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IN

LINGUISTICS

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POLYSEMY DERIVING FROM POSSESSOR ASCENSION* **

KYUSEEK HWANG

This paper investigates a construction in Korean which is ambiguous between a causative and a passive interpretation. I propose that such ambiguous sentences are polysemous and the polysemy is derived from A-movement, in particular, so-called possessor ascension, in agreement with Whitman and Han 1988 and Kim and Pires 2002. The proposed "possessor ascension" is justified from the Minimalist Program (MP) perspective. Specifically, I propose that the motivation of the possessor ascension is EPP (Extended Projection Principle) on T and solve several apparent problems by appealing to Equidistance due to V-to-T movement and the Phase Impenetrability Constraint (PIC) based on the Phase model (Chomsky 2005, 2001, 2000).

1. INTRODUCTION. While one aspect of human language is having the existence of various linguistic forms to express one concept, as with passivization and topicalization, it is also true that human language systems have a tendency toward economy, using a single linguistic form to express two or more distinct concepts. It is possible to use the same linguistic form to denote different objects in the world, or meanings of an utterance, because language users can eliminate ambiguity arising from any such form by relying on information from the linguistic context or pragmatic function. For instance, language users usually do not recognize any ambiguity about the word *corner* when they hear 'Do you know the bookstore on the *corner* of University Avenue and King Street?' even though the word *corner* has several related but still distinct meanings, including 'the inside of the point at which two lines, edges, or surfaces meet' or 'the outside of the point at which two lines, edges, or surfaces meet', etc. As humans, we disambiguate the word *corner* by using the information we have about the real world. This type of multiplicity of meanings of words is called polysemy; however, polysemy does not seem to be restricted to an individual word. Let us consider the Korean sentence (1), which is ambiguous between causative and passive interpretation. The ambiguity arising from sentences like (1) can also be called polysemy.

(1)   Korean[1]
       John-i   aki- eykey   son-ul   mwul- li-   ess-ta.
       John-NOM baby-DAT   hand-ACC bite-   PAS/CAS-PST-DC
       ‘John had a hand bitten by a baby.’
       a. Passive (experiential: the biting happened to John by a baby)
       b. Causative (John$_i$ made a baby$_j$ bite his$_{i/j}$ hand)

The type of ambiguity shown in (1) also occurs in English, French, Italian, Mongolian, Mandarin, and Japanese (Whitman and Han 1988, Washio 1993, among others). Examples of English, French, and Italian ambiguous passive/causative sentences are shown in (2)–(4).

(2)   English
       I had my hair cut.

(3)   French
       Jean s'est   fait   broyer   sa voiture par un camion.
       Jean REF. be. 3sg. PRES. done   destroy   his car   by a truck
       ‘John had his car crushed by a truck.’   (Washio 1993:47)

(4)   Italian
       Giann si   e   fatto   distruggere la macchina   da un camion.[2]
       John REF   be.3sg. PRES done   destroy   the car   by a truck
       ‘John had his car crushed by a truck.’

The glosses and translations for sentences (1), (2), (3), and (4) highlight the ambiguity between passive and causative. This cross-linguistic phenomenon led Washio (1993) to explore the relation between the causative and the passive interpretation of ambiguous constructions. He observed that both interpretations, passive and causative, share their sub-event. He claims that the difference is derived from the direction of affectedness, as shown in (5).

(5) a. Passive
       Subject (Patient/Theme) ← Sub-event
       ‘John’   ‘baby bites hand’

    b. Causative
       Subject (Causer) → Sub-event
       ‘John’   ‘baby bites hand’

(5a) represents the direction of affectedness by which we get a passive interpretation. A subject whose theta role is *patient* or *theme* is typically affected by the sub-event. The interpretation we get from (5a) corresponds to (1a) ‘the biting happened to John by a baby’, where John was affected by the event that a baby bit John’s hand. In contrast, the interpretation we get from (5b) corresponds to (1b) ‘John$_i$ made a baby$_j$ bite his$_{i/j}$ hand.’

To grasp the syntactic closeness of these two interpretations, especially in Korean, the idea of *possessor ascension* has been proposed by Whitman and Han (1988) and supported by Kim and

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[1] The following abbreviations are used in this paper: ACC (accusative), CAS (causative), COMP (complementizer), DAT (dative), DC (declarative), GEN (genitive), INST (instrumental), MOD (modality), NOM (nominative), PAS (passive), PRES (present), PST (past), REF (reflexive), 3sg (third person singular).

[2] This sentence was provided by Fabiana Piccolo, who is a native speaker of Italian.

