

Structural Case-driven Object Shift of ECMed Nominals out of the CP*

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Lee, Doo-Won. 2007. Structural Case-driven Object Shift of ECMed Nominals out of the CP. *The Linguistic Association of Korea Journal*, 15(1), 37-61). This paper argues that the surface position of the ECMed nominal in Korean should be [Spec, v*P] in the upper clause. This paper is against the arguments that the Korean ECM construction is a syntactic reflection of pragmatic force (i.e., *Int* effects in Chomsky's (2001) term) (Jung 2001, Yoon 2004, among others). In fact, the overt object shift of the ECMed nominal is driven by its structural Case checking against the matrix v* (cf. Bošković 1997, 2002, in press a, Radford 2004). This paper also claims that while the object with inherent Case in the thematic position undergoes Case checking against v* by Agree (Chomsky 2000, 2001), the ECMed nominal with structural Case necessarily undergoes overt object shift in order to have its structural Case checked against v*. No instance of feature checking movement can feed another instance of feature checking movement (Bošković in press a, b). It makes sense that the ECM construction in Korean involves A-movement out of CP, which induces the [Spec, CP] to be an A-position (cf. Tanaka 2002, McCloskey 2000, Bošković in press a, b). It is also observed that the Korean ECMed nominal may further undergo a separated feature checking operation from its surface shifted position to another surface position; hence, no feature checking in intermediate positions in successive cyclic movement of the ECMed nominals.

Key Words: ECM, feature checking, object shift, structural Case

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1. Introduction

It is recently observed in literature (Jung 2001 and Yoon 2004, among others) that the surface position of the ECMed nominal in Korean is [Spec, v*P] in the upper clause. If this is on the right track, the topmost concern in this paper will be what drives the overt object shift of the nominal in question *caki-uy tongsayng-ul* 'self-GEN younger brother-ACC' out of the embedded clause in the so-called ECM construction in (1):¹⁾

- (1) a. [_{CP} Chelswu_i-ka [_{CP} caki_i-uy tongsayng-i
Chelswu-NOM self-GEN younger brother-NOM
ttokttokha-ta-ko] mit-ess-ta]
smart-DC-COMP believe-PST-DC
'Chelswu believed that his younger brother was smart.'
- b. [_{CP} Chelswu_i-ka caki_i-uy tongsayng-ul [_{CP} t
Chelswu-NOM self-GEN younger brother-ACC
ttokttokha-ta-ko] mit-ess-ta]
smart-DC-COMP believe-PST-DC
'Chelswu believed his younger brother to be smart.'

This paper will be against Jung's (2001) and Yoon's (2004) arguments that the Korean ECM construction is a syntactic reflection of pragmatic force (i.e., *Int* effects in Chomsky's (2001) term). That is, it will be shown that the object shift of the ECMed nominal is not triggered by the EPP on v* contra Chomsky (2001). Also, it will be observed that A-movement out of CPs is in principle possible in the Korean ECM construction (cf. Ormazabal 1995, Epstein and Seely 2006,

1) An anonymous reviewer points out how in (1b), where the accusative-marked nominal undergoes ECM, the Case feature on T in the embedded clause can be checked, which may be a non-trivial issue in Korean ECM constructions. However, in this paper, where the overt object shift of the ECMed element is focused, this matter will be open, though it is an interesting and arguable issue.

Tanaka 2002, McCloskey 2000, Bošković in press a); hence, Chomsky's (1973) Improper Movement mechanism, which used to be appealed to block A-movement out of CPs, disappears. This paper will also argue that the overt object shift of the ECMed nominal as in (ib) is driven by its structural Case checking against the matrix v^* (cf. Bošković 2002, Radford 2004). Furthermore, it will be shown that the shifted ECMed nominal undergoes, for example, the so-called focus movement from its surface position (i.e., [Spec, v^*P]):

- (2) [_{CP} **caki-uy tongsayng-ul** [_{TP} Chelswu_i-ka [_{v^*P} t ttoktokha-ta-ko mit]-ess]-ta]

This paper is organized as follows. Section 2 investigates the surface position of ECMed nominals. Section 3 argues against Chomsky's (2001) *Int*-driven object shift of ECMed nominals in Korean. Section 4 examines what triggers overt object shift of ECMed nominals (cf. Bošković 1997, 2002). Section 5 shows that the ECMed nominals moves out of [Spec, CP], which induces the [Spec, CP] to be an A-position and that the Korean ECMed nominal may undergo focus movement from its surface shifted position. And section 6 concludes this paper.

2. The Surface Position of ECMed Nominals

As pointed above, Jung (2001) and Yoon (2004) argue that the subject in the ECM construction undergoes overt object shift to the upper clause; hence, the surface position of the ECMed nominal is the [Spec, v^*P] (i.e., outer spec, v^*) in the matrix clause as in (3):²⁾

- (3) Tom-un [_{v^*P} Sue-lul [_{CP} [_{TP} t_{SUE} yeppu]-ta-ko] mit]-ess-ta.³⁾

2) It is well known in literature (Lee 1995, Yoon 2004, among others) that only individual level predicates (i.e., stative predicates) occur in ECM constructions as in (3); hence, only the ECM process under stativity is at issue in this paper.

