Major subject as an applied argument*

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Ha, Iljoo. 2015. Major subject as an applied argument. *Linguistic Research* 32(1), 91-123. One fundamental question stands out in Multiple Nominative Constructions (MNCs) literature: how are the so-called Major Subjects (Kuroda 1986, Yoon, 2007) licensed? The goal of this paper is to bring a new perspective on this licensing issue. This paper proposes that Major Subjects in various types of Korean MNCs (i.e., Adjunct MNCs, Possessive MNCs and Oblique MNCs) are introduced and licensed by a specific functional head called an 'Applicative' head whose main function is to introduce an 'additional/applied' argument that is not lexically selected by a main predicate (Pylkkänen 2002, Cuervo 2003). This paper specifically argues that Korean applicative head s-selects only state/property-denoting phrases as its complements. The welcome result of this proposal is that three different types of MNCs receive a uniform treatment: for possessive MNCs, a high Appl selects either a property-denoting VP or a (resultant) state-denoting VP. For oblique MNCs, a low Appl selects a property-denoting NPs. Finally, for adjunct MNCs which I argue are root modal sentences, a high Appl selects a modalized/stativized VP as its complement. The applicative head relates these NPs/VPs to Major Subjects and uniformly assigns a holder role to them. **(Hankuk University of Foreign Studies)**

1. Introduction

The possessive multiple nominative construction (hereafter, MNC) in (1a) and the oblique MNC in (2a) are the two types of MNCs that have been mostly investigated in the MNC literature.

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(1) a. Mary-**ka**   emeni-**ka**   yeppu-si-ta.
       M-nom   mother-nom   beautiful-hon-decl.
       'Mary's mom is beautiful' 'Mary has a beautiful mother'
    b. Mary-**uy**   emeni-**ka**   yeppu-si-ta.
       M-gen   mother-nom   beautiful-hon-decl.
(2) a. Mary-**ka**   phwung-**i**   o-ess-ta.
       M-nom   paralysis-nom   come-past-decl.
       '(lit.) Paralysis came to Mary' 'Mary got paralyzed'
    b. Mary-**hanthey** phwung-**i**   o-ess-ta.
       M-da   paralysis-nom   come-past-decl.

The sentence-initial subject *Mary-ka* in (1a) and (2a) thematically corresponds to the genitive possessor DP *Mary-uy* 'Mary-gen' in (1b) and the dative DP *Mary-hanthey* 'Mary-to' respectively. In the literature, the sentence-initial subject *Mary* and the following preverbal subject *emeni* 'mother' in (1a) are called a Major Subject and a Logical Subject respectively (Kuroda 1986, Yoon 2007) and one of the main issues in the literature has been to account for how the Major Subject is licensed.

The existing analyses can be classified into two main types: the movement approach and the complex predicate approach via λ-abstraction. The movement approach assumes that the MNCs in (1) and (2) are derived by the movement of the DP *Mary* from the original theta-positions (a possessor argument position inside the Logical Subject *emeni* 'mother' in (1) and a goal argument position of the verbal predicate *o-* 'come' in (2)) to the sentential subject position (see Kang 1986, Yoon 1989 for possessive MNCs and Kim 1990, Youn 1990, Takahashi 1996 for oblique MNCs). On the other hand, the complex predicate approach assumes that the Major Subjects in (1a) and (2a) are base-generated in the sentential subject position. They are introduced and licensed by a λ-operator that binds the null arguments in the original theta-positions. (Heycock & Doron 2003, Vermeulen 2005, Yoon 2007). (3) illustrates the two types of derivations;

(3) a. [Major Subject$_i$-nom   [t$_i$ Logical Subject-nom V]]   (movement
       approach)
    b. [Major Subject$_i$-nom   Op$_i$ [pro$_i$ Logical Subject-nom   V]]
       (complex predicate approach)

Though the two approaches technically differ in terms of subject-licensing, they share one main idea: the licensing of Major Subjects is crucially dependent on the existence of the original thematic positions that are filled with either a trace or a null pronoun.

In this paper, I deal with yet another type of MNC which was named as an 'adjunct MNC' by Vermeulen (2005). As its name suggests, Major Subject in this type of MNC is thematically corresponds to various adjunct PPs.

(4) a. I tolo-**ka**   kyothongsako-**ka**   manhi   palsayngha-n-ta.
       this road-nom   traffic accident-nom   many   happen-pres-decl.
       'This road is such that many traffic accidents happen in it'
   b. I tolo-**eyse**   kyothongsako-**ka**   manhi   palsayngha-n-ta.
       this road-loc   traffic accident-nom   many   happen-pres-decl.
       'Many traffic accidents happen in this road'

(5) a. I hoswu-**ka**   nonge-**ka**   manhi/cal cap-hi-n-ta.
       this lake-nom   bass-nom   a lot/well catch-pass-pres-decl.
       'This lake is such that bass are caught well/a lot here'
   b. I hoswu-**eyse**   nonge-**ka**   manhi/cal cap-hi-n-ta.
       this lake-loc   bass-nom   a lot/well catch-pass-pres-decl.
       'Bass are caught a lot/well in this lake'

The Major Subjects *i tolo* and *i hoswu* in (4/5a) are optionally realized as the locative PPs, *i tolo-eyse* 'in this road' and *i hoswu-eyse* 'in this lake' in (4/5b). The following question arises immediately: can the licensing of the Major Subjects in the adjunct MNCs be accounted for under the existing analyses? Unfortunately, the answer seems to be negative. Consider the sentences in (6);

(6) a. I uyca-**ka**   heli-**ka** aphu-ta.
       this chair-nom   waist-nom   hurt-decl.
       'This chair gives back pain'
   b. *I uyca-**eyse**(-nun)   heli-**ka**   aphu-ta.
       this chair-loc(-top)   waist-nom   hurt-decl.
       '(Intended) 'On this chair, my back hurts'
   c. I uyca-ey   anc-**umyen**, heli-**ka** aphu-ta.

    this chair-dat   sit-if   waist-nom hurt-decl.

    'My back hurts when/if I sit on this chair'

Under the existing analyses, the adjunct MNC in (6a) should be derived from its semantically equivalent PP-construction. However, (6a) does not even have a corresponding PP-construction. As shown in (6b), the PP-form of the Major Subject *i uyca-eyse* 'on this chair' yields an ungrammatical sentence. Instead, its closest meaning comes from (6c) where an adjunct *if*-clause contains the Major Subject. In order for the existing analyses to be valid, we are forced to assume that (6a) is derived from (6c) via a massive syntactic deletion rule. However, this type of assumption is highly unlikely.

Then, what licenses Major Subjects in adjunct MNCs? This paper aims to provide an answer to this question. Specifically, this paper argues three main points: first, an adjunct MNC is an instance of a root modal construction whose modality is relativized to the Major Subject. Second, the adjunct MNC is an applicative construction where the Major Subject is introduced and licensed by an Appl head: the Appl head relates the Major Subject and the modalized VP and assigns a holder role to the Major Subject. Third, the applicative analysis can be extended to other two types of MNCs.

The paper is organized as follows: in the next section, I investigate the semantic properties of adjunct MNCs and propose that the MNCs are root modal constructions. Section 3 discusses the syntactic aspects of a root modal construction. Section 4 introduces my applicative analysis. Section 5 shows in detail how my applicative analysis can be applied to all three types of MNCs. Section 6 summarizes the paper.

2. Semantics of Genericity

2.1. Genericity Matters

In the previous section, we witnessed that an adjunct MNC like (6a) cannot be derived from any base form. The immediate question was what licenses the NP1 of the adjunct MNC then? The grammatical contrasts in (7-9) give us an initial clue.

