

An Applicative Theory of Korean Multiple Nominative Constructions

By

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## Abstract

This thesis presents arguments for an ‘Applicative’ analysis on Korean Multiple Nominative Constructions (MNCs) in which DPs (NP1) other than thematic subjects (NP2) of the main predicates function as sentential subjects. One fundamental question stands out in MNC literature: how are NP1s licensed as sentence subjects? The main goal of this thesis is to bring a new perspective on this licensing issue. This thesis proposes that NP1s in various types of Korean MNCs are introduced and licensed by a specific functional head called an ‘Applicative’ head whose main function is to introduce an argument that is not selected by a main predicate. (Marantz 1993, Pytkänen 2002 and Cuervo 2003). Specifically, this thesis argues that Korean applicative heads *s*-select only state/property-denoting expressions and link these semantically uniform expressions to the added argument (NP1). The welcome result of this proposal is that three different types of MNCs in Korean receive a uniform treatment: for the possessive MNC, a high applicative head *s*-selects either a property-denoting VP or a resultant state-denoting VP and links them to NP1. For the oblique MNC, a low applicative head *s*-selects a property-denoting NP2 and associates it with the NP1. Finally, the generic MNC is analyzed as a high applicative construction where the applicative head *s*-selects a modalized/stativized VP as its complement and links this VP to the NP1.

With this mechanism, this thesis satisfactorily accounts for two main questions that previous approaches could not solve. First, the current analysis correctly predicts why unergative verbs are not possible in MNCs: since Korean applicative head only *s*-selects the state/property-denoting expressions, the unergative verbs which do not have a

STATE eventuality in their lexical specifications are naturally excluded in the formation of MNCs. Second, the current analysis also satisfactorily accounts for why the thematic specifications of the NP1s of MNCs are limited to non-volitional, non-agentive variants: the applicative head only s-selects state-denoting or property-denoting expressions and links these expressions directly to the NP1s. Thus, NP1s in MNCs are naturally interpreted as a holder of certain states/properties but not agent or causer.

**Abbreviations**

Acc	Accusative
Appl	Applicative
C	Complementizer
COS	Change-of-State
Caus	Causative
Dat	Dative
Decl	Declarative
Foc	Focus
Gen	Genitive
Hon	Honorific
Incho	Inchoative
Loc	Locative
Masc	Masculine
MNC	Multiple Nominative Construction
Neg	Negative
Neut	Neutral
Nom	Nominative
Pass	Passive
Pl	Plural
Pres	Present
Refl	Reflexive
Rel	Relativizer
Top	Topic

## Chapter 1: Introduction

### 1. Multiple Nominative Constructions and Classifications

This thesis investigates a specific construction in Korean which has been called a ‘Multiple Nominative Construction’ (hereafter, MNC) in the literature. An MNC refers to a mono clausal construction in which more than one constituent is marked with a nominative marker, which is considered to be a canonical marker of a grammatical subject in Korean (and Japanese). The (a) sentences in (1) and (2) are representative examples of Korean MNCs.

1) a. Mary-**ka**    phal-**i**    kil-ta.<sup>1</sup>

M-nom    arm-nom    long-decl.

‘(lit.) Mary, arms are long’ ‘Mary’s arms are long’

b. Mary-**uy**    phal-**i**    kil-ta.

M-gen    arm-nom    long-decl.

‘Mary’s arms are long’

2) a. Mary-**ka**    cha-**ka**    kocangna-ss-ta.

M-nom    car-nom    break.down-past-decl.

‘Mary’s car broke down (on her)’

---

<sup>1</sup> There are two morphologically different subject markers in Korean whose distributions are conditioned morpho-phonologically: *-ka* and *-i*: *-ka* attaches to the words that end with vowels and *-i* attaches to the words that end with consonants.

- b. Mary-**uy**    cha-**ka**    kocangna-ss-ta.  
 M-gen        car-nom    break.down-past-decl.  
 ‘Mary’s car broke down’

In (1), the sentence initial NP *Mary* and the preverbal NP *phal* ‘arm’ are both marked with a nominative marker. Throughout the dissertation, I will call the sentence-initial nominative NPs “NP1” and the preverbal nominative NPs “NP2”. Thematically, the NP2 *phal* is a thematic, logical subject of the main predicate *kil-* ‘long’. The grammatical contrast in (3) illustrates this point.

- 3) a. \*Mary-**ka**    [**NP2**]    kil-ta.  
 M-nom                    long-decl.  
 \*‘Mary is long’
- b. # [**NP1**]    phal-**i**    kil-ta.  
                   arm-nom    long-decl.  
 ‘(The) arms are long’

(3a) is straightforwardly ungrammatical since there is no thematic/logical subject that the main predicate refers to. (3b) is grammatical, yet it simply sounds odd due to the lack of contextual information.

As for the NP1 *Mary* in (1a), it thematically functions as a possessor of the NP2 *phal*. Thus, it has been widely assumed that the semantic reading of MNC in (1a) is almost identical to the one of the sentence in (1b) where *Mary* directly functions as a

possessor of the possessive DP *Mary-uy phal* ‘Mary’s arm(s)’. The pair in (2) shows the same thematic property. Due to this thematic/semantic similarity between the MNCs in (1-2a) and the possessive DP constructions in (1-2b), these types of MNCs are called ‘possessive MNCs’ in the literature (Heycock & Doron 2003, Vermeulen 2005, etc.) and I will continue to use this term in this thesis.

The possessive MNCs are not the only type of MNC in Korean if we take the thematic properties of NP1s into consideration seriously. Consider the following MNCs in (4-5a) and their semantically/thematically corresponding non-MNC counterparts in (4-5b).

4) a. *Mary-ka pwung-i o-ss-ta.*

M-nom      paralysis-nom      come-past-decl.

‘(lit.) Mary, paralysis came’ ‘Mary is/got paralyzed’

b. *Mary-hantey pwung-i o-ss-ta.*

M-dat              paralysis-nom      come-past-decl.

‘(lit.) Paralysis came to Mary’ ‘Mary is/got paralyzed’

5) a. *Mary-ka wuncen myenhecong-i iss-ta.*

M-nom      driver’s license-nom      exist-decl.

‘(lit.) Mary, the driver’s license exists’ ‘Mary has a driver’s license’

b. *Mary-hantey wuncen myenhecong-i iss-ta.*

M-dat              driver’s license-nom      exist-decl.

‘Mary has a driver’s license’

The MNCs in (4-5a) are different from the possessive MNCs in (1-2a) in that while the NP1s in the latter types of MNCs are thematically related to the NP2s (i.e. possessor-possessee relation), the NP1s in the former types of MNCs are thematically related to the main predicates. For example, the NP1s *Mary* in (4-5a) function as oblique arguments of the main verbs: in (4a), the NP1 *Mary* literally denotes a location to which the theme NP2 *pwung* ‘paralysis’ moves; in (4b), the NP1 *Mary* denotes a location where the theme NP2 *wuncen myenhecong* ‘driver’s license’ exists(?). This intuition can be not only confirmed by the non-MNC sentences in (4-5b), whose semantic readings are almost identical to the MNCs in (4-5a), but also by the fact that when the NP1s and the NP2s (4-5a) form possessive DPs, the sentences are either ungrammatical or the meaning of the sentence is totally different.

- 6) a. \**Mary-uy pwung-i o-ss-ta.*  
 M-gen paralysis-nom come-past-decl.  
 \* ‘Mary’s paralysis came’
- b. *Mary-uy wuncen myenhecong-i iss-ta.*  
 M-gen driver’s license-nom exist-decl.  
 ‘Mary’s driver’s license is there/here’

As shown in (6a), the possessive DP formation of (4a) results in ungrammaticality; the possessive DP formation of (5b) seems to be possible as the grammaticality of (6b) shows. However, the reading of (6b) is different from the one of (5b): the MNC in (5b) has rather

possessive semantics while (6b) has a locative reading.<sup>2</sup> This further indicates that the MNCs in (4-5a) do not belong to the possessive MNCs. In this thesis, I will call the types of MNCs in (4-5a) ‘oblique MNCs’.

There is another type of MNC whose NP1 is neither a possessor argument of NP2 nor an oblique argument of the main predicate. In this third type of MNC, the function of NP1 corresponds to various adjunct phrases. Consider the sentences in (7) and (8).

7) a. I sakeli-**ka** kyotong sako-**ka** manhi palsaynggha-n-ta.

This crossroad-nom traffic accident-nom a lot happen-pres-decl.

‘(lit.) This crossroad, traffic accidents happen a lot’

‘Traffic accidents happen a lot in this crossroad’

b. I sakeli-**eyse** kyotong sako-**ka** manhi palsaynggha-n-ta.

This crossroad-loc traffic accident-nom a lot happen-pres-decl.

‘Traffic accidents happen a lot in this crossroad’

8) a. I sinpal-**i** palkkwumchi-**ka** appwu-ta.

These shoes-nom heel-nom hurt-decl.

‘(lit.) these shoes, (my) heel hurts’

‘These shoes make my heel hurt’

---

<sup>2</sup> One of the interesting semantic properties of this type of MNC is that there is a systematic disparity between the literal meanings of the sentences and the derived meanings of the sentences. For example, the NP1 in (4a) denotes a literal Goal, yet its derived meaning is an affectee/experiencer. Similarly, the NP1 in (5a) denotes a location, yet its derived meaning is a possessor. This will be discussed in detail in section 3.

b. I *sinpal-ul* *sin-umyen,* *palkkwumchi-ka* *appwu-ta.*

These shoes-acc put.on-if heel-nom hurt-decl.

‘Whenever I put on these shoes, (my) heel hurts’

In (7a), the NP1 *i sakeli* ‘this crossroad’ seems to denote the location where the eventuality denoted by the main predicate occurs. The similar reading of (7b) where the DP *i sakeli* is realized as a locative postpositional phrase confirms this intuition. The NP1 in (8a), *i sinpal* ‘these shoes’, is particularly interesting in that it does not have a semantically corresponding PP. As shown in (8b), the closest meaning of (8a) can only be expressed via the *if/when*-clause.

Vermeulen (2005) deals with very similar types of MNCs in Japanese and calls them ‘adjunct MNCs’. However, I will call the MNCs above ‘generic MNCs’ since these types of MNCs, unlike possessive MNCs and oblique MNCs, are only grammatical when they have generic readings. Compare the MNCs in (7-8a) with the ill-formed MNCs in (9-10a).

9) a. \**Achim-ey* *i sakeli-ka* *kyotong sako-ka* *manhi* *palsaynggha-yss-ta.*

Morning-loc this crossroad-nom traffic accident-nom a lot happen-past-decl.

‘(intended) A lot of traffic accidents happened in this road this morning’

b. *Achim-ey* *i sakeli-eyse* *kyotong sako-ka* *manhi* *palsaynggha-yss-ta.*

Morning-loc this road-loc traffic accident-nom a lot happen-past-decl.

‘A lot of traffic accidents happened in this crossroad’

10) a. \*Ecey, i sinpal-i palkkwumchi-ka app-ass-ta.

Yesterday these shoes-nom heel-nom hurt-past-decl.

‘(intended) yesterday, my heel hurt with these shoes’

b. Ecey, i sinpal-ul sin-umyen, palkkwumchi-ka app-ass-ta.

Yesterday these shoes-acc put.on-if heel-nom hurt-past-decl.

‘My heel hurt when I put on these shoes yesterday’

The MNCs in (9-10a) are ungrammatical while the MNCs in (7-8a) are totally fine: the only difference between these two constructions is that the former MNCs are generic statements while the latter MNCs are episodic statements. This fact, coupled with the fact that their non-MNC forms in (9-10b) are not affected by this specific semantic restriction, indicates that genericity plays a critical role in forming the MNCs in (7-8a). Based on this semantic peculiarity, I will call these types of MNCs ‘generic MNCs’.

### 1.1. Licensing of NP1

In the previous section, I introduced three main types of MNCs in Korean: possessive, oblique, and generic MNCs. The immediate question that arises at this point is this: what is the grammatical status of NP1? More specifically, what is the grammatical function of NP1? Given that NP1 is nominative marked, is it a subject? If so, how does grammar deal with the multiple subjects (NP1 and NP2) in a single clause? Answers to these questions vary in the MNC literature. However, one widely accepted assumption among the majority of researchers is that NP1 behaves as a canonical subject of the sentence: one of

the widely used syntactic tests is the relativization test. Consider the possessive MNC in (2a) which is repeated here in (11a).

11) a. Mary-**ka** cha-**ka** kocangna-ss-ta. (=2a)

M-nom car-nom break.down-past-decl.

‘Mary’s car broke down (on her)’

b. [DP [OP<sub>i</sub> [CP t<sub>i</sub> cha-**ka** kocangna]-n] Mary<sub>i</sub>]

car-nom broke.down-rel M

‘Mary whose car broke down’

c. \*[DP [OP<sub>i</sub> [CP Mary-**ka** t<sub>i</sub> kocangna]-n] cha<sub>i</sub>]

M-nom broke.down-rel car

While (11b) shows that the NP1 *Mary* can be a target of relativization, (11c) shows that the NP2 *cha* cannot be relativized. This relativization asymmetry between NP1 and NP2 indicates that the NP1 is the only argument that is syntactically active in the MNC and this, in turn, coupled with the fact that NP1 is marked with a nominative marker, indicates that NP1 is a sole structural subject of the sentence.

Provided that NP1 is a canonical subject of the MNC, we face a more intriguing question: how does the NP1 end up being a structural subject of the sentence? In other words, how are NP1s in MNCs licensed as a structural subject? This question has been a main topic in the MNC literature ever since MNCs were introduced by Kuno (1973). There have been two types of views on this matter: the first view is the famous ‘possessor-raising’-style analyses (Kang 1986, Yoon 1989, Ura 1999, Akiyama 2003 and

others) according to which NP1 undergoes raising from its thematic, DP-inside position to a structural subject position. As for the oblique MNCs, researchers such as Youn 1990, Hong 1992, Takahashi 1994 have proposed similar raising analyses, according to which NP1 is originally licensed as an oblique argument of the main predicate and it subsequently raises to a structural subject position. The simplified structures in (12) illustrate the main ideas of the raising analyses. Under this view, MNCs are derived from their non-MNC counterparts.

- 12) a.  $[_{XP} NP1_i \quad [_{XP} [_{DP} t_i \quad NP2] \quad predicate]]$  (possessive MNC)  
 b.  $[_{XP} NP1_i \quad [_{XP} t_i \quad NP2 \quad predicate]]$  (oblique MNC)

The second view regarding the licensing of NP1 is the so-called ‘base-generation’ approaches by Park 1981, O’Grady 1991, Heycock & Doron 2003, Vermeulen 2005. According to these authors, NP1 in a possessive MNC is base-generated in a DP-external position, yet it is linked to the DP-internal thematic position via  $\lambda$ -operator. The simplified structure in (13) illustrates the point.

- 13)  $[_{XP} NP1_i \quad \lambda_i [_{XP} [_{DP} e_i \quad NP2] \quad predicate]]$

In (13), the DP-internal thematic position is occupied by a null pronoun. Since the null pronoun is a variable, the whole XP semantically behaves as an unsaturated derived predicate. Thus,  $\lambda$ -operator introduces a new argument and connects the NP1 with the null pronoun.

Though the two types of approaches differ from each other in terms of their technicalities, both approaches crucially assume that an MNC is somehow linked with its non-MNC sentences. The link is established via a trace in the raising approach and it is a null pronoun bound by an operator in the base-generation approach. Now the question is whether these two approaches cover all the MNCs that I introduced above. The answer is negative. Consider the following oblique MNCs.

- 14) a. Mary-**ka**      kamki-**ka**    tul-ess-ta.  
       M-nom      cold-nom    enter-past-decl.  
       ‘(lit.) Mary, cold entered’ ‘Mary got cold’
- b. \*Mary-**hantey**    kamki-**ka**    tul-ess-ta.  
       M-dat            cold-nom    enter-past-decl.
- 15) a. Mary-**ka**      ywume-**ka**    iss-ta.  
       M-nom      humor-nom    exist-decl.  
       ‘Mary has humor’ ‘Mary is humorous’
- b. \*Mary-**hantey**    ywume-**ka**    iss-ta.  
       M-dat            humor-nom    exist-decl.

Unlike the oblique MNCs in (4-5a), the oblique MNCs in (14-15a) do not have their non-MNC counterparts: the dative constructions in (14b) and (15b) are all ungrammatical. This lack of the non-MNC forms above immediately proves the implausibility of the raising analysis under which MNCs are derived from their non-MNC forms via the

raising of the NP1. Does the ‘base-generation’ approach account for the MNCs above? The answer is also negative: in order for the ‘base-generation’ approach to be valid, one may have to assume that there is a null pronoun that does not manifest as an overt dative DP as in the (b) sentences. However, this assumption is not only speculative, but also unlikely. The same problem is also attested in generic MNCs. Consider the pair in (8) which is repeated here in (16).

- 16) a. I    *sinpal-i*                      *palkkwumchi-ka*    *appwu-ta*.  
           These shoes-nom    heel-nom                      hurt-decl.  
           ‘(lit.) these shoes, (my) heel hurts’  
           ‘These shoes make my heel hurt’
- b. I *sinpal-ul*                      *sin-umyen,*    *palkkwumchi-ka*    *appwu-ta*.  
           These shoes-acc    put.on-if                      heel-nom                      hurt-decl.  
           ‘Whenever I put on these shoes, (my) heel hurts’

It is impossible to argue that the generic MNC in (16a) is derived from (16b) or that NP1 in (16a) is introduced by a  $\lambda$ -operator that binds an empty pronoun from (16b).

## 2. Research Objectives and Overview

In the previous section, I showed that the existing proposals cannot cover all the types of MNCs that I introduced above. Of course, one may assume that the NP1s in the three types of MNCs above do not have to be licensed in a uniform way: each type of MNC may have its own NP1-licensing mechanism. Thus, under this assumption, the fact that

the existing proposals cannot cover all the types of MNCs would not be counted as a critical argument against the existing approaches. This type of assumption is certainly possible. However, the fact that the NP1s in all the three types of MNCs seem to form a natural class in terms of syntax and semantics challenges the validity of the assumption that the NP1s in these constructions are licensed in different ways. For example, I showed in the previous section that NP1s in possessive MNCs behave as sole arguments that are syntactically active, based on the fact that only NP1s can be a target of relativization. Indeed, all NP1s in other types of MNCs show this property.

#### Oblique MNC

17) a. Mary-**ka** pwung-**i** o-ss-ta. (=4a)

M-nom paralysis-nom come-past-decl.

‘(lit.) Paralysis came to Mary’ ‘Mary got paralyzed’

b. [[Op<sub>i</sub> [ t<sub>i</sub> pwung-**i** o-]-n] Mary<sub>i</sub>]

paralysis-nom come-rel Mary

‘Mary who got paralyzed’

c. \*[[Op<sub>i</sub> [Mary-**ka** t<sub>i</sub> o-]-n] pwung<sub>i</sub>]

M-nom come-rel paralysis

‘(intended) the paralysis that came to Mary’

## Generic MNC

18) a. I sakeli-**ka** sako-**ka** manhi palsayngaha-n-ta. (=7a)

This crossroad-nom accident-nom a lot happen-pres-decl.

‘This lake is such that bass are caught well in it’

b. [[ Op<sub>i</sub> [ t<sub>i</sub> sako-**ka** manhi palsayngaha]-nun] i sakeli<sub>i</sub>]

accident-nom a lot happen-rel this crossroad

‘This crossroad where accidents happen a lot’

c. \* [[ Op<sub>i</sub> [I sakeli-**ka** t<sub>i</sub> manhi palsayngaha]-nun] sako<sub>i</sub>]

this crossroad-nom a lot happen-rel accident

‘(intended:) the accidents that happen a lot in this crossroad’

(17) and (18) show that only NP1s, *Mary* in the oblique MNC and *i sakeli* ‘this crossroad’ in the generic MNC respectively, can undergo relativization. This relativization fact is consistent in all types of MNCs.

There is also semantic evidence indicating that the NP1s in all types of MNCs form a natural class. The interpretations of NP1s are consistent regardless of the type of MNC: when a predicate is stative, NP1 is interpreted as a holder; when a predicates denote a change of state event, NP1 is interpreted as an affectee/experiencer. The informal readings in (19), (20) and (21) illustrate this point.

## 19) Possessive MNCs

(1a): predicate: stative; NP1: holder (e.g. Mary is a holder of the property such that her arms are long)

(2a): predicate: change of state; NP1: affectee (e.g. Mary's car broke down and she was affected by this)

## 20) Oblique MNCs

(4a): predicate: change of state; NP1: affectee (e.g. Mary got cold and is affected by it)

(4b): predicate: stative; NP1: holder (e.g. Mary is a holder of a driver's license)

## 21) Generic MNCs

(7a): predicate: stativized generic event; NP1: holder (e.g. This crossroad is a holder of a generic property such that lots of traffic accidents happen there)

(8a): predicate: stativized generic event; NP1: holder (e.g. These shoes are a holder of a generic property such that they make heels hurt)

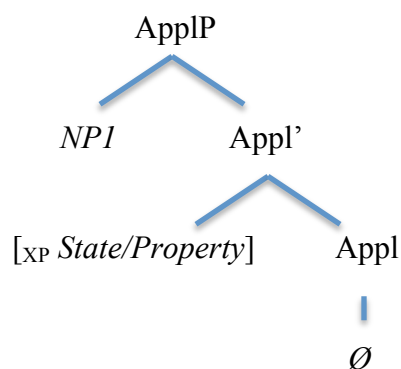
Given these observations, we can ask following questions: How are NP1s licensed? More specifically, is it possible to posit a single grammatical factor that licenses the NP1s in the different types of MNCs in a uniform way? If it is possible, what grammatical mechanism is it? In short, the answer is positive. The main goal of this thesis is to construct a theory under which all NP1s are licensed in a uniform way regardless of the types of MNCs.

To achieve this goal, I specifically reject the main assumption of the existing proposals according to which NP1s are direct thematic arguments of the possessee nouns or of the main predicates. Instead, I assume that NP1s are arguments of independently motivated functional heads called 'Applicative' heads (Marantz 1993, Pylkkänen 2002,

2008, Cuervo 2003, Li 2005, Schäfer 2008 among others). The main function of an applicative head is to introduce an additional/non-core argument that is not in the lexical specification of a lexical verb and to connect this additional argument to other phrases in the sentence. Following this basic assumption, I will propose that NPIs in MNCs are ‘additional’ arguments that are introduced and licensed by these null functional heads. This applicative approach intuitively explains the peculiar sentential argument-hood of NPIs in MNCs without positing any movement or operator-oriented binding mechanisms.

According to standard applicative theories (mainly by Pykkänen 2002, 2008, Cuervo 2003), an applicative head assigns to its applied argument various thematic roles such as Beneficiary, Malefactive, Possessor, Instrumental and so on. The innovation of this thesis is that I propose, based on empirical evidence, that there is a single applicative head in Korean whose sole function is to introduce a Holder argument. To facilitate this proposal, I will propose that the Korean applicative head has a special semantic selectional feature: that is, the applicative head s-selects only property-denoting or state-denoting expressions as its complement. This idea constitutes the backbone of my dissertation and I will show that all three types of MNCs have this basic applicative structure which is illustrated below.

22)



Even though I propose a single licensing mechanism in (22) for all types of MNCs, this does not mean that all the MNCs have a uniform structure. Each type of MNC deserves close inspection and requires different motivations for the applicative approach. In this respect, I provide three main chapters which deal with possessive MNCs, oblique MNCs, and generic MNCs respectively. Chapter 2 deals with possessive MNCs and proposes that possessive MNCs are instances of high applicative construction where the applicative head *s*-selects a property-denoting stative VP or a resultant state VP as its complement and links the applied arguments (NP1s) to these VPs. Chapter 3 deals with oblique MNCs and proposes that oblique MNCs are instances of low applicative construction where the applicative head *s*-selects property-denoting NP2s as its complements. In chapter 4, I deal with generic MNCs and argue that the MNCs are high applicative constructions where the applicative head *s*-selects stativized/modalized VPs and links these VPs to the applied arguments (NP1s). Chapter 5 summarizes the main discussions.

Under this assumption, the syntactic categories of the complements that the applicative head takes vary: for example, the applicative heads in possessive MNCs and generic MNCs take VPs as their complement. The applicative head in oblique MNCs takes NPs as its complement. However, the commonality that these complements share is that they all denote some sort of state/property (e.g. property-denoting stative VPs, resultant state VPs, property-denoting NPs and modalized/stativized VPs). This explains why Korean MNCs, with different syntactic structures, can be viewed as a single natural class. To the best of my knowledge, there is no work in the literature that unifies three

types of MNCs under the single notion of ‘applicative’ head. Thus, if this thesis turns out to be correct, the contribution of this thesis to the MNC literature will be significant.

### 3. Other Types of MNCs

Before moving on to the next chapter, I’d like to briefly discuss three types of constructions that have been considered as sub-types of MNCs in the literature, yet that will not be discussed in this thesis for independent reasons. Consider the sentences in (23).

23) a. Pihayngki-**ka** 747-**i** khu-ta.

Airplane-nom 747-nom big-decl.

‘As long as airplanes are concerned, the 747 is big’

b. Mary-**ka** John-**i** wul-key hay-sss-ta.

M-nom J-nm cry-KEY do-past-decl.

‘Mary made John cry’

c. Mary-**ka** emeni-**ka** kulip-ta.

M-nom mother-nom missing-decl.

‘Mary misses her mother’

Youn (1990) lists the sentences above as sub-types of MNCs; (23a) is named as a ‘Set-membership’ MNC, (23b) as a Causative MNC and finally, (23c) as an Experiencer MNC. The reason why these constructions are excluded in this thesis is clear: native speakers, including myself, find the grammatical status of these constructions

controversial. For example, as shown in (24), the ‘set-membership’ MNC in (23a) is highly degraded in my dialect and the NP1 *pihayngki* ‘airplane’ must be with the topic marker *-nun* in order for it to be acceptable.

24) a. ??? Pihayngki-**ka** 747-**i** khu-ta.  
           airplane-nom 747-nom big-decl.

b. Pihayngki-**nun** 747-**i** khu-ta.  
           airplane-top 747-nom big-decl.

‘As far as airplane is concerned, the 747 is big’

As for the causative MNC in (23b), the degraded status comes from the case-morphology on the NP2 *Mary*. As shown in (25b), in order for this sentence to be fully acceptable, the NP2 *Mary* must be marked with the accusative case *-ul*, functioning as a structural object of the periphrastic causative form ‘*-key ha-*’

25) a. \*Mary-**ka** John-**i** wul-[key hay]-ss-ta.  
           M-nom J-nom cry-caus-past-decl.

b. Mary-**ka** John-**ul** wul-[key hay]-ss-ta.  
           M-nom J-acc cry-caus-past-decl.

‘Mary made John to cry’

Finally, the experiencer MNC in (23c) is unacceptable since Korean psych-constructions are typically subject to the ‘first-person-subject’ constraint (Lee 2013). Consider the psych-constructions below.

- 26) a. \*Mary-/Ne-**ka**      emeni-**ka**      kulip-/coh-/mwusep-ta.  
       M/you-nom      mother-nom      missing/good/fearful-decl.
- b. Nay-**ka**      emeni-**ka**      kulip-/coh-/mwusep-ta.  
       I-nom      mother-nom      missing/good/fearful-decl.  
       ‘I miss/like/fear my mother’

The grammatical contrast in (26) shows that Korean psych-MNCs are only possible when the subject experiencer is the first-person pronoun. Lee (2013) proposes that the ‘first-person-subject’ constraint is due to the semantics of evidentiality that is idiosyncratically imposed on Korean psych-predicates. Even though I believe that this type of psych-MNCs in Korean are true sub-type of MNC, I won’t discuss them in this thesis due to this independently motivated idiosyncratic property.<sup>3</sup>

Having established the focus of this study, let me first start to investigate the syntax and semantics of possessive MNCs in the next chapter.

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<sup>3</sup> In Chapter 5, I will touch upon on Korean psych-MNCs, suggesting my own view on why these types of MNCs are subject to the ‘first-person-subject’ constraint.

## Chapter 2: Possessive Multiple Nominative Constructions

### 1. Introduction

How are arguments introduced and arranged in Syntax? This issue has been in debate for decades. In the literature, there are two main camps dealing with this question. Projectionists (Jackendoff 1997, Levin & Rappaport-Hovav 1995, 1998 among many others) assume that the lexical information of a verb is projected into syntax via special mapping algorithms such as the *Uniformity of Theta Assignment Hypothesis* (UTAH) (Baker 1988) or the *Event Structure Template* (Rappaport-Hovav & Levin 1998). According to this view, the argument arrangement in the syntax is fully decided by a verb's lexical information. On the other hand, Constructionalists (Borer 1994, Hale & Keyser 1993, Kratzer 1996, Marantz 1997, Ramchand 2008 among others) assume that arguments are introduced by series of functional heads that are built upon a verbal root. Under this assumption, the meaning of a construction is decided by a specific combination of functional heads arranged in syntax.

Both camps have their theoretical advantages and disadvantages, discussing various empirical evidence in favor of or against each view. In this respect, the sentences below are particularly interesting.

- 1) a. John melted the ice for me.  
b. John melted me some ice.

The PP *for me* in (1a) is apparently not an argument of the verb *melt*. In GB, this type of additional information is typically introduced in syntax as an adjunct PP. However, in (1b), this additional information seems to occupy an argument position. The question is how this additional DP that is not selected by verb is projected as an argument. The only option that projectionists have to take is polysemy. In other words, the verb in (1) has two different lexical entries in the lexicon. However, this view is quite undesirable as our lexicon, that is filled with idiosyncratic lexical rules, only cause learnability issues.

On the other hand, this phenomenon is not a problem according to constructionalists' view, as each additional piece of information may be introduced by a specific functional head in syntax. Inspired by the constructionalists' view, Pylkkänen (2002, 2008) proposes that there are two types of arguments, core arguments and non-core arguments. A core argument is an argument that is selected by a verb and projected into the syntax in an old-fashioned way. On the other hand, a non-core argument refers to an argument that is not selected by a verb but occupies an A-position in a sentence. According to her, the indirect object *me* in (1b) is a non-core argument and is introduced by a special functional head called an 'Applicative head'

In this respect, Korean possessive MNCs are particularly interesting in that the alleged subject of the construction seems to be an instance of non-core argument. The main theoretical challenge in the MNC literature was how the theories deal with an additional nominative subject in MNCs. The issue of how the additional subject is licensed has been a hot debate, ever since the construction was first introduced by Kuno (1973), and it continues to be a major problem. If we can give the applicative treatment to the possessive MNCs, it will bring a new perspective into this ongoing debate.

This chapter deals with two of the main topics of possessive MNCs: the syntactic structure of the construction and the semantics of the construction. Firstly, for the syntactic structure, I argue that Korean possessive MNCs are best described as an applicative construction where the additional subject of the sentence is introduced by the functional head ‘Appl’. Specifically, I argue that Korean possessive MNCs are instances of high applicatives where the applicative head takes a verbal phrase as its complement. Secondly, for the readings of the construction, I propose that the two main readings of the possessive MNCs (so-called possessive reading and affected reading) are compositionally derived from the same syntactic base. Specifically, I propose that the affected readings in the constructions have to do with ‘change-of-state’ semantics (and syntax).

