

External possession in Korean^{*}

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Abstract

This paper deals with external possession in Korean, in which a possessor of a verb's argument appears externally to that argument and behaves syntactically like a clausal argument. An external possessor of a subject and that of an object are often claimed to be derived by different operations, because the latter, but not the former, must be interpreted as 'affected' by the event described by the verb. In this paper, I propose that they are uniformly licensed by a single thematic operation. The contrast in the affected reading results from the difference in the grammatical function of the possessee. In addition to explaining a number of similarities between the two types of external possessors, the proposed theory offers an answer to why certain types of constituents, such as PPs and adjuncts, cannot participate in external possession.

1 Introduction

External possession is a phenomenon in which a possessor of an argument is licensed externally to that argument (Payne & Barshi 1999). The form in which the phenomenon is manifested varies greatly across languages. In Korean, external possession may involve subject or object, as illustrated by the examples in (1) and (2), respectively. The 'external possessors' precede their possessee arguments and bear the same case as the latter. Thus, in (1a), for instance, the first nominative phrase, *Mary-ka* 'Mary-Nom' is interpreted as the possessor of the following nominative phrase *moksoli-ka* 'voice-Nom' and in (2a), *John-ul* 'John-Acc' is interpreted as the possessor of *tali-lul* 'leg-Acc'.¹

- (1) a. *Mary-ka moksoli-ka kop-ta*
Mary-Nom voice-Nom beautiful-Decl
'Mary's voice is beautiful.'

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¹ The nominative case marker is realised as *ka* after a vowel and as *i* elsewhere. Similarly, the accusative case marker is realised as *lul* if following a vowel and as *ul* elsewhere.

- b. John-i cha-ka khu-ta
 John-Nom car-Nom big-Decl
 ‘John’s car is big.’
- (2) a. Mary-ka John-ul tali-lul cha-ss-ta
 Mary-Nom John-Acc leg-Acc kick-Past-Decl
 ‘Mary kicked John’s leg.’ (Cho 1992: 15)
- b. John-i namu-lul kaci-lul cal-ass-ta
 John-Nom tree-Acc branch-Acc cut-Past-Decl
 ‘John cut the tree on the branch’ (Yeon 1999: 221)

The external possessors of a subject and that of an object share a number of syntactic properties. They may be separated from their possessee arguments by an adverbial, indicating that they are independent constituents at the clausal level. This is shown by (3). The possessors can also be marked with the genitive case marker *uy* and appear internally to the projection of the possessee argument. Its NP-internal position is illustrated in (4) by the impossibility of inserting an adverbial between the two phrases. A clause may also contain an indefinitely large number of external possessors, as exemplified by (5).

- (3) a. Mary-ka pwunmyenghi moksoli-ka kop-ta
 Mary-Nom obviously voice-Nom beautiful-Decl
 b. Mary-ka John-ul ecey tali-lul cha-ss-ta
 Mary-Nom John-Acc yesterday leg-Acc kick-Past-Decl
- (4) a. [Mary-uy (*pwunmyenghi) moksoli]-ka kop-ta
 Mary-Gen obviously voice-Nom beautiful-Decl
 b. Mary-ka [John-uy (*ecey) tali]-lul cha-ss-ta
 Mary-Nom John-Gen yesterday leg-Acc kick-Past-Decl
- (5) a. Mary-ka tongsayng-i moksoli-ka kop-ta
 Mary-Nom sister-Nom voice-Nom beautiful-Decl
 b. Mary-ka John-ul tali-lul oluncchok-ul cha-ss-ta
 Mary-Nom John-Acc leg-Acc right.side-Acc kick-Past-Decl
 ‘Mary kicked the right side of John’s leg.’

Furthermore, overwhelming evidence has been offered in the literature for the status of the external possessors as clausal-level arguments, to which I will return.

Given the syntactic similarities between the two types of external possessors, the same syntactic operation appears responsible for deriving them.² However, there is one crucial difference between them, which has led some researchers to claim that

² I will not discuss other types of Korean multiple nominative or accusative constructions, as they show different sets of properties from external possession. See Yoon (2001) for an overview.

they should be treated separately. It is widely observed that the external possessor of an object, but not that of a subject, must be interpreted as 'affected' by the action described by the verb, and its possession relation to the object must be inalienable (Yoon 1989, 1990). The implied affected reading is often psychological in nature when the possessor is animate, akin to notions such as 'inconvenience', 'misfortune' or 'adversity'.³ The point is illustrated by the ungrammatical examples in (6). In (6a), the external possessor cannot be interpreted as affected by the event which the rest of the sentence describes, while in (6b), it is not an inalienable possessor. Notice that the two accusative phrases in each of the examples express the same possession relation as the two nominative phrases in the grammatical examples in (1a) and (1b), respectively.

- (6) a. *John-i Mary-lul moksoli-lul tul-ess-ta
John-Nom Mary-Acc voice-Acc hear-Past-Decl
'John heard Mary's voice.'
b. *Mary-ka John-ul cha-lul cha-ss-ta
Mary-Nom John-Acc car-Acc kick-Past-Decl
'Mary kicked John's car.'

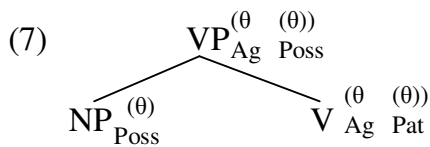
A number of analyses have been proposed in the literature for external possession in Korean. However, most analyses are primarily concerned with providing an explanation for the external possessor's syntactic status as an argument at the clausal level and its interpretation as a possessor of another argument. Moreover, as mentioned above, the contrast in the interpretation has in general led to distinct treatment of the two types of external possessors. As far as I am aware, no studies have examined the possible connection between external possession, on the one hand, and the affected reading and its absence when the possessee is a subject, on the other. The interpretation is simply stated as an independent constraint on the external possessor of an object (Kang 1986b, Kim 1989, Yoon 1989, 1990, Maling & Kim 1992, Cho 1992, 1993, Yoon 1997, Cho 1998, 2000).

In this paper, I will argue that external possessors in Korean are uniformly licensed by one thematic operation regardless of the grammatical function of the possessee argument. The proposal takes seriously the common assumption that θ -roles are purely syntactic entities and exist independently of the semantics associated with them, such as *Agent* and *Theme*. A correct interpretation of each argument is ensured by mapping at the syntax-semantics interface. This view of θ -roles suggests that a particular θ -role need not be associated with specific semantics determined by the predicate's lexical meaning throughout the derivation. In other

³ It is important to note that the term ‘affected’ does not refer to the semantic notion of ‘affectedness’, a line of analysis which has been proposed previously (Yeon 1998). See Vermeulen (2005) for discussion.

words, it should be possible for a θ -role to be re-associated with distinct semantics made available during the course of a derivation. Samek-Lodovici (2003) shows that this kind of process is indeed attested in Italian light verb constructions.

In external possession, I argue that a θ -role of the verb is re-associated with the *Possessor* semantics related to an argument of the verb. The verb subsequently assigns the re-associated θ -role to the external possessor. I argue furthermore that the operation is possible only when the possessee argument contains a variable such as a resumptive *pro*. The core idea of the operation, which I will call re-association, is illustrated below with an object (Ag=Agent; Pat=Patient; Poss=Possessor). The *Patient* semantics is dissociated from the verb's internal θ -role and the *Possessor* semantics related to the object is re-associated with that θ -role. The operation makes no reference to the grammatical function of the possessee argument, thus licenses external possessors regardless of whether the possessee argument is a subject or an object.



The obligatory affected reading arises from applying re-association to an internal argument of the verb. Recipients of the θ -roles in a verb's θ -grid are generally considered to be participants in the eventuality expressed by the verb.⁴ The semantics associated with each θ -role usually provides information concerning the argument's participation in the eventuality. The external possessor of an object receives a re-associated θ -role which is contained in the verb's θ -grid. It must therefore be construed as a participant in the eventuality. However, the semantics associated with the re-associated θ -role does not contain any relevant information, since it is not related to the lexical meaning of the verb. I propose that this integration of the external possessor into the eventuality results in what is generally referred to as the 'affected' interpretation.

The absence of the affected interpretation for the external possessor of a subject is a consequence of the manner in which the distinction between internal θ -roles and external θ -roles are represented in the syntax. Following Neeleman & van de Koot (2002), I assume that it is represented by the idea that an external θ -role is no longer in the verb's θ -grid when it is assigned to the subject. As a result, the re-associated θ -role assigned to an external possessor of the subject is not part of the

⁴ I use the term 'eventuality' in this paper in the sense of Bach (1986), namely as encompassing all aspectual types, including states. The implications are discussed in section 5. Moreover, I will speak of eventualities being described both by 'the verb' and by 'the rest of the sentence' without committing myself to any particular views of where information regarding eventuality is encoded in the grammar (cf. Rosen 1999). The issue is orthogonal to the proposal.

verb's θ -grid. It therefore need not be interpreted as a participant in the eventuality and does not receive an affected reading.

The paper is organised as follows. In the following section, I will develop the operation of re-association based on a particular theory of θ -role assignment. I will then show in section 3 how an external possessor can be licensed by means of re-association. Predictions made by the present analysis are shown to be correct in section 4. The affected interpretation is examined in detail in section 5. Section 6 considers alternative approaches offered in the literature and compares them with the proposed analysis. A summary is provided in section 7.

2 Re-association

2.1 θ -role assignment

In this sub-section, I will spell out my assumptions about how an argument is licensed syntactically and semantically. I will then demonstrate in the next sub-section how an additional argument can be licensed by means of re-association. It is a widely held assumption that θ -roles are purely syntactic objects and are mapped onto particular semantic representations determined by the predicate's lexical semantic structure or lexical conceptual structure only at the syntax-semantics interface (Grimshaw 1990, Jackendoff 1983, 1990, Zubizarreta 1987, Levin & Rappaport 1995, among many others). This idea is often implemented by representing the argument structure of a verb like *kick* as in (8), in which the two θ -roles are associated with the semantic roles, *Agent* and *Patient*, respectively.