(7) a. I tolo-**eyse**   achim-ey   kyotong sako-**ka**   palsaynghay-ss-ta.
      this road-loc morning-loc   traffic accident-nom   happen-past-decl.
      'This morning, a traffic accident happened in this road'

    b.^{???} I tolo-**ka**   achim-ey   kyotong sako-**ka**   palsaynghay-ss-ta.
      this road-nom morning-loc traffic accident-nom   happen-past-decl.

(8) a. Ecey   cenyek-ey, I   hoswu-**eyse** nonge-**ka** cap-hi-ess-ta.
      yesterday evening-loc this lake-loc   bass-nom catch-pass-past-decl.
      'Yesterday evening, bass was caught in this lake'

    b. ^{???} Ecey cenyek-ey,   i hoswu-**ka**   nonge-**ka**   cap-hi-ess-ta.
      yesterday evening-loc   this lake-nom   bass-nom
      catch-pass-past-decl.

(9) a. Onul achim, i uyca-ey   anc-**umyen** heli-**ka**   aphu-ess-ta.
      today morning this chair-dat sit-if   waist-nom   hurt-past-decl.
      'This morning, my back hurt when I sit on this chair'

    b. *Onul achim,   i uyca-**ka**   heli-**ka**   aphu-ess-ta.
      today morning   this chair-nom   waist-nom   hurt-past-decl.

The (a) sentences in (7-9) are regular adjunct sentences and the (b) sentences are adjunct MNCs. Unlike the MNCs in (4), (5) and (6), the MNCs in (7-9) are ungrammatical or degraded. The cause of the ungrammaticality in the latter seems to be apparent: while the MNCs in (4), (5) and (6) have a generic interpretation, the MNCs in (7-9) are all episodic. This indicates that genericity plays an important role in licensing the NP1s of the adjunct MNCs. The question is what aspect of the genericity is responsible for the licensing of the Major Subjects. To answer the question, we first need to take a look at the semantic aspects of genericity.

2.2. Two Types of Generic Readings as Epistemic and Root Modality

It has been widely assumed in the MNC literature that MNCs and their non-MNC counterparts have almost identical semantic readings. In this section, however, I will show that adjunct MNCs and their non-MNC counterparts yield slight different flavors of generic readings and the different flavors are nothing but different modal flavors.

2.2.1. Greenberg (2003)

It is a well-established fact that genericity is sub-type of modality (e.g., Krifka et al 1995). Greenberg (2003) is one of the researchers who analyze genericity as a sub-type of modality. Greenberg's innovation is that she observes that there are two types of generic readings (i.e., a descriptive generic reading and an *in-virtue-of* generic reading) and attributes this reading difference into the well-known epistemic/root distinction of modality.

(10) a. John can come by.
    b. It is possible that John will come by   (epistemic)
    c. John is able to come by   (root/ability)

The sentence in (10a) with the modal auxiliary verb *can* is ambiguous between an epistemic possibility reading (as in (10b)) and a root/ability reading (as in (10c)). Under the canonical modal analysis by Kratzer (1981) that treats modal statements as a sentence where a modal operator quantifies over possible worlds, different modal readings (e.g., modal flavors such as epistemic, circumstantial and root modal readings) are conditioned by the selection of the different modal bases (that is, the restricted subset of possible worlds). For example, in (10b) which has an epistemic flavor, the modal operator existentially quantifies over possible worlds that are compatible with what is known in our world (e.g., facts available to the speaker). In (10c), on the other hand, the modal operator existentially quantifies over possible worlds which the subject's physical ability or the circumstances surrounding the subject are compatible with and the sentence yields a root reading. Thus, (10b) and (10c) have the following informal readings in (11a) and (11b) respectively, where the *in view of* adjuncts informally represent the modal bases.

(11) a. (In view of the available evidence), John can come by.   (=10b)
    b. (In view of his physical, circumstantial abilities), John can come by.
                                                                    (=10c)

Greenberg (2003) notices that the generic sentences below have distinct flavors of generic readings;

(12) a. Boys don't cry.

    b. There is a pattern such that boys don't cry. (descriptive genericity)

(13) a. A boy doesn't cry.

    b. (In virtue of being tough), a boy doesn't cry. (in *virtue of* genericity)

According to Greenberg (2003), (12a) whose subject is a bare plural (BP) yields so-called a descriptive generic reading: the sentence merely asserts that there is a non-accidental pattern of events where boys don't cry on the basis of many actual instances of boys not crying in tear-inducing situations. On the other hand, (13a) whose subject is an indefinite singular (IS) yields an *in virtue of* generic reading: this reading asserts that the generalization is non-accidentally true in virtue of some inherent property of the subject referent. Thus, the generalization in (13a), unlike (12a), is true only if there is some property that we can associate with the set of boys: a genetic property or social norm property (e.g., being tough or being strong) in virtue of which boys don't cry in all relevant (tear-inducing) situations.

Based on the modal nature of generic operators, Greenberg proposes that the two types of generic readings above are nothing but the two types of modal readings: the descriptive generalization in (12) corresponds to epistemic modal descriptions and the *in virtue of* generalization in (13) corresponds to root modal descriptions. Since different flavors of modality depend on the selection of different modal bases, the different flavors of genericity in (12) and (13) can also be attributed to the distinct modal bases that generic operators select. (14) and (15) illustrate the point.

(14) a. Boys don't cry   (descriptive generalization)

    b. Modal force: universal quantifier

    c. Modal base: $R_{EPISTEMIC}$ (w, w') {w'| w' is a possible world where evidence available to the speaker in w (e.g., speaker's personal experience) holds true.

    d. The proposition [14a] is true in w iff [14a] is also true in all w' where the speaker's experiences in w hold true.

    e. Informal reading: In view of my personal experience/observation, boys don't cry.

(15) a. A boy doesn't cry.   (*in virtue of* generalization)

    b. Modal force: universal quantifier

c. Modal base: R_{ROOT} (w, w') {w' | w' is a possible worlds where the properties of subject (e.g., being tough, being strong) in w hold true.

d. The proposition [15a] is true in w iff [15a] is true in all w' where the properties of the subject in w hold true.

e. Informal reading: In virtue of being tough, a boy doesn't cry.

In (14a) which has a descriptive generic reading, the modal base is restricted to the possible worlds (w') that are compatible with evidences available to the speaker. The speaker asserts that (14a) is generally true purely based on what is known to him/her (e.g., personal observation/experience). Hence, the descriptive genericity is assimilated to the epistemic modality. On the other hand, in (15a) which has an *in virtue of* generic reading, the modal base is restricted to the possible worlds (w') that have known/inherent properties of subjects in our world (w). (e.g., being tough). The speaker asserts that his/her generalization holds true based on the inherent property of boys being tough. Thus, the *in virtue of* generic reading in (15) can be assimilated to the root modality.

2.2.2. Two Types of Generic Readings in Korean

Based on Greenberg (2003), I propose that adjunct MNCs and their PP-counterparts yield different flavors of generic readings: PP-sentences are subject to the descriptive generic readings whereas adjunct MNCs only yield the *in virtue of* generic readings. This, in turn, means that the PP-sentences are the sub-types of epistemic modal constructions and the adjunct MNCs are the subtypes of root modal constructions. The sentences in (16) and (17) illustrate my point.

(16) a. I tolo-**eyse**   kyothong sako-**ka**   manhi   palsayngha-n-ta.
        this road-loc   traffic accident-nom   a lot   happen-pres-decl.

   b. Modal force: universal

   c. Modal base: R_{EPISTEMIC} (w, w') {w' | w' is a possible world where evidence available to the speaker in w (e.g., the speaker's personal experience/observation) holds true.

   d. Informal reading: In view of my personal experiences/observations,

c. Modal base: R_{ROOT} (w, w') {w' | w' is a possible worlds where the properties of subject (e.g., being tough, being strong) in w hold true.

it is generally true that traffic accidents happen a lot in this road.