3) The embedded clause of Korean ECM constructions has an overt tense

Tom-TOP Sue-ACC pretty-DC-COMP believe-PST-DC
 'Tom thought Sue to be pretty.'

Following them, this paper also argues that the ECMed nominal raises to the matrix [Spec, v*P], though the triggering factor of the overt object shift here is different from theirs as will be shown. This may be verified by following empirical observations.

When the subject of a matrix ECM verb and its embedded subject are coreferential, the pronoun *ku* 'he' can be used when the embedded subject is in the nominative Case as in (4b), but it is obligatory to use the anaphor *caki* 'self' when the embedded subject is in the accusative case as the contrast in (5) shows:

- (4) a. John_i-un [**caki**_i-ka ttotokhata-ko] mit-nun-ta.
 John-Top self-Nom be-smart-Comp believe-Prs-Dec
 '*John believes that himself is smart.'
- b. John_i-un [**ku**_i-ka ttotokhata-ko] mit-nun-ta.
 John-Top he-Nom be-smart-Comp believe-Prs-Dec
 '*John_i believes that he_i is smart.'
- (5) a. John_i-un **caki**_i-lul ttotokhata-ko mit-nun-ta.
 John-Top self-Nom be-smart-Comp believe-Prs-Dec
 'John believes himself to be smart.'
- b. *John_i-un **ku**_i-lul ttotokhata-ko mit-nun-ta.⁴⁾
 John-Top he-Nom be-smart-Comp believe-Prs-Dec

morpheme and an overt complementizer, which indicates that it is of a CP structure (Yoon 1991, Yoon 1996, Baek 1997, Jung 2001).

4) The ECM constructions such as (5b) and (i) are ruled out (Hong 1990:216-217):

- (i) *John_i-i ku_i-lul papo-la-ko sayngkakha-n-ta.
 John-Nom he-Acc fool-be-Comp think-Prs-Dec
 'John_i thinks that he_i is a fool.'

For many speakers, the examples in (5b) and (i) are not as bad as it is supposed to be. However, note that the data are much more degraded than the example in (5a), where the reflexive anaphor *caki* 'self' is ECMed.

'John believes himself to be smart.' (Baek 1997:46)

Analyzing the ECMed pronoun as occupying the matrix clause comes from the behavior of the third person pronoun *ku* 'he'. Note that as shown in (5), the third person pronoun *ku* cannot have a clause mate antecedent,⁵⁾ whereas the reflexive anaphor *caki* can. In brief, the contrast in (4) and (5) shows that the ECMed nominal should be in the upper clause.

At this stage, we need to note that the reflexive anaphor in the embedded [Spec, CP] can be coindexed with the matrix subject in English as in (6):

- (6) a. John_i believes [_{CP} that Bill_j likes a picture of himself_{*i/j}].
b. John_i believes [_{CP} which picture of himself_{i/*j} that Bill_j likes t].

In this respect, to capture the ungrammaticality of the example in (5b), one may assume that the surface position of the pronoun coindexed with the matrix subject in (5b) is the embedded [Spec, CP] as in (7):

- (7) *John_i-un [_{CP} **ku**_i-lul [_{IP} ttottokha]ta-ko] mit-nun-ta.

Given the assumption that the matrix clause and the embedded [Spec, CP] may be a binding domain, we can distinguish the grammatical contrast between (6b) and (7) by Principle A and B. However, this does not seem to be on the right track. For many speakers, the lower subject 'gap' (i.e., here, *pro* in (8b)) by the ECMed nominal can be filled optionally by a lexical pronoun as in (8a) (Yoon 1996:124-125):

- (8) a. John-i Bill_i-ul [_{IP} ku_i-ka maywu yengliha]-ta-ko
John-Nom Bill-ACC he-NOM very be-clever-Dec-Comp
sayngkakha-n-ta.
think-PRS-Dec

5) Principle B induces the sentence in (5b) to be ruled out.

'John thinks that Bill is very clever.'

b. John-i Bill-i-ul [_{CP} [_{IP} **pro**_i maywu yengliha]-ta-ko sayngkakha-n-ta.

As shown in (8a), the lexical pronoun in the embedded subject position can be coindexed with the ECMed nominal, which seems to show that the two elements must not appear within the same clause (i.e., binding domain) at the same time; hence, no violation of Principle B. If this is correct, one is in the upper clause, the other is in the embedded clause.

Before proceeding, at this stage, let's consider the reflexive anaphor binding in the Korean bi-clausal structure. Let's look anew at the example in (4a), repeated in (9):

(9) John_i-un [_{CP} [_{IP} **caki**_i-ka ttottokha]ta-ko] mit-nun-ta.

If we suppose that the binding domain for the Korean anaphor in the embedded clause can be extended to the upper clause in the sense that the anaphor can be coindexed with the antecedent across the clause boundary, how can we explain the grammaticality of (4b), repeated in (10), where the pronoun in the embedded subject position is coindexed with the matrix subject?