- (8) kick (θ (θ))
 Agent Patient

An argument of a verb is licensed as such if it meets the syntactic and semantic conditions specified by the verb. Following Neeleman & van de Koot (2002), I assume that a θ -role represents syntactic selectional requirements on the properties of an argument, such as category and that it bears Case. An argument is licensed syntactically, if it meets the requirements of a θ -role in the predicate's θ -grid in the configuration of sisterhood.⁵ I assume that θ -roles in a θ -grid are structured according to the thematic hierarchy and that an argument must always satisfy the conditions of the least prominent θ -role first (Grimshaw 1990). Although there are numerous versions of a thematic hierarchy on offer in the literature, I adopt here the

⁵ Neeleman & van de Koot (2002) argue that the only structural relation which adheres to Inclusiveness (Chomsky 1995) is in fact direct domination, rather than sisterhood. I believe that direct domination is equally compatible with the theory proposed in the main text. However, in this paper, I will follow the general practice and assume that the relevant relation is sisterhood.

following hierarchy proposed by Grimshaw (1990).

- (9) Agent > Experiencer > Goal / Source / Location > Theme

When an argument satisfies the syntactic requirements represented by a θ -role, it must also be interpreted with respect to the predicate as specified by the semantic role associated with that θ -role. Although the semantic roles in the representation in (8) are stated simply as *Agent* and *Patient*, I assume that they are in fact labels for more complex semantic representations. The labels correspond to parts of the verb's semantic representation which are relevant for interpreting each argument. Adopting the neo-Davidsonian approach to argument-structure, the verb *kick* can be represented as in (10) (cf. Dowty 1989) and the labels *Agent* and *Patient* refer to the representations in (11a) and (11b), respectively.^{6,7}

- (10) $\lambda x \lambda y \lambda e$ [kicking (e) & Agent (x, e) & Patient (y, e)]

- (11) a. Agent: $\lambda x \lambda e$ [Agent (x, e)]
 b. Patient: $\lambda y \lambda e$ [Patient (y, e)]

Arguments replace the lambda-bound variables in the representations, which allows the arguments to be interpreted with respect to the eventuality described by the verb. Thus, in a simple transitive sentence such as *Mary kicked John*, *Mary*, translated as the term (*mary*) below, replaces x , and (*john*) replaces y . This ensures that *Mary* and *John* are interpreted as the agent and the patient in a kicking event. This process licenses the arguments semantically. For ease of exposition however, I will use the notation in (8), unless explicit reference to the more complex semantic representations is required.

- (12) a. $\lambda x \lambda e$ [Agent (x, e)] (*mary*) $\rightarrow \lambda e$ [Agent (*mary*, e)]
 b. $\lambda y \lambda e$ [Patient (y, e)] (*john*) $\rightarrow \lambda e$ [Patient (*john*, e)]

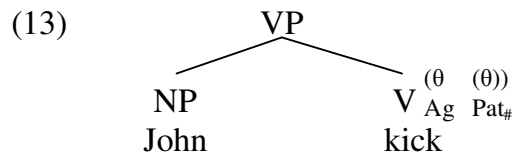
Thus, when an argument and a node containing a verb's θ -role appear in the structural configuration of sisterhood, the θ -role is not assigned to that argument in the sense assumed in Government and Binding Theory (cf. Chomsky 1981) and in earlier stages of the Minimalist framework (cf. Chomsky 1995). Rather, the configuration merely triggers a process which allows the argument to be interpreted

⁶ Predicates such as *Agent* and *Patient* are also simplification of far more complex semantic representations, as has been argued by a number of researchers (Jackendoff 1990, Levin and Rappaport 1995, Reinhart 2000, among others). However, the complexity of the predicates does not bear direct relevance to the claims made in this paper. I will therefore use the simplified labels.

⁷ The proposal does not depend on the neo-Davidsonian approach. I adopt it here only because it allows simple exposition of which part of semantic information is (re-)associated with a θ -role.

in a way specified by the semantic representation associated with that θ -role.

To illustrate, *John* in the following structure, satisfies the syntactic requirements represented by the internal θ -role of the verb *kick*, the least prominent θ -role in the θ -grid. (The order of NP and V is irrelevant here.) *John* then replaces the variable contained in the semantic representation associated with the θ -role, labelled *Pat* (Patient), shown in (11b). This allows *John* to be interpreted as the patient of *kick*. # indicates that the semantic representation no longer contains a variable.



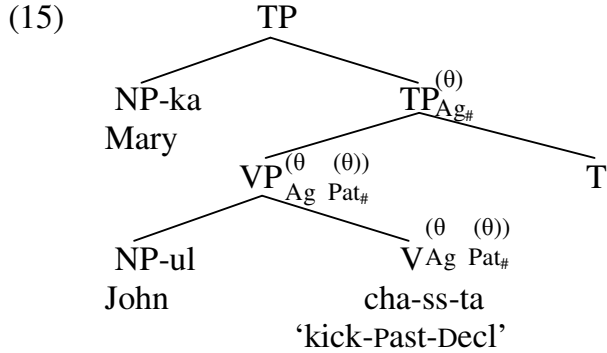
Note that although the θ -grid is represented here with the labels for the associated semantic representations, I do not believe that semantic information is actually present in syntactic structures. This practice is employed merely for ease of exposition. The presence of semantic information on a particular node in a syntactic representation should be taken only as an indication that the information is available on that node in a corresponding semantic structure.

I assume furthermore, following Neeleman & van de Koot (2002), that a θ -grid is copied up the tree until the selectional requirements of all the internal θ -roles contained in the θ -grid are satisfied. The external θ -role is copied up on its own without any information related to the internal organisation of the θ -grid. Neeleman & van de Koot show that this assumption explains some properties unique to external arguments, which I will not repeat here. However, I will show in section 5 that this assumption is relevant for explaining the absence of an affected reading for the external possessor of a subject. Thus, on this approach a simple Korean transitive sentence such as (14) has a structure like the one in (15).⁸ The subject *Mary-ka* satisfies the syntactic requirements of the verb's external θ -role, which has been copied up to TP and thereby is interpreted as the agent of *kick*.⁹

⁸ I assume that nominal phrases in Korean are NPs, rather than DPs, and can function as saturated arguments. However, nothing in the proposal hinges on this assumption.

⁹ The structure in (15) implies that the subject is base-generated in the specifier position of a functional projection above VP, contrary to claims made by Fukui (1986), Kuroda (1988) and Fukui & Sakai (2001) for Japanese, which show striking syntactic similarities to Korean. I believe however that a syntactic subject should universally be base-generated outside of the maximal projection which functions as its predicate. See Vermeulen (2005: Chapter 5) for discussion.

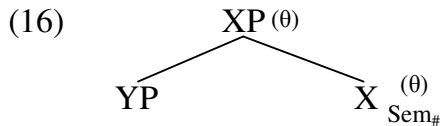
- (14) Mary-ka John-ul cha-ss-ta
 Mary-Nom John-Acc kick-Past-Decl
 ‘Mary kicked John.’



The view of argument licensing as involving two processes is important in presenting the idea of re-association. However, once I have explicated the details of the operation in the next section, I will often refer to this process simply as ‘θ-role assignment’. I will now demonstrate how a θ-role can be re-associated so that an extra argument can be licensed.

2.2 Re-associating a θ-role

The common view that a θ-role and its associated semantic representation exist independently of each other suggests that various operations may refer to them separately (Samek-Lodovici 2003). In particular, it should be possible for them to be dissociated from one another and for the dissociated θ-role to be re-associated with a different semantic representation during the course of a derivation. Here, I propose that a θ-role may be dissociated from its corresponding semantic representation, if it has been assigned to an argument. One way of representing this idea is as in (16), where YP has been assigned a θ-role under sisterhood and in copying up the θ-role to the dominating node, it is dissociated from its associated semantic representation, *Sem*.



This process yields a θ-role that is not linked to any semantic representation. Such a θ-role is however not a legitimate object. An argument may satisfy the requirements of a θ-role, but it cannot be interpreted with respect to the predicate if the θ-role is not associated with any semantics. The principle of Full Interpretation,

which disallows the presence of an uninterpretable material in a structure, would prohibit such a semantics-less θ -role, rendering a sentence containing it ungrammatical. (Chomsky 1986 cf. also Samek-Locovici 2003).

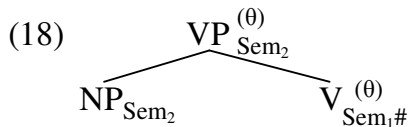
In order for a dissociated θ -role to be able to license an argument, it must be re-associated with some semantic representation. I argue that this effect can be achieved by an operation called ‘re-association’, which is formulated as follows. I assume furthermore that the operation is part of Universal Grammar.

(17) *Re-association*

A θ -role can be re-associated with an appropriate part of the semantic representation of an argument to which it is assigned.

An appropriate part of the semantic representation is the part that contains a variable which is restricted by the kind of semantics typical of a θ -role. In other words, the part must contain a predicate which corresponds to the kind of semantic roles usually linked to θ -roles, such as *Agent* and *Patient*, and a variable restricted by it. In what follows, I will sometimes refer to appropriate parts as independent representations for convenience. However, I will remain agnostic as to whether they exist as autonomous entities.

Re-association essentially allows a dissociated θ -role to be re-associated with a semantic representation so that it is no longer uninterpretable. Thus, a θ -role can be dissociated from its associated semantic representation only if there is another appropriate semantic representation available with which it can be re-associated, as illustrated below.