(17) a. I tolo-**ka**   kyothong sako-**ka**   manhi   palsayngha-n-ta.
　　　this road-nom   traffic accident-nom   a lot   occur-pres-decl.

　　b. Modal force: universal

　　c. Modal base: R_{ROOT} (w, w') {w' | w' is a possible world where (inherent) properties of the subject in w (e.g., being narrow, being curvy) hold true.

　　d. Informal reading: In virtue of being narrow, this road makes traffic accidents happen a lot.

As for the PP-construction in (16a), I propose that the epistemic modal base consists of evidences available to the speaker (i.e., speaker's own observation) and this is why the sentence has a descriptive generic reading. On the other hand, I argue that, in (17a) which is a generic MNC, the root modal base is restricted to possible worlds w' where the set of (inherent) properties of the Major Subject (e.g., being narrow or being curvy) in w hold true. And this setup yields an *in virtue of* reading. The next subsection shows evidence in favor of my classification.

2.2.3. Accommodation and In virtue of Genericity

According to Greenberg (2003), *in virtue of* generic sentences (i.e., IS-generics), unlike the descriptive generic sentences (i.e., BP-generics), is subject to a special felicity condition: the *in virtue of* property that is associated with a subject must come from interlocutors' contextual or world knowledge. In other words, *in virtue of* generic sentences sound felicitous only when all the interlocutors can accommodate an appropriate *in virtue of* property of the subject that can be reasonably related to the generalization. Consider the sentences in (18) which are from Greenberg (2003).

(18) a. Norwegian students whose name ends with 's' wear thick green socks.

　　b. #A Norwegian student whose name ends with 's' wears thick green socks.

Unlike the IS-BP pair in (14) and (15), (18a) and (18b) sharply contrast in terms of acceptability. The oddity of (18b), according to Greenberg is due to the

accommodation failure: in a normal world, 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 will fail to accommodate this information unless the relevant property is based on the interlocutors' shared knowledge. On the other hand, the BP sentence in (18a) does not show this type of restriction since it denotes a descriptive generalization which merely states the pattern. Even though the generalization is unnatural and unlikely in our real world, the sentence sounds perfect since it does not involve specific information that a hearer has to accommodate.

Now, if my classification in (16) and (17) is correct, it is expected that the adjunct MNC in (17) (which has an *in virtue of* generic reading) should be subject to the same type of felicity condition. And this expectation is borne out.

(19) a. I tolo-**eyse**   Mary cha-**ka**   cal   kocangna-n-ta.
          this road-loc   Mary car-nom   well/easily break.down-pres-decl.
          'Mary's car breaks down easily on this road'
     b. #I tolo-**ka**   Mary cha-**ka**   cal   kocangna-n-ta.
           this road-nom Mary car-nom   well/easily break.down-pres-decl.
           '(Intended) This road is such that Mary's car breaks down easily here'
(20) a. Nay-ka   i uyca-ey   anc-**umyen**,   simcang-**i**   apwu-ta.
          I-nom   this chair-dat   sit-if   heart-nom   hurt-decl.
          'My heart sickens when/if I sit on this chair'
     b. #I   uyca-**ka**   simcang-**i**   awpu-ta.
           this chair-nom   heart-nom   hurt-decl.
           '(Intended) this chair gives heart sickening'

Unlike the PP-sentences in (19a) and (20a), the adjunct MNCs in (19b) and (20b) sound odd. The contrast would have been a mystery if we had assumed that adjunct MNCs and their PP counterparts have the same type of generic reading. However, the oddity contrast is well accounted for under Greenberg's assumption

that *in virtue of* generics are subject to the special felicity condition: in (19b), it is hard for us to come up with a reasonable *in virtue of* property of the Major Subject *I tolo* 'this road' that makes the generalization 'the frequent breaking down of the Mary's car' hold true. On the other hand, the PP-sentence in (19a) is totally fine. This is so because, as a descriptive generalization, it is not subject to the felicity condition. The contrast in (20) can also be explained in the same way: we simply can't find an appropriate property of the Major Subject *i uyca* 'this chair' that is responsible for the eventuality of heart-hurting. I take this oddity contrast as strong evidence for my proposal: adjunct MNCs yield *in virtue of* generic readings and their PP-counterparts yield descriptive generic readings

To summarize, I argued that adjunct MNCs and their PP-counterparts have *in virtue of* generic readings and descriptive generic readings respectively. Adopting Greenberg's (2003) proposal that the two types of generic readings are originated from the epistemic and root modality, I classified the adjunct MNCs as a subtype of a root modal construction and their PP counterparts as a subtype of an epistemic modal construction.

3. Syntax of Modal Constructions

Having investigated the semantic aspects of adjunct MNCs and their PP-counterparts, in this section, I discuss the syntactic aspects of the two constructions. Eventually, we will see that the syntactic height of modal/generic operators plays an important role in licensing Major Subjects in adjunct MNCs.

Originally, under the Kratzerian modal analysis, modal constructions, regardless of their modal flavors, are considered to have a uniform syntactic structure. That is, the modal operator is a one-place predicate that takes a proposition as its argument. The different flavors of the modal constructions are conditioned by the selection of different modal bases and this modal base selection is a totally pragmatic procedure.[1] However, researchers like Brennan (1993), Cinque (1999) and Hacquard (2006) cast doubt on Kratzer's uniform analysis, arguing that the selection of modal bases cannot

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[1]   Ordering source is another pragmatic parameter that contributes to the overall modal meaning. This parameter is not discussed in this paper since it is not directly related to the modal meanings discussed here.

be a sole pragmatic matter. Given various empirical and typological evidences, they argue that the selection of modal bases is hardwired to syntax. According to them, there are two syntactic types of modal operators: a S(entential)-level operator and a VP-level operator. A S-level operator takes a whole proposition (CP) as its complement and typically encodes epistemic modality. On the other hand, a VP-level operator is a two-place predicate that takes a VP and a subject DP as its arguments: it turns the VP into a modal property expression and attributes it to its subject DP. The VP-operator typically encodes a root/deontic modality.

Due to the space limitations, I will not discuss the detailed theoretical and empirical motivations of their analysis. However, what is important for us is that there is a widespread view that epistemic modal constructions and root modal constructions have distinct syntactic structures. This, coupled with the previous conclusion that descriptive generic sentences are subtypes of epistemic modal constructions and *in virtue of* generic sentences are the subtypes of root modal constructions, suggests that Korean adjunct MNCs (which are *in virtue of* generic sentences) have a VP-level generic operator and their PP-counterparts (which are descriptive generic sentences) have a sentential level generic operator. The simplified structure in (21) illustrates this point.

(21) a. **GEN** [$_S$ I   sakeli-**eyse**   kyothong sako-**ka**   manhi   palsayngha-n-ta]
　　　　　　　　 this crossroad-loc traffic accident-nom a lot   happen-pres-decl.
　　　 'It is generally true that traffic accidents happen a lot in this crossroad'
　　 b. [$_S$ i sakeli-**ka**　 **GEN** [$_{VP}$ kyothong sako-**ka** manhi palsayngha-n-ta]
　　　　　this crossroad-nom   traffic accident-nom a lot   happen-pres-decl.
　　　 'It's generally true of this crossroad such that traffic accidents happen a lot here'

4. What Licenses Major Subjects?

4.1. Modal Analysis is Not Enough

In the previous sections, I proposed that the formation of adjunct MNCs has to do with the existence of generic operator and proposed that adjunct MNCs are

subtypes of root modal constructions based on the semantic similarity between root modal readings and *in virtue of* generic readings. Later, following the recent syntactic analyses of modal sentences, I further proposed that adjunct MNCs have a VP-level generic/modal operator.

