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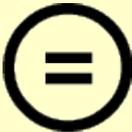
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**Master's Dissertation of Humanities**

**Theta-sensitive Dependent Case  
Assignment in Korean Multiple Case  
Constructions**

한국어 격 중출 구문에서의 의존격 할당:  
의미역 제약을 중심으로

**February, 2018**

**Seoul National University Graduate School**

**Department of Linguistics**

**Lawton Benjamin Potts Hogan**

# Theta-sensitive Dependent Case Assignment in Korean Multiple Case Constructions

지도교수 고희정

이 논문을 문학석사 학위논문으로 제출함  
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언어학과 언어학전공  
Lawton Benjamin Potts Hogan

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위원장

남용호



부위원장

고희정



위원

김한별 (인)

# **Theta-sensitive Dependent Case Assignment in Korean Multiple Case Constructions**

**Advisor: Heejeong Ko**

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of the requirements for the degree of  
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**Committee Chair**   
**Seungho Nam**

**Thesis Advisor**   
**Heejeong Ko**

**Examiner**   
**Han-Byul Chung**

## **Abstract**

# **Theta-sensitive Dependent Case Assignment in Korean Multiple Case Constructions**

**Lawton Hogan**

**Department of Linguistics**

**Graduate School**

**Seoul National University**

Korean Multiple Case Constructions (MCCs) have presented a long-standing issue for theories of morphological case. These constructions, in which multiple instances of the same case appear within a clause, directly challenge theories under which a given functional head assigns case to a single nominal. Two types of Multiple Case Constructions in Korean have garnered much attention in the syntactic literature -- Multiple Nominative Case constructions (MNCs) and Multiple Accusative Case constructions (MACs). Up to this point, multiple attempts to account for these case patterns have been attempted under the Agree model, but so far, none have proven to be fully satisfactory. This thesis examines

the ability of a different case model, namely, the Dependent Case Model, to account for MCC data.

The Dependent Case Model is fundamentally distinct from models under which case is assigned by a functional head. Under this model, morphological case is assigned configurationally, that is, according to the relation between the nominals themselves. Dependent Case, in particular, is assigned when two caseless nominals appear in an asymmetric c-command relation, the c-commanding nominal assigning dependent case to the c-commanded nominal. When attempting to account for MNC data, this model runs into the issue that, according to its case calculus, the higher  $DP_1$  ought to assign accusative to the lower  $DP_2$ . Thus, the Dependent Case Model on its own is not able to account for MNC data.

In order to resolve this issue, I utilize the insights of Heycock (1993) and Yoon (2004, 2007, 2015), among others, that the higher  $DP_1$  in an MNC is the Major Subject (MS) of a sentential predicate, formed from the lexical predicate and the Grammatical Subject (GS). This predicate assigns its own non-external  $\theta$ -role to the MS. Attempting to formally encode the lack of assignment of an external  $\theta$ -role to the lack of dependent case, I propose the Theta-sensitive Dependent Case-assignment Hypothesis. Under this hypothesis, the Dependent Case assignment calculus is amended such that a c-commanding nominal assigns dependent case to a c-commanded nominal *if and only if* the commanding nominal has been assigned an external  $\theta$ -role. This accounts for the MNC data by preventing dependent case-assignment from being triggered between the Major Subject and the Grammatical

Subject, as the Major Subject is assigned a non-external  $\theta$ -role by the sentential predicate. This lack of external  $\theta$ -role is also utilized to explain Nominative Object Constructions (NOCs) in Korean.

In addition to MNCs, this new theta-sensitive Dependent Case Model is applied to MACs, and it is found that it is able to account for this case pattern as well. In MACs, the subject is assigned an external  $\theta$ -role by the  $v_{do}$  head, which triggers dependent case assignment, and results in accusative case on the higher of the two accusative-marked nominals. At this point, dependent case assignment is still triggered, as the external  $\theta$ -role marked nominal and the lower of the two accusative marked DPs will still be caseless; as a result, the lower DP is able to receive its accusative case. Finally, ECM constructions are analyzed, and it is shown that, while the traditional Dependent Case Model is unable to account for this case pattern as well, the Theta-sensitive Dependent Case-assignment Hypothesis allows the model to account for the data naturally, including ACC/NOM case variation.

The Theta-dependent Case-assignment Hypothesis is shown to provide a novel account of the data in all of the analyzed case constructions. Further, it provides a direct link between theta and case, something that has been lacking in the Dependent Case Model up to this point. Application of this theta-sensitive Dependent Case Model to MNC and MAC data allows for a theoretically and empirically satisfying account of the data, and adds to significant insights to the body of literature, both on MCCs and on case in general.

**Keyword :** case, MNC, MAC, Agree, Dependent case  
**Student Number :** 2015-22103

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# 1. Introduction

Multiple Case Constructions (MCCs) in Korean have garnered much interest and attention in the literature on Korean, and small wonder, as these constructions seem to run counter to some basic assumptions about how language works, particularly those assumptions related to C/case. Korean has two construction types in particular that demonstrate surprising case patterns; the first is called the Multiple Nominative Construction (MNC)<sup>1</sup> and is shown in (1), the second, the Multiple Accusative Construction (MAC), shown in (2).

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<sup>1</sup> In the literature, MNCs have often been referred to as DNCs (Double Nominative Constructions), and MACs have often referred to as DACs (Double Accusative Constructions), because in a majority of the data, there are only two nominals that are marked nominative or accusative. However, as we will see, a crucial fact about these constructions is that nominative or accusative-marked nominals may appear recursively. That is, there may be an arbitrarily large number of nominals appearing with the same case. See (i) and (ii) for examples based on Kuno (1973).

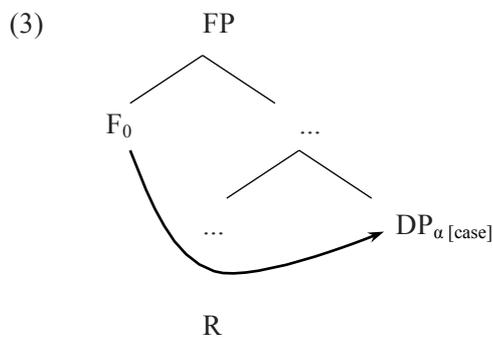
- (i) Nampankwu-ka                  munmyeng-kwuk.ka-ka                  namca-ka  
south.hemisphere-NOM developed-country-NOM                  men-NOM  
phyengkywun-swumyeng-i                  ccalp-ta  
average-lifespan-NOM                  short-DECL  
"It is in the southern hemisphere where it is the developed countries  
where it is that the men whose lifespan is short"
- (ii) Mary-ka                  John-ul                  tali-lul oluncok-ul                  cha-ss-  
Mary-NOM                  John-ACC                  leg-ACC right.side-ACC                  kick-pst-  
ta  
decl  
Mary kick the right side of John's leg.

In Chapters 1 - 3, for the sake of simplicity, I will focus on instances with only two nominative-marked nominals, but I will address cases with multiple nominative-marked nominals in Chapter 4.

(1) John-i            khi-ka            khu-ta.  
 John-NOM        height-NOM    tall-decl.  
 "John is tall."

(2) Mary-ka        John-ul        phal-ul        cap-ass-ta.  
 Mary-NOM       John-ACC       arm-ACC       grab-pst-decl.  
 "Mary grabbed John's arm."

The constructions are surprising because, according to the widely utilized Agree model of Case, under which morphological case and abstract Case are directly connected, case acts as a reflex of  $\Phi$ -feature agreement, being assigned only after a functional head  $F_0$  has entered into an agreement relationship with a given nominal  $\alpha$  in its c-command domain via a probe-goal relationship (Chomsky 2000, 2001). This is illustrated in (3).



The head of the functional projection probes for a goal that matches its given  $\Phi$ -feature, after which the appropriate case is assigned as a reflex, NOM for  $T_0$ , ACC

for  $v_0$ , and GEN for  $D_0$ . Crucially in this model, a single functional head enters into an agree relation with one and only one nominal, as the uninterpretable  $\Phi$ -feature will be eliminated (or valued) once it has entered into an agree relation, and further agreement will lack motivation. MNCs and MACs appear problematic for this model of case assignment as it is not clear why a given  $F_0$  should enter into  $\Phi$ -feature agreement with two separate nominals.

A separate case model that has been utilized to account for a wide range of case data is that of the Dependent Case Model, the most well-known version of which was proposed by Marantz (1991) (but see Yip, Maling, Moira & Jackendoff 1987 for a similar proposal). This model is fundamentally different from the Agree model, both in its formulation of morphological case assignment, and in its explanation of nominal licensing. Under this model, nominal licensing has nothing to do with case, rather, it is put down to the subject requirement of the EPP and the syntax-semantics interface. As for morphological case, the model proposes that it is assigned via the relationship between nominals, with no (direct) involvement of functional heads. Morphological case is categorized into four different types (4).

(4) *Typology of case in the Dependent Case Model* (Marantz 1991, p. 24)<sup>2</sup>

- Lexical case
- "dependent" case (accusative and ergative)
- unmarked case (environment-sensitive)

Case assignment happens according to a hierarchy that determines the order of case assignment (5).

(5) *Case disjunctive hierarchy* (Marantz 1991)

lexical/oblique case » dependent case » unmarked case

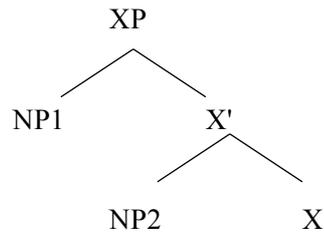
According to this model, lexical case is assigned directly by the lexical verb, while dependent case is assigned when two caseless nominals find themselves in an asymmetric c-command relation, in which case, the c-commanding nominal assigns dependent case to the c-commanded nominal in NOM-ACC languages, while the c-commanded nominal assigns dependent case to the c-commanding nominal in ERG-ABS languages. Finally, any nominals that have not been assigned lexical or dependent case will receive unmarked case.

---

<sup>2</sup> See Marantz (1991) for the original proposal including the difference between unmarked case and default case. Instances where default case will not arise in this thesis, therefore I omit discussion of it.

This model, too, runs into issues when attempting to account for sentences like (1), assuming an MNC derivation such as that in (6) where the two nominative-marked nominals are in an asymmetric c-command relation.

(6) *Basic MNC Structure*<sup>3</sup>.



Under the Dependent Case Model, nominative case is equivalent to a nominal remaining *caseless*. Marantz (1991) specifically argues that morphological case is completely separate from the nominal licensing, thus a nominal ending the derivation without morphological case will not cause ungrammaticality. Assuming for the moment that this is true, we would never expect to find two nominative marked nominals appearing in an asymmetric c-command relation, as we have in (1), since we would predict that the c-commanding nominal would assign accusative to the c-commanded nominal. Thus, we would expect that *height* in (1) would be assigned accusative case by *John*. It seems, then, that the Dependent

---

<sup>3</sup> This basic structure, in which the higher NP is base-generated above the lower NP is far from uncontroversial, and further justification will be given for it in section 1 of Chapter 2, but what is, to my knowledge, non-controversial is that the two nominals are in an asymmetric c-command relation, which is the crucial point here.

Case Model also fails to directly account for the data in (1) and requires some sort of amendment to explain the data.

In fact, an amended version of the Dependent Case Model has been introduced to account for a separate phenomenon in Korean known as case stacking (Levin 2016). Case stacking refers to a construction in which a single nominal appears to bear multiple case markers, as in (7).

(7) John-hanthey-ka      ton-i      iss-ta  
John-DAT-NOM      money-NOM      have-DECL  
"John has money."

(7) is problematic for the Dependent Case Model as, according to stipulation, a nominal should only receive case once, at which point, it is no longer available for case competition. Levin suggests that the data in (7) can be explained by suggesting that Case is assigned cyclically by phase, proposing Korean case assignment rules as in (8) (underline added for emphasis).

- (8) Korean case assignment rules
- a. If a DP is (c-)selected by a functional head (F0) that specifies idiosyncratic case morphology, assign that morphology to the DP.
  - b. If there are two distinct DPs in the same phase such that DP<sub>1</sub> (asymmetrically) c-commands DP<sub>2</sub>, assign accusative morphology to DP<sub>2</sub> if and only if DP<sub>1</sub> is caseless.
  - c. If a DP does not receive lexical or dependent case, it is caseless (realized as nominative case).

Levin argues that in sentences like (7), in the *vP* phase, *John* is assigned lexical case, allowing *money* to receive nominative case. *John* is subsequently raised into the CP phase, where it is the highest nominal in the domain, allowing it to receive nominative case. This results in the stacked dative-nominative case.

Though this amended version of the Dependent Case Model may explain the data in (7), it is not able to account for the data in (1) above. This issue will be discussed in more detail in Chapter 2, but in short, it does not handle the issue already raised, which is that we would expect the c-commanding DP to be able to assign accusative case to the c-commanded DP. Thus, even under Levin's (2016) amended Dependent Case assignment rules for Korean, some further modification must be made.

This thesis is organized as follows. Chapter 2 will cover the background of Multiple Nominative Constructions in Korean. I will establish the position of the nominals within the derivation in Section 2.1, and discuss the role of the nominative-marked nominals in Section 2.2. Section 2.3 will discuss some background on case, and argue that while the Dependent Case Model has advantages over the Agree model, it still fails to account for the data in MNCs. In Chapter 3, I will argue that what is missing from the Dependent Case Model is theta-sensitivity, and will propose the Theta-sensitive Dependent Case Assignment Hypothesis, which proposes that the external  $\theta$ -role-assigned argument plays a special function in case assignment. Chapter 4 will examine in detail how the proposal can be applied to both MNC constructions, and Nominative Object Constructions, and it will be shown that the current proposal is superior in accounting for that data compared to previous approaches. Chapter 5 will discuss how the proposal can be extended to other constructions, specifically Multiple Accusative and ECM constructions, and a note will be made about how the model might be applied to ergative-absolutive languages. Chapter 6 will summarize and conclude the paper.

## 2. The Syntax and Semantics of MNCs

MNCs appear in a number of different construction "types." A number of classifications have been proposed that attempt to separate and group them together based on varying criteria, but the most widely adopted is the classification given in (9)-(12) (see Choi (2009) and Nam (2015) for different classifications).

### (9) Inalienable Possession Construction (IPC)

- a. Chelswu-*ka*      pal-*i*      khu-ta.  
C.-NOM      foot-NOM      big-decl.
- b. Chelswu-*uy*      pal-*i*      khu-ta.  
C.-GEN      foot-NOM      big-decl.

"Chelswu's feet are big."

### (10) Alienable Possession Construction (APC)

- a. Inswu-*ka*      cha-*ka*      oycay-ta  
I.-NOM      car-NOM      import-decl.
- b. Inswu-*uy*      cha-ka      oycay-ta.  
I.-GEN      car-NOM      import-decl.

"Inswu's car in an import."

(11) Kinship

- |    |            |            |           |
|----|------------|------------|-----------|
| a. | Chelswu-ka | apeci-ka   | pwuca-ta. |
|    | C.-NOM     | father-nom | rich-decl |
| b. | Chelswu-uy | apeci-ka   | pwuca-ta  |
|    | C.-GEN     | father-nom | rich      |

“Chelswu’s father is rich.”

(12) Adjunct

- |    |            |            |           |
|----|------------|------------|-----------|
| a. | yelum-i    | maykcwu-ka | coh-ta    |
|    | yelum-nom  | beer-nom   | good      |
| b. | yelum-ay   | maykcwu-ka | coh-ta    |
|    | yelum-temp | beer-NOM   | good-decl |

"In summer, beer is good."

In the examples in (9) - (11), the DP<sub>1</sub> and DP<sub>2</sub> are related semantically by a possession relationship, that is, the DP<sub>1</sub> is the possessor of the DP<sub>2</sub>. In (12), however, the possession interpretation is not available. This has led a number of authors to suggest that these are two separate types of construction (Chun 1985; Youn 1990), but it has also been argued that this is not a meaningful distinction (Yoon 2004, 2007, 2015). The multi-type analysis has gone hand-in-hand with the possessor-raising analysis for the possessor-type MNCs (Chun 1985; Youn 1990; Choe 1986; Cho 2003; Ura 1996; Kim 1998; Yang 1998; Lee 2007). Under the possessor-raising analysis, the possessor is seen to be base-generated as the

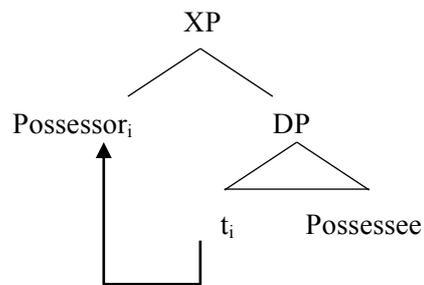
possessor of the DP containing the possessee (13) (next page). This approach contrasts with the base-generation approach (14) (next page), which regards  $DP_1$  as being base-generated in its surface position (Doron and Heycock, 1999; Yoon 2004, 2007, 2015). Related to this, there has been considerable debate about whether the both of the nominative-marked nominals are, in fact, subjects, or if the  $DP_1$  is actually acting as something like topic or focus. For any and all of these approaches, the question of how multiple nominals come to bare nominative case requires an explanation. In Section 2.1 of this Chapter, I will contrast the possessor-raising and base-generation approaches, and argue that the possessor-raising approach faces a number of issues that make it inferior to the base-generation approach. In Section 2.2 I will introduce the literature related to the role that the  $DP_1$  plays in the sentence, and argue along with Doron and Heycock (1999) and Yoon (2007b) that both nominals are indeed subjects. Finally, in Section 2.3, I will discuss the Agree and Dependent Case Models, and show that, while the Dependent Case Model has been shown to account for some case data in Korean that is problematic for the Agree model, it still has issues accounting for MNCs, and must be amended.