Pires (2002). The basic idea is that the subject *John* in (1a) is base-generated as a possessor of the accusative marked NP[3] *son-ul* 'hand-Acc' and ascends to the surface position. This analysis has several advantages, one of which is that it satisfies the UNIFORMITY OF THETA ASSIGNMENT HYPOTHESIS (UTAH), proposed by Baker (1988). UTAH was originally defined as follows:

(6)   Uniformity of theta assignment hypothesis (UTAH)
        Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure.
        (Baker 1988:46)

Whereas the subject of the causative interpretation of (1) has the agent theta-role (see (1b)), the subject of the passive interpretation (1a) has the theme theta-role. This contrast can be explained neatly by UTAH and possessor ascension. Based on UTAH, a theme is assumed to be base-generated in the complement position of VP. Possessor ascension moves a part of the theme (possessor) to the subject position [Spec, TP] through the unoccupied [Spec, *v*P] en route, as shown in (7). As a result of this NP movement (possessor ascension), the chain is headed by an A-position and has three members: head, intermediate trace, and foot. On the assumption that a theme is base-generated in the complement position of VP according to UTAH, this chain accounts for the passive interpretation. The NP receives a thematic role (a part of a theme, i.e., a possessor of *hand*) at the foot [Spec, DP]. Then it moves up to the head [Spec, TP], leaving an intermediate trace at [Spec, *v*P] as required by the locality condition, which says that every movement must be local. The anaphoric relation between the head and the trace results in the passive interpretation, since the trace at the foot refers to the NP at the head and the theta role of the whole chain is a part (possessor) of the theme (*hand*) of a transitive verb *bite*. In contrast, the causative interpretation comes about when the surface subject is base-generated in the specifier position of *v*P, which receives an agent theta role (discussed in §4.1; also refer to (19) for the tree diagram). In short, the causative and the passive interpretations of the ambiguous sentence are derived from different structures.

(7)   Passive

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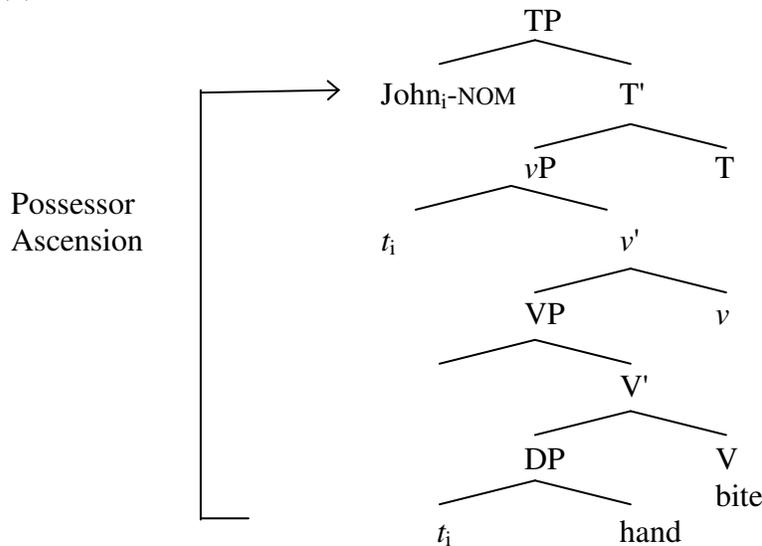
[3] I use NP and DP interchangeably except when there is a special need to distinguish them.

In this paper, I revisit the idea of possessor ascension from the perspective of the Minimalist Program (MP) as it relates to disambiguating causative and passive constructions in Korean. In particular, I show that the possessor ascension is a proper A-movement from the MP view and it obeys economy principles such as the Minimal Link Condition (MLC, defined in §4). In addition, I propose that the driving force of the movement "possessor ascension" is the EPP (defined in §2) feature on T.

The paper is organized as follows. In §2, I introduce some theoretical assumptions that will be used to analyze the relevant phenomena. §3 presents the types of possessor ascension that are proposed and then reviews previous work focusing on one type of possessor ascension. In §4, I argue that the motivation for the type of possessor ascension is EPP on T. I also address some apparent problems for the analysis. §5 concludes the paper.

2. THEORETICAL FRAMEWORK. In this section, I introduce theoretical assumptions that are necessary for detailing my argument in the remainder of the paper. My analysis of ambiguous passive/causative sentences is based on the Minimalist Program (MP, Chomsky 2005, 2001, 2000, 1995). MP takes a derivational approach, and assumes that a structure building is feature-driven. In other words, a derivation is driven by an (uninterpretable) feature-checking process. Core functional categories (CFCs), such as C (expressing force/mood), T (tense/event structure), and v (the "light verb" head of transitive constructions), may have φ-features (obligatory for T, v), which are uninterpretable.

Uninterpretable (unsemantic) features are taken as illegitimate objects at the LF interface. Therefore, uninterpretable features must be deleted by means of checking. Otherwise, the derivation crashes, which means that the output sentence is ungrammatical. Each CFC allows an extra Spec by way of EPP feature (EPP stands for EXTENDED PROJECTION PRINCIPLE). EPP features are uninterpretable and therefore must be checked. If a CFC has an EPP feature, it triggers a movement: C may trigger raising of a wh-phrase; T may trigger raising of a surface subject; v may trigger an object shift.