With these conclusions, one may naturally ask what aspect of the generic/modal operator is responsible for the licensing of Major Subjects in adjunct MNCs? At first glance, it seems that we already have an answer to this question: a VP-level modal operator, being a two-place predicate that takes a VP and a subject DP as its arguments, directly licenses Major Subjects. While I partly agree with this hypothesis in that the existence of a modal operator is a necessary condition for the licensing of Major Subjects in adjunct MNCs, I do not think that the operator is the direct licensor of Major Subjects. The reason why I reject this assumption is that it lacks explanatory power when we take the other two types of MNCs into consideration. That is, while the 'modal operator-as-a-direct-licensor' approach accounts for the formation of the adjunct MNCs, it cannot explain how the Major Subjects of the other two types of MNCs are licensed, since the possessive MNCs and the oblique MNCs are apparently not generic or modal constructions.

One might argue that the three types of MNCs may not form a natural class in terms of their syntax and semantics and that the licensing of the Major Subjects in these MNCs thus do not need to be accounted for in a uniform way. However, there are syntactic, semantic and pragmatic evidences showing that all three types of MNCs form a natural class. First, all three types of MNCs are subject to the same syntactic constraint in terms of relativization:

(22) a. Mary-**ka**   emeni-**ka**   yeppu-ta.   (possessive MNC)
        M-nom   mother-nom   pretty-decl.
        'Mary's mom is pretty'
     b. [e_i emeni-**ka**   yeppu-n] $Mary_i$
        mother-nom   pretty-rel   Mary
        'Mary whose mother is pretty'
     c. *[Mary-**ka**   e   yeppu-n] emeni[2]
            M-nom   pretty-rel   mother

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[2] The sentence is grammatical under the experiencer reading 'the mother who finds Mary pretty'. But this interpretation is irrelevant here.

(23) a. Mary-**ka**   phwung-   o-ess-ta.   (oblique MNC)
      M-nom   paralysis-nom   come-past-decl.
      'Mary got paralyzed'

    b. [e$_i$ phwung-**i**   o-n]   Mary$_i$
        paralysis-nom   come-rel   M
    'Mary who got paralyzed'

    c. *[Mary-**ka**   e$_i$ o-n]   phwung$_i$
        M-nom   come-rel   paralysis

(24) a. I tolo-**ka** kyothongsako-**ka**   cal   palsayngha-n-ta. (adjunct MNC)
      this road-nom   traffic accident-nom   well   happen-pres-decl.
      'This road is such that traffic accidents happen a lot here'

    b. [e$_i$ kyothongsako-**ka**   cal   palsayngha-nun] i tolo$_i$
        traffic accident-nom   well happen-rel   this road
    'this road in which traffic accidents happen a lot'

    c. *[i tolo-**ka**   e$_i$ cal   palsayngha-nun] kyothongsako$_i$
        this road-nom   well happen-rel   traffic accidents

(22a) is a possessive MNC and the grammatical contrast in (22b) and (22c) indicates that while the NP1 *Mary* can be relativized, the NP2 *emeni* 'mother' cannot be. This contrast is consistent in other types of MNCs as shown in (23) and (24).

Secondly, all three types of MNCs are subject to a specific semantic restriction that Major Subjects in MNCs must be a referential or specific:

(25) a. $^{???}$Han/etten salam-**i**   emeni-**ka**   yeppu-ta.
      a/an   person-nom   mother-nom   pretty-decl.
      'someone's mom is pretty'

    b. $^{???}$Han/etten salam-**i**   phwung-**i**   o-ess-ta.
      a/an   person-nom   paralysis-nom   come-past-decl.
      'A person got paralyzed'

    c. $^{???}$Han/etten tolo-**ka**   kyotongsako-**ka**   cal   palsayngha-n-ta.
      a/an   road-nom   traffic accident-nom well   happen-pres-decl.
      'A road is such that traffic accidents happen a lot'

The three types of MNCs in (25) all sound odd when the Major Subjects carry

determiners such as *han/etten* 'a/some' which typically trigger non-referential or non-specific interpretations.

Finally, all three types of MNCs are subject to a specific pragmatic well-formedness condition dubbed as 'Aboutness Condition'. Since this condition is well-documented in the literature of the possessive and oblique MNCs, I won't repeat them here. The question is whether adjunct MNCs are also subject to this condition. Interestingly, we have already witnessed that a similar type of well-formedness condition is operative for adjunct MNCs in the section 2.2.3.

(26) a. I   chimtay-**ka**   cam-**i**   cal   o-n-ta.
     this bed-nom   sleep-nom   well   come-pres-decl.
     'This bed sleeps well' 'One can sleep well in this bed'
  b. # Seoul-**i**   cam-**i**   cal o-n-ta.
      S-nom   sleep-nom well come-pres-decl.
     # 'Seoul sleeps well'

In (26a), the predicate denotes the dispositional properties of the Major Subject *i chimtay* 'this bed'. In other words, the sentential predicate in (26a) describes ABOUT the subject. Yet, the same predicate makes the sentence sound awful when the subject is replaced by *Seoul* in (26b). This is so because interlocutors may not take the denotation of the sentential predicate as a proper description ABOUT the subject under natural contexts.

So far, I have briefly shown that all the three types of MNCs share the same syntactic, semantic and pragmatic properties. I take this as evidence against the assumption that the relevant Korean MNCs may not form a natural class. This not only validates my rejection of the 'modal-operator-as-a-direct-licensor' approach, but also put us in a position where we need to find a uniform licensing condition for all the three types of MNCs.

4.2. Major Subjects As a Holder

In order to come up with a uniform licensing condition, we have to see if there are any common grammatical features that the relevant MNCs share. In this respect, Suh's (2003) work is worth noting: he proposes that the licensing of MNCs has

much to do with the aspectual properties of the predicates. For example, in (27), while the MNC with a stative verb in (27a) and the MNC with an achievement-type verb in (27b) are good, the MNC with an activity verb in (27c) is infelicitous.

(27) a. Mary-**ka**   emeni-**ka**   yeppu-/kenkangha-si-ta
          M-nom   dog-nom   pretty-/healthy-hon-decl.
          'Mary's mom is pretty/healthy'
      b. Mary-**ka**   kangaci-**ka**cwuk-/epseci-ess-ta.
          M-nom   dog-nom   die-/disappear-past-decl.
          'Mary's dog died/disapeared (on her)'
      c. * Mary-**ka**   kangaci-**ka**ttuienol-/cic-nun-ta
            M-nom   dog-nom   run.around/bark-pres-decl.
            '(intended) Mary's dog is running around/barking'

Based on the contrast above, Suh (2003) suggests that MNCs are only licensed by non-dynamic/non-active predicates. While his proposal is descriptively correct, he does not provide any detailed analysis regarding how non-dynamic aspectuality licenses these constructions. Thus, his proposal remains as an observational generalization at best. To provide more systematic analysis of MNCs, I suggest the following revised generalization.

(28) MNCs are only well-formed when the Major Subject is interpreted as a holder of a certain state/property or an undergoer of a certain change of state (COS).

First of all, the descriptive generalization in (28) accounts for the grammaticality contrasts in (27): (27a) is interpreted as 'Mary is a holder of a state where her mother is pretty'. In (27b), the NP1 *Mary* can be said to undergo change from a state where her mom is alive to a state where her mom is dead. On the other hand, in (27c) which is infelicitous, the Major Subject *Mary* is neither a holder of a state nor an undergoer of a certain change of state. Thus, the descriptive generalization in (28) correctly rules out the (27c). (28) also holds true for the oblique MNCs in (29) and the adjunct MNCs in (30).