(10) John_i-un [_{CP} [_{IP} **ku**_i-ka ttottokha]ta-ko] mit-nun-ta.

At this point, we need to note that unlike in English, the anaphor in Korean can be freely coindexed with the antecedent across the clause boundary as shown in (9); hence, we cannot decide the binding domain of the pronoun (i.e., for Principle B) like in (7), based on the binding fashion of the anaphor shown in (6b).

We further need to note that the idiomatic meaning of the idiomatic subject in (11a) disappears when it is ECMed as in (11b),⁶⁾ which as a

6) This idea grew out of conversations with William O'Grady. Unlike in English, the idiomatic subject in Korean cannot undergo ECM. The English counterpart is not dealt with in this paper. As far as the ECM of the idiomatic subject in Korean is concerned, A-movement out of CPs does not seem to be

result, induces the sentence to only have literal meaning:

- (11) a. Yenghi-nun cakun kochwu-ka mayp-ta-ko
Yenghi-TOP small pepper-NOM spicy-hot-DC-COMP
mit-nun-ta.
believe-PRS-DEC
Literal meaning: Yenghi believes that small peppers are spicily hot.
Idiomatic meaning: Yenghi believes that though small in body,
one is strong or fierce.
- b. Yenghi-nun cakun kochwu-lul mayp-ta-ko
Yenghi-TOP small pepper-NOM spicy-hot-DC-COMP
mit-nun-ta.
believe-PRS-DEC
Literal meaning: Yenghi believes small peppers to be spicily hot.
Idiomatic meaning is not available.

The idiomatic meaning of the above sentences is available, only when the subject remains in situ. If we assume that the ECMed nominal moves from the embedded subject position to the upper clause, it must raise through the embedded [Spec, CP] by A-movement. This seems to induce idiomatic meaning not to be available. If this assumption is on the right track, the ECMed pronoun in (7) must be in the upper clause; hence, violation of Principle B.

Next, we come to wonder which surface position the ECMed one occupies. One may argue that it occurs as a matrix object in the θ -position (cf. Hong 1990). However, the contrast between (12a) and (12b) implies the lack of selection, or θ -marking of the ECMed nominal by the matrix verb *mit* 'believe':⁷⁾

possible. That is, Chomsky's (1973) Improper Movement mechanism, which used to be appealed to block A-movement out of CPs, is still available to the ECM of the idiomatic subject, though it is not at issue in this paper. Refer to Lee (in press) for the discussions on the locality violation on A-movement, which seems to induce idiomatic meaning not to be available.

7) It can be testified only by an inanimate entity whether the ECMed nominal occupies a θ -position since there is an animacy restriction in the simplex

- (12) a. Mary-nun sakwa-lul ppalkah-ta-ko mit-nun-ta.
 Mary-Top apple-Acc red-Dec-Comp believe-PRS-Dec
 'Mary believes that an apple is red.'
- b. *Mary-nun sakwa-lul mit-nun-ta.
 Mary-Top apple-Acc believe-PRS-Dec
 '*Mary believes an apple.'

Thus, we can say that the ECMed nominal in (12a) cannot be base-generated as a matrix object in the θ -position (Yoon 1996). Here, the supposed surface position of the ECMed nominal is the outer spec of v^* in Chomsky's (2000, 2001) v^* -VP structure.⁸⁾

There are further paradigms which are explicable only on the assumption that an ECMed element in Korean must be in the upper clause (i.e., here [Spec, v^* P]). A sentential adverb modifying the matrix predicate can be interposed between the ECMed element and the lower predicate as in (13c), but not between a nominative subject and the lower VP as in (13b) (Yoon 1996):

- (13) a. John-un elisekkeyto Mary-ka yengliha-ta-ko
 John-TOP foolishly Mary-NOM be-intelligent-DC-COMP
 sayngkakha-n-ta.
 think-PRS-DC
 'John foolishly thinks that Mary is intelligent.'
- b. ?*John-un Mary-ka elisekkeyto yengliha-ta-ko sayngkakha-n-ta.
- c. John-un Mary-lul elisekkeyto yengliha-ta-ko sayngkakha-n-ta.
 Mary-ACC
 'John foolishly thinks that Mary is intelligent.'

counterpart of the ECM construction, as the contrast between (6b) and (i) shows:

- (i) Mary-ka John-ul mit-nun-ta.
 Mary-NOM John-ACC believe-PRS-DC
 'Mary believes John.'

8) My informers judge that there is a sharp contrast between (13b) and (13c), though an anonymous reviewer judges both sentences to be ruled in.

It is assumed that the sentential adverb *elisekkeyto* 'foolishly' may be adjoined to v*' or over v*P, while the VP adverbs such as *khukey* 'loudly' or *ppalli* 'quickly' are adjoined to VP (Yang 2004, among others). Under this assumption, the sentential adverbs in (13) and (14) seem to be adjoined to v*P and over v*P respectively:

(14) John-un elisekkeyto Mary-lul yengliha-ta-ko sayngkakha-n-ta.