This chapter is structured as follows. In section 2, I introduce two types of possessive MNCs and lay out main topics that this chapter deals with. In section 3, I review representative analyses in the previous literature and point out their shortcomings. In section 4, I introduce my analysis on the possessive MNCs. I provide a specific structural configuration for the possessive MNCs and discuss its syntactic and semantic consequences. Section 5 summarizes the chapter.

## **2. Overview**

Possessive MNCs refer to a type of construction where a DP that behaves as a thematic possessor of another DP occupies a syntactic position external to the possessed DP. (2) and (3) illustrate representative examples.

2) a. *Mary-uy tali-ka kil-ta.*

M-gen legs-nom long-decl.

‘Mary’s legs are long’

b. *Mary-ka tali-ka kil-ta.*

M-nom legs-nom long-decl.

3) a. *Mary-uy emeni-ka tolakasi-ess-ta.*

M-gen mother-nom die-past-decl.

‘Mary’s mom died’

b. *Mary-ka emeni-ka tolakasi-ess-ta.*

M-nom mother-nom die-past-decl.

*Mary* in (2a) and (3a) are possessors of the DPs, *tali* ‘leg’ in (2a) and *emeni* ‘mother’ in (3b) and they are assigned the genitive case in a canonical fashion in the specifier position of the determiner head. In these constructions, the whole possessive DP behaves as a thematic subject of the predicates. On the other hand, *Mary* in (2b) and (3b), the possessor DPs are assigned the nominative case in a DP-external position. The adverbial placement between the possessor DP and the possessee DP shows that the nominative possessor DPs are not in the DP-internal position.

4) a. \**Mary-uy cengmalo tali-ka kil-ta.*

M-gen really legs-nom long-decl.

\* ‘Mary’s in fact legs are long’

b. Mary-**ka** cengmalo tali-**ka** kil-ta.

M-nom really legs-nom long-decl.

‘In fact, Mary’s legs are long’

5) a. \*Mary-**uy** ecey emeni-**ka** tolakasi-ess-ta.

M-gen yesterday mother-nom die-past-decl.

\* ‘Mary’s yesterday mother died’

b. Mary-**ka** ecey emeni-**ka** tolakasi-ess-ta.

M-nom yesterday mother-nom die-past-decl.

‘Mary’s mom died yesterday’

Indeed, a similar phenomenon (DP-external realization of the possessor DP) is attested cross-linguistically and the constructions that show this effect are called ‘external possession’ constructions (Payne and Barshi 1999). The exact form in which the phenomenon is manifested varies across languages. In Korean, the external possession phenomenon is strictly confined to intransitive constructions and the external possessor DP is assigned the nominative case. To facilitate the discussion, in the next section, I briefly introduce basic properties of the possessive MNCs.

## 2.1. Properties of the Possessive MNCs

### 2.1.1. NP1 as a Structural Subject

We identified that the external possessor DP (hereafter NP1) is located in the DP-external position. The natural question would be: what syntactic position does the NP1 occupy? The following tests show that NP1 is best analyzed as a structural subject of the sentence.

#### 2.1.1.1. Scrambling

In MNCs, NP1 and NP2 behave differently in terms of scrambling.

6) a. Mary<sub>i</sub>-**ka** na-nun [<sub>CP</sub> t<sub>i</sub> tali-**ka** kil-tako] tul-ess-ta.  
 M-nom I-top legs-nom long-C hear-past-decl.

‘Mary, I heard that (her) legs are long’

b. \*Tali<sub>i</sub>-**ka** na-nun [<sub>CP</sub> Mary-**ka** t<sub>i</sub> kil-tako] tul-ess-ta.  
 legs-nom I-top M-nom long-C hear-past-decl.

\*‘(Her) legs, I hear that Mary is long’

In (6a), the NP1 *Mary* freely undergoes long-scrambling to the sentence initial position.

(6b), however, shows that the NP2 *tali* ‘leg’ cannot undergo scrambling.

#### 2.1.1.2. Relativization

They also behave differently in terms of relativization: (7a) shows that the NP1 can be the target of relativization. However, (7b) shows that the NP2 cannot undergo relativization.

7) a. [DP [CP t<sub>i</sub> emeni-ka tolakasi-n] Mary<sub>i</sub>]  
 mother-nom die-rel M

‘Mary whose mother died’

b. \*[DP [CP Mary-ka t<sub>i</sub> tolakasi-n] emeni<sub>i</sub>]  
 M-nom die-past mother

### 2.1.1.3. Binding

Finally, (8) shows that the NP1 can bind an anaphor but the NP2 cannot.

8) Mary<sub>i</sub>-ka chinkwu<sub>j</sub>-ka caki<sub>i/???j</sub> cip-eyse cwuk-ess-ta.  
 M-nom friend-nom self house-loc die-past-decl.

‘Mary’s friend died in Mary’s home’

The syntactic tests above show that NP1 behaves as a sole syntactic argument of the MNCs. Coupled with the fact that the nominative case *-ka/-i* is a subject marker in Korean, we conclude that NP1 is a structural subject (or at least it occupies an A-position)

### 2.1.2. Main Predicates of MNCs

Not all types of verbs are able to form a possessive MNC. Possessive MNCs are only well-formed when the main predicate is a property-denoting stative verb or a change-of-state unaccusative verb.

9) a. *yeppu-* ‘pretty’, *khu-* ‘big’, *celm-* ‘young’, *kkaykkutha-* ‘clean’, *chwup-* ‘cold’..etc.

- b. *cwuk*- ‘die’, *kocangna*- ‘get out of order’, *pwuleci*- ‘(intr.) break’, *hwui*- ‘(intr) bend’, *ssek*- ‘rot, get rotten’, *sangha*- ‘(intr.)deteriorate’, *phi*- ‘bloom’ ..etc.

The verbs in (9a) are property-denoting stative verbs whose semantic function is equivalent to the one of adjectives. Since Korean lacks the syntactic category of ‘adjective’ (Kim 2002), property-ascription is done via these stative verbs. The examples in (9b) are unaccusative verbs whose result states are lexically specified. These two types of verbs are always compatible with the possessive MNCs. In this thesis, I will refer to the MNCs with the verbs in (9a) as stative possessive MNCs and the MNCs with the verbs in (9b) as unaccusative possessive MNCs.

On the other hand, transitive verbs and unergative verbs can never form grammatical possessive MNCs.

- 10) a. \**Mary-ka emeni-ka chayk-ul ilk-usi-ess-ta.*

M-nom mother-nom book-acc read-hon-past-decl.

‘(intended:) Mary’s mom read the book’

- b. \**Mary-ka apeci-ka pemin-ul cwuk-i-ess-ta.*

M-nom father-nom suspect-acc die-caus-past-decl.

‘intended: Mary’s father killed a suspect’

- 11) a. \**Mary-ka emeni-ka ttui-si-ess-ta.*

M-nom mother-nom run-hon-past-decl.

‘(intended:) Mary’s mom ran’

- b. \*Mary-**ka** aiki-**ka** ttul-eyse nol-n-ta.  
 M-nom baby-nom garden-loc play-pres-decl.  
 ‘(intended:) Mary’s baby is playing in the garden’

That the possessive MNCs are most natural with stative verbs and COS unaccusative verbs (especially with stative verbs) is a well-observed fact in the literature. Unfortunately, however, there does not seem to be an analysis that directly deals with this fact as far as I know. A good theory about MNC should provide an answer for this well-known property.

### 2.1.3. Possessive and Affected Readings on NP1

Consider the two constructions in (3) which are repeated below.

- 12) a. Mary-**uy** emeni-**ka** tolakasi-ess-ta.  
 M-gen mother-nom die-past-decl.  
 ‘Mary’s mom died’
- b. Mary-**ka** emeni-**ka** tolakasi-ess-ta.  
 M-nom mother-nom die-past-decl.

Is there any reading difference between these two constructions? Since the NP1 in (12b) function as a possessor of the NP2, it has often been assumed that the semantic difference between (12a) and (12b) is minimal, and if there is one, it is pragmatic. According to

Hole (2006), however, there is an apparent semantic difference. Consider the sentences below in the context that Mary's death precedes her mother's death.

13) a. Mary-ka caknyen-ey cwuk-ess-ta.

M-nom last year-loc die-past-decl.

'Mary died last year'

Olhay-nun [Mary-uy emeni]-ka tolakasi-ess-ta.

This year-top M-gen mother-nom die-past-decl.

'this year, Mary's mother died'

b. Mary-ka caknyen-ey cwuk-ess-ta.

M-nom last year-loc die-past-decl.

'Mary died last year'

\* Olhay-nun Mary-ka emeni-ka tolakasi-ess-ta.

this year-top M-nom mother-nom die-past-decl.

'This year, Mary's mother died (on her)'

Given the context that *Mary* has died prior to her mother's death, the possessive DP construction in (13a) is fine while the MNC in (13b) is bad. Based on this contrast, Hole (2006) proposes that external possessors (the NP1 *Mary* in (13b)) are typically 'affected' by the eventuality denoted by the VP. According to him, the ungrammaticality of (13b) follows from the fact that a dead person cannot be affected (psychologically).

Whether this affectedness effect is semantic or pragmatic (or even syntactic) will be discussed later; I simply state two theory-neutral observations here. First, from the

grammaticality contrast shown in (13), it is apparent that the MNCs and their corresponding possessive DP constructions differ not only in terms of their syntax but also in terms of their interpretational properties. Second, though the ‘affected reading’ above is not mentioned in MNC literature, it is quite a salient property of external possession constructions in general. (see Hole 2006, Lee-Schoenfeld 2006, McIntyre 2006 for German, Cuervo 2003 for Spanish and Borer & Grodzinsky 1986, Landau 1999 for Hebrew and so on). Thus, as far as the semantics of the possessive MNCs is concerned, we are dealing with at least two separate readings: one is the possessive reading and the second is the affected reading.

In this chapter, we have briefly discussed three main properties of Korean possessive MNCs.

- A. Subjecthood of NP1: the external possessor NP1 seems to behave as a structural subject of the sentence.
- B. Distribution of MNCs: MNCs are most natural with property-denoting stative verbs and change-of-state unaccusative verbs. MNCs with unergative verbs and transitive verbs yield ungrammaticality.
- C. Semantics of MNCs: NP1 seems to have a dual role: a possessor role and an affectee role.

Based on these main properties, I ask three specific questions below. First, how is the NP1 licensed as a sentential subject? In other words, how is it that a DP that is not selected by a main verb occupies a sentential A-position? Second, why do MNCs only

occur with subset of intransitive verbs? What is the grammatical factor that decides the distribution of the possessive MNCs? Third, what exactly does a possessive MNC mean? Are the possessive readings and the affected readings on the NP1s derived compositionally? Or are those readings implied by non-linguistic factors? The main objective of this chapter is to answer these three main questions. Specifically, I aim to answer the questions by providing a syntactic structure of a possessive MNC where an applicative light verb and the eventuality of STATE play crucial roles. Before laying out my proposal, a review of previous analyses on the possessive MNCs is in order.

### **3. Previous Approaches**

The main focus of the previous approaches has been centered on the first question. That is, the question of how the NP1 is licensed. We can divide the MNC literature into two main types. I call the first type a ‘link analysis’ and the second type a ‘no-link analysis’. As their names suggest, the link analysis assumes that there is a formal link between the NP1 and the NP2. The no-link analysis does not assume any formal connection between these two nominals.

#### **3.1. Link Approach**

The main assumption of the link approach is that the NP1s are licensed as thematic arguments of NP2s. According to this approach, the possessor-possessee relation is a DP-internal thematic relation between two nominals and the NP1 is licensed as a possessor in a DP-internal position. This type of approach is again divided into two sub-types with respect to how the NP1 ends up in the sentence-initial position.

### 3.1.1. Raising Analysis

Ever since Kuno's (1973) theory-neutral 'subjectivization' proposal, many researchers tried to formalize this subjectivization process. A group of researchers propose that the NP1 undergoes syntactic movement to the structural subject position (Kang 1986, Yoon 1989, Ura 1999, Akiyama 2003 and Landau 1999 and others). According to them, the motivation of this raising is case-theoretic. According to this approach, the DP-internal thematic position is somehow a caseless position or a position where the case-checking is unavailable. Thus, the NP1 must raise to a DP-external case position to be licensed. The details of each analysis are slightly different from each other. For example, the syntactic position of NP2 varies: Ura (1996) proposes that both NP1 and NP2 are structural subjects that occupy the multiple specifiers of the IP (14a). According to Akiyama (2004), the NP2 stays in a VP-internal position and checks its case at LF (14b).

14) a.  $[_{IP} NP1_i \ [_{IP} [t_i NP2]_j \ [_{VP} t_j \ V]]]$

b.  $[_{IP} NP1_i \ [_{VP} [t_i NP2] \ V]]]$

Yet the core ideas of the proposals are the same: the NP1 is base-generated and theta-marked inside the possessee DP and it raises to the structural subject position for case-reason.

#### 3.1.1.1. Shortcomings

The raising approach, though intuitive in explaining the close relationship between MNCs and their corresponding possessive DP constructions, is quite problematic. First of

all, under the traditional GB framework, a movement from one case position to another case position is banned. In order for the NP1 to undergo case-driven raising, we need to speculate two things. First, the NP1 is theta-marked (for the possessor role) in a caseless position inside the projection of the possessee NP2. Second, there must be no intervening case position (e.g., spec/DP for the genitive case checking) between the theta-position of NP1 and the spec/IP. Without D-layer, the only available position in which the NP1 is theta-marked would be the complement position of the possessee NP2. However, this position is typically reserved for inalienable possessor DPs that are directly theta-marked by relational or part-whole possessee NPs (Alexiadou 2003). Yet, the semantic relations between two nominals in the possessive MNCs are not confined to this inalienable/part-whole relation. The possessive MNCs in (15) show this point.

15) a. Mary-**ka**    ankyeng-**i**    pwuleci-ess-ta.

M-nom    glasses-nom    break-past-decl.

‘Mary’s glasses broke (on her)’

b. Mary-**ka**    kapang-**i**    eps-eci-ess-ta.

M-nom    bag-nom    neg.exist-incho-past-decl.

‘Mary’s bag got lost’ ‘Mary lost her bag’

c. Mary-**ka**    cha-**ka**    kocangna-ss-ta.

M-nom    car-nom    get.out.of.order-past-decl.

‘Mary’s car broke down (on her)’

It is hard to insist that the possessee DPs in (15), *ankyeng* ‘glasses’, *kapang* ‘bag’ and *cha* ‘car’ are inalienable/relational possessee DPs. Thus, the argument of the raising analysis that all possessor DPs are base-generated and undergo case-theoretic raising is not warranted.

Another problem that the raising analysis faces is this: since the analysis assumes that an MNC is derived from its corresponding possessive DP construction and the derivation is purely case-theoretic, it is expected that there is no semantic difference between the MNC and its non-MNC counterpart. However, as we have seen earlier in section 2.1.3, the two constructions differ in that the MNC has so-called affected reading while its non-MNC counterpart does not: the two constructions in (13), behave differently under a certain contextual setup. The different grammaticality in (13) would not be expected if they were only different in their syntactic forms. Thus, the case-theoretic raising analysis fails to account for this semantic difference.

### 3.1.2. Base-generation Approach

The second type of the ‘link’ analysis assumes that the NP1 is base-generated in a DP-external position yet is linked to the DP-internal thematic position via  $\lambda$ -operator (Park 1981, O’Grady 1991, Heycock & Doron 2003, Vermeulen 2005). The basic structure that they posit is shown in (16).

16) [<sub>IP</sub> NP1<sub>x</sub>  $\lambda$ x [<sub>VP</sub> [<sub>DP</sub> pro<sub>x</sub> NP2] V]]

In (16), the DP-internal thematic position is occupied by a null pronoun. Since the null pronoun is a variable, the whole VP semantically behaves as an unsaturated derived predicate. Thus,  $\lambda$ -operator introduces a new argument and connects the NP1 with the null pronoun inside the derived predicate. Under this approach, NP1 is a derived subject that saturates the derived predicate via  $\lambda$ -abstraction.

The advantage of this base-generation approach is that it obviates the problems that the raising analysis faces. First, with the base-generation approach, we don't have to worry about the highly speculative DP-internal caseless position that the raising analysis posits (except the complement position where only inalienable possessors are thematically licensed): recall that the existence of the DP-internal caseless position was critical for the raising analysis since it triggers raising. Yet, I pointed out its highly speculative nature. Under the base-generation approach, the DP-internal thematic position, whichever it is, is occupied by a null pronoun which is licensed there and does not undergo movement. Thus, we don't have to speculate the existence of the caseless position inside DP. Second, the base-generation approach is also free from the critique that the raising analysis cannot account for the semantic disparity between MNCs and non-MNC counterparts: under the base-generation approach, MNCs are not directly derived from the non-MNC counterparts. This assumption, at least, implies that the semantics of MNCs do not have to be the same as one of the non-MNC counterparts.

### **3.1.2.1. Over-generation Problem**

The key assumption of the base-generation approach is the  $\lambda$ -operator. It binds the variable inside the VP and introduces a new subject that saturates the variable. The

question is how this semantic solution is optimized for MNCs. Indeed, the  $\lambda$ -abstraction is a general semantic tool that formalizes various syntactic operations such as relativization, control, movement, *tough*-predicate formation, and so on. Thus, it is hard to argue that  $\lambda$ -abstraction is the sole machinery that is responsible for the formation of the MNCs in Korean. In other words,  $\lambda$ -abstraction is too general to account for all the properties that MNCs have. For example, the base-generation approach cannot account for the question of why MNCs are restricted to only certain verb types (see section 2.1.2.). The approach simply overgenerates unwanted MNCs.

Indeed, Borer and Grodzinsky (1986), who propose the base-generation approach for the Hebrew external possession construction, brought up the issue of why the Hebrew external possession construction is ungrammatical with unergative verbs. Thus, it is appropriate to review their work briefly and to see if their work is applicable for Korean.

- 17) a. \*ha-kelev hitrocec **le-Rina**  
       the-dog ran.around to Rina  
       ‘Rina’s dog ran around’
- b. ha-kelev ne’elam **le-Rina**  
       the-dog disappeared to-Rina  
       ‘Rina’s dog disappeared’

In Hebrew, the externally realized possessor is assigned the dative case as shown in (17). According to Borer and Grodzinsky (1986), the external possessors in (17) are base-generated inside VP as an affected argument of V. They propose that the external

possessor DP must c-command and bind the possessee DP to get an appropriate interpretation. Since the possessee DP in (17b) is base-generated as the complement of the unaccusative verb *disappear*, the external possessor DP binds it and the sentence converges. On the other hand, the subject of the unergative verb (the possessee DP) in (17a) is base-generated in a VP-external position. Thus, the external possessor DP which is base-generated inside the VP cannot bind the syntactically higher possessee DP. Thus, the sentence cannot receive a correct interpretation and is ruled out.

Unfortunately, Borer and Grodzinsky's proposal cannot be applied in Korean MNCs. First of all, the proposal that the external dative possessor is the (affected) argument of the verb is unwarranted and highly speculative. For the sake of argument, let's suppose that the external possessor DP is the argument of the verb. Their analysis causes a problem for Korean MNCs: as shown earlier, Korean possessive MNCs are not only natural with unaccusative verbs but also perfect with property-denoting stative verbs which semantically function as adjectives in other languages. Now, under Borer & Grodzinsky's assumption, the possessee DPs in stative possessive MNCs must be base-generated as a complement of the stative verbs (in order to be bound by the possessor NP1). Yet, this assumption is controversial since the canonical view on the subject-adjective configuration is not the complement-head relation but specifier-head relation (Stowell 1981). On top of this, most of the property-denoting stative verbs used in the possessive MNCs are individual-level predicates whose logical subjects (possessee DPs) are base-generated in a position outside of the VP (Diesing 1992). Thus, under this canonical view combined with Borer and Grodzinsky's proposal, stative possessive

MNCs in Korean should never be grammatical. However, this is not the case. For this reason, Borer and Grodzinsky's analysis should be dropped, at least for Korean.

So far, I have introduced two types of link approach (a raising analysis and a base-generation analysis) and showed that neither analysis was able to predict the correct distribution of the possessive MNCs.

### 3.2. No-link Approach

Consider the following Japanese MNC in (18a) and its Korean version in (18b).

- 18) a. Buturigaku-**ga**      syuusyoku-**ga**      taihen da.  
       Physics-nom          finding.jobs-nom    difficult cop  
       ‘Physics [is such that] finding a job is difficult’
- b. Mwulihak-**i**          chwuicik-**i**          elyep-ta.  
       physics-nom        finding.job-nom    difficult-decl.

The MNCs in (18) are neither possessive nor adjunct MNCs in that neither the NP1 behaves as the possessor of the NP2 nor does it denote any spatial or instrumental relation with respect to the eventuality. Thus it is hard to infer that the NP1 is related to any gap inside the string of [NP2 + V]. Inspired by this type of MNC, a group of researchers propose that the existence of the link cannot be a necessary condition for the NP1s to be licensed. For example, Kuroda (1986) agrees with the previous ‘base-generation’ approach in that the NP1 in an MNC is a derived subject of the sentential predicate which is composed of the possessee NP2 and the main verb. However, unlike

the proponents of the link analyses, Kuroda assumes that there is no formal link between the subject and the sentential predicate. According to him, the syntactic string [NP2-nom V] is a thematically saturated sentence. What turns this full propositional sentence into a derived predicate is a cognitively defined speech act called ‘Categorical judgment’ which was originally proposed by Brentano in 19<sup>th</sup> century philosophical literature. According to him, there are two kinds of cognitive judgment types:thetic and categorical. The act ofthetic judgment simply expresses a speaker’s recognition of the existence of an actual situation. The categorical statement, on the other hand, consists of two separate acts, one the act of recognizing an entity (subject), and the other the act of affirming or denying what is expressed by the predicate about the subject. According to Kuroda (1986), this categorical judgment is what essentially defines the predication relation between the NP1s and the sentential predicates in (18). Later, Ladusaw (1994) reinterprets Kuroda’sthetic/categorical judgment and proposes that subjects ofthetic statements correspond to the subjects of stage-level predicates and the subject of the categorical statements to the subject of individual-level predicates. Based on Ladusaw’s distinction, Yoon (2006, 2007) proposes that NP1 in an MNC is nothing but the subject of an individual-level predicate.

### **3.2.1. Problems**

I make two short criticisms on this type of approach. First, I find Kuroda’s notion of ‘categorical judgment’ is too general to facilitate the exact licensing mechanism of NP1s in MNCs. Particularly, it over-generates unwanted MNCs. Without specifying the linguistic environments in which categorical judgment occurs, the proposal fails to

provide the correct distribution of MNCs. Second, Yoon's works (2006, 2007) try to be more specific about the notion of 'categorical judgment' by equating the categorical subjects with the subjects of individual-level predicates. However, his proposal is empirically wrong since not all MNCs yield a reading where the sentential predicate describes long-lasting, characteristic properties of the NP1. The sentential predicates in MNCs in (19) are by no means individual level predicates.

19) a. Mary-**ka** meli-**ka** apwu-ta.

M-nom head-nom sick-past

'Mary's head is sick' 'Mary has a headache'

b. Mary-**ka** ecey emeni-**ka** tolakasi-ess-ta.

M-nom yesterday mother-nom die-past-decl.

'Mary's mother died (on her) yesterday'

In this section, we have reviewed the previous approaches and their shortcomings. Specifically, I pointed out that the previous approaches, above all, face an over-generation problem: their licensing mechanisms are too general, they cannot predict the correct distribution of MNCs. In the next section, I introduce my own theory of the Korean possessive MNCs that sheds more light on this over-generation issue.

#### 4. MNC as Applicative Construction

There is another type of 'no-link' approach that has recently gained popularity in treating external possession constructions. As far as I know, Korean possessive MNCs have not

been treated under this type of approach. Since this approach will be the backbone of my analysis, I will introduce the background information about this approach in the next section.

#### **4.1. Applicative Head: Non-core Argument Introducer**

In traditional GB grammar, the syntactic mapping of arguments and non-arguments are relatively clear. An argument, a lexical item which is subcategorized by a verb, is mapped onto an A-position and its syntactic positions are regulated by various mapping algorithms such as UTAH (Baker 1988) and LCS (Jackendoff 1990). On the other hand, a non-argument, a lexical item which is not selected by a verb, is typically realized as an adjunct. Since they are not directly theta-marked by a verb, they accompany another lexical head that theta-marks them. Typically those heads are prepositions.

20) John kicked the dog for Mary.

In (20), *the dog*, which is the internal argument of the verb *kick*, is realized as a direct object. *Mary*, which is not subcategorized by the verb, is realized as a PP-adjunct where the P assigns a beneficiary role to *Mary*. In this respect, (21b) raises an interesting question.

21) a. Mary melted the ice for me.

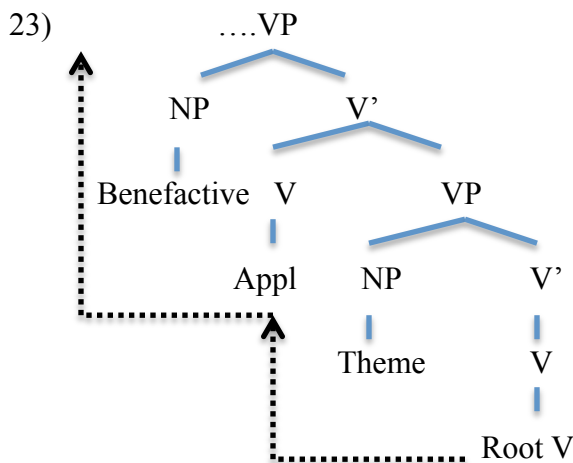
b. Mary melted me some ice.

In (21a), the beneficiary *me* is realized as an adjunct as usual. However, in (21b), the same DP with the same thematic role occupies an A-position (i.e. indirect object position). The question is how theories of argument realization deal with this beneficiary DP alternation. This argument alternation phenomenon is particularly challenging under the projectionists' view according to which different syntactic structures stem from the different lexical meanings of a verb. Various ideas have been suggested to solve this question. For example, Edmonds (1993) assumes that the beneficiary DP in (21b) is a real argument that is subcategorized by the verb and this subcategorization information is idiosyncratically listed in the verb's lexical entry. Another idea by Jackendoff (1990) and Levin & Rappaport-Hovav (1995, 1998) assumes that there is a special lexical rule that alternates the verb's argument structure (lexical semantic template). Beside technical validities of these approaches, neither approach conforms to the native speaker's intuition that the verb *melt* in (21a) is fundamentally different from the one in (21b).

On the other hand, under constructionalists' view, according to which the meaning of a sentence is decided by the 'construction' of functional heads stacked on a verbal root, the problems listed above do not arise. First of all, with this view, we don't need to posit multiple lexical entries for the verb *melt*. Second, the beneficiary DP *me* in (21b) can be in an argument position even though it is not subcategorized by the verb *melt*: it can be a functional head that introduces the beneficiary DP. Indeed, Marantz (1993) first proposed this idea.

- 22) a. Mavuto anaumba mitsuko kwa mfumu  
 Mavuto molded waterpots for chief
- b. Mavuto anaumb-ir-a mfumu mitsuko  
 Mavuto molded-APPL-Asp chief waterpots  
 ‘Mavuto molded the waterpots for the chief’

The sentences in (22) show the Chichewa beneficiary DP alternation that is similar to English data in (21). The difference is that in Chichewa, the overt applicative suffix is attached to the verb in (22b). Based on this, Marantz proposes that it is this applicative suffix *-ir-* that introduces the beneficiary argument. The simplified tree structure in (23) shows how the beneficiary NP is introduced and how the word order is derived.



Inspired by Marantz's work, Pylkkänen (2002) further develops her idea on the applicative head. Her main arguments can be summarized as follow.

- A. The meaning of a sentence is built in syntax via various functional heads.
- B. So-called ‘non-core’ arguments, which are not subcategorized by a verb, are introduced by these functional heads. Beneficiary NPs in (21b) and (22b) are ‘non-core’ arguments in this sense. Those NPs are introduced by a functional head called ‘Appl(icative)’
- C. There are two types of applicative head: High applicative head and low applicative head. These two applicatives are syntactically and semantically different from each other.
- D. High applicative heads attach above the VP and denote thematic relation between an applied argument and the eventuality denoted by the verb.
- E. The function of the high applicative head is identical to the one of the Voice head in Kratzer (1996). Both heads add an individual to eventuality denoted by VP via event identification. While the Voice head adds an agentive participant; an applicative head introduces various non-agentive event participants (e.g. beneficiary, malefactive, affected, etc). The semantics of the high applicative head is shown in (24). The structure in (25) is the high applicative construction that represents Chaga beneficiary construction.

24) High APPL:

$$\lambda x. \lambda e. \text{APPL}(e, x)$$

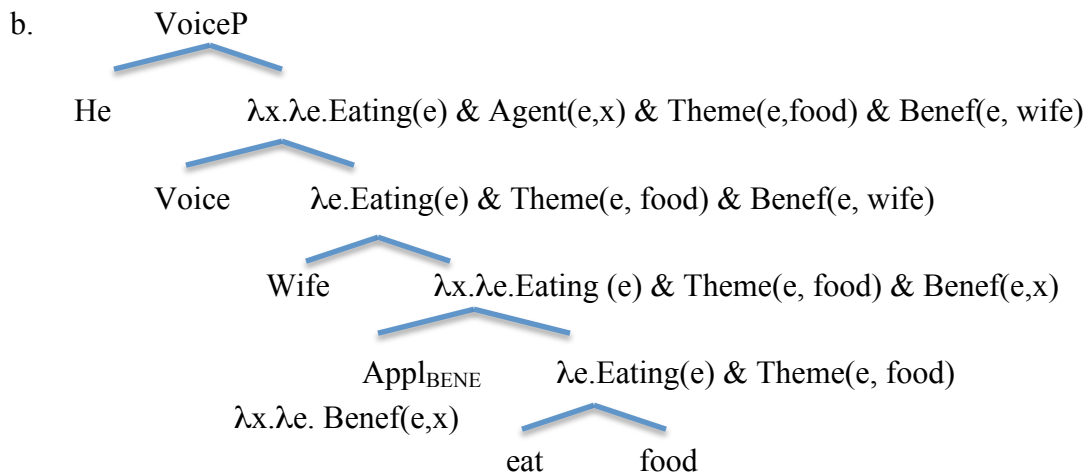
(collapsing APPL<sub>BEN</sub>, APPL<sub>INSTR</sub>, APPL<sub>LOC</sub> and so forth)

## 25) Chaga benefactive construction

a. N-a-y-lyi-i-a                      m-ka      k-elya.                      (Pylkkänen 2002:17)

Foc-1sg-pres-eat-appl-fv      1-wife    7-food

‘He is eating food for his wife’



F. On the other hand, a low applicative head combines with a nominal phrase (direct objects of the (in)transitive verbs), thus it configurationally originates below the VP. And it denotes a ‘transfer of possession’ relation (transfer between two entities, either in terms of a recipient or a source).