I also follow Chomsky's (2005, 2001, 2000) PHASE model. Chomsky proposes that an utterance is derived phase by phase and that a phase is "propositional." CP and vP are phases.[4] It is assumed that CPs and transitive vPs form a special class, known as strong phases. Once a strong phase is built up, it is not accessible to any operations taking place in the next phase, except for its edge, which corresponds to the relevant CFC head and its specifier. This property is named the PHASE-IMPENETRABILITY CONDITION (PIC) and is defined as follows:

(8)   Phase-Impenetrability Condition (PIC)
        For strong phase HP with head H, the domain of H is not accessible to operations
        outside HP; only H and its edge are accessible to such operations.
        (Chomsky 2001:13)

In other words, the PIC predicts that movement out of a strong phase is prohibited except for relevant items that are in the edge of the phase.

Finally, MP assumes that the economy condition requires movement to be as short as possible: the moving element must choose the closest target. It is crucial that we understand EQUIDISTANCE in this respect. Equidistance is related with how we define "closeness." When an uninterpretable feature is checked, it is subject to the economy condition. That is, the best

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[4] Chomsky (2005:9) mentions the similarities between CP and DP, which suggests that DP may also be a phase. I assume that DP is a phase.

candidate to check the uninterpretable feature is the closest one. The concept of being "closest" is defined in terms of a chain, rather than a head. Thus, equidistance is defined as (10) in an abstract illustrated in (9):

(9)

```
                    XP
              ┌──────┴──────┐
            UP             X'
                     ┌──────┴──────┐
                     X            YP
                          ┌────────┴────────┐
                        WP               Y'
                                   ┌──────┴──────┐
                                   Y            ZP
```
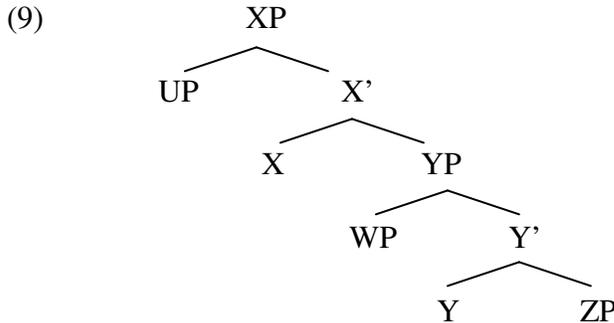
(10)   Equidistance[5]

If Y adjoins to X, forming the chain (Y, t) with the minimal domain {UP, WP, ZP}, then WP and ZP (or anything they contain) are equidistant from UP so that raising of (or from) ZP can cross WP to UP.

Based on (9) and (10), once a head Y moves to another head X, forming a chain, every maximal projection between Y and X, containing the complement of Y, is equidistant from UP. Notably, anything which WP or XP contains is also equidistant from UP. In terms of heads, WP is closer to UP than ZP is. However, recall that distance is defined in terms of chains, rather than heads, in this framework. Since Y moves to X, forming a chain (Y, t), both WP and XP are in the same chain (Y, t), and therefore, equidistant from UP.

3. POSSESSOR ASCENSION IN KOREAN. There are three possible types of possessor ascension that have been proposed in the literature.[6] In two of the types, the possessor has the same case marker as the NP it was extracted from, after it ascends. In the third type of possessor ascension, the raised possessor has a different case marker.

3.1 POSSIBLE TYPES OF POSSESSOR ASCENSION. If Korean has possessor ascension, then there are three distinct possible types of possessor ascension which need to be posited to explain the natural language data:[7] (i) Type 1: A possessor NP may ascend out of a nominative marked NP to another nominative marked NP position. (ii) Type 2: A possessor NP may ascend out of an accusative marked NP to another accusative marked NP position. (iii) Type 3: A possessor NP may ascend out of an accusative marked NP to a nominative marked NP position. The three types are shown in examples (11–13) below.

[5] Equidistance was originally defined by Chomsky (1995:185) in this way: if Y adjoins to X, forming the chain (Y, t) with the minimal domain {UP, WP, ZP}, then UP and WP are equidistant from ZP (or anything it contains), so that raising of (or from) ZP can cross WP to UP in a configuration such as (9). However if we translate it into the Attract model, it could be interpreted as something like (10).

[6] Though William O'Grady (personal communication) mentioned that the dative type of possessor ascension has been reported: [NP-Gen NP]-DAT $\Rightarrow$ NP-DAT [t_i NP]-DAT, this double dative construction sounds a little bit awkward to me. Therefore I do not include it in my discussion. But this does not make a tangible difference in the argument presented here.

[7] For an approach different from possessor ascension, which can account for the data in §3.1, see Tomioka and Shim 2005.