What I want to say here is that the surface position of the ECMed nominal may be [Spec, v*P], though it follows the sentential adverb as in (14). If this is on the right track, under my system, the ECM processes in (13c) and (14) is depicted as follows respectively:

- (15) a. John-un [_{v*P} Mary-lul elisekkeyto [_{CP} yengliha-ta-ko sayngkakha]-n-ta.
 b. John-un elisekkeyto [_{v*P} Mary-lul [_{CP} yengliha-ta-ko] sayngkakha]-n-ta.

As the sharp contrast between (13b) and (13c) shows, unlike the nominative-marked subject *Mary-ka* 'Mary-NOM', the ECMed nominal *Mary-lul* 'Mary-ACC' may be over the sentential adverb within the v*P in my system.

3. Against Chomsky's (2001) *Int*-driven Object Shift of ECMed Nominals

Let's look anew at the examples in (1b) and (2), repeated (16a,b):

- (16) a. Chelswu-ka [_{v*P} caki-uy tongsayng-ul ttokttokha-ta-ko mit]-ess-ta]
 b. [_{CP} **caki-uy tongsayng-ul** Chelswu-ka ttokttokha-ta-ko mit-ess-ta]

Yoon (2004) proposes that the ECMed nominal, for example, *caki-uy tongsayng-ul* in (16), raises to [Spec, v*P] to be assigned *Int* since the movement brings about an effect on outcome, focus reading, which, as a result, is on a par with Jung’s (2001) argument. However, there is a sharp contrast of semantic effects between the shifted ECMed nominal in (16a) and the A’-moved one in (16b): that is, the A’-moved anaphor phrase to the sentence-initial position is assigned (contrastive) focus, whereas the shifted one is not. Yoon (2004) and Jung (2001) try to show that the Korean ECM construction is a syntactic reflection of pragmatic force (i.e., *Int* effects in Chomsky’s (2001) term), focusing on the difference of discourse effects between the ECMed nominal *caki-uy tongsayng-ul* in (16a) and the nominative subject *caki-uy tongsayng-i* in (1a), repeated in (17):

(17) Chelswu-ka caki-uy tongsayng-i ttoktokha-ta-ko mit-ess-ta.

In fact, such a trial seems to be the same that one tries to investigate a difference of semantic outputs (i.e., discourse effects), if any, between the nominative object in (18a) and the accusative object in (18b):

- (18) a. Chelswu-ka ton-i philyoha-ta.
 Chelswu-NOM money-NOM need-DC
 ‘Chelswu needs money.’
 b. Chelswu-ka ton-ul philyoloha-n-ta.
 Chelswu-NOM money-ACC need-PRS-DC
 ‘Chelswu needs money.’

There isn’t such a sharp contrast in between, though the accusative-marked object tends to have a somewhat specific or exhaustive reading.⁹⁾ Such a semantic factor of the accusative-marked object in (18b), if any, seems not to induce the nominal in question to undergo overt object shift to the outer spec of v*: that is, such a factor

9) See Sch tze (2000) for the argument that the Case marker may be a focus one, though this paper doesn’t necessarily agree to such an argument.

cannot be involved in triggering overt object shift so that the accusative-marked object remains in-situ (i.e., in the thematic position of the lexical verb). This is just why this paper argues that the overt object shift of the ECMed nominal *caki-uy tongsayng-ul* in (18a) cannot be triggered by Chomsky's *Int* effects. At this stage, we need to note that in my system, there is a difference of Case checking between non-structural Case (i.e., inherent Case) of a simple object in (18b) and structural Case of the ECMed nominal as will be shown. This paper argues that while the object with inherent Case in the thematic position undergoes Case checking against v^* by Agree (Chomsky 2000, 2001), the ECMed nominal with structural Case in the non-thematic position necessarily undergoes overt object shift to the outer spec of v^* in order to have its structural Case checked against v^* (cf. Bošković 1997, 2002, in press a) as will be shown.¹⁰ Hence, as depicted as in (19), the supposed surface position of the ECMed nominal is [Spec, v^*P] in the upper clause:

- (19) Chelswu-ka [_{v^*P} caki-uy tongsayng-ul [_{CP} ttokttokha-ta-ko mit]-ess-ta]

With regard to the nature of the surface position of the ECMed nominal in Korean, it has been claimed that it is an A-position (Hong 1990, Yoon 1991, Yoon 1996, Kim 2005):

- (20) a. na-nun [_{CP} Chelswu-ka yengliha-yess-ta-ko] mit-ess-ta
 I-TOP C-NOM be-smart-Past-Dec-COMP believe-Past-Dec
 'I believed that Chelswu was smart.'
 b. na-nun Chelswu-lul [_{CP} t yengliha-yess-ta-ko] mit-ess-ta.
 I-TOP C-ACC be-smart-Past-Dec-COMP believe-Past-Dec
 'I believed foolishly Chelswu to have been smart.'

