, which is the direct object of the complement clause. This means that the acceptability of sentences like (18a) will not be explained even if we take the raising analysis and accordingly that NPI licensing cannot constitute evidence for raising to subject.

The inadequacy of the raising analysis in explaining the data like (18a) led Kim (2018) to propose the mono-clausal analysis of such sentences: maintaining that NPI licensing requires a clause-mate condition at S-structure, she claims that the acceptability of sentences like (18a) can be explained only if we assume that such sentences are composed of a single clause, to be more specific, the ‘V kes katta’ form has grammaticalized as a complex predicate. However, I will claim that we do not need the mono-clausal analysis since there is a way to explain the acceptability of sentences like (17) and (18a) under the bi-clausal analysis, i.e., by positing negative raising (Lakoff 1970, Collins and Postal 2014, etc.).

It is well-known that non-factive verbs like think, say allow negative raising unlike factive verbs like believe, know. Given that katta is a non-factive verb, as we see in (19a-b), the acceptability of (18a) can be explained by assuming that its D-structure is (20a), from which the Neg anh undergoes raising to the matrix clause, as shown in (20b).

M-NOM S-ACC Neg meet-ADN C seem-DCL
'It seems that Minho didn’t meet Somi.'

5 Due to the limitations of this paper, I will not be able to discuss the detailed structures of the sentences involving negative raising in Korean.
b. Minho-ka Somi-lul manna-n kes kat-ci anh-ta.
   M-NOM S-ACC meet-ADN C seem-C Neg-DCL
   ‘It doesn’t seem that Minho met Somi.’

(20) a. ____ [Minho-ka amwuto an manna-n kes] kat-ta.
   M-NOM anybody Neg meet-ADN C seem-DCL
   ‘It seems that Minho didn’t meet anybody.’

   M-NOM anybody meet-ADN C seem-C Neg-DCL
   ‘It doesn’t seem that Minho met anybody.’

To be more specific, we can say that NPI licensing can be done at D-structure before the Neg undergoes raising to the matrix clause.\(^6\)

To summarize, the preceding discussion has shown that licensing of NPIs, by itself, does not constitute evidence for raising to subject. In addition, it showed that the acceptability of sentences like (18a) does not lend support to the mono-clausal analysis, either, given that they can be explained even if such sentences have bi-clausal structures.\(^7\)

3.2. New Evidence – Raising Leading to Changes in Word Order and/or Case

Having shown the problems and limitations of the previous arguments for raising, in this section, I will present a different kind of evidence, namely, instances of raising that result in changes in word order and/or Case.

\(^6\) Support for this explanation comes from the unacceptability of sentences like (i) involving a factive verb. Note that the NPI amwuto in (i) cannot be licensed since the Neg. in such sentences originates in the matrix clause, not in the embedded clause and consequently, the NPI cannot be licensed by the clause-mate Neg. even at the D-structure.

   I-TOP S-NOM anybody meet-PST-DCL-C believe-C Neg-PRS-DCL
   ‘I don’t believe Somi met anybody.’

\(^7\) Although I am not going to discuss the mono-clausal analysis in detail due to space limits, it has some further problems. First of all, katta can take its own argument, i.e., the dative experiencer. Although Kim (2018) suggests that even the V2 in a complex predicate composed of V1 and V2 can maintain its argument structure, this is rather unusual and it has not been clearly spelled out how the two argument structures, i.e., those of V1 and V2, are combined into one. Secondly, note that V1 in the complex predicate ‘V1 kes V2 (=katta)’ can have its own tense, as we saw in (6). Last but not least, the mono-clausal analysis is not compatible with the data I am going to present in this paper, i.e., the existence of various restrictions for clear instances of raising to subject.
3.2.1. Two Cases of Raising Leading to Changes in Word Order and/or Case

3.2.1.1. Raising of Subject over Dative Experiencer

The first case involves sentences with the ~eykey phrase, as in (21).

(21) Minho-ka Somi-eykey paykmancangca-i-n kes kat-ta.
    M-NOM S-to millionaire-be-ADN C seem-DCL
    (i) ‘It seems to Somi that Minho is a millionaire.’
    (ii) ‘It seems that Minho is a millionaire to Somi.’

As shown above, sentence (21) can have two meanings depending on how Somi-eykey is interpreted, and this can be explained if we assume that (22a) and (22b) are the D-structures corresponding to each meaning, respectively: in reading (i), Somi-eykey is the dative experiencer selected by the matrix predicate katta while in reading (ii), it is an adjunct in the complement clause.

(22) a. ___ Somi-eykey [Minho-ka paykmancangca-i-n kes] kat-ta.
    b. ___ [Minho-ka Somi-eykey paykmancangca-i-n kes] kat-ta.

Of the two readings, what is important for the present discussion is reading (i): in this reading, the ~eykey phrase clearly is an element of the matrix clause.

Granted, we can interpret the word order in (21) as indicating that the embedded subject, Minho, underwent raising to the matrix subject position, i.e., (23) is its S-structure.

(23) Minho-ka; Somi-eykey [t; paykmancangca-i-n kes] kat-ta.

3.2.1.2. Raising of Non-subjects

Another case concerns sentences involving the apparent raising of non-subjects. Although raising of non-subjects is known to be impossible in many languages like English, such raising seems possible in Korean given the data like (24a-c) below.

    the movie-NOM many people-NOM like-ADN C seem-DCL
    ‘It seems that many people like the movie.’
   B-NOM many fan-PL-NOM gift-ACC send-ADN C seem-DCL
   'It seems that many fans send gifts to BTS.'

c. Ceycwuto-ka [manhun salamtul-i kyewul-ey kolphu-lul chi-le ka-nun
   Jeju Island-NOM many people-NOM winter-in golf-ACC play-to go-ADN
   kes] kat-ta.
   C seem-DCL
   'It seems that many people go to Jeju Island in winter to play golf.'