## (26) Lexical entries of low recipient and source applicatives

a. Low-Appl-TO (recipient applicative)

$\lambda x\lambda y\lambda f\langle e,\langle s,t\rangle\rangle.\lambda e.f(e,x) \& theme (e, x) \& to-the-possession (x,y)$

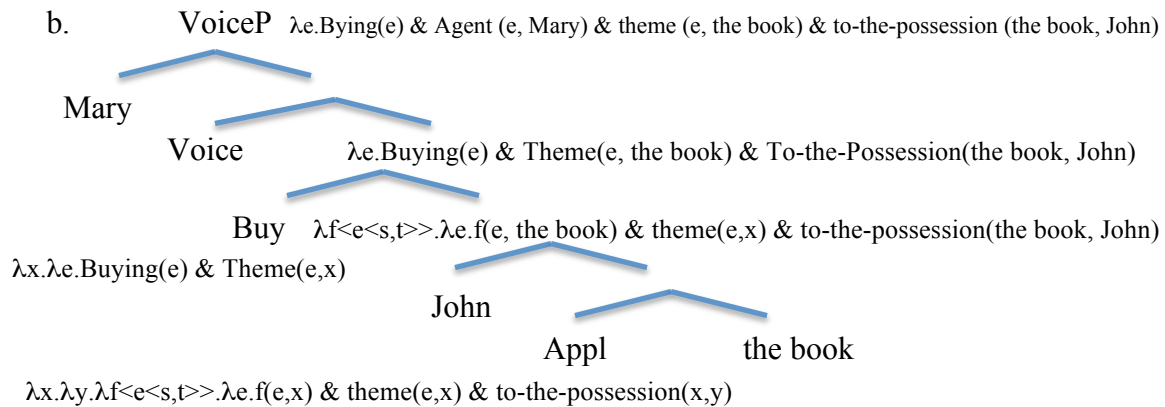
b. Low-APPL-FROM (Source applicative)

$\lambda x\lambda y\lambda f\langle e,\langle s,t\rangle\rangle.\lambda e.f(e,x) \& theme (e,x) \& from-the-possession (x,y)$

The lexical entries of low applicatives in (26) show that a low Appl takes three arguments, a theme argument, an applied argument (source or recipient of the theme) and a verb. The derivation of a low applicative construction is shown in (27).

### 27) English Low Applicative Construction

a. Mary bought John the book



The structure above yields a reading that there is a book-buying event performed by Mary and the book goes to the possession of John.

In this section, we briefly reviewed theories of applicative constructions: low applicatives relate a recipient or a source to an individual who is the internal argument of a verb and high applicatives relate an individual to an eventuality that is denoted by a VP. In the next section, based on this theoretical background, I introduce my applicative theory of Korean possessive MNCs.

#### 4.2. Proposal: Possessive MNC as a High Applicative Construction

Building on Pylkkänen's (2002, 2008) seminal work, I propose the applicative theory of Korean MNCs and show how my applicative approach answers the three main questions raised in the introduction.

Before going into details, let me briefly summarize the basic verbal representations that this thesis is based on. Since my analysis utilizes the applicative theory, I adopt basic notions of (neo-)constructional syntactic approaches. That is, I assume that the meaning of a construction is decided in syntax. Different meanings are products of different combination of various light verbs. Following Marantz (1997), I assume that verbs are formed in the syntax by the combination of lexical root and verbalizing light verbs. Specifically, I adopt Cuervo's (2003) basic assumption on event types. According to her, there are three basic event introducing light verbs,  $V_{DO}$ ,  $V_{GO}$  and  $V_{BE}$ . Roots combine with them and produce three basic event types.

- 28) a.  $V_{DO} + \text{Root} = \text{Activities}$  (dance, sweep, run)  
 b.  $V_{GO} + \text{Root} = \text{Changes}$  (come, fall, grow)  
 c.  $V_{BE} + \text{Root} = \text{States}$  (like, admire, lack)

Besides these three basic event types, derived event types are obtained by the combination of two light verbs.

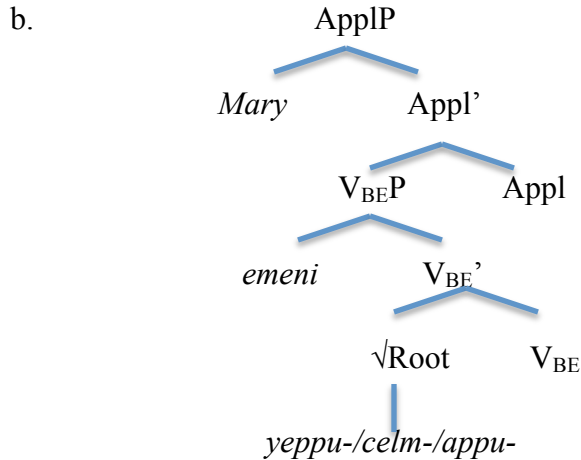
- 29) a.  $V_{DO} + V_{BE} + \text{Root} = \text{Accomplishment}$  (break, burn, close)  
 b.  $V_{GO} + V_{BE} + \text{Root} = \text{Inchoatives}$  ((intr). Break, burn, close)

#### 4.2.1. Stative Possessive MNCs

Note that there are two types of possessive MNCs in Korean: stative possessive MNCs whose main predicates are property-denoting stative verbs and eventive possessive MNCs whose main predicates are change-of-state unaccusative verbs. This section deals with the former type.

Recall that the central mystery of the MNC literature was the fact that the NP1 which is apparently not the (direct) argument of a main verb is licensed in a sentential argument position (subject position). We reviewed two types of previous approaches (the ‘link’ approach and the ‘no-link’ approach) and pointed out that both approaches face technical and empirical problems. The applicative theory provides a new insight into this mystery. I propose that the NP1s in the possessive MNCs are best analyzed as ‘non-core’ arguments that are introduced and licensed by a functional applicative head. Specifically, I argue that the NP1s in the possessive MNCs are introduced by a high applicative head. (30b) illustrates the structure of a stative possessive MNC in (30a).

- 30) a. Mary-**ka**      emini-**ka**      yeppu-/celm/appu-si-ta.  
       M-nom      mother-nom      beautiful/young/sick-hon-decl.  
       ‘Mary’s mom is beautiful/young/sick’



As shown in (30b), the NP1 *Mary* occupies the specifier position of ApplP. The high applicative head relates the NP1 to the state eventuality that is denoted by V<sub>BE</sub>P. I assume that Korean lacks a syntactic category of ‘Adjective’ just like Mohawk (Baker 2003). Thus, I assume that the category-neutral root like *yeppu-* ‘beautiful’ combines with a verbalizing light verb V<sub>BE</sub>, yielding a stative verb. Semantically, these stative verbs in Korean are no different from adjectives in languages with an adjectival category in that they both denote property states. Lastly, I assume that the NP2 *emeni* ‘mother’ occupies the specifier position of V<sub>BE</sub>P. The syntactic position of the NP2 needs more attention since it plays crucial role in the high applicative analysis of the possessive MNCs.

#### 4.2.1.1. NP2 as a Deep Subject

What makes a stative possessive MNC a high applicative construction? Pykkänen (2002) assumes that a low applicative head only applies to the direct object (objects of transitive verbs or deep objects of intransitive unaccusative verbs). According to her, a low applicative head cannot apply to the deep subject of a sentence (e.g. subjects of transitive verbs or subjects of unergative intransitive verbs). The reason is that low applicative

heads typically assign possessional SOURCE or RECIPIENT role to the applied arguments (i.e. to-the-possession-of, from-the-possession-of). Thus, if a low applicative head applies to the subject of these verbs, the sentence as a whole produces an illicit reading.

31) \*I ran Mary (as a low applicative construction)

(intended meaning: Mary ran to my possession or Mary ran from my possession)

As shown in (31), the sentence does not make sense at all given low applicative possessional semantics. Since there is no high applicative in English (according to Pylkkänen), the sentence in (31) only gets the source/recipient interpretation, rendering it semantically incorrect. On the other hand, languages with high applicatives have no problem in producing correct (beneficiary) semantics for the sentence like (31). (32) shows a Luganda high applicative construction with an unergative verb.

32) Mukasa ya-tambu-le-dde Katonga. (Pylkkänen 2002: 25)

Mukasa past-walk-appl-past Katonga

‘Mukasa walked for Katonga’

For this reason, Pylkkänen uses unergative constructions as a diagnostic for the high/low distinction. In this respect, it is important to decide whether the NP2 *emeni* ‘mother’ in (30) is a deep object or a deep subject. I provide two arguments in favor of its deep subjecthood. First, Korean intransitive stative verbs in possessive MNCs typically denote

properties just like adjectives in other languages do. Thus, even though they are categorically verbs, they are semantically and functionally equivalent to adjectives. This makes the relation between an NP2 and a property-denoting stative verb a predication relation where the stative verb ascribes property to its subject (NP2). It is highly likely that this predication relation is syntactically realized in a specifier-head configuration or a small clause configuration. If this assumption is correct, it means that an NP2 in a stative possessive MNC is not the complement of a verb.

Another argument that supports this assumption comes from Baker's (2003) analysis on Mohawk stative verbs. Mohawk, according to Baker, lacks the syntactic category of adjective, while property-denoting stative verbs function as adjectives. So far, Mohawk property-denoting stative verbs seem to be identical to Korean property-denoting stative verbs. However, Baker (2003) classifies Mohawk property-denoting stative verbs (e.g. *owanv* 'be.big') as a subtype of unaccusative verb. The reasoning is as follows: in (33a), the DP *wir* 'baby' is the subject of the unergative verb 'cry' and it cannot undergo incorporation with the verb. On the other hand, in (33b), the same DP *wir* is the deep object of the unaccusative verb 'fall' and it freely undergoes incorporation with its verb. Interestingly, (33c) shows that the DP *nuhs* 'house', which is the sole argument of the stative verb *owanv* 'be.big', is able to incorporate with its verb. Based on this parallel behavior, Baker concludes that the Mohawk stative verb is a subtype of unaccusative verb whose sole argument is base-generated in the verb's complement position.

- 33) a. \*Wa'-t-ka-wir-ahsv'tho-  
 fact-dup-N.sg-baby-cry-punc  
 'The baby cried'
- b. Wa'-ka-wir-v'-ne  
 fact-N.sg-baby-fall-punc  
 'The baby fell'
- c. Ka-nuhs-own-v            thikv.  
 N.sg-house-be.big-stat    that  
 'That house is big'

Contrary to Mohawk property-denoting stative verbs, Korean property-denoting stative verbs do not allow incorporation at all.

- 34) a. Mary-**ka**    kamki-**ka**    tul-ess-ta.  
 M-nom    cold-nom    settle.in-past-decl.  
 '(lit.) Mary, cold entered' 'Mary has cold'
- b. Mary-**ka**    **kamki-tul**-ess-ta.  
 M-nom    cold-enter-past-decl.
- 35) a. Mary-**ka**    cip-**i**            khu-ta.  
 M-nom    house-nom    big-decl.  
 'Mary's house is big'

b. \*Mary-ka cip-khu-ta.

M-nom house.big-decl.

(34a) is an oblique MNC whose main verb *tul-* ‘come.in, arrive, settle.in’ is a typical unaccusative verb. (34b) shows that the NP2 *kamki* ‘cold’ undergoes incorporation. (35) is a stative possessive MNC where the main verb *khu-* ‘be.big’ is a property-denoting stative verb. Unlike (34b), (35b) does not allow the NP2 *cip* ‘house’ to incorporate with the main predicate *khu-* ‘be.big’. If Baker’s incorporation diagnostic is correct, the unavailability of incorporation in (35) indicates that Korean property-denoting stative verbs cannot be unaccusative variants. This, in turn, supports the assumption that the sole argument (NP2) of a property-denoting verb in a stative possessive MNC is a deep subject.

In this section, I proposed that a Korean stative possessive MNC is a high applicative construction. This was based on the syntactic subjecthood of NP2 and I provided two supporting arguments for this conclusion.

#### 4.2.2. Eventive Possessive MNCs

This section deals with another type of possessive MNC, those that have eventive unaccusative verbs as their main predicates. In this section, I propose that this type of possessive MNC must also be classified as a high applicative construction.

#### 4.2.2.1. High or Low?

The MNCs in (36) are representative examples of eventive possessive MNCs whose main predicates are change of state unaccusative variants (underived unaccusatives in (36a, b, c) and inchoatives derived from transitive roots in (36d, e)).

36) a. Mary-**ka** emeni-**ka** tolakasi-ess-ta.

M-nom mother-nom die-past-decl.

‘Mary’s mom died (on her)’

b. Mary-**ka** ankyeng-**i** pwuleci-ess-ta.

M-nom glasses-nom break(intr.)-past-decl.

‘Mary’s glasses broke (on her)’

c. Mary-**ka** nwun-**i** pwus-ess-ta.

M-nom eyes-nom swell-past-decl.

‘Mary’s eyes are swollen’

d. Ku pay-**ka** toch-**i** ccic-eci-ess-ta.

the boat-nom sail-nom tear-incho-past-decl.

‘The boat tore its sail’

e. Mary-**ka** intay-**ka** kkun-eci-ess-ta.

M-nom ligament-nom cut-incho-past-decl.

‘Mary tore her ligament’

As shown in the previous chapter, Pylkkänen’s High/Low Appl distinction depends on the availability of direct objects: Low applicative head only applies to direct objects

(deep objects). It cannot apply to deep subjects. Thus, only high applicatives can apply to unergative constructions. Based on this, Pylkkänen (2002) proposes that Hebrew possessor dative constructions (external possession constructions) are low applicative constructions. She argues that the fact that Hebrew possessor dative constructions are never possible with unergative verbs (Borer & Grodzinsky 1986) is immediately accounted for under her low applicative analysis.

It is very attractive to analyze the Korean possessive MNCs in (36) as low applicative constructions since the main predicates in (36) are all unaccusative variants whose sole arguments (NP2s) are deep objects. Also, the unavailability of unergatives in the eventive possessive MNCs in (37) seems to support the Pylkkänen's analysis.

37) a. \*Mary-**ka** emeni-**ka** ttui-si-ess-ta.

M-nom mother-nom run-hon-past-decl.

‘(intended) Mary’s mom ran’

b. \*Mary-**ka** aiki-**ka** ttul-eyse nol-n-ta.

M-nom baby-nom garden-loc play-pres-decl.

‘(intended) Mary’s baby is playing in the garden’

From these two empirical facts, it seems quite counter-intuitive to assert that the possessive MNCs in (36) are high applicative constructions. Nevertheless, I reject the Pylkkänen-style low applicative analysis for Korean possessive MNCs.

In this section, I propose that Korean eventive possessive MNCs share the same syntactic structure as the stative possessive MNCs. The logic behind this proposal is that

the NP2s in (36) are indeed deep subjects of the main predicates. More specifically, I show that the NP2s in (36) are subjects of (resultant) state sub-events. Under this configuration, the low applicative head cannot apply to these NP2s. Thus, NP1s in (36) should be introduced by a high applicative head.

#### 4.2.2.2. Two Types of Unaccusatives in Spanish

Ever since Perlmutter's (1978) Split Intransitivity Hypothesis under the Reference Grammar framework and the subsequent GB works by Burzio (1986) and Levin & Rappaport-Hovav (1995), the majority of researchers agree that the sole argument of an unaccusative verb is a deep object which is base-generated in the complement position of the verb.

Recently, based on the fact that unaccusative verbs do not form a homogeneous natural class semantically, Cuervo (2010, In press) proposes that distinct semantic properties of unaccusative verbs should also mirror their syntactic structures. She argues that there are at least two-types of unaccusative structure: Cuervo proposes that Spanish unaccusatives can be divided into two main variants depending on whether they have reflexive clitic *se* or not. Some verbs are always realized with the clitic *se*. Some verbs are not.

#### 38) *Se-/Se-less* Unaccusatives

a. Obligatory *se*-variants: *hundirse* 'sink', *romperse* 'break', *derretirse* 'melt', *abrirse*

'open'

b. Optional *se*-variants: *caer(se)* 'fall', *morir(se)* 'die', *ir(se)* 'go', *salir(se)* 'come off/out'

c. *Se*-less variants: *ilegar* ‘arrive’, *venir* ‘come’, *rodar* ‘roll’, *suced*er ‘happen’, *faltar*  
 ‘lack’

Cuervo notices that these *se*-/*se*-less variants differ in terms of their semantic and syntactic properties. First, *se*-variants (anticausatives) usually alternate with their transitive counterparts while *se*-less variants do not show this alternation. Second, *se*-variants encode change-of-state (inchoative) events where the change events and its resulting state are specified together. On the other hand, *se*-less variants encode simple change event (without any specific result state). Thus, *se*-less variants allow atelic readings as in (39a) while *se*-variants only yield telic readings (39b).

39) a. El avion cayo durante tres minutos/\* en tres minutos (Cuervo: In press: 4)

‘The plane fell for three minutes/\*in three minutes

b. El avion **se** cayo \*durante tres minutos/en tres minutos

‘The plane fell down \*for three minutes/in three minutes’

Finally, *se*-less variants allow bare noun subjects while *se*-variants do not.

40) a. Cayeron hojas

fell leaves

‘(Some) leaves fell’

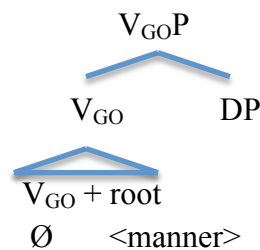
- b. \* Se cayeron hojas  
 fell down leaves  
 ‘(Some) leaves fell down’

Based on these differences, Cuervo argues that these *se/se-less* unaccusatives have different syntactic structures.

41) a. *Se-less* variant

*Salieron muchos yuyos*

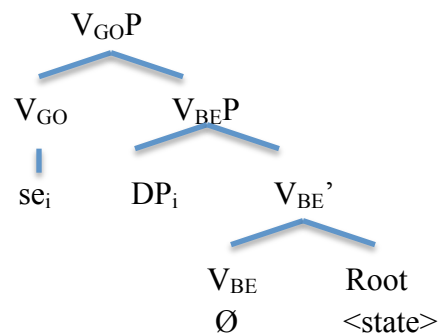
‘There appeared many weeds’



b. *Se*-variant

*Se salieron tres clavos*

‘Three nails came off’



In (41a), the *se-less* unaccusative has a simple mono-event structure that encodes a simple change or directed motion event. In this structure, the root adjoins to the phonologically null verbalizing head  $V_{GO}$  and specifies the manner of the event. On the other hand, *se*-unaccusatives in (41b) have a complex event structure which consists of a CHANGE sub-event (represented by  $V_{GO}$ ) and a result STATE sub-event (represented by  $V_{BE}$ ). The root combines with a stative light verb as its complement. In this configuration, the argument DP has a dual role. It is not only an undergoer of a CHANGE event but also

a holder of the result STATE eventuality. Thus, the structure exactly mirrors the change-of-state (Achievement) semantics of *se*-unaccusatives.<sup>4</sup>

What is important for us is Cuervo's assumption that the argument DP in *se*-less variants (41a) is base-generated as a complement of  $V_{GO}$  while the argument DP in *se*-variants (41b) is base-generated as a subject of the stative  $V_{BE}$ . According to her, the different argument position is why bare nouns in Spanish behave differently in unaccusative constructions. Cuervo notes that Spanish bare nominals are systematically excluded in deep subject positions such as external argument positions of transitive verbs or unergative verbs and the subject positions of small clauses. Based on this, she proposes the following constraint:

#### 42) Bare Noun Phrase Constraint

*An unmodified common noun cannot be the subject of a predicate under conditions of normal stress and intonation.*

In other words, Spanish bare nouns cannot be a subject in subject-predication relation. Thus, she attributes the unavailability of bare nouns in *se*-unaccusatives to the specific structural property of *se*-unaccusatives that requires its argument to be a subject of the result state sub-event.

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<sup>4</sup> The close relationship between the reflexive clitic and the result state is also observed in Folli & Harely (2005). Though their syntactic analysis is different from Cuervo's (2010, In press) analysis, the basic assumptions are the same. That is, the reflexive clitic and change-of-state inchoativity are grammatically closely related.

#### 4.2.2.3. NP2 as a Deep Subject

Inspired by Cuervo's structural distinction between simple-change/directed-motion unaccusatives and COS unaccusatives, I propose that the NP2s in the eventive possessive MNCs in (36) are deep subjects, and because of this, the NP1s are introduced by a high applicative head.

There are two reasons to believe that the NP2s in (36) are deep subjects rather than deep objects. First, the unaccusative verbs that appear in the eventive possessive MNCs in (36) are unambiguously change of state (COS)-variants. Thus, if Cuervo's assumption is correct, NP2s in the possessive MNCs must be base-generated in the specifier position of the  $V_{\text{BEP}}$  that encodes the result state. The natural question is: what happens if the non-COS unaccusatives occur in the eventive possessive MNCs? The sentence is ungrammatical as shown in (43a) where the non-COS unaccusative verbs *cala-* 'grow' is used.

43) a. \*Mary-**ka** meli-/atul-**i** cala-ss-ta.

M-nom hair-/son-nom grow-past-decl.

'Mary's hair/son grew'

b. Mary-**ka** meli-/atul-**i** ta/wancenhi cala-ss-ta.

M-nom hair-/son-nom fully/completely grow-past-decl.

'Mary's hair/son is fully grown'

On the other hand, (43b) shows that (43a) becomes grammatical if we put an adverb that explicitly specifies the end result/final point of the change. The reason is clear: the non-

COS unaccusative verb becomes a COS unaccusative with the help of an end-state specifying adverb and this licenses the NP2 as a subject of the result state sub-event. This further supports Cuervo's analysis.

The second piece of evidence in favor of the deep subjecthood of the NP2s comes from the incorporation fact. Consider the MNCs where the main predicate are typical non-COS unaccusatives (*o-* 'come', *na-* 'happen', 'come out' and *iss-* 'exist')

44) a. Mary-**ka** sonim-**i** o-ass-ta.

M-nom guest-nom come-past-decl.

'(lit.) Mary, a customer came' 'Mary got a customer'

b. Mary-**ka** sako-**ka** na-ss-ta.

M-nom accident-nom happen/come.out-past-decl.

'(lit.) Mary, an accident happened' 'Mary got accident'

c. Mary-**ka** sikan-**i** iss-ta.

M-nom time-nom exist-decl.

'(lit.) Mary, time exist' 'Mary has time'

Note that we concluded that non-COS (simplex) unaccusatives are banned in the eventive possessive MNCs (without an explicit end result). Thus, the MNCs in (44) can't be possessive MNCs. (45) shows that these MNCs are oblique MNCs: The nominative NP1s can freely alternate with dative DPs. On the other hand, genitive alternation is not allowed. This indicates that the MNCs in (44) are oblique MNCs.

- 45) a. Mary-**hantey**/**\*-uy** sonim-**i** o-ss-ta.  
 M-dat/-gen guest-nom come-past-decl.  
 ‘A customer came to Mary/\*Mary’s customer came’<sup>5</sup>
- b. Mary-**hantey**/**\*-uy** sako-**ka** na-ss-ta.  
 M-dat/-gen accident-nom happen/come.out-past-decl.  
 ‘An accident happened to Mary/\*Mary’s accident happened’
- c. Mary-**hantey**/**#-uy** sikan-**i** iss-ta.  
 M-dat/-gen money-nom exist-decl.  
 ‘Mary has time/#Mary’s time exist’

Now, what is important for us is that the oblique MNCs in (46) allow incorporation of the NP2s into the main verbs while the eventive possessive MNCs in (47) do not.

46) MNCs with non-COS unaccusatives (oblique MNCs)

- a. Mary-**ka** sonim-**o**-ss-ta.  
 M-nom guest-come-past-decl.  
 ‘Mary got a guest’

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<sup>5</sup> The possessive construction in (45a) is actually possible. However, this possessive form has a different reading where *Mary’s guest* refers to a specific person.

Mary-uy sonim-i o-ss-ta  
 M-gen guest-nom come-past-decl.  
 ‘Mary’s guest (let’s say Mr. Kim) came’

On the other hand, the NP2 *sonim* ‘guest’ in (44a) refers to a non-specific, indefinite person. The NP2 here cannot be a referential. Thus, the reading is more close to ‘Mary got a guest’.

b. Mary-**ka sako-na-ss-ta**.

M-nom accident-happen-past-decl.

‘Mary had an accident’

c. Mary-**ka sikan-iss-ta**.

M-nom time-exst-decl.

‘Mary has time’

47) MNCs with COS unaccusatives (eventive Possessive MNCs)

a \*Mary-**ka emeni-tolakasi-ess-ta**. (=36a)

M-nom mother-die-past-decl.

‘(lit.) Mary, mother-died’

b. \* Mary-**ka ankyeng-pwuleci-ess-ta**. (=36b)

M-nom glasses-break-past-decl.

‘(lit.) Mary, glasses-broke’

(46) shows that the NP2s and the non-COS verbs freely form a single unit via incorporation while (47) shows that such incorporation is not available with the COS verbs. How can we characterize this contrast? I propose that the contrast follows naturally if we accept Cuervo’s structural distinction between COS unaccusatives and non-COS unaccusatives. The sole argument of a non-COS unaccusative is base-generated as a complement of  $V_{GO}$  while the argument of a COS unaccusative is base-generated as a specifier of  $V_{BE}$  (i.e., the subject of a result state sub-event). Under Baker’s assumption

that incorporation is only available between the head and its complement, the unavailability of incorporation in (47) is expected.

To summarize, I proposed that eventive possessive MNCs whose main predicates are change of state unaccusative verbs should be analyzed as high applicative constructions. The proposal was based on Cuervo's assumption that the sole arguments of the COS unaccusatives in Spanish are base-generated in the spec/ $V_{BE}P$ . I showed that incorporation facts in Korean support Cuervo's assumption.

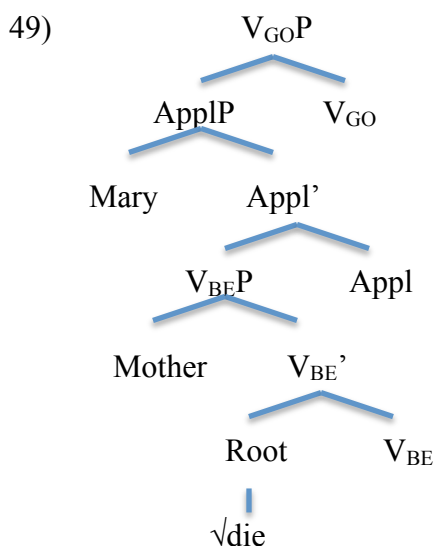
#### 4.2.2.4. Structure of the Eventive Possessive MNCs

Having established the syntactic position of NP2s in the possessive MNCs, I propose that an eventive possessive MNC in (48) has the following high applicative structure in (49).

48) Mary-ka emeni-ka tolakasi-ess-ta.

M-nom mother-nom die-past-decl.

'Mary's mom died (on her)'

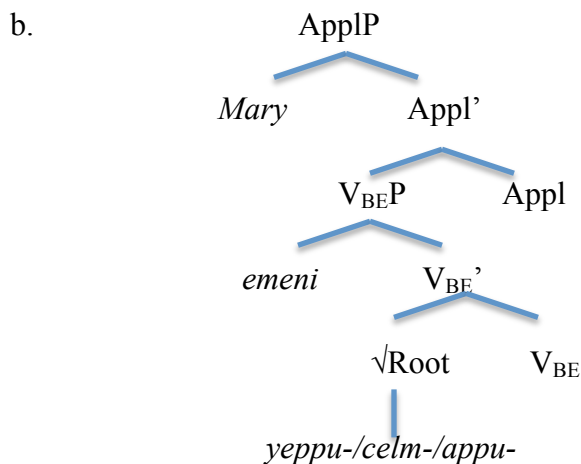


In (49), the root *tolakasi-* ‘die’ combines with a stativizing head  $V_{BE}$ . This constitutes a lower resultant state sub-event. The NP2 *emeni* ‘mother’ functions as a deep subject of the resultant state VP. Due to the inner subjecthood of the NP2, NP1 is introduced by a high applicative head. Finally,  $V_{GO}$  (which encodes the CHANGE sub-event) is introduced.<sup>6</sup> In (49), the applicative head is located between two sub-events of a single verb. Note that this makes the syntactic structure of the eventive possessive MNCs in (49) not much different from the structure of the stative possessive MNCs in (30). In both constructions the high applicative heads uniformly select a stative  $V_{BEP}$ . The only difference is that the stative possessive MNCs lack an event-denoting  $V_{GO}$  head on top of the structure. The structure of the stative possessive MNC in (30) is repeated in (50).

50) a. Mary-**ka**      emini-**ka**      yeppu-/celm/appu-si-ta.      (=30)

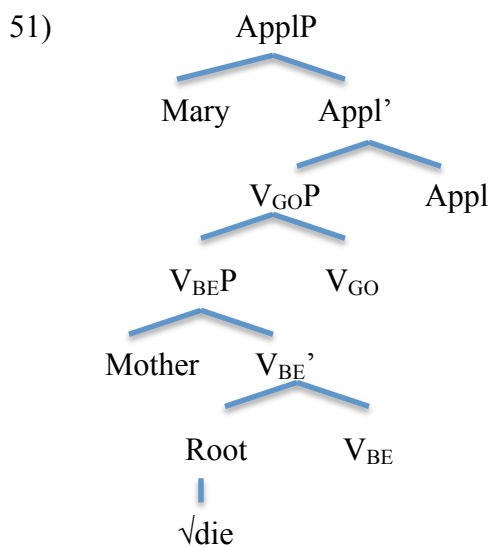
M-nom      mother-nom      beautiful/young/sick-hon-decl.

‘Mary’s mom is beautiful/young’



<sup>6</sup> The syntactic structure in (49) is originally proposed by Cuervo (2003). The significant difference between my proposal and Cuervo’s proposal lies in the semantic manifestation of this specific configuration. As we will see later, my proposal of how the affected readings are encoded in this structure differs from Cuervo’s proposal.

I believe that this minimal structural difference between (49) and (50) is a welcome result, as we don't need to posit two separate high applicative heads that select different types of complements. Yet, one may argue that inserting the high applicative head between the two sub-event denoting light verbs  $V_{GO}$  and  $V_{BE}$  is unwarranted since another syntactic configuration is available. (51) illustrates the alternative structure for the eventive possessive MNCs in Korean.



The difference is clear: in (49), the event-denoting  $V_{GO}$  takes ApplP as its complement, scoping over the applied subject *Mary*. In (51), the applicative head takes  $V_{GOP}$  as its complement, scoping over the whole change of state event.

How do we justify that the structure in (49), not the one in (51), is the correct representation of the eventive possessive MNCs? The justification comes from the semantic difference that two distinct structures yield. For example, the structure in (49) predicts that the applied argument (NP1) is the part of ‘change of state’ event by being under the scope of the  $V_{GO}$  which denotes the sub-event CHANGE. In other words, the

NP1 in (49) is a direct participant of change-of-state event. (i.e., an entity that undergoes some change). On the other hand, the NP1 in (51) is not direct participant of the change of state event as the  $V_{\text{GOP}}$  denoting CHANGE is dominated by the applicative head. The configuration of (51) simply predicts that the applied DP (NP1) is in some relation with the change of state event.