(11)   Korean
       [NP1-GEN NP2]-NOM ⟹ NP1$_i$-NOM [t_i NP2]-NOM
       a. [John-uy khi]$_{NP}$-ka   khu-ta.
          John-GEN height-NOM   tall-DC
          'John's height is tall.'

       b. [John$_i$]$_{NP1}$-i   [t_i khi]$_{NP2}$-ka khu-ta.
          John-NOM   height-NOM   tall-DC
          (same as (11a))

(12)   Korean
       [NP1-GEN NP2]-ACC ⟹ NP1$_i$-ACC [t_i NP2]-ACC
       a. Sally-ka   [John-uy   son]-ul   cap-ass-ta.
          Sally-NOM   John-GEN hand-ACC hold-PST-DC
          'Sally held John's hand.'

       b. Sally-ka   [John$_i$]$_{NP1}$-ul   [t_i son]$_{NP2}$-ul   cap-ass-ta.
          Sally-NOM John-ACC   hand-ACC   hold-PST-DC
          (same as (12a))

(13)   Korean
       [NP1-GEN NP2]-ACC ⟹ NP1$_i$-NOM [t_i NP2]$_{NP}$-ACC
       a. Koyangi-eykey   [John-uy   son]-ul   mul-li-ess-ta.
          Cat-DAT   John-GEN hand-ACC bite-PAS/CAS-PST-DC
          Lit. 'A cat bit John's hand.'

       b. [John$_i$]-i   koyangi-eykey   [t_i son]-ul   mul-li-ess-ta.
          John-NOM cat-DAT   hand-ACC   bite-PAS/CAS-PST-DC
          Lit. 'John's hand was bitten.'

In (11a), *John*, the possessor, has genitive case, licensed inside the theme NP, which has nominative case marking. On the other hand, in (11b), *John*, the possessor of the NP *khi* 'height', appears in nominative case. Given that NP1 *John* and NP2 *khi* 'height' have the same case, it is plausible that NP1 ascends out of the theme NP, leaving a trace.

In the same vein, (12b) is argued to derive from (12a). A possessor which has genitive case, such as *John-uy* (GEN), is licensed inside the theme NP, which has an accusative case, *-ul* in (12a). However, in (12b), the possessor *John* ascends out of its position in an accusative marked NP, but still has an accusative case marking.

(13a) and (13b) are different from (11) and (12) in that a possessor ascends from the accusative marked NP position to a position marked as nominative. Both Whitman and Han (1988) and Kim and Pires (2002) argue that constructions like (13) involve possessor ascension, in which a possessor is extracted and actually surfaces in the subject position of the sentence.

This paper focuses only on the third type of possessor ascension involving sentences such as (1) and (13). The other types of possessor ascension are beyond the scope of this paper and open to future research. In the next section, I review previous work on the third type of possessor ascension.

3.2 TYPE-THREE POSSESSOR ASCENSION AS PASSIVIZATION. Park (1986) proposes a unitary account of the function of the Korean passive/causative suffix based on the theory of valence-changing affixes presented in Marantz 1984. Based on Park 1986, Whitman and Han (1988)

develop an account of passive/causative parallelism in terms of shared syntactic structure. In particular, Whitman and Han (1988) propose that in sentences like (1), repeated below, the surface subject *John* is base-generated inside the VP as the possessor of the accusative marked NP *son* 'hand'.

(1) Korean
John$_i$-i aki-eykey (t_i) son-ul mwul-li-ess-ta.
John-NOM baby-DAT hand-ACC bite-PAS/CAS-PST-DC
'John had a hand bitten by a baby.'
a. Passive (experiential: the biting happened to John by a baby)
b. Causative (John$_i$ made a baby$_j$ bite his$_{i/j}$ hand)

Following Whitman and Han (1988), Kim and Pires (2002) argue that passive and causative interpretations involve two different structures: only the passive interpretation involves possessor ascension. They argue that the passive interpretation, but not the causative, shows the properties of A-movement, which suggests that only the passive involves possessor ascension (i.e., A-movement). One of the properties is interpretive restriction. An A-movement forms a chain, and the chain results in an anaphoric interpretation. In other words, the anaphoric interpretation becomes available due to the trace left behind as a result of A-movement such as possessor ascension. Now let us compare (14) and (15) to see how the anaphoric interpretation is associated with passives, but not with causatives.

(14) Korean
John$_i$-i Mary-eykey (t_i) meli-ul kkakk-i-ess-ta.
John-NOM Mary-DAT hair-ACC cut-CAS/PAS-PST-DC
'John had his hair cut by Mary.'

(15) Korean
John-i Mary-eykey Sue-uy meli-lul kkakk-i-ess-ta.
John-NOM Mary-DAT Sue-GEN hair-ACC cut-CAS/PAS-PST-DC
a. Causative: John had Mary cut Sue's hair.'
b. Passive: *John was affected by Mary's cutting Sue's hair.

The sentence (14) is ambiguous; it may have an anaphoric interpretation in the sense that the possessor (t_i) of *hair* can be the surface subject (*John*). In contrast, the sentence (15) is not ambiguous. It does not allow an anaphoric interpretation as the possessor of *hair* is specified as *Sue*. This contrast of interpretation of (14) and (15) suggests that only (14) involves an A-movement, in specific, possessor ascension.

Kim and Pires also claim that only the passive interpretation of ambiguous passive/causative sentences shows three diagnostic phenomena (Lebeaux 1985, Higginbotham 1992, Hornstein 1999), which supports A-movement of the passive subject. First, the antecedent of the gap, the possessor, must be "local," as shown in (16).