Semantically, the first Nom. Case-marked NPs in (24a-c) are interpreted as the
direct object, the indirect object and the goal argument of verbs in the
complement clauses, respectively. Given this, we can posit the following
D-structures for (25a-c), respectively.

   c. ____ [manhun salamtul-i kyewul-ey Ceycwuto-ey kolphu-lul chi-le
   ka-nun kes] kat-ta.

Once we posit these D-structures, the changes in word order and Case observed
in (24a-c) indicate that raising took place, i.e., (26a-c) are the S-structures of
(24a-c), respectively.8

   c. Ceycwuto-ka [manhun salamtul-i kyewul-ey ti kolphu-lul chi-le
   ka-nun kes] kat-ta.

3.2.2. Problems

As one may have already noticed, the strength of the two pieces of evidence just
presented-get weakened since there is an alternative explanation for both cases
that does not employ raising.

As for raising over the dative experiencer, one obvious alternative will be to

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8 To be more precise, we will have to assume that ~eykey and ~ey, which, respectively, are
dative and oblique Case markers, have been omitted in (26b) and (26c).
say that the movement responsible for the change in word order in sentences like (23) is scrambling. Given that scrambling of subjects is not impossible in Korean, as shown below, there certainly is a possibility that the embedded subject Minho-ka underwent scrambling, not raising.


PRS-DCL
'I think that Minho is the smartest in my class.'

We also have an alternative account for sentences like (24a-c) involving the apparent raising of non-subjects, i.e., to assume that such sentences have multiple subject constructions (MSCs, henceforth) in the complement clauses. To be specific, assuming that MSCs involve base-generated pro chains, the D-structures of (24a-c) will be (25a-c), not (26a-c), respectively and if so, even the sentences like (24a-c) will not constitute clear evidence for raising: note that we can derive the surface order without raising, i.e., (28a-c) can be the S-structures of (24a-c).

   c. ___ [Ceycwuto-ka, manhun salammtul-i kyewul-ey pro, kolphu-lul chi-le ka-nun kes] kat-ta.

What the previous discussion shows is that if the two cases of raising resulting in changes in word order and/or Case are to constitute clear evidence for raising, the alternative accounts will have to be ruled out. I turn to this next.

4. Restrictions for Raising to Subject in Korean as Further Evidence

In this section, I will first show that various restrictions hold for sentences involving the presumed raising when the raising leads to a change in word order and/or Case but not when it does not do so. I will then discuss how this

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9 Note, however, that there has been a debate concerning the derivation of MSCs, i.e., whether they involve base-generation or movement. If we take the movement approach to MSCs, the D-structures of (24a-c) will be, again, (25a-c).
constitutes further evidence for the optional raising analysis.

4.1. Restrictions for Clear Instances of Raising

4.1.1. Restrictions for Raising over Dative Experiencer

Raising over the ~eykey phrase in Korean is not always possible, as we see below.

   \text{S-to} \text{ M-NOM} \text{ now} \text{ study-ACC} \text{ do-C} \text{ PROG-ADN C seem-DCL}
   ‘It seems to Somi that Minho is studying now.’

   \text{parents-to} \text{ M-NOM} \text{ soon lunch-ACC eat-ADN C seem-DCL}
   ‘It seems to Minho’s parents that he will soon eat lunch.’

As indicated above, sentences (29b) and (30b) sound slightly degraded, at least, more degraded than (29a) and (30a). Considering that the ~eykey phrase in these sentences is in the matrix clause, one way to interpret the degradedness of (29b) and (30b) will be to say that raising of the embedded subject over the ~eykey phrase in the matrix clause is subject to some restrictions, although very weakly.

Granted, the next question is what kinds of factors distinguish acceptable instances of raising from unacceptable ones, and one factor we can readily identify is the types of predicates in the complement clauses. Note that unlike unacceptable sentences like (29b) and (30b), sentences that involve raising and are acceptable tend to have stative predicates in their complement clauses, as we can see in (31) and also in (31) below.

(31) Minho-ka, motun sensaygnim-tul-eykey [t; maywu sengsilha-n kes] kat-ta.
   \text{M-NOM} \text{ all} \text{ teacher-PL-to} \text{ very} \text{ diligent-ADN C seem-DCL}
   ‘Minho seems to all the teachers to be very diligent.’

In addition, sentences like (32a-b) show that raising over the dative experiencer is subject to the so-called Characteristic Property Condition (the CPC, hereafter), which, originally, was proposed for MSCs (Jang 1998, J. Yoon 2007, Kim et al.
'It seems to Minho’s teachers that Minho always studies hard.'
'It seems to Minho’s parents that Minho generally takes good care of his brother.'

Note that the acceptability of (32a-b) cannot be explained in terms of the predicate type per se given that the predicates are not stative. The acceptability of (32a-b), however, can be explained in terms of the CPC since sentences (32a-b) seem to satisfy the CPC, unlike (30a-b).

In short, what the above discussion shows is that raising of the complement clause subject over the dative experiencer in the matrix clause is subject to some restrictions. Although I admit that the acceptability differences I am basing this claim on are very subtle, the importance of the restrictions will get more prominent once we observe that similar restrictions are also observed for raising of non-subjects.

10 What the CPC states, in short, is that in an MSC, the rest of the sentence except the first subject should be able to be interpreted as its characteristic/characterizing property.