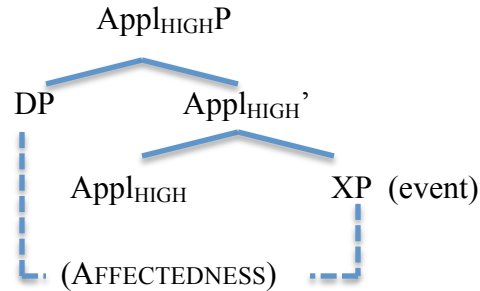
The discussion above naturally leads us to the other main topic of this chapter, the semantics of the MNCs. In the next section, I review two previous analyses where so-called affected readings of high applicative constructions are derived in accordance with the structure of (51). Then, I provide my own analysis where the affected reading is defined under the notion of ‘change of state’. Consequently, I argue that my idea is best represented under the structure of (49).

### **4.2.3. Affectedness and High Applicative Head**

In this section, I show that the so-called ‘affected’ readings imposed on the NP1s in the eventive possessive MNCs are better captured in the structure of (49).

It has been widely assumed in the literature that the semantic relation between an applied argument that is introduced by a high applicative and the eventuality that is a complement of a high applicative head is characterized as an affectedness relation. (Pylkkänen 2002, Bosse 2011, McIntyre 2006, Lee-Schoenfeld 2006, Schäfer 2008 among others)

52)



The affectedness relation is taken as a cover term for various thematic relations (beneficiary, malefactive, experiencer...etc.) that the applied argument can have with respect to the eventualities denoted by the complement of the Appl head. There are mainly two types of approaches regarding how the affectedness relation is established between the applied argument and the eventualities.

#### 4.2.3.1. Applicative Head as a Thematic Role Assigner

One type of approach takes the applicative head as a thematic role assigner. Pykkänen (2002) proposes that each applicative head comes with its own theta-role, such as beneficiary, malefactive, instrumental, etc. It assigns an appropriate theta role to the applied argument. Pykkänen's treatment has some shortcomings though. Consider the following Korean possessive MNCs.

53) a. Mary-**ka** intay-**ka** ccic-eci-ess-ta.

M-nom ligament-nom be.torn-incho-past-decl.

'Mary's ligament is torn and she is affected by this'

b. Mary-**ka** emeni-**ka** tolakasi-ess-ta.

M-nom mother-nom die-past-decl.

‘Mary’s mom died and she is affected by this’

Under Pykkänen’s assumption, the NP1s in the MNCs in (53) are assigned a malefactive role: the eventualities denoted by the predicate create bad effect on the NP1s. However, this effect is a pragmatically implied one. Typically one may be unhappy when his/her ligament is torn. But the effect can be the opposite under different circumstances: *Mary* in (53) may be delighted when her ligament is torn if that’s the only way she can take a long rest or if *Mary* indeed enjoys hospital life. In this respect, the sentences in (53) raise a question on how thematic role assignment is regulated.

One may suggest that this problem disappears if the high applicative head uniformly assigns an experiencer role (either physical or psychological). However, this suggestion also faces a problem given the sentences in (54) where the affected NP1s are inanimate that cannot receive an experiencer role.

54) a. This yothu-**ka** tochtay-**ka** pwuleci-ess-ta.

this yacht-nom mast-nom break (intr.)-past-decl.

‘The mast of this yacht broke and the yacht is affected by this’

b. I telepi-**ka** LCD pan-**i** kkay-ci-ess-ta.

this TV-nom LCD panel-nom shatter-inch-past-decl.

‘This TV’s LCD panel is shattered’

Due to these shortcomings, some researchers (Hole 2006, Lee-Schoenfeld 2006 and Bosse 2011) propose that the high applicative head is an ‘Affect’ head that discharges an ‘affected’ theta role to the applied argument. Unfortunately, these authors do not elaborate on the exact nature of this role. For example, they do not address the question of how their notion of affectedness is different from or similar to the traditional notion of affectedness: for example, an affected argument is assumed to be an event participant that undergoes some change in its physical or abstract property. (Fillmore 1970). Affectedness has also been playing a central role in argument alternation phenomena (especially in determining direct objecthood) (Dowty 1991). Affectedness has also been assumed to be a determinant factor in deciding telicity. (Tenny 1994, Beavers 2006). Unfortunately, the authors above do not mention whether the affected applied arguments are also related to these properties.

Another problem that arises when treating the notion of affectedness as a thematic role is that we end up having multiple theta roles for affected arguments: theme, patients, affected, and experiencers. What difference or similarity are all of these differently named theta roles supposed to have?

#### **4.2.3.2. Applicative Head as HAVE<sub>EXP</sub>**

McIntyre (2006) brings another approach in deriving the affectedness in high applicative constructions. He proposes that German high applicatives are similar to English experiencer HAVE-constructions. Thus, the affected readings on the applied arguments and the experiencer readings on the subjects of the HAVE constructions are derived in a similar way.

The verb HAVE in English has a very wide range of use and its interpretation also varies depending on grammatical and non-grammatical factors. Here are representative examples from Harley (1998).

- 55) a. Getafix had [a golden sickle]. (possessor: alienable)  
 b. The oak tree has [many branches]. (possessor: inalienable)  
 c. Pinocchio had [milk poured on him]. (experiencer)  
 d. Asterix had [Obelix running errands for him] (causative)

Syntactically, the verb HAVE can either take a nominal complement (55 a and b) or a phrasal predicative XP (typically small clause) (55 c and d). When the complement is nominal, the subject of HAVE is interpreted as an (in)alienable possessor (55 a and b) and when the complement is phrasal, the subject can either get an experiencer reading (55c) or a causer reading (55d).

In order to account for these various readings of HAVE constructions, the proponents of single HAVE analysis such as Belvin (1996), Ritter & Rosen (1997) and Harley (1998) propose that the verb HAVE is a light verb whose semantic specification is bleached and the various readings in (55) are dependent on other factors. For example, Harley (1998) proposes that the experiencer reading is a by-product of three main factors: i) thematically-null HAVE, ii) stativity of the complement phrase, and iii) the existence of a bound pronominal in the complement phrase.

McIntyre (2006), based on the treatment of HAVE in English, proposes that German high applicatives are nothing but experiencer HAVE constructions in English.

According to him, the high Appl/HAVE is a purely functional head that simply asserts that there is an underspecified relation between the applied arguments and the complement phrase. (56) is what an applicative head/HAVE means formally.

56) *HAVE* ( $x, y$ ), where  $y$  is either a DP or a situation,<sup>7</sup> asserts of  $x$  that it is in some relationship with  $y$ . (McIntyre 2006)

For example, the subject of the nominal HAVE construction in (55a) has a possessor reading not because the APPL/HAVE assigns a thematic possessor role, but because our world knowledge computes in such a way that the asserted underspecified relation between two nominals must be a possession relation. As for the affected readings in high applicatives, he provides a similar, pure pragmatics-based explanation.

57) a. (weil) ihm ein Sohn sterb

since he.dat a son die

‘(since) he had a son die (on him)’

b. [<sub>VDATP</sub> ihm [<sub>VP</sub> ein Sohn sterb-] <sub>VDAT</sub>] (<sub>VDAT</sub> = Appl<sub>HIGH</sub>)<sup>8</sup>

According to (56), (57) entails that the dative subject *ihm* relates to a situation where a son died. This invites the hearer to deduce some way in which the subject could relate to

<sup>7</sup> Unlike Harley (1998) who argues that the experiencer HAVE can only take stative complements, McIntyre (2006) does not specify whether the phrasal complement of the Appl is eventive or stative. He dubs two eventualities under the term ‘situation’.

<sup>8</sup> According to McIntyre (2006), <sub>VDAT</sub> is an inherent dative assigning light verb that takes a VP as its complement. In this respect, <sub>VDAT</sub> is nothing but a high applicative head. In European languages, applied arguments are typically assigned inherent dative case.

the son's death. This is possible if the situation (the son's death) has consequence for him, if it affects him somehow. Thus, the notion of affectedness under his approach is pragmatic in essence. Whether or not the applied argument is affected is based purely upon how the lexical meaning denoted by the VP (situation) has an effect on the applied argument. The task of estimating this effect is purely dependent on our world knowledge.

McIntyre's approach certainly has an advantage over the 'Appl-as-thematic role assigner' approaches in the previous section. (57), for example, merely asserts that an event of son-dying happened to him. Whether he is affected by this happening (typically psychologically) is purely the interlocutors' guessing work. In fact, as shown in (58), the sentence is still grammatical even if the subject does not feel any emotion at all.

58) Mary-**ka** emeni-**ka** tolakasi-ess-ta. Kulentay,  
 M-nom mother-nom die-past-decl but  
 Mary-nun amwulen yenghayngto an pat-ass-ta.  
 M-top any influence neg get-past-decl.

'Mary had her mom die (on her). But, Mary isn't affected by this at all'

By separating what is asserted from what is implied, McIntyre's approach reduces unnecessary burdens on thematic roles and gets rid of a thematic role such as 'affectee' whose nature is dubious and superfluous.

I partly agree with McIntyre (2006) in that some pragmatic filtering system is definitely operative in these types of constructions. But I do not agree that the notion of affectedness can be reduced into pure pragmatic notion. The reason is that the affected

readings in Korean possessive MNCs (which are high APPL constructions) are restricted to a very specific linguistic environment. That is, the affected reading only occurs when the main predicates are eventive change-of-state predicates. This raises the question of whether the affected relation in high applicative constructions is formally definable. In the next section, I show that the affectedness relation found in high applicative constructions is no different from the traditional notion of affectedness where ‘change of state’ plays a key role.

#### **4.2.3.3. Affected Argument as an Undergoer**

In this section, I propose that the affected reading on NP1s (the applied argument) in Korean MNCs (high applicative constructions) arises when the applied argument undergoes a (physical or abstract) change of state.

Indeed, the relation between the notion of affectedness and the notion of (undergoing) ‘change-of-state’ is by no means a new idea. First, Gropen et al (1991) show that the notion of affectedness plays an important role in so-called ‘argument (locative/dative) alternation’ phenomena.

59) a. Mary loaded hay onto the truck.

b. Mary loaded the truck with hay.

60) a. Mary sprayed the red paint onto the door.

b. Mary sprayed the door with the red paint.

In (59), either *hay* or *the truck* can be the direct object of the verb *load*. The situation is the same for the verb *spray* in (60). According to Gropen et al (1991), the selection of the direct object depends on which is an affected object. In their work, an affected object is defined as an entity that undergoes change. So, the object *hay* in (59a) undergoes Change-of-Location (i.e., it ends up being in the truck) and the object *the truck* in (59b) undergoes Change-of-State (i.e., the truck becomes full of hay).

Secondly, Beavers (2011) classifies so-called ‘affectedness-inducing’ verbs into four general types and shows that these verbs commonly encode change in various forms. The objects of these verbs, as a result, entail change in their properties.

- 61) a. Mary broke the vase. (change of state verbs: *clean, paint, spray*)  
 b. Mary pushed the cart into the store. (change of location verbs: *move, throw*)  
 c. Mary deleted the file. (consumption verbs: *eat, consume, deplete*)  
 d. Mary carved the wood into a toy. (transformation verbs: *turn, change,* )

The object *the vase* in (61a) becomes broken. The object in (61b) changes its physical location. The object *the file* in (61c) becomes non-existent suddenly. Finally, the object *the wood* in (61d) transforms its shape. Thus, the examples in (61) uniformly suggest the relatedness between the notion of affectedness and change.

Finally, it is observed that only affected arguments can be subjects of secondary resultative predication.

- 62) a. Mary painted the barn [red].

- b. Mary hammered the metal [flat].
- c. Mary drank the glass [empty].
- d. Mary cut the bread [into three pieces]

- 63) a. \*Mary loved the barn [red].
- b. \*Mary saw the metal [flat].

This is so because the affected arguments in (62) undergo change and this change typically implies that there is an end result. On the other hand, the objects of the stative verbs in (63) are not subject to change. Thus, no result XPs are allowed.

So far, we briefly reviewed the fact that the traditional notion of affectedness is closely related to the notion of change. Now the natural question is whether we can account for the affectedness relation found in Korean eventive possessive MNCs (high applicatives) under the notion of change. The answer is positive. I propose that the affected readings of NP1s in Korean possessive MNCs arise because the NP1 undergoes Change-of-State. Consider the possessive MNCs in (36) which are repeated in (64).

- 64) a. Mary-**ka** emeni-**ka** tolakasi-ess-ta.

M-nom mother-nom die-past-decl.

‘Mary’s mom died (on her)’

- b. Mary-**ka** ankyeng-**i** pwuleci-ess-ta.

M-nom glasses-nom break(intr.)-past-decl.

‘Mary’s car went out of (order on her)’

- c. Mary-**ka**    nwun-**i**    pwut-ess-ta.  
 M-nom    eyes-nom    swell-past-decl.  
 ‘Mary’s eyes got swollen’
- d. Ku pay-**ka**    toch-**i**    ccic-eci-ess-ta.  
 the boat-nom    sail-nom    tear-incho-past-decl.  
 ‘The boat tore its sail’
- e. Mary-**ka**    intay-**ka**    kkun-eci-ess-ta.  
 M-nom    ligament-nom    cut-incho-past-decl.  
 ‘Mary tore her ligament’

I propose that the readings in (64) are informally represented as the sentences in (65).

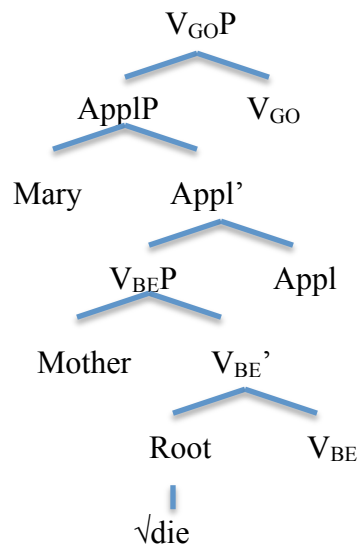
- 65) a. Mary undergoes change (from a state where her mother is alive) to a state where her mother is dead.
- b. Mary undergoes change (from a state where her glasses are unbroken) to a state where her glasses are broken.
- c. Mary undergoes change (from a state where her eyes are not swollen) to a state where her eyes are swollen.
- d. The boat undergoes change (from a state where its sail is not torn) to a state where its sail is torn.
- e. Mary undergoes change (from a state where her ligament is not torn) to a state where her ligament is torn.

The informal translations in (65) mirror the basic semantics of ‘change’. For example, Dowty (1979) defines ‘change for x’ as a transition from  $\neg\Psi$  (a property that does not hold at the initial point of the event for x) to  $\Psi$  (a property that does hold at the starting at the final point of the event for x). The states in the parentheses in (65) represent  $\neg\Psi$  and the following states represent the target/result state  $\Psi$ . Now the question is whether this semantic notion of change can be structurally represented or not. This naturally brings us back to the original question raised in section 4.2.2.4. Recall that in that section, I proposed the syntactic structure of the eventive possessive MNCs in (49), which is repeated here in (66a), and compared it with another possible structure in (51), which is repeated in (66b). In that section, I briefly mentioned the semantic consequences that each syntactic representation yield without giving the reason why (66a) is a correct representation.

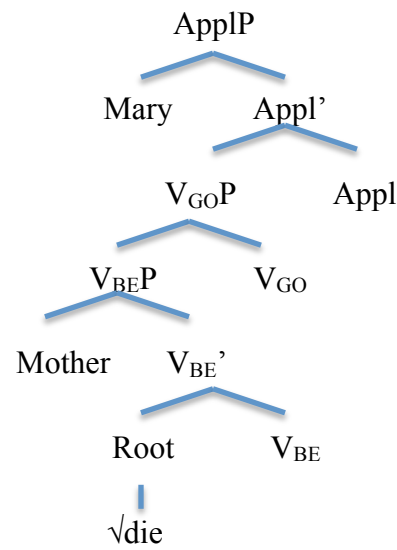
Having established the notion of affectedness in this section, now we can understand why (66a) is a better alternative:

- 66) Mary-**ka** emeni-**ka** tolakasi-ess-ta. (=64a)  
 M-nom mother-nom die-past-decl.  
 ‘Mary’s mom died (on her)’

a. (=49)



b. (=51)



Note the structural difference between the two representations: (66a), which I am arguing for, has an  $ApplP$  between  $V_{GOP}$  and  $V_{BEP}$  while (66b) has an  $ApplP$  dominating  $V_{GOP}$ .

Note also that we have just identified that affected readings on NP1s in eventive possessive MNCs have to do with the semantic nature of NP1s being an undergoer of various Change-of-State. I propose that the structure (66a) is superior to the structure (66b) since the structure (66a) directly represents the meaning where NP1 undergoes Change-of-State. In the lexical semantic literature, a typical change-of-state verb (i.e., *die*) has the following event structure.

67) a. *Mary died.*

b. [BECOME [Mary [STATE dead]]] (Rappaport-Hovav &amp; Levin 1998)

In (67), the subject *Mary* is sandwiched between the BECOME operator and the STATE operator. This configuration gives the interpretation that *Mary* is an undergoer of the

BECOME event and the holder of the result STATE ‘dead’ at the same time. I argue that the structure (66a) is the syntactically extended version of the lexical event semantic structure in (67) that represents the semantics of Change-of-State: The  $V_{BE}P$  in (66a) denotes a pure state where (Mary’s) mother is dead. This  $V_{BE}P$  corresponds to the STATE (dead) component in (67b). Next, the high applicative head introduces the argument *Mary*. I propose that this applicative head denotes a holder relation between the applied argument *Mary* and the (result) state denoted by  $V_{BE}P$ . Thus, the syntactic position of *Mary* in (66a) exactly corresponds to the position of the subject *Mary* in (67b) and semantically they both function as a holder of a result state. Finally,  $V_{GO}P$  attaches to the AppIP.  $V_{GO}P$  in (66a) corresponds to the BECOME operator in (67b). Being under the scope of the  $V_{GO}$ , the applied argument *Mary* is interpreted as an undergoer. In this way, the whole structure in (66a) denotes a change of state event (i.e., achievement) and yields a correct reading of the eventive possessive MNC. That is, *Mary* becomes a holder of the (result) state where her mother is dead.

On the other hand, the structure in (66b) can’t derive this change-of-state reading. In (66b), the applied argument *Mary* is related to the change of state event where *Mary*’s mother becomes a holder of the result state ‘being dead’. Since the applied argument *Mary* c-commands the  $V_{GO}P$  that is equivalent to the BECOME operator, *Mary* cannot be an undergoer of the change of state event. In other words, the configuration of (66b) fails to encode *Mary* as an undergoer.

To summarize this section, based on the intuition that the notion of affectedness is closely related to the notion of Change-of-State, I proposed that the affected readings imposed on the NP1s in the possessive MNCs arise when the NP1s undergo change of



Note that under my analysis, the high applicative head uniformly selects the state-denoting  $V_{BEP}$ s. The welcome consequence of this uniform behavior of the applicative head is that we can give a uniform semantics for the high applicative head in Korean. Thus, I propose that in both eventive MNCs and stative MNCs, the function of the applicative head is the same: It denotes a holder relation between the applied argument and the state denoted by  $V_{BEP}$ . The only difference between the eventive MNCs and stative MNCs is that the former has  $V_{GOP}$  and the latter does not. Thus, the readings of (69a) and (69b) can be informally phrased as in (70a) and (70b) respectively.

- 70) a. Mary BECOMES the holder of the state where her mother is dead. (=69a)  
 b. Mary IS the holder of the state where her mother is pretty. (=69b)

Now, if we adopt the syntactic structure in (66b), on which Pylkkänen (2002) and McIntyre's (2006) analyses are based, (71a) would be the structure of the eventive possessive MNC in (68a), and (71b) would be the structure of the stative possessive MNC in (68b).

- 71) a. [<sub>AppIP</sub> Mary [<sub>VGOP</sub> [<sub>VBEP</sub> my mother died]  $V_{GO}$ ] Appl] (=68a)  
 b. [<sub>AppIP</sub> Mary [<sub>VBEP</sub> my mother pretty] Appl] (=68b)

As seen in (71), the (s-)selectional property of the applicative head in (71a) is different from the one of the applicative head in (71b). The former selects an eventive complement while the latter selects a stative complement. Due to this disparity, we are not able to

assign an identical role (i.e. holder) to them. Indeed, McIntyre (2006) also proposes that there is only one high applicative head. That is, the high applicative head is the light verb HAVE. Yet, I believe my analysis has more explanatory adequacy compared to McIntyre's. The reason is simple. The semantics of the applicative head is predictable and not speculated under my analysis: The applicative head only takes a stative complement. Thus, its holder relation with its complement is always expected under Kratzer's (1996) analysis where the external argument of a stative VP receives a holder role. On the other hand, under the HAVE-analysis, it is still mysterious as to why the applied argument gets an experiencer reading when it is related to some event and a possessor reading when it is related to a nominal complement (and/or stative eventuality).

#### 4.2.5. The Distribution of the Possessive MNCs

Why do unergative verbs not appear in possessive MNCs? Recall that this was one of the main questions this thesis aims to solve. Consider the relevant constructions in (72).

72) a. \*Mary-**ka**    emeni-**ka**    ttui-ess-ta.

M-nom    mother-nom    run-past-decl.

‘(intended:) Mary’s mom ran’

b. \*Mary-**ka**    atul-**i**    ttul-eyse    nol-ass-ta.

M-nom    son-nom    garden-loc    play-past-decl.

‘(intended:) Mary’s son played in the garden’

As far as I know, there is no treatment on this question in the MNC literature. In the external possession literature, the question was first raised by Borer & Grodzinsky (1986) for Hebrew dative possessor constructions. In section 3.1.2.1, I showed that their analysis does not apply to Korean MNCs due to the different assumptions regarding the syntactic position of the possessee DPs (NP2s in Korean MNCs). Later, Pylkkänen (2002) provides her own analysis on Hebrew external possession construction. First, she shows that the semantics of low applicative heads (i.e., transfer of possession relation such as *to-the-possession-of*, *from-the-possession-of*) produces an illicit reading when it combines with the subject DP of an unergative verb (see section 4.2.1.1. for the details of Pylkkänen's argument on this point). Thus, according to her analysis, the unavailability of unergative verbs is viewed as the one of the diagnostics in deciding the type of the applicative constructions (high and low). Based on this, she proposes that the unavailability of unergative verbs in Hebrew possessor dative constructions is due to the fact that the possessor dative constructions are low applicative constructions.

However, Pylkkänen's proposal does not apply to Korean possessive MNCs since the constructions are all analyzed as high applicative constructions. Thus, in theory, the possessive MNCs must be acceptable with unergative verbs. They are apparently not, however. Thus, we need a new perspective to account for why the high applicative constructions in Korean do not allow unergative verbs

My analysis sheds light on this puzzle. As we've seen above, the high applicative head in Korean unambiguously s-selects a stative complement (i.e.,  $V_{BEP}$ ). In other words, a Korean high applicative head is only compatible with a predicate that contains STATE as its main eventuality (pure stative verbs) or as its sub-eventuality (change-of-

state unaccusatives). Apparently, unergative verbs simply denote ACTIVITY (represented as simplex  $V_{DO}$ ), lacking any STATE component. Thus, an applicative head cannot associate with unergative verbs by any means.

## 5. Summary

Let me wrap up this chapter by addressing the original three questions we raised at the beginning of the chapter.

The first question was how the possessor NP1 can be licensed in a position external to the original licensing position (i.e., the internal position of the possessee NP (NP2)). I showed that the traditional approaches that assume the NP1 is linked with NP2 (such as the possessor-raising analyses and the base-generation analyses) face various theoretical and empirical problems. I proposed that NP1 in MNCs is the argument of a functional head called an ‘applicative head’ whose main function is to introduce a ‘non-core’ or ‘additional’ argument that is not subcategorized by the main verb. The theoretical advantage of this applicative approach is that the NP1 is introduced into syntax in the same way an external argument of a transitive construction is introduced. Note that the external argument was traditionally assumed to be an integral part of verbal syntax. However, Kratzer (1996) severs the link between the VP and its subject and posits a functional category that independently licenses the external argument. Thus, the applicative analysis provides a new way of licensing the NP1 without positing any formal link with the NP2 which is the part of the VP.

The next question we raised is how a theory of MNC derives a possessive reading from the stative MNCs and an affected reading from the eventive MNCs. Regarding the

affected readings on the eventive MNCs, I argued that the affected reading on the NP1 arises only when it undergoes Change-of-State and proposed that the syntactic structure that mirrors the semantics of Change-of-State: an applicative head unambiguously selects a (result) state-denoting  $V_{\text{BEP}}$  which is composed of the NP2 and the main predicate. The NP1 (the applied argument) in this configuration functions as a holder of this state. In the later derivation, the event (transition/change)-encoding  $V_{\text{GOP}}$  is introduced and the whole structure thus represents the change of state eventuality for the NP1. The advantage of my approach is that we don't need to posit a separate structure for the possessive readings that the stative MNCs yield. If we get rid of the highest  $V_{\text{GOP}}$  from the eventive MNCs, we get the stative MNC.

Finally, we raised a question of how a theory of MNC predicts the distributional property of the possessive MNCs. I showed that the possessive MNCs only allow two variants of intransitive verb (i.e., intransitive stative verbs and change of state unaccusative verbs) and reject two variants of intransitive verb (i.e., simple change unaccusative verbs and unergative verbs). In this chapter, I proposed that this distributional property follows from the (s-)selectional property of the high applicative head in Korean: the high applicative head only s-selects state-denoting expressions. Since simple change unaccusatives and unergatives do not come with built-in stative components, their unavailability in possessive MNCs are readily accounted for.



Oblique MNCs can be classified into two subtypes based on the lexical meaning of the main verbs: in the first type of MNC which I call a ‘directed motion MNC’, the main verbs are so-called directed motion verbs, such as *o-* ‘come’, *tul-* ‘enter/come.in’, *nayli-* ‘fall/come.down’, *na-* ‘exit/go.out’, *nao-* ‘come.out’, etc. Thus, based on the meanings of these verbs, NP1 can either be interpreted as a goal or as a source.

2) a. Mary-**ka** pwung-**i** o-ss-ta.

M-nom paralysis come-past-decl.

‘(lit.) Paralysis came to Mary’ ‘Mary is paralyzed’

b. Mary-**hantey** pwung-**i** o-ss-ta.

M-dat paralysis-nom come-past-decl.

3) a. Sorak san-**i** tanpwung-**i** tul-ess-ta.

Mt. Sorak-nom autumn.foliage-nom enter-past-decl.

‘(lit.) Autumn foliage has entered Mt. Sorak’ ‘Mt. Sorak is fall-colored’

b. Sorak san-**ey** tanpwung-**i** tul-ess-ta.

Mt. Sorak-dat autumn.foliage-nom enter-past-decl.

4) a. Mary-**ka** sin-**i** nayli-ess-ta.

M-nom god-nom descend-past-decl.

‘(lit.) A god descend to Mary’ ‘Mary was possessed by a spirit’

b. Mary-**hantey** sin-**i** nayli-ess-ta.

M-dat god-nom descend-past-decl.

The MNCs in (1-4) are directed motion MNCs whose NP1s are literally interpreted as a goal. On the other hand, the MNCs in (5-7) are directed motion MNCs where the theme NP2s move out of the source NP1.

5) a. Mary-**ka** kichim/hapwum-**i** nao-ss-ta.

M-nom cough/yawn-nom came.out-past-decl.

‘(lit.) Cough/yawning came out from Mary’ ‘Mary coughed/yawned’

b. ???Mary-**hanteyse** kichim/hapwum-**i** nao-ss-ta.

M-from cough/yawn-nom came.out-past-decl.

6) a. Mary-**ka** hwa/hung-**i** na-ss-ta.

M-nom anger/joy-nom exit-past-decl.

‘(lit.) Anger/joy came.out from Mary’ ‘Mary is angry/joyful’

b. \*Mary-**hanteyse** hwa/hung-**i** na-ss-ta.

M-from anger/joy-nom exit-past-decl.

7) a. John-**i** yetulum/swuyem-**i** na-ss-ta.

J-nom pimple/beard-nom came.out-past-decl.

‘(lit.) Pimple/beard came out from John’ ‘John got a pimple/beard’

b. \*John-**hanteyse** yetulum/swuyem-**i** na-ss-ta.

J-from pimple/beard-nom came.out-past-decl.

Interestingly, the MNCs in (5-7) do not have semantically corresponding non-MNC counterparts. Indeed, oblique MNCs, unlike the possessive MNCs in the previous chapter, do not show consistent case-alternation (i.e., nominative-oblique case here). For example, the nominative goal NPIs in (8) and (9) cannot be realized as oblique DPs.<sup>10</sup>

8) a. Mary-**ka** sachwunki-**ka** o-ass-ta.

M-nom puberty-nom come-past-decl.

‘(lit.) Puberty came to Mary’ ‘Mary became adolescent’

b. <sup>???</sup>Mary-**hantey** sachwunki-**ka** o-ass-ta.

M-dat puberty-nom come-past-decl.

9) a. Mary-**ka** kamki-**ka** tul-ess-ta.

M-nom cold-nom enter-past-decl.

‘(lit.) Cold entered Mary’ ‘Mary got cold’

b. \*Mary-**hantey** kamki-**ka** tul-ess-ta.

M-dat cold-nom enter-past-decl.

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<sup>10</sup> Based on the unavailability of the corresponding oblique markers in the constructions in (5-9), one might wonder if these constructions are instances of the possessive constructions. However, the possessive DP formations are also bad.

Ex1) \*Mary-**uy** sachwunki-**ka** o-ss-ta. (from 8a)  
 M-gen puberty-nom come-past-decl.  
 \*‘Mary’s puberty came’

Ex2) \*Mary-**uy** kamki-**ka** tul-ess-ta. (from 9a)  
 M-gen cold-nom enter-past-decl.  
 \*‘Mary’s cold entered’

The second subtype of oblique MNC is what I call an ‘existential MNC’. As its name suggests, the main predicates in this type of construction are so-called existential verbs. The representative existential verb *iss-* ‘exist’, its inchoative variant *sayngki-* ‘come to exist’, and its negative variant *eps-* ‘neg.exist’ are mainly used in these constructions. Other similar verbs that can be used in these constructions are *nemchi-* ‘exceed’, *manh-* ‘abundant’, and their negative variants *mocala-/pwucokha-* ‘lack’. The representative examples are illustrated in (10-12).

- 10) a. Mary-**ka**      cha-/namca chinkwu-/nwuna-**ka**      iss-ta.  
          M-nom          car/boyfriend/sister-nom                                  exist-decl.  
          ‘(lit.) Mary, a car/a boyfriend/a sister exists’ ‘Mary has a car/a boyfriend/a sister’
- b. Mary-**hantey**      cha-/namca chinkwu/nwuna-**ka**      iss-ta.  
          M-dat                  car/boyfriend/sister-nom                                  exist-decl.
- 11) a. Mary-**ka**      yaksok/cha/namca chinkwu-**ka**      sayngki-ess-ta.  
          M-nom          appointment/car/boyfriend-nom      come-to-exist-past-decl.  
          ‘(lit.) Mary, an appointment/a car/a boyfriend came to exist’  
          ‘Mary got an appointment/a car/a boyfriend’
- b. Mary-**hantey**      yaksok/cha/namca chinkwu-**ka**      sayngki-ess-ta.  
          M-dat                  appointment/car/boyfriend-nom      come-to-exist-past-decl.

12) a. Mary-**ka**    yaksok/cha/namca chinkwu-**ka**    eps-ta.  
 M-nom    appointment/car/boyfriend-nom    neg.exist-decl.