## 2.1 Possessor-raising vs. Base-generation

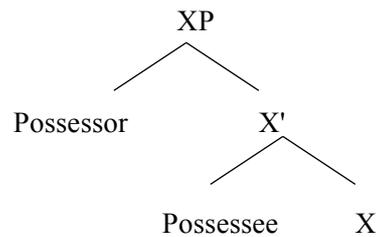
In this section, I will provide background on two separate approaches that attempt to account for the location of the nominative-marked nominals in MNCs, and argue that one of them offers clear benefits over the other.

As mentioned above, there have been two principal analyses for the location of the nominative-marked nominals in MNC constructions. The first is the Possessor-raising approach, which is shown in (13); the second is the base-generation approach, shown in (14).

(13) *Possessor-raising Approach*

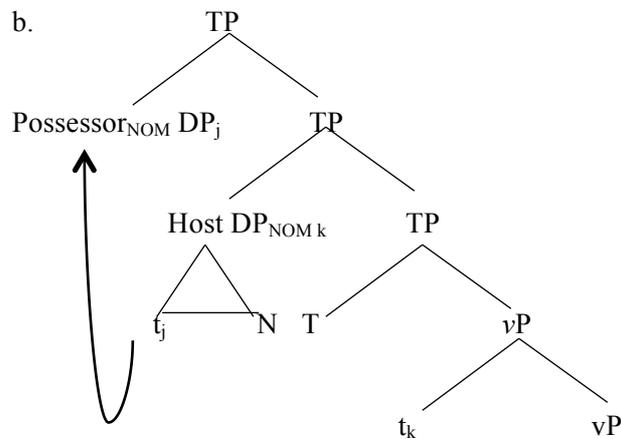


(14) *Base-generation Approach*



The Possessor-Raising approach has an undeniable appeal. In particular, it provides a straightforward account of how the DP<sub>1</sub> is able to be interpreted as the possessor, as under this analysis, it begins its sentential life as a possessor. There have been a number of accounts given under this framework. Under Ura's (1996) account, the higher nominal begins in the specifier position of the lower DP, but specified for nominal along with the entire DP. As such, the DP agrees with T to check its nominative case feature and raises to Spec TP, at which point, the possessor must also Agree with T and raise in order to check its own nominative case feature (15).

- (15) a. Mary-ka                      meri-ka                      kil-ta.  
           M.-NOM                      hair-NOM                      long-DECL  
           'Mary's hair is long.'

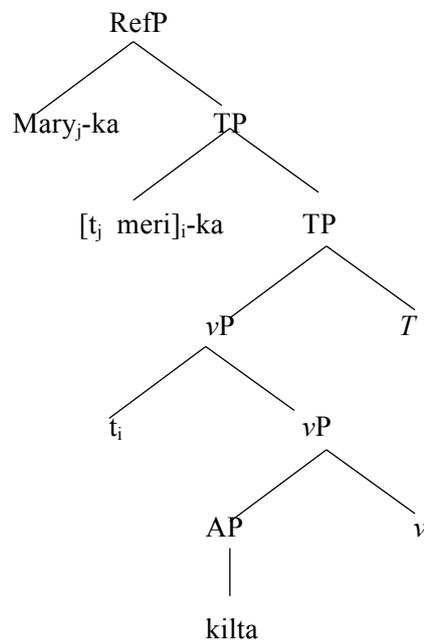


This analysis critically relies on the notion that, in languages like Korean and Japanese, the case feature of T tolerates arbitrarily many unforced violations of

Procrastinate, allowing T to enter into multiple checking relations. A similar analysis that utilizes the notion of multiple checking is Lee (2007), though offering a different motivation for raising. It is argued that the DP<sub>1</sub> moves to the position Spec RefP in order to check off a +specificity feature. Under Lee's analysis, the nominal feature on both the possessor and possessee are valued through Agree with T, but the possessor nominal moves to Spec RefP due to an EPP feature on Ref

(16).

(16)



The benefit of these types of analyses is, as previously stated, they give a straightforward account of the possessor interpretation that these constructions receive. However, they also face a number of serious issues.

First, Doron and Heycock (1999) and Yoon (2007a) point out that the possessor DP is able to appear bearing nominative case even when the possessee appears within an island (17).

- (17) Yenghi-ka      [[e/kunye-uy    apeci-ka      ha-si-nun]  
 Y-NOM              she-GEN    father-NOM    do-HON-ADNOM  
 saep-i              manghay-ss-ta.  
 business-NOM go.bankrupt-pst-decl.

"It is Yenghi that the business **her** father was running went bankrupt.

If the DP<sub>1</sub> is base-generated in its surface position, then we have a straightforward explanation for why the embedded gap or pronoun is able to appear within an island (Yoon 2007a).

An additional benefit of the base-generation analysis is that it explains the fact that the DP<sub>1</sub> also receives a wide scope interpretation over other elements of the sentence (18a), where as the genitive counterpart is able to scope below lower elements (18b).









## 2.2 Role of DP<sub>1</sub>

The previous section covered where the DP<sub>1</sub> is generated, and it was decided that, due to strong evidence against the possessor-raising analysis, it must be base generated in its surface position. This does not, however, answer the question of what role it plays in the sentence. A number of proposals have been made in regards to this question, but they take two principal forms: 1) DP<sub>2</sub> is the actual subject of the sentence, while DP<sub>1</sub> fulfills some other role (topic, focus, etc.), and 2) both DP<sub>1</sub> and DP<sub>2</sub> are subjects. I will present some of the arguments for each of these analyses and conclude that both nominative-marked nominals are indeed subjects.

As mentioned, a common approach to MNCs has been that the DP<sub>1</sub> is not a subject, but instead a focus or topic. The attractiveness of this approach derives from its ability to maintain a one-to-one correspondence between the number of thematic roles in the sentence and the number of arguments. Variants of this approach have been given by a number of scholars (James Yoon 1986; Jong Yurl Yoon 1989; Schütze 2001). Schütze (2001) utilizes examples with case stacking to argue that Korean subject and object particles may double as a focus marker. In sentences like (22) below, Schütze points out that the sentence is only felicitous with specific prosody.

- (22) Na-eykey-ka                paym-i                mwusep-ta.  
       I-DAT-NOM                snake-NOM        fearful-DEC  
       "I am afraid of snakes."

He argues that the necessity of this type of specific prosody is evidence that the stacked NOM particle here is, in fact, a focus marker. Specifically in regards to locative, directional, and temporal adjunct MNCs, like (23), Schütze says that because these elements fail subjecthood tests (Hong 1990), they require a different analysis.

- (23) Cip-aneyse-ka                swunhi-eykey    namphyen-i        mwusep-ta.  
       house-in-NOM                Swunhi-DAT    husband-NOM    fears-DEC.  
       "It is in the house that Swunhi is afraid of her husband."

Schütze further argues that stacked *ka* appears in environments where only the focus interpretation is available; specifically in wh-phrases (24), in answers to wh-questions (25), in correction sentences (26), with overt focus markers (27), and in sentences with apparent multiple focus (28) (amongst multiple other environments).

- (24) Nwukwu-eykey-ka      Mary-ka                      mwusep-ni?  
 who-DAT-NOM              Mary-NOM                      fear-Q  
 "Who is afraid of Mary?"
- (25) Q:      Nwukwu-eykey              ton-i              kelekhey              manh-ni?  
             who-DAT                      money-NOM      so                      much-Q  
             "Who has so much money?"
- A:      Chelswu-eykey-ka              ton-i              kulekhey              manchi.  
             Chelswu-DAT-NOM      money-NOM      so                      much  
             "Chelswu has so much money."
- (26) A:      Swunhi-eykey                      chelswu-ka                      cohunkapwa.  
             Swunhi-DAT                      Chelswu-NOM                      like.seems-decl  
             "Swunhi seems to like Chelswu."
- B:      Aniya, Yenghi-eykey-ka              Chelswu-ka              coha.  
             no              Yenghi-DAT-NOM              Chelswu-NOM likes  
             "No, Yenghi likes Chelswu."
- (27) Na-eykey-man-i              paym-i              mwusep-ta.  
             I-DAT-only-NOM              snake-NOM              fearful-DEC  
             "Only I am afraid of snakes."

- (28) Cip-aneyse-ka            kyewul-ey-ka    Swunhi-eykey nampyen-i  
house-in-NOM            winter-in-NOM Swunhi-DAT    husband-NOM  
mwusepta.  
fears-DEC  
"In the house, in winter, Swunhi fears her husband."

Up to this point, the examples dealt with by Schütze relate to case-stacking specifically, and may or may not apply to simple MNCs. Nevertheless, his argument that –KA is at least not *strictly* a subject marker opens up the possibility that –KA marks something other than subjects in MNCs as well. He provides (29) as an example where this might be the case.

- (29) a. L.A.-ka            hankwuksalam-i            ceyil manhi            san-ta.  
L.A.-NOM    Koreans-NOM            most            live-DEC  
"As for L.A., it has the largest Korean population."

- b. Minswu-ka            L.A.-lul            hankwuksalam-i    ceyil manhi  
Minswu-NOM            L.A.-ACC            Korean-NOM            most  
san-ta-ko            sayngkakhan-ta.  
live-decl-comp            think-decl  
"Minswu thinks that, as for LA, it has the largest Korean population."

Schütze argues here that the *-ka* particle marking *L.A.* is marking generic topic, and that the *-lul* marker on *L.A.* in (29b) is also able to mark focus, thus, these elements are acting as discourse markers rather than case markers.

While it is certainly true that nominative often appears on focused elements, there are issues with the idea that nominative is an express indicator of focus. Lee (2007) raises the issue of (30), which is an MNC construction with an indefinite in the DP<sub>1</sub> position, which is normally unable to be focused.

- (30) Nwukwunka-ka      khi-ka      khu-ta.  
         someone-NOM      height-NOM      tall-DEC  
         "Someone is tall."

Additionally, Yoon (2004, 2007, 2015) has argued extensively that both nominative-marked nominals in MNCs are, in fact, true subjects. In Yoon (2007b), Yoon provides a breakdown of subject diagnostics for Korean, shown here in (31) and (32), and argues that in MNCs they are split between the DP<sub>1</sub> and DP<sub>2</sub>. Yoon refers to the DP<sub>1</sub> as the Major Subject (MS), and the DP<sub>2</sub> as the Grammatical Subject (GS).

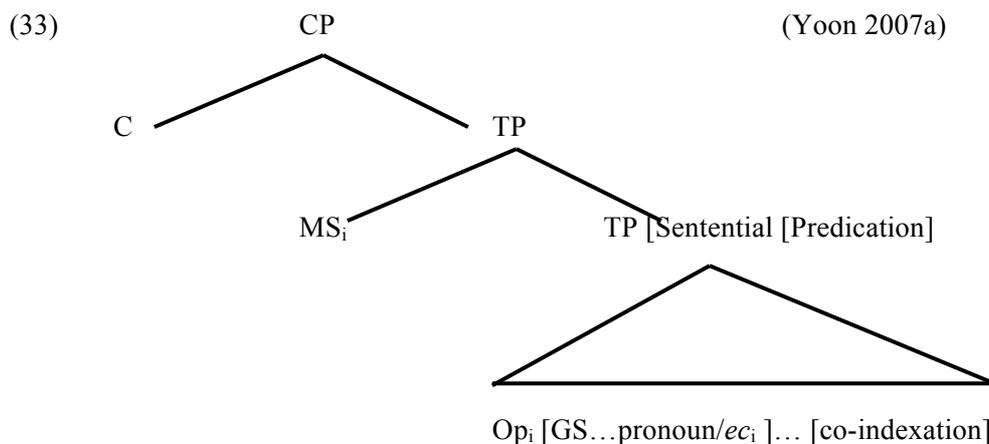
- 31) Diagnostics for Major Subjects:  
     a. Subject-to-Object raising  
     b. Nominative case-marking

32) Diagnostics for Grammatical Subjects:

- a. Subject honorification
- b. Equi controller in obligatory control

Yoon explains this split in subject properties by evoking the idea of pivot and most prominent (core) argument. In brief, when there is one nominative marked particle in an utterance (and therefore only one subject), the pivot and core are the same argument, resulting in all subjecthood properties converging on that nominal. But when there are two nominative-marked nominals, the Major Subject becomes the pivot (as it is not selected as an argument of the predicate), and the Grammatical Subject takes the role of core. Yoon goes on to argue that those diagnostics that apply to the MS are the very same as those that apply to the pivot, and that those that apply to the GS match those that apply to the core.

This still leaves the question of what the Major Subject is a subject *of*. A number of authors have taken the approach that the Grammatical Subject is the subject of the simple predicate, while the Major Subject is the subject of a sentential predicate (Park, 1973; I. Lee, 1987; Heycock, 1993; James Yoon, 2004, 2007, 2015, C. Park, 2010). The sentential predicate, under this type of analysis, is made up of the simple predicate and the grammatical subject. Heycock (1993) and Yoon (2007) argue that the Major Subject position is licensed via predicate abstraction. Yoon (2007) offers the following structure in (33) (a more detailed version of this will be provided momentarily)



According to this analysis, an empty category in the position of the possessor for the Grammatical Subject licenses predicate abstraction, which results in the presence of a null operator that is able to bind the empty category. The Major Subject is then licensed as the subject of the sentential predicate<sup>4</sup>.

Of course, in order for this analysis to be convincing, the conditions that allow the Major Subject to be interpreted as a predicate must be fleshed out. Yoon (2007, 2015), proposes two principle restrictions. Originally proposed by Kang (2001), the first is a restriction on the predicate itself, while the second is a

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<sup>4</sup> Chung Han-Byul (personal communication) points out that assuming the empty category in the possessor position is crucial for licensing predicate abstraction, it is not immediately clear how this can be extended to the adjunct-type MNCs, as there is generally no obvious empty category within the sentential predicate. I do not have a clear answer for this issue at this time and will leave it up to future research.

restriction on the Major Subject. The data in (34) illustrates the restriction on the predicate.

(34) a. Chelswu-ka            apeci-ka            tolaka-si-ess-ta  
           C-NOM                father-NOM            die-hon-pst-decl  
           ‘‘It is Chelswu whose father died.’’

b. \*?Chelswu-ka            apeci-ka            nemeci-si-ess-ta  
           C-NOM                father-NOM            fall-hon-pst-decl  
           ‘‘It is Chelswu whose father fell.’’

As can be seen in the example above, the MNC is licensed with the predicate *die*, but is totally out with the predicate *fall*. This indicates that for a Major Subject to be licensed, the sentential predicate must tell us something fundamental. It is reasonable to think that someone's father having died could be considered a critical detail about that person, while it is very difficult to imagine a situation where someone's father having fallen down could be considered sufficiently critical. Kang (2001) and Yoon (2004, 2007, 2015) refer to this as the Characteristic Property (CP) of the sentential predicate, which, as the name suggests, must describe some crucial detail about the Major Subject. The second restriction proposed by Yoon (2007) is that the Major Subject must be "Newsworthy" in the discourse; this is dubbed the Newsworthiness Condition. Yoon (2015) provides the data (35) and (36) as an illustration of this restriction.

- (35) \*khi-ka            Chelswu-ka            khu-ta.  
 height-NOM    C-NOM                            big-decl

Intended: “As for height, Chelswu is the tallest.”

- (36) a. Ku            thim-eyse-nun            khi-ka            Shaquille O’Neal-i  
 That            team-among-TOP            height-NOM    SO-NOM  
 ceyil            khu-ta  
 most            big-decl

“As for height, Shaq is the tallest on that team.”

- b. Khi-ka            nwu-ka            ceyil            khu-ni?  
 Height-NOM            who-NOM            most            tall-inter

“Speaking of height, who’s the tallest on that team?”

Without the proper context, the sentence in (35) is odd to the level of being totally ungrammatical, but the right context, such as that provided by the question in (36b), is able to rescue it. If *khi* "height" has already been highlighted as the discourse-salient item, it is able to appear as the Major Subject.

The sentential predication analysis utilizing base generation has a number of advantages over the others. First, as it utilizes base generation, it avoids issues that the possessor-raising analysis faces related to movement. Further, it avoids the issues that arise under the focus analysis, particularly the issue that not all Major

Subjects are focused<sup>5</sup>, and also the non-trivial learnability issue that arises if an identical marker serves two disparate grammatical functions (subject and focus).

An additional benefit of this analysis is that, when combined with Cyclic Linearization (CL) and an analysis of predication as a phasal domain, we can explain a number of interesting restrictions on linear order that MNCs demonstrate (Ko 2007, 2009). CL has been proposed as something of an alternative to Chomsky's (2001) phase model (see Fox and Pesetsky (2005) for the original proposal). The principle differences are two-fold, the spell-out domain, and the syntactic restrictions that occur as a result of spell-out. Under Chomsky (2001), the domain of spell-out is the complement of the phase that is being spelled-out. For example, when the *v*-head undergoes spell-out, anything and everything located in its complement will undergo spell-out, but the *v*-head and the specifier of *v* will not spell-out until the next phase (C, under Chomsky's model). Fox and Pesetsky's CL model differs in that all elements associated with the head being spelled-out are spelled-out simultaneously; this includes the head and its specifier. The syntactic restrictions placed on spelled-out elements also differ. Under Chomsky's model, once an element has been spelled out, it is invisible to all future syntactic operations. Chomsky refers to this as the Phase Impenetrability Condition (PIC) (37).