(16)   Korean
        [_TP_John-i   [_CP_Bill-i   Mary-eykey   meli-lul   kkakk-i-ess-ta-ko]
        John-NOM Bill-NOM   Mary-DAT   hair-ACC   cut-CAS/PAS-PST-DC-COMP
        mal-hay-ss-ta].
        speech-do-PST-DC
        a.   'John said that Bill had Mary cut the hair.'
        b.   Lit. 'John said that Bill was cut the hair by Mary.'

Though *meli* 'hair' in (16) could be either *John's* or *Bill's* in the causative, *the hair* must be *Bill's* and cannot be *John's* in the passive. Assuming that A-movement is local (i.e., clause-bound), the movement of *John* from the possessor position to the surface subject position would lead to ungrammaticality, because it has to cross a clause boundary (CP), which is an obvious violation of the locality (i.e., clause-bound) condition. The fact that *John* can be interpreted as a possessor in a causative suggests that no movement is involved in the causative. On the other hand, the fact that *John* cannot be interpreted as a possessor in a passive suggests that passive interpretation involves a clause-bound (i.e., local) movement, in particular, A-movement such as possessor ascension. In other words, the passive interpretation of (16) shows a locality restriction in the sense that an A-movement element cannot get out of a clause boundary, which is a typical property of A-movement. In contrast, the causative interpretation of (16) is not subject to such an interpretative restriction, which indicates that it does not involve an A-movement.

Second, the antecedent must c-command its trace in A-movement. In the causative interpretation of (17), *hair* could either be *John's* or *John's father's*. However, in the passive interpretation of (17), *hair* must be *John's father's*. This is because the passive configuration has a trace which *John's father*, the antecedent, c-commands. This is the reason that *John* cannot be interpreted as a possessor: if the NP *John* had undergone movement, it would not c-command the trace. Thus, if the possessor *John's father* does not move out of the accusative-marked NP, it is difficult to explain why *hair* must be *John's father's,* not *John's*, in the passive interpretation.

(17)   Korean
        John-uy   apeci_i-ka   Mary-eykey   (t_i) meli-lul   kkakk-i-ess-ta.
        John-GEN father-NOM   Mary-DAT   hair-ACC   cut-CAS/PAS-PST-DC
        a.   Causative: 'John's father had Mary cut the hair.'
        b.   Passive: 'John's father's hair was cut by Mary.'

Third, VP ellipsis provides evidence to suggest that passive interpretation involves A-movement. In sentences such as (18), when interpreted as a causative, the elided VP could have either a strict reading (in which the possessor of *hair* is taken to be the subject of the first conjunct, *John*) or a sloppy reading (in which the possessor of *hair* is taken to be the subject of the second conjunct, *Tom*). In contrast, when interpreted as a passive, the elided VP can have only the sloppy reading: the possessor is taken to be the subject of the second conjunct. In this case, it appears that the sloppy reading results from the trace being bound by the subject of the second conjunct (i.e., *Tom*). In other words, in the passive configuration (18b), when VP is elided, the trace of the subject at the foot (i.e., the possessor of *meli* 'hair') is elided because the trace is a part of the VP. When the elided VP is interpreted by way of reconstruction, the trace is reconstructed because the trace is a part of the VP. Therefore, the fact that (18) has only a sloppy reading when it is interpreted as a passive suggests that the elided VP, which can be

reconstructed afterwards, has a trace for the surface subject (i.e., *Tom*) in the passive configuration. This implies that it involves A-movement. To recapitulate, it would be hard to explain why *Tom's hair* is cut and why *John's hair* cannot be cut in the passive interpretation of (18), if the possessor *Tom* had not moved to the surface subject position.

(18)   Korean
    John-i   Mary-eykey   meli-lul   kkakk-i-ko   Tom-to   kule-hay-ess-ta.
    John-NOM Mary-DAT   hair-ACC   cut-PAS/CAS-and Tom-also so-do-PST-DC
    a. 'John had Mary cut his hair and so did Tom.' (=Tom had Mary cut
        John's/Tom's/somebody else hair).'
    b. 'John's hair was cut by Mary and so was Tom's.' (=Tom's hair was cut by
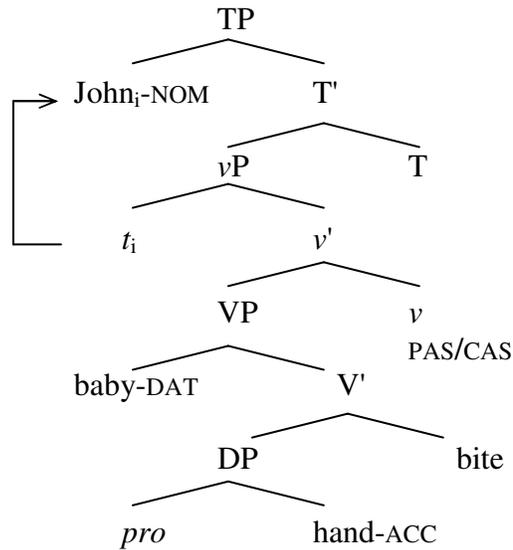   Mary).'