‘(lit.) Mary, an appointment/a car/a boyfriend doesn’t exist’

‘Mary has no appointment/car/boyfriend’

b. Mary-**hantey**    yaksok/cha/namca chinkwu-**ka**    eps-ta.

M-dat    appointment/car/boyfriend-nom    neg.exist-decl.

The dative DPs in (b) sentences function as an (alienable or inalienable) possessor. These dative possessors seem to freely alternate with the nominative case, forming MNCs in (a) sentences. One thing to note is that this alternation seems to be restricted to possessors only. It is a well-known fact that in a HAVE-less language like Korean, the possessive semantics is closely related to locative syntax (Freeze 1992, Kayne 1993). Thus, both existential constructions and predicative possessive constructions in Korean have the same linear syntactic string ‘DP-dative + DP-nominative + existential verb’. As shown in (13a), when the dative DP is animate, the structure yields a possessive reading. If the DP is inanimate as in (13b), the sentence yields an existential reading.

13) a. Mary-**hantey**    cha-**ka**    iss-ta.

M-dat    car-nom    exist-decl.

‘Mary has a car’

b. Cwuchacang-**ey**    cha-**ka**    iss-ta.

Parking lot-dat    car-nom    exist-decl.

‘There is a car in the parking lot’

The grammatical contrast in (14) shows that not all dative DPs show the case alternation attested above. The ungrammaticality of (14b) can only be accounted for if we assume that existential MNCs are variants of predicative possessive constructions.

14) a. Mary-**ka** cha-**ka** iss-ta. (= 13a)

M-nom car-nom exist-decl.

‘Mary has a car’

b. \*Cwuchacang-**i** cha-**ka** iss-ta. (=13b)

parking lot-nom car-nom exist-decl.

To summarize, I introduced two types of oblique MNCs in Korean: directed motion MNCs and existential MNCs. They differ in terms of the type of main verbs they take but functionally they encode very similar notions: NP1 behaves as a Ground and NP2 behaves as a Figure in Talmy’s (1985) sense: Directed-motion MNCs literally describe Figure’s (NP2) movement with respect to the Ground (NP1) which is the reference point. Existential MNCs describe the Figure’s static location with respect to the Ground.

To facilitate the main discussion, I introduce general syntactic and semantic properties of oblique MNCs and raise main questions in the next section.

## 2. General Properties of Oblique MNCs

### 2.1. NP1 as a Structural Subject

Recall that in the previous chapter, I proposed that NP1s in possessive MNCs were structural subjects based on various syntactic tests such as relativization and scrambling. The same effect is also observed in oblique MNCs: while NP1 is able to undergo relativization and scrambling, NP2 cannot.

#### Relativization

15) a. Mary-**ka** pwung-**i** o-ss-ta. (=2a)

M-nom paralysis-nom come-past-decl.

‘(lit.) Paralysis came to Mary’ ‘Mary got paralyzed’

b. [[Op<sub>i</sub> [ t<sub>i</sub> pwung-**i** o-]-n] Mary<sub>i</sub>]

paralysis-nom come-rel Mary

‘Mary who got paralyzed’

c. \*[[Op<sub>i</sub> [Mary-**ka** t<sub>i</sub> o-]-n] pwung<sub>i</sub>]

M-nom come-rel paralysis

(15) shows that while the NP1 *Mary* can be relativized, the NP2 *pwung* ‘paralysis’ cannot. Note that the non-MNC counterpart of (15a) does not show this contrast: both the NP1 and the NP2 can be relativized as shown in (16b and c):

16) a. Mary-**hantey** pwung-**i** o-ss-ta. (=2b)

M-dat paralysis-nom come-past-decl.

‘Paralysis came to Mary’ ‘Mary got paralyzed’

b. [[Op<sub>i</sub> [ t<sub>i</sub> pwung-**i** o-]-n] Mary<sub>i</sub>]

paralysis-nom come-rel Mary

‘Mary who is paralyzed’

c. [[Op<sub>i</sub> [Mary-**hantey** t<sub>i</sub> o-]-n] pwung:]

M-dat come-rel paralysis

‘(lit.) the paralysis that came to Mary’

### Scrambling

NP1s and NP2s in oblique MNCs also behave differently in terms of scrambling:

17) a. Mary-**ka<sub>i</sub>** na-nun [ t<sub>i</sub> cha-**ka** iss-tako] sayngkakhay-ss-ta. (=10a)

M-nom I-top car-nom exist-C think-past-decl.

‘I thought that Mary had a car’

b. \*Cha-**ka<sub>i</sub>** na-nun [Mary-**ka** t<sub>i</sub> iss-tako] sayngkakhay-ss-ta.

car-nom I-top M-nom exist-C think-past-decl.

While the NP1 *Mary* in (17a) has no problem in undergoing long-scrambling into a sentence initial position, the NP2 *cha* ‘car’ cannot undergo scrambling. Again, there is no such contrast in the semantically equivalent dative construction in (18).

18) a. Mary-**hantey**<sub>i</sub> na-nun [ t<sub>i</sub> cha-**ka** iss-tako] sayngkakhay-ss-ta.  
 M-dat I-top car-nom exist-C think-past-decl.

‘I thought that Mary had a car’

b. Cha-**ka**<sub>i</sub> na-nun [Mary-**hantey** t<sub>i</sub> iss-tako] sayngkakhay-ss-ta.  
 car-nom I-top M-dat exist-C think-past-decl.

I have shown that syntactic behaviors of the NP1s and the NP2s in oblique MNCs are different in terms of relativization and scrambling. I took these as evidence that shows NP1s in oblique MNCs are structural subjects.

## 2.2. Non-Compositional Meaning

As readers might have noticed, there seems to be semantic disparity between what oblique MNCs literally mean and the overall semantic meaning that the constructions denote. In other words, the final semantic denotation of oblique MNCs does not seem to be derived in a compositional way. Consider the directed motion MNCs below.

19) a. Mary-**ka** kamki-**ka** tul-ess-ta.  
 M-nom cold-nom enter-past-decl.

‘(lit.) Mary, cold entered’ ‘Mary has/got cold’

b. Mary-**ka** hwa-**ka** na-ss-ta.  
 M-nom anger-nom exit-past-decl.

‘(lit.) Mary, anger exited’ ‘Mary is/got angry’

The oblique MNC in (19a) literally means that the NP2 *kamki* ‘cold’ (Figure) is coming into the NP1 *Mary* (Ground). Yet the actual semantic meaning of the construction is closer to the possessional meaning that NP1 ‘has’ NP2. The situation for (19b) is the same: the sentence literally describes Figure (NP2) coming out of Ground (NP1). Yet the actual meaning of the sentence is closer to the possessional meaning: The meaning ‘Mary is angry’ is interchangeable with ‘Mary has anger’. A good theory about the oblique MNCs, thus, should be explicit on how disparity of reading arises.

### 2.3. Affected Reading

In the previous section, I showed that the semantics of oblique MNCs is very close to possessional semantics. What makes the semantic characterization of the oblique MNCs more complicated is that there seems to be another semantic characterization available for the constructions. Consider the following directed motion MNCs.

20) a. *Mary-ka hwa/sin-i na-ss-ta.*

M-nom anger/joy-nom exit-past-decl.

‘(lit.) Mary, anger/joy exited’, ‘Mary is/got angry/joyful’

b. *Mary-ka hapwum/kichim-i nao-ss-ta.*

M-nom yawning/cough-nom come.out-past-decl.

‘(lit), Mary, yawning/cough came out’ ‘Mary yawned/coughed’

c. *Mary-ka kakmki/pyeng-i tul-ess-ta.*

M-nom cold/sickness-nom enter-past-decl.

‘(lit.) Mary, cold/sickness entered’ ‘Mary got cold/sick’

d. Sorak san-i tanpwung-i tul-ess-ta.

Mt. Sorak-nom autumn.foliage-nom enter-past-decl.

‘(lit.) Mt. Sorak, autumn foliage entered’ ‘Mt. Sorak is/got fall-colored’

All the MNCs above share one common semantic feature. That is, the subject NP1s are somehow affected by the psychological or physiological processes that are denoted by the VPs. In (20a), *Mary* can be interpreted as an experiencer of the psychological changes. In (20b and c), *Mary* is physiologically affected by the bodily processes. In (20d), the inanimate subject *Mt. Sorak* is affected by its physical change (i.e., the color change on its surface). A good theory about oblique MNCs should account for how these affected readings are derived in addition to the possessional readings discussed in the previous section.

#### **2.4. Semantic Difference between Oblique MNCs and their Dative Counterparts**

At first sight, it seems that there is no observable difference between oblique MNCs and their dative equivalents. Upon close inspection, however, we witness subtle semantic differences between them.

First, directed motion MNCs seem to show a ‘holistic affectedness’ effect while their dative counterparts do not. The ‘holistic affectedness’ is considered as one of the semantic properties that only direct objects have in comparison with their dative counterparts in dative alternation phenomena.

21) a. Mary drank at the pint of beer.

b. Mary drank the pint of beer.

22) a. Mary loaded hay onto the truck.

b. Mary loaded the truck with hay.

(21b), where *the pint of beer* is realized as a direct object, means that the direct object is completely consumed. On the other hand, (21a) where *the pint of beer* is realized as a PP-adjunct does not necessarily mean that the pint of beer is completely gone. The same contrast is also observed in (22). While (22b) means that the direct object *the truck* is fully loaded with hay, (22a) does not necessarily mean that the truck must be full. Based on this semantic difference, it is generally assumed in the literature that the direct objects, unlike their dative equivalents, are holistically affected (Gropen et al, 1991, Beavers 2006). Additionally, the notion of holistic affectedness has been considered as evidence against the assumption that argument alternation is just a simple case-alternation phenomenon.

Now, a similar effect is also observed in Korean oblique MNCs. Consider the following context and utterances made under this context.

23) Context: Mary is at the top of the Mt. Sorak and is able to see the whole mountain.

She finds out that only some part of the mountain has changed its color.

- a. # Sorak san-**i**      tanpwung-**i**      tul-ess-ta.  
      Mt. Sorak-nom    autumn.foliage-nom    enter-past-decl.  
      ‘Mt. Sorak is fall-colored’
- b. Sorak san-**ey**      tanpwung-**i**      tul-ess-ta.  
      Mt. Sorak-dat      autumn.foliage-nom    enter-past-decl.  
      ‘Autumn foliage has settled in Mt. Sorak’

Unless Mt. Sorak has fully changed its color, the MNC in (23a) cannot be used. Instead, its dative equivalent in (23b) must be used. I believe that the oddity of (23a) is naturally explained if we assume that the NP1 in (23a) should be holistically affected.

The similar holistic affectedness effect is also shown in (24). Consider the context below and the acceptability contrast between (24a) and (24b).

24) Context: Mary is at the top of the high mountain where she can see the whole city of Seoul. She finds out that it is raining only in the northern part of the city.

- a. # Seoul-**i**    pi-**ka**      nayli-n-ta.  
      S-nom    rain-nom    fall-pres-decl.  
      ‘It is raining in Seoul’
- b. Seoul-**ey**    pi-**ka**      nayli-n-ta.  
      S-dat    rain-nom    fall-pres-decl.

Again, the speaker cannot utter (24a) unless the raining holistically affects the whole city. On the other hand, the utterance of the dative equivalent in (24b) does not have this sort

of contextual restriction. In summary, the contrast shown above suggests that oblique MNCs and their dative counterparts have different semantic manifestations.

Due to the pure stative nature of the construction, existential MNCs do not show this affectedness effect. Yet, we can witness the different type of the semantic difference between existential MNCs and their dative counterparts.

25) a. Mary-**ka** wuncen myenhecong-**i** iss-ta.

M-nom driver's license-nom exist-decl.

'Mary has a driver's license' 'Mary is licensed to drive'

b. Mary-**hantey** wuncen myenhecong-**i** iss-ta.

M-dat driver's license-nom exist-decl.

'Mary has a driver's license'

Both the existential MNC in (25a) and its dative counterpart in (25b) have a similar possessive reading. However, there is a subtle difference in meaning between them. In (25b) the NP2 *wuncen myenhecong* 'driver's license' denotes a simple object. Thus, the sentence sounds licit even though the driver's license is not Mary's. The sentence simply asserts that Mary has an object called 'driver's license'. On the other hand, the existential MNC in (25a) implies that *Mary* is a qualified driver by having a driver's license. The license, thus, must be Mary's, not another's. The NP2 in (25a) seems to denote abstract meaning of 'licensehood'. Thus, the crude distinction between two sentences would be that the former (25b) asserts that the subject possesses a thing while the latter (23a) asserts that the subject possesses a certain property.

In this section, I introduced the hallmark properties of oblique MNCs: First, NP1s in these constructions behave as structural subjects. Second, the final semantic denotations of oblique MNCs seem to be derived in a non-compositional way: they all have possessional semantics even though the predicates do not encode possession. Third, NP1s in directed motion MNCs also seem to have affected readings. Finally, there is a subtle yet apparent semantic difference between oblique MNCs and their dative counterparts.

## **2.5. Theoretical Questions**

Based on the properties discussed in the previous section, I lay out the main theoretical questions that a theory of oblique MNCs should answer. First, we need a theory that addresses how NP1 is licensed. There are two possible options in dealing with this issue.

First, we can assume that NP1 is thematically licensed as an argument of the main verb. Under this assumption, oblique MNCs would be derivationally related to their dative equivalents. If this is the case, we need to account for how the argument is realized as two distinct morphosyntactic forms (nominative DP and oblique DP). Alternatively, we can assume that oblique MNCs have no derivational relation with their dative equivalents. If this is the case, the NP1 must be licensed either as an adjunct or as the argument of another licensing head. Under the former assumption (NP1 as adjunct), the task would be to account for how this adjunct can be licensed as a structural subject. Under the latter assumption, the task would be to find out what kind of other licensing head is available in oblique MNCs.

The second theoretical question that a theory of oblique MNC has to address is the non-compositional semantic denotations that these MNCs have. That is, we need to account for how the possessional readings are derived despite the fact that there seems to be no lexical item that is directly related to possessional semantics. Indeed, it is possible that the movement of something (Figure:NP2) towards a certain location (Ground:NP1) is cognitively reinterpreted as Ground's having Figure. The question is, then, whether this cognitive reevaluation process can be represented in our grammar. Thus, this chapter aims to provide a theory of oblique MNCs that represents this cognitive notion of possession in a compositional, linguistic way.

Thirdly, we've seen in section 2.1.3 that NP1s in oblique MNCs have affected readings too. A theory of oblique MNCs should account for how affected readings are derived in addition to the possessional readings. Specifically, the theory needs to be explicit about whether these readings are an entailed one or not.

Finally, I showed that there are subtle semantic differences between oblique MNCs and their dative counterparts in section 2.1.4 (i.e., the holistic affectedness for directed motion MNCs and different types of possessional meanings for existential MNCs). A theory of oblique MNCs must locate the grammatical factors that are responsible for these semantic differences attested between the oblique MNCs and their dative counterparts.

Let me briefly summarize what I will propose about the oblique MNCs and their dative counterparts. I will propose that that an NP1 in an oblique MNC is not an argument of a main verb but rather an argument of an applicative head. Specifically, I argue that an oblique MNC is a low applicative construction (Pylkkänen 2002, Cuervo

2003) where the NP1 is applied to the complement (NP2) of an unaccusative verb. As for its dative counterpart, I propose that the dative construction is a regular unaccusative construction whose main verb is a two-place unaccusative verb that theta-marks both NP1 and NP2.

What is peculiar about my proposal is that I don't posit a distinct semantics for the low applicative head: be it a high applicative head or a low applicative head, an applicative head in Korean uniformly s-selects a property-denoting state. In oblique MNCs, the applicative head selects only NPs that denote properties. Thus, the NP1 is naturally interpreted as a holder of a certain property. This naturally accounts for why oblique MNCs have possessional semantics. As for the affected reading, I propose the same argument that I proposed for the affected readings of high applicative constructions. That is, the affected readings in oblique MNCs can be defined under the notion of Change-of-State: NP1 BECOMES a holder of a certain property that is denoted by NP2. In this way, this chapter aims to show that the oblique MNCs (low applicative constructions) are minimally different from the possessive MNCs (high applicative constructions) in terms of their semantics and syntax.

In section 3, I briefly overview the previous approaches on oblique MNCs and point out their shortcomings. In section 4, I lay out my own analysis on oblique MNCs. In section 5, I summarize my proposals and discuss their consequences.

### 3. Previous Approaches

#### 3.1. Oblique Argument Approach

Unfortunately, there are few researchers who have worked on oblique MNCs (Youn 1990, Hong 1992, Takahashi 1994, Yoon 1996, 2004, Vermeulen 2005). There is one common theoretical concern in which the above researchers have all been interested: how NP1s in oblique MNCs, which seem to be thematically no different from their dative counterparts, can be assigned nominative case. Though the technicalities are slightly different from each other, the researchers, except Vermeulen (2005), all agree on the main assumption. That is, both nominative NP1 and its dative counterpart are deep structure objects of the main verb. For example, Youn (1990) and Takahashi (1994) propose that oblique MNCs are derived from their dative counterparts.

26) a. [VP Mary-**hantey** [VP pwung-**i** o-ass-ta]]  
           M-dat                      paralysis-nom    come-past-decl.  
           ‘Paralysis came to Mary’

b. [IP Mary<sub>i</sub>-**ka** [VP t<sub>i</sub> [VP pwung-**i** o-ss-ta]]]  
           M-nom                      paralysis-nom    come-past-decl.

According to these authors, *Mary* in (26a) is one of the two arguments of the main verb (indirect object). It is base-generated inside the projection of VP and is theta-marked in situ by the verb. The dative case on *Mary* in (26a) is an inherent case that is directly assigned by the verb. (26b) is an MNC where the indirect object *Mary* is raised to the spec/IP where the structural nominative case is assigned. Since *Mary* is already

inherently case-marked by the verb, the motivation of raising is not case-theoretic according to these authors. Under Youn (1990), who adopts Relational Grammar, *Mary* is a deep object of an unaccusative verb. Thus, via the ‘Advancement to 1’ rule that applies to deep objects of unaccusative verbs, it raises to the subject position. On the other hand, Takahashi (1994) assumes that *Mary* in (26a) raises to become a Major Subject (Kuroda 1986) which is only licensed in a structural subject position according to her. Yoon (1996, 2004) proposes a slightly different analysis:

- 27) a. [<sub>VP</sub> Mary-**hantey**/-Ø    [<sub>VP</sub> pwung-**i**    o-ss-ta]]  
           M-dat/-Ø                    paralysis-nom    come-past-decl.  
           ‘(lit.) Paralysis came to Mary’ ‘Mary is/got paralyzed’
- b. [<sub>IP</sub> Mary<sub>i</sub>-**ka**                    [<sub>VP</sub> t<sub>i</sub>    [<sub>VP</sub> pwung-**i**    o-]-ss-ta]  
           M-nom    paralysis-nom    come-past-decl
- c. [<sub>IP</sub> Mary-**hantey**<sub>i</sub>                    [<sub>VP</sub> t<sub>i</sub>    [<sub>VP</sub> pwung-**i**    o-]-ss-ta]  
           M-dat    paralysis-nom    come-past-decl.

He agrees with the previous researchers in that oblique MNCs and their dative counterparts share the same deep structure as shown in (27a). However, he argues that in Korean inherent case-assignment is optional. As a result, *Mary* in (27a) can be optionally case-less. When this case-less DP raises to the structural subject position, we have an oblique MNC in (27b) where the NP1 ends up being assigned a structural case. When the

inherently case-marked dative DP raises, we have (27c) where the raised dative DP is comparable to oblique subjects in Icelandic (Zaenen et al. 1985).

Note that though the technical details are different from each other, the analyses above all share the key assumption that oblique MNCs and their dative counterparts share the same deep structure.

### 3.1.1. Shortcomings

This type of approach, though intuitive at first sight, has several theoretical and empirical problems. First of all, Youn (1990) and Takahashi (1994) assume that nominative NP1s in oblique MNCs are derived from their dative counterparts via a non-case theoretic raising process. Their analyses presuppose that the inherent dative case is somehow dropped when the DP (*Mary* in (6)) is assigned the structural nominative case in the structural subject position. Still, they are not clear about how this case-dropping happens. The more serious problem is that their analyses do not account for how an inherently case-marked DP can be assigned a structural case again. To avoid this problem, Yoon (1996, 2004) assumes that inherent case-assignment is optional. Thus, oblique MNCs are derived from a deep structure where the NP1 is not inherently case-marked (see (27)). However, this assumption is purely speculative and he does not provide any support for it.

Secondly, there is an empirical problem for the main assumption that oblique MNCs are derived from their dative counterparts. If this assumption is correct, we expect that oblique MNCs always have their non-MNC counterparts. Yet, as we witnessed in the previous sections, not all oblique MNCs have their non-MNC counterparts. (28) and (29) illustrate this point.

28) a. Mary-**ka** kamki-**ka** tul-ess-ta.

M-nom cold-nom enter-past-decl.

‘(lit.) Cold entered Mary’ ‘Mary got cold’

b. \*Mary-**hantey** kamki-**ka** tul-ess-ta.

M-dat cold-nom enter-past-decl.

29) a. Mary-**ka** ywume-**ka** iss-ta.

M-nom humor-nom exist-decl.

‘Mary has humor’ ‘Mary is humorous’

b. \*Mary-**hantey** ywume-**ka** iss-ta.

M-dat humor-nom exist-decl.

The examples above show that the derivational approaches, such as Youn (1990) and Takahashi (1994), are empirically wrong. One may argue that unlike the previous two analyses, Yoon’s (1996, 2004) analysis obviates this problem in that the MNCs in (28) and (29) may be derived from a deep structure where the NP1 is not inherently case-marked. This is certainly a possibility. Yet, again, I am skeptical about this since his analysis lacks any supporting empirical evidence.

Finally, there is another phenomenon that all the analyses mentioned above fail to account for. Note that the main assumption of this type of approach is that both nominative NP1s and dative DPs are the (indirect) objects of the main verb in their deep structure. That is, both nominative NP1 and its dative variant are assigned the same thematic role by the verb. Thus, according to this approach, oblique MNCs and their

dative counterparts are not supposed to be semantically distinct since they share the same deep structure. Yet, I showed in the section 2.1.4. that there are subtle, yet clear, a semantic differences between oblique MNCs and their dative counterparts (i.e., Holistic affectedness for the directed motion MNCs and a different type of possessional interpretations for the existential MNCs).

### 3.2. Focus Approach

According to Vermeulen (2005), the nominative marker *-ka/-i* on the NP1s in oblique MNCs is not a subject marker or a structural case but a focus marker. Thus, according to this analysis, the NP1s in oblique MNCs are not structural subjects but sentential adjuncts that happen to carry the homophonous focus marker. The motivation of this assumption comes from Japanese MNCs like (30b).

30) a. ano mise-**de** gakusee-**ga** hon-o yoku kau (Vermeulen 2005:1351)

that shop-at student-nom book-acc often buy

‘Students often buy books in that shop’

b. ano mise-**de-ga** gakusee-**ga** hon-o yoku kau.

That shop-at-foc student-nom book-acc often buy

‘It is in that shop that students often buy books’

c. ano mise-**ga** gakusee-**ga** hon-o yoku kau.

That shop-foc student-nom book-acc often buy

‘It is in that shop that students often buy books’

The locative DP *ano mise* ‘that shop’ in (30a) is canonically marked with a postposition *-de* ‘at’. In (30b), the adjunct PP optionally appears with *ga*-marker. Since, generally, an adjunct PP does not need a case, according to Vermeulen (2005), the appearance of *-ga* must be motivated by reasons other than case-assignment. She proposes that *-ga* in (30b) is a subject focus maker and posits the following focus generalization for Japanese MNCs.

### 31) Focus Generalization

*Ga* is interpreted as a focus marker if the constituent to which it is attached c-commands at least one other *ga*-phrase and no *ga*-phrase c-commands it.

Based on this rule, Vermeulen further argues that the MNC in (30c) is also a focus construction where the locative postposition *-de* is optionally dropped.

To a certain degree, I agree with Vermeulen (2005) in that a certain combination of dative marker *-eykey* and the nominative marker *-ka* in Korean, along with the help of intonation, yields this focus interpretation:

32) ?? [<sub>FOC</sub> Mary-**eykey-ka**] sonim-i o-ss-ta.

M-dat-nom customer-nom come-past-decl.

‘It is to Mary that a customer came’

However, I do not agree with Vermeulen’s (2005) proposal that all oblique MNCs belong to this type of focus construction. First of all, the main discourse function of NP1s in Korean oblique MNCs is topic-marking, not focus-marking. They are typically

contextually salient or familiar entities that carry old information. They are also subject to so-called ‘Aboutness condition’ according to which the rest of the sentence should be about the NP1.

33) a. Mary-ka cikum manhi paphu-ni?

M-nom now much busy-Q

‘Is Mary very busy right now?’

b. Yei. # Mary-**hantey-ka** cikum sonim-i o-ss-ta.

Yes M-dat-nom now customer-nom come-past-decl.

#‘Yes, It is to Mary that a customer came to’

c. Yei, Mary-**ka** cikum sonim-i o-ss-ta.

Yes, M-nom cikum customer-nom come-past-decl.

‘Yes, Mary got a customer right now’

If the MNC in (33c) were a focus construction just like (313b), we wouldn’t expect that there is an oddity contrast between (33b) and (33c). I take this contrast as evidence against Vermeulen’s proposal that all adjunct MNCs are focus constructions.

To summarize, we reviewed two previous approaches on oblique MNCs in this section. The first type of approach assumes that NP1 is an argument of the main verb and the second type of approach assumes that NP1 is a sentential adjunct that functions as a focus phrase. I showed that both approaches have empirical and theoretical problems. In the next section, I show that NP1 is neither an argument of the main verb nor an adjunct.

#### 4. Oblique MNCs as Low Applicative Construction

In the previous sections, we have seen two types of approaches regarding oblique MNCs. One approach argues that NP1 is a deep (indirect) object of V and the other argues that NP1 in MNCs is not an argument but is a focused adjunct with a homophonous focus marker. We rejected both approaches based on their shortcomings.

In this section, I argue that NP1 in an oblique MNC is neither an argument of the main verb nor a focused adjunct. Instead, I propose that NP1 is an argument that is introduced by an applicative functional head. Specifically, I propose that oblique MNCs in Korean are the case of a low applicative construction where the applied argument (NP1) is related to another nominal (NP2). I propose the following structures for oblique MNCs and their non-MNC counterparts.

##### 34) Directed Motion MNC and its Dative Counterpart

a. Mary-**ka** pwung-**i** o-ss-ta.

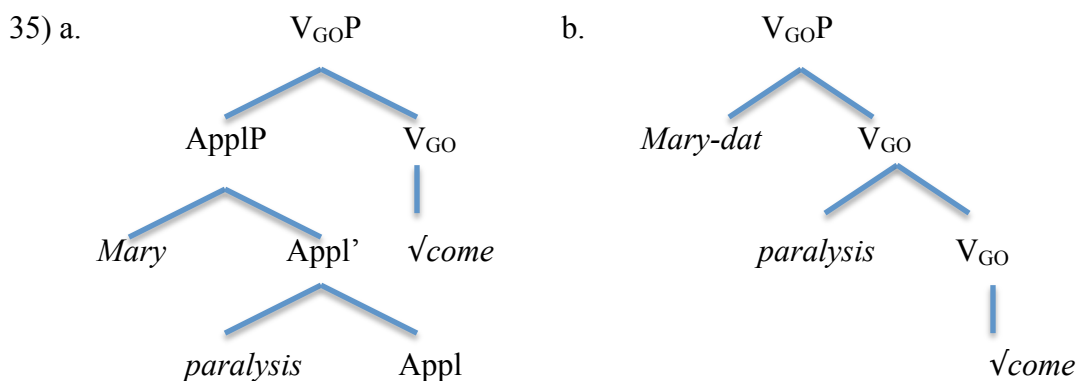
M-nom paralysis-nom come-past-decl.

‘(lit.) Mary, paralysis came’ ‘Mary is/got paralyzed’

b. Mary-**hantey** pwung-**i** o-ss-ta.

M-dat paralysis-nom come-past-decl.

‘(lit.) Paralysis came to Mary’



(34a) is a directed motion MNC and (34b) is its dative counterpart. (35a) illustrates the syntactic structure of (34a) where the directed motion unaccusative verb *o-* ‘come’ projects  $V_{GO}P$  that encodes an event of simple change. The verb *o-* ‘come’ takes low ApplP as its complement. The low applicative head takes the NP2 *pwung* ‘paralysis’ as its complement and relates the NP1 *Mary* to it. On the other hand, (35b) illustrates the syntactic structure of the regular dative construction where both the dative DP and the nominative DP are represented as arguments of the two-place unaccusative verb *o-* ‘come’. The structural difference above represents my idea that NP1 in an oblique MNC is an argument of an applicative functional head and its dative counterpart is an argument of a main verb.<sup>11</sup>

As for the existential MNC and its dative counterpart in (36), I propose the following structures in (37).

<sup>11</sup> The structures in (35) imply that there are two types of unaccusative *o-* ‘come’: one is a one-place predicate (35a) and the other is a two-place predicate (35b). This is certainly not what we want. Alternatively, we can posit the following structure for (35b) where a dative case assigning functional head dominates the  $V_{GO}P$ .

[ $V_{DAT}P$  NP1-dat [ $V_{GO}P$  NP2-nom  $V_{GO}$ ]  $V_{DAT}$ ] for (35b)

In this thesis, we keep the traditional representation in (35b) to show the syntactic difference between the nominative NP1 and its dative counterpart more clearly.

36) a. *Mary-ka myenhecong-i iss-ta.* (Existential MNC)

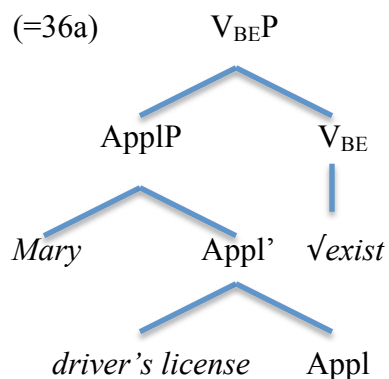
M-nom driver's license-nom exist-decl.

'Mary has a driver's license' 'Mary is licensed to drive'

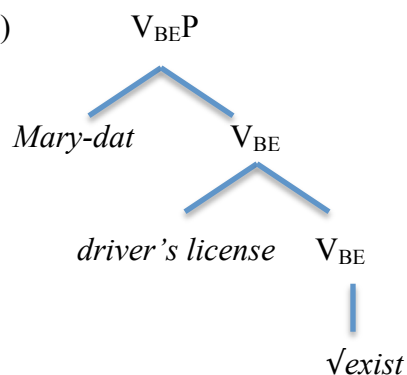
b. *Mary-hantey myenhecong-i iss-ta.* (Dative counterpart)

M-dat driver's license-nom exist-decl.

37) a. (=36a)



b. (=36b)



The structures in (37) are identical to the structures in (35) except that the main verb *iss-* 'exist' in (37) projects  $V_{BE}P$  as it denotes a state. In (37a), the verb takes a low  $ApplP$  as its complement. The applicative head takes the NP2 *myenhecong* 'driver's license' as its complement and relates it to the added argument *Mary*.