11 Let me note that the restrictions/factors I have identified here are different from those previously identified to affect subject-to-subject raising over the dative experiencer, i.e., whether the experiencer is a full NP, a pronoun or a wh-trace. The following cross-linguistic variation has been reported: (i) in languages like English, subject-to-subject raising over the dative experiencer is allowed regardless of whether the intervening dative experiencer is a full NP, a pronoun or an A’-trace; (ii) in languages like Italian, it is possible when the dative experiencer is a pronoun or an A’-trace, but not when it is a full NP; (iii) in Icelandic, such raising is possible only when the dative experiencer is an A’-trace; (iv) in Spanish, such raising is impossible across the board (Holmberg and Hróarsdóttir 2003, Cuervo 2003, Kim 2005). Although it will be interesting to compare the restrictions I have identified for raising in Korean with the factors previously identified for the cross-linguistic variation in dative intervention effects, I will not be able to do so due to the limitations of the paper. Instead, I will simply note that if we examine raising over the dative experiencer in Korean in terms of the factors previously identified, Korean seems to belong to the English type since raising is possible even when the dative experiencer is a full NP.
4.1.2. Restrictions for Raising of Non-subjects

Not all sentences involving raising of non-subjects are acceptable, as the following data show: (33a-c) are all degraded, at least, more degraded than (24a-c).

the movie-NOM M-NOM like-ADN C seem-DCL
‘It seems that Minho likes the movie.’
B-NOM S-NOM gift-ACC send-ADN C seem-DCL
‘It seems that Minho sent gifts to BTS.’
Jeju Island-NOM Prof. Kim-NOM yesterday go–ADN C seem-DCL
‘It seems that Prof. Kim went to Jeju Island yesterday.’

A reasonable way to explain this difference in acceptability, again, will be to assume that some restrictions hold for raising of non-subjects.

First, as for the differences between (26a-c) and (33a-c), what distinguishes the two, clearly, is the referential specificity of the complement clause subject: in acceptable (26a-c), the subjects of the complement clauses are referentially non-specific (i.e., manhun salalmtul), but in unacceptable (33a-c), they are referentially specific (Minho, Somi, Kim kyoswu).

Secondly, another factor we can come up with, given the more degraded status of sentence (34b) than (34a), is the argument vs. adjunct status of the elements undergoing raising.

(34) a. Ceycwuto-ka, [manhun salam tul-i ecey ti kolphu-lul chi-le
Jeju Island-NOM many people-NOM yesterday golf-ACC play-to
ka-n kes] kat-ta.
go–ADN C seem-DCL
‘It seems that many people went to Jeju Island yesterday to play golf.’
b. ??Ceycwuto-ka, [manhun salam tul-i ecey ti kolphu-lul chi-n
Jeju Island-NOM many people-NOM yesterday golf-ACC play-ADN
kes] kat-ta.
C seem-DCL
‘It seems that many people played golf in Jeju Island yesterday.'
Note that sentences (34a-b) do not differ in the referential specificity of the complement clause subjects but (34b) is more degraded than (34a). Given that Ceyewuto is a goal argument of the verb kata ‘go’ in (34a), while it is a locative adjunct of the verb chita ‘play’ in (34b), we can say that it is the argument vs. adjunct status of the element undergoing raising that affects the possibility of raising in these sentences.

Third, we observe that the Predicate Type Restriction and the CPC, which we have already observed to affect the possibility of raising over the dative experiencer, also affect the possibility of raising of non-subjects. For example, I find (35a), where the predicate of the complement clause is a stative predicate, better than (35b), in which it is a non-stative predicate, although the difference is subtle.

(35) a. Ku namca-ka, [manhun salamtul-i t; conkyenga-nun kes] kat-ta.  > the man-NOM many people-NOM respect-ADN C seem-DCL
   ‘It seems that many people respect the man.’

   b. ??Ku namca-ka, [manhun salamtul-i t; tayli-n kes] kat-ta.
      the man-NOM many people-NOM batter-ADN C seem-DCL
      ‘It seems that many people battered the man.’

Alternatively, the difference between (35a-b) can be explained in terms of the CPC given that native speakers feel that sentences with stative predicates tend to satisfy the CPC better than those with non-stative predicates.

4.1.3. More on the Restrictions

Postponing to section 5 the discussion on why the restrictions of diverse nature as just observed should hold for raising to subject, here I will simply note a few facts that stand out about them.

First, some of the factors/restrictions affecting raising of non-subjects are none other than those known to affect the possibility of A'-movement out of islands, i.e., referential specificity of intervening elements and the argument vs. adjunct status of the elements undergoing movement.

Secondly, some other factors/restrictions strongly remind us of those known to hold for MSCs in Korean: in addition to the CPC, the types of predicates are well-known to affect the acceptability of MSCs. In fact, we may say that the factors affecting raising to subject are basically the same as those affecting the acceptability of MSCs considering that factors like the referential specificity of the
intervening subject and the argument vs. adjunct status of the first subject also seem to affect the acceptability of MSCs, as shown below.\textsuperscript{12}

\begin{enumerate}
\item a. \textit{Ku yenghwa-ka\textsubscript{i} manhun salamul-i e\textsubscript{i} cohaha-n-ta.}
\hspace{1cm} the movie-NOM many people-NOM like-PRS-DCL
\hspace{1cm} ‘Many people like the movie.’
\item b. *\textit{Ku yenghwa-ka, Minho-ka e\textsubscript{i} cohaha-n-ta.}
\hspace{1cm} the movie-NOM M-NOM like-PRS-DCL
\hspace{1cm} ‘Minho likes the movie.’
\end{enumerate}

\begin{enumerate}
\item a. \textit{Ceycwuto-ka\textsubscript{i} manhun salamul-i ec\textsubscript{e} y e\textsubscript{i} kolphu-lul chi-les-ta.}
\hspace{1cm} Jeju Island-NOM many people-NOM yesterday golf-ACC play-to go-PST-DCL
\hspace{1cm} ‘Many people went to Jeju Island yesterday to play golf.’
\item b. *\textit{Ceycwuto-ka\textsubscript{i} manhun salamul-i ec\textsubscript{e} y e\textsubscript{i} kolphu-lul}
\hspace{1cm} Jeju Island-NOM many people-NOM yesterday golf-ACC
\hspace{1cm} chi-ess-ta.
\hspace{1cm} play-PST-DCL
\hspace{1cm} ‘Many people played golf in Jeju Island yesterday.’
\end{enumerate}

Last but not least, we can say that the restrictions holding for raising over the dative experiencer and raising of non-subjects are basically the same once we take the following into account: the reason why factors like referential specificity of intervening subjects or argument vs. adjunct status of the elements undergoing raising, which have been observed to affect the possibility of raising of non-subjects, are not observed for raising of the complement clause subject over the dative experiencer in the matrix clause is because in this case, there is no intervening subject and what undergoes raising is the subject, an argument.