The position of the ECMed nominal must be an A-position in the sense

10) This is also a matter of my another research on different issues of the Korean ECM construction.

that a Case position is an A-position and the ECMed nominal receives an accusative Case. Furthermore, the fact that the ECMed nominal can feed further A-movement operations such as Saito's (1992) local scrambling is taken to show that it is in a matrix A-position as will be shown soon. As pointed above, the supposed position of the ECMed element *Chelswu-lul* 'Chelswu-ACC' in (20b) is the matrix [Spec, v*P], which is a non-thematic position. If this is on the right track, from that surface A-position (i.e., [Spec, v*P]) it can undergo local scrambling as in (21):

- (21) *kutul_i-ul sero_i-uy sensayng-nim-i t_i papo-la-ko*
 they-ACC each other-GEN teacher-HON-NOM fool-be-COMP
 *sayngkakha-n-ta.*¹¹⁾

11) An anonymous reviewer judges the example in (i) to be ruled in and points out that the reflexive anaphor *caki-lul* 'self-ACC' in (i) underwent A'-movement (in the sense that anaphor phrase can be reconstructed to be bound by its antecedent):

- (i) *caki_i-lul Chelswu_i-nun miweha-n-ta.*
 self-ACC Chelswu-TOP hate-PRS-DC
 'Chelswu hates himself.'

In this vein, he argues that *kutul-ul* 'they-ACC' in the sentence-initial position in (21) underwent A'-movement. At this point, however, we need to note that there arises a sharp contrast between (i), repeated in (iia) on the one hand and (iib) and (iii) on the other (cf. Yang 2004):

- (ii) a. *?*caki_i-lul Chelswu_i-nun miweha-n-ta.*
 b. *Chelswu_i-nun caki_i-lul miweha-n-ta.*
 (iii) a. ***caki-casin_i-lul*** *Chelswu_i-nun miweha-n-ta.*
 self-ACC Chelswu-TOP hate-PRS-DC
 'Chelswu hates himself.'
 b. ***caki-tonsayng-ul*** *Chelswu_i-nun miweha-n-ta.*
 self-brother-ACC Chelswu-TOP hate-PRS-DC
 'Chelswu hates his younger brother.'

The heaviness of the anaphor phrase in (iii,a,b) is assigned a contrastive focus (Yang 2004); hence, it can undergo A'-movement to the matrix [Spec, CP] and also be reconstructed to satisfy Principle A. In brief, the anaphor in (iia) and the

think-PRS-Dec

'Their teacher thinks them to be a fool.'

At this stage, we need to note that the locally scrambled *kutul-ul* 'they-ACC' in (21) does not seem to be assigned any semantic output. If this is correct, the ECM process in (21) cannot induce the element in question to trigger *Int* effects,¹²⁾ contrary to Yoon's and Jung's arguments.

4. What Drives Overt Object Shift of ECMed Nominals?

4.1 Overt Object Shift in English

This paper follows the overt object shift analysis of English ECM constructions, which means that English (in fact, any language) has overt movement of accusative elements to [Spec, AgroP]/[Spec, vP], motivated by licensing of the accusative Case of the object, an uninterpretable feature (see Boeckx and Hornstein 2005, Bošković 1997, 2002, 2007, Epstein and Seely 1999, 2006, Lasnik 1999, McCloskey 2000, among others).¹³⁾ The arguments are particularly strong regarding the

pronoun in (21) both underwent A-movement contrary to his prediction; hence, no reconstruction.

12) There does not really seem to be a contrast of discourse effects between the ECMed nominal in (ia) and the simply accusative-marked object in (ib); hence, no *Int*-driven object shift of the ECMed nominal in (ia):

- (i) a. *sensayng-nim-i kutul-ul papo-la-ko mit-ess-ta.*
teacher-HON-NOM they-ACC fool-be-COMP believe-PST-Dec
'A teacher believed them to be a fool.'
- b. *sensayng-nim-i kutul-ul mit-ess-ta.*
teacher-HON-NOM they-ACC elieve-PST-Dec
'A teacher believed them.'

13) As noted above, the ECMed nominal raises to a non-thematic position in the matrix clause (i.e., matrix outer spec of v*). Of the two candidates [Spec, AgroP] and [Spec, v*P], I will choose [Spec, v*P] without arguments, because Chomsky's (1995) arguments for eliminating Agr projections are so strong that the presentation of Agro seems to be only a technical apparatus.

ECM accusative, which must be structural Case.¹⁴⁾

McCloskey (2000), who discusses quantifier float under wh-movement in West Ulster English, shows that (22), where *all* is floated under wh-movement of *who*, provides evidence for overt object shift: that is, the infinitival subject *your mother* in (22) moves overtly to the higher clause for (structural) Case-checking:¹⁵⁾

(22) Who did you expect your mother [_{CP} [all t] to meet at the party]?