In the upcoming sections, I provide the theoretical and empirical justifications for the structures above and show how semantic properties of oblique MNCs naturally follow from the structures above.

#### 4.1. Motivations

In this section, I provide three reasons why an oblique MNC should be classified as a low applicative construction.

#### 4.1.1. Types of Main Verbs

Recall that in distinguishing a high applicative head and a low applicative head, Pylkkänen (2002) argues that a low applicative head only applies to deep objects (i.e., objects of transitive verbs and objects of unaccusative verbs). A low applicative head cannot apply to the subjects of unergative verbs or transitive verbs. According to her, when a verb has a deep subject, only a high applicative formation is possible. Based on this, I proposed in the previous chapter that Korean possessive MNCs are instances of high applicative construction since the NP2s in these constructions function as deep subjects of main predicates. Thus, a low applicative head was not able to take these NP2s as its complement.

I showed that the only two types of verbs can occur in possessive MNCs (property-denoting stative verbs and change of state unaccusative verbs) and proposed that the sole arguments of these verbs behave as deep subjects. My proposal was based on Cuervo's (2010, In press) classification of Spanish unaccusative verbs. According to her, there are two types of unaccusative verbs. Change-of-state verbs are composed of two sub-events (a change event and a result state event) and the sole argument of the verb is base-generated as a deep subject of the result state sub-event. On the other hand, simplex unaccusative verbs have a single eventuality that denotes either state or change. The sole arguments of a simplex unaccusative verb are base generated as the complement of the V. In Spanish, existential verbs such as *quedar* 'remain', *sobrar* 'be-extra' and directed motion verbs such as *llegar* 'arrive', *venir* 'come' *caer* 'fall' belong to the latter verb group. It must not be purely accidental that oblique MNCs in Korean only accept these verbs (existential unaccusatives and directed motion unaccusatives) as their main verbs.

(38) shows the distributional correlation between two types of MNCs and two types of verbs.

38)

	Possessive MNCs	Oblique MNCs
Change-of-State /Property-denoting stative verbs	OK	Not available
Existential/Directed Motion verbs	Not available	OK

Thus, the complementary distribution in (38) alone raises the possibility that oblique MNCs are instances of low applicative constructions: the fact that the occurrence of existential verbs and directed motion verbs whose sole arguments are base-generated as complements of V is only limited to oblique MNCs would indicate that the oblique MNCs are low applicative constructions.

#### 4.1.2. Incorporation

If Cuervo's assumption that the sole argument of a COS unaccusative is a deep subject and the sole argument of an existential/directed motion unaccusative is a deep object is correct, there must be some kind of grammatical contrast that reflects this dichotomy. For example, Cuervo (2010, In press) shows that Spanish bare nominals behave differently with respect to the two types of unaccusative verbs: bare nominals are not possible as subjects of COS unaccusatives. As for Korean, we witnessed a different kind of contrast in the previous section. Recall that Baker (2003) observed that the sole arguments of

unergative verbs in Mohawk cannot undergo incorporation while the sole arguments of the unaccusative verbs can. Based on this, Baker proposed that only arguments that are base-generated in the complement positions (deep objects) of the verbs are able to undergo incorporation in Mohawk. Following Baker's logic, I proposed that the NP2s in Korean possessive MNCs are deep subjects since they cannot undergo incorporation:

39) a. Mary-**ka** kamki-**ka** simhay-ci-ess-ta.

M-nom cold-nom severe-incho-past-decl.

'Mary's cold has gotten severe'

b. \*Mary-**ka** kamki-simhay-ci-ess-ta.

M-nom cold-severe-incho-past-decl.

40) a. Mary-**ka** cha-**ka** pissa-ta.

M-nom car-nom expensive-decl.

'Mary's car is expensive'

b. \*Mary-**ka** cha-pissa-ta.

M-nom car-expensive-decl.

(39a) is a possessive MNC with the COS unaccusative verb *simhayci-* 'get severe' and (40a) is a possessive MNC with the property-denoting stative verb *pissa-* 'expensive'. As (39b) and (40b) show, incorporation of NP2s is not possible.

Now, if Cuervo (2010, In press) and Baker (2003) are correct, it is expected that NP2s in oblique MNCs are able to incorporate since they are deep objects of directed motion/existential verbs. And this is what we observe in (41) and (42)

41) a. Mary-**ka** kamki-**ka** tul-ess-ta.  
 M-nom cold-nom enter-past-decl.  
 ‘(lit.) Cold entered Mary’ ‘Mary got a cold’

b. Mary-**ka** **kamki-tul**-ess-ta.  
 M-nom cold-enter-past-decl.

42) a. Mary-**ka** cha-**ka** iss-ta.  
 M-nom car-nom exist-decl.  
 ‘Mary has a car’

b. Mary-**ka** **cha-iss**-ta.  
 M-nom car-exist-decl.

(41a) is an oblique MNC with the directed motion verb *tul-* ‘enter’ and (42a) is an oblique MNC with the existential verb *iss-* ‘exist’. As (41b) and (42b) show, the NP2s have no problem in undergoing incorporation with the main verbs. I take this incorporation fact as strong evidence in favor of the proposal that Korean oblique MNCs are instances of low applicative constructions where the applicative head takes the complement NP2 of existential/directed motion unaccusatives.

#### 4.1.3. Double Object Constructions

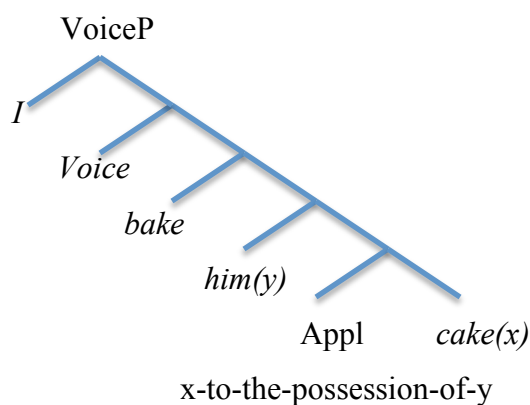
The last evidence in favor of my proposal that an oblique MNC is a low applicative construction comes from the cross-linguistic similarity between double object constructions (DOC) in Indo-European languages such as English, Spanish, and German

and Korean MNCs. In the applicative literature, DOCs are widely accepted as a representative example of low applicative construction. (Pylkkänen 2002 for English, Cuervo 2003 for Spanish and McIntyre 2006 for German). For example, Pylkkänen suggests the following structure for English DOCs.

43) a. I bake him a cake

= I bake a cake and the cake was to the possession of him.

b.



In the structure above, the low applicative head bears no semantic relation to the verb whatsoever. It only bears a transfer of possession relation to the direct object. Cuervo (2003) and McIntyre (2006) propose similar structures for Spanish and German DOCs respectively. Thus, if there are meaningful syntactic and semantic similarities found between Korean oblique MNCs and DOCs in these languages, this would be evidence in favor of the proposal that Korean oblique MNCs are low applicative constructions.

The first similarity between the DOCs and oblique MNCs is that both constructions are subject to dative-alternation.

44) a. Mary gave/threw/send/lend him a book.

b. Mary gave/threw/send/lend a book to him

45) a. Mary-**ka**    sonim-**i**            o-ss-ta.

M-nom    customer-nom    come-past-decl.

‘(lit.) Mary, a customer came’ ‘Mary got a customer’

b. Mary-**hantey**    sonim-**i**            o-ss-ta.

M-dat            customer-nom    come-past-decl.

The indirect object *him* in (44a) can be alternatively realized as a dative PP in its non-DOC counterpart (44b). The dative alternation is also frequently attested in oblique MNCs in (45).

The second similarity comes from their possessional meanings. The verbs used in DOCs typically do not have explicit semantics of possession. Yet, the typical semantic readings of DOCs encode possession. For example, the DOCs in (44a) have the following readings in (46).

46) I caused him to have a book by giving/throwing/sending/lending it.

Now, as I showed earlier, the verbs used in Korean oblique MNCs do not directly encode the possessional semantics even though the final denotations of the oblique MNCs encode possession as shown in (45a).

Thirdly, both DOCs and oblique MNCs show so-called ‘holistic affectedness’ that has to do with resultativity. Recall that the oblique MNC in (23a), which is repeated in

(47a), shows full affectedness while its dative-counterpart in (47b) does not have this type of effect.

- 47) a. Sorak san-**i**      tanpwung-**i**      tul-ess-ta.  
       Mt. Sorak-nom    autumn.foliage-nom    enter-past-decl.  
       ‘Mt. Sorak is fall-colored’
- b. Sorak san-**ey**      tanpwung-**i**      tul-ess-ta.  
       Mt. Sorak-dat    autumn.foliage-nom    enter-past-decl.  
       ‘Autumn foliage has settled in Mt. Sorak’

The oblique MNC in (47a) sounds bad if Mt. Sorak has not changed its color fully. On the other hand, (47b) can be successfully uttered under the situation where only part of Mt. Sorak has changed its color. Similarly, English DOCs and their dative counterparts show similar effect.

- 48) a. The teacher taught the students Pashto (\*but they didn’t learn any)  
       b. The teacher taught Pashto to the students (but they didn’t learn any)

According to Van Valin (2002) and Harley (2003), the DOC in (48a) strongly implies that the knowledge of Pashto language is successfully transferred to the indirect object *the students*. Thus, the sentence means that the students learned Pashto somehow as a result of this full transition. This is why the parenthesis sounds bad since its content is

contradictory. On the other hand, its dative counterpart in (48b) does not have such implication of the full knowledge transfer. The dative PP is purely interpreted as a goal.

It seems to me that the semantic effects shown in the both English DOCs and Korean oblique MNCs are the same type: DOCs and MNCs encode the full transfer of Figure to Ground. As a result, Ground ends up having Figure. On the other hand, their dative counterparts do not encode the full transfer of Figure. The dative DPs (PPs) only function as thematic goals.

So far, I have provided three syntactic and semantic similarities between English DOCs and Korean oblique MNCs. Since English DOCs are considered to be low applicative constructions, I take these similarities as legitimate motivation for my proposal that Korean oblique MNCs are low applicative constructions.

To summarize, in this section, I proposed that Korean oblique MNCs are instances of low applicative constructions and their dative counterparts are regular two-place unaccusative constructions. I provided three motivations for my proposal. First, oblique MNCs only takes existential and directed motion unaccusatives which are classified by Cuervo (2010, In press) as canonical unaccusatives whose sole arguments are deep objects. Second, unlike the NP2s of the possessive MNCs, the NP2s in oblique MNCs freely undergo incorporation. This shows that the NP2s in these constructions are base-generated as deep objects. Third, oblique MNCs share their hallmark properties with DOCs in Indo-European languages which are analyzed as canonical low applicative constructions.

In the next section, I deal with the semantic aspects of the oblique MNCs and show how my proposal account for the semantic properties of the oblique MNCs discussed in the previous sections.

## 4.2. Semantics of Oblique MNCs

Recall that we showed that there are two defining semantic readings that oblique MNCs yield. First, NP1s in oblique MNCs function as a possessor despite that there is no explicit constituent that encodes the semantics of possession. Second, NP1s in oblique MNCs are also interpreted as holistically affected entities. In this section, I try to show that these two semantic properties naturally follow from one simple proposal: the low applicative head *s*-selects a property-denoting noun.

### 4.2.1. Applied Argument as a Holder

Let's first discuss the possessional semantics of oblique MNCs. The common semantic readings of the oblique MNCs in (49) are that NP1 is interpreted as a possessor. The question is how this possessional meaning is derived.

49) a. Mary-**ka**    sonim-**i**            o-ss-ta.

M-nom    customer-nom    come-past-decl.

‘(lit.) A customer came to Mary’ ‘Mary got a customer’

b. Mary-**ka**    kamki-**ka**            tul-ess-ta.

M-nom    cold-nom            enter-past-decl.

‘(lit.) Cold entered Mary’ ‘Mary has a cold’

c. Mary-**ka** yetulum-**i** na-ss-ta.

M-nom pimple-nom exit-past-decl.

‘(lit.) A pimple came out from Mary’ ‘Mary got pimples’

Since we have shown that oblique MNCs are very similar to DOCs in other languages in that they both have possessional semantics, it would be useful to review the main analyses in the DOC literature and see if they can be applied to Korean oblique MNCs.

#### 4.2.1.1. Possession Encoding in DOCs

Although the details are different from each other, most analyses in the DOC literature agree on two points. First, the DOC in (50a) encodes ‘CAUSE to HAVE’ while its dative counterpart in (50b) encodes ‘CAUSE to MOVE’. (Gropen et al 1989, Harley 2002, Pylkkänen 2002, Cuervo 2003, Rappaport-Hovav & Levin 2008 among others)

50) a. Mary sent John a letter.

= Mary CAUSED John to HAVE a letter (by sending it)

b. Mary sent a letter to John.

= Mary CAUSED a letter to MOVE toward/to John.

Second, the notion of possession is a linguistic primitive and this semantic primitive is directly encoded by a verb or by a functional head in the DOC. For example, Gropen et al (1989) assume that DOC verbs such as *give*, *send*, *throw*, etc. have two

lexical entries; one encodes ‘cause to have’ semantics and the other encodes ‘cause to move’ semantics. The verbs take two arguments and a mapping algorithm projects those two arguments onto different syntactic positions. In other words, the semantics of possession is a part of the verb’s lexical meaning.

However, Pylkkänen (2002), Harley (2002) and Cuervo (2003) reject this idea and propose that the possession is not part of verb semantics but is directed encoded by a functional head. For example, Pylkkänen (2002) and Cuervo (2003) propose that a low applicative head denotes a transfer of possession relation such as ‘X-to-the-possession-of-Y’ and ‘X-from-the-possession-of-Y’.<sup>12</sup> On the other hand, Harley (2002) proposes that the possession relations in DOCs are encoded by the functional head P<sub>HAVE</sub> whose syntactic and semantic nature is close to a prepositional head. Though the labels of the functional heads are different, the basic semantics that these three researchers assume is essentially the same: possession is encoded by a special functional head that only exists in DOCs. (51) shows the rough representation of the two functional head approaches.

- 51) a. [<sub>VP</sub> CAUSE [<sub>AppIP</sub> John Appl [<sub>DP</sub> a letter ]]] (Pylkkänen 2002)  
 b. [<sub>VP</sub> CAUSE [<sub>PHAVEP</sub> John P<sub>HAVE</sub> [<sub>DP</sub> a letter ]]] (Harley 2002)

Overall, the semantics of DOCs and their dative counterparts are straightforward according to these analyses: DOCs encode possession and their dative counterparts encode movement/directed motion.

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<sup>12</sup> Cuervo (2003)’s analysis is not much different from Pylkkänen’s (2002) low applicative analysis. Noticing that Pylkkänen’s semantics of a low applicative head only takes care of dynamic possession relation (transfer of possession), she adds another low applicative head into the existing inventory. That is, the low applicative head Appl<sub>POSS</sub> denotes a static possession relation such as ‘X-in-the-possession-of-Y’.

Now the question is whether this idea can be directly applied to Korean oblique MNCs and their dative counterparts. Unfortunately, the application of the analyses above for Korean constructions doesn't seem to be possible. Consider the following oblique MNC and its dative counterpart:

- 52) a. Mary-**ka**    nwuna/cha-**ka**    iss-ta.  
       M-nom    sister/car-nom    exist-decl.  
       'Mary has a sister/a car'
- b. Mary-**hantey**    nwuna/cha-**ka**    iss-ta.  
       M-dat        sister/car-nom    exist-decl.

(52a) is a typical example of an oblique MNC and (52b) is its dative counterpart. Under the DOC analyses discussed above, there must be a sharp reading difference between two constructions: the MNC in (52a), which is a DOC-equivalent of (50a), must have a possessional semantics while its dative counterpart in (52b), which is the equivalent of the dative construction in (50b), must denote a pure locational/spatial relation between the two arguments. Yet, both constructions in (49) encode possession. This indicates that DOC-type analyses cannot be directly applied, at least for Korean oblique MNCs and their dative counterparts. In the next section, I present my own view on possessional readings of oblique MNCs and show how my analysis deals with the data in (52).

#### 4.2.1.2. Property Denoting Nouns and Sortal Nouns

I propose that the possessional readings in oblique MNCs arise when the applied argument (NP1) is interpreted as a holder of a certain property. This means that the possessional readings in oblique MNCs essentially come from the semantic nature of the complement noun phrase that the low applicative selects. Specifically, I argue that a low applicative head *s*-selects property-denoting NPs (NP2) as its complement and it relates the applied argument (NP1) to the property-denoting nominal (NP2). Since the applied argument is linked to the property, it is naturally interpreted as a holder of the property. On the other hand, I argue that, in dative constructions, the sole nominative DPs which are the equivalents of the NP2s in MNCs are object/individual-denoting nominals.

To support my idea, I show the specific case-alternation phenomenon in Korean existential MNCs and discuss the details of my proposal afterwards. First consider the existential MNCs and their dative counterparts below:

- 53) a. \*Mary-**ka**    ceckalak/mangchi-**ka**            iss-ta.  
           M-nom    chopstick/a hammer-nom    exist-decl.
- b. Mary-**hantey**    ceckalak/mangchi-**ka**            iss-ta.  
           M-dat            chopstick/a hammer-nom    exist-decl.
- ‘Mary has chopsticks/a hammer’

- 54) a. Mary-**ka**    cha/ton/cip-**i**                    iss-ta.  
           M-nom    car/money/house-nom    exist-decl.
- ‘Mary has a car/money/house’

b. Mary-**hantey** cha/ton/cip-**i** iss-ta.  
 M-dat car/money/house-nom exist-decl.

55) a. Mary-**ka** enni/ttal/nampyen-**i** iss-ta.  
 M-nom sister/daughter/husband-nom exist-decl.

‘Mary has a sister/a daughter’

b. Mary-**hantey** enni/ttal/nampyen-**i** iss-ta.  
 M-dat sister/daughter-nom exist-decl.

56) a. Mary-**ka** ywume/seynsu/wun-**i** iss-ta.  
 M-nom humor/sense/luck-nom exist-decl.

‘Mary has humor/sense/luck’ ‘Mary is humorous/sensible/lucky’

b. \*Mary-**hantey** ywume/seynsu/wun-**i** iss-ta.  
 M-dat humor/sense/luck-nom exist-decl.

The sentences in (53-56) show mixed behaviors in terms of case-alternation: the nominative/dative alternation seems to be free in (54) and (55). On the other hand, the formation of the MNC yields ungrammaticality in (53a). The opposite case, where the MNC is possible but its dative counterpart is bad, is also attested as in (56b). Since everything is equal except the denotations of NP2s, we conclude that the case-alternation must have to do with the semantics of NP2. The table in (57) shows the patterns of case-alternation with respect to NP2s.

57)

Case\NP2	<i>Ceckalak/mangchi</i> (chopstick/hammer)	<i>Cha/ton/cip</i> (car/money/house)	<i>Enni/ttal/nampyen</i> (siblig/daughtr/husband)	<i>Ywume/seynsu/wun</i> (humor/sense/luck)
Nominative	*	ok	ok	ok
Dative	ok	ok	ok	*

The question is what aspect of the NP2s above leads to these variable behaviors in terms of case-alternation. To pinpoint the clear difference, we need to compare the nouns that do not allow nominative NP1s (nouns in the left-most side in (57)) and the nouns that do not allow dative NP1s (nouns in the right-most side in (57)). The nouns in the right-most side, *ywume* ‘humor’, *seynsu* ‘sense’ and *wun* ‘luck’ denote abstract notions. On the other hand, the nouns in the left-most side, *ceckalak* ‘chopsticks’, *mangchi* ‘hammer’ denote concrete objects. Based on this denotational difference (concrete vs. abstract), it is reasonable to hypothesize that oblique MNCs are only possible with abstract nouns, and their dative counterparts, on the other hand, are only possible with concrete nouns. This would mean that nouns in the middle columns in (57) are ambiguous between abstract nouns and concrete nouns. To implement this idea, I use Beyssade & Dobrovie-Sorin’s (2005) dichotomy that divides nominals into two sub-types: sortal nouns and property-denoting nouns. According to them, a sortal noun denotes a set of individuals. It cannot denote intensional properties but instead must be extensionalized into sets of individuals. Syntactically, a sortal noun projects a functional layer such as NumP or DP. On the other hand, property denoting nouns and relational nouns denote property P (viewed as a primitive entity not as a set of individual). According to them, property-denoting nouns are typically bare NPs (with no functional heads) and their semantic function is no different from that of adjectives: both property-denoting nominals and adjectives denote

property and ascribe a certain property to its subject individual. Beyssade & Dobrovie-Sorin (2005) give the following example to show the semantic difference that these two types of nominals typically yield.

- 58) a. Jean est {clown, danseur} (Professional)  
       b. Jean est un {clown, danseur} (Not necessarily professional)
- (Beyssade & Dobrovie-Sorin 2005:52)

When the predicative nominals are used bare as in (58a), the sentence only yields a job description reading. Whereas when the predicative nominals are indefinite DPs, the reading of the sentence is more flexible: in addition to the job description reading, the sentence can also mean that Jean is an actor who is doing clown-like behaviors or dancing right now. According to Beyssade & Dobrovie-Sorin (2005), the reading difference comes from the different denotations of the two nominals.

- 59) a. Jean has a property of being clown, dancer (58a)  
       b. Jean belongs to a set of individuals who are a clown, a dancer. (58b)

Given this semantic distinction, it is expected that Korean oblique MNCs and their dative counterparts show similar reading differences since we hypothesize that NP2s in oblique MNCs are property-denoting nouns and the NP2-equivalents in dative constructions are sortal nouns. This prediction is borne out: the reading difference

between the two constructions was briefly discussed in the section 2.4. Consider the constructions in (25) which are repeated in (60).

60) a. Mary-**ka** wuncen myenhecong-**i** iss-ta.

M-nom driver's license-nom exist-decl.

'Mary has a driver's license'

b. Mary-**hantey** wuncen myenhecong-**i** iss-ta.

M-dat driver's license-nom exist-decl.

Recall that both the MNC and its dative counterpart have some kind of possession reading. Yet, there is a subtle difference in reading. (60b) simply asserts that *Mary* has a driver's license. What is important is that the possessee NP, *driver's license*, does not have to be her own. On the other hand, in the MNC in (60a), the NP2 *driver's license* must be *Mary's*. In addition to this requirement, the MNC has a qualitative reading such that *Mary* is a qualified legal driver by having a driver's license. The dative construction in (60b), on the other hand, lacks this type of additional reading. It simply asserts that a thing called 'drivers' license' is in *Mary's* possession right now. I propose this reading difference comes from the denotational distinction between a sortal noun and a property-denoting noun. The drivers' license in the dative construction in (60b) is a sortal noun that simply denotes an object/individual. Thus, the sentence yields a reading where *Mary* simply owns an object that is called 'a driver's license'. On the other hand, in the existential MNC in (60a), the NP2 is a property-denoting noun. When the low applicative head associates the applied argument *Mary* (NP1) with this property-denoting noun, the

NP1 *Mary* is interpreted as a holder of the property. Thus, the sentence means that *Mary* is a holder of ‘driver’s license-hood’. I assume that this ‘holder of a property’-reading is responsible for the qualitative reading attested in (60a).

Based on this conclusion, now we can account for the variable case-alternation phenomena in (53-56). Take (56) first, where the MNC is possible while its dative form is ungrammatical. The grammaticality contrast is now apparent under my assumption that property-denoting nouns are only available in MNCs (since the low applicative head *s-* selects them alone) and sortal nouns are only available in their dative counterparts. It is apparent that the abstract nouns *ywume* ‘humor’, *seynsu* ‘sense’ and *wun* ‘luck’ in (56) denote certain properties and they can hardly be individual/object-denoting nouns. Thus, their distributions are limited to existential MNCs.<sup>13</sup>

On the opposite side, there are nouns that seem to only denote concrete objects/individuals. Those nouns are the nouns found in (53), such as *ceckalak* ‘chopstick’ and *mangchi* ‘hammer’. Thus, the ungrammaticality of the MNC is expected.

Finally, let’s consider the constructions in (54) and (55) where both MNCs and their dative counterparts are grammatical. Since both are grammatical, the natural assumption is that the nouns in these constructions are ambiguous between property-denoting nouns and sortal nouns. This assumption is confirmed, as we witness the reading differences between these two types of constructions. Consider (61), which is the negated version of (54), and (62), which is (55).

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<sup>13</sup> The proposal that the nouns in (56) are property-denoting nouns is also supported by the readings that the existential MNCs in (56) have. According to Beyssade & Dobrovie-Sorin (2005), the semantic function of a property-denoting noun is not different from an adjective. The readings in (56) such as ‘Mary has humor’, ‘Mary has sense’ and ‘Mary has luck’ can readily be re-interpreted as ‘Mary is humorous’, ‘Mary is sensual/sensitive’ and ‘Mary is lucky’. This interpretational commonality supports my proposal indirectly.

61) a. Mary-**ka** cip-**i** eps-ta.

M-nom house-nom neg.exist-decl.

‘Mary has no house’ ‘Mary is homeless’

b. Mary-**hantey** cip-**i** eps-ta.

M-dat house-nom neg.exist-decl.

‘Mary has no house’

62) a. Mary-**ka** nampyen-**i** iss-ta. (=55)

M-nom husband-nom exist-decl.

‘Mary has a husband’ ‘Mary is married’

b. Mary-**hantey** nampyen-**i** iss-ta.

M-dat husband-nom exist-decl.

‘Mary has a husband’ ‘Mary’s husband is with her’

The dative construction in (61b) simply asserts that *Mary* has no house. On the other hand, the salient reading of the MNC in (61a) is a qualitative reading that *Mary* is homeless by having no house. We have a similar reading contrast in (62) as well: the dative construction in (62b) simply says that *Mary* has an individual called husband. On the other hand, the MNC in (62a) expresses that *Mary* is a married person by having a husband. I assume that these reading differences come from the sortal/property-denoting noun distinction.

To summarize, in this section we asked the question of how possessional readings arise in oblique MNCs. I argued here that the possessional readings are nothing but a

‘holder of property’ readings that are derived from a specific configuration where a low applicative head *s*-selects a property-denoting noun. To support my analysis, I showed that there are subtle yet systematic reading differences between existential MNCs and their dative counterparts and concluded that these reading differences come from the distinction between sortal nouns and property-denoting nouns.

#### **4.2.1.2.1. Advantages**

Since I analyze oblique MNCs as low applicative constructions, before we proceed to the next section, I would like to point out two advantages of the current analyses compared to the existing low applicative analyses, such as Pylkkänen (2002) and Cuervo (2003). I think the current analysis has more explanatory power than the existing two analyses.

First, the current analysis provides more insightful characterization of the possessional semantics of low applicative constructions than the existing applicative analyses. Note that according to my analysis, the possessional readings in low applicative constructions are nothing but holder relations between an individual (NP1) and a property (NP2). On the other hand, according to Pylkkänen’s (2002) and Cuervo’s (2003) analyses, this possessional relation is established via thematic role assignment: a low applicative head assigns a possessor-like role to the applied argument. Now, it is apparent that the current analysis provides more natural insight in accounting for the adjectival readings that the MNCs in (54, 55 and 56) have. For example, the interchangeability between ‘having humor’ and ‘being humorous’ and between ‘having luck’ and ‘being lucky’ is naturally accounted for by the assumption that the subjects of adjectives are in fact the holders of the properties that the adjectives denote.

Second, by proposing that a low applicative head s-selects property-denoting nouns, the current analysis enables us to propose the uniform semantics for both high and low applicative constructions. Recall that in the previous chapter, I proposed that a high applicative head (in possessive MNCs) uniformly s-selects a state-denoting VP (property-denoting stative VPs or result state VPs) and the applied argument (NP1) is interpreted as a holder of the state. In this section, I proposed that a low applicative head (in oblique MNCs) s-selects a property-denoting noun and the applied argument is also interpreted as a holder of the property. Thus, according my approach, the syntactic heights of the high and low applicative heads are different, but their semantics are uniform. This contrasts with the existing applicative analyses according to which high and low applicative constructions have different syntax and semantics (i.e. affectedness semantics for high applicatives and possessional semantics for low applicatives). In this respect, the current analysis is more economic than the existing analyses in that it is able to deal with a wider range of data given the limited inventory of applicative heads.

#### **4.2.2. Affectedness and Change of State**

In this section, I discuss the semantics of directed motion MNCs. I show that the so-called affected readings that this type of MNC has can be handled in the same way that the affected readings of the eventive possessive MNCs are explained in the previous chapter. That is, the notion of Change-of-State plays a key role for the derivation of the affected readings.

Note that we classified Korean oblique MNCs into two sub-types: existential MNCs and directed Motion MNCs. An existential MNC has a static possessional reading

and we proposed that this reading results from the specific low applicative configuration where the applied argument (NP1) functions as a holder of a certain property (NP2). As for the readings of directed motion MNCs, we showed that these constructions have so-called affected readings in addition to their possessional readings. Consider the directed motion MNCs below.

63) a. Mary-**ka**      hwa/sin-**i**      na-ss-ta.

M-nom      anger/joy-nom      exit-past-decl.

‘(lit.) Anger/joyfulness came out from Mary’ ‘Mary got angry/joyful’

b. Mary-**ka**      cam/cengsin/kamki-**ka**      tul-ess-ta.

M-nom      sleep/consciousness/cold-nom      enter-past-decl.

‘(lit.) Sleep/consciousness/cold came into Mary’

‘Mary fell asleep/came to herself/got a cold’

c. Mary-**ka**      yetulum/swuyem-**i**      na-ss-ta.

M-nom      pimple/beard-nom      exit-past-decl.

‘(lit.) Pimple/beard came out from Mary’ ‘Mary got pimple/grew beard’

The MNCs in (63) denote a psychological process (a and b) and a physiological/bodily process (b and c) and the subject NP1s in directed motion MNCs are typically interpreted as entities that are affected by these psychological and physiological processes. The immediate question is how these readings are derived under the current low applicative analysis. There are two possible assumptions: one may assume that NP1s in these types of constructions are assigned specific thematic roles, such as an experiencer role or an

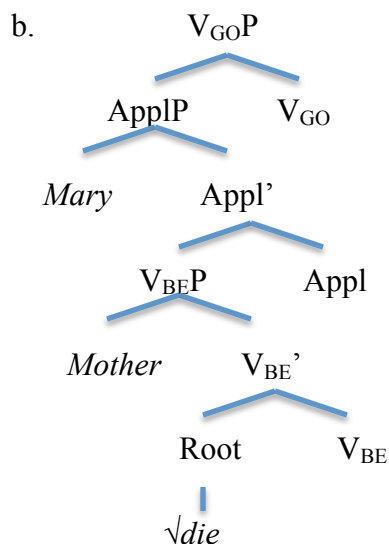
affected role, by the low applicative heads. If this is the case, we have to assume that there are at least two different types of low applicative heads: A low applicative head that facilitates a holder interpretation for the NP1s in existential MNCs and another low applicative head that assigns an affected role to their subject NP1s in directed motion MNCs. Certainly, this option is not desirable, not only for economic reasons but also because of the purely speculative nature of the assumption.

