# A Critical Survey of GB/Minimalist Research on Case and A-Chains in Korean\*

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#### 1. Introduction

Constructions posing interesting problems for the crosslinguistic understanding of Case have been actively and frequently researched in Korean syntax. In this paper, we will critically survey research on Case conducted in the tradition of recent Chomskyan syntactic theory, i.e., GB Theory and the Minimalist Program. Specifically, in this paper, we will (1) identify the issues and problems the study of Korean syntax raises for Case Theory in general; (2) review a sampling of the research done in an effort to resolve these problems; (3) provide a critical assessment of the contributions made to Case Theory from Korean; and finally, (4) address problems which await future research. We will begin our discussion by reviewing the research done within the GB framework and briefly discuss the recent developments in Case Theory within the Minimalist Program.

## 2. Case in GB Theory

#### 2.1. Case Filter and Visibility Condition

Case Theory in GB is based on the observation that there are certain structural positions (e.g., subject of certain non-finite clauses) to which a  $\theta$ -role is assigned but where a lexical NP with phonological content may not surface. Such positions appear to be counterexamples to the Theta Criterion

<sup>\*</sup>This paper is a revised and expanded version of section 1 of the paper presented in 1996 at the plenary session of the 10th International Conference on Korean Linguistics in Brisbane, Australia. The original paper, co-authored with H-S J Yoon, covered Case (section 1) and Scrambling (section 2). Section 1 (on Case) was written by J-M Yoon and section 2 (on Scrambling) by H-S J Yoon. I would like to thank an anonymous reviewer for helpful comments.

and the Projection Principle, which demand that positions that receive thetaroles be structurally represented. Being a modular theory, instead of saying that the Theta Criterion and the Projection Principle are wrong, GB Theory handled these data by invoking another module, i.e., Case Theory, which prohibits the occurrence of overt NPs in contexts where they are not assigned Case, taking a cue from the fact that overtly realized argument NPs in many languages bear morphological Case inflection.

According to Case Theory, NPs are prohibited from occurring in certain positions if these positions fail to be assigned Case, even though they may be assigned a  $\theta$ -role. This observation is stated in the Case filter.

#### (1) Case Filter (Chomsky 1981)

\* NP, if NP is lexical, and does not have Case (at S-structure).

Some explanation is in order about the Case Filter. First, Case in the Case Filter is abstract Case, not morphological case. The concept of abstract Case is needed because first, there are languages with little or no morphological case inflection such as Chinese and English but the Case Filter is meant to be a universal principle. Secondly, it is not just overtly realized NPs (capable of bearing case inflection) which fall under Case Theory but certain types of null NPs (incapable of bearing case inflection) as well, such as the trace of movement in (2) below.<sup>1</sup>

#### (2) \*Who<sub>i</sub> does it seem/appear t<sub>i</sub> to be here?

Thirdly, the Case Filter holds at S-structure. This is because an NP without Case at D-structure can be "saved" by moving to a position to which Case is assigned at S-structure. This yields the phenomenon of NP/A-Movement.

One obvious problem with the Case Filter, however, is that it is not just lexical NPs which are subject to the Case Filter, but certain types of null NPs, i.e., Wh-traces as we saw above in (1) and *pro*, are also subject to it. This raises the question of what it is that these NPs may have in common

<sup>&</sup>lt;sup>1</sup> For (2), one might say that it is the "head" of the movement Chain which needs Case, but there are structures in which the head of the Chain is not lexical, and yet a trace has the distribution of lexical NPs.

<sup>(</sup>i) \* Mary is easy [Opi for it to seem ti to be tired]

The head of the chain in (i) is a phonologically null operator, and yet the trace it binds must occur in positions where case is assigned, as seen by the ungrammaticality of (i).

which requires them to carry abstract Case. A solution to this problem was provided in the form of the Visibility Condition, which attempts to link the Case Filter to a "deeper" principle of grammar, namely, Theta Theory.

## (3) Visibility Condition (Chomsky 1986a)

An element is visible for  $\theta$ -marking only if it is assigned Case.

An argument NP must receive a  $\theta$ -role and since Case is a prerequisite for the  $\theta$ -marking, it follows that every NP must be Case-marked.

The Visibility Condition requires Case only on argument NPs, and in this sense, is distinct from the Case Filter, which requires all lexical NPs to have Case, whether or not they are arguments. Since adverbial NPs are regularly Case-marked in Korean, they raise a problem for the Visibility Condition, and might provide us with a test case to distinguish the Case Filter and the Visibility Condition.

As shown in (4) below, adverbial NPs such as 'one hour' (han sikan-ul) and 'in the rain' (pis-sok-ul), though not arguments, can be Case-marked.

- (4) a. Chelswu-ka han sikan-ul kongpwuha-ess-ta.
  Chelswu-NOM one hour-ACC study-PAST-DECL
  'Chelswu studies for one hour.'
  - b. pesu-ka pis-sok-ul talli-ess-ta.bus-NOM rain-in-ACC run-PAST-DECL 'The bus ran in the rain.'

#### 2.2. Conditions on Case Assignment

Having reviewed problems with the Case Filter/Visibility Condition, let us now move on to the set of basic principles which underlie Case assignment. First, let us begin with the basic configuration of Case assignment. The basic hypothesis of Case Theory is that the positions that can host lexical NPs are those which are in a local relation to a certain kind of head. This is formalized as the following Case assignment rules.

- (5) Configurational Conditions on Case Assignment (Chomsky 1981)
  - (i) Case is assigned under Government.
  - (ii) Government: a governs  $\beta$  if a is a governor and a m-commands  $\beta$  and there is no Y, Y an  $X^o,$  such that Y c-commands  $\beta$  and does not c-command a.
  - (iii) Governing heads: finite I, transitive V, P.

In short, (5) identifies three essential properties of Case assignment. First, configurationally, the Case-assignee should be in the m-command domain of the Case assigner. Secondly, there must not be a closer governor for the Case-assignee. Thirdly, only certain kinds of heads can be Case assigners. In English, a finite Infl, active and transitive V, and P are such heads.

The problems the analysis of the Case marking pattern in Korean raises for the above Case assignment mechanisms are the following. First, in Korean, there are constructions where Case assignment does not appear to observe the structural condition of government. These constructions include Multiple Nominative/Accusative Constructions (MNCs/MACs), Nominative Object Constructions (NOCs) and Exceptional Case-Marking Constructions (ECMCs), as shown below.

#### (6) MNCs

a. Chelswu-ka apeci-ka pwuca-i-ta.
 C-NOM father-NOM rich person-COP-DECL
 'Chelswu's father is rich.'

#### MACs

b. Yenghi-ka Tongswu-lul meli-lul chi-ess-ta.
 Y-NOM T-ACC head-ACC hit-PAST-DECL
 'Yenghi hit Tongswu on the head.'

#### **NOCs**

c. Chelswu-ka paym-i mwusep-ta.C-NOM snakes-NOM fearsome-DECL'Chelswu is afraid of snakes'

#### **ECMCs**

d. Chelswu-ka Yenghi-lul yeppu-ta-ko sayngkakha-n-ta.

C-NOM Y-ACC pretty-DECL-COMP think-PRES-DECL

'Chelswu thinks Yenghi to be pretty.'

The reasons these are problematic for (5) are as follows.

Although there can be differences depending on analyses, configurationally, the extra Nom/Acc-marked NPs in Multiple Nom/Acc Constructions, i.e, the Nom/Acc-marked NPs except the ones closest to the Case governor, appear in positions which are not in the m-command domain of the Case assigner: for example, the extra Nom NPs, if they are adjoined to IP, will not be m-commanded by Infl, under the standard definition of m-command given in

Chomsky (1986b).

The same problem arises in the analysis of NOCs, if Infl is the assigner of Nom Case. As V is a closer governor which c-commands the object, VP is a minimality barrier and thus Infl cannot govern and assign Nom Case to the object. Another construction in Korean which appears to violate the government condition is ECMCs, where the subject of the embedded clause is apparently assigned Acc Case from the matrix predicate across the CP boundary. The problems relating to the configurational properties of Case-assignment will be discussed in section 3.1.1.

Another kind of problem concerning Case assignment in Korean has to do the nature of Nom/Acc Case assigner. Contrary to English where there is one-to-one relation between the Case assigner and the assignee, no such relation between the Case assigner and the assignee is observed in Korean, as can be seen in Multiple Case Constructions and NOCs. Although it has not been explicitly stated, the general assumption in Case Theory is that there is one-to-one matching between the Case assigner and the assignee, as observed in many languages such as English. Since Korean Case appears to challenge this generalization, some explanation is called for.

Furthermore, the identity of the Nom/Acc Case assigner in Korean is not clear. Since subjects of non-finite clauses can be assigned Nom Case in Korean, it cannot be finite Infl that assigns Nom Case, but something else.

#### 2.3. Chain Condition/Case Uniqueness Condition

In GB Theory, the uniqueness of  $\theta$ -roles and Case are taken as a definitive property of A-Chains. This is stated in the following Chain Condition.

#### (7) Chain Condition (Chomsky 1986a)

In a maximal Chain  $C = \langle a_1 ... a_n \rangle$ ,  $a_n$  occupies its unique  $\theta$ -position and  $a_1$  its unique Case-marked position

Several constructions in Korean appear to cast doubt on the validity of the Chain Condition, specifically regarding its provision that there is only one Case assigned to a Chain - the Case Uniqueness Condition.

First, in Korean, we find overt evidence of multiple Case marking on Chains. Case stacking data belong to this category. Case stacking could be taken to indicate that the nominal is assigned the two overtly manifested Cases, in violation of the Chain Condition.

- (8) a. Chelswu-eykey-man-i paym-i mwusep-ta.
  C-DAT-only-NOM snake-NOM fearsome-DECL
  'Only Chelswu is afraid of snakes.'
  - b. Yenghi-eykey-man-i ton-i manh-ta.
     Y-DAT-only-NOM money-NOM is much-DECL
     'Only Yenghi has lots of money.'
  - c. I kongchang-ey-man-i pwul-i na-ess-ta.
     this factory-LOC-only-NOM fire-NOM break out-PAST-DECL
     'A fire broke out only in this factory.'

Secondly, some constructions in Korean strongly suggest that two Cases might have been assigned to a Chain, unless we assume Case assignment in Korean is optional. Alternation of Nom and Acc Case on the subject of the embedded clause in ECMCs, and Subject-to-Subject Raising Constructions constitute the relevant data.

- (9) a. Chelswu-nun Yenghi-ka/lul ttokttokha-ta-ko sayngkakha-n-ta. C-NOM Y-NOM/ACC smart-DECL-COMP think-PRES-DECL 'Chelswuu think that Yenghi is smart.'
  - b. Apenim-i o-si-n-kes katu-si-ta.
     father-NOM come-HON-ADN-COMP seem-HON-DECL
     'The father seems to have come.'

In addition to the fact that they violate the Case Uniqueness Condition of the Chain Condition, these constructions raise problems to the standard assumption about the nature of A-movement, i.e., A-movement is an obligatory movement in order to receive Case and that A-movement is local in the sense that it is subject to the Tensed S Condition (TSC) and the Specified Subject Condition (SSC). We will turn to an evaluation of these issues in section 3.2.

In sum, we have a number of potential challenges to the standard assumptions about Case Theory coming from Korean. The interesting question is whether these are only apparent problems that evaporate on a more skilled analysis, or are indicative of fundamental problems in the theory. In the next section, we will undertake a detailed critique of the issues identified above.