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<sup>5</sup> Schütze (2001) attempts to address the issues with the focus analysis by suggesting that *-ka* may also indicate topic, but this badly compounds the learnability issue.

(37) *Phase Impenetrability Condition* (Chomsky 2001: 13)

The domain of H is not accessible to operations outside HP; only H and its *edge* are accessible to such operations

This means that for an element to be available for syntactic operations in later phases, it must move to the edge of the domain, i.e. a specifier position, before spell-out takes place. Chomsky refers to the specifier position of a spell-out domain as the "escape hatch," because movement to this position allows the element to be targeted for future syntactic operations. Under the CL model, the only restriction that is placed on spelled-out elements is that they must maintain their relative linear order. They may be targeted by syntactic operations even after spell-out, but their linear order with respect to other spelled-out elements must remain the same. This is illustrated below in (38).

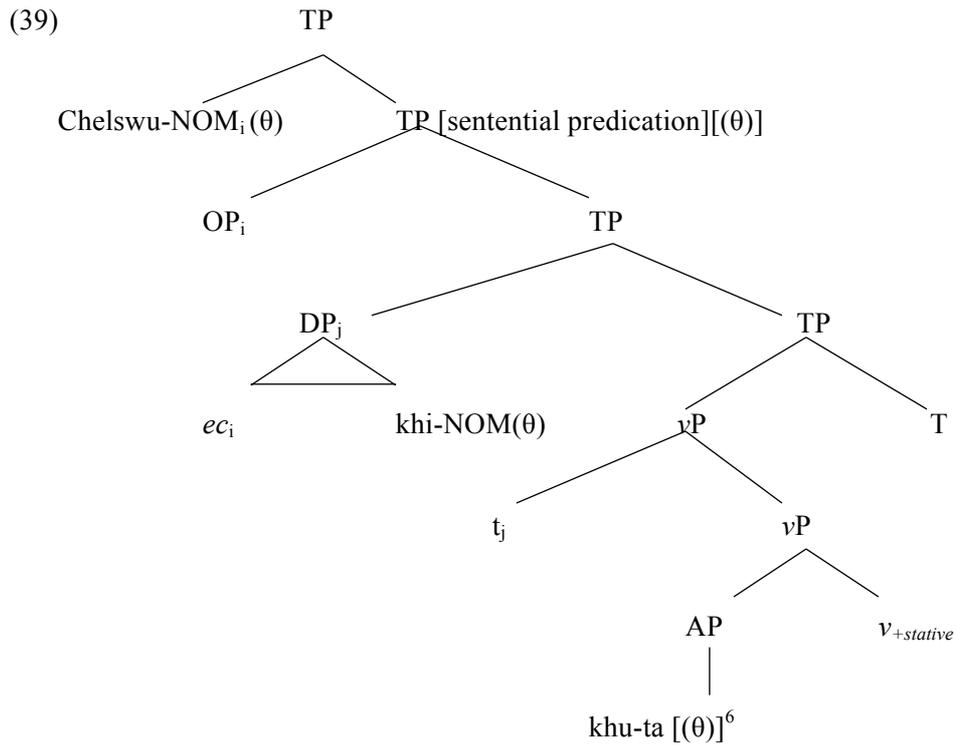
(38) a. [<sub>HP</sub> α [H YP]]  
 α > H > YP

b. \* [<sub>ZP</sub> Z ... YP [<sub>HP</sub> α [H t<sub>i</sub>]]]  
 \*Z > YP > α > H

c. [<sub>ZP</sub> Z ... α H [<sub>HP</sub> t<sub>i</sub>] [t<sub>j</sub> YP]]  
 Z > YP > α > H

The issue with (38b) is that the relative order established in the lower phase was not maintained, as in the lower phase  $\alpha$  is linearly superior to YP, while the opposite is true in (38b). In (38c), however, the relative order between YP,  $\alpha$ , and H has been maintained.

Following Den Dikken (2006), Ko (2014) argues that Cyclic Linearization, when combined with an analysis of predication as a phasal domain, can explain a number of word order related phenomenon demonstrated by MNCs. In particular, it explains the word order restrictions demonstrated in (40), assuming a structure like (39).




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<sup>6</sup> Note that, although we have not discussed  $\theta$ -assignment so far, what type of  $\theta$ -role is assigned will become crucial when we discuss case, therefore I have noted on the tree the  $\theta$ -role that is assigned by both the lexical predicate, and the sentential predicate, which in this case are both internal. We will go into much more detail about this in Chapter 3.

- (40) a. [<sub>PredP</sub> John-i [<sub>PredP</sub> apeci-ka wuphyo-lul mou-si-n-ta.]]  
           J.-NOM           father-NOM stamp-ACC   collect-hon-pres decl  
           ‘John’s father collects stamps.’
- b. \*[[<sub>PredP</sub> apeci-ka [<sub>PredP</sub> John-i wuphyo-lul mou-si-n-ta.]]  
           father-NOM J.-NOM stamp-ACC   collect-hon-pres-decl
- c. \*[[<sub>PredP</sub> wuphyo-lul [<sub>PredP</sub> John-i apeci-ka mou-si-n-ta.]]  
           stamp-ACC   J.-NOM father-NOM   collect-hon-pres-decl
- d. [<sub>PredP</sub> wuphyo-lul [<sub>PredP</sub> John-uy apeci-ka mou-si-n-ta.  
           stamp-ACC   J.-GEN father-NOM   collect-hon-pres-decl

The important facts represented in (40) are that, i) unlike when *John* is marked nominative (40c), when the possessor *John* is marked- genitive (40d), the object *wuphyo* "stamp" is able to scramble over it, and ii) the grammatical subject *apeci* "father" is not able to scramble above the Major Subject *John*. As Korean is a scrambling language that exhibits general flexibility of word order, these restrictions require an explanation. Ko (2014) argues that they are a consequence of spell-out. Specifically, in (40d), where *John* is marked genitive, the object and subject are part of the same predicational domain, and so the object is able to undergo vP internal scrambling to a position over the subject before they are linearized. In (40c), however, *John* is base-generated above the sentential predicate, and the sentential predicate *apeci-ka wuphyo-lul mou-si-n-ta* is not able to scramble over its own Major Subject due to anti-locality. All the elements of the sentential predicate must follow the Major Subject. This explains why normally

grammatical object scrambling over subject is ungrammatical in (40c). A relevant and obviously question is why the Major Subject is base-generated in an additional specifier of TP, rather than in some new projection such as RefP as in Lee (2007). The issue with this analysis is that it fails to explain the ungrammaticality of (40b). If we assume that we have a new projection above TP into which the Major Subject is base-generated, we have no way of preventing the head of this new projection from raising the Grammatical Subject over the Major Subject. If, however, we assume that the Major Subject is base-generated in an additional specifier of TP, the Grammatical Subject is prevented from raising over the Major Subject due to anti-locality; that is, T cannot raise the Grammatical Subject over the Major Subject because the Grammatical Subject has already adjoined to T and has no reason to do so a second time.

At this point, it would be helpful to take a look at what has been covered so far. With regard to the initial position of the Major Subject, I have adopted the base-generation analysis over the possessor-raising analysis due to the number of serious issues facing the possessor-raising analysis. In addition, I have adopted the sentential predicate analysis, in which the lowest nominative-marked DP in an MNC is analyzed as the Grammatical Subject, while the higher DP is analyzed as the Major Subject, the subject of the sentential predicate. Further, I have adopted the Cyclic Linearization model of Fox and Pesetsky (2005), and the phasal predication of Den Dikken (2006), the combination of which was originally

proposed by Ko (2014) to account for MNC data in (40). Our resulting structure is that given in (39).

To be clear about exactly how the derivation breaks down, I will go through the derivation in (39) step by step: first, the DP with the empty category and *khi* "height" are base generated in the spec of  $\nu$ P, just as we would expect, and the internal  $\theta$ -role of *khu-ta* "big" is assigned to it; second, that DP raises to the spec of TP, again as we would expect, at which point predicate abstraction yields the sentential predicate by the null operator, which binds the empty category; lastly, the Major Subject is generated in the subject position of the sentential predicate and is assigned the internal  $\theta$ -role of the newly formed sentential predicate. Due to anti-locality, no member of the sentential predicate (nor, obviously, the entire sentential predicate) may raise over the Major Subject, as previously discussed. Note that (40) is an inalienable-possession MNC, but this explanation will work for any of the possession-type MNCs; inalienable-possession, alienable-possession, and kinship.<sup>7</sup>

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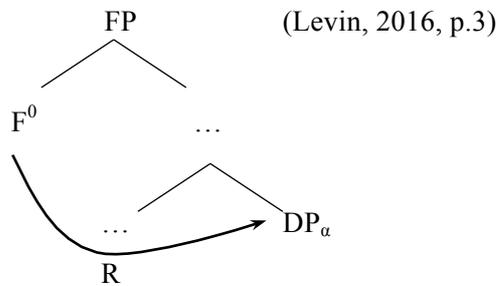
<sup>7</sup> For the adjunct type construction, Yoon (2007a, 2015) has argued that they are derived through the same process as the possessor-types, i.e., that the type distinction between MNCs is nothing more than cosmetic. However if predication abstraction is necessary to license the Major Subject, and an empty category is necessary to license predicate abstraction, it's not clear that this is the appropriate way to account for adjunct-type MNCs, as it is not at all clear that there is an empty category located in the sentential predicate. I am not clear what the best strategy will be for tackling this issue, and I will leave it up to future research.

In the next section, I will discuss two models of case, and argue that, while one offers certain advantages over the other, neither is able to satisfactorily account for case properties in MNCs.

### 2.3 Case and MNCs

The most widely accepted model of case assignment currently is the Agree model of case assignment. A number of variations of this model have been introduced and expanded upon since Chomsky (1981), but the most widely used version of this model was proposed in Chomsky (2000, 2001). Under this version of the model, structural C/case features are assigned as a reflex of a  $\phi$ -feature agreement relation established between a functional head  $F^0$  and the closest nominal  $\alpha$  in its c-command domain (41).

(41) *The Agree Model of Case Assignment*



The case that is assigned by the relation R is functional head-specific -- nominative is assigned by  $T^0$ , accusative by  $v_0$ , and genitive by  $D^0$ . Nominals are both licensed and given their morphological case feature via this relation. This model faces a number of issues in explaining Korean data. For example, it has been frequently noted that Korean nominative case assignment appears to be independent from both agreement and tense (Y. Kim 1991). For instance, nominative case occurs in tenseless constructions in Korean (42).

- (42) na-nun            Chelswu-ka    tayhakyo-ey    ciweonha-tolok  
       I-TOP            C.-NOM        University-to    apply-as to  
       seltukha-yess-ta.  
       persuade-pst-DECL.  
       "I persuaded Chelswu to apply to University."

In addition, though the appearance of honorific morphology on the predicate has often been seen as evidence of agreement with T in Korean, Y. Kim (1991) points out that this cannot be the case (see Heycock and Lee (1989) for similar evidence), as the honorific morphology is also triggered by elements appearing in an unambiguous CP position (43).

- (43) Halmeni-uy                    sayngay-eyse-nun                    samsiptay-ka  
grandmother-GEN                    life-loc-TOP                    thirties-NOM  
haypang-cikhwu                    kacang                    hayngpokha-si-ess-ta.  
liberation-right after                    most                    happy-HON-pst-DECL.  
  
"In grandmother's life, her thirties, right after liberation, was the happiest  
period."

Traditional evidence, then, that nominative case is tied to tense and agreement, does not seem to be present in Korean. In addition to this, MCCs present some challenges to the traditional Agree model of C/case assignment.

First, it is generally assumed that  $F^0$  enters into one agreement relation with one DP that bears matching  $\Phi$ -features and is sufficiently local. In multiple case constructions, however, if we assume, as the agree model proposes, that nominative is assigned as a reflex of agreement with  $T^0$ , the functional head appears to be entering into agree relations with multiple nominals, licensing them and giving them their morphological case. This is problematic, as we would expect that the unvalued features present on  $T^0$ , which initially required agreement to be established with a nominal, would be valued once this relation has been established. It is therefore not clear why it would enter into an additional agreement relation with another nominal, as this would be a redundant operation. Chomsky (1995) proposes to handle this issue through the multiple-specifier

analysis, which assumes that a functional head in languages with multiple case can enter into multiple-feature checking relations. This analysis has been utilized in some form or other by Ura (1996), Yang (1998, 1999), and Kim (1998), among others.

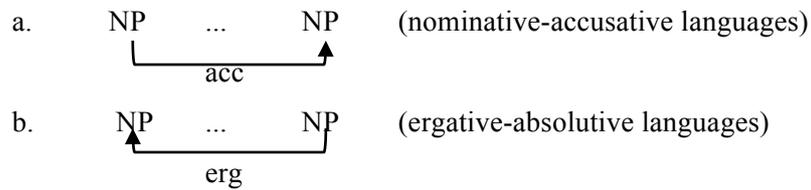
A potential issue this analysis faces is the issue of over-generation, not only of MNCs, but also MACs assuming that  $v^0$  also has the ability to agree with multiple nominals. This would lead us to predict that MNCs and MACs should be quite widespread in the language, but actually we find they are highly restricted. More concretely, given the multi-specifier analysis, it is clear how  $T^0$  is able to assign nominative case to the possessee-DP, as it falls squarely in the c-command domain of  $T^0$ . However, it is not clear how  $T^0$  is able to agree with the Major Subject, as we have already seen that the Major Subject is base-generated in the specifier position of T, and is thus outside of its c-command domain.

An additional potential problem for the Agree model of case is that of case stacking in Korean. Levin (2016) argues that the Agree model is unable to account for the phenomenon of case stacking in Korean, and instead adapts the Dependent Case Model to account for it. An example of case stacking is given in (44), taken from Levin (2016).



assigned in a particular order, specifically left to right according to (45). Lexical case is assigned by specific lexical items. Dependent case is assigned when two nominals that have not yet been assigned case appear in an asymmetric c-command relation within the same domain, which was originally taken to be the V+T complex, but has recently been taken to be a phase (Baker & Vinokurova, 2010; Baker, 2015; Levin & Preminger, 2015; Levin, 2016). In an accusative language, the c-commanding nominal assigns case, while in ergative languages, the c-commanded nominal assigns case (46).

(46) *Dependent Case Assignment*



After dependent case is assigned, any nominal that has not yet been assigned case will receive nominative/absolutive case as the realization of unmarked case.

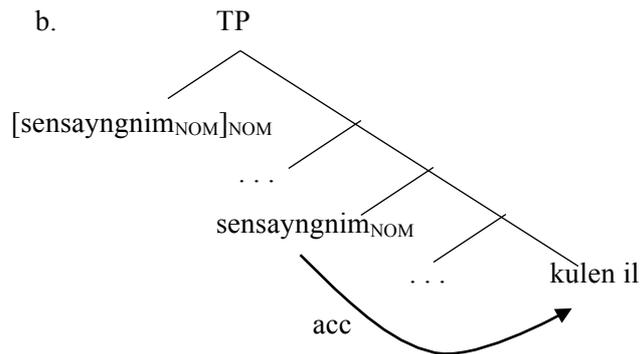
The case stacking data presented in (44) as problematic for the Agree model is, in fact, also problematic for the Dependent Case Model in its original instantiation. This is because, by stipulation, once a nominal receives case, it was said to be removed from case competition, and thus not eligible to receive case a second time. Levin (2016) handles this issue by proposing that a nominal that is present in multiple phases may be assigned case multiple times, at least in Korean.

He provides the revised case assignment rules for Korean in (47) (underline added for emphasis).

- (47) *Korean case assignment rules* (Levin 2016, p. 5)
- a. If a DP is (c-)selected by a functional head ( $F^0$ ) that specifies idiosyncratic case morphology, assign that morphology to the DP.
  - b. If there are two distinct DPs in the same phase such that  $DP_1$  (asymmetrically) c-commands  $DP_2$ , assign accusative morphology to  $DP_2$  if and only if  $DP_1$  is caseless.
  - c. If a DP does not receive lexical or dependent case, it is caseless (realized as nominative case).

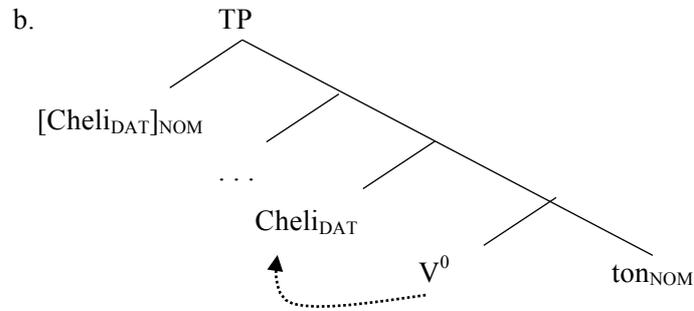
Making case assignment phasal allows allow nominals to be assigned case a second time if it is present in multiple phases, allowing the model to account for instances where a single nominal bears the same case twice (48), or multiple different cases, (49) and (50)

- (48) a. *Sensayngnimtul-kkeyse-man-i kulen il-ul*  
 teachers-(hon)NOM-only-NOM that.type work-ACC  
*ha-si-pni-ta.*  
 do-hon-pres-decl.  
 "Only teachers do that kind of work."