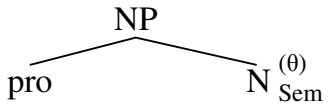


In (18), Sem_2 is available for re-association, as indicated by the absence of # on it. One question which immediately arises is: when does such a situation occur? Considering that the semantic representation in question must contain a variable, the argument NP must be headed by an argument-taking noun. However, θ -roles are generally assigned within the maximal projection or the extended projection of the predicate. Moreover, I claimed above that an argument that satisfies the requirements of a θ -role must also replace the variable in the associated semantic representation. It seems therefore unclear when the desired situation would arise.

I propose that it arises when an argument of the argument-taking noun is realised as a variable such as a bound pronoun or a resumptive *pro*. Bound or resumptive pronouns, as opposed to pronouns which receive a referential interpretation through context, are variables at LF, since they depend on other elements in the sentence for

their interpretation. That pronouns in some environments, such as in VP-ellipsis contexts, may be interpreted as a bound variable is well-known (cf. Reinhart 1983).

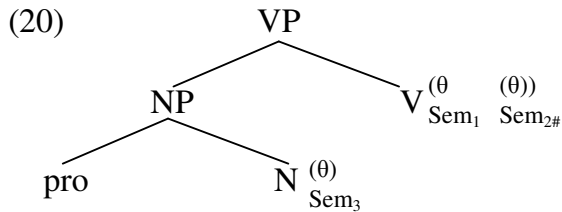
Resumptive pronouns are legitimate syntactic items, which can function as arguments. Thus, if, for instance, a *pro* appears as an argument of an argument-taking noun, as in (19a), the syntactic requirements represented by a relevant θ -role in the noun's θ -grid are satisfied. However, replacing the variable in the semantic representation linked to the θ -role by the resumptive *pro* would yield a representation which still contains a variable, because the resumptive *pro* translates as a variable in the semantics. I assume that the noun in (19a) has the semantic representation in (19b), which states that the noun takes one thematic argument and its relation to the noun is specified by the predicate *Sem*. The representation linked to the θ -role, namely the part of the representation in (19b) that is relevant for interpreting the thematic relation between the noun and its argument, is illustrated in (19c). The lambda-bound variable y is replaced by the variable z , which corresponds to *pro*, as demonstrated in (19d).

- (19) a. 
- b. $\lambda x \lambda y [n(x) \ \& \ Sem(x, y)]$
 c. $\lambda x \lambda y [Sem(x, y)]$
 d. $\lambda x \lambda y [Sem(x, y)](z) \rightarrow \lambda x [Sem(x, z)]$

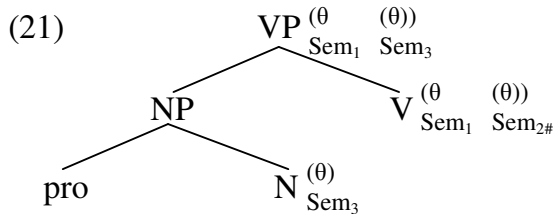
The structure in (19a) is ungrammatical as it is, as the argument of the noun lacks interpretation.¹⁰ Suppose that the NP in (19a) is realised as an internal argument of a transitive verb, as illustrated below. Here, it satisfies the syntactic requirements represented by the internal θ -role in the verb's θ -grid and replaces the variable in the associated semantic representation *Sem*₂, indicated by #.¹¹

¹⁰ The structure is of course grammatical if *pro* does not receive a bound interpretation, but its reference is obtained by other means, such as from the context.

¹¹ The semantic counterpart of NP that replaces the variable in *Sem*₂ in fact contains a variable, as the NP would be translated as something like *z's N* or *N of z* in the semantics. Thus, strictly speaking, *Sem*₂ should not be marked with #. I assume that the variable z present in *Sem*₂ after lambda-reduction can obtain its reference from its antecedent at a later stage in the derivation. In the constructions under discussion in this paper, this representation does not undergo re-association. I will therefore mark it with # in order to facilitate simple exposition of the proposal.



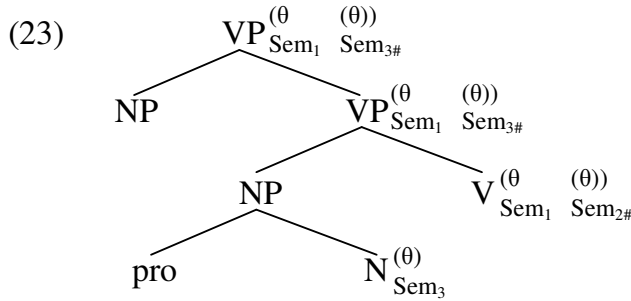
Under this specific circumstance, it is possible to dissociate the verb's internal θ -role from its associated semantic representation, Sem_2 , because it can be re-associated with a distinct representation, namely Sem_3 . Sem_3 , which is the resultant representation in (19d), is appropriate for re-association, because it contains a variable and is part of the semantic representation of the argument which has satisfied the θ -role. This process yields the following representation.



In terms of semantics, re-association can be viewed as an operation that introduces a lambda operator into a representation which would otherwise contain an unbound, uninterpretable variable. Notice that a representation that is appropriate for re-association always contains a free variable. Thus, as a result of re-association with the internal θ -role, the resultant representation in (19d) looks like (22), allowing the variable z to be replaced by an appropriate argument. It seems natural to consider linking to a θ -role as introduction of a lambda operator, as a variable cannot be replaced by an argument if the representation containing it is not linked to a θ -role or if it is not bound by a lambda operator.

(22) $\lambda x \lambda z$ [Sem (x , z)]

The θ -grid of the VP in the structure in (21) is now identical to that of a transitive verb: it contains two θ -roles each associated with a semantic representation containing a variable. Another internal argument must therefore be merged with the structure to fulfil the syntactic requirements of the re-associated θ -role and to replace the variable in the associated semantic representation. This is illustrated in (23). Recall that θ -role assignment involves satisfaction of syntactic requirements by an argument under sisterhood. Thus, although the conditions of the internal θ -role are met at V, those represented by the same internal θ -role at VP are not.



The newly introduced argument functions syntactically as an internal argument of the verb. It satisfies the syntactic conditions represented by the internal θ -role, the least prominent θ -role in the grid. It is however interpreted as a semantic argument of the other internal argument, because the semantic information represented here by Sem_3 has its source in the lexical meaning of the noun, not the verb. Furthermore, the operation of re-association is potentially recursive. The additional argument in (23) can itself contain a *pro*, making an appropriate semantic representation available for further re-association with the θ -role which it is assigned.

In sum, when an argument contains a variable, the θ -role which is assigned to the argument can be dissociated from its associated semantic representation. It must then be re-associated with a representation present in the argument, which is linked to the variable. This allows the verb to syntactically license an additional argument which is a semantic argument of another one of its arguments.

3 External Possession in Korean

3.1 The presence of *pro*

In this section I will argue that re-association is precisely what derives external possession in Korean: the possessee argument is the argument-taking noun and the external possessor is the additional argument. However, as we saw above, the presence of a resumptive *pro* in the verb's argument is crucial for possible application of re-association. I argue that the external possessor binds a *pro* within the NP headed by the possessee argument. I will first provide evidence for this claim before presenting an analysis of external possession in terms of re-association.

That a possessee argument in Korean does contain a *pro* associated with its external possessor is clearly demonstrated by the fact that it is possible to realise it overtly (cf. Cho 1992, 1993). The following examples illustrate this point.¹²

¹² Kitahara (1993) reports similar examples to those in (25) as ungrammatical. Cho (1992, 1993) notes however that the acceptability of the example with an overt *pro* improves if the possessor is scrambled away from the *pro*, as (i) shows for (25a), and attributes the effect to Avoid Pronoun Principle (Chomsky 1981). Since some speakers find the examples in question grammatical,

- (24) a. [?]Mary_i-ka [(kunye_i-uy) moksoli]-ka kop-ta
 Mary-Nom she-Gen voice-Nom beautiful-Decl
 b. [?]John_i-i [(ku_i-uy) cha-ka khu-ta
 John-Nom he-Gen car-Nom big-Decl
- (25) a. [?]Mary-ka John_i-ul [(ku_i-uy) tali]-ul cha-ss-ta
 Mary-Nom John-Acc he-Gen leg-Acc kick-Past-Decl (Cho 1992: 19)
 b. [?]John-i namu_i-lul [(kukek_i-uy) kaci]-lul cal-ass-ta
 John-Nom tree-Acc it-Gen branch-Acc cut-Past-Decl

Korean is a radical *pro*-drop language. An argument need not be overtly realised, if its content can be recovered from the context, as the examples in (26) show, where *e* indicates a gap (cf. Lee 1983).

- (26) a. *e* phathi-e ka-ess-ta
 party-to go-Past-Decl
 ‘I/you/he/she/we/they went to a party.’
 b. *e e* sa-ess-ta
 buy-Past-Decl
 ‘I/you/he/she/we/they bought it/them.’

Moreover, there are other constructions in which a resumptive pronoun referring to a displaced argument may optionally appear. A topic or a relativised NP can be associated with a position within an island and a *pro* related to the displaced element can be spelled out, as exemplified below. In (27), *John* is topicalised out of a relative clause, while in (28) *John* is relativised out of a relative clause. In both examples, the pronoun *ku* ‘he’ related to *John* can be spelled out in the relative clauses.

- (27) John_i-un [_{NP} [_{CP} Ø_j [_{TP} (ku_i-ka) e_j kaluch-n]]haksayng_j-tul]-i
 John-Top he-Nom teach-Rel students-Nom
 motwu sihem-ey hapkyekhay-ss-ta
 all exam-in succeeded-Past-Decl
 Lit.: ‘As for John, all the students (he) taught passed the exam’

including some of my informants, I assume with Cho that the possibility of overtly realising it is subject to idiolectal variation.