#### 3. Critical Review

#### 3.1. Government and Case Assignment in Korean

In section 2.1, we pointed out that various constructions such as Multiple Case Constructions, Nominative Object Constructions and Exceptional Case-Marking Constructions in Korean manifest apparent violations of the basic conditions of Case assignment, i.e., that Case is assigned under government. Below we discuss the configurational problems of Case assignment in Korean raised by these constructions one by one.

#### 3.1.1. Configurational Problems of Case Assignment

#### 3.1.1.1. Multiple Nominative Constructions

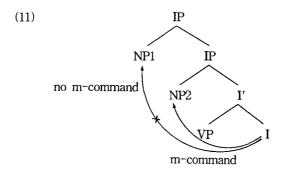
The problem of Nom Case assignment in MNCs is that the Nominative NP(s) except the one closest to Infl are not m-commanded by it, assuming that Infl is the assigner of Nom Case and that non-final Nominative NPs are adjoined to IP.

- (10) a. [IP Chelswu-ka [IP apeci-ka pwuca-i-ta]]

  C-NOM father-NOM rich person-COP-DECL

  'Chelswu's father is rich.'
  - b. [IP Pihayngki-ka [IP nalkay-ka [IP oynccok-i puleci-ess-ta]]] airplane-NOM wing-NOM left one-NOM break-PST-DECL 'The left wing of the plane broke.'

Under the definition of m-command proposed in Chomsky (1986b), a head does not m-command a category adjoined to the maximal projection of the head, because an element adjoined to a maximal projection XP is not dominated by the XP category. In (11) below, NP1 is outside the m-command, and hence, government, domain of Infl.



Various proposals have been made in order to solve this problem. One class of analysis approached the problem by modifying the definition of m-command to make government by Infl possible in such configurations, assuming that Nom Case is assigned by Infl. Han (1987) proposes such an approach. He solves the problem of m-command by proposing the following revised definition of m-command.

#### (12) m-command

 $\alpha$  m-commands  $\beta$  iff  $\alpha$  does not dominate  $\beta$  and every maximal projection  $\gamma$  that dominates  $\alpha$  includes  $\beta$ .

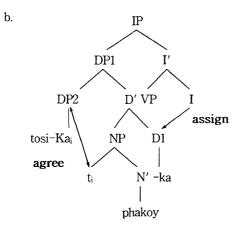
A similar proposal was made earlier by Yim (1985).

Although this proposal solves the apparent configurational problem of Nom Case assignment in MNCs in Korean, simply changing the definition of m-command for Korean does not explain why the same does not hold in English-type languages, i.e., why adjoined positions cannot be Case positions in English-type languages, while they are in Korean.<sup>2</sup>

Another way to solve the problem is posit a special mechanism to assign Nom Case to the extra NPs, still keeping the assumption that Nom Case is assigned by Infl. The Case Agreement analysis proposed by Y-J Kim (1990) and Bak (1992) are analyses along these lines. The crux of this analysis is that only the NP closest to Infl in MNCs is assigned Nom Case by Infl, while other NPs receive Nom Case not directly from Infl, but by a special mechanism called Case Agreement. For instance, according to Bak, the Case feature of XP can percolate to X and the general process of Spec-Head agreement can allow X (or XP) and its Spec YP to share the same Case feature. Thus, in his analysis, the following is the structure of tosi-ka phakoy-ka in a MNC like (13a).

(13) a. tosi-ka phakoy-ka toy-ess-ta.
city-NOM destruction-NOM become-PAST-DECL
'The city was destroyed.'

 $<sup>^2</sup>$  However, see Y-S Lee (1993) for the claim that adjoined positions are systematically Case positions.



Although this analysis solves the problem of non-local Case assignment and is also able to account for the fact that only the final NP triggers honorific agreement, since only that NP will be governed by Agr/Infl, one obvious problem of this analysis is that it fails to explain the Case-marking pattern in sentences like (14b) below, discussed in Kim & Maling (1992).

- (14) a. kongcang-i changko-<u>ka</u> pwul-i na-ess-ta. factory-NOM warehouse-NOM fire-NOM break out-PAST-DECL 'There was a fire in the factory.'
  - b. kongcang-i changko-ey pwul-i na-ess-ta.
     factory-NOM warehouse-LOC fire-Nom break out-PAST-DECL

Unlike (14a), the grammaticality of (14b) is not explained if the whole NP kongoang acquired Nom Case by Case Agreement with the part NP changko, given that the latter is marked with Loc Case, not Nom Case.

Another approach to the problem gives up the standard assumption that Nom Case is assigned by Infl under government and seeks a different Case assignment mechanism which does not resort to configurational conditions like m-command. A representative analysis of this approach is the proposal which views Nom Case in Korean as a default Case (Y-S Kang 1986; Y-J Kim 1990). Since nothing assigns Nom Case, the configurational problem of Case assignment simply does not arise in this approach. Under this analysis, the extra NPs in MNCs get Nom case because they cannot be assigned Case from any governor, but must surface with Case in order not to violate the Case Filter. We will discuss the Default Case analysis in section 3.1.2.1.

#### 3.1.1.2. Nominative Object Constructions

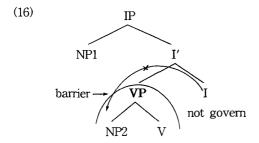
Another construction which appears to pose problems for the configuration of Case assignment is the Nominative Object Construction shown below.

- (15) a. Chelswu-ka paym-i mwusep-ta.

  C-NOM snakes-NOM fearsome-DECL

  'Chelswu is afraid of snakes'
  - b. Yenghi-ka ton-i manh-ta.Y-NOM money-NOM much-DECL 'Yenghi has lots of money.'

Since the second Nom-marked NP in (15) is the object of the predicate, if the source of Nom Case is Infl, it should not be governed by Infl, because the VP is a barrier as there is a closer governor V. In (16) below, Infl should not govern NP2 under this definition.



There have been a number of analyses of Nom objects. The first analysis claims that Nom Case on the object NP is assigned by the Infl according to the standard assumptions on Nom Case assignment and seeks a special mechanism which enables Infl to govern the object in such constructions.

In J-S Lee's (1992) analysis, this is done by a new notion of minimality barrier developed within a theory of "Case Minimality", which says in effect that only the head with a Case feature forms a minimality type barrier with respect to a more remote head. Since stative predicates such as *mwusepta* do not have a Case feature, Infl can govern and assign Nom Case to their objects.

A problem of this analysis is that the Nom object does not trigger honorific agreement typically associated with Infl as the assigner of Nom in Korean. Note that this is similar to the problem encountered above in MNCs and appears to come from the following two suppositions, namely, that all Nom Cases come from Infl and that honorific agreement and Nom Case assignment are inseparable, both of them originating from Infl.

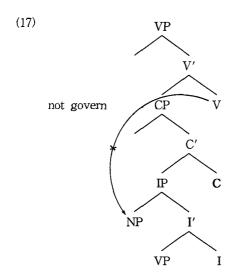
As for general problems of the analysis based on Case Minimality, we will discuss them in detail in section 3.1.1.3., where we discuss ECMCs in more detail.

Another analysis attributes Nom Case on the object of these constructions not to Infl but to the stative predicate itself (Han 1991). In this approach, there are two kinds of Nom Cases in Korean: one is a structural Case assigned by Infl and the other is a lexical Case assigned by some stative predicates. Although it is theoretically possible that there are two different mechanisms for assigning Nom Case, this would have to be justified on the basis of data showing that the two types of Nom Cases are indeed different.

A similar but slightly different analysis can be found in the Default Case Approach to Nom Case assignment (Kang 1986; Kim 1990). According to the Default Case analysis, Nom Case on the object of stative predicates is a Default Case, since stative predicates such as *mwusepta* do not assign Acc Case. We will come back to an evaluation of this approach in section 3.1.2.1.

# 3.1.1.3. Exceptional Case-Marking (Subject-to-Object Raising) Constructions

One of the most salient properties of ECMCs in Korean is that unlike in English, the clause embedded under the ECM predicate is headed by C, i.e., it is a CP, not an IP. Therefore, unless we assume some kind of movement is involved in ECMCs, the assignment of Acc Case by the matrix predicate to the subject of the embedded clause constitutes an apparent violation of government condition of Case assignment, namely, the Minimality Condition, C being a closer governor of the subject NP.



Two different approaches have been proposed for this problem.<sup>3</sup> The first approach conforms to the standard analysis of ECMCs by adopting some

The major piece of evidence presented by Song to support his analysis is sentences like the following, which shows that the complement clause in the ECMC is an island:

(ii) a. Chelswu-ka Yenghi-<u>lul</u> <u>swuhak</u>-ul cal ha-n-ta-ko
C-NOM Y-ACC math-ACC well do-PRES-DECL-COMP
sayngkakha-n-ta.
think-PRES-DECL

'Chelswu thinks that Yenghi is good at math.'

b. \*[ Chelswu-ka Yenghi-lul t<sub>i</sub> cal ha-n-ta-ko sayngkakha-nun] swuhak; 'math that Chelswu thinks Yenghi is good at.'

This is explained in Song, since the Spec of embedded CP is filled with the null operator and thus does not allow the extraction of another NP through it.

(iii) a. Chelswu-ka Yenghi-lul [op, [ti] swuhak-ul cal ha-n-ta-ko] sayngkakha-n-ta.b.\*Chelswu-ka Yenghi-lul [op, [ti] ti] cal ha-n-ta-ko] swuhaki

<sup>&</sup>lt;sup>3</sup> Another approach to the ECM Construction proposed outside GB theory is that these constructions involve neither S/CP-deletion nor movement but the ECMed/raised object is base-generated in the matrix clause as a non-thematic object/topic of the embedded clause (Hong 1990; Song 1994). For example, (ib) is the structure of an ECM construction like (ia) proposed by Song.

<sup>(</sup>i) a. Chelswu-ka Yenghi-lul yeppu-ta-ko sayngkakha-n-ta.
C-NOM Y-ACC pretty-DECL-COMP think-PRES-DECL
'Chelswu thinks Yenghi to be pretty.'

b. Chelswu-ka Yenghii-lul [ opi [ ti yeppu-ta-ko ]] sayngkakha-n-ta.

kind of special mechanism such as S'-deletion/transparency or restructuring which nullifies the barrierhood of CP projection (Choe 1988). Another approach handles the problem by assuming that ECMCs in Korean involves movement to or through the Spec of CP, where ACC Case can be assigned from V, although the claims vary regarding the nature of the movement. Ahn & Yoon (1989), J-M Yoon (1989, 1991), Yoon & Yoon (1990, 1991), and Lee (1992) all propose that the ECMed NP moves to Spec of CP and is ECMed by the matrix predicate there.

As to the nature of movement, there have been proponents of both A- and A'-movement. J-M Yoon (1991) claims that Spec of CP is an A-position in Korean and hence, the ECM-movement is A-movement, based on the fact that ECMed NP can undergo further A-movement, such as passivization.

- (18) a. Chelswu-ka Yenghi-ka yeppu-ta-ko sayngkakha-n-ta.

  C-NOM Y-NOM pretty-DECL-COMP think-PRES-DECL

  'Chelswu thinks that Yenghi is pretty.'
  - b. Chelswu-ka Yenghi-lul yeppu-ta-ko sayngkakha-n-ta.
     C-NOM Y-ACC pretty-DECL-COMP think-PRES-DECL
     'Chelswu thinks Yenghi to be pretty.'
  - c. Yenghi<sub>i</sub>-ka (Chelswu-eyuyhay) t<sub>i</sub> yeppu-ta-ko
    Y-NOM C-by pretty-DECL-COMP
    sayngkak-toy-n-ta.
    think-PASS-PRES-DECL
    'Yenghi is thought to be pretty (by Chelswu).'