(29) a. Mary-**ka**   ywume/withu-ka   iss-ta.
       M-nom   humor/wit-nom   be-decl.
       'Mary has humor/wit' 'Mary is humorous/witty'
   b. Mary-**ka**   cengsin/kamki-**ka**   tul-ess-ta.
       M-nom   consciousness/cold-nom   enter-past-decl.
       'Mary came to consciousness/Mary got a cold'

(30) I tolo-**ka**   kyothongsako-**ka**   cal   palsayngha-n-ta.
    road-nom   traffic accident-nom   well   happen-pres-decl.
    'This road is such that traffic accidents happen a lot'

In (29a), the Major Subject *Mary* is interpreted as a holder of a certain property such as 'humor' and 'wit'. On the other hand, the subject in (29b) can be interpreted either as an holder of the result state where *Mary* ends up being conscious/having a cold or it is interpreted as an undergoer of a change from a state where she does not have consciousness or a cold to a state where she has consciousness/a cold. Finally, in (30) which is an adjunct MNC, the Major Subject *i tolo* 'this road' is interpreted as a holder of a generic state such that traffic accidents habitually happen there.

4.3. Proposal: MNCs As Applicative Construction

So far, we've seen that the descriptive generalization in (28) holds for all the three types of MNCs. Now the question is how we formulate a proper syntactic representation that reflects the descriptive generalization in (28). I believe that the essential grammatical feature that lies in the descriptive generalization in (28) is stativity/propertyhood and I propose the following syntactic representation:

(31)   ApplP

Major Subject   Appl'

                 XP   Appl

              state/property
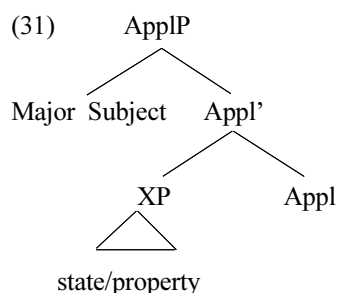
The structure in (31) tells us two important properties of the MNCs. First, Major Subjects in the three types of MNCs are introduced by a special functional head called 'Applicative Head'. This means that Major Subjects in Korean MNCs are neither an argument of a logical subject nor an argument of a main predicate, but an argument of the functional head Appl. Second, this applicative head comes with a specific s(emantic)-selectional feature. That is, the functional head 'Appl' only s-selects a state-denoting or a property-denoting maximal projection as its complement.

Before we proceed further, let me briefly discuss my motivations of the applicative analysis for Korean MNCs. The notion of applicative head is originally proposed by Marantz (1993) and is further developed by Pylkkänen (2002). According to them, the main syntactic function of the applicative head is to introduce a non-core/additional argument. A non-core argument refers to an argument that is not subcategorized by a verb but occupies an A-position in a sentence. The sentences in (32) and (33) illustrate representative applicative constructions in the literature.

(32) a. Mavuto   anaumba   mitsuko   kwa   **mfumu**. (Baker 1988:353)
         M   molded   waterpots for   chief.
     b. Mavuto   anaumb-**ir**-a   **mfumu**   mitsuko.
         M   molded-appl-asp   chief   waterpots
        'Mavuto molded the waterpots for the chief'
     c. [TP Mavuto [T anaumb-ir-a [ApplP mfumu [Appl -ir- [VP mitsuko ~~anaumb-~~]]]]]

(32a) is a canonical Chichewa benefactive construction where the beneficiary NP *mfumu* 'chief' is realized as a PP-adjunct. In (32b), the same beneficiary NP is realized in an A-position (the indirect object position of the verb *anaumb-* 'mold'). According to Marantz (1993), it is the applicative head *-ir* that introduces the beneficiary NP in its specifier position. In this respect, the beneficiary NP is an argument of the applicative head *-ir-* that attaches to the VP whose head (*anaumb-* 'mold') later undergoes cyclic head-movement. Later, Pylkkänen (2002) proposes that there are two types of applicative heads (i.e., a high and a low applicative head). A high applicative head applies to a VP and denotes a so-called affectedness relation (beneficiary, malefective, experiencer, etc.) between an individual (non-core argument) and an eventuality that is denoted by the VP. In this respect, (32b) is an instance of a high applicative construction. On the other hand, a low applicative head applies to a direct object of a verb and denotes a possessional relation between two nominals. (33a) is an English double object construction which Pylkkänen classifies as a low applicative construction.

(33) a. Mary taught John Turkish.
　　b. Mary taught Turkish to John
　　c. [$_{TP}$ Mary [$_{VP}$ taught [$_{ApplP}$ John [$_{Appl}$ ø[$_{NP}$ Turkish]]]]]　　(=33a)

In (33a) the recipient DP *John*, which otherwise realizes as a PP as in (33b), occupies an indirect object position. According to Pylkkänen, the indirect object *John* is not an argument of the verb *teach* but an argument of the null low applicative head that applies to the direct object of the verb *Turkish*. (33c) illustrates her point. Under this configuration, the applicative head denotes a possessional relation between two DPs: Mary causes John to be the possessor of (the knowledge of) Turkish by teaching it.

There are a couple of reasons why I suspect that Korean MNCs are instances of an applicative construction. First of all, NP1s in Korean MNCs are indeed non-core arguments: NP1s in MNCs are apparently not the (direct) arguments of the main predicates yet they all occupy an A-position in the sentence (i.e., the structural subject position). This syntactic characterization of the NP1s in MNCs exactly corresponds to the non-core arguments in the applicative constructions above. Thus, it is not unreasonable to assume that NP1s in MNCs are introduced and licensed by

these applicative heads.

   Secondly, there is similarity between applied arguments and Major Subjects in MNCs in terms of their semantic roles: it is crosslinguistically assumed that applicative arguments are typically affected arguments (32b) or possessor arguments (33a). (See also Cuervo 2003 for Spanish, Lee-Schoenfeld 2006, Schäfer 2008 and McIntyre 2006 for German and Tsai 2009 for Chinese, and many others). For example, in (32b), the applicative argument *mfumu* 'chief' is an entity that is positively (or negatively) affected by the eventuality of Mavuto's molding waterpots, ending up having a beneficiary role (or a malefective role). In (33a), the applicative argument *John* ends up having the knowledge of Turkish. The same thing can be said for Major Subjects: The Major Subjects in the possessive MNCs with stative verbs (e.g. (1a)) and the adjunct MNCs (e.g. (4a)) are holders of certain states. As for the Major Subjects in possessive MNCs with change-of-state unaccusative verbs, they qualify as affected arguments. For example, in (27b), the subject *Mary* can be said to be (negatively) affected by the death of her dog. In the case of the oblique MNCs in (29), the Major Subjects are either interpreted as a possessor (a) or as an experiencer of physiological change (b). Being an experiencer of a certain eventuality, the Major Subjects are nevertheless affected entities.[3]

   Thirdly, so-called external possession constructions (EPCs) in various languages whose syntax and semantic characterizations are similar to Korean possessive MNCs are analyzed as an applicative construction by many researchers recently (see Pylkkänen 2002 for Hebrew, Cuervo (2003) for Spanish, Tsai 2009 for Chinese, Shklovsky 2012 for Tseltal and Kiyosawa & Gerdts (2010) for Salish languages).[4] Especially, the works by Shklovsky (2012) and by Kiyosawa & Gerdts (2010) carry

[3]   In fact, the notion of affectedness in the applicative literature is not firmly defined. Affectedness in this literature is typically used as a cover term to denote various thematic relations (beneficiary, malefective, experiencer..etc) between an individual (non-core argument) and an eventuality of a VP. Whereas, the original notion of affectedness is rather syntactically defined and its semantic notion is more related to the notion of change. In various works (Dowty 1991, Gropen et al. 1991 and Beavers 2011), for example, only affected entities can be realized as a (direct) argument of a verb and they typically undergo some sort of (physical) change. Though my description of affectedness above is closer to the former notion, in the upcoming sections I will show how well the affected Major Subjects in Korean MNCs follow from the classical definition of affectedness.