Another option that I will pursue is that the semantic function of a low applicative is the same in both types of MNC. That is, it unambiguously s-selects the property-denoting nouns (NP2) and the applied argument is interpreted as a holder of the property. In order to keep this core semantics of a low applicative intact, I propose that the affected readings on the NP1s of the directed motion MNCs are derived in the exact same way the affected readings on the NP1s of the eventive possessive MNCs are derived. That is, the affected readings are by-products of NP1s undergoing various Change-of-States. Recall how an affected reading of the NP1 is derived in a possessive MNC such as (64) (which is analyzed as a high applicative construction) in the previous chapter.

64) a. Mary-**ka** emeni-**ka** tolakasi-ess-ta.

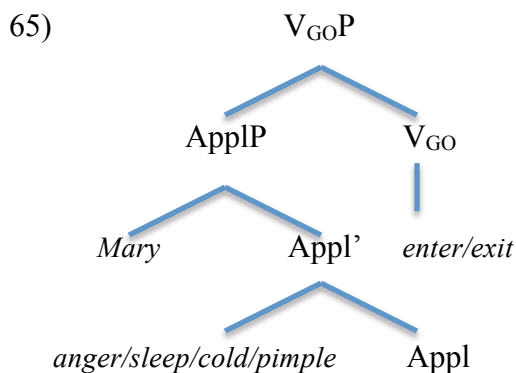
M-nom mother-nom die-past-decl.

‘Mary has her mother die (on her)’



In (64), we analyzed the COS unaccusative verb *tolakasi*- ‘die’ as a complex verb that is composed of two sub-events:  $V_{GO}$  encodes an event of change and  $V_{BE}$  encodes a result state. The high applicative head intervenes between these two sub-events and the NP1 functions as both an undergoer of the change event and a holder of the result state where her mother is dead. Thus, the reading of this sentence is roughly equivalent to ‘Mary becomes a holder of a result state where her mother is dead’ or ‘Mary undergoes change from a state where her mother is alive to a state where her mother is dead’.

Now, the immediate problem that we face in applying this analysis to the directed motion MNCs in (63) is that the main verbs in (63) are not COS verbs but simple change verbs that lack inherent result state sub-events. Thus, one may wonder how COS readings can ever be achieved without any lexically represented result states. I propose that in (63), the property-denoting nouns that are s-selected by the low applicative heads naturally function as result states. Consider the low applicative structure in (65) that represents the directed motion MNCs in (63).



In (65), the low applicative head s-selects various property-denoting nouns (NP2) and introduces the applied argument (NP1) which functions as a holder of the properties. In turn, the directed motion verbs take the low ApplP as their complement. I propose that these directed motion verbs are light verbs that simply encode a simple event of change. This specific configuration yields a reading where the NP1 *Mary* behaves as an undergoer of the change event and a holder of the relevant property at the same time. Thus, the configuration in (65) exactly yields a change of state semantics: NP1 becomes a holder of a certain property that is denoted by NP2. Note that under this reading the property-denoting nouns exactly function as final property states that the NP1s end up with.<sup>14</sup> The sentences in (66) are ‘change-of-state’ interpretations of the MNCs in (63) and their readings mirror the structure in (65).

<sup>14</sup> It is interesting to see that while the lexical content of the end state/final state that the NP1 ends up with is provided by the main verb in a possessive MNC (which is a high applicative construction), the lexical content of the end state is provided by NP2 in an oblique MNC (which is a low applicative construction). This contrast indirectly supports my main argument in this thesis that possessive MNCs are high applicative and oblique MNCs are low applicatives: a HOLDER introducing applicative head must take a contentful (end)state as its complement. Otherwise, these constructions would not be able to yield achievement-type change of state semantics. The high/low distinction is purely dependent on which constituent in the structure is qualified as a result/end state. In an oblique MNC, NP2 qualifies as a result state. Thus, it has a low applicative configuration. In a possessive MNC, the phrasal level V<sub>BE</sub>P qualifies as a result state, thus, it has a high applicative configuration.

66) a. (63a): Mary became a holder of the property ‘angriness’, ‘joyfulness’

= Mary got angry/joyful.

b. (63b): Mary became a holder of the property ‘sleepness’, ‘a cold’.

= Mary fell asleep/Mary got a cold.

c. (63c): Mary became a holder of the property ‘pimple’, ‘beard’.

= Mary got pimples/grew beard.

Given the discussion so far, we are now able to account for the difference in reading between directed motion MNCs and their dative counterparts. Recall the differences in reading discussed in (23) which are repeated (67).

67) Context: Mary is at the top of the Mt. Sorak and is able to see the whole mountain.

She finds out that only some part of the mountain has changed its color.

a. # Sorak san-**i**      tanpwung-**i**      tul-ess-ta.

Mt. Sorak-nom    autumn.foliage-nom    enter-past-decl.

‘Mt. Sorak is fall-colored’

b. Sorak san-**ey**      tanpwung-**i**      tul-ess-ta.

Mt. Sorak-dat      autumn.foliage-nom    enter-past-decl.

‘Autumn foliage has settled in Mt. Sorak’

In order for (67a) to be true, *Mt. Sorak* has to be fully covered with autumn foliage. On the other hand, its dative counterpart in (67b) does not require such a contextual setup. This holistic affectedness can be now accounted for under the notion of affectedness

we've discussed here: The MNC in (67a) has a low applicative construction where *Mt. Sorak* is an undergoer of a color-change event and a holder of the property 'fall-coloredness'. Since this property represents the final state that the NP1 ends up with, the holistic affectedness of the NP1 is expected. On the other hand, the dative counterpart in (67b) does not have a low applicative construction where achievement-style 'change of event' is structurally encoded. Its structure would simply represent two-place directional motion verb construction where the dative DP *Mt. Sorak-ey* 'to Mt. Sorak' functions as a thematic goal and the nominative DP *tanpwung* 'autumn foliage' functions as a figuratively moving theme. Thus, the reading difference in (67) naturally follows from my analysis that a low applicative sentence constructionally encodes change-of-state events.

To summarize, in this section, I investigated how the affected readings of directed motion MNCs are derived. I proposed that the affected readings are by-products of Change-of-State semantics that are constructionally derived from the low applicative configuration.

## 5. Summary

In this chapter, I investigated the syntactic and semantic properties of oblique MNCs and their dative counterparts. As for the syntax of the construction, I rejected previous approaches according to which oblique MNCs are derived from their dative counterpart constructions. Instead, I proposed that a Korean oblique MNC is an instance of a low applicative construction where an applicative head *s*-selects property-denoting NP2s.

As for the semantics of the construction, I proposed that the low applicative construction yields a consistent semantics where an applied argument interpreted as a holder of a property that is denoted by NP2. The possessional readings of existential MNCs and affected readings of directed motion MNCs share this core semantics. When  $V_{GO}$  (which encodes a change event) dominates the ApplP, it yields a change of state reading where the NP1 is interpreted as an affected entity. When  $V_{BE}$  (which encodes a state) dominates the ApplP, it yields a purely stative possessional (holder) reading.

Now, let's see how my analysis takes care of the main questions that we raised at the beginning of the chapter. First, we asked how NP1 of the oblique MNCs, which seems to be thematically equivalent to the dative argument of the dative constructions, is licensed. In this chapter, I proposed that there is no derivational relation between oblique MNCs and their dative counterparts: while dative arguments are licensed as thematic arguments (goal/source/location) of the main verb, the NP1s in oblique MNCs are not arguments of the main verb but arguments of low applicative functional heads that directly select NP2.

Secondly, I raised the question of how oblique MNCs have possessional semantics even though there are no lexical items that encode possession. I proposed that we do not need to posit a specific thematic role, such as 'possessor', for the possessional readings in oblique MNCs. Instead I argued that the possessional semantics arises due to the specific configuration of the ApplP where the low applicative head s-selects a property-denoting noun (NP2) and introduces an individual (NP1) in its specifier position. Under this configuration, the applied argument (NP1) is naturally interpreted as a holder of the property that is denoted by NP2.

Thirdly, we raised the question of how the various semantic differences between oblique MNCs and their dative counterparts can be accounted for in a systematic way. For example, I showed that existential MNCs yield more adjective-like qualitative readings while their dative counterparts encode possessional or existential readings straightforwardly. As for the directed motion MNCs, I showed that these MNCs have affected readings while their dative counterparts do not. By now, it is rather apparent why there are such differences in meaning. As for the differences in reading between the existential MNCs and their dative counterparts, I argued that this reading difference is the direct consequence of the different nature of the NP2s: in the MNCs, a low applicative head only *s*-selects property-denoting nouns while in the dative constructions, main unaccusative verb selects individual-denoting sortal nouns. Thus, the NP1 in MNCs is interpreted as a holder of a property while the dative DP in the dative constructions is interpreted as a possessor or as a location of a concrete object. As for the reading difference between directed motion MNCs and their dative counterparts, I proposed that the low applicative syntax of the MNCs systematically yields a COS interpretation where the NP1 is interpreted as an affected entity (as an undergoer of the change of state event). On the other hand, in my analysis, dative constructions are analyzed as regular two-place unaccusative constructions where the dative arguments are interpreted as a thematic goal or source. Thus, the lack of affectedness on the dative argument is expected.

## Chapter 4: Generic Multiple Nominative Constructions

### 1. Introduction

In this chapter, I introduce the third type of MNC, which has is often referred to as an ‘Adjunct MNC’ in the literature (Vermeulen 2005), and discuss the syntax and semantics of its construction. As its name suggests, NP1s in these types of MNCs have thematic readings that are typically expressed in the syntactic form of adjuncts. Such thematic readings of NP1s include Goal, Location and Instrument. The (b) sentences in (1-4) are representative examples of adjunct MNCs in Korean and the (a) sentences are their semantically equivalent non-MNC constructions.

1) a. I hoswu-**eyse** nonge-**ka** cal cap-hi-n-ta.

This lake-loc bass-nom well catch-pass-pres-decl.

‘Bass are caught well/easily in this lake’

b. I hoswu-**ka** nonge-**ka** cal cap-hi-n-ta.

This lake-nom bass-nom well catch-pass-pres-decl.

‘(lit). This lake, bass are caught well/easily’

2) a. Pusan-**ey** ilponin-tul-**i** manhi o-n-ta.

Pusan-dat Japanese-pl-nom a lot come-pres-decl.

‘A lot of Japanese (tourists) come to Pusan’

b. Pusan-**i** ilponin-tul-**i** manhi o-n-ta  
 Pusan-nom Japanese-pl-nom a lot come-pres-decl.

‘(lit.) Pusan, a lot of Japanese (tourists) come’

3) a. I golf chay-**lo(-nun)** kong-**i** meli mac-nun-ta.  
 This golf club-with-top ball-nom long hit(intr.)-pres-decl.

‘Ball is hit long with this golf club’ ‘This golf club hits the ball long’

b. I golf chay-**ka** kong-**i** meli mac-nun-ta.  
 This golf club-nom ball-nom long hit(intr.)-pres-decl.

4) a. I sinpal-ul sin-**umyen**, palkkumchi-ka appu-ta.  
 These shoes-acc put.on-if heel-nom hurt-decl.

‘If/whenever I put on this shoes, my heel hurts’

b. I sinpal-**i** palkkumchi-**ka** appu-ta.  
 These shoes-nom heel-nom hurt-decl.

‘(lit.) this shoes, (my) heel hurts’

The DP *hoswu* in (1) can either take the locative marker *-eyse* as in (1a) or the nominative marker as in (1b). Regardless of its marker, the DP seems to denote the location where the event happens. The DP *Pusan* in (2) denotes a Goal with either the dative maker *-ey* or the nominative marker *-i*. In (3), the DP *i golf chay* ‘this golf club’ is interpreted as an instrument with either the instrumental marker ‘*-(u)lo*’ or the nominative marker *-ka*. The sentences in (4) show that alternation is not limited to the morphological

case markers: The nominative NP1 in (4b), *i sinpal* ‘these shoes’ is interpreted as an inanimate causer. That is, the MNC in (4b) is interpreted as either ‘these shoes are the main reason why my heel hurts’ or ‘these shoes make my heel hurt’. The non-MNC form that would yield the closest meaning is (4a) where the adjunct *if*-clause temporally restricts the eventuality of heel-hurting. This would yield a reading like ‘my heel-hurting event arises only when I put on these shoes’.

Given the alternation shown in the sentences above, one might wonder if there is any reason that I classify these adjunct MNCs as an independent type of MNC that is different from the oblique MNCs that were the main topic of the previous chapter. Recall that most oblique MNCs show case-alternation between the nominative and dative cases. The adjunct MNCs in (1-4) also show a similar type of case-alternation. For precisely this reason, Vermeulen (2005) treats both MNCs equally under the name of adjunct MNCs. However, there is a reason why oblique MNCs and adjunct MNCs should be treated separately: unlike oblique MNCs, the grammaticality of the so-called adjunct MNCs depends on the genericity. In other words, adjunct MNCs are illicit if the sentences are interpreted episodically. On the other hand, oblique MNCs are acceptable in both generic and episodic environments. Consider the following sentences:

5) a. Mary-**ka**    kamki-**ka**    tul-ess-ta.

M-nom    cold-nom    enter-past-decl.

‘Mary got a cold’

b. Mary-**ka** kamki-**ka** cal tul-n-ta.

M-nom cold-nom well enter-past-decl.

‘Mary gets a cold easily’

(5a) is a canonical oblique MNC which denotes an episodic event where *Mary* ended up having a cold. As shown in (5b), it can freely become a generic sentence with the present tense marker *-(nu)n-* which is three-way ambiguous as a present tense marker, a habitual marker and a generic marker. On the other hand, so-called adjunct MNCs are all bad when they denote episodic events.

6) a. I hoswu-**eyse** ecey nonge-**ka** cap-hi-ess-ta.

This lake-loc yesterday bass-nom catch-pass-past-decl.

‘A bass was caught in this lake yesterday’

b. \* I hoswu-**ka** ecey nonge-**ka** cap-hi-ess-ta.

This lake-nom yesterday bass-nom catch-pass-past-decl.

7) a. Ecey Pusan-**ey** ilponin-tul-**i** manhi o-ss-ta.

yesterday P-dat Japanese-pl-nom a lot come-past-decl.

‘A lot of Japanese came to Pusan yesterday’

b. \* Ecey Pusan-**i** ilponin-tul-**i** manhi o-ss-ta.

Yesterday P-nom Japanese-pl-nom a lot come-past-decl.

- 8) a. Cepen hol-eyse, i golf chay-**lo** kong-**i** meli mac-ass-ta.  
 Last hole-loc, this golf club-with ball-nom long hit-past-decl.  
 ‘In the previous hole, the ball was hit long with this golf club’  
 ‘With this golf club, I hit the ball long in the previous hole’
- b. \* Cepen hol-eyse, i golf chay-**ka** kong-**i** meli mac-ass-ta.  
 Last hole-loc, this golf club-nom ball-nom long hit-past-decl.

- 9) a. Ecey i sinpal-ul sin-unmyen, palkkumchi-ka appu-ss-ta.  
 Yesterday these shoes-acc put.on-if heel-nom hurt-past-decl.  
 ‘My heel hurt yesterday when I put on these shoes’
- b. \* Ecey i sinpal-**i** palkkumchi-**ka** appu-ss-ta.  
 Yesterday these shoes-nom heel-nom hurt-past-decl.

While the non-MNC constructions in (6a-9a) are fine with episodic readings, so-called adjunct MNCs in (6b-9b) are all ungrammatical with them. This indicates that genericity plays a key role in licensing nominative NP1s in adjunct MNCs. For this reason, I suspect that adjunct MNCs and oblique MNCs cannot be treated as the same type of MNC. To emphasize the close relation between the generic readings and the licensing condition of the NP1s in this type of construction, I will call this type of MNC a ‘Generic MNC’ from now on.

At this point, an immediate question arises: what aspects of genericity licenses NP1s in generic MNCs? We can ask the question in a slightly different way: given the conclusions from the previous chapters that NP1s in Korean MNCs are licensed by an

applicative head, are generic MNCs another type of applicative construction? If so, how does the genericity play a role in licensing an NP1 that is introduced by an applicative head?

This chapter is devoted to providing an answer to this question. To briefly summarize, I propose that a generic MNC is a high applicative construction where the applicative head *s*-selects a VP that is stativized by a VP-level generic operator. The NP1 in this MNC is introduced and licensed by an applicative head as a holder of a state that is denoted by the modalized/stativized VP. On the other hand, I argue that its non-MNC counterpart is a generic sentence which has a sentential level generic operator. With a sentential generic operator, the applicative formation is never possible: when the VP is constructed, it will denote a simple event and this eventive VP can never be *s*-selected by an applicative head in Korean. Thus, according to my proposal, the licensing of NP1 in a generic MNC critically depends on the syntactic height of the generic operator. To prove this, first I show that a generic MNC and its non-MNC counterpart manifest different flavors of generic reading. Then, following Brennan (1993), I suggest that this reading difference comes from the different syntactic position of a generic operator.

This chapter is organized as follows: section 2 discusses two defining properties of generic MNCs. Section 3 introduces standard theories of modality and genericity which will be the backbone of my applicative analysis. Section 4 provides my proposal and supporting evidences. Section 5 summarizes the chapter.

## 2. Properties of Generic MNCs

In this section, I show one syntactic and one semantic property of generic MNC that will be primarily discussed throughout this chapter.

### 2.1. NP1 as a Syntactic Subject

The syntactic subjecthood of NP1s in MNCs must be a familiar fact by now. NP1s in generic MNCs are no exception in this respect: while NP1s in generic MNCs freely undergo relativization and scrambling, NP2s cannot.

#### Relativization

10) a. I hoswu-**ka** nonge-**ka** cal cap-hi-n-ta. (=1b)

This lake-nom bass-nom well catch-pass-pres-decl.

‘This lake is such that bass are caught well in it’

b. [[ Op<sub>i</sub> [ t<sub>i</sub> nonge-**ka** cal cap-hi]-nun] i hoswu<sub>i</sub>]

bass-nom well catch-pass-rel this lake

‘This lake where bass are caught well’

c. \* [[ Op<sub>i</sub> [I hoswu-**ka** t<sub>i</sub> cal cap-hi]-nun] nonge<sub>i</sub>]

this lake-nom well catch-pass-rel bass

‘(intended:) the bass that are caught well in this lake’

The MNC in (1b) is repeated in (10a). While (10b) shows that the NP1 *i hoswu* ‘this lake’ can be relativized, (10c) shows that the NP2 *nonge* ‘bass’ cannot be. Note that the non-MNC form in (1a), which is repeated in (11a), does not show this type of restriction.

11) a. I hoswu-eyse nonge-ka cal cap-hi-n-ta.  
 This lake-loc bass-nom well catch-pass-pres-decl.

‘Bass are caught well in this lake’

b. [[ Op<sub>i</sub> [ t<sub>i</sub> nonge-ka cal cap-hi]-nun] i hoswu<sub>i</sub>]  
 bass-nom well catch-pass-rel this lake

‘This lake where bass are caught well’

c. [[ Op<sub>i</sub> [I hoswu-eyse t<sub>i</sub> cal cap-hi]-nun] nonge<sub>i</sub>]  
 this lake-loc well catch-pass-rel bass

‘The bass that are caught well in this lake’

A scrambling test also shows the exact same pattern. The MNC in (2b) is repeated in (12a). (12b) shows that NP1 can undergo long-scrambling. However, (12c) shows that NP2 cannot undergo the same type of scrambling.

### Scrambling

12) a. Pusan-i ilponin-tul-i manhi o-n-ta (=2b)  
 Pusan-nom Japanese-pl-nom a lot come-pres-decl.

‘(lit.) Pusan, a lot of Japanese (tourists) come’

b. Pusan-i<sub>i</sub> na-nun [ t<sub>i</sub> ilponin-tul-i manhi o-n-tako] sayngkakhayssta.  
 P-nom I-top Japanese-pl-nom a lot come-pres-C thought

‘I thought that lots of Japanese come to (visit) Pusan’

c. \*Ilponin-tul-i<sub>i</sub> na-nun [Pusan-i t<sub>i</sub> manhi o-n-tako] sayngkakhayssta.  
 Japanese-pl-nom I-top P-nom a lot come-pres-C thought

Again, the sentences in (13) show that the non-MNC form in (2a) does not show this type of restriction. (13c) shows that NP2 can freely undergo scrambling to the sentence-initial position.

- 13) a. Pusan-ey ilponin-tul-i manhi o-n-ta. (=2a)  
 Pusan-dat Japanese-pl-nom a lot come-pres-decl.  
 ‘A lot of Japanese (tourists) come to Pusan’
- b. Pusan-ey<sub>i</sub> na-nun [<sub>t<sub>i</sub></sub> ilponin-tul-i manhi o-n-tako] sayngkakhayssta.  
 P-dat I-top Japanese-pl-nom a lot come-pres-C thought  
 ‘I thought that lots of Japanese come to (visit) Pusan’
- c. Ilponin-tul-i<sub>i</sub> na-nun [Pusan-ey <sub>t<sub>i</sub></sub> manhi o-n-tako] sayngkakhayssta.  
 Japanese-pl-nom I-top P-dat a lot come-pres-C thought  
 ‘I thought that lots of Japanese come to (visit) Pusan’

I take the syntactic behaviors of the NP1s above as evidence that NP1s in generic MNCs are structural subjects.

## 2.2. Descriptive Generics and Dispositional Generics

This section introduces an important semantic characterization that all generic MNCs share. Since both generic MNCs and their non-MNC counterparts are generic statements and the thematic functions of the NP1s in generic MNCs are almost identical to the thematic functions of the NP1-counterparts in non-MNC sentences, one may naturally wonder if there is any semantic difference between these two generic statements. Indeed,

I observe that there is a systematic reading difference between these two types of constructions. Before I deal with Korean examples, let me first introduce two types of generic readings mainly discussed by Greenberg (2003).

### **2.2.1. ‘In virtue of’ Generalizations and Descriptive Generalizations**

Greenberg (2003) proposes that there exist two types of generalizations in generic statements: descriptive generalizations and ‘in virtue of’ generalizations. According to her, ‘in virtue of’ generalizations assert that the generalization is non-accidentally true in virtue of some (inherent) property that the subject referent is taken by the speaker to have and that the hearer has to accommodate. On the other hand, descriptive generalizations merely assert the existence of a pattern. To illustrate these two readings, she shows that generic sentences with indefinite singular (IS) subjects and bare plural (BP) subjects are quite different in terms of their felicity conditions and the degree of non-accidentality: according to her, while BP can denote both types of generalization, IS sentences can only denote ‘in virtue of’ generalizations.

14) a. A boy doesn’t cry.

- b. The generalization ‘every boy doesn’t cry’ is non-accidentally true in virtue of some property, associated with the property of being a boy (e.g. the property of being tough).

In (14), *A boy doesn't cry* will be true if there is some property we associate with the set of boys: a genetic property or a social norm property, e.g. being tough, in virtue of which boys will not cry in all relevant situations.

BP sentences can also express 'in virtue of' generalizations, but unlike IS sentences, they have an additional generic reading, that is, a descriptive generalization. (15) illustrates the fact.

15) a. Boys don't cry.

b. The generalization 'every boy doesn't cry' (in all relevant, e.g. 'tear-inducing' situations) is not accidental.

The descriptive generalization in (15b) merely asserts that there is some pattern that cannot be accidental on the basis of several/many actual instances of boys not crying in tear-inducing situations.

According to Greenberg, 'in virtue of' generalizations carry a special felicity condition that descriptive generalizations do not have. That is, the 'in virtue of' property (e.g. *being tough* in (14)) that is associated with the subject (e.g. *being a boy*) must come from the world knowledge that is shared by both the speaker and the hearer. In other words, the IS sentence in (14) sounds felicitous only when all the interlocutors think that the 'in virtue of' property is reasonably related to the generalization. The contrast in (16) illustrates this point.

16) a. Norwegian students whose name ends with ‘s’ or ‘g’ wear thick green socks.

b. # A Norwegian student whose name ends with ‘s’ or ‘g’ wears thick green socks.

Unlike the IS-BP pair in (14) and (15), the sentences in (16) sharply contrast in terms of the acceptability: while the BP sentence in (16a) is felicitous, the IS sentence in (16b) is odd. The oddity of (16b), according to Greenberg, is apparent: it is hard to find an appropriate ‘in virtue of’ property that is related to the subject ‘a Norwegian student whose name ends with ‘s’ or ‘g’’. In other words, there seems to be no ‘in virtue of’ property of the subject in our world knowledge that is responsible for the generalization ‘wearing thick green socks’ to hold true. Even though there is an appropriate ‘in virtue of’ property that a speaker thinks that the subject has, a hearer fails to accommodate this information since the ‘in virtue of’ property must be based on the world knowledge shared by the interlocutors. On the other hand, the BP sentence in (16a) does not show this type of restriction since it denotes a descriptive generalization which merely states the pattern: Even though the generalization in (16a) is unnatural and unlikely, the sentence sounds acceptable since the descriptive generalization does not involve specific information that a hearer has to accommodate.

### **2.2.2. Korean Generic MNCs as ‘In virtue’ of Generics**

Based on Greenberg’s (2003) analysis, I propose that Korean generic MNCs denote ‘in virtue of’ generalizations and their non-MNC counterparts denote descriptive generalizations. First, let us take a look at the pair of generic statements in (2) which is repeated in (17).

17) a. Pusan-i ilponin-tul-i manhi o-n-ta

Pusan-nom Japanese-pl-nom a lot come-pres-decl.

‘It is generally true of Pusan such that many Japanese come to (visit) there’

b. Pusan-ey ilponin-tul-i manhi o-n-ta.

Pusan-dat Japanese-pl-nom a lot come-pres-decl.

‘There is a generic pattern such that many Japanese come to (visit) Pusan’

(17a), which is a generic MNC, gives a strong inference that the speaker invites us to think in such a way that the generic event of ‘many Japanese coming’ is closely related to the city of *Pusan*. For example, (17a) implies that the geographical property of *Pusan* (which is the largest port city close to Japan) may be the reason why there are many Japanese visiting the city. Due to this inference, the MNC in (17a) seems to assert that the relevant generic event is one of the characterizing properties of the city. Based on this initial inference, it is not unreasonable to classify the MNC in (17a) as an ‘in virtue of’ generic sentence.

On the other hand, (17b), which is a non-MNC form, has a strong impression that the speaker of (17b) simply reports that there is an observable and stable pattern such that many Japanese come to visit the city. The speaker may not know why this is the case. Thus, the speaker may utter (17b) purely based on his/her empirical experiences: for example, the speaker visits and stays in Pusan and finds lots of Japanese tourists shopping around. Given this personal experience, the speaker can utter (17b) naturally. Based on these inferences, I propose that the non-MNC generic form in (17b) yields a descriptive generalization. (18) shows the generic readings that (17a) and (17b) have.

18) a. (17a) = ‘in virtue of’ generalization

(In virtue of being close to Japan), it is generally true of Pusan that many Japanese come to visit there.

b. (17b) = descriptive generalization

There is a generic pattern that many Japanese come to (visit) Pusan.

Though the initial inferences of (17a) and (17b) point to the readings in (18), one may wonder if there is any evidence in favor of this classification. I present a piece of evidence in the next subsection.

#### 2.2.2.1. Accommodation Failure

19) a. Pusan-ey Mary-ka cacwu o-n-ta.

P-dat M-nom frequently come-pres-decl.

‘Mary comes to (visit) Pusan frequently’

b. \*Pusan-i Mary-ka cacwu o-n-ta.

P-nom M-nom frequently come-pres-decl.

Unlike the pairs of the generic statements in (17), the generic MNC in (19b) yields ungrammaticality. Note that the only difference between (17) and (19) is the denotation of NP2: the NP2 in (17) is an indefinite plural noun and the NP2 in (19) is a proper name. I attribute this grammatical contrast in (19) to Greenberg’s proposal that ‘in virtue of’ generalizations are subject to a special felicity condition. Recall that in this type of generic statement, the ‘in virtue of’ property of the subject must be reasonable enough for

the hearers to accommodate with respect to the properties denoted by the VP. Thus, if we assume that the generic MNC in (19b) denotes an ‘in virtue of’ generalization, its oddity is explained: it is very hard for us to come up with a good ‘in virtue of property’ related to *Pusan* that makes the generalization ‘Mary’s frequent visiting’ hold true. On the other hand, the grammaticality of (19a), which is a non-MNC form, is expected since it denotes a descriptive generalization. Indeed, (19a) lacks a dispositional reading. It simply states that there are frequent events of Mary coming to Pusan.

This type of contrast can be extended to any pair in (1-4). Compare (20) with (21). The sentences in (20) are repeated from (4). The sentences in (21) are minimally different from (20) in that the theme NP is *meli* ‘head’ in (21) and the theme NP is *palkkumchi* ‘heel’ in (20).

20) a. I            sinpal-ul    sin-**umyen**,    palkkumchi-ka    appu-ta.

These shoes-acc    put.on-if    hell-nom            hurt-decl.

‘If/whenever I put on this shoes, my heel hurts’

b. I            sinpal-i            palkkumchi-ka    appu-ta.

These shoes-nom    heel-nom    hurt-decl.

‘(lit.) this shoes, (my) heel hurts’

21) a. I            sinpal-ul    sin-**umyen**,    meli-ka            appu-ta.

These shoes-acc    put.on-if    head-nom            hurt-decl.

‘If/whenever I put on these shoes, my head hurts’

b. # I          sinpal-i          meli-ka          appu-ta.

These shoes-nom    head-nom    hurt-decl.

‘(lit.) these shoes, (my) head hurts’

The generic MNC in (20b) is fine while the one in (21b) is bad. Again, the contrast here follows from Greenberg’s assumption: in (20b), it is easy for us to accommodate an appropriate ‘in virtue of’ property of the subject that may be responsible for the generic heel-hurting event. For example, the shoes may be defective or the shoes may have an inherent design flaw. On the other hand, in (21b), we simply can’t come up with an appropriate ‘in virtue of’ property related to the subject that makes the generic event of ‘head-hurting’ hold true. Thus, the sentence sounds odd due to the accommodation failure. Note that their non-MNC generic forms are fine. This is also expected under my assumption that non-MNC generic statements denote descriptive generalizations. In sum, the variable acceptabilities shown above confirm my proposal that generic MNCs are ‘in virtue of’ generic sentences.

To summarize, in this subsection, I introduced one syntactic and one semantic property of generic MNCs: first I showed that NP1s in generic MNCs are syntactic subjects. Second, I showed that generic MNCs and their non-MNC counterparts are different in terms of their generic readings. While generic MNCs denote ‘in virtue of’ generalizations, their non-MNC forms denote descriptive generalizations.

### **3. Syntax of Modal Constructions and Genericity**

In this section, I introduce several background theories that will be the backbone of my applicative analysis of generic MNCs. Specifically, I introduce an idea proposed by Greenberg (2003) according to which ‘in virtue of’ generalizations and descriptive generalizations are sub-types of root modal descriptions and epistemic modal descriptions respectively. Since the two generic readings are closely related to two modal readings in terms of semantics and syntax, let me briefly summarize theories on how epistemic and root modal readings are derived.

#### **3.1. Semantics of Epistemic and Root Modality**

Modal statements are used to talk about possibilities and necessities, essentially, the state of affairs that may not be realized in the actual world. Standard modal analysis (Kratzer 1991), thus, treats modal statements as a sentence where a modal operator quantifies over possible worlds. For example, a necessity modal operator and a possibility modal operator are viewed as a universal quantifier and an existential quantifier over possible worlds respectively: a necessity modal statement is true if the statement is true in all possible worlds and a possibility modal statement is true if the statement is true in some possible worlds. This modal force (universal/existential) is one of the components that decide the overall meaning of a modal statement (i.e. necessity or possibility).