In (18) above, passivization of the ECMed NP will result in an improper chain of A-A'-A configuration if the Spec of CP is an A'-position. Although it denies the standard assumptions about the A/A'-nature of Spec of CP, her claim is based on the observation that there are languages whose ECMCs show properties similar to Korean and that the cross-linguistic variation in ECMCs can be more easily explained if the nature of Spec of CP is allowed to vary among languages.

Unlike J-M Yoon, J-S Lee (1992) follows the standard assumption that Spec of CP is an A'-position and proposes to solve the problem of passivization discussed above by claiming that the passivization in (18a) does not go through the Spec of CP, but proceeds directly from the Spec of IP.

Note that in order for this analysis to work, the barrierhood of CP must be

voided, since otherwise the direct movement of the subject of the embedded clause to matrix subject position will not be possible. In his system, this is possible since CP is not a barrier for the embedded subject trace when the predicate of the embedded clause is intransitive, under the notion called "Case Minimality."

The problem with this analysis is that, first of all, there are cases, as shown below, which are not explained even with his Case Minimality, as he admits.

- (19) a. Chelswu-nun [Hemingway-ka ku chayk-ul C-TOP H-NOM that book-ACC ssu-ess-ta-ko] mit-nun-ta.
  rite-PAST-DECL-COMP believe-PRES-DECL 'Chelswu believes that Hemingway wrote that book.'
  - b. Chelswu-nun [Hemingway<sub>i</sub>-lul [ t<sub>i</sub> ku chayk-ul C-TOP H-ACC that book-ACC ssu-ess-ta-ko]] mit-nun-ta.

    write-PAST-DECL-COMP believe-PRES-DECL
  - c. Hemingwayi-ka (Chelswu-eyuyhay) [ ti [ ti ku chayk-ul H-NOM C-by that book-ACC ssu-ess-ta-ko] mit(e)-ci-n-ta. write-PAST-DECL-COMP believe-PASS-PRES-DECL 'Hemingway is believed to have written that book (by Chelswu).'

Since the embedded predicate is a transitive verb, the embedded CP forms a Minimality barrier and therefore, passivization of the embedded subject will not be allowed.

Secondly, we doubt whether the transitive/intransitive distinction in ECMCs, which appears to be the strongest evidence for his Case Minimality, is really valid. As observed by many researchers, the acceptability of ECMCs depends on whether the predicate of the embedded predicate can have a generic, property reading, not whether it is transitive or not.

(20) a.??Chelswu-nun apeci-lul cinci-lul tusi-ess-ta-ko
C-TOP father-ACC meal-ACC eat-PAST-DECL-COMP
sayngkakha-n-ta.
think-PRES-DECL
'Chelswu thinks his father to have eaten a meal.'

b. Chelswu-nun apeci-lul cinci-lul cal tusi-n-ta-ko
 C-TOP father-ACC meal-ACC well eat-PRES-DECL-COMP sayngkakha-n-ta.
 think-PRES-DECL

'Chelswu thinks his father to eat meals well.'

The improved acceptability of (20b) in contrast to (20a) can be explained by the fact that (20b) has a generic, property reading unlike (20a). Note that in Lee's analysis both sentences should be equally bad, since the verbs are transitive in both cases.

#### 3.1.2. Case Governors in Korean (Source of Nom/Acc Case)

#### 3.1.2.1. Source of (multiple) Nominative Case

Unlike English, finite Tense cannot be held responsible for Nom Case in Korean, since the subjects of non-finite clauses can be assigned Nom Case in Korean, as we see in (21) below.

- (21) a. Na-nun [Yenghi-ka ka-tolok] ha-ess-ta.

  I-TOP Y-NOM go-COMP make-PAST-DECL
  'I made Yenghi to go.'
  - b. \*Na-nun [Yenghi-ka ka-<u>ess/keyss</u>-tolok] ha-ess-ta.

    I-TOP Y-NOM go-PAST/FUT-COMP make-PAST-DECL

The impossibility of tense-marking on the verb of *-tolok* clause in (20b) shows that *-tolok* clause is non-finite.

Among various proposals made concerning the source of Nom Case in Korean, two types of proposals are most common. One type of analysis holds that Agr, instead of Tense is responsible for Nom Case (Han 1987; Kang 1988; Choe 1988; J-Y Yoon 1990). Such analyses take honorific agreement and/or plural agreement as instances of subject-verb agreement.

This analysis, however, faces the following problems. First, it is difficult to view honorific agreement and plural agreement in Korean as syntactic agreement. That subject honorification is subject to pragmatic conditions was pointed out and discussed in Y-J Kim (1990), among others. As an example, the following sentence from Kim shows that the honorification can be triggered by elements other than the subject, such as the topic.

(22) [ Halmeni-uy sayngay-eyse-nun ] samsiptay-ka kacang Grandmother-GEN life-LOC-TOP thirties-NOM most hayngpokha-<u>si</u>-ess-ta.

be-happy-HON-PAST-DECL

'In grandmother's life, (her) thirties was the happiest (HON).'

Secondly, the lack of one-to-one matching between the Case assigner and the assignee, one of the salient properties of Case marking in Korean in general, significantly undermines the claim that Agr assigns Nom Case. It is because in constructions which show multiple NOM Case marking such as MNCs and NOCs, only one Nom-marked NP shows agreement with the predicate. Thus, in MNCs, it is the final subject, which is closest to Infl, that triggers honorific agreement.

(23) Chelswu-ka <u>apenim-i</u> pwuca-i-<u>si</u>-ta.

C-NOM father-NOM rich-COP-HON-DECL

'Chelswu's father is rich.'

As we see in (23), the verb agrees with the second Nom NP *apemim*, not with the first Nom NP *Chelswu*. This is not explained if what assigns Nom Case is Agr. A similar problem is found in NOCs. If the Nom Case on the object comes from Agr, it is not explained why it does not show honorific agreement with the predicate, as we see in (24).

(24) \*Chelswu-ka <u>apenim-i</u> mwusewu-<u>si</u>-ta.

C-NOM father(HON)-NOM fearsome-HON-DECL

'Chelswu is afraid of his father.'

Certain proposals made in order to solve this problem try to distinguish two different kinds of Nom Case marker ka. Concerning the source of Nom Case on non-final subjects NPs, Kang (1988) claims that only the Nom Case on the final subject of MNCs is assigned by Agr, and the Nom on other subjects is a default Case. J-Y Yoon (1990) and Schütze (1995) claim that Nom Case ka on non-final Nominative NPs is not a Case marker but something else, specifically, a focus marker.

Note, however, if ka on the non-final Nominative NPs in MNCs is not a Case marker, we need to explain how these non-final ka-marked NPs in MNCs can satisfy the Case Filter, since being NPs, they will have to be Case-marked in order to be well-formed. For this and other reasons, the

Focus analysis proposes the Movement analysis of MNCs. In this analysis, the non-final multiple subjects satisfy the Case Filter, since they have acquired some kind of Case, i.e., Gen Case, before movement. The Focus analysis also fares well with the standard Chain Condition that an A-Chain has a unique Case, when coupled with the Possessor Raising analysis. Since a pre-nominal possessor receives Gen Case from D before raising, the chain as a whole will end up with two Cases, namely, Gen and Nom Case if ka-marking on the head of the chain is a Nom Case marker. The problem, however, does not occur if ka-marking on non-final Nominative NPs in MNCs is a focus marker, not a Case marker.

The Movement analysis of MNCs, however, has several problems in handling the whole range of MNCs, as discussed extensively in J H-S Yoon (1987). First, the Possessor Raising movement putatively involved in deriving MNCs does not show the properties typical of movement, such as Subjacency.

- (25) a. Nampankwu-ka mwunmyengkwukka-ka namca-ka southern hemisphere-NOM civilized countries-NOM men-NOM swumyeng-i ccalp-ta.

  life-span-NOM short-DECL

  'It is the southern hemisphere that civilized countries are such that men are such that their life-span is short.'
  - b. [[[ Nampankwu-uy] mwunmyengkwukka-uy] namca-uy] southern hemisphere-GEN civilized countries-GEN men-GEN swumyeng ]-i ccalpta.
    life-span-NOM short-DECL
  - c. Nampankwu<sub>i</sub>-ka [[[[[ t<sub>i</sub> ] mwunmyengkwukka-uy] namca-uy] southern hemisphere-NOM civilized countries-GEN men-GEN swumyeng ]-i ccalpta.]]]]] life-span-NOM short-DECL

In order to derive (a) from (b), the most deeply embedded NP has to be raised as in (c) in severe violation of Subjacency.

Secondly, the interpretation of phrasal idioms provides an argument against the movement analysis of MNCs. Assuming that idioms are inserted as a unit at D-Structure, the idiomatic interpretation in MNCs below cannot be explained.

(26) a. [Chelswu-ka [pal-i nelp-ta]]
C-NOM foot-NOM wide-DECL
'Chelswu has wide contacts.' (plus literal reading)

b. [Chelswu-ka [son-i khu-ta]]C-NOM hand-NOM big-DECL'Chelswu is very generous.' (plus literal reading)

If MNCs such as (26) are derived from sentences like (27) below by movement, the fact that (26a-b) have idiomatic meaning, which (27a-b) lack, is not explained.

(27) a. [Chelswu-uy pal]-i nelp-ta]]

C-GEN foot-NOM wide-DECL

'Chelswu has wide feet.' (only literal reading)

b. [Chelswu-uy son ]-i khuta ]]C-GEN hand-NOM big-DECL'Chelswu has big hands.' (only literal reading)

Thirdly, the Movement analysis in conjunction with the Focus analysis does not explain the fact that non-argument subjects can undergo A-movement such as Raising, as we see in (28) below.

(28) a. Chelswu-ka<sub>i</sub> Tongswu-eykey-nun [ t<sub>i</sub> apenim-i father-NOM T-DAT-TOP father-NOM aphu-si-n kes ] kat-ta. sick-HON-PRES-COMP seem-DECL 'To Tongswu, Chelswu's father seems to be sick.'

b. Na-nun Chelswu<sub>i</sub>-lul [ t<sub>i</sub> apeci-ka aphu-si-ta-ko]
I-TOP C-ACC father-NOM sick-HON-DECL-COMP sayngkakha-n-ta.
think-PRES-DECL
'I think Chelswu's father to be sick.'

(28a) shows that the non-argument subject, *Chelswu*, can undergo Subject-to-Subject Raising, while (28b) shows that it can undergo Subject-to-Object Raising (ECM). Given that the position of the multiple subjects is assumed to be an A'-position in the Focus analysis, A-movement from this position should result in an improper chain with the following configuration, <A, .. A', .. A>,

as we see below in (29), which is an analysis of (28b).

Thus, the grammaticality of (28a) and (28b) is not explained under the Focus analysis.

Note that the Focus analysis still has problems even if we take the Base-Generation approach instead of the Possessor Raising approach. As for the problem of Case Filter violation, we could solve it if we adopt the Visibility Condition instead of the Case Filter. If the Case requirement on NPs is just for argument NPs, multiple NOM-marked NPs will not violate the Visibility Condition even if they are base-generated in A'-positions, since they are not arguments.

non-argument in A'-position
|
(30) [ Chelswu-ka [ apeci-ka pwuca-i-ta.]]
| C-NOM father-NOM rich-COP-DECL
'Chelswu's father is rich.'

At first glance, this conclusion appears to be consistent with the various observations about MNCs: it is the final *ka*-marked NP which has typical subject properties with respect to various tests of subjecthood such as honorific agreement, plural agreement, control, and reflexive binding, as shown below.