In sum, Kim and Pires (2002) propose that the passive interpretation involves possessor ascension (A-movement) to explain the ambiguity between a Korean morphological passive and causative. They argue that causatives and passives are derived from different structures. The evidence is that only passives show A-movement properties. In causatives, they propose, the surface subject is base-generated in the specifier position of the highest VP, which allows the implicit possessor to act like a pronoun (i.e., *pro*), and not like an anaphor (i.e., trace).

4. TYPE-THREE POSSESSOR ASCENSION REVISITED BY MP. Following Kim and Pires's (2002) approach, I assume that causatives and passives involve two different structures. In this section I analyze the relevant constructions in light of MP.

4.1 THE STRUCTURES OF CAUSATIVES AND PASSIVES. Following Ahn 2000 and Kang 1997, I assume that the causative and passive suffixes are placed in *v*, and accordingly, that both structures project *v*P. Sentence (1), repeated below, is ambiguous between a causative and a passive interpretation. The causative interpretation arises when the NOM-marked NP is base-generated in [Spec, *v*P] and moves to [Spec, TP], as shown in (19). The causative affix licenses an extra argument (i.e., causer). The extra argument then moves to [Spec, TP] due to EPP on T. The DAT-marked NP is taken to be base-generated VP-internally (i.e., in [Spec, VP]), as in ditransitive constructions (Kang 1997, Ahn 2001).
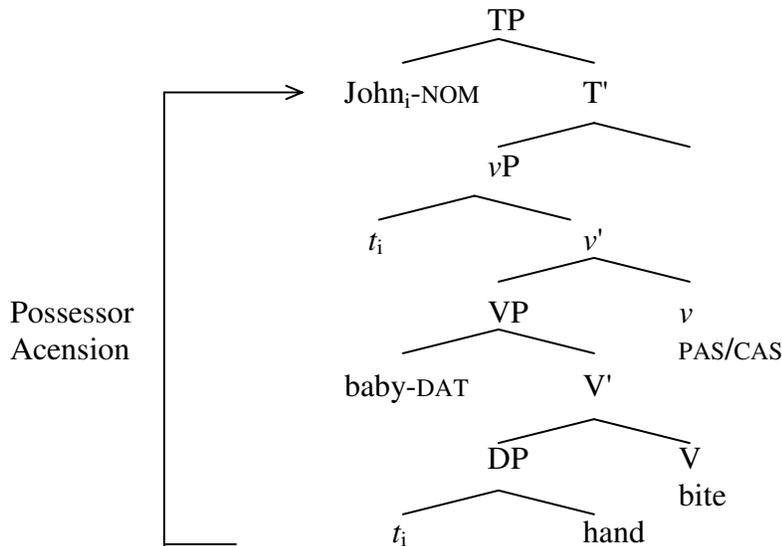
(1)   Korean
    John-i   aki-eykey   son- ul   mwul-li- ess- ta
    John-NOM baby-DAT   hand-ACC bite-PAS/CAS-PST-DC
    'John had a hand bitten by a baby.'

(19)   Causative

```
                    TP
        ┌──────────────────────┐
     →  Johnᵢ-NOM            T'
     │              ┌──────────────┐
     │             vP             T
     │        ┌──────────┐
     └──      tᵢ          v'
                    ┌──────────┐
                   VP          v
                ┌──────┐      PAS/CAS
            baby-DAT   V'
                    ┌──────────┐
                   DP          bite
                ┌──────┐
              pro    hand-ACC
```

In contrast, the passive interpretation arises when a NOM-marked subject is base-generated as a possessor inside the accusative-marked NP and raises to [Spec, TP], as shown in (20). This movement is what Kim and Pires (2002) and Whitman and Han (1988) call possessor ascension. Here I assume a multiple-step movement. As shown in (20), the specifier position of *v*P is unoccupied. Accordingly, the possessor passes through [Spec, *v*P], which is an intermediate position. Notice that the passive structure also projects *v*P, which implies that the specifier position is projected by the Projection Principle.

(20)   Passive

```
                        TP
                ┌──────────────┐
    →  Johnᵢ-NOM            T'
    │              ┌──────────────┐
    │             vP             T
    │         ┌──────────┐
    │        tᵢ          v'
    │              ┌──────────┐
Possessor         VP          v
Acension      ┌──────┐       PAS/CAS
    │      baby-DAT   V'
    │              ┌──────────┐
    │             DP          V
    │         ┌──────┐       bite
    └──      tᵢ      hand
```

In MP, every movement must be economical. Accordingly, the movement of possessor ascension needs to be evaluated to see if it obeys the economy conditions. The analysis sketched so far leads us to pose the following two MP-related questions. First, provided that possessor ascension is a type of movement (A-movement), and subject to the economy conditions, what is the feature that licenses the movement? Second, how can the VP-internal possessor NP *John*

raise to [Spec, TP], instead of the NP *baby*-DAT in [Spec, VP] that is closer to T, which apparently violates the minimal link condition (MLC)? MLC requires that the closest candidate must move. In §4.2, I discuss these questions.