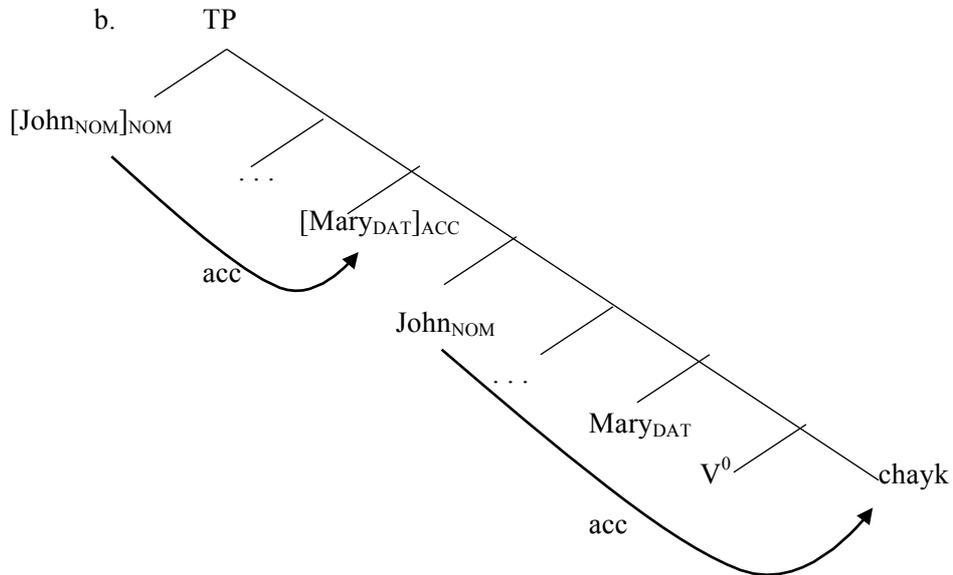
Here, *sensayngnim* "teacher" receives nominal in the lower phase, as it is the highest nominal in the derivation and therefore cannot be assigned dependent case, and then it raises into a higher phase, where it receives nominative case a second time. (49) demonstrates how a nominal might receive both dative and nominative.

- (49) a. Cheli-hanthey- ka    ton-i            iss-ta.  
           C-DAT-NOM        money-NOM    have.decl  
           "Cheli has money."



In (49), Cheli receives dative case from the lexical verb in the lower phase, and then raises to a new phase where it receives nominative, resulting in dative-nominative stacking. Finally, in (50) we can see how the model accounts for dative accusative stacking.

- (50) a. John-i      Mary-hanthey-lul      ton-ul      cwu-esse.  
           J.-NOM      M.-DAT-ACC      money-ACC      give-pst  
           "John gave Mary money."



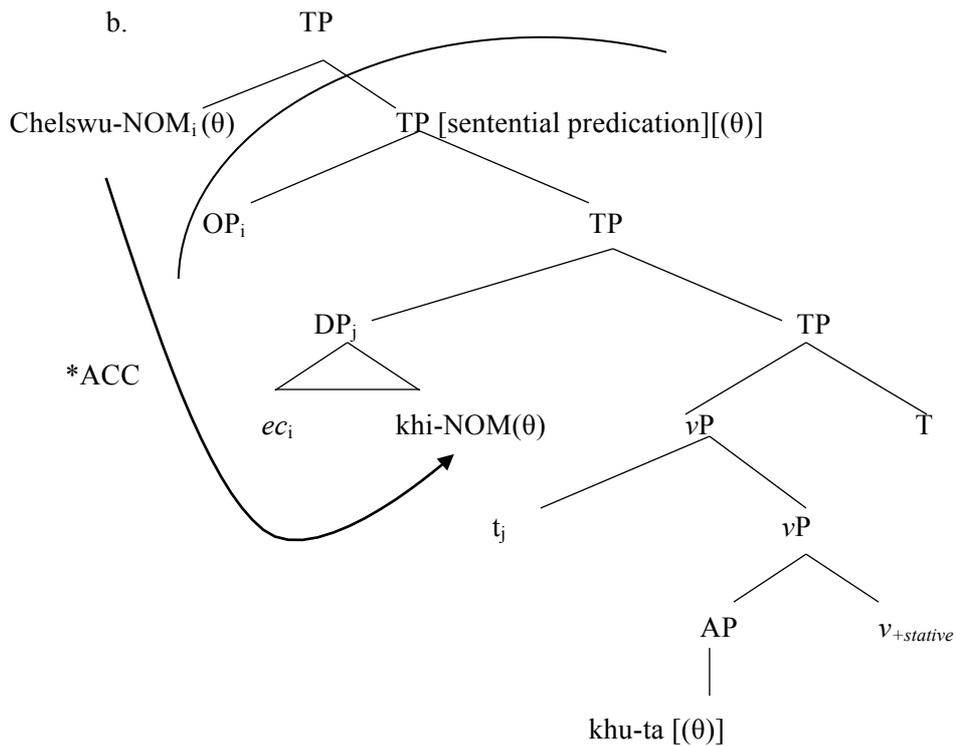
In (50), *Mary* is assigned dative case in the lower phase, while *John* assigns accusative to *chayk* "book" and receives nominative itself; then in the higher phase, where *John* and *Mary* have moved, *John* assigns accusative case to *Mary*, resulting in dative-accusative stacking.

It's important to note that the Agree model can also account for (49) and (50) given a phase-sensitive amendment; it is (48) that poses the real problem, as it would require that T agree with the same nominal twice.

While the Dependent Model seems to account for this stacking data nicely, it runs into an issue when dealing with Multiple Case Constructions, and specifically Multiple Nominative Constructions. In sentences like that in (1), repeated below in (51), the lower nominal is within the case assignment domain of the Major Subject, which predicts that it should receive accusative case, but this is ungrammatical.

- (51) a. Chelswu-ka            khi-ka            khu-ta.  
           C-NOM                height-NOM      big-DECL

"It is Chelswu who is tall.



Though it appears that *Chelswu* should be able to assign accusative to *khi*, this is ungrammatical. As the data in (52)-(54) make clear, this is an issue for MNCs in general and is not specific to the inalienable-possession type.

- (52) Chelswu-ka                      kapang-i/\*lul                      mwukep-ta  
       C-NOM                              bag-NOM/\*ACC                      heavy-decl  
       ‘‘It is Chelswu whose bag is heavy.’’

- (53) Chelswu-ka    apeci-ka/\*lul                      pwuca-i-si-ta  
       C-NOM            father-NOM/\*ACC                      rich-cop-hon-decl  
       ‘‘It is Chelswu whose father is rich.’’

- (54) yelum-i                      maykcwu-ka/\*lul                      choyko-ta  
       summer-NOM                      beer-NOM/\*ACC                      best-decl  
       ‘‘It is the summer that beer is the best.’’

This is clearly a significant issue for the Dependent Case Model, and one that will be tackled in Chapter 3.

In this chapter, we established licensing position and roles of the Major and Grammatical subjects, but we saw that the case pattern itself still poses an issue. In the next chapter, I will propose an amendment to the Dependent Case

Model, one that relies specifically on  $\theta$ -assignment, and show that it accounts for the full range of MNC data.

### 3. Theta-sensitive Dependent Case Assignment

In this chapter I will present an amendment to the Dependent Case Model that allows it to account for both MNC and MAC constructions in Korean, as well as a number of related constructions. It will be shown that this amended version of the Dependent Case Model can account for basic Korean data, as well as a basic MNC sentence.

Burzio's Generalization has been the focus of much research in syntax, including the volume *Arguments and Case: Explaining Burzio's Generalization* (55), where Marantz first proposed the Dependent Case Model .

(55) *Burzio's Generalization:*

All and only the verbs that can assign a  $\theta$ -role to the subject can assign accusative case to an object.

Marantz's proposal of the Dependent Case Model was, at least in part, an attempt to show that morphological case-assignment need not be tied to  $\theta$ -role s, as Burzio's Generalization suggests. However, Burzio's Generalization seems to be on the right track as it pertains to the MNC data. Recall that, according to the Dependent Case Model, anytime two nominals appear in an asymmetric c-command relation within the same case assignment domain, the c-commanding nominal should assign

accusative case to the c-commanded nominal. The issue that MNCs pose is that there is just such a relation between the two nominative-marked nominals in these constructions, but accusative case-assignment is impossible. Now consider Burzio's Generalization, which points out that accusative case marking only seems to appear when we have an external  $\theta$ -role. Chomsky originally tied C/case and  $\theta$ -roles together with the Visibility Condition, which states, "an element is visible only if it is assigned Case" (Chomsky 1986: 94). Thus a nominal was not an argument unless marked by C/case. However, since the minimalist program (Chomsky 1993, 1995), case has become separated from argument making, and instead has been seen to make an argument "active" for Agree, though in the most recent instantiation (Chomsky 2001), case is seen as a reflex of agree, reducing its role in the grammar even further. Although the move from GB to minimalism has undoubtedly been a theoretically and empirically beneficial shift in the research program, perhaps the Visibility Condition, or at least a version of it, still has a place in the grammar. To my knowledge, no one has attempted to marry the intuition of the Visibility Condition with the Dependent Case Model, but in order to account for the MNC data, perhaps such a melding is warranted.

To recap what we have seen so far, although the Dependent Case Model has been shown to have some advantages over the Agree model of case assignment, Multiple Nominative Constructions pose an outstanding challenge. In addition, as GB gave way to minimalism, the role of case in the grammar has become quite

vague, along with what (if any) connection remains between theta and C/case. In order to overcome the difficulties posed by case patterns in Multiple Nominative Constructions, I would like to propose the following amendment to the Dependent Case Model that attempts to blend the Dependent Case Model with the insight from Burzio's Generalization and the notion from the Visibility Condition that Case and  $\theta$ -roles are directly tied (56).

(56) *Theta-sensitive Dependent case assignment hypothesis*

Only arguments marked by an external  $\theta$ -role are assigners of dependent case

As for what heads assign an external  $\theta$ -role, I will follow Folli and Harley (2005) and assume that  $v_{ACTIVE}$  and  $v_{CAUSE}$  heads assign an external  $\theta$ -role, while other heads assign a non-external  $\theta$ -role. More formally, I will assume the following<sup>8</sup>:

(57)  *$\theta$ -role assignment*

$v_{ACTIVE}, v_{CAUSE}$	-->	external $\theta$ -role	$\theta$
elsewhere	-->	internal $\theta$ -role	( $\theta$ )

---

<sup>8</sup> The Experiencer  $\theta$ -role offers something of a challenge, since it has been argued to be both internal and external (Tenny, 1989). I will argue in section 4.2 that in Korean, at least, the external experiencer is able to assign dependent case, while the internal one cannot.

I claim that  $\theta$ -role assignment by  $v_{\text{ACTIVE}}$  and  $v_{\text{CAUSE}}$  is in some sense "marked," while all other  $\theta$ -role assignment is "unmarked." The marked  $\theta$ -role then, according to (57), is responsible for dependent case assignment. Thus, the 'marked'  $\theta$ -role (external) leads to the 'marked' case-assignment (dependent). Note, however, that the nominal that is assigned the marked  $\theta$ -role is not assigned the marked case. That is, the nominal that is assigned the external  $\theta$ -role is not *assigned* dependent case, but rather, it becomes responsible for *assigning* dependent case.

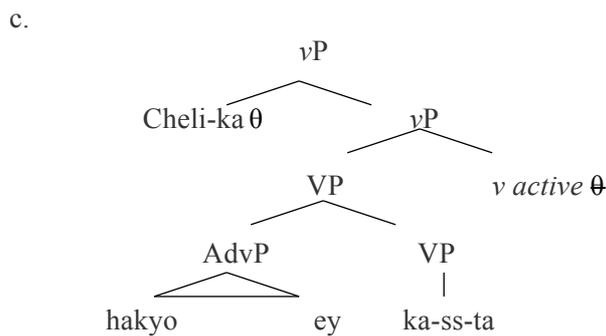
Before going any further, it will probably be useful to look at the full list of case assignment rules that we now have for Korean (58), as well as how case assignment will look in your average, run-of-the-mill constructions in Korean.

(58) *Korean case assignment rules*

- a. If a DP is (c-)selected by a functional head ( $F^0$ ) that specifies idiosyncratic case morphology, assign that morphology to the DP.
- b. If there are two distinct DPs in the same phase such that ***DP<sub>1</sub> has been assigned an external  $\theta$ -role*** and  $DP_1$  (asymmetrically) c-commands  $DP_2$ , assign accusative morphology to  $DP_2$  if and only if  $DP_1$  is caseless.
- c. If a DP does not receive lexical or dependent case, it is caseless (realized as nominative case).

The critical addition is that now, if there are two nominals in the derivation that have not yet been assigned case, accusative case assignment is only triggered if an external  $\theta$ -role has been assigned. Otherwise, all nominals (that have not been assigned lexical case) will be assigned nominative case. Let's see how this looks in a few basic structures. (59) shows an example of a derivation with a one-place predicate.

- (59) a. *ka-ta* "to go" : one-place predicate  
 b. Cheli-ka            hakyō-ey        ka-ss-ta.  
    C.-NOM            school-loc        go-pst-DECL  
    "Cheli went to school."



In (59), the verb *ka-ta* "to go" is a one-place predicate. Though it does assign an agentive  $\theta$ -role, there is no NP to which it can assign dependent case. *Cheli* is the only nominal in the derivation, it thus receives unmarked case, which is realized as

nominative. Interestingly, as it happens, in Korean it is possible to have the locative argument marked with an accusative case marker, as in (60)<sup>9</sup>.

- (60) Cheli-ka                    hakyō-lul            ka-ss-ta.  
C.-NOM                    school-ACC        go-pst-DECL  
"Cheli went to school."

The proposed case-assignment rules that incorporate theta-sensitivity straightforwardly account for this<sup>10</sup>. As *Cheli* receives an external theta role, it is able to assign accusative case to an argument in its c-command domain.

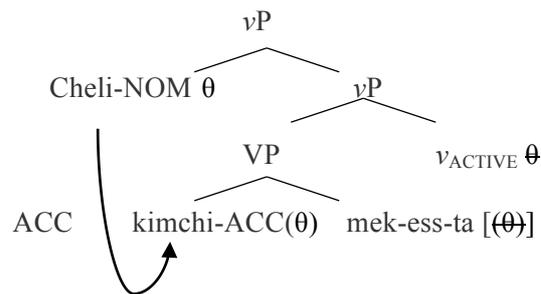
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<sup>9</sup> I would like to thank professor Ko Heejeong for first making me aware of this possibility.

<sup>10</sup> Professor Ko Heejeong (personal communication) points out that the licensing of *hakyō* "school" as an argument of *ka-ta* "to go" is still an issue. I do not have any additional thoughts on this, and will leave it to further research.

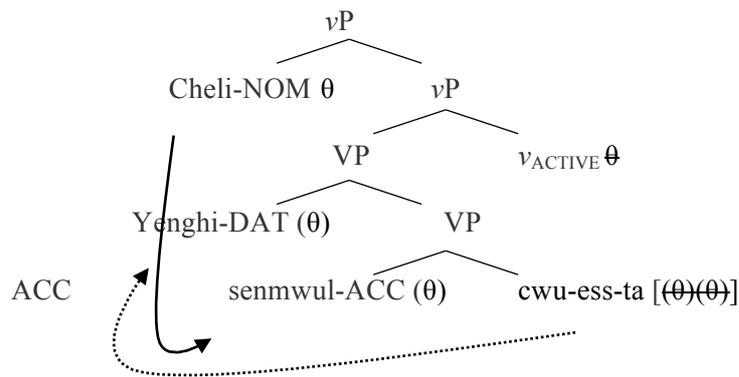
Now let's take a look at a two-place predicate.

- (61) a. *mek-ta* "to eat" : two-place predicate  
 b. *Cheli-ka* kimchi-lul mek-ess-ta.  
 C-NOM kimchi-ACC eat-pst-decl.  
 "Cheli ate kimchi."  
 c.



In the derivation in (61), *mek-ta* "eat" assigns an external  $\theta$ -role to the object *kimchi*, and  $v_{ACTIVE}$  assigns an external  $\theta$ -role to the *Cheli*. The assignment of the external  $\theta$ -role triggers the possibility of dependent case assignment, so *Cheli* looks in its c-command domain and locates *kimchi*, assigning it dependent (accusative) case. *Cheli* itself is the highest nominal in the derivation, so there is nothing that might assign it dependent case, and it is not assigned lexical case; thus, it is assigned unmarked case (nominative). Continuing on two a somewhat more complicated example, (62) illustrates the derivation for the three-place predicate *cwu-ta* "give."

- (62) a. *cwu-ta* "to give" : three-place predicate
- b. Chelwu-ka                      Yenghi-hanthey                      senmwul-ul  
     C.-NOM                      Y.-DAT                      gift-ACC  
     cwu-ess-ta.  
     give-pst-DECL.  
     "Cheslwu gave a gift to Yenghi."
- c.



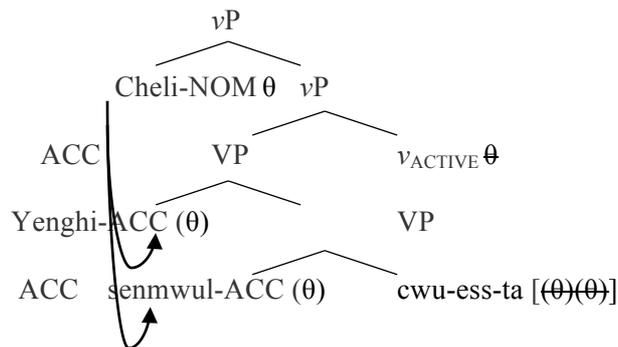
In the derivation in (62), we get to see all the case assignment rules at work. First, the verb *cwu-ta* "give" assigns lexical (dative) case to *senmwul* "present," at which point it is removed from case competition. At this stage in the derivation, both *Cheli* and *senmwul* "present" are still caseless. *Senmwul* is assigned an external  $\theta$ -role by the verb, and *Cheli* is assigned an external  $\theta$ -role by  $v_{\text{ACTIVE}}$ . When the external  $\theta$ -role is assigned, the ability to assign accusative case is triggered, thus *Cheli* searches its c-command domain, finding *senmwul* (*Yenghi* has been removed from case competition). It then assigns accusative case to *senmwul*. *Cheli* is the last

remaining caseless nominal in the derivation. With nothing to assign it either dependent or lexical case, it receives unmarked case.