#### Honorific Agreement

- (31) a. #Apenim-i kisa-ka cohu-si-ta
  Father-NOM driver-NOM nice-HON-DECL
  'My father's driver is nice.'
  - b. John-i <u>apenim-i</u> cham cohu-<u>si</u>-ta
     J-NOM father-NOM very nice-HON-DECL
     'John's father is very nice.'

#### Plural Agreement

(32) a.\*Haksayng-<u>tul</u>-i kongpwuha-nun pang-i nemwu-<u>tul</u> Student-PLU-NOM study-ADN room-NOM very-PLU cak-ta (there is one room)
small-DECL

'The room where the students study is small.'

b. Kim kyoswunim-i haksayng-tul-i nemwu-tul Kim professor -NOM students-PLU-NOM very-PLU ttokttokha-ta smart-DECL 'Professor Kim's students are very smart.'

#### Control

(33) Yenghi<sub>i</sub>-ka tongsayng<sub>j</sub>-i [pro<sub>j</sub> cip-ey kalye-ko] cha-lul Y-NOM brother-NOM home-to go-COMP car-ACC tha-ss-ta board-PAST-DECL 'Yenghi's brother got in the car to go home.'

#### Reflexive binding

- (34) Yenghi; -ka tongsayng;-i [ cakicasin;-uy pang-eyse ]
  Y-NOM brother-NOM self-GEN room-LOC kill
  casalhay-ss-ta
  oneself-PAST-DECL
  'Yenghi's brother killed himself in his room.'
- (31) and (32) show that various subject-verb agreement relations hold between the verb and the final ka-marked NP; (33) shows that it is the final ka-marked NP which acts as the controller of the pro in the embedded clause; and finally, sentence (34) shows that it also is the final ka-marked NP that binds the anaphor.

The Base-Generation analysis, however, also faces the problem of improper movement as the Movement analysis. As long as the focus position is an A'-position, whether the non-argument subjects are base-generated there or moved to it, further A-movement should not be possible because of the Improper Movement Condition.

Another proposal about the source of Nom Case is that Nom Case in Korean is a Default Case (Y-S Kang 1986; Y-J Kim 1990). Basically, what the Default Case approach says about Nom Case in Korean is that it can be assigned to any NP which lacks Case at S-structure. The two most common pieces of data presented as evidence for this approach is first, that subjects

of non-finite clauses are assigned Nom Case even when there is no syntactic agreement in Korean, and secondly, that objects of adjectival predicates are assigned Nom Case (Kang 1986; Kim 1990). As we can recall, these are the problems of Nom Case by Infl (Agr) approach, and the Default Case approach has advantages over it in that it is free from these problems.

A serious problem with the Default Case approach, however, is the Case stacking data as in (35) below.

(35) Chelswu-<u>eykey</u>-man-<u>i</u> ton-i manh-ta.

C-DAT-only-NOM money-NOM much-DECL

'Only Chelswu has lots of money.'

If Nom Case ka is the Default Case in Korean, it is not explained why *Chelswu* which already has Dat Case receives a Default Nom Case, since there is no need for an additional Case. Thus, in order to maintain the Default Case analysis, these researchers would have to adopt some version of the Focus analysis as well. If ka/i-marking on non-final subjects is a focus marker, not a Case marker, the presence of ka/i-marking on non-final subjects does not cause a problem to the Default nature of Nom Case marking.

#### 3.1.2.2. Source of (multiple) Acc Case

A similar problem of multiple Case assignment is found with Acc Case in Korean and the analyses that have been proposed are similar to those proposed for multiple Nom Case assignment, except that the Default Case approach is not taken for Acc Case assignment. As with the analysis of MNCs, the first type of approach assumes that only one Case is directly assigned by the predicate and the other Cases are assigned through some special mechanism such as Case Agreement (Y-J Kim 1989, 1990; Bak 1992).

As we have already pointed out for the Case Agreement analysis of MNCs, a problem for this approach is that it simply fails to explain all instances of multiple Acc-marking observed in Korean. As an example, multiple Acc-marking in sentences like (36) below is not explained by Case Agreement.

(36) a. Nay-ka sakwa-lul sey kay-lul mek-ess-ta.

I-NOM apple-ACC three-ACC eat-PAST-DECL
'I ate three apples.'

b.\*Nay-ka [sakwa-uy sey kay]-lul mek-ess-ta.

I-NOM apple-GEN three-ACC eat-PAST-DECL
'I ate three apples.'

According to the Case Agreement mechanism of Bak (1992), the first NP sakwa must gets Acc Case by Case agreement with the NP of which it is the dependent. This, however, is not possible, since sakwa is not a dependent of sey kay, as the ungrammaticality of (36b) shows.

Another approach is, again, the Focus analysis which claims that *lul* on posessor NPs in MACs is not a Case marker but a focus particle (H-S Choe 1987; J-Y Yoon 1990; Schütze 1995). This approach claims that *lul* on the non-arguments in MACs are focus particles and these NPs are adjoined to VP. The problem this analysis faces is as follows.

First, if the real argument of the predicate is the part NP closest to the verb and the whole NP is just a focus adjunct in sentences like (37a) below, then the fact that it is the whole (possessor) NP, not the part NP, which can be passivized ((37b-c)) is not explained. On the other hand, if we take the whole NP as the argument of the predicate and the part NP just as a focus adjunct, it is not explained that it is the whole NP that gets the focus interpretation.

- (37) a. Yenghi-ka Tongswu-lul meli-lul chi-ess-ta.

  Y-NOM T-ACC head-ACC hit-PAST-DECL
  'Yenghi hit Tongswu on the head.'
  - b. Tongswu-ka (Yenghi-eyuyhay) meli-lul chi(e)-ci-ess-ta.
     T-NOM Y-by head-ACC hit-PASS-PAST-DECL 'Tongswu was hit on the head (by Yenghi).'
  - c.\*Meli-ka (Yenghi-eyuyhay) Tongswu-lul chi(e)-ci-ess-ta. head-NOM Y-by T-ACC hit-PASS-PAST-DECL

Secondly, as discussed in section 3.1.2.1., if MACs are generated by movement as proposed in this analysis, various problems we encountered in the Movement analysis of MNCs, such as Subjacency, idiomatic interpretation, etc., have to be addressed for MACs as well.

#### 3.2. The Chain Condition and Multiply Case-marked Chains in Korean

According to the Chain Condition, a Chain must have a unique Case and NP-movement is a Case-driven obligatory movement. Several constructions

in Korean appear to cast doubt on the validity of the Chain Condition. First, in Korean, the phenomenon of Case stacking as we see below has been observed.

- (38) a. Chelswu-hanthey-ka paym-i mwusep-ta.

  C-DAT-NOM snake-NOM fearsome-DECL

  'Chelswu is afraid of snakes.'
  - b. I kongcang-ey-ka pwul-i na-ess-ta.
     this factory-LOC-NOM fire-NOM break out-PAST-DECL 'Fire broke out in this factory.'

This kind of stacking data was considered as overt evidence for multiple Case-marking on Chains, i.e., as evidence against the Case Uniqueness of the Chain Condition (Gerdts 1988; Yoon & Yoon 1990; J-M Yoon 1991; H-S J Yoon 1996). Based on stacking in Korean and other languages such as Quechua, Yoon & Yoon (1990) propose that assignment of multiple Cases on a Chain should, in principle, be allowed as long as each position in the Chain has a unique Case.

Although not as strong as Case stacking, alternation of Nom and Acc Case on the subject of the complement clause of ECMCs and Subject-to-Subject Raising in Korean also suggests that more than one Case might be assigned to a Chain. As discussed in section 3.1.1.3., the fact that the subject of embedded clause in ECMCs can have Nom Case, unlike in English, suggests that the ECMed NP has two Cases, unless the assignment of Nom Case is optional in Korean. If the subject of the complement clause moves through Spec of CP for reasons of locality of movement, as proposed in the Movement analysis (Ahn & Yoon 1989; J-M Yoon 1989, 1991; Yoon & Yoon 1990, 1991; J-S Lee 1992), the Chain as a whole has two Cases, although only one Case is overtly realized.

Sentences like (39) below also can be instances of multiple Cases on a Chain, when Subject-to-Subject Raising takes place.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup>It seems that Subject-to-Subject Raising is not obligatory in Korean. Sentences such as (ia) below, whose analysis is indicated in (ib), suggest that Raising is not obligatory.

<sup>(</sup> i ) a. [Yenghi-nun meli-ka aphu]-ko [Chelswu-nun pay-ka aphu]-n Y-TOP head-NOM sick-and C-TOP stomach-NOM sick-ADN kes kat-ta.

- (39) a. Chelswui-ka cakii pwumo-eykey-nun seysang-eyse ceyil

  C-NOM self parents-DAT-TOP world-in

  ttokttokha-n kes kat-ta.

  most smart-ADN-COMP seem-DECL

  'To his parents, Chelswu seems to be the smartest in the world.'
  - b. Chelswui-ka cakii pwumo-eykey-nun [ ti seysang-eyse ceyil ttokttokha-n kes ] kat-ta.

Given that subjects of non-finite clauses can be assigned Nom Case in Korean, the Chain headed by *Chelswu* in (39) can be analyzed as having two Nom Cases.

A different approach to Case stacking data and ECMCs is that stacked ka or lul are not Case markers but focus markers (J-Y Yoon 1990; Sohn 1994; Schütze 1995, etc.). In fact, the basic assumption of this approach is that instances of ka and lul which are not amenable to standard Case Theory are all focus markers. Thus, not only the stacked ka or lul but also ka and lul in MNCs and/or MACs and lul in ECMCs are taken to be focus, not Case, markers.

Although there have been observations that some instances of ka and lul in these constructions are interpreted with focus, this analysis has the following problems. First, as for the choice between ka and lul, it remains a puzzle why the focus markers ka and lul have an almost identical distribution as Case markers ka and lul. Secondly, the possibility of the ECMed NP to undergo further A-movement such as passivization is not explained: if passivization of the subject of embedded clause involves direct movement across the CP, it will cross a barrier as we saw in Lee's (1992) analysis; the passivization of the ECMed NP adjoined to matrix VP will not be also allowed, since this movement will be A'-to-A-movement, which should be illegitimate.<sup>5</sup>

Another problem raised by the preceding discusson on multiple Case assignment on a Chain is that a Chain with multiple Cases conflicts with the standard assumption about NP-movement, that NP-movement is an

COMP seem-DECL

<sup>&#</sup>x27;It seems that Yenghi has a headache and Chelswu has a stomachache.'

b. [e [cP [ Yenghi-nun meli-ka aphu]-ko [Chelswu-nu pay-ka aphu]-n kes]

<sup>&</sup>lt;sup>5</sup> This is so when we assume that positions adjoined to VP are A'-positions.

obligatory movement to acquire Case. The constructions we discussed in two previous sections all show that NPs which already have a Case move to some other positions and are assigned another Case there.

#### 3.3. The Case Filter and the Visibility Condition in Korean

The Visibility Condition differs from the Case Filter in that it requires Case only on argument NPs. The analysis of Case marking on adverbial NPs in Korean bears on the distinction between the Visibility Condition and the Case Filter, since the two make different predictions. At first glance, the fact that adverbial NPs are quite regularly Case-marked in Korean raises a problem for the Visibility Condition, although not for the Case Filter.