[4]   See also McIntyre (2006) for German and Paul (2009) for Malagasy for similar analysis in which they argue that external possessors are introduced and licensed by the functional head 'HAVE'. Though the label of the functional head is different, the basic ideas of these works are not much different from the applicative analysis.

importance since they show that the relevant languages have morphologically overt applicative morphemes and the EPCs in these languages are only possible when the overt applicative morphemes are present. This is not only a direct support for the applicative analysis of the EPCs but also an indirect evidence for the applicative analysis of Korean possessive MNCs.

One may argue that syntactic and semantic properties of the EPCs may differ crosslinguistically, thus not all EPCs may qualify as an applicative construction. However, the following crosslinguistic distributional property of EPCs cast doubts on this type of argumentation: in languages where EPCs are possible, only unaccusatives, but not unergatives can form EPCs. Recall that the MNCs in (27) show that MNCs are possible with unaccusative verbs but not with unergative verbs. (34) and (35) show that the same restriction holds crosslinguistically.

(34) Hebrew unaccusative   unergative (Pylkkänen:2002:51)
    a. ha-kelev ne'elam   le-Rina   b. *ha-kelev   hitrocec   le-Rina.
       the dog   disappeard to-R   the dog   ran.around to-R
       'Rina's dog disappeared on her'   'Rina's dog ran around on her'
(35) Chinese unaccusative   unergative (Tsai:2009:14)
    a. Akiu   pao-le   laopo.   b. *Akiu   zai-pao   laopo.
       A   run-incho   wife   A   prog-run   wife
       'Aiku's wife ran away on him'   'Aiku's wife is running away on him'

Both in the Hebrew and the Chinese EPCs, unergatives are systematically excluded. I take this crosslinguistic property as strong evidence against the argumentation that EPCs do not have to be analyzed as a uniform applicative construction.

To summarize this section, I provided reasons why the Major Subjects in all the three types of MNCs should be licensed in a uniform way and proposed the applicative structure in (31) where the Appl head relates the Major Subjects with property/state-denoting maximal projections. I also provided motivations for my applicative analysis. In the next section, I will show how the applicative structure in (31) handle all three types of MNCs in a uniform way.

5. A Unified Applicative Construction For Three Types of Korean MNCs

5.1. Adjunct MNCs

I propose that the adjunct MNC and its PP-counterpart in (5) have the following syntactic structures in (36a) and (36b) respectively.

(36) a. [$_{IP}$ I hoswu$_i$-**ka** [$_{ApplP}$ t$_i$ Appl [$_{VP}$ **Gen** [$_{VP}$ nonge-**ka** cal caphinta]]]]
        this lake-nom bass-nom   well   caught
        'This lake is such that bass are caught well here'
  b. [$_{CP}$ **Gen** [$_{CP}$ I hoswu-**eyse**   nonge-**ka**   cal   caphinta]]
             this lake-loc   bass-nom   well   caught
    'Bass are caught well in this lake'

Recall that I proposed that adjunct MNCs are subtypes of root modal constructions which have a VP-level generic operator and their PP-counterparts are subtypes of epistemic modal constructions whose modal operator is a S-level operator. Thus, in (36a) which is an adjunct MNC, the VP-level modal operator takes an eventive VP as its complement. At this point, being a generic operator, this modal operator stativizes the VP: it turns an eventive VP into a stative VP. This makes it possible for the applicative head to s-select the stativized VP as its complement. Consequently, the applicative head introduces the non-core argument *i hoswu* 'this lake' and assigns a holder role. This ensures that the Major Subject in (36a) is interpreted as a holder of a generic/habitual state where bass are caught well. On the other hand, in (36b) which is an epistemic modal construction, the generic operator takes a whole sentence as its complement. This means that the sentence cannot be stativized until it reaches the CP/IP-level at which the sentential generic operator is introduced. Thus, the only option for (36b) to be an applicative structure is that the applicative head is introduced on top of the (stativized) CP/IP. However, this option is highly doubtful: under the original applicative analysis by Pylkkänen (2002), the syntactic notion of a high applicative head is identical to the one of the Kratzerian small *v* (Kratzer 1996) in that both heads apply to a VP via event identification and introduce an additional argument that does not belong to the

lexical specification of the V. In this respect, the assumption that an applicative head can freely be introduced in a CP/IP level amounts to say that a small *v* can take a CP/IP as its complement, which is impossible. For this reason (i.e., being an S-level modal construction), the PP-generic sentence in (36b) is not able to host an applicative head and this is why the epistemic modal/descriptive generic readings are never realized in the form of an MNC.

5.2. Possessive MNCs

Recall that the well-formed possessive MNCs allow stative verbs and change-of-state (COS) unaccusative verbs but not unergative verbs as their main predicates ((27) in section 4.2.). This empirical generalization, however, does not seem to be compatible with the syntactic structure of the MNCs that I proposed in (31): the applicative head in (31) only s-selects state or property-denoting phrases as its complement. Thus, (31) explains why stative verbs, but not event-denoting unergative verbs are allowed in the possessive MNCs. However, (31) wrongly rules out the possessive MNCs with COS unaccusatives since the COS unaccusatives nevertheless denote CHANGE events. To resolve this issue, I will adopt Cuervo's (2003, 2014) analysis on Spanish applicative constructions.

5.2.1. Two Types of Unaccusative Verbs

Ever since Perlmutter's (1978) split intransitivity hypothesis, it is widely accepted that the subject of an unaccusative verb is a deep object which is base-generated in the complement position of the verb. (e.g., Burzio 1986, Levin & Rappaport-Hovav 1995). On the other hand, Cuervo (2003, 2014), based on the fact that unaccusative verbs generally do not form a semantically homogeneous natural class, proposes that distinct semantic properties of unaccusative verbs should also mirror their syntactic structures. Cuervo reports that Spanish unaccusative verbs can be divided into two classes depending on whether they can take the reflexive clitic *se* or not.
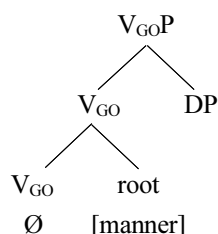
(37) a. *Se*-variants: *hundirse* 'sink', *romperse* 'break', *derretirse* 'melt' *morirse* 'die'..etc.

 b. *Se*-less variants: *ilegar* 'arrive', *venir* 'come', *rodar* 'roll', *suceder*
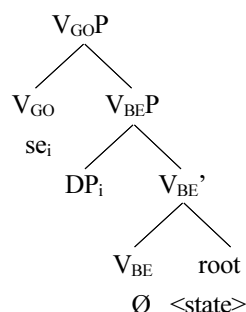
'happen', *faltar* 'lack'...etc.

Cuervo notices that while the *se*-variants in (37a) lexically encode COS (inchoative) events where the change events and its resulting states are specified together, the *se*-less variants in (37b) encode simple change event without any specific result state. Based on this morphological and semantic difference, she argues that these *se/se*-less unaccusatives have different syntactic structures.