- (i) John_i-ul Mary-ka [ku_i-uy tali]-ul cha-ss-ta
 John-Acc Mary-Nom he-Gen leg-Acc kick-Past-Decl (Cho 1992: 19)

- (28) [NP Ø_i [TP[NP Ø_j [TP(ku_i-ka) e_j kaluchi-n]haksayng_j-tul]-i
he-Nom teach-Rel students-Nom
motwu sihem-ey hapkyekha-n] John_i
all exam-in succeed-Rel John
Lit.: ‘John, who all the students (he) taught passed the exam.’
(Kang 1986a : 225)

Considering that a *pro* related to the external possessor can be spelled out and that there are other constructions displaying a similar property, it seems reasonable to argue that the possessor is realised as *pro* internally to the possessee argument. In cases where the possessee argument is a subject, the situation attested is in fact identical to the above, as subject is also generally considered to be an island for extraction. It is not the case that the island conditions do not hold in Korean. I will show in section 4.1 that PPs cannot be extracted out of an island.

3.2 External possession by re-association

Having established the presence of *pro* within the possessee's maximal projection, I will now illustrate how re-association uniformly derives external possession in Korean. I assume that in general a possessor is assigned a θ -role with the *Possessor* semantics associated with it. Thus, a noun such as *tali* 'leg' has a θ -role in its argument structure, as shown in (29). Assuming that *tali* has the representation in (30a), *Poss* related to the θ -role refers to the representation in (30b).

- (29) *tali* (θ)
 ‘leg’ Poss
- (30) a. *tali* ‘leg’: λxλy [leg (x) & Possessor (x, y)]
 b. Poss: λxλy [Possessor (x, y)]

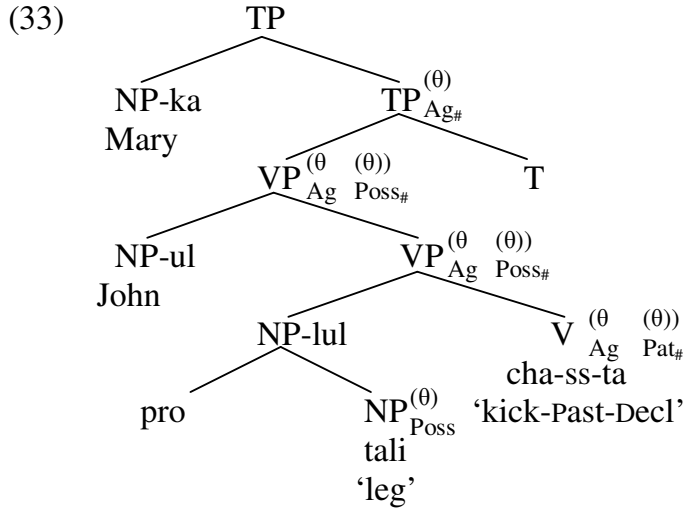
Since *pro* is able to function as a syntactic argument, it can satisfy the syntactic conditions of the θ -role in a sisterhood configuration to the NP *tali* ‘leg’, as illustrated below in (31a). It subsequently replaces the variable contained in the associated semantic representation. This results in a representation still containing a variable, (31b), where the resumptive *pro* is translated as the variable *z*.

- (31) a.
- ```
graph TD
 NP1[NP] --- pro[pro]
 NP1 --- NP2[NP(θ)Possr]
 NP2 --- tali[tali]
 NP2 --- leg['leg']
```

- b.  $\lambda x \lambda y [\text{Possessor}(x, y)](z) \rightarrow \lambda x [\text{Possessor}(x, z)]$

The resultant representation in (31b) is of a type that can be re-associated with another  $\theta$ -role. It contains an unbound variable and a predicate that corresponds to the kind of semantic role that is usually linked to a  $\theta$ -role. This allows the  $\theta$ -role assigned to the NP in (31a), to be dissociated from its semantic representation, and be re-associated with the resultant representation in (31b) present in the NP. This yields the structure in (33) for an example of external possession involving an object, such as (2a), repeated below as (32).

- (32) Mary-ka John-ul tali-lul cha-ss-ta  
 Mary-Nom John-Acc leg-Acc kick-Past-Decl  
 ‘Mary kicked John’s leg.’



The NP headed by the possessee object *tali* ‘leg’ is licensed syntactically and semantically as the internal argument of the verb in the standard manner described in section 2.1. It satisfies the syntactic conditions of the verb’s internal  $\theta$ -role and replaces the variable in the associated semantic representation, resulting in its being interpreted as the patient of the action expressed by the verb.

The  $\theta$ -role which is assigned to the possessee argument is dissociated from its semantic representation, *Patient*, and be re-associated with the representation *Possessor*. The re-associated  $\theta$ -role is assigned to the external possessor *John*, which is base-generated in an adjoined position to VP.<sup>13</sup> *John* is licensed syntactically as an internal argument of the verb, since the re-associated  $\theta$ -role is an

<sup>13</sup> I assume here without discussion that a verb can license multiple accusative phrases within its maximal projection. See Vermeulen (2005: Ch.5) where I specifically argue for this configuration.

internal  $\theta$ -role. At the same time, it is construed as a semantic argument of *tali* ‘leg’, as the semantic representation associated with the  $\theta$ -role is related to the object.

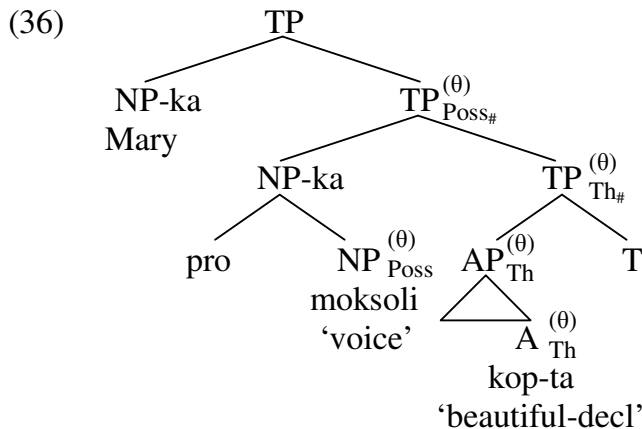
In terms of semantics, re-association introduces a lambda operator. The unbound variable  $z$  in the resultant representation in (31b) is now therefore bound, yielding a formula that can be applied to the external possessor, *John*, as (34) illustrates.

- (34) a. Re-association:  $\lambda x$  [Possessor ( $x, z$ )]  $\rightarrow \lambda x \lambda z$  [Possessor ( $x, z$ )]  
 b.  $\lambda x \lambda z$  [Possessor ( $x, z$ )] (*john*)  $\rightarrow \lambda x$  [Possessor ( $x, \text{john}$ )]

Re-association makes no reference to the grammatical function of the possessee argument. It is equally applicable to the verb’s external  $\theta$ -role, if the subject is headed by an argument-taking noun and its argument is realised as a variable. The example in (1a), repeated below as (35), therefore has a structure like (36).

The NP headed by *moksoli* ‘voice’ is licensed as an external argument of *kop-ta* ‘beautiful-Decl’ syntactically and semantically. The external  $\theta$ -role of the adjective *kop-ta* ‘beautiful-Decl’ is dissociated from its associated semantic representation, labelled *Theme*, because the presence of *pro* makes part of the semantic representation of the NP headed by *moksoli* ‘voice’, namely *Possessor*, appropriate for re-association. The dissociated  $\theta$ -role is re-associated with *Possessor* and assigned to *Mary*. As a consequence, *Mary* is licensed as an additional external argument of the adjective, but is interpreted as a possessor of *moksoli* ‘voice’.

- (35) Mary-ka      moksoli-ka      kop-ta  
 Mary-Nom    voice-Nom    beautiful-Decl  
 ‘It is Mary whose voice is beautiful.’



As argued above, re-association is potentially a recursive operation. An external possessor itself could contain a *pro* in its specifier position, which would facilitate further re-association. Since there is in principle no limit on the number of

specifiers permitted within one maximal projection, it is predicted that an indefinitely large number of external possessors can be present in a clause. We saw in section 1 that this is indeed true for both nominative and accusative external possessors. The examples in (5) would therefore have structures as indicated below.

- (37) a. [TP Mary<sub>i</sub>-ka [TP[NP pro<sub>i</sub> tongsayng]<sub>j</sub>-i [TP[NP pro<sub>j</sub> moksoli]-ka kop-ta  
           Mary-Nom                    sister-Nom                    voice-Nom beautiful-Decl  
       b. [TP Mary-ka [VP John<sub>i</sub>-ul [VP[NP pro<sub>i</sub> tali]<sub>j</sub>-lul [VP[NP pro<sub>j</sub> olunccek-ul cha-ss-ta  
           Mary-Nom John-Acc                    leg-Acc                    right.side-Acc kick-Past-Decl

The proposed account makes a number of predictions. Firstly, considering that the external possessor receives a  $\theta$ -role from the verb, they are predicted to behave like syntactic arguments of the verb. In particular, a nominative external possessor should behave like a subject and an accusative external possessor should display properties associated with object. As mentioned above, it has been widely observed in the literature that this is indeed the case. An external possessor of a subject can trigger subject honorific marker on the lexical predicate, bind the subject-oriented anaphor *caki* 'self', control PRO and be realised in the accusative in an ECM construction (Kang 1986b, O'Grady 1991, Suh 1993, cf. also Heycock & Lee 1989, 1990). An external possessor of an object can be passivised and act as a subject of a resultative predicate. It can also function simultaneously as a thematically selected internal argument and as an external possessor of an object in a coordinate construction, where one conjunct contains only a transitive verb, while the other conjunct contains a transitive verb and the possessee object (Kang 1986b, Kim 1989, Yoon 1989, 1990, Yoon 1997, Yeon 1999, Vermeulen 2005). In addition, both types of external possessors can float a quantifier, a property associated with argument-hood (O'Grady 1991 and references therein). For reasons of space, I will not review the evidence here. The reader is referred to the literature for data and discussion.<sup>14</sup> In the following section, I will consider predictions regarding other properties of the construction

<sup>14</sup> The proposed account also predicts that the object possessee retains its argument-hood. Some authors have claimed otherwise, because it cannot be passivised. However, I argue in Vermeulen (2005) and below that the possessee does still show argument-like properties, such as being thematically selected by the verb, the ability to host a floating a quantifier and act as the subject of a resultative predicate. I claim that the impossibility of passivisation is for independent reasons.