Lasnik (1999) presents an analysis of pseudogapping that requires overt object shift. He argues that (23) involves overt object shift, followed by VP ellipsis (see Lasnik 1999 for details):

(23) The DA proved Jones guilty and the Assistant DA will Smith;
[_{VP} prove t_i guilty] (the underlined part is missing in pseudogapping)

He also argues that the ECMed phrase *two men* in (24), where the adjunct modifies the matrix clause, must be moving to the matrix

14) Bošković (2002) argues that direct object accusative could be an inherent Case since the Case-licensing verb θ -marks the nominal in question, which means that it is not necessarily an uninterpretable feature, but that structural Case must be checked by movement and this triggers the overt object shift of the ECMed element to the matrix [Spec, AgroP]/[Spec, vP].

15) The possibility of Q-float in (i) also provides another argument to this effect (cf. Bošković in press a, Sportiche 1988):

(i) I believe the students [_{IP} [all t] [_{IP} to [t know French]]].

The students in (i) and *your mother* in (22) underwent ECM from the embedded subject position. An anonymous reviewer points out how we know that *your mother* in (16) underwent ECM. In (22), the wh-object moved to the matrix [Spec, CP] through the embedded [Spec, CP] (i.e., the position of *all*), which shows that *your mother* should be over the embedded [Spec, CP]. Hence, the supposed surface position of the ECMed nominal *your mother* is the matrix clause.

clause overtly:

- (24) The DA proved two men_i to have been at the scene during each other_i's trials.

The example in (24), where the anaphor *each other* is coindexed with the NP in question, shows that the NP (i.e., ECMed phrase *two men*) is in the position c-commanding the adjunct within which the anaphor is; hence, the supposed position is the matrix [Spec, v*P].

As Bošković points out, the contrast between (25a) and (25b) (more precisely, the ungrammaticality of (25b)) provides evidence for obligatory overt object shift with ECM (Bošković 1997, 2002):

- (25) a. Whom did John prove to be guilty when?
b. *When did John prove whom to be guilty?

He argues that if *whom* must undergo to the matrix [Spec, AgroP]/[Spec, vP] in Bošković (2007, in press a), we can easily account for the fact that *whom* rather than *when*, moves to [Spec, CP] in (25a,b). As a result of overt object shift, *whom* ends up being higher in the structure than *when* prior to wh-movement. Consequently, the superiority condition requires that *whom*, rather than *when*, moves to [Spec, CP].

The grammaticality of (26), where a matrix adverbial follows the embedded clause subject, also provides evidence that the infinitival subject moves overtly into the matrix clause (Postal 1974):¹⁶

- (26) I've believed John for a long time now to be a liar.

4.2 Structural Case Checking of ECMed Nominals

16) It is assumed in this paper that the matrix adverbial in (26) is adjoined to VP: the supposed surface position of the ECMed nominal is the matrix [Spec, v*P] as noted above.

Uninterpretable features play an important role in recent work in the Minimalist tradition; they are essential to movement and other relations in syntax. For example, it is assumed that uninterpretable features render a linguistic object active, allowing it to be targeted by syntactic operations (Chomsky 2000:123). A version of this assumption is that once an expression no longer contains any uninterpretable features, it necessarily spells out. Structural Case is taken to be fully uninterpretable: that is, Case differs from ϕ -features in that it is always uninterpretable, for both terms (i.e., checker and checked) of the checking relation. This is why language has the operation Move (Chomsky 1995:278). Chomsky (1995:278–79) calls Case (i.e., structural Case) the “formal feature par excellence” for this reason.

Bošković (2002:212) argues that inherent Case differs from structural Case in that it does not require movement to [Spec, AgroP] (i.e., here, [Spec, v*P]). Essentially following Chomsky (1986), he argues that it may be licensed in situ under θ -role assignment. As for the ECM accusative, the inherent Case option is ruled out due to the association of inherent Case with θ -licensing, ECMed nominals not being θ -marked by their Case licenser. Note that the only Case available to objects that undergo ECM, then is structural. Bošković further argues that structural Case must be checked by movement and this triggers the overt object shift of the ECMed element to the matrix [Spec, AgroP]. That is, by taking the structural Case option of the ECMed nominal, we obligatorily get overt object shift, structural Case requiring overt licensing. In this paper, following Bošković (1997, 2002), I argue that the ECMed nominal in Korean must move to the outer spec of v* in the upper clause in order to have its structural Case checked.¹⁷⁾

17) An anonymous reviewer points out that all accusative-marked elements in Korean seems to be unable to be licensed in the spec-head relation and asks how the accusative-marked elements in (i) are Case-licensed:

- (i) John-un halu-eyto yel-pen-ul khep lamyen-ul mek-i-lul
 J-TOP a day-within-even ten-Cl-ACC cup ramen-ACC eat-n-ACC
 cwuce-lul haci-lul ani-lul ha-n-ta-ko-yo.
 give-ACC do-ACC not-ACC do-PRS-Dec-COMP-HON · Dec

5. Movement of ECMed Nominals out of [Spec, CP]

5.1 The Intermediate [Spec, CP]

Bošković (2007, in press a) argues that intermediate Cs and intermediate Is should be treated uniformly in successive cyclic movement: (28a) is the IP counterpart of (27a), and (28b) is the IP counterpart of (27b):

- (27) a. What_i do you think [_{CP} t_i that John bought t_i]?
b. You think [_{CP} that John bought a house].
- (28) a. Someone_i seems [_{IP} t_i to be t_i in the garden].
b. There seems [_{IP} to be someone in the garden].