(38) a. ***Salieron** muchos yuyos* (Se-less verb)   b. ***Se salieron** tres clavos* (se-verb)

'There appeared many weeds'   'Three nails came off'

$V_{GO}P$ $V_{GO}P$

V_{GO} DP V_{GO} $V_{BE}P$
                                      se_i

V_{GO} root DP_i V_{BE}'
Ø   [manner]
                                                          V_{BE} root
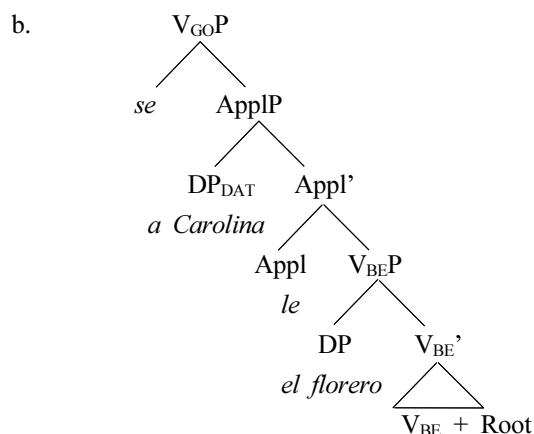   Ø   <state>

As shown in (38a), the *se*-less unaccusative verb *salieron* 'appear' have a simple mono-event structure where the verbalizing V_{GO} head encodes a simple CHANGE event or a directed motion event. On the other hand, the *se*-variant *se salieron* 'come off' in (38b) 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}). In this configuration, the single argument DP *tres clavos* 'three nails' has a dual role. It is not only an undergoer of a CHANGE event (by being bound by reflexive *se*) but also a holder of the result STATE eventuality (by being in the spec/$V_{BE}P$). On the basis of this dichotomy, Cuervo proposes the following syntactic structure for a Spanish dative applicative construction with a COS unaccusative verb.

(39) a. A Carolina   se   le   rompio   el florero (Cuervo 2003:140)
       To Carolina   refl   cl.dat   broke   the vase
       'The vase broke and Carolina is affected by this'

b.
```
                    V_GOP
                   /    \
                 se     ApplP
                       /    \
                   DP_DAT   Appl'
                  a Carolina /   \
                         Appl    V_BEP
                          le    /    \
                             DP    V_BE'
                         el florero  /\
                                  V_BE + Root
```

In (39b), the dative subject *a Carolina* is introduced by a high applicative head and it is assigned an affectee role by the Appl head. What is interesting is that the ApplP in this construction is sandwiched between the CHANGE sub-event and the STATE sub-event. Under this configuration, the dative applied argument is both an object of the event of change and the possessor of the end state. According to Cuervo, this is why the dative applied argument is interpreted as an affected entity.

Now, I propose that the distribution of Korean possessive MNCs can be directly accounted for under Cuervo's analysis.
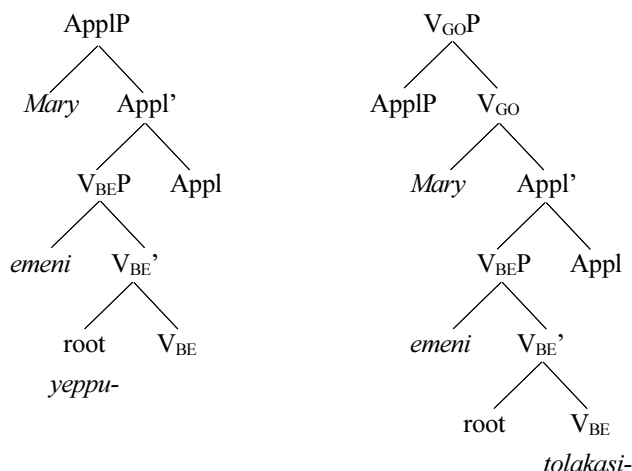
(40) a. Mary-**ka** emeni-**ka** yeppu-si-ta   b. Mary-**ka** emeni-**ka** tolakasi-ess-ta.
       M-nom mother-nom pretty-hon-decl.   M-nom   mom-nom die-past-decl.
       'Mary's mom is pretty'   'Mary's mom died on her

In (40a) which is a stative possessive MNC, the applicative head takes the state-denoting $V_{BE}P$ as its complement and assigns a holder role to the added argument *Mary*. This yields a reading such that Mary is a holder of the state where her mom is pretty. On the other hand, in (40b) which is a COS possessive MNC, the applicative head is sandwiched between the CHANGE-denoting $V_{GO}P$ and (result) STATE-denoting $V_{BE}P$. The applicative head uniformly assigns a holder role to the added argument *Mary*. Being an object of the CHANGE event, *Mary* is also interpreted as an undergoer of the event. Thus, the configuration in (40b) exactly achieves the desired reading such that Mary undergoes a CHANGE (from the STATE where her mom is alive) to a holder of the STATE where her mom is dead.

In sum, Cuervo's syntactic analysis of COS unaccusative verbs and applicatives enables us to keep the uniform applicative analysis for Korean MNCs. That is, the applicative head in Korean unambiguously s-selects state/property-denoting phrases. Consequently, this explains why Korean possessive MNCs allow COS unaccusatives but not unergatives: unlike COS unaccusatives which have a STATE sub-component, unergative verbs do not come with any STATE (sub-)component in their lexical specifications. Thus, an applicative head which only s-selects state-denoting eventuality cannot apply to these verbs.

5.3. Oblique MNCs

Korean oblique MNCs are typically formed with two types of main predicates. The main predicates are either existential unaccusatives (e.g., *iss-* 'be, exist' in (41a)) or directed motion unaccusatives (e.g., *o-* 'come', *tul-* 'enter' or *na-* 'exit' in (41b-d)).
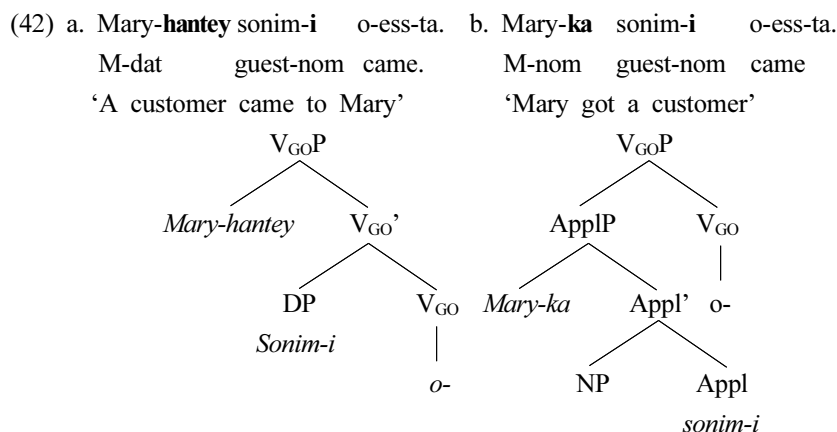
(41) a. Mary-**ka**   myenhecung-**i**   iss-ta.
       M-nom   driver's license-nom   be-decl.
    'Mary has a driver's license'

    b. Mary-**ka**   pwung-**i**   o-ess-ta.
       M-nom   paralysis-nom   come-past-decl.
    'Mary got paralyzed'

    c. Mary-**ka**   kamki-**ka**   tul-ess-ta.
       M-nom   cold-nom   enter-past-decl.
    'Mary got a cold'

    d. Mary-**ka**   yetulum-**i**   na-ess-ta.
       M-nom   pimple-nom   exit-past-decl.
    'Mary got pimples'

Interestingly, the semantic roles of the Major Subjects in (41) are very similar to the ones of the Major Subjects in the possessive MNCs. Recall that the Major Subjects in the possessive MNCs are either a holder (of a certain state) or an undergoer (of a COS event). In (41), the NP1s are also interpreted as a holder or an undergoer: in (41a), *Mary* is a holder of a driver's license. The Major Subjects in (41b, c and d), on the other hand, 'become' a holder of paralysis, a cold and pimples respectively. In other words, they undergo some sort of physiological change. (e.g., *Mary* in (41c) undergoes a change from a healthy state to an ill-state).