- (40) a. Chelswu-ka han sikan-ul kongpwuha-ess-ta.
  Chelswu-NOM one hour-ACC study-PAST-DECL
  'Chelswu studied for one hour.'
  - b. pesu-ka pis-sok-ul talli-ess-ta.
     bus-NOM rain-in-ACC run-PAST-DECL
     'The bus ran in the rain.'

Wechsler & Lee (1997), however, make a proposal which may be construed as supporting the Visibility Condition. According to Wechsler & Lee, only adverbs which are Situation Delimiters get Case, and it is because they become (optional) arguments of the predicate. Situation Delimiters are phrases with a temporal quantificational effect. They express duration, cardinal count, or path length and temporally quantify or 'delimit' the situation expressed by the predicate.

If their claim is correct, Case marking of adverbial NPs in Korean will render support for the Visibility Condition over the Case Filter. This analysis, however, is not without problems. Most of all, the existence of adjuncts which are not Situation Delimiters but are Case-marked casts doubt on their claim. For example, a frequency adverbial like *mayil-mayil* 'each day' is not a Situation Delimiter according to Wechsler & Lee's definition of Situation Delimiters but allows Case marking as we see below.<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Wechsler & Lee claim that frequencey adverbials like 'each day' cannot receive Case based on the following sentence.

<sup>(</sup>i) Tom-i mayil-mayil-mayil(\*ul/\*i) wa-ss-ta.

Tom-NOM each day(ACC-NOM) come-PST-DEC

'Tom came each day.' ((8) of Wechsler & Lee (1996))

(41) ?Chelswu-nun mayil-mayil-ul yelsimhi salkoissta.

C-TOP everyday-ACC diligently is living

'Chelswu is living everyday diligently'

Another problem with case marking on adverbial NPs in Korean is that Case marking on arguments and adverbials show some differences with respect to passivization, as illustrated below (Y-S Kang 1986).

(42) pesu-ka pis-sok-<u>ul</u> kwasokulo mola-ci-ess-ta. bus-NOM rain-in-ACC too fast drive-PASS-PST-DECL 'The bus was driven too fast in the rain.'

Since *toy*- or *ci*-passives in Korean does not assign Acc Case to its object, as we see in (43) below, it is not explained how the adverb *pis-sok* receives Acc Case.

(43) namwu-ka kaci-ka/\*lul calla-ci-ess-ta.

tree-NOM branch-NOM/ACC cut-PASS-PAST-DECL

'The branch of the tree was cut.

This problem, however, could be solved, if adverbials are assigned Case by Aspect, not by verbs, as Maling & Kim (1992) suggest.

# 4. Case in the Minimalist Program

In this section, we turn to the treatment of Case in the Minimalist Program and see how the theoretical constructs in the Minimalist Program fare with regard to data from Korean. Since we are not aware of extensive studies on Korean Case within the Minimalist Program except for some works by D-W Yang (1996, 1997) and Ura (1996), we will focus on the potential impact of the Minimalist Program regarding the analysis of Korean Case.

Contrary to Wechsler & Lee, we do not think that sentence (i) is ungrammatical although we agree that it is somewhat ackward. Furthermore, as we have seen, grammaticality of sentences like (41) suggests that frequency adverbials allow Case marking.

#### 4.1. Configuration of Case-Checking

In section 3.1, we noted that Case phenomena in Korean raise severe problems for the configurational conditions on Case assignment in GB. In MP, government is abandoned and Case is supposed to be checked in a configuration of Spec-Head agreement where the Head has relevant Case features. A second important difference between GB Theory and MP is that in the latter, Case is checked rather than assigned. That is, nominals are inserted with Case already specified. If the Case should match that of the checking head, then it passes the Case Filter; if not, it doesn't. Thirdly, Case is checked at LF, rather than at the equivalent of S-structure. Thus, there is both overt and covert Case-seeking movement. A corollary of these is that there is a lot more visible and invisible movement. Under the assumption that arguments generated inside the VP cannot have their Case checked there, the theory posits Case-seeking movement of both the Subject and Object to the Spec's of various functional projections generated above the VP.

Recall that phenomena which posed acute problems for government were multiple Nom/Acc Constructions, Nom Object Constructions and ECM Constructions. The problems now are cast in a different light. For the first, the problem now becomes how a single Case-checking head can enter into multiple Spec-Head relations, checking the Cases on Spec's. For the second and third, the problem now becomes one of how the Nom Object and ECMed subject can move from the base-generated position to a position where Nom/Acc Case is checked. That is, the problem is whether this movement is properly triggered and whether it is consistent with other conditions on A-movement.

#### 4.1.1. Multiple Case (Nom/Acc) Constructions

For multiple Case constructions, the MP provides the following type of analysis. In direct response to arguments by Ura (1994) that the Spec-Head relation is not one-to-one in certain languages, Chomsky (1995) allows a single head to enter into multiple Spec-Head agreements, when the feature on the head is exceptionally allowed to check the feature of more than one Spec.<sup>7</sup>

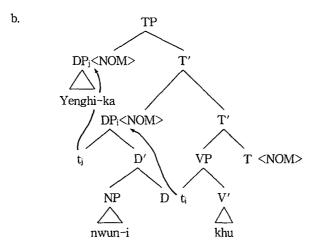
<sup>&</sup>lt;sup>7</sup> Yang (1996) proposes that Multiple Case Constructions are possible in Korean due to the parameter like the following.

In languages that allow multiple Case structures, the formal features may undergo just Delete, but not Erase, after checking. ((24) of Yang 1996)

In Ura (1996), MNCs/MACs are analyzed as involving Possessor Raising. However, the analysis is interestingly different. Under the checking theory, in the MP, nothing precludes a Possessor from being inserted inside an NP with Nom or Acc Case.

Of course, unless something checks the Case of the DP in Spec, a derivation containing such a possessor will crash, since nothing in the DP is able to check a verbal Case. A legitimate derivation will result when the possessor raises out of the DP and has its Case checked by a suitable head. Given the option of multiple Spec-Head agreement, the possessor could check its Case in a higher Spec of T or v, the higher head of the two-layered VP-shell (Chomsky 1995). For example, (45b) will be the structure of a MNC (45a).

(45) a. Yenghi-ka nwun-i khu-ta. Y-NOM eye-NOM big-DECL 'Yenghi's eyes are big.'



In (45b), first, the entire subject DP [Yenghi-ka nwun-i] moves to Spec of TP and checks its Nom Case against T and then the Nom-marked possessor NP [Yenghi-ka] moves to a higher Spec of TP and checks its Nom Case by T. The analysis of Multiple Case Constructions in Korean proposed by Yang (1996, 1997) also adopts the multiple Spec approach. Like Ura, Yang assumes

that Multiple Case Constructions are derived by movement of possessor DPs to additional Spec's of Infl (AgrP for Yang), which checks off Nom Case multiply.

It should be noted that the analysis of Multiple Case Constructions utilizing the notion of multiple Spec's removes much of the motivation for the Focus analysis of Multiple Case Constructions (Schütze 1996). This is because assignment of more than one Nom Case is in principle possible, and thus obviates the need to interpret Nom Case markers except the one closest to Infl as anything other than Case markers, i.e., focus markers. However, the Possessor Raising analysis of Multiple Case Constructions in the MP is not without problems.

First of all, although the multiple Spec structure is crucially employed in the analysis of Multiple Case Constructions, it is not clear exactly how multiple Spec's are licensed. According to Chomsky (1995), multiple Spec's appear when a "strong" feature of a head may escape deletion. He further suggests that the option of multiple Spec's in a language can be explained in terms of "violability of Procrastinate". This interpretation of multiple Spec licensing can be understood to mean that if a feature is strong but tolerates unforced violations of Procrastinate, it can trigger more than one instance of overt movement and thus project additional Spec's, even after it has been checked. Assuming that strong features become weak once they are checked, we can say that this overt movement violates Procrastinate.

However, the assumption that only strong features license multiple Spec's is problematic for Korean, given that there is no evidence that a strong feature of a head licenses multiple Spec's. As an example, neither the EPP feature nor the Nom Case feature of T, the two features of T which could be held to be the licenser of multiple Spec's in MNCs, seems to be strong.

First, concerning the EPP feature of T, if the EPP feature is strong in Korean, the prediction is there should be an expletive in Spec of T in Korean just as in English. Given that no expletives are observed in Korean, the hypothesis that EPP feature is strong in Korean is not tenable.<sup>8</sup>

Moreover, coordinate sentences like (46) below also provide evidence against the strength of the EPP feature of T.

(46) a. Yenghi-nun meli-ka aphu-ko Chelswu-nun pay-ka
Y-TOP head-NOM sick-and C-TOP stomach-NOM

<sup>&</sup>lt;sup>8</sup> This is so unless we assume that there is an expletive pro in Korean.

aphu-n kes kat-ta. sick-ADN COMP seem-DECL

'It seems that Yenghi has a headache and Chelswuu has a stomackache.'

b. [TP e [VP [CP [Yenghi-nun meli-ka aphu]-ko [Chelswu-nun pay-ka aphu]-n kes]] kat-ta]

In (46), the first conjunct as well as the second conjunct is interpreted within the scope of raising verb *katta*, suggesting that there was no Subject-to-Subject Raising and that the Spec of the matrix TP is empty. Sentences like (46) thus show that the EPP feature of T cannot be taken to be strong in Korean.

Similar considerations also argue against viewing Nom Case feature of T to be strong.<sup>9</sup> If T has strong Nom Case feature, the prediction is that every sentence should have a Nom-marked NP in Spec of T in overt syntax. If so, grammaticality of sentences like (46) is again not explained.

Difficulties such as those identified above led Ura (1996) to propose that a head with a weak feature can license multiple Spec's. For instance, Ura assumes that the Nom Case feature of T is weak and multiple Spec's of T are licensed by this weak Nom Case feature. However, the proposal that a weak feature can license multiple Spec's seems counterintuitive, given that in principle a weak feature cannot license even a single Spec in overt syntax. In essence, allowing a weak feature to license multiple Spec's is equivalent

<sup>&</sup>lt;sup>9</sup> Yang (1996) claims that multiple Specs of T are licensed by strong Nom Case feature of T and takes sentences like the following as evidence that Nom Case feature of T (agr) is strong.

<sup>(</sup>i) a. \*John-uy cengmallo hyeng-i pwuca-i-ta.J-GEN really brother-NOM rich-COP-DECL 'John's brother is really rich.'

b. John-i cengmallo hyeng-i pwuca-i-ta.

J-NOM really brother-NOM rich-COP-DECL

Unlike in (ia) where the possessor *John* is marked with Gen Case, in (ib) where it is marked with Nom Case, an adverb can intervene between the possessor and the possessee. Under the Possessor Raising analysis, Yang takes this contrast as indicating that the first Nom-NP in (ib) has overtly raised to the additional Spec of T. However, given sentences like (46) in the text, the overt raising in sentences like (ia) does not necessarily and conclusively show that Nom Case feature is strong. Moreover, if we do not assume the Possessor Raising analysis, the contrast in (ia) and (ib) does not say anything about the strength of Nom Case feature.

to allowing a weak feature to be optionally strong and thus to allow optional overt movement.<sup>10</sup>

Secondly, the problems facing the Possessor Raising analysis of Multiple Case Constructions discussed in section 3 carry over to the Possessor Raising analysis in the MP. These are the problems such as Subjacency, idiom argument, etc., which suggested base-generation, rather than movement.

Finally, the Possessor Raising analysis in the MP has to be able to explain why the unchecked Gen Case feature of D (when the possessor raises out of the DP to additional Spec of TP or vP) does not cause the derivation to crash. In order to solve this problem, Ura (1996) had to make an additional assumption that in languages like Korean which allow Multiple Case Constructions, D is allowed not to have a structural Gen Case, which is equivalent to the claim that Gen Case is an optional Case in Korean. A similar proposal was made by Yang (1996).