The sentence in (62) may also appear in the alternative double object construction (DOC) where the dative-marked *Yenghi* appears in the accusative case. This is distinct from the Multiple Accusative Case constructions, and the differences between these two constructions will be covered in detail in Chapter 5, but for the moment, (63) shows that the basic case pattern in DOCs can be accounted for by the model.

- (63) a. Chelswu-ka            Yenghi-lul            senmwul-ul  
           C.-NOM            Y.-ACC            gift-ACC  
           cwu-ess-ta.  
           give-pst-DECL.  
           "Chelswu gave Yenghi a present.

b.



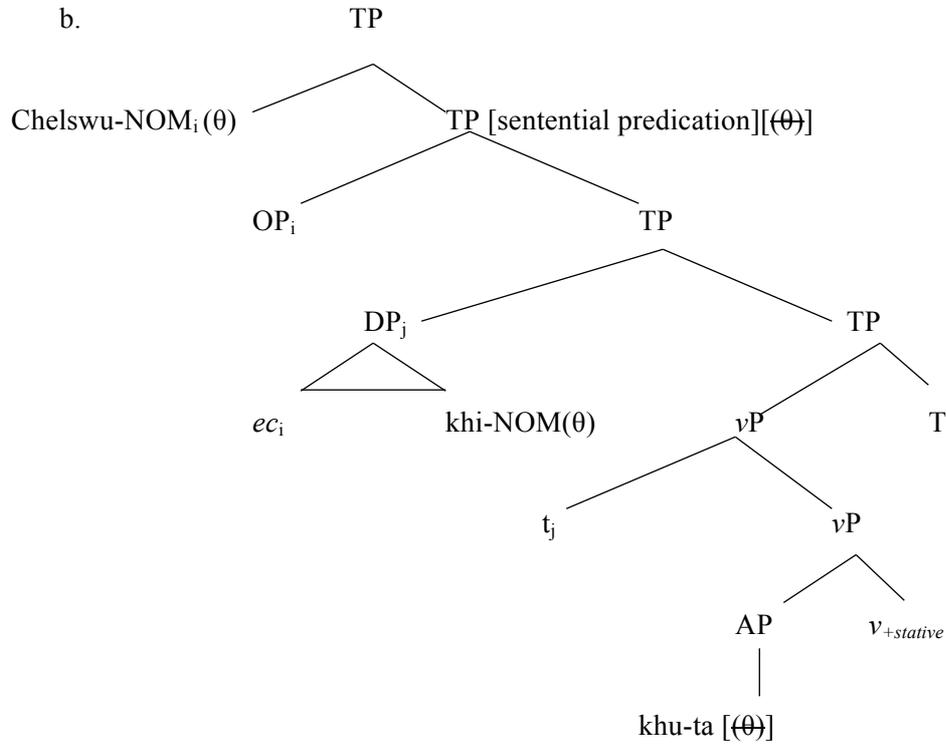
As no lexical case is assigned by the verb here, we have three caseless nominals in the beginning of the derivation. Under a Dependent Case Model that has adopted the Theta-sensitive Dependent Case-assignment Hypothesis, the derivation will proceed as follows: 1) as both *Yenghi* and *senmwul* receive non-external  $\theta$ -roles, no accusative case assignment is triggered for these two nominals, 2) *Cheli* is assigned the external  $\theta$ -role by  $v_{\text{ACTIVE}}$ , triggering dependent case assignment, 3) *Cheli* probes its c-command domain, and the first nominal it finds is *Yenghi*, so it assigns dependent case to *Yenghi*, 4) at this stage, the criterion for rule (b) of the *Korean case assignment rules* is still satisfied, so *Cheli* once again probes its c-command domain and finds *senmwul*, assigning it dependent case, 5) finally, as *Cheli* is the last caseless nominal in the derivation, it receives unmarked case.

An interesting contrast between the traditional Dependent Case Model of Marantz (or the revised one proposed by Levin (2016)) and one adopting the Theta-sensitive Dependent Case-assignment Hypothesis is that, while they can both account for the data in (63), they will actually account for it differently, i.e. the accusative case marking is assigned by different nominals. In all prior versions of the Dependent Case Model, as accusative case assignment is triggered simply by the presence of two caseless nominals, it will account for the data by *Yengmi* assigning dependent case to *senmwul* "present" as soon as it is generated, and only later will *Cheli* assign accusative case to *Yengmi*. In contrast, under a model adopting the Theta-sensitive Dependent Case-assignment Hypothesis, both *senmwul* and *Yengmi* are assigned dependent case from *Cheli*. Thus, although both

models are able to account for the data, the dependent case-assigning nominals are different, and the assignment order is different. Further analysis of this difference may help to tease the two models apart further in the future. I will leave this to future research.

Now that we have seen that the Dependent Case Model is able to account for basic Korean data when adopting the Theta-sensitive Dependent Case-assignment Hypothesis, I will demonstrate that it is also able to account for a standard MNC construction. Recall that under the standard Dependent Case Model, and the one proposed by Levin (2016) in which case is able to be assigned multiple times in across phases, we would predict that MNC constructions should be impossible, as the higher nominal should always assign accusative case to the lower nominal. This is not the case, however, once we adopt the Theta-sensitive Dependent Case-assignment Hypothesis, as is demonstrated in (64).

- (64) a. Chelswu-ka            khi-ka            khu-ta.  
           C.-NOM            height-NOM    big-DECL.  
           "Chelswu is tall."



Critically, under the Theta-sensitive Dependent Case-assignment Hypothesis, (64) does not meet the requirements for dependent case assignment. *Khu-ta* "big" assigns a non-external  $\theta$ -role to *khi* "height," and the formation of the sentential predicate also results in a non-external  $\theta$ -role, which is assigned to *Chelswu*. As no external  $\theta$ -role is assigned during the course of the derivation, dependent case-assignment is not triggered, thus, both nominals receive unmarked nominative case.

In this chapter, I proposed incorporating insights from Burzio's Generalization and the Visibility Condition into the Dependent Case Model in order to account for case phenomenon in Multiple Nominative Construction. This lead to the proposal of the Theta-sensitive Dependent Case-assignment Hypothesis, which states that only a nominal that has received an external  $\theta$ -role may assign dependent case. It was shown that under this hypothesis, basic Korean data can be accounted for, as well as Double Object Constructions, and standard Multiple Nominative Case constructions. In the following chapter, we attempt to account for the full range of MNCs, and expand our coverage to Nominative Object Constructions (NOCs) as well.

## **4. Nominative case and Theta-sensitvivity**

In the previous chapter, I introduced the Theta-sensitive Dependent Case-assignment Hypothesis and showed that it is able to account for data in transitive and intransitive constructions, as well as double object constructions, and I also demonstrated that it is able to account for a standard inalienable possession-type MNC. In this chapter, in Section 4.1, we will look at a more complete range of MNC data, specifically MNC data that extends to transitive MNC constructions, and we will see that the theta-sensitive dependent case assignment model continues to be superior to a Dependent Case Model where the position of nominals alone account for case assignment. Then, in Section 4.2, we will look at Nominative Object Constructions and see that, while the Dependent Case Model has difficulty accounting for these constructions as well, introducing theta-sensitivity into the model allows the data to be accounted for readily.

### **4.1 MNCs and theta-sensitivity**

As we saw in Chapter 3, the Theta-sensitive Dependent Case-assignment Hypothesis is able to account for inalienable possession construction-type MNCs with an intransitive verb. In this section, we will see that it is able to account for the full range of MNC constructions, including the four types illustrated in (9) - (12), shown again here in (65) - (68).

(65) Inalienable Possession Construction (IPC)

- a. Chelswu-*ka* pal-*i* khu-ta.  
C.-NOM foot-NOM big-decl.
- b. Chelswu-*uy* pal-*i* khu-ta.  
C.-GEN foot-NOM big-decl.
- ‘Chelswu’s feet are big’

(66) Alienable Possession Construction (APC)

- a. Inswu-*ka* cha-*ka* oycay-ta  
I.-NOM car-NOM import-decl.  
‘Inswu’s car in an import’
- b. ‘Inswu-*uy* cha-*ka* oycay-ta.  
I.-GEN car-NOM import-decl.

(67) Kinship

- a. Chelswu-*ka* apeci-*ka* pwuca-ta.  
C.-NOM father-nom rich-decl
- b. Chelswu-*uy* apeci-*ka* pwuca-ta  
C.-GEN father-nom rich
- “Chelswu’s father is rich.”

(68) Adjunct

a. yelum-i            maykcwu-ga    coh-ta

yelum-nom    beer-nom        good

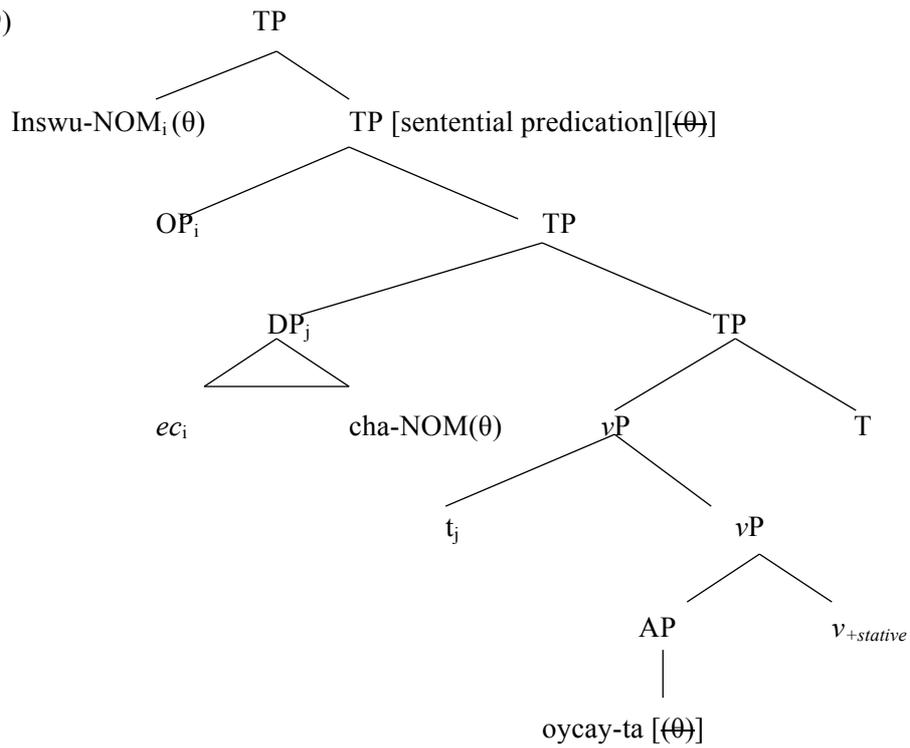
“It is in summer that beer is good.”

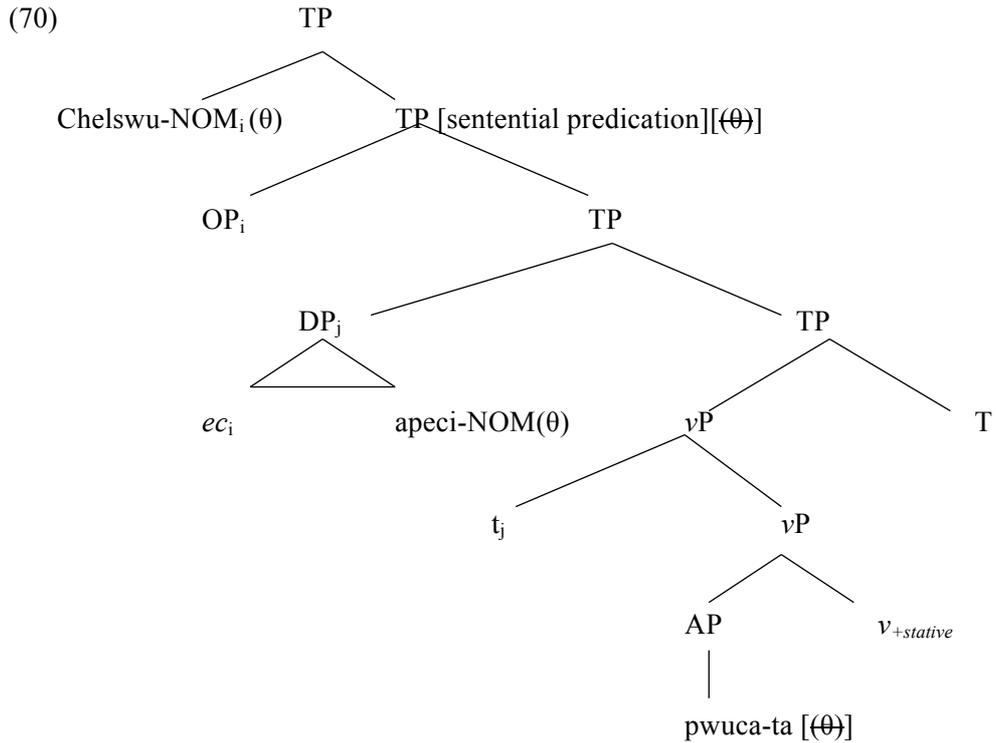
b. yelum-ay            maykcwu-ga    coh-ta

yelum-temp    beer                good-decl

We have already seen the full derivation and discussed the case assignment for sentences like (65), and sentences like (66) and (67) are derived identically. The derivation for (66a) is given in (69), and the one for (67a) is given in (70).

(69)





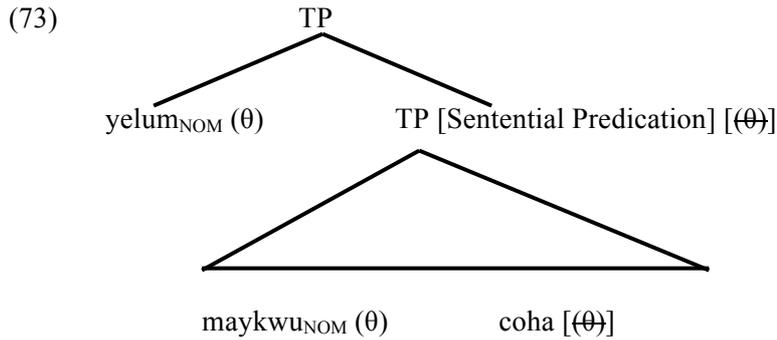
Case assignment in (69) and (70) follows in exactly the same pattern as (64). *Cha* "car" and *apeci* "father" receive a non-external  $\theta$ -role from the lexical predicates *oycay* "import" and *pwuca* "rich," respectively. Likewise, *Inswu* and *Chelswu* each receive a non-external  $\theta$ -role from their respective sentential predicates. Because no external  $\theta$ -role has been assigned, accusative case is not triggered in either construction. Thus, each of the nominals receive unmarked nominative case. Thus, all of the MNC possessor-type constructions can be accounted for in the same manner.

Adjunct type constructions can be accounted for in essentially the same manner as possessor-type constructions. There is good reason to think that they are licensed in the same manner, particularly that they appear to be subject to the same semantic restraints. The sentential predicate must denote a Characteristic Property of the Major Subject, and the Major Subject must abide by the Newsworthiness Condition, i.e. it must be salient in the discourse. That the sentential predicate must give a Characteristic Property of the Major Subject is demonstrated in the contrast between (71a) and (71b), and the effect of Newsworthiness Condition is indicated in the contrast between (71a) and (72).

- (71) a.     ?Yelum-i        maykcwu-ka    choyko-i-ta.  
                  summer-NOM beer-NOM        best-cop-decl  
                  "It is during summer that beer is the best."
- b.     \*?Yelum-i        Cheli-ka        cip-ey        on-ta.  
                  Summer-NOM C-NOM        home-loc        come-decl  
                  "It is in summer that Cheli comes home."

- (72) Q: Yelum-i                    mwe-ka                    coha?  
          Summer-NOM            what-NOM                good?  
          What is good in summer?"
- A: Yelum-i                    maykcwu-ka                coha  
      Summer-NOM            beer-NOM                 good  
      "In summer, beer is good."

The contrast between (71a) and (71b) is due to the fact that it is relatively easy to imagine beer being good as a characteristic property of summer, while *Cheli* coming home is more difficult to consider this way. The answer in (72) shows that increasing the discourse prominence of the Major Subject by having it appear in a question first increases the grammaticality of (71a) even further. The fact that Adjunct-type MNCs are subject to the same restrictions as other MNCs is strong evidence that the Major Subject-sentential predicate analysis is the correct one for adjunct-type MNCs as well, with the principle difference being that Adjunct-type MNCs do not require a co-indexed element in the sentential predicate. A derivation for (71a) is given in (73).

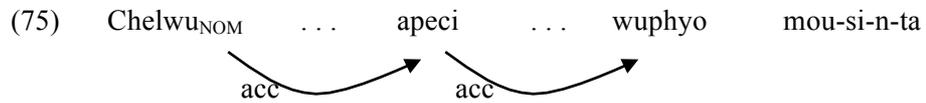


Here, as for the other MNCs, as neither the Major Subject nor the Grammatical Subject are assigned an external  $\theta$ -role, dependent case assignment is not triggered, and thus both nominals receive unmarked nominative case.