## 4 Predictions

### 4.1 General characteristics of external possession

In this sub-section, I will discuss six predictions made by the present analysis which concern the syntactic properties of the construction, while the next sub-section deals with predicted differences between the external possessor and the possessee. The first three predictions here are not tested against external possession involving an object, as the relevant examples are extremely difficult to obtain due to the constraint that the external possessor must be interpreted as affected by the event described by the verb. More specifically, as I will argue in section 5, the external possessor must be construed as a participant in the eventuality described by the verb.

A first prediction concerns the nature of the external possessor. The present analysis predicts that not only possessors but any argument of the verb's argument should be able to appear externally. Nothing in the operation restricts its application solely to possessors. In other words, it should be possible for any semantic argument of the verb's argument to be licensed as a syntactic argument of the verb if it is related to a *pro* within the maximal projection of the verb's argument.

It is difficult to test this prediction against external possession involving an object, because, an example in which an argument of the object other than a possessor is realised externally and is interpreted as a participant in the eventuality is hard to obtain. However, the following examples illustrate that the prediction is borne out for external possession involving a subject. (38) illustrates that the theme argument of the subject can appear in the nominative externally to the subject. Similarly, in (39), *Mary-ka* is interpreted as the agent of the action expressed by the subject. Thus, in fact, the phenomenon of external possession is not limited to possessors. I will however continue to refer to the phenomenon as external possession and the externally realised arguments as external possessors.

- (38) tosi-ka    phakoy-ka        mwuseu-ess-ta  
       city-Nom destruction-Nom terrible-Past-Decl  
       'The city's destruction was terrible.'
- (39) Mary-ka    chwum-i        mesci-ta  
       Mary-Nom dance-Nom beautiful-Decl  
       'Mary's dance was beautiful.'

By contrast, it should be impossible for an adjunct modifier of the subject to be realised externally to the subject. Adjuncts do not receive a  $\theta$ -role and hence do not replace variables in semantic representations associated with  $\theta$ -roles. It is also unclear whether a *pro* can correspond to an adjunct, since pronominals generally function as arguments. The implication is that no semantic representation relevant

for interpreting an adjunct can be made available for re-association. The following ungrammatical examples demonstrate that an adjunct modifier of a subject which clearly does not receive a  $\theta$ -role cannot be licensed externally to the subject.<sup>15</sup>

- (40) choykun-uy/\*i sako-ka nayil-uy hoyuy-eyse  
 recent-Gen/Nom accident-Nom tomorrow-Gen meeting-in  
 keron-toy-l kes-i-ta  
 discussion-Pass-future fact-be-Decl  
 ‘Recent accidents will be discussed in tomorrow’s meeting.’
- (41) ecey-uy/\*ka sinmwun-i isanghaky e onul phal-li-ess-ta  
 yesterday-Gen/Nom newspaper-Nom strangely today sell-Pass-Past-Decl  
 ‘Strangely, yesterday’s newspaper was sold today.’

Secondly, the proposed analysis predicts that no more than one argument of the same argument can be realised externally. Recall that a semantic representation can only be re-associated with a  $\theta$ -role which is assigned to the argument in which the representation is present. Considering that an argument usually satisfies at most one  $\theta$ -role, there is only one  $\theta$ -role per argument which can undergo re-association. Consequently, even if two arguments of the same noun were realised as *pro* internally to the NP, making semantic representations related to two arguments available for re-association, only one argument can be realised externally.

This prediction is correct. In Korean, arguments of a noun can appear in the genitive in the projection of the noun, as shown by (42a). In (42b) the agent of the noun *phakoy* ‘destruction’ is realised in the nominative, while (42c) illustrates that a theme argument is able to appear externally. However, as (42d) shows, both semantic arguments cannot be licensed externally to the subject simultaneously.

- (42) a. Roma-in-tul-uy tosi-uy phakoy-ka mwuseu-ess-ta  
 Rome-people-Pl-Gen city-Gen destruction-Nom terrible-Past-Decl  
 ‘The Roman’s destruction of the city was terrible.’
- b. Roma-in-tul-i tosi-uy phakoy-ka mwuseu-ess-ta  
 Rome-people-Pl-Nom city-Gen destruction-Nom terrible-Past-Decl
- c. tosi-ka (\*Roma-in-tul-uy) phakoy-ka mwuseu-ess-ta<sup>16</sup>  
 city-Nom Rome-people-Pl-Gen destruction-Nom terrible-Past-Decl

<sup>15</sup> This of course raises the question of what kind of elements receive a  $\theta$ -role, which I will not address here.

<sup>16</sup> It is not possible to realise the agent of the deverbal noun NP-internally if the theme of the same noun is realised externally. This is perhaps due to the fact that it violates the order in which  $\theta$ -roles must be assigned: a theme  $\theta$ -role is usually assigned prior to an agent  $\theta$ -role, since the latter is more prominent than the former in Grimshaw’s (1990) terms. However, the main point of the example is that the theme argument can appear externally to the projection headed by the noun.

- |                    |          |                 |                    |
|--------------------|----------|-----------------|--------------------|
| d. *Roma-in-tul-i  | tosi-ka  | phakoy-ka       | mwuseu-ess-ta      |
| Rome-people-Pl-Nom | city-Nom | destruction-Nom | terrible-Past-Decl |

It is important to note the distinction between the example in (42d) and the superficially similar example in (5a), in which two nominative phrases preceding the subject of the lexical predicate are each interpreted as a possessor of the immediately following nominative phrase. (42d), whose derivation is shown below, constitutes an illegal instance of re-association, because it does not adhere to the strictly local nature of the operation.

- (43) \*<sub>[TP Roma-in-tul</sub> <sub>[TP tosi-ka</sub> <sub>[TP</sub> <sub>[NP pro</sub> <sub>[NP pro</sub> phakoy]]  
 Rome-people-Pl-Nom city-Nom destruction-Nom  
<sub>[TP</sub> <sub>[AP mwuseu-ess-ta] T]]]]  
 terrible-Past-Decl</sub>

The  $\theta$ -role assigned to *tosi-ka* ‘city-Nom’ in (43) cannot be re-associated with the semantic representation related to the agent argument of the deverbal noun *phakoy* ‘destruction’. The  $\theta$ -role assigned to the NP headed by *phakoy* ‘destruction’ and the  $\theta$ -role assigned to *tosi-ka* ‘city-Nom’ are both instances of the external  $\theta$ -role of the adjective *mwuseu-ess-ta* ‘terrible-Past-Decl’. Nevertheless, each instance is distinguished for the purpose of re-association, because they are ‘satisfied’ by a different argument, the relevant notion for the operation. Consequently, the  $\theta$ -role which *tosi-ka* satisfies can only be re-associated with a semantic representation relevant to interpreting an argument of *tosi* and not of *phakoy*.

On the other hand, (5a), whose derivation is repeated below from (37a), is a grammatical instance of re-association. *Mary* is assigned a  $\theta$ -role which is associated with part of the semantic representation of the immediately following nominative phrase *tongsayng* ‘sister’, respecting the local nature of re-association.

- (44) [TP Mary<sub>i</sub>-ka [TP<sub>[NP pro<sub>i</sub> tongsayng]<sub>j</sub>-i [TP<sub>[NP pro<sub>j</sub> moksoli]-ka kop-ta</sub></sub>
- Mary-Nom sister-Nom voice-Nom beautiful-Decl

A third prediction concerns the syntactic category of the external possessor. There is some evidence that PP-*pro* does not exist in Korean. We saw in section 3.1 that a resumptive *pro* strategy is available in Korean when extraction takes place out of an island. However, if the extracted item is a PP, the result is ungrammatical, as demonstrated below, where a PP is topicalised out of a relative clause. Considering that an NP can undergo the same movement, as we saw in (27), the following observation indicates that PP-*pro* does not exist in Korean. The example also serves to show that the island conditions do hold in Korean.

- (45) \*[<sub>PP</sub> pwusan-eyse]<sub>j</sub>-nun [<sub>TP</sub> [<sub>NP</sub> Ø<sub>i</sub> [<sub>TP</sub> *e<sub>i</sub>* *t<sub>j</sub>* o-n] haksayng]-i motwu  
 Pwusan-from-Top came-Rel student-Nom all  
 sihem-ey hapkyekhay-ss-ta]  
 exam-in succeeded-Past-Decl  
 Lit.: 'As for from Pusan, all students (from there) passed the exam.'

According to the proposed analysis, the external possessor is indirectly related to a *pro* in the following argument. If PP-*pro* does not exist, it should be impossible for a PP-argument of a verb's argument to be realised externally to the latter by means of re-association. It is difficult to test this prediction if the possessee is an object, because of the interpretive constraint on the external possessor. It does not make sense to talk of a PP being affected, because PPs generally refer to concepts related to space or time. Nevertheless, the ungrammaticality of the following examples demonstrate that the prediction is correct. In both examples, the PP arguments of the subjects, *Hankwuwuk-ey* 'Korea-to' and *Mary-hako* 'Mary-with', respectively, cannot be realised externally to the subject in the nominative.