This semantic parallelism between two types of MNCs leads us to assume that both possessive MNCs and oblique MNCs in Korean have the same types of applicative structures represented in (40). Unfortunately, this assumption is untenable: remember that under Cuervo's (2003, 2014) classification of unaccusative verbs, COS unaccusatives are bi-eventive verbs that project a change-denoting $V_{GO}P$ and a state-denoting $V_{BE}P$. On the other hand, directed motion unaccusatives are

mono-eventive verbs that only project a $V_{GO}P$. This means that Korean oblique MNCs with directed motion unaccusatives in (41b-d) cannot even form an applicative structure since an applicative head, which should s-select state/property-denoting phrases cannot apply to a change-denoting $V_{GO}P$.

Does this mean that oblique MNCs are not applicative constructions? If so, how do we capture the similar semantic properties between two types of MNCs? Nonetheless, I believe that all three types of Korean MNCs are applicative constructions where Major Subjects are either interpreted as a holder or an undergoer in a uniform way. To maintain the applicative analysis, I propose that Korean oblique MNCs belong to what Pylkkänen (2002) classifies as a low applicative construction where an applicative head applies to a nominal complement of the main verb. (42a) and (42b) illustrate an oblique/dative construction and an oblique MNC respectively.

(42) a. Mary-**hantey** sonim-**i**   o-ess-ta.   b. Mary-**ka**   sonim-**i**   o-ess-ta.
       M-dat   guest-nom came.   M-nom   guest-nom   came
       'A customer came to Mary'   'Mary got a customer'

As shown in (42a), the dative construction is not an applicative construction but a two-place unaccusative construction where the verb takes the theme argument *sonim* 'customer' and the goal argument *Mary*. On the other hand, (42b), which is an oblique MNC, is a low applicative construction where the applicative head s-selects a property-denoting NP. Note that unlike *sonim* 'guest' in (42a) which is an individual-denoting DP, *sonim* in (42b) is a property-denoting NP. Critically, this semantic property of *sonim* in (42b) is what makes the sentence an applicative construction: the applicative head s-selects only a state/property-denoting phrase.

The question is how we know the Logical Subjects in oblique MNCs are property-denoting NPs. There are a couple of reasons why I suspect this is the case. First of all, there are slight semantic differences between oblique MNCs and their dative counterparts. Consider the existential/possessive MNC in (43a) and its dative counterpart in (43b).

(43) a. Mary-**hanthey**   ton-/wuncen   myenhecung-**i**   iss-ta.
      M-dat   money/driver's license-nom   be-decl.
      'Mary has money/a driver's license'
    b. Mary-**ka**   ton-/wuncen myenhecung-**i**   iss-ta.
      M-nom   money-/driver's license-nom   be-decl.

While the dative construction in (43a) yields a straightforward possessive reading where a concrete thing called money or a driver's license is in the possession of *Mary*, the MNC in (43b) rather have a qualitative reading where *Mary* is interpreted as a rich/affordable person in terms of her financial situation or a licensed person in terms of driving. Thus, while money or a driver's license in (43a) may not be Mary's at all, the same NPs in (43b) must be Mary's. I believe this reading difference has much to do with whether the relevant NPs in (43) denote concrete individuals or abstract properties.

The second evidence comes from the case-alternation fact that is illustrated below;

(44) a. Mary-**ka**/-**hanthey**   nwuna-/namca chinkwu-**ka**   iss-ta.
      M-dat/nom   sister-/boyfriend-nom   be-decl.
      'Mary has a sister/a boyfriend'
    b. Mary-**ka**/*$^?$-**hanthey** ywume-/sengkkal-/him-**i**   iss-ta.
      M-nom/*$^?$-dat   humor-/temper-/power-nom   be-decl.
      'Mary has humor/temper/power' 'Mary is humorous/tempered/strong'

It is widely assumed that Major Subjects in oblique MNCs freely alternate between nominative case and dative case as shown in (44a). However, (44b) shows that this is indeed not the case. I believe that the unavailability of dative case in (44b) has much to do with the semantic denotations of the Logical Subjects. Note

that the Logical Subjects in (44a) can either denote an individual (concrete person) or a property (abstract or relational notions such as sisterhood, boyfriendship). Thus, the individual-denoting Logical Subject will derive a dative construction and the property-denoting Logical Subject will derive an applicative MNC. On the other hand, the Logical Subjects in (44b) are nouns that typically denote only abstract properties. Thus, the formation of a dative construction is not possible as these property-denoting Logical Subjects only qualify as a legit input for the applicative head.

Now let me illustrate how the Major Subjects in oblique MNCs get a holder and an undergoer interpretation.

(45) a. Mary-**ka** yel-**i**   iss-ta.   b. Mary-**ka** kamki-**ka** tul-ess-ta.
        M-nom   fever-nom be-decl.   M-nom   cold-nom enter-past-decl.
        'Mary has a fever'   'Mary got a cold'

$V_{BE}P$ tree:
- $V_{BE}P$
  - ApplP
    - *Mary*
    - Appl'
      - *yel*
      - Appl
  - $V_{BE}P$
    - *iss-*

$V_{GO}P$ tree:
- $V_{GO}P$
  - ApplP
    - *Mary*
    - Appl'
      - *kamki*
      - Appl
  - V_{GO}
    - *tul-*

In (45a), the applicative head takes the property-denoting NP *yel* 'fever' as its complement and introduce an additional argument *Mary* and assigns a holder role to it. This makes *Mary* a holder of the relevant property. Since the main verb *iss-* 'be' projects a $V_{BE}P$ which denotes a state, it does not add any COS meaning here. On the other hand, in (45b), the directed motion verb *tul-* 'enter' projects a change-denoting $V_{GO}P$. Under this projection, the added argument *Mary*, which is a holder of the property *kamki* 'cold', has a dual role: it is both an undergoer of a certain change (by being an object of a change event) and a holder of a property. Thus, the sentence in (45b) yields a COS reading like 'Mary becomes a holder of a cold'.

6. Summary

In this paper, I explored a unified analysis of three types of Korean MNCs. In doing this, my two proposals played a key role: first, Major Subjects in all Korean MNCs are introduced and licensed by an 'applicative' head. Second, the applicative head in Korean only s-selects property/state-denoting phrases as its complement and relates these phrases to the added argument (NP1). Thus, all three types of MNCs investigated in this paper have the basic structure in (46).

(46) [$_{ApplP}$ NP1   [$_{Appl'}$ Appl [$_{XP}$ STATE/PROPERTY]]]

I started this paper with adjunct MNCs and analyzed them as a VP-level modal construction. Thus, for an adjunct MNC, the XP in (46) corresponds to a modalized/stativized VP. For a possessive MNC, the XP corresponds to either a property-denoting VP or a (resultant) state-denoting VP. As for an oblique MNC, the XP corresponds to a property-denoting NP2. Thus, under this configuration, the three types of MNCs in Korean do not differ from each other in essence. Another theoretical advantage of my proposal regarding the structure in (46) is that it accounts for the two main readings of Major Subjects in MNCs. (i.e., a holder (of a state) reading and an undergoer of (a change-of-state) reading). The structure in (46) readily signifies the holder reading. As for the undergoer reading, we achieve it by simply adding the additional functional layer, $V_{GO}P$ which corresponds to a 'BECOME/CHANGE' event. Overall, our initial observation that all three types of MNCs seem to form a natural class is well-captured under my applicative analysis.

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