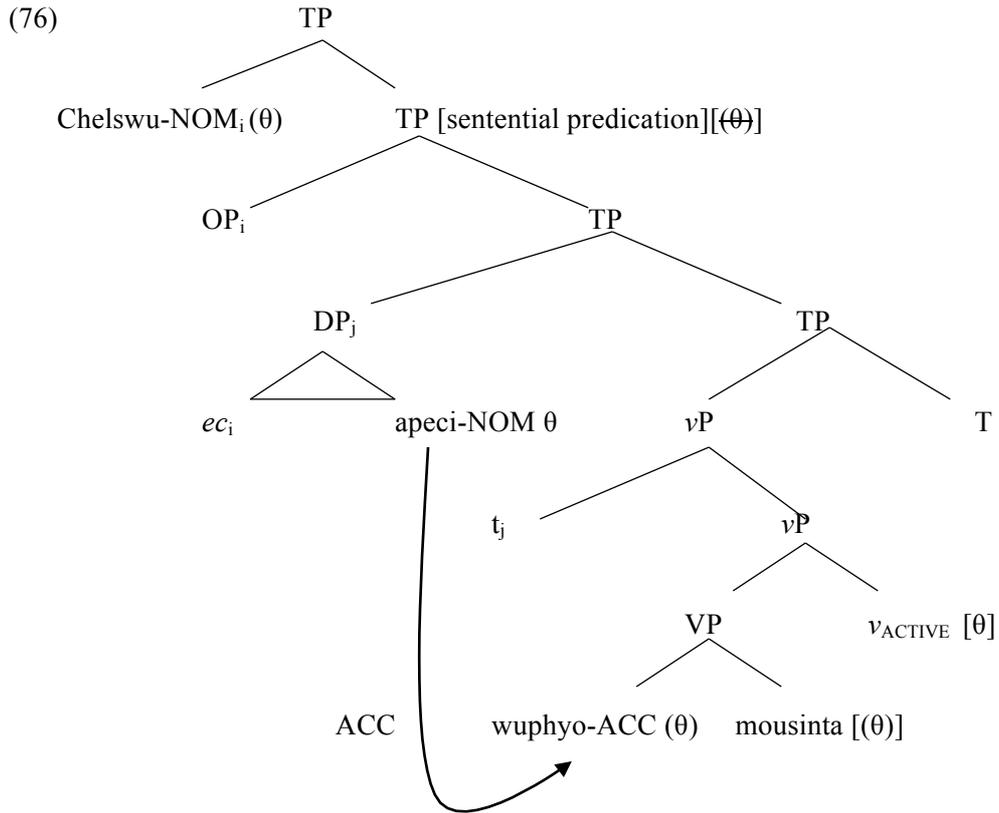
Now that we have seen how standard intransitive MNCs might be accounted for using the Theta-sensitive Dependent Case-assignment Hypothesis, we can expand our coverage to transitive MNCs. MNCs with transitive predicates seem to be much more rare than MNC with stative predicates, perhaps because it is more difficult to construe a transitive sentence as a Characteristic Property, but MNCs with transitive predicates are attested and, in fact, we have already seen one in (40a), reprinted here in (74).

- (74) John-*i*            apeci-*ka*            wuphyo-*lul*            mou-si-n-ta  
 J.-NOM            father-NOM            stamp-ACC            collect-hon-pres decl  
 ‘John’s father collects stamps.’

First, let's consider whether the non-theta sensitive Dependent Case Model is able to account for this pattern (75).



Once again, because the Marantz's Dependent Case Model predicts that anytime two NPs appear in an asymmetric c-command relation, the higher one will assign accusative to the lower, it is unable to account for data where two nominative-marked-nominals appear in this configuration. For the sentence in (75), the model would predict that *apeci* should be accusative marked, but this is impossible. Thus, transitive MNCs also pose an issue for the Dependent Case Model. However, injecting theta-sensitivity into the model allows us to account for such constructions. (76) provides the derivation for (74), demonstrating how case assignment affects case assignment.

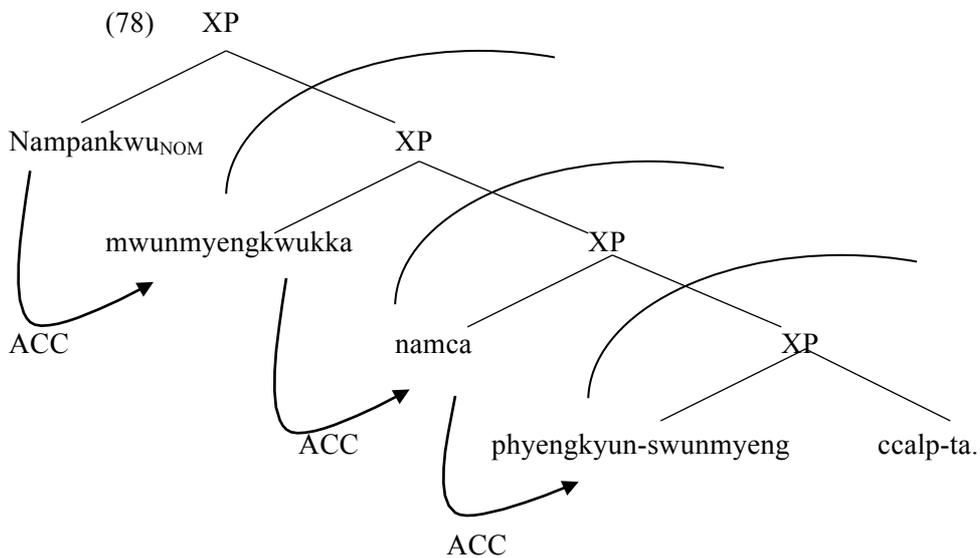


Here, *apeci* "father" is assigned an external  $\theta$ -role by  $v_{ACTIVE}$ , which triggers dependent case assignment. Thus, *apeci* probes its c-command domain and finds *wuphyo*, which is assigned dependent case. Sentential predicate formation results in a non-external  $\theta$ -role, which is assigned to *Chelswu*. Because this  $\theta$ -role is non-external, dependent-case assignment is not triggered, and thus, *apeci* and *Chelswu* receives unmarked case. Once again, incorporating the Theta-sensitive Dependent-case hypothesis allows us to account for MNC data.

So far in this chapter, we have seen that, while the Dependent Case Model alone is not able to account for MNC data, introducing theta-sensitivity into the model allows it to account for the data by restricting dependent-case assignment in a very particular way: only those nominals that receive an external  $\theta$ -role are able to assign case. All other nominals, while being available to receive case, are unable to assign it. Critically, because MNCs involve sentential predication, and this sentential predication produces only a non-external  $\theta$ -role, this makes the prediction that anytime we find such sentential predication, we should also find multiple nominative marked nominals, as the highest nominal in the pre-sentential predication phase will receive unmarked nominative case, and the highest nominal in the sentential predication phase will also receive unmarked nominative case. As it happens, MNCs may occur with an arbitrarily large number of nominative-marked nominals, an example of which is given in (77).

- (77) Nampankwu-ka                      mwunmyengkwwukka-ka namca-ka  
southern.hemisphere-nom      civilized.country-nom              men-nom  
phyengkyun-swumyeng-i      ccalp-ta  
average-lifespan-nom              short-decl
- "It is the southern hemisphere that it is the civilized countries where  
it is the men whose lifespan is short."

What we have here is multiple sentential predications and multiple Major Subjects. Each time predicate abstraction produces an additional sentential predicate licensing a Major Subject, the order of the new Major Subject and all the elements below it becomes fixed, due to anti-locality, as discussed in Section 2.2. In addition, as the Major Subject for each phase will be accessible to the next phase above it, the non-theta-sensitive Dependent Case Model would be predict that all but the highest nominal should receive dependent accusative case (78).



This illustrates an important contrast in the predictions made by Marantz's (and Levin's) Dependent Case Model and one adopting theta-sensitive dependent case assignment. Specifically, the Dependent Case Model predicts that predication should result in accusative case assignment to the subject of a lower predication, while a model incorporating theta-sensitive dependent case assignment would only

predict accusative case assignment to the subject of a lower predication if the higher predicate assigned an external  $\theta$ -role. We will look at a case of this in Chapter 5 when we take a look at ECM constructions.

## 4.2 NOCs and theta-sensitivity

Korean is not limited to MNCs when it comes to constructions with multiple nominative-marked nominals appearing in sequence. There are, in fact, a variety of constructions in Korean that demonstrate this pattern; these are known collectively as Nominative Object Constructions (Cho 2011). The sentences below are examples of two types of NOC, existential (76) and psych-preds (77), which are related to the dative-subject construction (77c).

- (79) a. Chelswu-ka                      ton-i                      iss-ta  
           C-NOM                              money-NOM                      have-decl  
           “Chelswu has money.”
- b. \*Chelswu-ka                      ton-ul                      iss-ta  
           C-NOM                              money-ACC                      have-decl

- |      |    |                                    |           |                 |
|------|----|------------------------------------|-----------|-----------------|
| (80) | a. | Chelswu-ka                         | paym-i    | mwusew-ess-ta   |
|      |    | C-NOM                              | snake-NOM | scared-pst-decl |
|      |    | “Chelswu was scared of the snake.” |           |                 |
|      | c. | Chelswu-hanthey                    | paym-i    | mwusew-ess-ta   |
|      |    | C-DAT                              | snake-ACC | scared-decl     |
|      | b. | *Chelswu-ka                        | paym-ul   | mwusew-ess-ta.  |
|      |    | C-NOM                              | snake-ACC | scared-decl     |

Constructions in (79a) and (80a) have been argued to be distinct from MNCs in the literature (Kuno, 1973; Yoon, 2015). One of the main arguments given for this has been that both arguments are licensed by the lexical predicate (Yoon 2015). The higher nominative-marked argument is thus seen to be the grammatical subject, while the lower nominative-marked argument is seen to be the grammatical object, resulting in the name Nominative Object Construction. The higher nominative argument is analyzed as taking the experiencer role. If this is correct, it poses an interesting problem for the proposed theta-sensitive Dependent Case Model. Namely, if experiencer theta-roles are assigned externally, like agents, why does the higher nominal not assign dependent accusative case to the lower nominal<sup>11</sup>. In fact, there is a similar construction to (80) where accusative case is assigned to the lower nominal, as in (81).

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<sup>11</sup> I would like to thank Professor Seungho Nam for first alerting me to this issue.

- (81) Chelswu-ka            paym-\*/i/ul            mwusewe-ha-ss-ta  
       C-NOM                snake-\*/NOM/ACC      scared-do-pst-decl  
       "Chelswu was afraid of the snake."

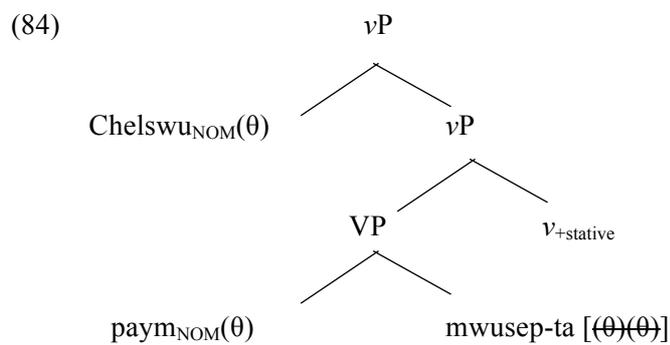
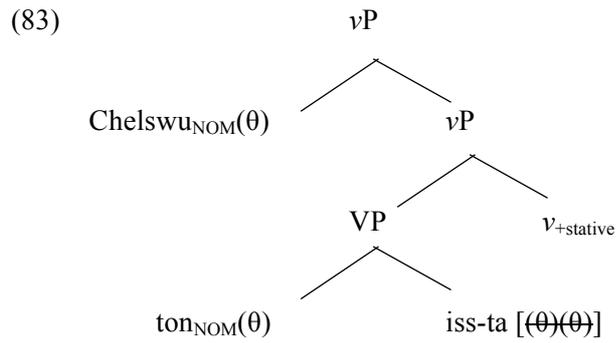
I believe that there is a difference in the way that the arguments are encoded in (80) and (81) that can explain their contrasting case patterns and explain why the accusative case is only possible with the *ha-ta* "to do" verb.

There is some evidence to suggest that the analysis of the higher nominal as the subject and the lower nominal as the object in (80) is not on the right track. First, though constructions like that in (80) are referred to as Nominative Object constructions, there is good reason to believe that the lower nominal is not an object. First, it is widely known that the honorific *-si* particle in Korean agrees with sentential subjects, and is often one of the tests used to determine subjecthood in Korean (Yoon 2007b). Though it has been argued that honorific may also agree with elements in C such as topics (Y. Kim, 1991; Heycock and Lee, 1999), what is clear is that it cannot agree with sentential objects. In (82), however, we see that the so-called object in NOCs may agree with the *-si* marker.

- (82) Chelswu-hanthay          sensayngnim-i          mwusewe-sye-ss-ta.  
       C-DAT                        teacher-NOM                scary-hon-pst-decl.  
       "Chelswu is scared of his teacher."

This agreement with the so-called object is highly unexpected, and is one piece of evidence that this lower element may in fact be the grammatical subject.

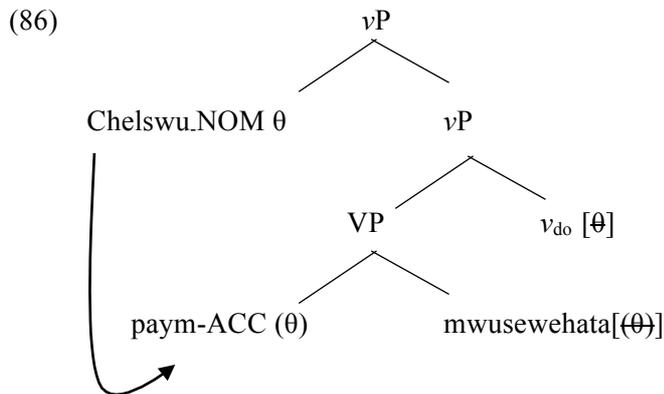
What, then, of the higher nominal that is marked dative or nominative? The nominative marking has generally been argued to be the result of raising from the dative position (Gerdtts and Youn, 2001). If this is true, the higher nominal is initially licensed as an internal argument, and only later raises to a higher position. This is what Levin (2016) assumes to account for dative-nominative case stacking. If this is the case, higher NP in these constructions is actually licensed as an internal argument, making it incapable of assigning dependent case under this model. However, as with the MNCs we have already examined, under the traditional Dependent Case Model, we would predict that the c-commanded nominal should receive accusative case from the c-commanding nominal, which is impossible. Incorporating theta-sensitivity into the model, however, allows it to account for the data above, because neither the predicate *iss-ta* "to have" (83) nor the predicate *mwusepta* "to be scared" (84) involve a  $v_{ACTIVE}$  or  $v_{CAUSITIVE}$  head or otherwise assign an external  $\theta$ -role, and thus neither trigger accusative case assignment.



The contrast between (80a) and (81), repeated here in (85), provides an additional piece of evidence that  $\theta$ -roles are playing a critical role in the case-assignment here.

- (85) a. Chelswu-ka            paym-i/\*ul            mwusew-ess-ta  
           C-NOM                snake-NOM/\*ACC        scared-decl  
           “Chelswu was scared of the snake.”
- b. Chelswu-ka            paym-\*i/ul            mwusewe-ha-ss-ta  
           C-NOM                snake-\*NOM/ACC        scared-do-pst-decl

Notice that the addition of the *ha-ta* "do" verb licenses accusative case on the object. Under any prior instantiation of the Dependent Case Model, the addition of the *ha-ta* verb should have no affect on whether or not accusative case is licensed, as functional heads play no direct role in case assignment, and simply having two caseless nominals in the same domain should always result in dependent case assignment to the lower one. By contrast, the Theta-sensitive Dependent Case-assignment Hypothesis directly accounts for the case difference between (85a) and (85b), as the *ha-ta* "do" verb assigns an external  $\theta$ -role (86).



This analysis falls in line with Tenny (1989) in arguing that the "experiencer" in psych-constructions may be internal or external. In (85a), the "experiencer" is internal, while in (85b), it is external.

As previously stated, there doesn't seem to be a clear way for the non-theta-sensitive Dependent Case Model to account for the contrast between (85a) and (85b), while it is directly accounted for under a theta-sensitive model.

The major take-away from this chapter should be that in order for the Dependent Case Model to account for MNC data, it must restrict dependent case-assignment to some subset of nominals, otherwise it overpredicts the appearance of accusative case, and further, it predicts that constructions such as MNCs in which multiple nominative-marked nominals appear within a case-assignment domain should be impossible. The Theta-sensitive Dependent Case-Assignment Hypothesis restricts dependent case assignment in exactly the manner needed, and predicts that any predication that lacks an external  $\theta$ -role will also lack dependent case assignment, making the presence of MNCs and nominative case in general a natural consequence of predication, an insight also utilized by Heycock (1993), and one that seems implicit to much of the work done on MNCs by Yoon (2004, 2007, 2015). In addition, it incorporates the underlying notion of Burzio's Generalization, and establishes a connection between theta and case in the Dependent Case Model, a connection that has seemed to be in some way necessary since the Visibility Condition. In the next chapter, we will take a look at some related case phenomenon and see that the Theta-sensitive Dependent Case-assignment hypothesis is able to account for these data as well.