The above observations will play a significant role in section 5, where I will discuss some potential problems of the raising analysis.

4.2. Importance of the Restrictions

The observation that clear instances of raising to subject in Korean are subject to the kinds of restrictions observed is important since it not only helps us rule out

\textsuperscript{12} These factors, however, have not been identified as separate restrictions but are generally subsumed under the CPC. To be more specific, both J. Yoon (2007) and I (J.-M. Yoon 2018) claimed that the CPC is the ultimate restriction MSCs need to satisfy and that all the other restrictions can be subsumed under it.
the alternative accounts but also provides us with further evidence for raising.

4.2.1. Ruling out Alternative Accounts

The existence of the restrictions for raising over the dative experiencer provides us with crucial evidence against the scrambling account since scrambling is not known to be subject to such restrictions. The scrambling account will thus fail to explain the difference in the acceptability of sentences like (38a) and (38b) below.

(38) a. Minho-ka, Somi-eykey [t; chencay-i-n kes] kat-ta.
    M-NOM S-to genius-be-ADN C seem-DCL
    ‘It seems to Somi that Minho is a genius.’

b. ?Minho-ka Somi-eykey [t; cikum kongpwu-lul ha-ko iss-nun kes]
    M-NOM S-to now study-ACC do-C PROG-ADN C kat-ta.
    seem-DCL
    ‘It seems to Somi that Minho is studying now.’

Turning to the MSC-based account for raising of non-subjects, the existence of the restrictions, by itself, does not argue against the MSC-based account considering that MSCs are independently known to be subject to similar restrictions. Rather, given that the restrictions, in particular, the Predicate Type Restriction and the CPC, are better known as the restrictions for MSCs in Korean syntax, one may argue that the very fact that similar restrictions hold for raising of non-subjects and MSCs will render support to the MSC-based account. However, this account, however, has the following problems.

First of all, the MSC-based account cannot explain why the restrictions holding for raising of the complement clause subject over the dative experiencer are the same as those holding for raising of non-subjects. Given that the former has nothing to do with MSCs, it is not explained why it shares similar restrictions with the latter.

Secondly, there can be some differences between the acceptability of

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13 In fact, this kind of MSC-based account has been proposed or entertained for various constructions in Korean such as double relative constructions (Han and Kim 2004) and raising to object constructions (J. Yoon 2007) since these constructions also share similar restrictions with MSCs and that we can dispense with the problem of locality constraint violation posed by these constructions by simply assuming that MSCs do not involve movement. Interested readers are referred to J.-M. Yoon (2015). See also section 5 for a related discussion.
sentences involving raising of non-subjects and the acceptability of their MSC counterparts. For example, I find (34b) more acceptable than (37b), repeated as (39a) and (39b), respectively, although the difference is subtle.

(39) a. ??Ceycwuto-ka manhun salalmtul-i ecey kolphu-lul chi-n kes kat-ta.
   b. *Ceycwuto-ka manhun salalmtul-i ecey kolphu-lul chi-ess-ta

Note that this kind of difference cannot be easily explained if sentence (39a) has the D-structure as in (40): it is because the MSC posited in the complement clause, i.e., (39b), is more degraded as an independent sentence.

(40) _____ [Ceycwuto-ka, manhun salalmtul-i e, ecey kolphu-lul chi-n kes] kat-ta.

The following data also show similar differences between raising to subject constructions and the corresponding MSCs.

   the movie-NOM M-NOM like-ADN C seem-DCL
   'It seems that Minho likes the movie.'
   the movie-NOM M-NOM like-PRS-DCL
   'Minho likes the movie.'

(42) a. *Ceycwuto-ka Kim kyoswu-ka ecey ka-n kes kat-ta.
   Jeju Island-NOM Prof. Kim-NOM yesterday go-ADN C seem-DCL
   'It seems that Prof. Kim went to Jeju Island yesterday.'
   Jeju Island-NOM Prof. Kim-NOM yesterday go-PST-DCL
   'Professor Kim went Jeju Island yesterday.'

Although these sentences all sound degraded, there are some differences between raising to subject constructions and the comparable MSCs: we clearly get the impression that raising to subject constructions are more acceptable than the comparable MSCs. What these data show, then, is that we cannot explain the acceptability of all sentences involving apparent raising of non-subjects by simply assuming that they have MSCs in the complement clause.

Lastly, a further, potential problem of the MSC-based account is that it remains to be explained why MSCs, to begin with, are subject to the kinds of
restrictions observed. Although one might say that this is a problem for the account of MSCs, not for the account of raising to subject constructions, it will certainly be better if we can provide a unified explanation for both, as I am going to do in section 5.

4.2.2. Similar Restrictions for Raising to Object

It has been long recognized that raising to object in Korean is subject to some restrictions such as the Stative Predicate Restriction (J.-M. Yoon 1989, Hong 1997, J. Yoon 2007). To be more specific, the following discussion shows that the restrictions holding for raising to object is basically the same as those holding for raising to subject.

First, sentences below show that raising to object in Korean is subject to the Predicate Type Restriction.

    I-TOP   M-ACC      diligent-DCL-C think-PRS-DCL
    'I think Minho to be diligent.'
    I-TOP   M-ACC       studying-ACC do-C PROG-DCL-C think-PRS-DCL
    'I think Minho to be studying'
    I-TOP   M-ACC      room-in    sleep-PRS-DCL-C think-PRS-DCL
    'I think Minho to be sleeping.'

As in the sentences involving clear instance of raising to subject, we observe that sentences involving raising to object get degraded when the predicates of the complement clauses are not stative, as in (44a-b).

Secondly, the acceptability of sentences like (45) shows that the CPC holds for raising to object: although the predicate in (45) is not stative, it is acceptable, and we can say that it is because it satisfies the CPC.