- (46) \*Hankwuk-ey-ka yehayng-i caymi-iss-ess-ta  
 Korea-to-Nom trip-Nom fun-is-Past-Decl  
 'A trip to Korea was interesting.'  
 (47) \*Mary-hako-ka hoyhap-i milwu-e ci-ess-ta  
 Mary-with-Nom meeting-Nom postpone-Inf. get-Past-Decl  
 'It is with Mary that the meeting was postponed.'

Fourthly, the proposed account predicts that the possessee must itself be a syntactic argument of a predicate. This is because a  $\theta$ -role can only be re-associated with a semantic representation present in the constituent that receives the  $\theta$ -role. In other words, an argument of a noun contained in an adjunct cannot be licensed externally. The point is illustrated below.

- (48) \*
- 
- ```

graph TD
  XP --> Adjunct
  XP --> XP1["XP(θ)Sem1"]
  Adjunct --> pro
  Adjunct --> YP["YP(θ)Sem2"]

```

The following example demonstrates that this option is indeed disallowed. *Cip* 'house', which is interpreted as the possessor of *cipwung* 'roof' cannot be licensed externally to the adjunct containing its possessee, irrespective of the case it bears.

- (49) *Mary-ka cip-i/ul/ey/eyse cipwung-eyse John-ul cha-ss-ta
 Mary-Nom house-Nom/Acc/Dat/on roof-on John-Acc kick-Past-Decl
 Intended: 'Mary kicked John on the roof of the house.'

That the thematic relation between *cip* ‘house’ and *cipwung* ‘roof’ is of a type that can take part in external possession can be seen from the grammaticality of the following example, in which *cipwung* is the subject and *cip* is its external possessor.

- (50) *Cip-i cipwung-i mwuneci-ess-ta*
 house-Nom roof-Nom collapse-Past-Decl
 ‘The roof of the house collapsed.’

Fifthly, re-association makes no reference to the grammatical function of the possessee or the case of the constituents involved. The operation should therefore be able to apply to any argument as long as case is available for the external possessor. In particular, it should be possible to license a possessor of an indirect object externally, if an additional instance of dative case is permitted in the language. The prediction is borne out. The following example shows that a possessor of the indirect object, *Yumi*, can be marked with the dative marker *eykey* and appear externally to the indirect object, *phal-ey* ‘arm-Dat’.¹⁷

- (51) *Nay-ka Yumi-eykey (ecey) phal-ey cwusa-lul noh-ass-ta*
 I-Nom Yumi-Dat yesterday arm-Dat shot-Acc give-Past-Decl
 ‘I gave Yumi a shot in the arm.’ (modified from Maling & Kim 1992: 42)

In fact, an external possessor should be able to bear any case that the language makes available. The indirect object of some ditransitive verbs in Korean can be realised in dative case as well as accusative case, as shown by (52).

- (52) *Nay-ka Yumi-eykey/lul cwusa-lul noh-ass-ta*
 I-Nom Yumi-Dat/Acc shot-Acc give-Past-Decl
 ‘I gave Yumi a shot.’ (Maling & Kim 1992: 42)

A prediction that follows is that an external possessor of an indirect object and the indirect object may agree or differ in the case they bear, which is true.¹⁸ In (51) above and (53a) below, the possessor and the possessee agree in case, while in (53b) and (53c), they are marked with different cases. This demonstrates clearly that re-association is indeed independent of what case the possessee or the external possessor bears. As Maling & Kim (1992) note, the observation here makes it extremely difficult to pursue an analysis of external possession in terms of case agreement, which has been proposed previously (cf. Kim 1989, Cho 2000).

¹⁷ The dative marker is *eykey* if the referent of the NP it marks is animate and *ey* if inanimate.

¹⁸ It may not be entirely accurate to predict that the external possessor and the indirect object may differ in case from the observation in (52), as different structures may be involved depending on the case of the indirect object. However, the fact that they can differ in case, as illustrated in (52b-c), shows that the external possessor need not agree in case with its possessee.

- (53) a. Nay-ka Yumi-lul phal-ul cwusa-lul noh-ass-ta (Acc-Acc, Acc)
I-Nom Yumi-Acc arm-Acc shot-Acc give-Past-Decl
b. Nay-ka Yumi-lul phal-ey cwusa-lul noh-ass-ta (Acc-Dat, Acc)
I-Nom Yumi-Acc arm-Dat shot-Acc give-Past-Decl
c. Nay-ka Yumi-eykey phal-ul cwusa-lul noh-ass-ta (Dat-Acc, Acc)
I-Nom Yumi-Dat arm-Acc shot-Acc give-Past-Decl
(Maling & Kim 1992: 42)

A final prediction concerns the locality of the external possessor to the possessee. According to the definition of re-association in (17), it is not possible, for example, for a θ -role assigned to an argument other than the direct object to undergo re-association with a semantic representation present in the direct object. Thus, the prediction is that an external possessor of an object cannot be base-generated in a position above the subject and be licensed as an external argument of the verb, or similarly, be base-generated above an indirect object and be licensed syntactically as an indirect object. Both of these instances involve re-association of a θ -role with a semantic representation which is not part of the semantic representation of the argument to which the θ -role is assigned. As the ungrammaticality of the examples in (54) shows, this prediction is correct. *John-i* ‘John-Nom’ and *ai-eykey* ‘child-Dat’ are intended to be understood as the external possessors of the direct objects *tali-lul* ‘leg-Acc’ and *phal-ul* ‘arm-Acc’, respectively.

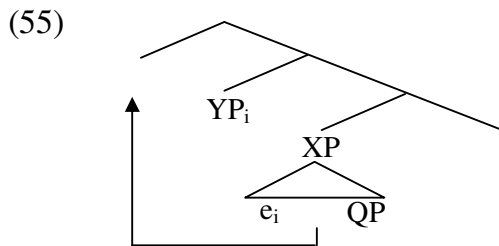
- (54) a. *John-i Mary-ka tali-ul cha-ss-ta
John-Nom Mary-Nom leg-Acc kick-Past-Decl
'Mary kicked John's leg.'
- b. *Mary-nun ai-eykey uisa-eykey phal-ul kalikhi-ess-ta
Mary-Top child-Dat doctor-Dat arm-Acc show-Past-Decl
'Mary showed the child's arm to the doctor.'
- cf. Mary-nun uisa-eykey ai-lul phal-ul kalikhi-ess-ta
Mary-Top doctor-Dat child-Acc arm-Acc show-Past-Decl

Thus, an analysis of external possession in terms of re-association can explain a number of general properties of the construction: (i) any semantic argument of the subject, but not an adjunct modifier of the subject, can be realised externally to the subject; (ii) no more than one semantic argument of the subject can take part in external possession; (iii) the external possessor cannot be a PP; (iv) the possessee cannot be contained in an adjunct; (v) the possessee can be an indirect object and need not agree in case with the external possessor; and (vi) the external possessor must be base-generated locally to its possessee argument. The properties in (i), (ii), (iv) and (vi) are consequences of the fact that re-association directly involves the θ -role assigned to the possessee. The other two properties follow from independent

characteristics of the language.

4.2 Some differences between the external possessor and the possessee

The proposed analysis also predicts that the external possessor and the possessee display some disparate properties. Here, I discuss three such properties. A first prediction is that an external possessor and a possessee should display contrasting behaviour with respect to movement operations due to independent factors concerning the nature of movement and the constituents involved. Barrs (1986) observes that if a constituent containing a gap moves to a position higher than the antecedent of the gap, the antecedent cannot be interpreted in the gap position for its scopal construal. In other words, in the following structure, YP cannot be interpreted as being in the scope of QP, if XP is fronted (cf. also Boeckx 2001, Sauerland & Elbourne 2002, van de Koot 2004)¹⁹.



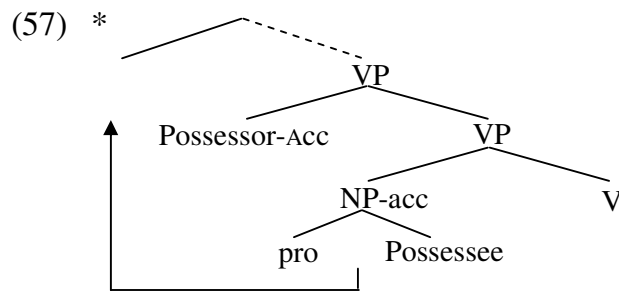
The following pair of examples illustrates this point. *Some young lady* corresponds to YP in the above structure and *every senator* to QP in XP. In (56a), the constituent containing *every senator* is not moved. *Some young lady*, which is moved out of this constituent, can be interpreted in its base position for scope, as it can take narrow scope with respect to the universal quantifier. In (56b), by contrast, the constituent containing *every senator* is moved to a position higher than *some young lady* and the indefinite can no longer be in the scope of the universal.

- (56) a. [_{YP}Some young lady]_i seems [_{t_i} to be likely
[_{XP} _{t_i} to dance with every senator]]
some > every; every>some
b. [_{XP}How likely _{t_i} to dance with every senator]_j
does [_{YP} some young lady]_i seem to be _{t_j}?
some > every; *every>some

Returning to external possession in Korean, the structure I have proposed in (33)

¹⁹The authors vary significantly in explaining Barrs's generalisation. For the purpose of the discussion in the main text, however, it is only necessary that the generalisation is true.

and (36) are equivalent to that in (55). The possessee contains a *pro*, a gap, which is related to a position external to its maximal projection. Thus, if the possessee is moved to a position above the external possessor, it is not possible to access *pro* in the possessee's base position for the interpretation of the external possessor. Consequently, the information that the possessee's θ -role is assigned to an item which translates as a variable in the semantics is unavailable in the possessee's base-position. The θ -role assigned to the possessee should therefore not be able to undergo re-association with the appropriate semantic representation to provide a θ -role for the external possessor, rendering the derivation to crash, as shown below.