## 5. Accusative Case and the Theta-sensitivity

Before concluding, there are two additional constructions that are related to MNCs that we should examine. The first, Multiple Accusative Case constructions (MACs), will be covered in Section 5.1, and the second, Exceptional Case Marking constructions (ECMs), which Yoon (2007) argues are directly fed by MNCs, will be covered in Section 5.2

### 5.1 MACS and the theta-sensitive Dependent Case Model

Nominative case does not have a monopoly on case repetition patterns in Korean. There is a parallel, well-known construction in Korean, known fittingly as the Multiple Accusative Case construction (MAC). Like MNCs, these appear in a number of forms (Yoon 2015), though they seem to be most readily licensed in the inalienable-possession type construction (87).

(87)	Mary-ka	John-ul	tali-lul	cha-ss-ta
	M-NOM	J-ACC	leg-ACC	kick-st-decl

"It was John whose leg Mary kicked."

Like MNCs, it appears that there is an additional argument outside of the ones licensed by the lexical predicate; in this case, the additional argument is marked by

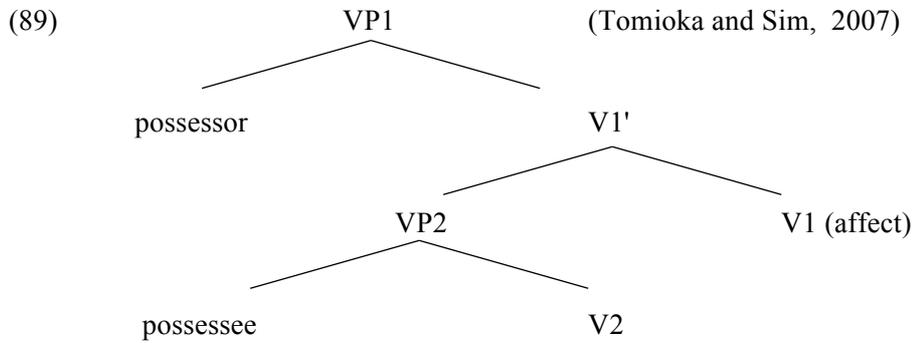
accusative case. This is the principle reason that Double Object Constructions are typically not grouped in with Multiple Accusative Case. All of the arguments in a DOC are encoded in the lexical predicate (88).

- (88) Chelswu-ka    Yenghi-lul                    senmwul-ul  
       C.-NOM        Y.-ACC                                    gift-ACC  
       cwu-ess-ta.  
       give-pst-DECL.  
       "Chelswu gave Yenghi a present."

The verb *cwuta* "give" encodes a giver, a receiver, and an object that is given, making the appearance of three arguments is unsurprising. By contrast, the lexical verb in (87), *chata* "kick," only encodes two arguments, a kicker and a kickee. Thus the appearance of three arguments is unexpected.

Before examining how a theta-sensitive Dependent Case Model can account for this construction, some background should be provided. The main questions then for MAC constructions, as in MNC constructions, are as follow: 1) how is the additional argument licensed, and 2) how is accusative case assigned twice? As to the question of licensing, I will follow Tomioka and Sim's (2007) argument that the additional argument is licensed via a phonologically silent *affect* verb (c.f. Vermeulen (2009) for a different analysis).

Tomioka and Sim argue that the *affect* verb has its own Theme role that the possessor NP corresponds to. The syntactic structure for this is shown in (89).



Utilizing this silent *affect* verb has the immediate benefit of explaining why there seems to be a required interpretation that the higher NP is adversely affected by the event. However, one possible downside is that it is not immediately obvious how the possessor interpretation arises, since they are not directly linked thematically. Tomioka and Sim argue that this interpretation arises due to a material part-whole relation between possessor and possessee. Specifically, they utilize an insight from Back (1986) that material part-whole relations between events correspond to material part-whole relations between entities (90).

- (90) a. Fred drew a map of Japan.  
 b. Fred drew a map of Kyushu.

Fred drawing a map of Kyushu is a material part of him drawing a map of Japan

because it happens that Kyushu is a material part of Japan. Tomioka and Sim argue that in this sense, inalienable possession interpretations do not come from thematic part-whole relations, but from part-whole relations between eventualities in which parts and wholes are included<sup>12</sup>.

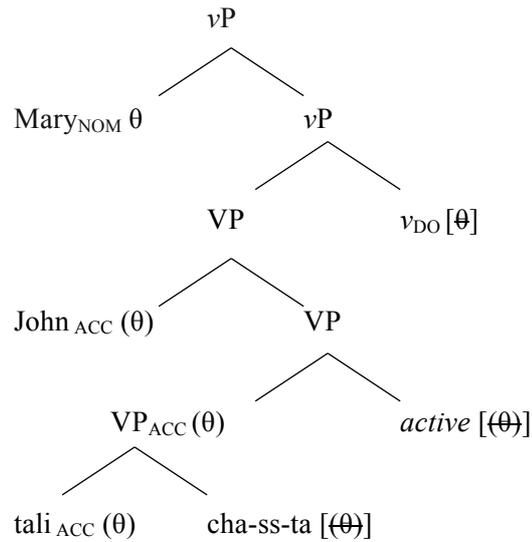
In sum, Tomioka and Sim propose that the lexical verb selects a Theme argument, the possessee, and the silent *affect* verb selects its own Theme argument, the possessor, which selects a VP as its complement. Importantly, both the lexical verb and the silent *affect* verb assign internal Theme  $\theta$ -role s.

Under this analysis, the possessor receives an internal  $\theta$ -role from the *affect* verb, but is interpreted as the possessor. If this is correct, we are left with the full derivation in (91).

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<sup>12</sup> See Toimioka and Sim (2007) for a more thorough explanation of the semantics involved.

(91)

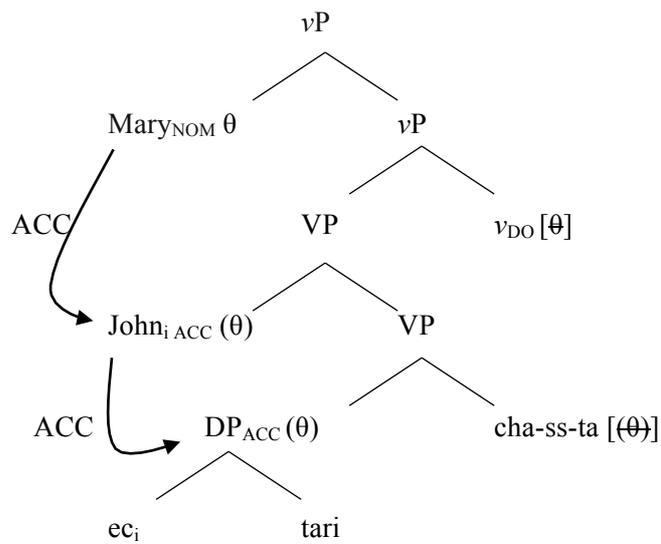


The inclusion of the silent *affect* verb is able to explain licensing of the possessor NP outside the possessee DP, however, by itself this does not explain how the possessor comes to bare accusative case. The agree model has the same difficulty account for multiple accusatives as it does for multiple nominatives, namely that there doesn't seem to be a good reason for  $v$  to agree with multiple nominals. Unlike in MNCs, both nominals are clearly generated in the c-command domain of  $v$ , so how it is able to reach the two nominals by probe is less of an issue, but there is still no motivation for  $v$  to enter into two multiple relations. As for MNCs, the Dependent Case Model offers an alternative.

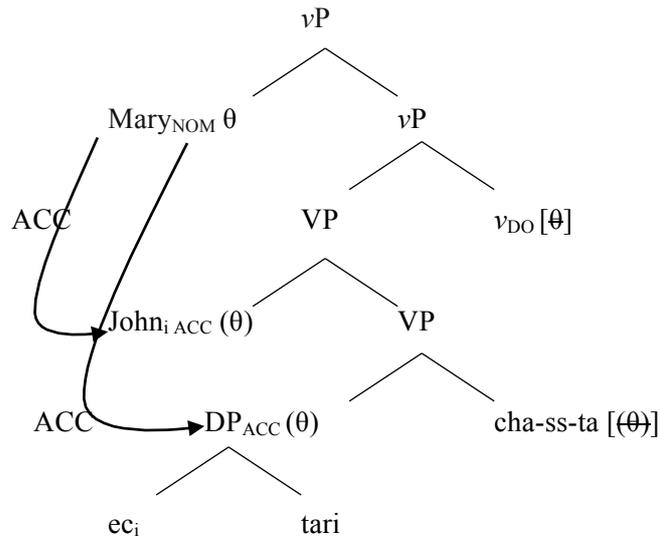
As we already saw with Double Object Constructions, prior instantiations of the Dependent Case Model and a model incorporating the Theta-Sensitive Dependent Case-assignment Hypothesis are both able to account for multiple

accusative-marked nominals occurring in sequence, but the two accounts differ. Because prior versions of the Dependent Case Model makes no reference to  $\theta$ -roles when case is assigned, it will account for the data in (91) by asserting that *John* assigns accusative to the DP containing *tali* as soon as it is generated, and that *Mary* will then assign accusative to *John* after it is generated. Once the Theta-sensitive Dependent Case-assignment Hypothesis is incorporated into the model, however, the data will be accounted for by asserting that *Mary* assigns accusative case to both *John* and *tali* once *Mary* has been generated and has received the external  $\theta$ -role. The account provided by the traditional Dependent Case Model is shown in (92), and the account given by the theta-sensitive model is given in (93).

(92)



(93)



The best possible scenario would be to find data that is somehow able to tease apart these two accounts so that we might see which is accurate, but such data does not seem to be forthcoming. For now, it is enough to say that a satisfactory account of the case patterns of MACs has been provided by mixing Tomioka and Sim's (2007) account of MAC licensing using a silent *active* verb, and the Dependent Case Model incorporating the Theta-sensitive Dependent Case-assignment Hypothesis. In the next section, we will look at whether the Theta-sensitive Dependent Case-assignment Hypothesis is able to account for case patterns in ECM constructions.

## 5.2 ECM and the theta-sensitive Dependent Case Model

Another Korean construction that has interesting implications for case is the ECM construction. ECM in Korean allows case variation on the nominal that normally appears in accusative. This is shown in (94).

- (94) a. Chelswu-ka      Yengmi-lul      khi-ka      khu-ta-ko  
C.-NOM      Y.-ACC      height-NOM      big-decl-comp  
sayngkakhanta.  
think-decl.  
"Chelswu thinks Yengmi to be tall."
- b. Chelswu-ka      Yengmi-ka      khi-ka      khu-ta-ko  
C.-NOM      Y.-NOM      height-NOM      big-decl-comp  
sayngkakhanta.  
think-decl.  
"Chelswu thinks that Yengmi is tall."

Yoon (2007) argues convincingly that what raises in ECM constructions in Korean is the Major Subject. This means MNCs would be expected to feed ECM constructions. Indeed, any of the types of MNC discussed here can feed an ECM sentence, as (95) - (98) demonstrate.

(95) Inalienable Possession

Chelswu-ka	Yengmi-ka/lul	khi-ka	khu-
C.-NOM	Y.-NOM/ACC	height-NOM	big-
ta-ko	sayngkakkan-ta.		
decl-comp	think-decl.		

"Chelswu considers Yengmi to be tall."

(96) Alienable Possession

Chelswu-ka	Yengmi-ka/lul	kapang-i	mwukep-
C-NOM	Y.-NOM/ACC	bag-NOM	heavy-
ta-ko	sayngkakkan-ta		
decl-comp	think-decl.		

"Chelswu considers Yengmi's bag to be heavy."

(97) Kinship

Chelswu-ka	Yengmi-ka/lul	dongsayng-i	yeppu-
C-NOM	Y.-NOM/ACC	younger-sister	pretty-
ta-ko	sayngkakkan-ta		
decl-comp	think-decl.		

"Chelswu considers Yengmi's younger sister to be pretty."

(98) Adjunct

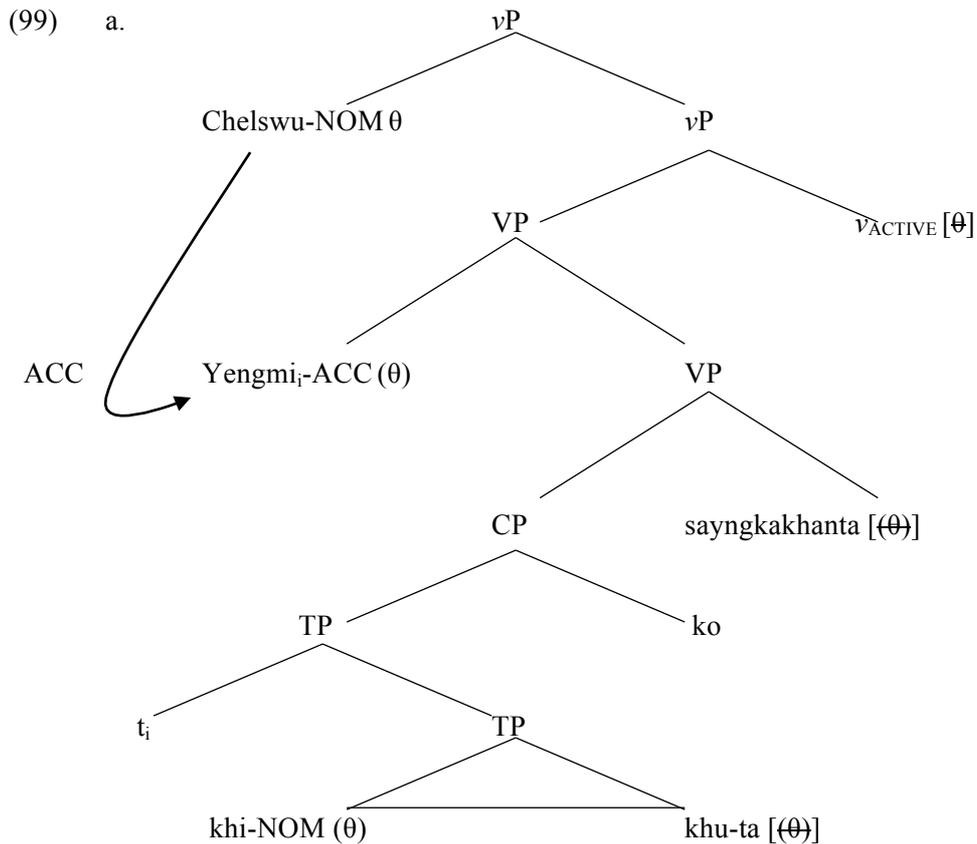
Chelswu-ka	yelum-i/lul	maykcwu-ka	coh-
C.-NOM	summer-NOM/ACC	beer-NOM	good-
ta-ko	sayngkakkan-ta		
decl-comp	think-decl		

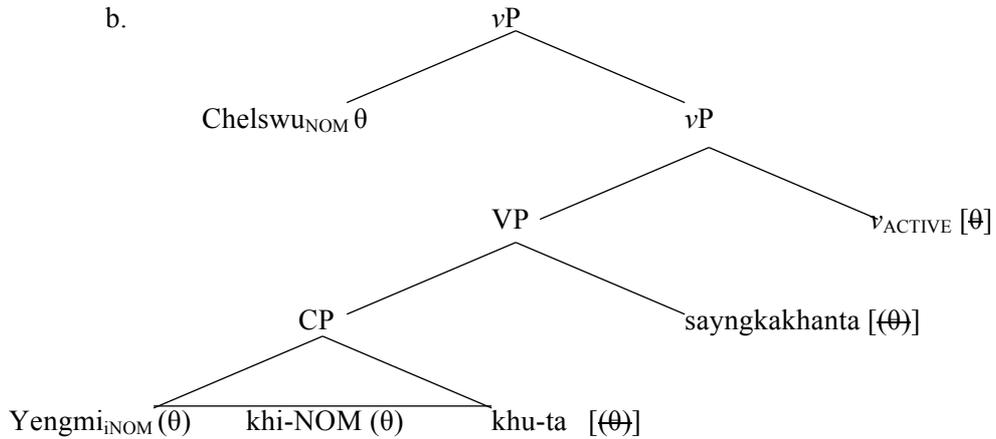
"Chelswu considers the summer a good time for beer."

Any account of case in Korean must be able to account for the case variation demonstrated in (95)-(98). Yoon (2007a) argues that the difference between the two case patterns is down to movement, i.e. the accusative case is the result of movement while the nominative case is a result of a lack thereof. Though it has previously been argued that the construction in which the "raised" nominal is actually base generated in the object position (Moore 1998; Potsdam and Runner 2001; Takano 2003; Davies 2005; Hoji 1991, 2005), Yoon (2007a) argues convincingly that while the two approaches achieve the same level of empirical coverage, the movement analysis has certain empirical and theoretical advantages, and thus I will adopt this approach.

A critical point about ECM constructions is that the non-theta-sensitive Dependent Case Model fails to account for either case pattern. This is because, as discussed previously, under the traditional Dependent Case Model, the

grammatical subject in the sentential predicate in the embedded clause should be marked accusative. Thus, in a sentence like (95), whether or not *Yengmi* raises to the Matrix clause, once it is generated in the Major Subject position, it should assign accusative to the grammatical subject *khi*. Thus, for all of the sentences above, the third nominal, the Grammatical Subject of the embedded clause, should be marked accusative. However, once the Theta-sensitive Dependent Case-assignment Hypothesis is adopted, we are able to account for all of the sentences in (95) through (98). (99a) provides the derivation for (94a), and (99b) gives the derivation for (94b), and these would be identical for (96) - (99).