Ormazabal (1995) and Epstein and Seely (2006) suggest that all raising and ECM infinitives (propositional infinitives) are CPs.¹⁸ There is then a complete parallelism between successive cyclic wh-movement in (27a) and successive cyclic NP-movement in (28a), repeated in (29):

- (29) Someone_i seems [_{CP} t_i [_{C'} to be t_i in the garden]].

In this respect, Bošković (2007, in press a) proposes that successive cyclic A and A' movement should be treated in the same way. A-movement across CP is in principle possible (Ormazabal 1995, Epstein

¹⁸Even within a day John doesn't hesitate to eat the cup ramen ten times.'

As the example in (i) shows, the accusative Case in Korean seems to be able to be attached to the sentence constituents without strict restrictions. Note that the object with inherent Case in Korean is covertly Case-checked against v* (Chomsky 2001). Here, however, I will leave it open how the Case-marked elements in (i) are Case-licensed. As noted above, this paper focuses on the structural Case licensing of the ECMed nominals: the ECMed nominal with structural Case should be Case-licensed against v* in the spec-head relation (Bošković 1997, 2002, in press a, b, among others).

18) Pesetsky (1992) also suggests this analysis and Tanaka (2002), who discusses only ECM infinitives, argues that ECM infinitives are CPs.

and Seely 2006, Tanaka 2002, McCloskey 2000).¹⁹⁾ McCloskey (2000) provides evidence that given that *all* can be in [Spec, CP] in successive cyclic movement in West Ulster English as in (30a), the ECM infinitive in (30b) must be a CP and the example must involve A-movement (i.e., overt object shift of the ECMed NP *your mother* in (30b)) out of CP:

- (30) a. What do you think [_{CP} (all) that he'll say [_{CP} (all) that we should buy]]?
 b. Who do you expect [_{AgroP} (i.e., here, v*P) your mother [_{CP} [all t] to meet at the party]]?

As pointed above, in the current framework, A-movement out of CPs is in principle possible as in (29) and (30b). The A and A' distinction of [Spec, CP] depends on the nature of the movement when it serves as an intermediate landing site of successive cyclic movement: that is, nothing prevents us from treating the intermediate [Spec, CP] as an A-position during successive cyclic A-movement (see Bošković in press b for details).

Based on the above observations in English, I argue that the ECM construction in Korean involves A-movement out of CP, which induces the intermediate [Spec, CP] to be an A-position:^{20) 21)} That is, the

19) The A/A' distinction is no longer needed in the current, feature-based theoretical system. Eliminating it would clearly be theoretically desirable (see Abe 1993, Bošković and Takahashi 1998, Chomsky 1995). The same holds for the Improper Movement mechanism, which used to be appealed to block A-movement out of CPs (Bošković in press a): that is, A-movement out of CPs should be in principle possible as noted above.

20) Refer to Yoon (2004) for the argument that the intermediate [Spec, CP] in the Korean ECM construction is an A-position, though this paper doesn't necessarily agree to his argument. Here, for the present purpose, I apply Bošković's proposal that the ECM construction involves A-movement out of CP which induces the intermediate [Spec, CP] to be an A-position to Korean ECM constructions without arguments.

21) Bruening (2001) claims for Passamaquoddy and Japanese that when an NP raises out of a finite clause by A-movement, it is base-generated at the clause edge position. Based on this proposal, Kim (2005) argues that the ECMed nominal in Korean is base-generated in the second spec of the lower clause,

ECMed nominals *caki-uy tongsayng-ul* and *Sue-lul* in (31) undergo A-movement through the A-position (i.e., here, intermediate [Spec, CP]) to the matrix [Spec, v*P] as in (31):

- (31) a. Chelswu_i-ka [_{v*P} **caki-uy tongsayng-ul** [_{CP} t [_{TP} t ttoktokha-ta-ko] mit-ess-ta] (=1b)
 b. Tom-un [_{v*P} **Sue-lul** [_{CP} t [_{TP} t yeppu]-ta-ko] mit]-ess-ta. (=3)

As noted above, the surface position of the ECMed nominal in Korean is [Spec, v*P]: that is, it undergoes overt object shift, which is an A-movement in the sense that it is driven by structural Case checking.

Then, in this system, in what sense do phases ensure that grammatical operations are local as in (31)? The answer is given by Chomsky (2001): a head and its edge are accessible only to the next phase, under the Phase Impenetrability Condition (PIC) defined in (26):

- (32) Phase Impenetrability Condition (PIC)

The domain of H is not accessible to operations outside HP (i.e., phase); only H and its edge are accessible to such operations (Chomsky 2001:13).

5.2 Further Movements of ECMed Nominals

Let's look anew at the examples in (2) and (21), repeated in (33a, b)

deriving its theta-role (but not case) from a coindexed position with a null *pro* in a thematic A-position (cf. Yoon 1996) as in (i):

- (i) Na-nun [_{v*P} Mary_i-lul [_{CP2} t_i [_{CP1} pro_i hayngpokha-yess-ta-ko]] mit]-ess-ta.
 I-Top Mary-Acc happy-Past-Dec-Comp believe-Past-Dec
 'I believed that Mary was happy.'