On the other hand, no such gap is present in the external possessor and hence it should be able to undergo movement operations. As the following examples illustrate, this prediction is correct for topicalisation and relativisation. The (a)-examples involve movement of the external possessor, while the ungrammatical (b)-examples illustrate the same movement by the possessee (Kang 1986b, Kim 1989, Yoon 1989, 1990, Yoon 1997, Yeon 1999).^{20,21}

Topicalisation

- (58) a. Mary-nun moksoli-ka kop-ta
 Mary-Top voice-Nom beautiful-Decl
 ‘Mary’s voice is beautiful.’
 b. ?*moksoli-nun Mary-ka kop-ta
 voice-Top Mary-Nom beautiful-Decl
- (59) a. Haksayng-un kay-ka tali-lul mul-ess-ta
 student-Top dog-Nom leg-Acc bite-Past-Decl
 ‘The dog bit the student on the leg.’
 b. *tali-un kay-ka haksayng-ul mul-ess-ta
 leg-Top dog-Nom student-Acc bite-Past-Decl (Yeon 1999: 214-15)

²⁰ The same observation obtains for scrambling and passivisation: the external possessor of an object can be passivised/scrambled, but the possessee object cannot (Kang 1986b, Kim 1989, Yeon 1999).

²¹ Two out of five of my informants found (58b) marginal, although (59b) for them was still ungrammatical. In Japanese too, topicalising a possessee subject seems better than relativising it.

Relativisation

- (60) a. [_{CP} Ø_i [_{TP} e_i moksoli-ka kop-un]] Mary
voice-Nom beautiful-Rel] Mary
'Mary whose voice is beautiful.'
b. *[[_{CP} Ø_i [_{TP} Mary-ka e_i kop-un]] moksoli
Mary-Nom beautiful-Rel] voice
Lit.: 'Voice that Mary is beautiful.'
- (61) a. [_{CP} Ø_i [_{TP} Chelswu-ka e_i kaci-lul cal-un] namwu
Chelswu-Nom branch-Acc cut-Comp tree
'The tree that Chelswu cut the branches of'
b. *[[_{CP} Ø_i [_{TP} Chelswu-ka namwu-lul e_i cal-un] kaci]²²
Chelswu-Nom tree-Acc cut-Comp branch
Lit.: 'The branch that Chelswu cut from the tree.' (Yoon 1997: 246)

Secondly, the presence of a variable within the projection headed by a possessee has the effect that the possessee is not referential. This is because part of its reference is determined by an element external to the possessee's projection. It is generally not possible for a non-referential expression to be modified by an appositive adjective (Vergnaud & Zubizarreta 1992 and references cited there). Accordingly, modification of a possessee with an appositive adjective should be disallowed. As the ungrammaticality of the examples in (62) shows, this is true. An external possessor, on the contrary, contains no variable, hence should be able to tolerate such modification, which is also true, as the examples in (63) illustrate (cf. Kim 1989, Yoon 1989, 1990, O'Grady 1991, Yoon 1997).

- (62) a. * Sue-ka ki-n meli-ka coh-ta
Sue-Nom long hair-Nom good-Decl
Lit.: ‘Sue’s long hair is good.’ (cf. Jo 1986: 107)
- b. *[?] Chelswu-ka Yenghi-lul [yeppun elkwul]-ul chi-ess-ta
Chelswu-Nom Yenghi-Acc pretty face-Acc hit-Past-Decl
‘Chelswu hit Yenghi’s face, which is pretty.’ (Yoon 1997: 246)
- (63) a. [yeppun Sue]-ka meli-ka coh-ta
pretty Sue-Nom hair-Nom good-Decl
Lit.: ‘Pretty Sue’s hair is good.’
- b. Yumi-ka [chakhan Inho]-lul meli-lul ttayli-ess-ta
Yumi-Nom kind Inno-Acc head-Acc hit-Past
‘Yumi hit Inho, who is kind, on the head.’ (Kim 1989: 451)

²² Tomioka & Sim (2005) claim that a similar example to (61b) is grammatical. However, all my informants find relativisation of a possessee ungrammatical in accordance with the general consensus in the literature. I will therefore assume that it is ungrammatical.

A final prediction is particularly relevant for external possession involving objects. According to the proposed analysis, only the possessee object should be thematically selected by the verb. This is because the θ -role assigned to the possessee object is associated with a semantic representation which is related to the lexical meaning of the verb, but the θ -role assigned to the external possessor is not. Thus, the verb should not thematically select the external possessor. One prediction that follows from such considerations is that the semantic / pragmatic relation between the external possessor and the verb need not be identical to that between the possessee and the verb. As Maling & Kim (1992) observe, this is indeed true. (64a) does not entail that the chicken is plucked. Similarly, in (65a), it is the hair that is cut and not Yenghi. That the thematic selection indeed holds only for the possessee is demonstrated by the ungrammatical (b)-examples, in which the possessee arguments are omitted.

- (64) a. Cheli-nun talk-ul thel-ul ppop-ass-ta
 Cheli-Top chicken-Acc feather-Acc pull.out-Past-Decl
 ‘Cheli pulled out the chicken’s feather.’
 b. *Cheli-nun talk-ul ppop-ass-ta
 Cheli-Top chicken-Acc pull.out-Past-Decl (Maling & Kim 1992: 58)
- (65) a. Cheli-nun Yenghi-lul meli-lul kkak-ass-ta
 Cheli-Top Yenghi-Acc hair-Acc cut-Past-Decl
 ‘Cheli cut Yenghi’s hair.’
 b. *Cheli-nun Yenghi-lul kkak-ass-ta
 Cheli-Top Yenghi-Acc cut-Past-Decl (modified from Yoon 2001: 5)

In sum, re-association allows a uniform account of external possession, regardless of the grammatical function of the possessee. At the same time, it also explains differences between the external possessor and the possessee, as we saw in this sub-section: (i) the external possessor can undergo movement operation, but the possessee cannot; (ii) the external possessor can be modified by an appositive adjective, but the possessee cannot; (iii) only the possessee is thematically selected by the verb. The first two properties are due to the possessee being non-referential. The last property follows from the fact that the external possessor replaces a variable in a representation linked to the lexical meaning of the possessee.

The literature offers several alternative approaches to accounting for some of the properties observed in this section. I will discuss and compare them with the present analysis in section 6. In the next section, I will demonstrate that the obligatory affected reading of an accusative external possessor and the lack of such reading for a nominative external possessor follows from the combination of the present analysis and the difference in the grammatical function of the possessee.

5 Affectedness

5.1 (The absence of) the affected reading

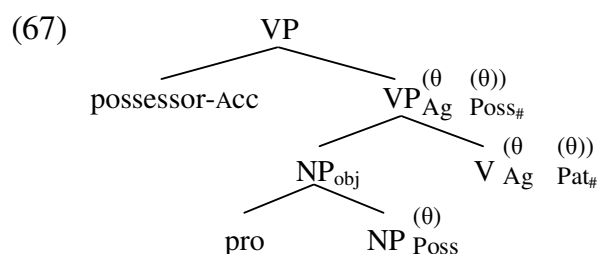
As observed in the introduction, the external possessor of an object is interpreted as ‘affected’. I propose that this reading is a consequence of the manner in which language represents information related to participants of the eventuality expressed by the verb. I will first discuss how the affected reading arises for an external possessor of an object and subsequently why no such interpretation obtains for an external possessor of a subject.

Recipients of θ -roles in a verb’s θ -grid are generally considered to correspond to participants in the eventuality expressed by the verb. The semantic representations associated with θ -roles provide instructions as to how they participate in the eventuality. Thus, in the sentence in (66a), *John’s dog* and *Mary’s hamster* are construed as participants in an eating event, since the verb *eat* has a θ -grid as indicated in (66b), and the θ -roles are assigned to these constituents. They are furthermore interpreted as *Agent* and *Theme* in the eventuality, respectively, as specified by the associated semantic representations. *John* and *Mary* are not understood as participants, because they do not receive a θ -role from the verb.

(66) a. John’s dog ate Mary’s hamster.

b. eat (θ (θ))
 Ag Th

An external possessor of an object is assigned a re-associated θ -role, which is contained in the verb’s θ -grid. (67) represents a relevant part of the structure.



As a consequence, the external possessor must be understood as a participant in the eventuality expressed by the verb. However, the semantic representation linked to the re-associated θ -role does not have its source in the lexical meaning of the verb, but that of the possessee. It therefore provides no relevant information concerning the possessor’s participation in the eventuality. I propose that the affected reading obtains under such a circumstance due to pragmatics. Considering that the external possessor must be part of the eventuality, in the absence of any specific information, it seems only natural that it is interpreted as somehow involved in the eventuality,

and hence affected by it. In other words, the external realisation of a possessor of an object is a linguistic representation of the speaker's view of the world in which the possessor is part of the eventuality expressed by the rest of the sentence.

Whether or how an external possessor can be conceived of as being part of the eventuality depends on the speaker's concept of an eventuality. As argued by Shibatani (1994) and Yeon (1999), 'affected' is a vague interpretation related to our knowledge of the world and should not be described in terms of grammatical, well-defined semantic roles, such as *Affected*, as has been proposed by some authors (Tomioka & Sim (2005) for Korean and see Shibatani (1994) for references for other languages). Relevant factors influencing the likelihood of an external possessor's integration into an eventuality seem to include notions such as adversity, inalienability and cognitive contiguity.

The adversity reading generally associated with an external possessor is therefore not inherent in the construction. Nothing in the assumption that the external possessor must be part of the eventuality forces it to be also interpreted as *adversely* affected by the eventuality. Instead, it results from the nature of the eventuality and our knowledge of the world. If the eventuality involves kicking one's leg, pragmatic considerations would dictate that the possessor of the leg, who must also be part of the eventuality, is adversely affected by it. I will illustrate in the next sub-section that given appropriate lexical items, a *positively* affected reading is possible for an external possessor of an object. Similarly, the inalienable possession relation implied in most instances of external possession is not inherent in the construction. It is a consequence of the fact that the external possessor must be a participant in the eventuality. If someone is part of a *kicking-a-leg* event, and is construed as a possessor of *leg*, it seems most natural to interpret that person as an inalienable possessor of *leg*. I will also show below that the observed inalienable possession relation is indeed not absolute, but merely a tendency.