4.2 EPP ON T AND EQUI-DISTANCE. As a response to the first question raised above, I propose the EPP feature on T licenses possessor movement. First of all, let us assume that EPP is an uninterpretable c(ategorial)-selectional feature on T. Accordingly, EPP requires the presence of a certain category, in this case, a nominal in the specifier of T to check off its uninterpretable feature (Chomsky 2001, 2000). In the causative configuration, EPP is checked off when the causer *John* moves from [Spec, *v*P] to [Spec, TP]. In contrast, the passive configuration does not have an NP in [Spec, *v*P] and EPP needs to be checked off by other NP in order for the derivation to converge. As a result, the genitive NP originating in the accusative-marked NP moves to [Spec, TP] and checks off the EPP feature.

The problem arising from this analysis is that another NP is a potential candidate to check off T's EPP. This competing NP is the DAT-marked NP in [Spec, VP]. In fact, the DAT-NP is closer to the target position [Spec, TP], as shown in (21). Subsequently, it looks like a violation of the MLC, which requires that the closest candidate must move. This is the other question raised in §4.1.

(21)
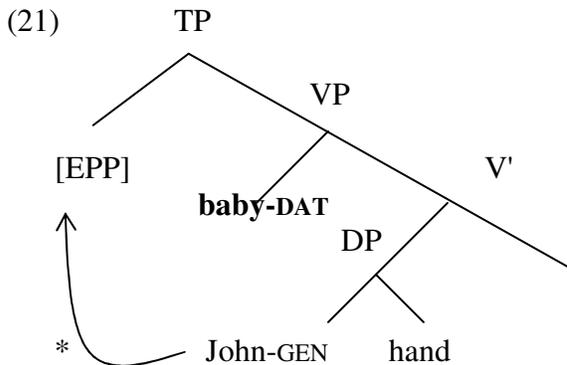
To solve this apparent problem, I assume that V moves to T and makes the two NPs equidistant in Korean, as suggested by Choi (1999), Koizumi (2000), Miyagawa (2000), Otani and Whitman (1991) among others.[8] Suppose V moves to T. Then, DAT-marked NP in [Spec, VP] and the NP in [V', Comp] become equidistant from the target position [Spec, TP] in the sense of Chomsky 1995.[9]

Apart from the evidence used in previous works by the proponents of V-to-T movement (Choi 1999, Koizumi 2000, Miyagawa 2000, Otani and Whitman 1991, among others), the concept that V moves to T makes very good sense if we consider the phenomenon shown in (22).

(22)　　Korean
　　　　mwul-li- ess- keyss- ta
　　　　bite- PAS/CAS-PST-MOD　-DC
　　　　'I guess that (somebody) may have been bitten.'

(22) shows Korean verb's agglutinative property. The morphemes expressing tense, modal, and force get agglutinated around the verb. I propose that this verb's agglutinative property is an

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[8] For the idea against V-to-T movement in Korean or Japanese, refer to Fukui and Sakai 2002 or Han et al. 2005.

[9] Based on the definition of equidistance in (10), [Spec, NP] is equidistant from [Spec, TP] as well.

additional piece of evidence that V moves up to T or even up to C (whether V moves to T or C does not make a significant difference for the analysis). Given that [Spec, TP] is equidistant for DAT-marked NP in [Spec, VP] and the NP in [V', Comp], either of them is able to reach the [Spec, TP] target position in (21). This is compatible with (23), resulting from movement of the originally accusative-marked NP.

(23)   Korean
        <ACC-marked NP ascension>
        [John-uy   son-i]$_i$ aki-eykey t_i mwul-li-ess-ta.
        John-GEN hand-NOM baby-DAT   bite-PAS/CAS-PST-DC
        'John's hand is bitten by a baby.'

The dative-marked NP, however, cannot raise to the subject position, as shown in (24). (24) cannot be interpreted in the target meaning 'A baby bit John's hand.' This appears to be problematic for the present analysis because it was predicted to be possible.

(24)   Korean
        <DAT-marked NP ascension>
        *aki-ka   John-uy   son-ul   mwul-li-ess-ta.
        baby-NOM John-GEN   hand-ACC bite-PAS/CAS-PST-DC
        'A baby bit John's hand.'

However, the apparent problem can be solved if we take the view that Korean DAT marker *eykey* is different from other case markers such as nominative or accusative markers. In other words, the dative case seems to be licensed by the lexical morpheme *eykey* itself rather than licensed by structure such as spec-head configuration. The numeration for the sentence includes the lexical item *eykey*, which takes 'baby' as its argument. Also, *eykey* has an independent meaning like the English *to*, *by*, or *from*; accordingly it is not an inflectional case marker. In that sense, the phrase *aki-eykey* 'by a baby' is a PP rather than an NP. Note that a PP is not a possible candidate to check EPP.

    The genitive-marked *John* also can move by itself.[10] Remember sentences such as (1) repeated below.

(1) Korean
        <GEN-marked NP ascension>
        John-i   aki-eykey son-ul   mwul-li-ess-ta.
        John-NOM baby-DAT hand-ACC bite-PAS/CAS-PST-DC
        'John had his hand bitten by a baby.'