In (99a), in the embedded clause, the predicate does not assign an external  $\theta$ -role, thus all the nominals remain unmarked for case. *Yengmi* raises to Spec VP of the embedded clause. The matrix verb *sayngkakhanta* "think" does assign an external  $\theta$ -role, which *Chelswu* receives. *Chelswu* then probes its c-command domain and finds *Yengmi*, to which it assigns accusative case. In (99b), *Yengmi* remains inside the embedded CP, and thus the dependent case assignment probe that is triggered by the external  $\theta$ -role assignment to *Chelswu* is not able to reach it due to the phase-edge at CP. In the next section, we will take a brief detour into the world of ERG-ABS languages to see if the Theta-sensitive Case Assignment Hypothesis can be modified in any straightforward way that will account at least for basic ERG-ABS language data.

### 5.3 Theta sensitivity and ERG-ABS Languages

Before concluding this thesis, it is important to take a brief look at ergative-absolutive data and see if theta-sensitivity can be applied to these types of constructions. The beauty of the Dependent Case Model, after all, was at least partially its ability to account for NOM-ACC and ERG-ABS data with only a very minor change; namely, when two nominals appear in an asymmetric c-command relation, in NOM-ACC languages, the c-commanding nominal assigns dependent (accusative) case to the c-commanded nominal, while in ABS-ERG languages the c-commanded nominal assigns dependent (ergative) case to the c-commanding nominal. It is not within the scope of this paper to provide a thorough analysis of ERG-ABS language data, but I will attempt to show that it is at least theoretically possible that ERG-ABS might be explained using a theta-sensitive Dependent Case Model.

In order to show that theta-sensitivity is at least plausible for ERG-ABS languages, I will examine data that Marantz (1991) utilized when first formulating the Dependent Case Model. The data in (100) is from Hindi, while the data in (101) is from Basque.

- (100) a. siita (\*ne) aayii. (unaccusative)  
 Sita-FEM (\*ERG) arrived/came-FEM
- b. kutte bhoNke.  
 dogs-MASC.PL barked-MASC.PL
- c. kuttoN ne bhoNkaa  
 dogs.PL ERG barked-MASC.PL
- d. raam ne roTii khaayii  
 Ram-MASC ERG bread-FEM eat-FEM  
 thii.  
 be-PAST.FEM

- (101) a. Ni etorri naiz,(unaccusative)  
 I-ABS come 1SG-be
- b. Nik lan egin dut  
 I-ERG work do have-1sG
- c. Nik libura ekarri dut.  
 I-ERG book-ABS bought have-1sG

Right off the bat a few things jump out at us. First, ergative is impossible in both Hindi and Basque in the unaccusative construction ((100a), (101a)). Secondly, in in the transitive construction ((100d), (101c)), ergative is required on the subject argument. And lastly, ergative is obligatory in the unergative construction in



Now let's recall the Theta Sensitive Dependent Case Assignment Hypothesis and see if there is some natural way that it might be modified to account for this data. The hypothesis itself is given again in (103) for reference.

(103) *Theta-sensitive Dependent case assignment hypothesis*

(nominative-accusative languages)

Only arguments marked by an external  $\theta$ -role are assigners of dependent case

Obviously this will not be able to account for the data in (100) and (101), but there may be some relatively simple way to amend it such that it can. First off, to summarize the facts of the data, in (100a) and (101a) we have no external  $\theta$ -role, and also no dependent case. In (100d) and (101c) we have an external  $\theta$ -role, and we have dependent case appearing on the argument that carries that role, along with an additional, c-commanded argument which might have assigned dependent case. In (100c) and (101b), again we have the external  $\theta$ -role bearing argument appearing with dependent case, but this time there is no argument that could have been responsible for assigning it (unless, like Marantz argues, the empty position is able to assign it). One thing is consistent in all of the data (except for (100b)): if an argument bears an external  $\theta$ -role, it exhibits dependent case. Let's try to account for these facts with a straightforward reformulation of (103).

(104) *Theta-sensitive Dependent case assignment hypothesis*

(ergative-absolutive languages)<sup>13</sup>

Only arguments marked by an external  $\theta$ -role are receivers of dependent case

This reformulation straightforwardly captures the data in (100d) and (101c), as well as data from languages like Inuktitut where ergative only appears in transitive clauses (Marantz 1991), which Marantz's formulation works for as well. However, it doesn't quite work for (100c) and (101b), because there is no other argument that the subject in those sentences can receive dependent ergative case from, which is the same issue these sentences posed for Marantz. With this in mind, we might propose a hypothesis like that in (105) for languages like Hindi and Basque.

(105) *Theta-sensitive Dependent case assignment hypothesis*

(ergative-absolutive languages)

Only arguments marked by an external  $\theta$ -role bear dependent case

For a language like Basque, it might be argued that dependent ergative case is assigned obligatorily as soon as the external  $\theta$ -role is assigned, following (105).

For languages like Inuktitut, the formulation in (104) would be active in the case-

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<sup>13</sup> It should be noted that Hindi and Basque are not representative of ergative-absolutive languages. Other ergative languages, such as Inuktitut, only show ergative case on the subject in transitive clauses (Marantz, 1991).

assignment calculus, while in language like Hindi, it would appear that it is something between (104) and (105), such that ergative case is possible on any external  $\theta$ -role bearing argument, but is obligatory if that argument c-commands another argument. The result of this is a series of calculations for theta-sensitive dependent case assignment, shown in (106).

(106) *Theta-sensitive dependent case classification*

<u>Language type</u>	<u>Role of external <math>\theta</math>-role</u>
Nominative-Accusative (Korean)	assigns dependent case
Ergative-Absolutive (Basque)	bears dependent case
Ergative-Absolutive (Inuktitut)	receives dependent case

Obviously this is not a complete classification of possible languages, nor does it perfectly account even for the data in (100) and (101), as Hindi's ability to optionally display ergative case is still an issue, but it shows that the theta-sensitive Dependent Case assignment can be manipulated in simple and straightforward ways to account for data in ergative-absolutive languages that is at least as satisfying as the account Marantz's Dependent Case Model provides, and perhaps more so, as it does not need to appeal to empty positions assigning case.

In this Chapter we have examined two additional constructions related to the MNCs we analyzed in Chapter 4. In Section 5.1 we examined MAC constructions and saw that both prior instantiations of the Dependent Case Model and one that adopts theta-sensitivity are able to account for this case pattern, although they account for it somewhat differently. In Section 5.2 we examined ECM constructions and found that, while the Dependent Case Model is not able to account for the case patterns for the same reasons it could not account for the case patterns in MNC constructions, once we apply the Theta-sensitive Dependent Case-assignment Hypothesis, the data is explained straightforwardly. Finally, in section 5.3, we briefly looked at ergative-absolutive data from Hindi and Basque, and saw that it is possible, at least in theory, to adapt theta-sensitive dependent case assignment to account for the case patterns of these languages. In the next chapter, I will sum up what has been covered in this thesis and discuss some remaining issues.

## 6. Conclusion

In this thesis, I have examined the ability of the Dependent Case Model to account for a number of related constructions in Korean, with the focal point being Multiple Nominative Case constructions. In doing so, it was found that the Dependent Case Model that does not incorporate theta-sensitivity is unable to account for constructions in which multiple nominative-marked nominals appear in sequence. More concretely, the Dependent Case Model fails to account for data related to Multiple Nominative Constructions, Nominative Object Constructions, and Exceptional Case Marking constructions. This inability comes from the Dependent Case Model's stipulation that anytime two caseless nominals appear in the same domain, the c-commanding nominal will always assign dependent case to the c-commanded nominal. The solution that was proposed was to introduce theta-sensitivity into the model. Specifically, the Theta-sensitive Dependent Case-assignment Hypothesis was proposed, which amends the Dependent Case Model by stipulating that, when two caseless nominals are in an asymmetric c-commanding relation, accusative case is assigned from the c-commanding to c-commanded nominal *if and only if* the c-commanding nominal has been assigned an external  $\theta$ -role. As the Major Subject of an MNC is licensed by a predication operation, which only results in a non-external  $\theta$ -role, dependent case-assignment is not triggered in this context.

Despite providing a solid account of the data in MNCs, NOCs, MACs, and ECM constructions, it might be asked whether the Theta-sensitive Dependent Case-assignment Hypothesis is a theoretically desirable addition to the Dependent Case Model. It must be said that the simplicity Marantz's Dependent Case Model is part of what makes it theoretically appealing. In addition to this, a large part of the attraction of Marantz's original (1991) proposal is the ease in which it accounts for both nominative-accusative and ergative-absolutive case systems, essentially only by changing the direction of the dependent case-assignment. Adding theta-sensitivity to the model will require complicating this somewhat. Finally, it could be argued that morphological case assignment being an almost entirely self-contained operation is desirable, as it helps to move the language model toward a more computationally discrete series of operations. However, I argue that the Theta-sensitive Dependent Case-Assignment Hypothesis is theoretically desirable for a few reasons. First, while simplicity is desirable, it obviously should not be prioritized over the ability to properly account for data. It has been demonstrated thoroughly in this thesis that the addition of theta-sensitivity into the Dependent Case Model provides superior coverage of the data, and also helps to solve a long-standing case puzzle related to Multiple Nominative Case constructions. Secondly, incorporating the Theta-sensitive Dependent Case-assignment Hypothesis does not have to significantly complicate accounting for the difference between nominative-accusative and ergative-absolutive languages. The solution might be something as simple as stipulating that, while external- $\theta$ -role assigned nominals act as dependent

*case-assigners* in nominative-accusative languages, they act as dependent case-*receivers* in ergative-absolutive languages. Obviously, a great deal more research needs to be done to determine whether this type of simple solution would be viable, but it shows that the addition of theta-sensitivity need not greatly complicate the model. Finally, I argue that directly connecting case assignment with theta-assignment is a beneficial addition to the language model as a whole. This insight is what underlies the establishment of the Visibility Condition, and it is in some ways simply a formalization of Burzio's Generalization, the very topic of the book in which the Dependent Case Model was initially proposed. Since the beginning, it has seemed clear that theta and Case/case are directly related in some way, and the Theta-sensitive Dependent Case-assignment Hypothesis gives this insight a concrete place in the case-assignment model.

In addition to allowing the Dependent Case Model to more fully account for the data in MNC constructions, the Theta-sensitive Dependent Case-assignment Hypothesis also helps to provide a complete picture of the derivation of Multiple Nominative Case constructions, a construction that has long been a topic of interest in Korean linguistics but has never been provided with a fully satisfactory account. It has been argued here that MNC licensing and case pattern can be accounted for by combining theta-sensitive case-assignment with a number of previous strategies that have been proposed to account for MNC licensing. Namely, base-generation of the Major Subject avoids a number of troubling issues that the possessor-raising

analysis faces, and allows a unified account between possessor and adjunct-type MNCs. Taking predication to be phasal and combining this with the Cyclic Linearization model of spell-out explains word order restrictions demonstrated by MNC constructions. Adding to this, a theta-sensitive Dependent Case Model explains how both the Grammatical and Major Subject come to bear nominative case morphology, completing the puzzle using a novel analysis of case assignment.

It was also demonstrated that a theta-sensitive Dependent Case Model can account for Nominative Object, MAC, and ECM constructions. In the case of MACs, it was found that both the original and theta-sensitive Dependent Case Models could account for the case data, though the order of accusative assignment differed. This is an area that should be examined further to see if there is some way to determine which model gives the more accurate picture of case-assignment. As far as NOC and ECM constructions, it was found that , without theta-sensitivity, the Dependent Case Model was unable to account for the data, for the same reason that it failed to account for the MNC data. Incorporating theta-sensitivity allowed the Dependent Case Model to account for the data in both construction types.

Obviously, much research remains to be done to determine whether or not a theta-sensitive Dependent Case Model is able to explain the full range of possible case data. Within Korean itself, data involving embedded sentences with different types of matrix verbs should be examined to determine possible case assignment to

raised embedded arguments. The Theta-sensitive Dependent Case-assignment Hypothesis would predict that accusative marking on raised embedded arguments should only be possible if the matrix verb assigns an external  $\theta$ -role, otherwise accusative marking on a raised argument should be impossible. Additionally, small clause constructions might prove a fruitful area of investigation for similar reasons. In addition to broadening the analyzed Korean data, it will be critical to analyze other language data to see whether or not the model is viable. In particular, it will be critical to look at a wider range of ergative-absolutive language data to see just how the model might be applied. The present study has been only a small initial step in examining whether  $\theta$ -assignment might be directly connected to case within the Dependent Case Model, but it seems clear that it is a beneficial addition at least with regards to MNC, NOC, and ECM constructions in Korean.

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## 초록

한국어의 격 중출 (MCC)구문은 격 이론에서 오랫동안 문제가 되었던 부분이다. 같은 격을 지닌 명사구가 한 절 내에 여러 번 나타나는 이러한 구성은, 기능적 핵이 하나의 명사에만 격을 할당한다는 이론에 직접적으로 반증이 된다. 한국어의 격 중출 구조 중 주격 중출 구조(Multiple Nominative Case constructions (MNCs) )와 대격 중출 구조(Accusative Case constructions (MACs))가 여러 연구자들의 주된 관심사였다. 지금까지 일치 (Agree) 모델에서는 이러한 격 패턴을 설명하려는 여러 해명이 시도되었지만 아직까지는 완전히 만족스러운 해명은 없다. 이 논문은 대안적인 격 이론, 즉 의존격 이론(Dependent Case Model)을 활용하여 한국어의 격 중출 구문을 설명하고자 한다.

의존격 이론은 일치 이론과 근본적으로 구별된다. 이 이론에 따르면 격은 기능적 핵에서 주어지는 것이 아니라, 명사구들 자체의 상대적 위치 관계에 따라 할당된다. 특히 의존격(한국어의 경우 대격)은 두 개의 격 없는 명사가 비대칭적인 성분통어(c-command)관계에 나타날 때 할당되며, c-command 하는 명사가 의존격을 c-command 받는 명사에 할당한다. MNC 구문을 설명하려고 할 때, 일치 이론은 격 계산에 따르면

더 높은 DP1 이 더 낮은 DP2 에 의존격 (대격)을 할당해야 한다는 문제에 부딪힌다. 따라서 현재의 의존격 모델은 MNC 구문을 설명할 수 없다.

이 문제를 해결하기 위해 본고는 Heycock (1993)과 Yoon (2004, 2007, 2015)의 통찰을 활용한다. Heycock 과 Yoon 은 주격중출 구문에서, 하위 명사구가 ‘문법적 주어’(Grammatical Subject, GS)가 되어 술어와 함께 ‘문장 술어’(sentential predicate)를 형성하며, 상위 명사구가 이 문장 술어의 '상의 주어' (Major Subject, MS)가 된다고 가정한다. 문장 술어는 MS 에 자체 비외부 의미역을 할당한다. 비외부 의미역의 결여와 의존격 결여의 관계성을 의존격 모델에서 설명하고자, “의미역 기반 의존격 할당 가설” (Theta-dependent Case-assignment Hypothesis)을 제안한다. 이 가설 하에서는 c-command 하는 명사가 외부의미역을 할당받은 경우에만 c-command 받는 명사에 의존격을 할당할 수 있다. 주격 중출 구문에서 하위 명사에 의존격이 할당되지 않은 이유는 상위 명사가 문장술어로부터 비외부의미역을 할당받았기 때문이다. 이것은 MS 가 문장술어에 의해 비외부 의미 역할을 할당 받았기 때문에 MS 와 GS 사이에서 의존격 할당이 유발되지 않도록 데이터를 설명한다. 이 가설은 또한 한국어의 주격 목적어 구성(Nominative Object Construction)에 대해서도 설명을 제공할 수 있다.

의미역 기반 의존격 할당 가설은 대격 중출 구문에 대해서도 적용이 가능하다. 대격 중출 구문에서 주어는  $v_{do}$  핵으로부터 외부의미역을 할당받고, 이것이 의존격 할당을 유발하여 두 개의 목적어 중 상위 목적어에 의존격이 할당된다. 그러나 한 번 의존격 할당이 일어난 이후에도, 주어와 하위 목적어가 여전히 격이 없는 상태로 남아 있어 또 한 번 의존격 할당이 유발된다. 이로써 하위목적어 역시 대격을 할당받는 것이다. 마지막으로 예외적 격 표시(ECM) 구조에 대한 분석을 제시한다. ECM 은 전통적인 의존격 모델에서 설명하지 못했던 부분이지만 의미역 기반 의존격 이론에서는 대격/주격 교체를 포함하여 ECM 구조에 대한 자연스러운 설명이 가능하다. ECM 구성은 또한 C 가 격 할당의 장벽으로 작용함을 보여준다. 주절의 주제는 의존격을 C 의 Spec 위치까지만 할당할 수 있으며, 그보다 더 아래로는 할당할 수 없기 때문이다.

의미 역할에 의존한 의존격 할당 가설 (Theta-dependent Case-assignment Hypothesis)은 분석된 모든 격 구성에서 데이터에 대한 새로운 해명을 제공하는 것으로 나타났다. 더 나아가서, 그것은 의미역과 격 사이의 직접적인 연결을 제공하는데, 이는 지금까지의 의존격 모델에서 결여된 부분이다. 이 의미 역할에 의존한 의존격 모델을 MNC 및 MAC 데이터에 적용한 결과는 이론적 및 경험적으로 만족스러운 자료의 해명이며, MCC 및 일반적인 격에 대한 중요한 통찰력을 제공한다.