(45) Na-nun Minho-lul [ti enceyna kongpwu-lul yelsimhi ha-n-ta-ko]
    I-TOP   M-ACC       always   studying-ACC hard do-PRS-DCL-C
    sayngkakha-n-ta.
    think-PRS-DCL

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14 The observation, in short, was that raising to object constructions share similar restrictions with MSCs.
‘I think that Minho always studies hard.’

Third, the notion of referential specificity plays a role for raising to object: we find (46a), where the subject of the complement clause is referentially non-specific, more acceptable than (46b), where it is referentially specific.

‘I think that many people go to Jeju Island in winter to play golf.’

b. ??Na-nun Ceycwuto-lul, [Somi-ka kyewul-ey t, kolphu-lul chi-le I-TOP Jeju Island-ACC S-NOM winter-in golf-ACC play-to ka-n-ta-ko] sayngkakha-n-ta go-PRS-DCL-C think-PRS-DCL
‘I think that Somi goes to Jeju Island in winter to play golf.’

Finally, the more degraded status of sentence (47) than (46a) shows that argument vs. adjunct differences also affect the possibility of raising to object.

‘I think that many people played golf in Jeju Island last winter.’

What the preceding data show is that the restrictions identified for raising to subject in this paper also hold for raising to object, and this, naturally, will constitute further evidence that there is optional raising to subject in Korean. In fact, what is puzzling, in hindsight, is why the existence of the restrictions has not been recognized for raising to subject, unlike for raising to object, and this, presumably, is due to the absence of any restrictions for typical raising constructions like (48) with no dative experiencer phrase.

(48) a. Minho-ka cikum kongpwu-lul ha-ko iss-nun kes kat-ta.
M-NOM now study-ACC do-C PROG-ADN C seem-DCL
‘It seems that Minho is studying now.’

It seems that Minho will eat lunch soon.

In these sentences, the predicates are not stative and they do not satisfy the CPC, either, but they, nevertheless, are acceptable. This, at first glance, seems to indicate the absence of any restrictions for raising to subject.

Note, however, that there is a simple explanation for why raising in sentences like (48a-b) does not appear to be subject to any restrictions: it is because subjects of the complement clauses of raising predicates can stay in situ, i.e., raising is not obligatory, in Korean, as we have seen in section 2. Once we recognize this, we can say that the reason sentences like (48a-b) are acceptable is because they do not involve raising. Note that we can get the correct S-structures without raising from the D-structures as in (49).

\[(49) \text{a. } [\text{Minho-ka cikum kongpwu-lul ha-ko iss-nun kes}] \text{ kat-ta.} \]
\[\text{b. } [\text{Minho-ka kot cemsim-ul mek-ul kes}] \text{ kat-ta.}\]

Given that the restrictions are specifically for raising, it follows that if there is no raising, no restrictions will hold.

To summarize, I have shown in this section how the existence of the restrictions for sentences involving clear instances of raising to subject helps us rule out the alternative accounts and provides further evidence for optional raising to subject in Korean.

5. Further Questions for Raising Analysis

5.1. Nature of the Restrictions and Non-clause-boundedness of Raising

One immediate question we need to ask for the proposed raising analysis is why various restrictions as observed in this paper should hold for raising to subject in Korean. This question, as far as I know, has not been asked and naturally no account is available, which is natural considering that the very existence of such restrictions has not been recognized.\(^{15}\)

\(^{15}\) A similar question, however, has been addressed for raising to object and some explanations have been proposed (J.-M. Yoon 1989, Hong 1997, J. Yoon 2007, etc.). For example, Hong (1997) proposed that the reason raising to object constructions are subject to the Stative Predicate Restriction is due to discourse-functional reasons. To be more specific, her claim is that the raised element functions as the topic of the complement clause and that the reason stative predicates are preferred in the complement clause is because clauses can function as predicates most naturally when the predicates are
Given that the restrictions holding for raising to subject are basically the same as those holding for MSCs, one quick answer for the question can be to say that it is because sentences involving raising to subject have MSCs in the complement clauses and that MSCs are subject to such restrictions independently of raising. However, I have already pointed out the problems and limitations of such an MSC-based account in section 4. Instead, I will seek an answer to the question by relating it to another significant question for the proposed raising analysis, i.e., how raising to subject can be non-clause-bounded in Korean, violating the TSC and/or the SSC. As for the TSC, all instances of raising to subject will violate it if the kes clause is finite, as I have assumed to be the case in section 2. Violation of the SSC is observed in sentences like (26a-c) involving raising of non-subjects. As the first step towards this, I will start by noting the limitations of my previous attempt to explain non-clause-bounded A-movement in Korean, which was a purely syntactic account.

5.2. Towards an Explanation

5.2.1. Syntactic Account of Non-clause-bounded A-movement and Its Limitations

In J.-M. Yoon (1991), I discussed under the Government and Binding Theory various problems posed by non-clause-bounded A-movement, in particular, raising to object, in Korean. To be more specific, noting that it is not just the TSC and the SSC that raising in Korean violates but that it appears to defy all kinds of syntactic assumptions about A-movement/A-chains, I proposed that if we are to explain the possibility of non-clause-bounded raising in Korean and also in some other languages like Niuean, Kipsigis, and Imbabura Quechua (Jake and Odden 1979, Seiter 1980, Cole and Hermon 1981), we should abandon or revise a number of GB-theoretical assumptions about A-movement/A-chains. The following summarizes the key revisions.

\[(50) \text{ (i) Traces of A-movement are not subject to Principle A of the Binding Theory;}
\]

individual-level predicates. In the case of J. Yoon (2007), he provided a syntactic account in terms of Relativized Minimality (Rizzi 1990) for the Stative Predicate Restriction. Although one can certainly entertain the possibility of extending these proposals to raising to subject, I will not do so since I find problems with them. Due to space limits, I will not be able to discuss the problems in detail and simply note that although they seem to succeed in explaining some of the restrictions holding for raising, they cannot provide a satisfactory explanation for all the restrictions discussed in this paper.
(ii) The Chain Condition which dictates that A-chains have a unique
Case at the head of the chain should be abandoned.
(iii) SpecCP and adjoined positions are not necessarily A’-positions in all
languages.