In addition, in order to explain the fact that only the inalienable possessors can raise ((47a) in contrast to (47b)), Ura further proposes that there are two kinds of D's, one which assigns inherent Gen Case to alienable possessors and the other which assigns a structural Gen Case to inalienable possessors.<sup>11</sup>

(47) a. Yenghi-ka emenim-i miin-i-si-ta.
Y-NOM mother-NOM beauty-COP-HON-DECL
'Yenghi's mother is a beauty.'

b. ?Yenghi-ka chayk-i nalk-ess-ta.
 Y-NOM book-NOM old-PAST-DECL
 'Yenghi's book is old.'

<sup>&</sup>lt;sup>10</sup> Ura suggests that this way of multiple Spec licensing provides us with a way to handle optional movement, which is not allowed in the MP but empirically attested.

Il Inalienable possessors are possessors of nouns whose meaning cannot be understood without reference to the existence of another entity that stands in a specified relation to them. For example, unlike common nouns like chayk 'book' or tongmwul 'animal', the meaning of relational nouns like emeni 'mother' cannot be construed without reference to someone for whom the specified relation holds, i.e., a person cannot be a mother without there being a person whom she is the mother of. These nouns are called relational nouns and the most conspicuous instances of them are kinship terms such as emeni 'mother, bodypart terms such as son 'hand' and partwhole terms such as an 'inside' and wuy 'top'. Since the prototypical instances of relations denoted by relational nouns are inborn or inherent, not conferred by purchase, the possessors of relational nouns are usually called "inalienable" possessors in the literature, in contrast to the "alienable" possessors of non-relational nouns like chayk 'book'.

Now the reason alienable possessors can never raise is attributed to the obligatoriness of inherent Case assignment, which accompanies  $\theta$ -marking, while the reason inalienable possessors could raise is attributed to the optionality of structural Gen Case in some languages.

Although Ura can explain the distinction between inalienable and alienable possessors with respect to raising by adopting these additional assumptions, the analysis of Possessor Raising based on the optionality of Gen Case has the following problems.

First of all, it seems counter-intuitive that D assigns an inherent Case to alienable possessors and a structural Case to inalienable possessors, given that inalienable possessors are generally considered to be thematic arguments of the noun, while alienable possessors are just the modifiers of the noun (Vergnaud & Zubizaretta 1992; Barker 1991; J-M Yoon 1997). Assuming that an inherent Case is a lexical Case which accompanies  $\theta$ -marking, it would be more plausible if D assigns an inherent Case to inalienable possessors, not to the alienable possessors.

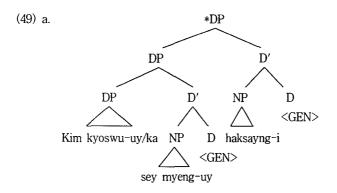
Secondly and more importantly, the analysis of sentences like (48a) in Korean is problematic, even granting the assumption that Gen Case is optional.

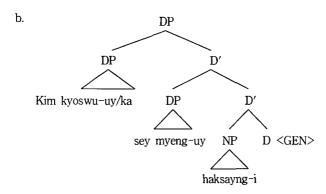
- (48) a. Kim kyoswu-ka sey-myeng-uy haksayng-i ttokttokha-ta.

  Kim professor-NOM three-CL-GEN student-NOM smart-DECL

  'The three students of Professor Kim are smart.'
  - kim kyoswu-uy sey-myeng-uy haksayng-i ttokttokha-ta.
     Kim professor-GEN three-CL-GEN student-NOM smart-DECL

If we adopt the Possessor Raising analysis of MNCs, (48a) and (48b) must share the same underlying structure except that the possessor *Kim kyoswu* in (48a) is marked with Nom Case and raises to the additional Spec of TP, whereas the Gen-marked possessor in (48b) does not raise but checks its Case against D. Crucially, the structure of (48) must be something like (49b), which involves multiple Spec's of D, not (49a), since *Kim kyoswu-uy sey myeng* does not form a constituent.





Given a structure like (49b), the next question we have to ask is which feature of D licenses multiple Spec's within the DP. We can think of two potential features, i.e., Gen Case feature and some sort of EPP feature of D, in analogy with T.

First, let us assume that multiple Spec's of D are licensed by the Gen Case feature. The problem that (48a) raises is as follows: the Gen Case feature of D which has licensed the higher Spec of D will remain unchecked, since the DP *Kim kyoswu* is marked with Nom Case, not Gen Case.

One might say that this is not a problem since we can simply say that Gen Case of D in (48a) was erased after checking that of *sey myeng*. This explanation, however, is not tenable for the following reasons. Given that multiple Spec's of D are licensed by Gen Case feature of D, the additional Spec position *kim kyoswu-ka* occupies would not have been licensed in the first place if the Gen Case of D in (48a) had been erased after checking that of *sey myeng*. In short, if multiple Spec's of D are licensed by the Gen Case feature of D, the grammaticality of sentences like (48a) is not explained in

the Possessor Raising analysis of MNCs even if we assume that Gen Case is an optional feature of D.

Let us suppose then that multiple Spec's of D are licensed by the EPP feature of D. If this is the case, we can maintain that Gen Case of D was erased after checking that of *sey myeng* so that there is no unchecked Gen Case thatwill cause the derivation to crash. However, the suggestion that multiple Spec's of D are licensed by the EPP feature is dubious at best, considering that there is no evidence that D has an EPP feature. If D has an EPP feature, the prediction is that there should be expletives within DP. Since no languages are reported to have expletives within DP, it is hard to suppose that D has an EPP feature.

To summarize, given that it is the Gen Case feature of D which is responsible for licensing multiple Spec's within a DP, grammaticality of sentences like (48a) remains a problem even if Gen Case is taken to be optional.

Finally, another potential problem of the multiple Spec analysis of Multiple Case Constructions in Korean is the lack of honorific agreement between the extra Nom-marked DPs and T. In order to solve this problem, Ura (1996) proposes that the multiple feature checking relations should hold between individual formal features, not between a head and all its Specifiers. This means that if a head has many formal features, each feature can differ in the possibility to enter into multiple checking relations. If so, it is expected that only the DP which first raises to Spec of T will agree with it. As an example, in a MNC like (45), the DP which raises to Spec of T first is the DP<sub>i</sub>, which is closest to T, and thus it is expected that T agrees with the DP<sub>i</sub>. A similar solution was proposed by Yang (1996). According to Yang, Nom Case can enter into multiple checking relations, but Hon feature cannot.

This problem, however, simply will not arise if honorific agreement in Korean is not a syntactic feature of Infl, as discussed in section 3.

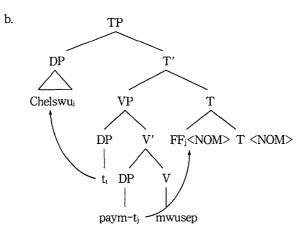
#### 4.1.2. Nominative Object Constructions

Since the MP allows a DP to be generated in its base/thematic position with any sort of Case in principle, an object can be generated in a position sister to V with Nom Case. All that is required is for the object or the Nom Case feature of the object, to be precise, to raise to a head that attracts it and check its Case. Assuming that the head which checks Nom Case is T, the Nom feature of the object could be checked off by T, as long as Nom Case feature can enter into multiple checking relations and the Nom Case

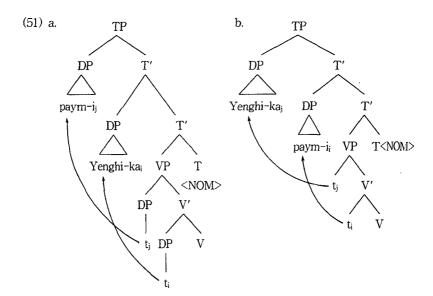
feature of the object can legitimately raise to a position where it can enter into a feature checking relation with T.

Yang (1996) proposes that the movement of the subject to Spec of TP (AgrP for Yang) takes place at S-structure, i.e., before Spell-Out, while the movement of the object is a feature movement at LF. Since Yang seems to assume that the Nom Object Construction does not involve a  $\nu$ P-shell, being an unaccusative structure (Chomsky 1995), (50b) will be the structure of a NOC like (50a) at LF.

(50) a. Chelswu-ka paym-i mwusep-ta.
C-NOM snake-NOM fearsome-DECL
'Chelswu is afraid of snakes.'



In addition, Yang proposes to rule out the following two raising operations which involve the overt raising of the Nom object by appealing to the Strict Cycle Condition and the MLC. The two movements are the overt raising of the object subsequent to the overt raising of the subject ((51a) below), which results in the incorrect word order, and the overt raising of the object to Spec of T before the overt raising of the subject to the additional Spec of T ((51b)), which should be ruled out given that agreement relation holds between the Infl and the subject, not the Nom object. Unlike Nom Case assignment, the agreement relation can only be one-to-one in Korean, and thus it is assumed that agreement feature cannot enter into multiple checking relations (Ura 1996; Yang 1996). Given this, the overt raising of the object to Spec of T before the subject must be ruled out.



These two raising operations are ruled out in Yang (1996) in the following way. First, concerning the overt raising of the object subsequent to the overt raising of the subject, Yang says that it is ruled out by the Strict Cycle Condition stated below:

# (52) Strict Cycle Condition $\alpha$ may not raise to $\gamma$ if $\beta$ has already raised to $\gamma$ and the trace of $\beta$ c-commands $\alpha$ .

Next, concerning the overt raising of the object to Spec of T before the overt raising of the subject to the additional Spec of T, he proposes that it is ruled out by the MLC.

Yang's analysis of NOCs, however, runs into the following problems.

First, the impossibility of overt raising of the object subsequent to the overt raising of the subject ((50a)) cannot be explained. Recall that Yang is assuming that Nom Case is a strong feature (of Agr) and that it can enter into multiple checking relations, creating multiple Spec's. This means that even if the subject has raised to Spec of T, the Nom object still can raise to an additional Spec of T at S-structure, in violation of Procrastinate.

In order to block this movement, Yang appeals to the Strict Cycle Condition. The problem, however, is that the Strict Cycle Condition has no

status in the current MP, with its effects incorporated into other principles or constraints such as the MLC. This means that overt raising of the object subsequent to that of the subject should be allowed unless it violates some principles/constraints. This movement, however, does not seem to violate any relevant principles or constraints. In particular, it does not violate the MLC, according to the definition of "equidistance" in Chomsky (1995).

#### (53) <u>Definition of Equidistance</u>

 $\nu$  and  $\beta$  are equidistant from  $\alpha$  if  $\nu$  and  $\beta$  are in the same minimal domain. ((189) of Chomsky (1995))

### (54) Definition of "close" for Attract/Move

If  $\beta$  c-commands  $\alpha$  and  $\tau$  is the target of raising, then  $\beta$  is closer to K than  $\alpha$  unless  $\beta$  is in the same minimal domain as (a)  $\tau$  or (b)  $\alpha$ . ((190) of Chomsky (1995))

In essence, what (53) and (54) says is that an intervening element ( $\beta$ ) does not cause an MLC violation if it is in the same minimal domain as the landing site of the movement ( $\tau$ ) or with the element which undergoes movement ( $\alpha$ ).

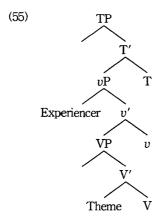
In (51a), since the subject in the lower Spec of T is in the same minimal domain as the higher Spec of T, the landing site of the object raising, movement of the Nom object to the additional Spec of T over the subject in the lower Spec of T does not violate the MLC, according to (a) of (54).