However, we need to notice that the NP *hand* itself cannot move even in Korean, as the ungrammaticality of (25) shows.

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[10] We might wonder why this does not happen in English. For example, if we consider the following example, English appears not to allow the edge to move by itself:

    (i)   [seems [his father [to be sick]]]
    (ii)   His father seems t_i to be sick.
    (iii)   *He seems t_i father to be sick.

I can think of one possible reason: Case. In (iii), *father* is left without any case in situ, while an accusative case is always available in (1) because the Korean morphological passive projects *v*P.

(25)   Korean
        *Son-i   aki-eykey John (-uy) t_i-ul   mwul-li-ess-ta.
        hand-NOM baby-DAT John (-GEN) -ACC bite-PAS/CAS-PST-DC
        'His hand was bitten John by a baby.'

This also appears to be problematic for the present analysis, because the NP *hand* is also a possible candidate based on the equidistance caused by V to T movement. This potential problem poses no threat, however.

   If we accept Chomsky's (2001) "Phase model," DP is a phase alongside CP and *v*P. Recall the PIC, which states that in phase α with head H, the domain of H is not accessible to any operation outside α, save for head H and its edge, which remain accessible. Since the position [Spec, DP] is part of the edge of a phase, it is accessible to operations outside that phase, namely DP. This is represented as (26).

(26)
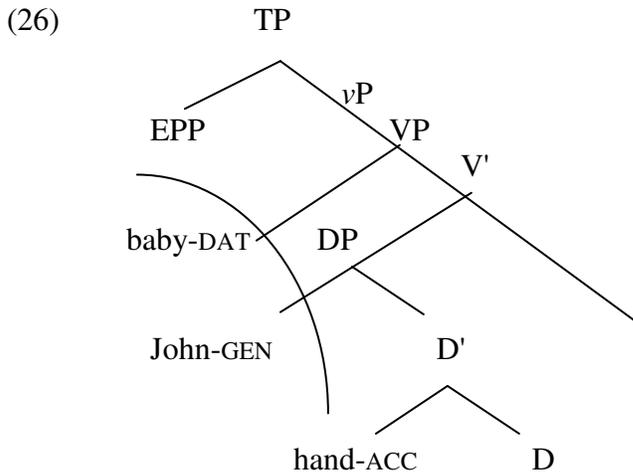
The NP *John*-GEN is located at the edge of the relevant phrase, [Spec, DP]. Accordingly it is accessible to operations outside the phase. This accounts for (1). In contrast, the NP *hand*-ACC is not at an edge, which makes the NP *hand*-ACC inaccessible to the operations outside the phase. This is why the NP *hand*-ACC alone cannot move, as shown in the ungrammaticality of (25).[11]

   Finally, let us briefly examine how *hand* can get accusative case in (23). It may appear to be problematic if we consider that it is passive, because passive *v* typically does not license accusative case. We should remember, however, that the Korean morphological passive (defined as the passive using dependent passive morphemes such as *i* and *hi*) is unique in the sense that it projects the same *v*P as the causative, which is a type of transitive, as shown in (20). I argue that the passive *v* assigns accusative case in the same way that the causative (transitive) *v* can assign

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[11] Here I assume that (ii) has more basic structure than (i), a double accusative construction, because I take the view that (i) is derived from (ii). If this is on the right track, it is more economical to derive the sentences such as (1) and (16) directly from (ii) by one operation, rather than two operations: one operation from (ii) to (i), the other from (i) to (1) or (16).
   (i)   John-ul   son-ul   mwul-ess-ta.
           John-ACC   hand-ACC   bite-PST-DC
           '(*pro*) bit John's hand'
   (ii)   John-uy   son-ul   mwul-ess-ta.
           John-GEN   hand-ACC   bite-PST-DC
           'sames as (i)'
I assume that (i) is derived by possessor ascension. If this is correct, we do not need the extra movement operation.

accusative case. This clarifies that the passive meaning is due to the chain that the possessor constitutes by way of possessor ascension: from the complement position of V to the specifier position of T, rather than depending on defective *v*P as in English, i.e., suppression of the agent argument.

5. CONCLUSION AND FURTHER RESEARCH**.** This paper began by looking at the polysemy between causative and passive, which occurs cross-linguistically. In Korean, possessor ascension was proposed to explain the phenomenon: causatives and passives are derived from distinct structures and only passives involve possessor ascension in Korean. I reviewed three possible types of possessor ascension in Korean and then focused on the last type of possessor ascension. Using the Minimalist Program framework, I proposed that the motivation for possessor ascension is the EPP feature on T. Several apparent problems for the analysis were identified; however possible solutions were proposed by using concepts developed in the Minimalist Program, such as Equidistance and the Phase Impenetrability Constraint.

Although I introduced cross-linguistic data on ambiguous passive/causative sentences and explored an analysis of Korean data based on possessor ascension, I limited this analysis to only one of the three types of possessor ascension that have been proposed for Korean. Whether a similar analysis can account for the cross-linguistic data or be extended to the other two types of possessor ascension in Korean remains to be seen.

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