With these general revisions, I proposed a few more specific assumptions about
Korean syntax which make sentences involving non-clause-bounded A-movement
acceptable in Korean: (i) that SpecCP and adjoined positions to VP in Korean can
function as both A- and A’-positions; (ii) that the subject position in Korean is
properly head-governed and thus movement of subjects out of a CP will not
result in a violation of the Empty Category Principle (ECP, from now on), unlike
in languages like English.

Although this account could explain why non-clause-bounded A-movement
is, in principle, possible in languages like Korean, unlike in others like English, it
has limitations in that it cannot explain why non-clause-bounded A-movement,
even in a language like Korean, is subject to the kinds of restrictions as observed
in this paper. To be more specific, if we assume that A-movement in Korean can
be non-clause-bounded due to some unique syntactic properties of Korean, in
other words, if non-clause-bounded A-movement in Korean does not violate any
syntactic locality constraint at all, there is no reason why it should be sensitive
to factors like the referential specificity of the complement clause subject or the
argument vs. adjunct status of the elements undergoing raising. Below, I will
suggest that an answer to this question can be found once we recognize the
parallel properties between non-clause-bounded A-movement and A’-movement
out of islands.

5.2.2. Parallel Between Non-clause-bounded A-movement and A’-movement out of
Islands

Although A’-movement is subject to Island Constraints (Ross 1967), movement out
of islands is not impossible when various factors are satisfied. For example, it is
well-known that factors such as the D-linking of the moving element (Pesetsky
1987), argument vs. adjunct status of the moving elements or the referential
specificity of the moving or intervening elements affect the possibility of
A’-movement out of islands. Interestingly, we can easily see that what we have
observed about raising in Korean parallels this property of A’-movement out of
islands: raising can violate the TSC and/or the SSC in Korean when certain
factors/restrictions are satisfied, just like A’-movement can violate Island
Constraints when some factors/restrictions are satisfied. Crucially, we observe that the factors/restrictions affecting raising violating the TSC and/or the SSC in Korean are basically the same as those affecting A’-movement violating Island Constraints.

We have already seen in section 3 that the factors affecting the possibility of raising in Korean include the referential specificity of the moving or intervening elements or the argument vs. adjunct status of the moving elements, which are prominent factors affecting the possibility of A’-movement out of an island. Conversely, note that restrictions like the Predicate Type Restriction and the CPC, which I have identified to hold for non-clause-bounded raising in Korean, also hold for A’-movement out of islands. As for the Predicate Type Restriction, Kluender (1992) shows, based on data like (51a-c), that the types of predicates, to be more specific, the aspæctual properties of predicates affect the possibility of A’-movement out of islands.

(51) a. This is a paper that there really must be someone who understands.
   b. This is a paper that we really need to find someone who understands.
   c. This is a paper that we really need to talk to someone who understands. (Kluender 1992: 247)

What we observe in (51) is that the more activity-like a predicate (i.e., talk > find > be) is, the more unacceptable the sentences involving A’-movement out of islands get.

The same is true of the CPC. In J.-M. Yoon (2015), I observed that if we examine in terms of the CPC data like (52)-(53) in Korean involving A’-movement out of a complex NP island, we see that the CPC affects their acceptabilities.

(52) a. Ku ai-nun, [[t; t; ip-ko iss-nun] os]-i yeyppu-ta.
   that child-TOP wear-C be-ADN clothes-NOM pretty-DCL
   ‘As for the child, the clothes that she is wearing is pretty.’
   b. ?’Ku ai-nun, Minho-ka [[t; t; ip-ko iss-nun] os]-ul
   that child-TOP M-NOM wear-C be-ADN clothes-ACC
   po-ess-ta.
   see-PST-DCL
   ‘As for the girl, Minho saw the clothes she was wearing.’
(53) a. [[[t; t; ip-ko iss-nun] os]-i yeyppu-n] ai,
wear-C PROG-ADN clothes-NOM pretty-ADN child

‘the child, [who, the clothes, [which, she, is wearing e], is pretty]’

b. ‘[Minho-ka [[t; ti ip-ko iss-nun] os]-ul po-n] ai
M-NOM wear-C PROG-ADN clothes-ACC see-ADN child

‘the child, [who, Minho saw the clothes, [which, she, was wearing e]]’

Note that a child can be characterized by the fact that the clothes she is wearing is pretty, as in (52a) and (53a), but not by the fact that somebody saw the clothes she was wearing, as in (52b) and (53b).16 And it is not just the A’-movement out of islands in Korean that is subject to the CPC. If we examine the acceptability differences observed in sentences (51a-c) in English in terms of the CPC, we get the impression that (51a) satisfies the CPC better than (51b) and (51b) better than (51c).17

The observation that various restrictions identified for non-clause-bounded raising in Korean also hold for A’-movement out of islands, in fact, is not surprising considering that A’-movement out of islands is well-known to be subject to various restrictions of a lexico-semantic or pragmatic nature (Allwood 1976, Kuno 1976, Engdahl 1980, Erteschik-Shir 1981, etc.). In short, what I am suggesting is that there exists a clear parallel between raising violating the TSC/SSC in Korean and A’-movement violating Island Constraints in general: just like A’-movement can violate Island Constraints when certain factors/restrictions are satisfied, A-movement like raising can also violate the TSC/SSC when similar factors/restrictions are satisfied. And once we recognize it, we can entertain the following hypothesis as an explanation for the question why raising in Korean is subject to diverse restrictions observed: movement violating locality constraints, whether it is A- or A’-movement, is subject to various restrictions of a seemingly lexico-semantic or pragmatic nature.