Thirdly, contrary to Yang, raising the Nom object before the subject at S-structure, as in (51b), cannot be blocked in terms of the MLC either. First, overt raising of the Nom object to Spec of T over the subject does not violate the MLC. It is because the subject and the object are in the same minimal domain, i.e., VP, and thus according to (b) of (54), Yenghi, the Exp subject in Spec of VP, is not closer to T than paym, the object. Secondly, the subsequent overt raising of the subject to the additional Spec of T over the object in the lower Spec of T does not violate the MLC, either, according to (a) of (54), i.e., because the intervening element paym-i in the lower Spec of T is in the same minimal domain as the higher Spec of T, the landing site of the movement of the subject.

To summarize, the preceding discussion shows that Yang's analysis of NOCs fails to rule out the two unwanted raising operations in NOCs.

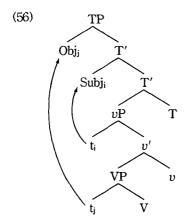
Ura (1996) proposes a different analysis of NOCs. Although Ura (1996) also assumes that the correct word order in NOCs is derived by raising the subject at S-structure and the Nom object at LF, he differs from Yang in

two respects. First, Ura assumes that Nom Case feature of T which licenses multiple Spec's is weak, while the EPP feature of T is strong. Secondly, Ura assumes that NOCs involve a  $\nu P$  shell, and that the Experiencer subject is generated in Spec of  $\nu P$  and the Theme object is generated as a sister to V.



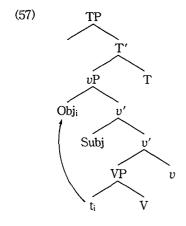
With these assumptions, Ura claims that it follows that the subject must move at S-structure, while the Nom object moves at LF: the subject raises at S-structure because the EPP and  $\Phi$ -features of T are strong, but the Nom object raises at LF because the Nom Case feature of T is weak. Although Ura's analysis appears to explain why the Nom object cannot move at S-structure, upon a closer look, it also has the following problems.

First, the overt raising of the object subsequent to the overt raising of the subject is not blocked in Ura. At first glance, it seems that it can be blocked without a problem since Ura, unlike Yang, is assuming that Nom Case is a weak feature. Recall, however, that Ura is assuming that weak features can license multiple Spec's and that multiple Nom subjects are licensed by the weak Nom feature of T. Applied to NOCs, this means that the Nom object can raise to the additional Spec of T before Spell-Out as long as it does not violate other conditions on movement such as the MLC. We have already seen that this movement does not violate the MLC when NOCs do not have vP shell structure. It also does not violate the MLC even if NOCs do have vP structure as in Ura. Since the two Spec's of T are in the same minimal domain and the subject trace in Spec of vP cannot be attracted, raising of the object to the additional Spec of T over the lower Spec of T does not violate the MLC.



In fact, Ura (1996) specifically discusses the possibility of A-movement in a configuration like (56) above, i.e., a case which involves an apparent SSC violation, and claims that it is allowed if T can license multiple Spec's. Since T in Korean licenses multiple Spec's, the impossibility of overt raising of the Nom object over the subject in NOCs is not explained in Ura.

Secondly, concerning the overt raising of the object to Spec of T before that of the subject to the additional Spec of T ((51b)), it seems that Ura can rule it out. Since the subject and the object are in different minimal domains ( $\nu$ P and VP, respectively), the object cannot raise to Spec of T over the subject in Spec of  $\nu$ P.<sup>12</sup>



<sup>&</sup>lt;sup>12</sup> The object, however, can raise to Spec of υP once the subject has raised to Spec of T, since the trace does not count as a closer element to be attracted (Chomsky 1995).

Note, however, that his explanation crucially hinges on the assumption that NOCs have a vP shell structure, i.e., Experiencer subjects of NOCs are generated in the Spec of vP, contrary to the general assumption that Spec of vP is a position for Agent subjects and that unaccusative verbs do not involve a vP shell (Hale & Keyser 1993). We have already seen that without a vP shell, this raising operation does not violate the MLC.

In short, both Yang and Ura fail to provide an adequate analysis of NOCs. What the preceding discussion shows is that even with the option of multiple feature checking and multiple Spec structure, the proper analysis of double Nom Case marking in NOCs remains a problem in the MP. It seems at first that some of the difficulties can be attributed to the lack of a precise characterization of multiple feature checking/multiple Spec licensing, as already pointed out in the previous section. However, given that both analyses we have considered in this section assume that Nom Case on the object in NOCs has the same source as that on the subject, i.e., Infl, the difficulties in the proper analysis of NOCs we have witnessed in this section might be due to the fact that the Nom Case on subjects and objects come from different sources.

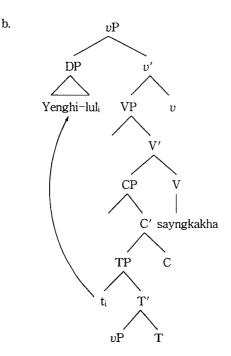
# 4.1.3. Exceptional Case-Marking Constructions

In the MP, the Acc Case on an ECMed subject must be checked by the matrix ECM verb through the Case-checking movement to Spec of vP from Spec of the embedded TP, overtly or covertly. Although a non-thematic A-position like Spec of vP is available as a landing site of movement in the MP unlike in the GB framework, the movement of the ECMed subject raises some problems. As an example, let us consider the derivation of an ECMC like (58a) below.

(58) a. Chelswu-ka Yenghi-lul yeppu-ta-ko sayngkakha-n-ta.

C-NOM Y-NOM/ACC pretty-DECL-COMP think-PRES-DECL

'Chelswu thinks Yenghi to be pretty.'



The movement raises two difficulties for standard MP concerns. First, one needs to determine whether such a movement is possible in the first place. If the movement is directly from Spec of TP to Spec of vP, it crosses TP and CP. This used to be considered an impossible move for NP-movement in GB Theory, being a violation of TSC (or Principle A of Binding Theory). Chomsky (1995) appears to assume that such a movement is in principle possible, though without any explicit discussion. If TSC violations are in principle possible, the next question is why it is allowed in languages like Korean but not in languages like English.

(59) a. \*John believes Mary<sub>i</sub> [that t<sub>i</sub> is intelligent]b. \*John<sub>i</sub> seems [that t<sub>i</sub> is intelligent]

One possibility is to appeal to the ECP, assuming that subject traces in languages like English are not properly governed and thus violate the ECP, while those in languages like Korean are properly governed and thus do not violate the ECP.

To assume that TSC violations are in principle possible and explain the apparent TSC effects in terms of ECP, in turn, has some theoretical conse-

quences with respect to the Binding Theory. Given that TSC effects have been explained in terms of the Principle A of the Binding Theory in GB Theory, the fact that TSC violations are possible in certain languages suggests that the traditional GB assumption that traces of A-movement are subject to the Binding Theory cannot be maintained. Although the belief that the Binding Principles regulate the distribution of traces is firmly established for English-type languages, there is no intrinsic reason the distribution of traces has to be subject to the Binding Theory.<sup>13</sup>

Another difficulty involved in raising the ECMed subject to matrix Spec of vP concerns the issue of what allows this movement to happen at all. Since the embedded Spec of TP is a Case position where Nom can be checked ((60)), the question arises why movement takes place from a Case position to another Case position, a problem we already encountered in the Possessor Raising analysis of Multiple Case Constructions.

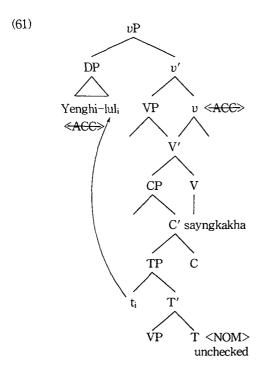
(60) Chelswu-ka Yenghi-ka/lul yeppu-ta-ko sayngkakha-n-ta.

C-NOM Y-NOM/ACC pretty-DECL-COMP think-PRES-DECL 'Chelswu thinks Yenghi to be pretty.'

The answer must be along the following lines: In the MP, nothing prevents an Acc-marked NP from being inserted in a position where Nom is checked. It will simply lead to a crashed derivation if there is no head to check Acc Case. If there is one, such as the matrix v in ECM constructions, the Acc-marked NP may move there and have its Case checked.

However, in order for this line of explanation to work, one must ask why the Nom-checking head in the embedded clause does not lead to a crashed derivation even when it fails to discharge its Case.

<sup>&</sup>lt;sup>13</sup> See J-M Yoon (1991) for discussion.

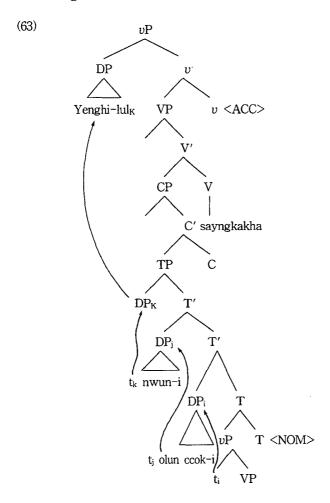


One easy way out of this problem, which is similar to what was proposed for the same problem in the Possessor Raising analysis of Multiple Case Constructions, will be to assume that unlike English, Nom Case is an optional feature of T in languages like Korean. Yang (1996) adopts this approach. According to Yang, Nom Case is an optional feature of T (Agr) in Korean and thus, in case the embedded T (Agr) lacks Nom Case feature, the embedded subject can move to the Spec of matrix  $\nu P$  and get its Acc Case checked there.

The explanation based on the optionality of Nom Case feature, however, runs into the same problem we encountered in the explanation of Possessor Raising in Multiple Case Constructions based on the optionality of Gen Case, as we see below.

(62) Chelswu-nun Yenghi-<u>lul</u> nwun-<u>i</u> olun ccok-<u>i</u>
C-TOP Y-ACC eye-NOM right side-NOM khu-ta-ko sayngkakhanta.
big-DECL-COMP think
'Chelswu thinks that Yenghi's right eye is big.'

The following will be the structure of (62) in the MP.



Nom-Case marking on *nwun* and *olun ccok* in (63) shows that T in (63) must have Nom Case, i.e., it cannot take the option of not having a Nom Case feature even if Nom Case is optional in Korean, as Yang claims. Now the problem of (63) is as follows: given that what licenses mutiple Spec's is the Nom Case feature (Yang 1996; Ura 1996), the highest Spec of T (occupied by DP<sub>k</sub> which has raised out of DP<sub>j</sub>) in (63) must have been licensed by the Nom Case feature. The Nom Case feature of T in (63), however, remains unchecked since the DP, *Yenghi-lul*, carries Acc Case,

which it checks by moving to the Spec of the light verb.<sup>14</sup>

In short, the preceding discussion shows that even if we grant that Nom Case is optional in Korean, there are ECMCs where there is an unchecked Nom Case, but the derivation does not crash. Recall that we had to deal with the same problem in the Possessor Raising analysis of Multiple Case Constructions. There too, the optional Gen Case approach failed to explain why the undischarged Gen Case of D does not lead to a crashed derivation. Let us assume then that there is no optional Case assignment.

Now, if Nom Case and Gen Case are not optional, the problem we face is how the undischarged Case of a head does not cause the derivation to crash. A potential solution to this problem will be discussed in the next section, when we discuss the status of the Chain Condition in the MP.