However, this paper doesn't follow such a proposal since there may arise a non-trivial issue as to why the ECMed nominal should be generated in [Spec, CP].

respectively, for the present purpose:

- (33) a. [_{CP} **caki_i-uy tongsayng-ul** [_{TP} Chelswu_i-ka [_{VP} t
ttokttokha-ta-ko mit]-ess]-ta]. (2)
- b. [_{CP} [_{TP} **kutul_i-ul** [_{T'} sero_i-uy sensayng-nim-i [_{VP} t
elisekkeyto ttokttokha-ta-ko mit]-usi-ess]]-ta]. (21)

The ECMed nominals in (33) underwent further movement from the their surface shifted position.

Before proceeding, let's consider Chomsky's (2000, 2001) problem in successive cyclic movement. Given that there are no defective heads, all probes delete the uninterpretable feature of the goal that makes the goal active for entering into a relation with the probe. Apparently, once the wh-phrase in (27a), repeated in (34), moves to [Spec, CP] undergoing agreement with the C it is frozen in this position in Chomsky's (2000, 2001) system:

- (34) What_i do you think [_{CP} t_i that John bought t_i]?

This problem can be readily solved if passing through an intermediate [Spec, CP] doesn't imply feature checking with the head of a phase (cf. Takahashi 1994, Bošković 2007, in press a, b, among others).²²⁾

Let's return to the examples in (33). In this paper, basically following Bošković (in press a, b), I assume that there is no feature checking in intermediate positions in successive cyclic A or A' movement in Korean, in which Form Chain is eliminated (Chomsky 1995, and later). That is, this paper doesn't accept Chomsky's (2000, 2001) theory of successive cyclic movement, which relies on intermediate feature checking. Then, in this system, how can ECMed nominals in (33)

22) In Takahashi's (1994) system based on Chomsky and Lasnik's (1993) Minimize Chain Links Principle (MCLP), successive cyclic movement is not a result of feature checking. Rather, it is a result of the requirement that all chain links be as short as possible. The requirement forces element X undergoing movement of type Y to stop at every position of type Y on the way to its final landing site, independently of feature checking.

undergo movement to the sentence-initial position? Passing through the surface position (i.e., [Spec, v*P]) in (33) implies feature checking against v* since the ECM process is triggered by structural Case checking against v*. Nevertheless, the sentence is ruled in. However, this may not be a problem in this system where an element undergoes A/A' feature checking only once (cf. Bošković in press b). At this point, we can say that no instance of feature checking movement can feed another instance of feature checking movement. This accords with the fact that in (33), the ECMed nominal underwent feature checking from its surface position [i.e., [Spec, v*P]] to the sentence-initial position only once. At this stage, we need to notice that the instance of movement from the embedded subject position to the shifted position through [Spec, CP] is triggered by the different feature checking from the above case: that is, a separated feature checking operation. The movement of the ECMed nominals in (33) from the embedded clause to the sentence-initial position cannot be a successive cyclic operation, but the result of two successive cyclic operations in Bošković's fashion. Notice that the matrix [Spec, v*P] is the surface position of the ECMed nominal in this system, where Bošković's successive cyclic movement ends. This means that when the ECMed nominal undergoes movement from the shifted position to the sentence-initial position as shown in (33), the movement must be another (successive cyclic) one in my system.

6. Conclusion

In this paper, I have argued that in Korean, the ECMed nominal undergoes overt object shift to the matrix [Spec, v*P] out of the embedded clause (in order to have its structural Case checked against v) (cf. Bošković 1997, 2002, Lasnik 1999, McCloskey 2000, Radford 2004, among others). It has been shown that A-movement out of CPs is in principle possible in the Korean ECM construction (cf. Bruening 2001, Ormazabal 1995, Epstein and Seely 2006, Tanaka 2002, McCloskey 2000, among others); hence, Chomsky's (1973) Improper Movement

mechanism, which used to be appealed to block A-movement out of CPs, is gone in the sense that the Form Chain operation has been eliminated (Chomsky 1995, and later). Once the wh-phrase in (34) moves to the intermediate [Spec, CP] undergoing agreement with the C it is frozen in this position in Chomsky's (2000, 2001) system. Focusing on this problem. I have shown that it can be readily solved if passing through an intermediate [Spec, CP] doesn't imply feature checking with the head of a phase (cf. Takahashi 1994, Bošković 2007, in press a, b, among others). In my system, however, passing through the intermediate [Spec, v*P] in (33) implies feature checking against v* since the ECM process is triggered by structural Case checking against v*. To address this seemingly problematic factor, following Bošković (in press a, b), we need to note that no instance of feature checking movement can feed another instance of feature checking movement. In this respect, I have shown that in fact, there is no intermediate feature checking in (33), since the ECMed nominal underwent a new feature checking operation from its surface shifted position.

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