Once we assume this hypothesis, the question why the restrictions holding for raising constructions are basically the same as those holding for MSCs can be

16 A similar observation was also made by Han and Kim (2004) for double relative constructions like (53a-b).

17 Note that this is crucial for arguing against the MSC-based account for sentences involving A’-movement out of islands in Korean, e.g., Han and Kim’s (2004) account of double relative constructions. According to Han and Kim, the reason double relativization, i.e., A’-movement violating the Complex NP Island Constraint, is possible in Korean is because double relative constructions are derived from the corresponding MSCs, which involve base-generated pro chains, and thus do not violate the Complex NP Island Constraint. However, if A’-movement out of complex NP islands is also possible in languages like English, where MSCs are not available, the MSC-based account of double relative constructions in Korean will lose its force.
Given the following explanation: it is because MSCs also involve movement, to be precise, A-movement, violating locality constraints (J.-M. Yoon 2018, 2021). In section 4, I have already noted that one potential problem of the MSC-based account for raising to subject constructions is that in order for the account to be complete, we should be able to explain why MSCs, to begin with, are subject to diverse restrictions of a seemingly lexico-semantic nature. As far as I know, no account is available that can successfully explain all the restrictions under the non-movement approach to MSCs. The restrictions, however, can be explained in terms of the same hypothesis that explains the restrictions for raising constructions once we take the movement approach to MSCs. 19

Granted, the next, more fundamental question remaining will be why movement violating locality constraints like Island Constraints or the TSC/SSC is subject to the kinds of restrictions observed. I turn to this next.

5.3. Processing Nature of the Restrictions

It has been proposed by various researchers that locality constraints like Island Constraints have a processing nature (Kluender 1992, Kluender and Kutas 1993, Hofmeister and Sag 2010, etc.). The basic assumption underlying the processing approach to Island Constraints is that filler-gap dependencies are structures difficult to process (Fodor 1983, Just and Carpenter 1992), and in this approach, the reason A'-movement out of islands is generally not possible is because the processing loads incurred by such movement exceed a certain threshold. This, in turn, means that A'-movement out of islands will be possible when the processing loads do not exceed a threshold, being aided by various processing factors. In short, according to the processing approach, various factors/restictions known to affect the possibility of A'-movement out of islands are the ones

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18 Considering that typical MSCs like (i) involving A-movement out of a simple NP in the subject position are also subject to the CPC, we'll have to assume that not only complex NPs but also simple NPs work as an island for A-movement. See J.-M. Yoon (2015) for a discussion on the grounds to assume so.

(i) Minho-ka [t, apex]-ka pwuca-i-si-la.
M-NOM father-NOM rich-be-HON-DCL
'Minho's father is rich.'

19 In particular, the acceptability difference between MSCs like (36a) and (36b) is not adequately explained under the non-movement approach to MSCs, e.g., J. Yoon (2007). This kind of difference, however, can be readily explained once we assume the movement approach to MSCs: it is because the movement as in (36a-b) violates the SSC and that such movement is subject to the Non-specificity Condition. For more discussion on this, see J.-M. Yoon (2018, 2021).
affecting the processing loads of the sentences involving movement.

It is well-known that the referential specificity of moving or intervening elements is a key factor affecting processing loads. It has been proposed that other factors identified, such as the Predicate Type Restriction and the CPC, also boil down to processing. For example, according to Kluender (1992), the effects of the predicate types on the possibility of A’-movement out of an island, as shown in (51), can be also reduced to referential specificity and processing loads: the more activity-like a predicate is, the more referentially specific it is, and as a result, the heavier processing loads it will incur. The processing nature of the CPC is not difficult to see, either, once we recognize the fact that the CPC is not a single, independent condition but can be decomposed into various sub-factors that work cumulatively. To be specific, working on the restrictions for MSCs under the movement approach to MSCs (J.-M. Yoon 2018, 2021), I proposed that native speakers feel that an MSC satisfies the CPC when it satisfies various factors such as the types of predicates or the referential specificity of the second intervening subject.

In addition to explaining why the effects of the CPC mostly overlap with those of other restrictions like the Non-specificity Condition or the Predicate Type Restriction, recognizing the processing nature of the CPC enables us to explain how the CPC can override the effects of the other restrictions, e.g, as in (32a-b). It is because the hallmark of the processing approach to the locality of movement is that various processing factors work cumulatively, i.e., what matters is not whether a specific factor/restriction is satisfied or not but whether the cumulative proceeding loads incurred by a sentence as a whole do not exceed a certain threshold. Seen from this perspective, the acceptability of sentences (32a-b) is readily explained: although it violates the Predicate Type Restriction, it is acceptable since the cumulative processing loads do not exceed a threshold.

The cumulative nature of the processing restrictions can also shed light on the subtleness of grammaticality judgments on the data showing the effect of a single restriction such as the Predicate Type Restriction, which, at first glance, seems to weaken the claim that such a restriction holds for raising to subject. Such subtleness, however, is expected and can be naturally explained once we recognize the processing nature of the restrictions. It is because the additional processing loads incurred by violating a single processing restriction may not be big and that the effect of violating processing restrictions will be clearly seen only when the cumulative processing loads far exceed a certain threshold.

Lastly, the processing approach can also help us explain the subtle acceptability differences between raising to subject constructions and the
corresponding MSCs, as observed in (42a-b). This is because there is some ground to assume that A-movement in MSCs will incur heavier processing loads than A-movement in raising to subject constructions. Unlike in raising to subject constructions, in which the landing site of movement, i.e., the matrix subject position, is already available, in the case of MSCs, the extra subject position has to be created following the formation of a complex predicate. We can reasonably surmise that this will incur some additional processing loads, making MSCs a little more degraded than the corresponding raising to subject constructions.