#### 4.2. Chain Condition

Another salient problem that Korean Case raised for GB Theory was the apparent violation of the Chain Condition. In particular, Case stacking posed the gravest threat to the Chain Condition. Although not as strong as Case stacking, various raising constructions such as ECMCs (Subject-to-Object Raising), Subject-to-Subject Raising, and Possessor Raising Constructions (i.e., Multiple Case Constructions) in Korean also caused a problem for the Chain Condition since both the head and the tail of the Chain formed by raising seem to be Case positions.

In the MP of Chomsky (1995), the generalization stated in the Chain Condition can be ensured only under the assumption that (i) DP's can have only one Case and (ii) the Case feature of a DP is erased once it is checked. The validity of these two assumptions, however, is dubious. As a result, the MP allows the possibility that a Chain might contain more than one Case.

First, as already discussed, the assumption that DP's can have only one Case marker is empirically refuted by Case-stacking data like (64) below.<sup>15</sup>

 $<sup>^{14}</sup>$  An alternative derivation in which "Yenghi-Iul" raises to the matrix clause directly out of DP<sub>j</sub>, thus not projecting an additional Spec of T (=DP<sub>k</sub>) could avoid the problem of an unchecked Nom case which licenses the DP<sub>k</sub>. However, this derivation is not legitimate, since the light verb will Attract a DP closest to it. If DP<sub>k</sub> is contained within DP<sub>j</sub>, then the DP closet to the Acc-checker is the latter, not the former.

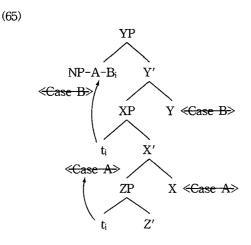
<sup>&</sup>lt;sup>15</sup>Case-stacking is observed in languages like Old Georgian, Alyawarra, Quechua, and some Australian languages. See Blake (1994) for details.

- (64) a. Chelswu-eykey-ka paym-i mwusep-ta.

  C-DAT-NOM snake-NOM fearsome-DECL

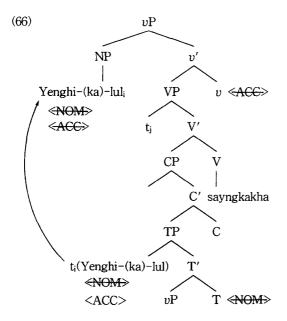
  'Chelswu is afraid of snakes.'
  - b. I kongcang-ey-ka pwul-i na-ess-ta.
     this factory-LOC-NOM fire-NOM break out-PAST-DECL
     'Fire broke out in this factory.'

Theoretically, under the MP a multiply Case-marked Chain may be licensed in the following manner. Suppose that a DP has more than one Case to check, then such a DP, with two Cases specified, should be able to move from one Case position to another Case position and check its Cases consecutively (J H-S Yoon 1996). Specifically, suppose that a nominal is inserted in its base position with two Cases, A and B. Suppose also that both Cases must be checked overtly (i.e., the checkers of A and B are strong). Then the nominal can overtly move to a position where Case A is checked to another position that checks Case B. As a consequence of this movement, we have an A-Chain with multiple Cases.



In short, given that a DP may have multiple Cases, the theoretical mechanisms in the MP are compatible with derivations where a Chain has more than one Case, thus contradicting the generalization stated in the Chain Condition.

If Case stacking is in principle possible, we can also provide an answer to the problem raised earlier by ECMCs in Korean, i.e., why the unchecked Nom Case does not lead to a crashed derivation. Since a Chain can have more than one Case, we can analyze the ECMed subject in ECMCs as having two Cases, i.e., Nom Case and Acc Case, although only one Case, i.e., the Acc Case, is overtly realized. Assuming that a morphological constraint on Case realization is responsible for surface realization of only one Case (Yoon & Yoon 1990; J-M Yoon 1991; H-S J Yoon 1996), this means that the ECMed DP is able to check off the Nom Case of lower T as well as the Acc Case of the ECM verb in the matrix clause. Therefore, the problem of undischarged Case does not arise.



The same can be said of the A-chain formed by Possesor Raising in Multiple Case Constructions, if MCCs do indeed involve Possessor Raising. That is, we can say that the Chain formed by Possessor Raising has two Cases, i.e., Gen and Nom Case, although only the Nom Case is overtly realized. If this is the case, the problem of unchecked Gen Case will be solved, without assuming the optionality of Gen Case.

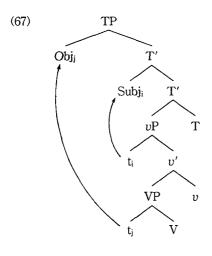
Concerning the second assumption that the Case feature of a DP has to be erased once it is checked, there is a possibility in the MP that the Case feature of a DP is not erased after checking, entering into a checking relation with another head. We have already seen that MP allows a Case feature of a head H, i.e., the attractor/checker, not to erase after checking and to enter into multiple checking relations. Allowing a feature of an element to be

attracted not to erase after checking can be a natural extension of the mechanism already available in MP.<sup>16</sup> Under such a scenario, we could have a Chain with multiple Cases even if we maintain the first assumption.

## 4.3. Locality of A-movement in the MP

We have seen that one of the innovations of the MP is that it allows the assignment/checking of more than one Case by a single head through the device of multiple feature checking and multiple Spec structure. In addition to providing a principled way to analyze Multiple Case Constructions and NOCs in languages like Korean, multiple Spec licensing has the consequence of providing an escape hatch for A-movement. That is, it provides a way to handle long-distance A-movement, also called Superraising, the very existence of which was denied in GB Theory due to various theoretical difficulties it raises.<sup>17</sup>

As discussed in Ura (1996), the so-called Superraising construction is allowed in a language if T in the language allows multiple Spec's. It is because raising the object to the additional Spec of T over the subject in Spec of T does not violate the MLC under the definition of Equi-distance/Closeness in Chomsky (1995): the two Spec's of T are in the same minimal domain and the subject trace in Spec of vP cannot be attracted.



<sup>&</sup>lt;sup>16</sup> In fact, Ura (1996) reports that Chomsky has suggested this possibility for Superraising in Arabic, although he opts for copy-raising.

<sup>&</sup>lt;sup>17</sup> See J-M Yoon (1991) for the discussion.

Now all that is required for non-clause-bounded raising of the object is for there to be an ECM verb with a strong feature in the matrix clause which attracts the object.

Turning to Korean, since T in Korean allows multiple Spec's, the prediction is that Korean should allow Superraising. This prediction is borne out by sentences like (68) below, where the object of the embedded clause is passivized and becomes the subject in the matrix clause. 18

(68) a. Chelswu-nun [ Hemingway-ka ku chayk-ul ssu-ess-ta-ko]

C-TOP H-NOM that book-ACC

ssu-ess-ta-ko] mit-nun-ta.

write-PAST-DECL-COMP believe-PRES-DECL

'Chelswu believes that Hemingway wrote that book.'

b. ku chayk<sub>i</sub>-i (Chelswu-eyuyhay) [Hemingway-ka t<sub>i</sub> that book C-by H-NOM ssu-ess-ta-ko]] mit(e)-ci-n-ta. write-PAST-DECL-COMP believe-PASS-PRES-DECL 'That book is believed to have been written by Hemingway (by Chelswu).'

In (68b) the embedded object *ku chayk-ul* raises to the matrix subject position over the embedded subject *Hemingway-ka*. We may assume that the movement of the embedded subject passed through the additional Spec of T.

This, in turn, raises a question regarding the locality of A-movement. We have already seen that A-movement which violates the TSC, i.e., movement from Spec of TP in the embedded clause to Spec of vP in the matrix clause, should in principle be possible and the apparent TSC violations in some languages can be attributed to the ECP. With the multiple Spec structure opening up the possibility of SSC violations, the widely accepted belief that A-movement shows strong locality unlike A'-movement completely loses its ground. Instead, the emerging generalization is that A-movement locality can vary among languages and whether A-movement in a language allows the

<sup>&</sup>lt;sup>18</sup> See J-M Yoon (1991) for the analysis of sentences like (68b) which violate the SSC within the GB framework. She proposes that positions such as Spec of CP and positions adjoined to IP and VP which are taken to be universally A'-positions, can be A-positions in some languages (i.e., the A/A'-nature of these positions can vary among languages) and thus in those languages, they can be used as an escape hatch for non-clause-bounded A-movement.

TSC and/or the SSC effects depends on whether T in a language allows multiple Spec's and/or whether subject traces are properly governed.

#### 5. Conclusion

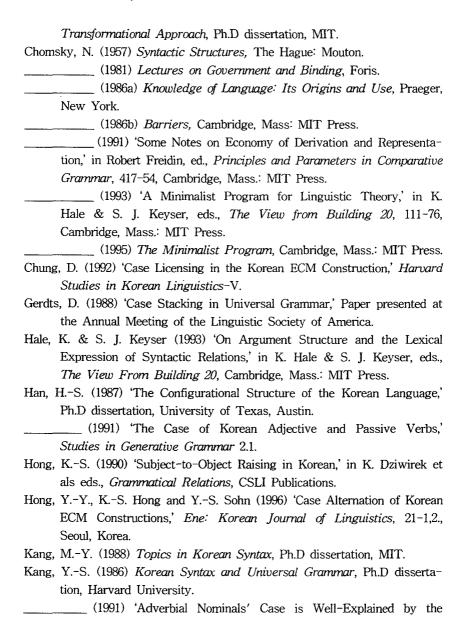
In this paper, we have reviewed developments in Case Theory in Korean syntax over the past decade or so, concentrating on work conducted within the GB/MP tradition. As stated at the beginning, Korean possesses a rich and interesting Case system whose investigation should shed light on theoretical treatments of Case and related phenomena.

Many of these complex Case phenomena in Korean were not amenable to standard Case Theory in GB framework, and very often, we have seen either facile attempts to fit the data to the theory or an unprincipled revision of the theory to fit the facts of the language.

Although extensive work on Korean Case system in the MP is yet to be done, compared to GB Theory, the MP seems to allow more flexibility to explain intricacies of Korean Case system, providing technical devices such as multiple Spec's to accomodate the intricate Korean Case phenomena which did not receive a satisfactory treatment in GB Theory. Upon a closer investigation, however, the details of the MP analysis of various Case phenomena in Korean are yet to be worked out, with many of the theoretical devices being not precisely formulated and/or too unconstrained. In addition, we have also seen that a number of problems carry over unaltered from GB Theory to MP. A resolution of these issues should be the concern of the next stage of inquiry on Case.

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# **ABSTRACT**

# A Critical Survey of GB/Minimalist Research on Case and A-Chains in Korean

Jeong-Me Yoon

Korean possesses a rich and interesting Case system whose investigation sheds light on theoretical treatments of Case and related phenomena. For this reason, constructions involving Case-theoretic problems have been actively and frequently researched in Korean syntax. In this paper, we critically survey research on Case done in the tradition of Chomskyan syntactic theory, i.e., GB theory and the Minimalist Program.

Many of the complex Case phenomena in Korean were not amenable to standard Case Theory in GB framework, and very often, we see either facile attempts to fit the data to the theory or an unprincipled revision of the theory to fit the facts of the language. Although extensive work on Korean Case system in the MP is yet to be done, compared to GB theory, the MP seems to allow more flexibility to explain intricacies of Korean Case system, given technical devices such as multiple Spec's to accomodate the intricate Korean Case phenomena which did not receive a satisfactory treatment in GB theory. Upon a closer investigation, however, the details of the MP analysis of various Case phenomena in Korean are yet to be worked out, with many of the theoretical devices being not precisely formulated and/or too unconstrained. In addition, a number of problems carry over unaltered from GB Theory to the MP. A resolution of these issues should be the concern of the next stage of inquiry on Case.

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