The other important parameter that contributes to the meaning of a modal statement is called ‘Modal Base’: just like a quantificational NP *every student* should be restricted to a certain contextually available subset (since we rarely talk about every single student in the universe), the possible worlds that is quantified by a modal operator

must also be restricted to a certain subset. This restricted subset of possible worlds is called a modal base and this is what determines the particular ‘flavor’ that the modal statement receives (e.g. epistemic, deontic, circumstantial modality, etc.). If the possible worlds are restricted to worlds compatible with what is known in our world, the modal that quantifies them is interpreted as an epistemic modal. If a modal operator quantifies over worlds compatible with certain circumstances in our world, it is interpreted as a circumstantial modal. Circumstantial modals are also called root modals that include ability, dispositional, and some deontic modals. The sentences in (22) and their informal readings show how an epistemic reading and a root reading are derived based on these two parameters.<sup>15</sup>

22) a. Mary must be the killer.

b. Modal force: universal : necessity

c. Modal base: epistemic: possible worlds that are compatible with what is known (to us) in our world.

d. What is known: Mary’s knife was found at the crime scene, Mary’s alibi does not match..etc.

e. [Mary is the killer] is true in our world  $w$  iff it is true in all possible worlds  $w'$  where what is known to us in  $w$  holds.

f. In view of evidence available to us, Mary is the killer.

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<sup>15</sup> There is one more parameter that contributes to the overall meaning of a modal statement. That is, the ordering source parameter that orders possible worlds also yields the most ideal worlds of the modal base. Since it is not directly related to our main discussion, it will not be mentioned in this chapter.

- 23) a. Mary can lift the rock.
- b. Modal force: existential : possibility
  - c. Modal base: root/ability: possible worlds that are compatible with the circumstance of subject holds true in our world.
  - d. Circumstances of subject: the current status of the subject (e.g. physical ability)
  - e. [Mary lifts a rock] is true in our world  $w$  iff it is true in some possible worlds  $w'$  where Mary's physical ability in  $w$  holds.
  - f. In view of Mary's physical ability, Mary can lift the rock.

### 3.2. Syntax of Epistemic and Root Modality

One of the unsettled issues in modal literature is the question of how epistemic and root modal readings are represented in syntax. As we have briefly seen in the previous section, the epistemic/root distinction is largely dependent on the variable selection of modal bases. While researchers all agree on this, they do differ on the manner of how modal bases are selected.

According to Kratzer (1991), modal operators are unambiguous sentential level (S-level) quantifiers that take a proposition as their argument. The selection of modal base is done via what she calls 'conversational backgrounds'. In other words, the different flavors of modal readings are majorly dependent on pragmatics. The advantage of this pragmatic approach is that we don't need to treat the modal word *must* in (24) as separate lexical items (i.e. deontic *must* and epistemic *must*).

24) a. Mary must be the killer.

‘In view of what is known to us, Mary must (epistemic) be the killer’

b. Mary must pay the fine.

‘In view of the current laws, Mary must (deontic) pay the fine’

Under Kratzer’s analysis, *must* in (24) is a single modal word that is a sentential operator.

The different readings come from different contextually derived modal bases.

On the other hand, researchers like Brennan (1993), Cinque (1999) cast doubt on Kratzer’s uniform analysis, arguing that the selection of modal bases cannot be a sole pragmatic matter. Given various empirical and typological evidences, they argue that the selection of modal bases is hard-wired to syntax. According to them, there are two syntactic types of modal operators: an S-level operator and a VP-level operator. An S-level operator typically yields an epistemic modal reading and a VP-level operator typically yields a root modal reading. In other words, the syntactic position of a modal operator is closely related to the selection of modal bases. Specifically, a root modal applying to a VP turns the VP into a modalized property and attributes this property to its subject. According to Brennan (1993), this is why root modal sentences are unambiguously subject-oriented and their modality is keyed/relativized to their syntactic subjects. The consistent subject-oriented readings and the syntactic position of the root modal operator cannot be accidental under this assumption. Brennan shows the contrast in (25) as a piece of evidence in favor of her analysis.

- 25) a. Every radio may get Chicago stations and no radio may get Chicago stations.  
 b. # Every radio can get Chicago stations and no radio can get Chicago stations.

According to her, the oddity contrast is related to the way quantificational subject *every radio* takes scope with respect to the modal words. While epistemic *may* is able to take scope over a quantificational subject, root (ability) *can* cannot: with epistemic *may* in (25a), no contradiction arises, suggesting that *every radio* is interpreted below the modal: *it may be that every radio gets Chicago stations and (it may also be that) no radio gets Chicago stations*. The contradiction in (25b) with root *can*, however, suggests that *every radio* has to be interpreted above the modal. Brennan points out that this scope relation naturally follows from her syntactic analysis, but it would be mysterious under Kratzer's uniform sentential operator analysis.

Another important piece of evidence in favor of the proposal that epistemic/root distinction is corresponding to the syntactic height distinction (S/VP) comes from the symmetry between the nature of a modal operator and the nature of the modal base that restricts the operator: As shown in (26), root modals, being VP-level operators, combine with property expressions (VP) to form modal property expressions and their modal bases consist of bundles of property expressions. On the other hand, epistemic modals, being S-level operators, take propositions as their arguments and their modal bases consist of bundles of propositions.

26) a. [MUST<sub>EPIS</sub> [<sub>S</sub> Mary is the killer]]

Modal Base: set of propositions that are known to the speaker. (e.g. Mary's blood was found; Mary has no alibi...etc.)

b. [<sub>S</sub> Mary [CAN<sub>ROOT</sub> [<sub>VP</sub> lift the rock]]]

Modal Base: set of properties related to the subject. (e.g. Mary's physical property)

According to Brennan, this symmetry is expected: since modal bases restrict modal operators, the modal bases should consist of the same type of semantic expressions on which modal operators operate.

### 3.3. Descriptive/'In virtue of' Genericity as Epistemic/Root Modality

One of the peculiarities of generic statements is that they allow possible exceptions. Consider the simple generic statement in (27).

27) Lions have bushy tails.

(27) is still true even though not all lions in our world have bushy tails. To capture this property, Krifka et al (1995) propose that a generic operator in a generic statement is not an extensional operator but a modal operator (a universal quantifier) that quantifies over possible worlds (i.e. ideal worlds) as shown in (28).

28)  $GEN_x (\text{lion}(x); \exists y [\text{bushy\_tail}(y) \ \& \ \text{has}(x, y)])$

is true in our worlds  $w$  iff the generic statement [lions have bushy tails] is true in the MOST possible/ideal worlds  $w'$  where a notion of ideality in  $w$  holds.

Under this modal approach, the possible exceptions in generic statements are handled well: a generic operator is relativized to our possible/ideal world that only contains lions that have bushy tails (i.e. stereotypical lions).

Based on Krifka et al (1995), Greenberg (2003) further argues that generic sentences, as a sub-type of modal sentences, can have different modal flavors depending on the types of modal bases they take. As we've seen earlier in this chapter, she classifies generic sentences into two sub-types: descriptive generalizations by BP sentences and 'in virtue of' generalizations by IS sentences. According to her, these two generic readings are two different modal flavors that result from two different modal bases restricting generic operators. Specifically, following Brennan (1993), she proposes that descriptive generalizations are epistemic modal statements whose modal base consists of set of propositions that are known to the speaker while 'in virtue of' generalizations are root modal statements whose modal base consists of properties of subjects. Greenberg's proposal can be summarized as in (29).

BP-sentence (descriptive generalization: epistemic modality)

29) a. Boys don't cry.

b. Modal force: universal : necessity

- c. Modal base: epistemic: possible/ideal worlds that are compatible with what is known (to speaker) in our world.
- d. What is known: stereotypical knowledge known to speaker or personal experience of speaker.
- e. [Every boy doesn't cry] is true in our world  $w$  iff it is true in MOST ideal worlds  $w'$  where what is known to a speaker/experiences of a speaker in  $w$  holds.
- f. In view of my knowledge (based on my experiences), it is generally true that boys don't cry.

IS-sentence ('in virtue of' generalization: root modality)

- 30) a. A boy doesn't cry.
- b. Modal force: universal : necessity
  - c. Modal base: root : possible/ideal worlds that are compatible with properties of subjects in our world.
  - d. Properties of subject: physical property of a boy (e.g. being tough)
  - e. [Every boy doesn't cry] is true in our world  $w$  iff it is true in MOST ideal worlds  $w'$  where the properties of subject in  $w$  hold.
  - f. In virtue of being tough, a boy doesn't cry.

As shown in (29), the descriptive generalization expressed by a BP sentence takes an epistemic modal base that consists of what is known to the speaker. The facts that are known to the speaker in this case would be the speaker's own observational experiences in our world. Based on this, the speaker generalizes that the proposition 'boys don't cry'

is not accidental. According to Greenberg, descriptive generic sentences are typically speaker-oriented generalizations. This is so because the modality here is restricted by general facts that are available to the speaker (that is, the knowledge based on his experience). On the other hand, the ‘in virtue of’ generalization in (30) is characterized as a dispositional description about the syntactic subject. This is so because the ‘in virtue of’ generalization takes a root modal base that consists of properties of the syntactic subjects. The reason why ‘in virtue of’ generalizations are typically taken as subject-oriented generalizations is that the generic operator is restricted by the root modal base.

#### **4. Proposal**

##### **4.1. Generic MNCs as Root Modal Construction**

In section 2, I have shown that Korean generic MNCs and their non-MNC counterparts have different flavors of generic readings: generic MNCs yield ‘in virtue of’ generalizations and their non-MNC counterparts yield descriptive generalizations. In section 3, I briefly reviewed Brennan’s (1993) analysis of the epistemic/root distinction and Greenberg’s (2003) proposal in which her dichotomy of descriptive and ‘in virtue of’ generalizations is assimilated to Brennan’s epistemic/root distinction.

Following Greenberg (2003), I propose that Korean generic MNCs, which are ‘in virtue of’ generic sentences, are root modal constructions, and their non-MNC sentences, which are descriptive generic sentences, are epistemic modal constructions. The generic sentences in (17) are repeated here with their informal semantic readings.

(Non-MNC form: descriptive generalization)

31) a. Pusan-ey ilponin-tul-i manhi o-n-ta.

P-dat Japanese-pl-nom a lot come-pres-decl.

‘A lot of Japanese come to (visit) Pusan’

b. Modal force: universal : necessity

c. Modal base: epistemic: possible/ideal worlds that are compatible with what is known (to speaker) in our world.

d. What is known: stereotypical knowledge known to speaker or personal experience of speaker.

e. [A lot of Japanese come to Pusan] is true in our world w iff it is true in MOST ideal worlds w’ where what is known to a speaker/experiences of a speaker holds.

f. In view of information available (to me), (e.g. based on my experiences), it is generally true that many Japanese come to (visit) Pusan.

(Generic MNC : ‘In virtue of’ generalization)

32) a. Pusan-i ilponin-tul-i manhi o-n-ta.

P-nom Japanese-pl-nom a lot come-pres-decl.

‘(lit.) Pusan, Japanese come a lot’

b. Modal force: universal : necessity

c. Modal base: root : possible/ideal worlds that are compatible with properties of subjects in our world.

d. Properties of subject: geographical property of Pusan (e.g. being close to Japan)

- e. [A lot of Japanese come to Pusan] is true in our world  $w$  iff it is true in MOST ideal worlds  $w'$  where the properties of subject in  $w$  hold.
- f. In virtue of being close to Japan, it is generally true of Pusan that a lot of Japanese come to (visit) the city.

Notice that the different flavors of the two generic statements are expressed with different adjuncts: an *in view of* adjunct for the descriptive generalization in (31f) and an *in virtue of* adjunct for the ‘in virtue of’ generalization in (32f). Kratzer (1991) originally suggests that *in view of* adjuncts explicitly show the otherwise covert, contextually supplied contents of the modal bases. According to Brennan (1993), the contents of root modal bases are expressed with *in virtue of* adjuncts. Under this assumption, Brennan claims that the contrast below indicates that root modal constructions are necessarily subject-oriented:

- 33) a. Joan can sing arias in virtue of her natural ability.  
       b. In virtue of her patience, Joan will listen to anything.
- 34) a. ?? In virtue of the rock being lightweight, Mary can lift it.  
       b. ?? Mary will agree to anything in virtue of the loose atmosphere in the office.

While the *in virtue of* adjuncts in (33) contain properties of the subjects, the *in virtue of* adjuncts in (34) contain properties of non-subject elements. The oddity of (34) is expected under the assumption that the root modal constructions are subject-oriented: if

the adjuncts are overt realization of the modal base, they must consist of the properties of the syntactic subjects. Since the adjuncts (34) do not consist of the subject properties, the root modal sentences sound odd. If Korean generic MNCs are root modal constructions, we expect an effect similar to those shown in these constructions. The contrast below shows that this expectation is indeed borne out:

35) a. *ilpon-kwa cilicekulo kakkap-un kwankey-lo,* (=32)

Japan-with geographically close-rel relation-with,

Pusan-**i** ilponin-tul-**i** manhi o-n-ta.

P-nom Japanese-pl-nom a lot come-pres-decl.

‘In virtue of being close to Japan geographically, Pusan is such a city that a lot of Japanese come to (visit) the city’

b. \* *hankwuk-ul coaha-nun kwankey-lo,*

Korea-acc like-rel relation-with,

Pusan-**i** ilponin-tul-**i** manhi o-n-ta.

P-nom Japanese-pl-nom a lot come-pres-decl.

\*‘In virtue of them loving Korea, Pusan is such a city that a lot of Japanese come to (visit) the city’



that the NP1s are not possible if the constructions are interpreted as episodic sentences (See (6)-(9)). From this, it is obvious that genericity plays a critical role in licensing NP1s in generic MNCs. Thus, we could come up with a possible theory in which generic operators directly license the NP1s in generic MNCs. Indeed, this would be very similar to what Jackendoff (1972) and Brennan (1993) suggest for their VP-level modal operators: according to them, a VP-level modal operator (root modal) is a two-place predicate that selects an individual (subject) and a VP-property. According to this analysis, the NP1s in generic MNCs are direct (thematic) arguments of the root modal operator.

While I don't have any objection to this type of analysis, there is one thing that we have to take into consideration in constructing a syntactic structure of a generic MNC: throughout the dissertation, I proposed that Korean MNCs are applicative constructions and NP1s in MNCs are uniformly introduced and licensed by an (high/low) applicative head. Given the syntactic similarities between the generic MNCs in this chapter and other types of MNCs in the previous chapters, it is not unreasonable to assume that generic MNCs are also a sub-type of applicative construction. Given this assumption, we naturally wonder how genericity and applicative syntax corroborate in licensing NP1s in generic MNCs. Specifically we wonder whether the NP1s in generic MNCs can be licensed in the same way the NP1s in other MNCs are licensed. I suspect that this is indeed possible.

Following Jackendoff (1972) and Brennan (1993), I propose that an epistemic modal operator is an S-level operator and a root modal operator is a VP-level operator. Thus, Korean generic MNCs which yield 'in virtue of' generic readings (which is a

variant of a root modal reading) will have a VP-level generic operator, and their non-MNC counterparts which yield descriptive generic readings (which is a variant of an epistemic modal reading) will have an S-level generic operator. Specifically, I hypothesize that Korean generic MNCs are high applicative constructions where the NP1s are introduced and licensed by high applicative heads. This configuration is only possible for the ‘in virtue of’ generic sentences which have a VP-level generic operator: the VP-level generic operator will take a VP as its complement and turns it into a modalized property. In other words, the generic operator stativizes the VP. Note that one of the fundamental assumptions of this dissertation is that an applicative head, regardless of its syntactic height, s-selects property-denoting expressions or stative expressions. In a possessive MNC, a high applicative head s-selects either a property-denoting stative VP or a resultant state VP. In an oblique MNC, a low applicative head s-selects a property-denoting NP. In this respect, this stativized/modalized VP in a generic MNC perfectly qualifies as an input for the high applicative head.

On the other hand, non-MNC constructions that have S-level generic operators will not be able to form an applicative construction: the VPs in these constructions are not modalized when they are formed due to the lack of a lower VP-level operator. Being event-denoting VPs, they cannot be s-selected by applicative heads. Under this assumption, the syntactic height (VP-level) of a root modal operator still plays an important role in licensing NP1s in generic MNCs. However, it is not a direct licenser of the NP1: by modalizing a VP, it creates a critical syntactic environment where the high applicative head s-selects this stativized VP. Instead, it is the high applicative head that introduces and licenses the NP1.

(37a) is the syntactic structure of the non-MNC construction in (1a) with a descriptive generic reading, and (37b) is the structure of the generic MNC in (1b) with a ‘in virtue of’ generic reading.

37) a. **Gen** [<sub>IP</sub> I *hoswu-eyse*    *nonge-ka*    *cal*    *cap-hi-n-ta*]

This lake-loc            bass-nom    well    catch-pass-pres-decl.

‘It is generally true that bass are caught well in this lake’

b. [<sub>AppIP</sub> I *hoswu-ka*    [<sub>VP</sub> **Gen** [<sub>VP</sub> *nonge-ka*    *cal*    *cap-hi-n-ta*]] AppI]

This lake-nom                            bass-nom    well    catch-pass-pres-decl.

‘It is generally true of this lake that bass are caught well here’

One of the welcome results of this applicative analysis is that the analysis naturally accounts for the existence of additional semantic readings of NP1s in generic MNCs: in addition to their modal-related truth-conditional readings, NP1s in generic MNCs are predominantly interpreted as possessors of dispositional/inherent properties. For example, in (37b), the NP1, *i hoswu* ‘this lake’ is interpreted as a possessor of the inherent property (i.e. This lake has a generic property such that bass are caught well there). This type of possessor reading in generic MNCs is readily accounted for under the applicative analysis: an applicative head *s*-selects a property/state-denoting expression and relates this to the applied argument (NP1). Due to this function of the applicative head, the applied argument is interpreted as a holder of the relevant property/state. This general semantic similarity (the ‘holder’ interpretation of NP1) between applicative

constructions and generic MNCs further indicates that generic MNCs are a sub-type of applicative construction.

### **4.3. Cross-linguistic Evidence: Slavic Involuntary State Constructions**

In the previous section, I proposed that Korean generic MNCs are high applicative constructions and that this was possible due to the VP-level modal operators that stativize the VPs. The natural question at this point is whether my hypothesis has any supporting evidence. For example, since the VP-modality plays a key role in forming a high applicative construction, we can expect two things: first, different types of Korean root modal sentences are expected to have a syntactic structure of MNC. Second, we also expect that there are root modal applicative constructions in other languages. If these two expectations are met, this will be excellent supporting evidence in favor of my hypothesis. Indeed, these expectations are borne out. In this section, I show that there is one type of an applicative construction which is called an ‘involuntary state construction’ in Slavic languages and which is analyzed as a circumstantial modal construction. What is interesting is that a similar meaning is expressed in a syntactic form of MNC in Korean. Consider the following Russian dative construction from Benedicto (1995).

38) a. mne      ne    čitaetsja.

Me.dat   not   read.3sg.Pres.Refl.

‘Somehow I have hard time in reading’ ‘Somehow I can’t read’

b. mne xoroβo çitaetsja.

Me.dat well read.3sg.Pres.Refl.

‘Somehow, I can read book easily’ ‘I read book well and I feel good about this’

According to Benedicto (1995), the sentences above have distinctive semantic and syntactic properties. First, the structural subjects of the constructions always carry the dative case. Second, the appearance of the reflexive morpheme *-sja* is obligatory. Finally, the verbs in these constructions do not agree with their structural dative subjects. With these distinctive morpho-syntactic properties, the constructions in (38), have distinctive readings that their regular active versions do not have. For example, (39) is an active version of (38a).

39) Ja ne çitaju

I.nom not read.1sg.Pres.

‘I don’t read’ ‘I am not reading’

(39) denotes a simple episodic event where the subject, as an agent, has full control of the event that is denoted by the VP. In other words, the event of ‘not reading’ is a willful event that is performed by the subject. On the other hand, (38a) which is the dative version of (39), does not denote an episodic event but rather denotes a state that the subject observes. Moreover, the subject has no control over this state of affairs. For example, (38a) expresses that for some unknown reason, the subject observes/feels that the ‘reading’ event that is performed by him/her is not going well. It is clear from our

world knowledge that the agent of the reading event is the subject but the agentivity is somehow depressed or not even expressed in (38a). (38b) also expresses a similar reading: the speaker somehow finds his/her reading is being processed well and implies that this current state of affair has nothing to do with her/his will.

Based on this peculiar semantics, Benedicto proposes that the constructions in (38) are modal constructions where a VP-level circumstantial modal operator (which is another sub-type of a root modal operator) takes the VP as its complement and introduces a dative subject as its external argument. According to her, the modal bases of these modal constructions are various circumstantial states of the subjects which can be characterized as their psychological states. Under this analysis, the sentences in (38) have the following readings.<sup>16</sup>

- 40) a. (38a): In view of my psychological circumstances, I can't read (there is no possibility for me to read).
- b. (38b): In view of my psychological circumstances, my reading is good.

Rivero (2009) and Rivero, Arregui and Frckowiak (2010) show that there are many dative constructions in Slavic languages that have the same morphosyntactic and semantic properties of Russian dative constructions in (38). They call these dative constructions 'involuntary state construction' based on their peculiar semantic readings. Following Benedicto's insight, they propose that these dative constructions are

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<sup>16</sup> Benedicto (1995) shows the details of how the circumstantial readings are derived in her paper. The details of her exposition are omitted here since the details of the derivation of the root modal readings are shown in the previous sub-section and Benedicto's analysis is similar to my exposition in that she adopts Brennan's approach.

circumstantial modal constructions where the dative subject is introduced by a high applicative head whose head itself is a circumstantial modal operator. (41a) is the representative involuntary state construction from Polish.

41) a. Jankowi tancylo sie dobrze.

Janek.dat danced.neu refl well

‘Janek danced and could not help enjoying it’

b. Janek tanczyl dobrze.

Janek.nom danced.masc well.

‘Janek danced well’

The dative construction in (41a) shares all the morpho-syntactic properties that the Russian circumstantial modal sentences in (38) have: The subject is assigned the dative case. There is no subject-verb agreement and the reflexive marker *sie* is obligatory. Most importantly, the sentence has a circumstantial modal reading: first, the subject does not have control over what is going on. Second, the evaluation of the adverb *dobrze* ‘well’ is relativized on the subject’s psychological state. On the other hand, the regular active sentence in (41b) has no such modal reading.

Their analyses are slightly different from Benedicto’s analysis in terms of technical details (e.g. what qualifies as a circumstantial modal operator). While the former assumes that the high applicative head itself is the covert modal operator, the latter assumes that the modal operator is a covert head that dominates the VP. However, this technical difference is not relevant to our current discussion. What is important for us

is that a certain root modal semantics (involuntary state readings) is consistently expressed in the syntactic form of a dative applicative construction.

In this respect, it is striking that the involuntary state reading is expressed in the form of MNC in Korean.

42) a. *Nay-ka* (onul) *whisky-ka* *cal* *tuleka-n-ta*.

I-nom (today) whisky-nom well go.in-pres-decl.

‘(lit.) Today, I, whisky comes in well’

‘Somehow, today whiskey drinking is easy on me’

b. *Nay-ka* (onul) *kong-i* *meli* *mac-nun-ta*.

I-nom (today) ball-nom long hit(intr.)-pres-decl.

‘(lit.) Today, I, ball is hit long’

‘Today I am hitting long balls somehow and I feel good/bad about this’

43) a. (42a): In view of my psychological state, (I feel like) I drink whisky well.

b. (42b): In view of my psychological circumstances, (I feel like) I hit balls long.

The sentences in (42) are MNCs that express involuntary state readings which can be translated into the circumstantial modal readings in (43). For example, the subjects in (42) have no control over the current states of affairs denoted by the VPs. Also, the adverb *cal* ‘well’ in (42a) and *meli* ‘long’ are totally subject to the subjects’ psychological states. For example, suppose that (42b) is uttered in the middle of a golf game. Even though the subject hit the ball terribly short, the sentence is still true if the subject feels that he hit

long balls throughout the day. This shows that the evaluation of the adverb *meli* ‘long’ in (42b) is relativized to the subject’s psychological state.

So far, we have seen that i) so-called involuntary state readings are derived from VP-level circumstantial modal operator whose modal base consists of subject’s various psychological states, and that ii) the involuntary state readings are cross-linguistically derived from the same type of construction: dative applicative constructions in Slavic languages and MNCs in Korean.

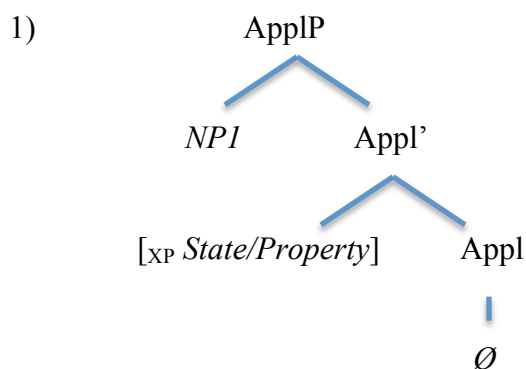
The discussion so far tells us two important things: first, the generic MNCs in (1-4) and the involuntary state MNCs in (42) are the same type of construction. They both have VP-level root modal operators. The semantic difference between these two MNCs (generic modality vs. circumstantial modality) can be reduced to the modal operators taking different modal bases, creating different modal flavors. In generic MNCs, the modal base is a set of inherent properties of the subject. In involuntary state MNCs, the modal base is a set of psychological properties of the subject. Second, the main hypothesis of this chapter, that generic MNCs are high applicative constructions, is also supported by the cross-linguistic data. Though they are not generic readings, it is shown that Slavic dative applicative constructions have similar modal readings (involuntary state reading) that originate from the same VP-level root modal operator. This, coupled with the fact that Korean has involuntary state MNCs, further indicates that generic MNCs are high applicative constructions.

## 5. Summary

The main topic of this chapter was Korean generic MNCs whose NP1s are licensed only in generic environments. The main theoretical question, thus, was which aspect of genericity has to do with the licensing of the NP1s. In search of the answer, I first, showed that Korean generic MNCs have so-called ‘in virtue of’ generic readings and their non-MNC counterparts have descriptive generic readings. Following Greenberg (2003), I proposed that the ‘in virtue of’ generic readings of the generic MNCs are nothing but root modal interpretations and the descriptive generalizations of the non-MNC forms are sub-types of epistemic modal interpretations. Combining this proposal with Brennan’s (1993) suggestion that root and epistemic modal readings come from a VP-level and an S-level modal operator respectively, I concluded that generic MNCs have a VP-level modal operator and their non-MNC counterparts have an S-level modal operator. Finally, I hypothesized that this syntactic height difference is closely related to the licensing of the NP1s in generic MNCs: I proposed that generic MNCs are high applicative constructions where NP1s are introduced and licensed by a high applicative head. What makes this specific licensing configuration available is the presence of the VP-level modal operator: it takes an eventive VP as its complement and stativizes it. This modalized VP is interpreted as a property-denoting state and qualifies as an appropriate input for the high applicative head which only s-selects state/property-denoting expressions.

## Chapter 5: Concluding Remarks

In this thesis, I explored a unified analysis of three types of Korean multiple nominative constructions. In doing this, my two proposals played a key role: first, NP1s in all Korean MNCs are introduced and licensed by a functional ‘applicative’ head. Second, the applicative head in Korean only s-selects property/state-denoting expressions as its complements and relates these expressions to the added argument (NP1). Thus, all three types of MNCs investigated in this thesis have the following structure as shown in (1).



For a possessive MNC, the XP in (1) corresponds to either a property-denoting VP or a resultant state-denoting VP where NP2 behaves as a subject of a property/state-denoting V. As for an oblique MNC, the XP corresponds to a property-denoting NP2. Finally, for a generic MNC, the XP corresponds to a modalized/stativized VP headed by a VP-level modal operator. Thus, within this specific configuration, the three types of MNCs do not differ from each other in essence.

Another theoretical advantage of my proposal regarding the structure of (1) is that it accounts for the two main readings of MNCs (i.e. a possessional reading and a ‘change-of-state’ reading) without altering the structure in (1): the structure in (1) readily signifies

the possessional readings. As for the ‘change-of-state’ reading, we achieve it by simply adding the additional functional head  $V_{GO}$ P which corresponds to a ‘BECOME/GO’ event. Overall, the ‘applicative’ analysis satisfactorily represents our initial observation that all three types of MNCs seem to form a natural class despite their slightly different syntax and semantics.

Before concluding this thesis, I would like to briefly touch upon one remaining issue. There is one type of MNC that this thesis didn’t deal with: a psychological construction. Due to my late interest in this type of construction and vast number of existing works, I was not able to incorporate psychological MNCs into my applicative theory. Still, there is an interesting example that indicates that this type of MNC can also be accounted for under my analysis. Consider the following pair in (2).

2) a. *Nay-ka*     *sushi-ka*     *coh-ta*.

I-nom     sushi-nom     good-decl.

‘I like sushi’

b. *Na-hantey*     *sushi-ka*     *coh-ta*.

I-dat     sushi-nom     good-decl.

‘(lit.) Sushi is good to me’ ‘Sushi is good for me’

The MNC in (2a) is a representative example of a psychological MNC where the NP1 *nay* ‘I’ functions as a psychological experiencer. The same DP is marked dative in (2b). Interestingly, for these sentences, their differences in reading are rather obvious, as the English translations clearly show. While the main predicate *coh-* ‘good’ in (2a) functions

as a psychological predicate, assigning an experiencer role to the NP1 *Nay* ‘I’, the same verb in (2b) functions as an evaluative adjective (a property-denoting verb), assigning a beneficiary role to the dative DP *Na-hantey*. How can these different readings be accounted for under the constructionalists’ assumption that the main verb *coh-* has a single lexical entry? It seems that the answer is obvious under my analysis: the (2a) is a circumstantial modal construction where the VP-level circumstantial modal operator modalizes the VP [*sushi-nom good*]. Subsequently, a high applicative head *s-* selects this modalized VP and introduces the NP1. On the other hand, (2b) is an epistemic modal construction in which an S-level epistemic modal operator takes the whole CP as its complement. While the modal base in (2a) is the psychological circumstance/state of the subject, the modal base in (2b) is the fact/evidence available to the speaker. Thus, (2a) and (2b) exactly yield a subject-oriented reading and a speaker-oriented reading respectively. (3a) and (3b) are the informal readings of (2a) and (2b) respectively.

3) a. In virtue of my psychological state, sushi is good.

b. In view of evidences available to me/my evaluation, sushi is good for me.

According to this view, why the psychological construction in (2a), not the evaluative adjective construction in (2b), has a syntactic form of MNC is readily accounted for: a high applicative head *s-* selects the modalized/stativized VP as its complement and links this VP to the NP1. Thus, the NP1 in (2a) is interpreted as a holder of the relevant psychological state.

In this respect, I believe that the applicative analysis defended in this thesis will shed new light on the literature regarding the case-conversion (nominative-dative) phenomenon in Korean psychological constructions.

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