Having discussed the processing nature of the restrictions/factors identified for raising in Korean, let me briefly discuss what is new about the proposal in this paper. As far as I know, most processing-based studies of movement locality have dealt with A'-movement and A-movement has rarely been studied in terms of processing. And it is not difficult to see why this is the case: it is probably because unlike A'-movement violating Island Constraints, A-movement violating the TSC and/or the SSC, cross-linguistically, is rare. Such A-movement, however, does exist in some languages, Korean being one of them, and what I have shown in this section is that such A-movement is subject to the same kinds of processing factors/restrictions known to affect A'-movement violating Island Constraints. This, in turn, confirms the processing nature of the TSC and the SSC. The processing nature the SSC is rather obvious considering that the referential specificity of the intervening elements is one of the key factors known to affect the processing of a filler-gap dependency. As for the TSC, Kluender (1992) suggests that it also has a processing nature. His claim is that finite verbs are referentially more specific than non-finite verbs and consequently, forming a dependency over a finite clause boundary will incur heavier processing loads than forming a dependency over a non-finite clause boundary, regardless of whether it is A- or A'-dependency.20

5.4. Cross-linguistic Variation in Locality of A-movement

A question one may still want to ask about the proposal in this paper is why raising violating the TSC and/or the SSC is not observed in many languages. If such raising is possible in Korean being aided by various processing factors, one may expect that the comparable raising should be also possible in other languages when the same kinds of processing factors are satisfied.21

20 Note that this is consistent with Chomsky’s (1973) original claim about the TSC and the SSC, i.e., they hold for both A- and A'-movements.
21 In fact, this kind of cross-linguistic variation in locality effects has been often considered a
An answer for this question, however, can be readily found once we examine why sentences like (54)–(55) involving non-clause-bounded raising are ungrammatical in English.

(54) a. *John, seems [that t is smart].
    b. *The movie, seems [that many people like t].

(55) a. *I believe John, [that t is smart].
    b. *I believe the movie, [that many people like t].

Note that in addition to the TSC and the SSC, these sentences also violate other syntactic constraints such as the ECP and/or the Improper Movement Condition banning the A-A’-A chain, given that (i) SpecIP is not properly head-governed in English and (ii) SpecCP in English is an A’-position and thus cannot be used as an escape hatch for A-movement. Now if we assume that unlike the TSC and the SSC, constraints like the ECP and the Improper Movement Condition are purely formal syntactic constraints, i.e., constraints that work categorically, independently of non-structural factors such as processing factors, we can explain why non-clause-bounded raising is impossible in English regardless of whether it satisfies various processing factors/restrictions or not.

We can provide a similar explanation for the impossibility of raising in sentences like (56).

(56) *The movie, seems [many people to like t].

Although raising the object of the complement clause in (56) violates the SSC, such raising, when viewed from the processing perspective, should be possible, on a par with (24a) in Korean. The unacceptability of sentences like (56), however, can be readily explained considering that the subject of the non-finite clause is not Case-marked in English and thus violates the Case Filter (Chomsky 1981).

What I am suggesting, in short, is that locality of movement in a language is determined by the interplay of both the purely formal syntactic constraints such as the ECP, the Improper Movement Condition and the Case Filter, which work categorically and independently of non-structural factors, and constraints like Island Constraints, the TSC and the SSC, which have a processing nature.

problem of the processing approach by reductionists, i.e., people who assume that speakers of all languages have roughly the same cognitive constraints and sentence processing architectures. See Phillips (2013) for a more detailed discussion on this.
and thus work gradiently, and that the impossibility of non-clause-bounded raising in many languages can be explained in terms of the former. Coming back to non-clause-bounded raising in Korean, this means that what makes it possible, first of all, is the unique syntactic properties of Korean such as the properly governed nature of the subject position and the ambivalent nature of SpecCP with respect to A- and A'-distinction, as proposed in J.-M. Yoon (1991). Once we grant these unique syntactic properties, it follows that non-clause-bounded raising in Korean will not violate any formal syntactic constraints like the ECP or the Improper Movement Condition although it violates the TSC and/or the SSC, and given that the TSC and the SSC have a processing nature, such raising will be possible in Korean when aided by various processing factors/restrictions. Seen from this perspective, we can say that violation of purely formal syntactic constraints like the ECP, the Improper Movement Condition or the Case Filter is why the parallel between A-movement violating the TSC and/or the SSC and A'-movement violating Island Constraints has not been recognized before. To be more specific, it is because non-clause-bounded A-movement violating the TSC and/or the SSC in many languages also violates the ECP, the Improper Movement Condition or the Case Filter and thus is impossible regardless of whether it satisfies processing restrictions/factors or not.

6. Conclusion

In this paper, I have claimed that there is optional raising to subject in Korean based on the fact that sentences involving the presumed raising are subject to various restrictions when it results in changes in word order and/or Case but not when it does not. The crux of my argument was that the existence of such restrictions cannot be satisfactorily explained by some alternative accounts not employing raising, most notably, the MSC-based account, and that similar restrictions also hold for raising to object in Korean. Concerning the two further

Alternatively, instead of saying that the constraints like the TSC, the SSC and Island Constraints are processing restrictions, we may adopt Sorace and Keller’s (2005) distinction between ‘hard’ and ‘soft’ syntactic constraints: according to them, hard constraints only refer to structure and determine ‘categorical’ grammatical facts while soft constraints typically give rise to ‘gradient’ judgements, generally involving interactions between syntactic structure and non-syntactic factors like semantics, discourse and processing difficulty. Once we adopt this distinction, we can say that constraints like the TSC, the SSC and Island Constraints are soft constraints while those like the ECP and the Improper Movement Condition are hard constraints and that the reason non-clause-bounded A-movement is not possible at all in many languages like English is probably because it violates the former.
questions for the proposed raising analysis, namely, why various restrictions hold for raising to subject in Korean and how it can be non-clause-bounded violating the TSC and the SSC, I suggested that a key to these questions can be found once we recognize the parallel between non-clause-bounded raising in Korean and A'-movement out of islands: just like A'-movement violating Island Constraints is possible when certain restrictions are satisfied, non-clause-bounded raising violating the TSC and/or the SSC is possible when the same kinds of restrictions are satisfied. Based on this parallel, I proposed that the reason raising to subject in Korean is subject to the kinds of restrictions as observed in this paper is because it violates the TSC and/or the SSC and that A'-movement violating locality constraints like the TSC or the SSC is subject to such restrictions. Ultimately, my claim is that those restrictions have a processing nature.

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