Why then are external possessors of a subject not affected? Since they are also assigned a re-associated θ -role by the verb, it appears that a comparable restriction on the interpretation should hold for these possessors. I propose that the contrast follows from the interaction between re-association and an independent property of language, namely the necessity to distinguish external θ -roles from internal θ -roles.

Since at least Williams (1980), external θ -roles have been distinguished from internal θ -roles in various ways. The distinction is necessary, because external arguments and internal arguments display fundamentally different properties (cf. Marantz 1984, Grimshaw 1990, Kratzer 1996). One such property is that a predicate may license multiple internal arguments, but no more than one external argument. A widely adopted practice is to employ a θ -grid to represent the relevant distinction. It allows the θ -roles of one predicate to be ordered and hence the external θ -role to be identified in a defined manner, for example, as the θ -role occupying a particular position in the grid. Neeleman & van de Koot (2002)

propose an alternative way in which this distinction can be represented in the syntax. They assume a rather different system of establishing syntactic dependencies, including θ -role assignment, from what is conventionally adopted, but the basic idea can be described as follows.²³

Instead of a θ -grid, Neeleman & van de Koot postulate an ordering tier, which is part of the lexical property of a predicate. By assumption, two θ -roles cannot be distinguished from each other unless at least one of them is linked to a position in the tier. The tier also contains categorial features of the predicate. Thus, a ditransitive verb contains information such as the following. The θ -roles linked to the positions indicated as 1 and 2 are the internal θ -roles, while the unlinked θ -role is the external θ -role.

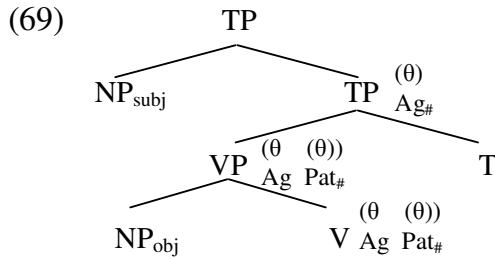
$$(68) \qquad \qquad \qquad \begin{array}{c} \{\theta \ \theta \ \theta\} \\ \quad \quad | \quad | \\ \text{ordering tier: } <+V, -N \quad 1 \quad 2> \end{array}$$

The information in (68) is copied up the tree in a manner that is consistent with economy considerations. Thus, only unassigned θ -roles are targeted by copying. In assigning the internal θ -roles, the ordering tier must also be copied up, because the θ -roles would otherwise not be distinguished. As the ordering tier contains categorial features, copying of the tier to the dominating node equates to categorial projection. In other words, a node that contains the ordering tier in (68) must be either the verb, i.e. V^0 , or a projection of a verb.

Once the internal θ -roles are assigned, however, the ordering tier need not be copied any further, as there is only one unassigned θ -role, the external θ -role. The external θ -role is therefore copied up on its own. This in turn implies that the node to which the external θ -role is copied is not a projection of the verb, but must be a projection of some other head. Neeleman & van de Koot demonstrate that the proposal has a number of welcome empirical consequences, which I will not discuss here, as they are not directly relevant to the issues at hand.

Translating Neeleman & van de Koot's idea into the current framework, I argue that a verb's θ -grid is not copied up beyond the verb's maximal projection. An external θ -role is copied up on its own without any information related to the internal organisation of the θ -grid. The point is illustrated below.

²³ Neeleman & van de Koot's (2002) proposal outlined here uses slightly different terminology from their work, so that the main idea can be explained without going too much into the details of their overall system. For instance, they argue that syntactic dependencies such as θ -role assignment, binding, movement, and the licensing of negative polarity items, are viewed as 'functions', which are copied up the tree and are satisfied by an appropriate item under domination. I refer the reader to the original work for further details.



Although the external θ -role is no longer part of the verb's θ -grid when it is assigned to the subject, the subject is still interpreted as a participant in the eventuality expressed by the verb. This is because the semantic representation associated with the θ -role is related to the lexical meaning of the verb. It thus gives information as to how the subject participates in the eventuality. In licensing an external possessor of the subject, the external θ -role undergoes re-association with a semantic representation present in the subject. In other words, the semantic representation linked to the re-associated θ -role, which the external possessor of the subject receives, does not provide relevant information concerning its participation in the eventuality. However, the re-associated θ -role is no longer in the verb's θ -grid. Consequently, the external possessor need not be construed as a participant in the eventuality and hence receive an affected reading.

The approach advocated here has implications for what kinds of interpretations are available for an external possessor, to which I now turn.

5.2 Possible interpretations of an external possessor

The proposed approach to (the absence of) the affected reading of an external possessor makes four predictions, particularly in relation to the range of possible interpretations an external possessor of an object may receive. Firstly, the claim that the adversity reading results from the nature of the eventuality involved and our knowledge of the world predicts that given appropriate lexical items, the external possessor of an object may be positively affected or not be psychologically affected at all. This prediction is borne out. In (70), Mary is readily understood to be positively affected by the doctor curing her arm, while in (71), since a shovel is an inanimate entity, there is no sense in which it is psychologically affected.

- (70) uisa-ka Mary-lul phal-ul kochi-ess-ta
 doctor-Nom Mary-Acc arm-Acc cure-Past-Decl
 'The doctor cured Mary's arm.'
- (71) Chelswu-ka sap-ul caru-lul cap-ass-ta
 Chelswu-Nom shovel-Acc handle-Acc grab-Past-Decl
 'Chelswu grabbed the handle of the shovel.' (Tomioka & Sim 2005: 279)

Secondly, the present approach predicts that as long as the external possessor can be construed as part of the eventuality, its possession relation with the object need not be inalienable, contrary to what is widely assumed. Indeed, inalienable possession seems to be a strong tendency rather than an absolute requirement. The example in (72) is acceptable as long as Swuni is wearing the dress, thereby being conceived of as being part of the eventuality expressed by the verb (Yoon 2001, Yeon 1999). Yeon (1999) notes that the contrast in (73) reflects our knowledge of the world in that it is easier to perceive Mary being part of a scolding event if her only son is the patient than if her teacher is the patient.

- (72) Cheli-ka Swuni-lul chimacalak-ul pwutcap-ass-ta
 Cheli-Nom Swuni-Acc dress.train-Acc catch-Past-Decl
 'Cheli caught the train of the dress that Swuni is wearing.' (Yoon 2001: 6)
- (73) John-i Mary-lul ?sensayng-ul / oyatul-ul ttayli-ess-ta
 John-Nom Mary-Acc teacher-Acc / only son-Acc hit-Past-Decl
 'John hit Mary's teacher / only son.' (Yeon 1999: 225)

On the other hand, no such interpretational restriction obtains for the external possessor of a subject. In (74), Swuni need not be wearing the dress and in (75), the possessee can be *sensayng* 'teacher' or *oyatul* 'only son', without any effects on the acceptability.

- (74) Swuni-ka chimacalak-i kil-ta
 Swuni-Nom dress.train-Nom long-Decl
 'It is Swuni whose train of the dress is long.'
- (75) Mary-ka sensayng-i / oyatul-ka cwuk-ess-ta
 Mary-Nom teacher-Nom / only son-Nom die-Past-Decl
 'It is Mary whose teacher / only son died.'

A third prediction is that licensing an external possessor of an object is almost impossible if the predicate is stative. This is because stative sentences describe a relation among participants which holds true during the period of time specified by the context. It is extremely difficult to introduce a new participant into such a situation, as demonstrated by the ungrammaticality of the following example.

- (76) *Chelswu-ka Yenghi-lul elkwul-ul cohaha-n-ta
 Chelswu-Nom Yenghi-Acc face-Acc like-Pres-Decl
 'Chelswu likes Yenghi's face.' (Yoon 1997: 250)

Nevertheless, if an external possessor can be construed as being a participant in a stative situation expressed by the sentence, the acceptability improves drastically, as (77) shows. Liking someone's personality is usually synonymous with liking

that person. Thus, the possessor of the personality can be readily interpreted as being part of the state in which the speaker likes the particular personality. By contrast, in (76) above, it is difficult to interpret Yenghi being a participant in the state in which Chelswu likes a particular face, which happens to belong to Yenghi.

- (77) Nay-ka Swuni-lul sengkyek-ul coaha-n-ta
 I-Top Swuni-Acc personality-Acc like-Pres-Decl
 'I like Swuni's personality.' (Choo 1994: 129)

Finally, the proposed analysis correctly predicts the well-known observation that the acceptability of an external possessor of an object is subject to great variation among speakers, particularly when the predicate is of 'low impact', such as *see* and *draw*, like the following. Whether the external possessor can be part of an eventuality depends on the speaker's view of the eventuality.

- (78) Chelswu-ka Yenghi-lul elkul-ul po-ass-ta
 Chelswu-Nom Yenghi-Acc face-Acc see-Past-Decl
 'Chelswu saw Yenghi's face.' (Yoon 1997: 250)

Importantly, there is a general consensus that if an adverbial is inserted, which makes it easier for the possessor to be construed as being part of the eventuality, the acceptability improves. Thus, the above sentence sounds much more acceptable with the insertion of adverbials such as *ttwulecikey* 'hard', as illustrated below.

- (79) Chelswu-ka Yenghi-lul elkul-ul ttwulecikey po-ass-ta
 Chelswu-Nom Yenghi-Acc face-Acc hard see-Past-Decl
 'Chelswu looked at Yenghi's face hard [enough to make a hole in it].'
 (modified from Yoon 1997: 252)

Thus, the contrast in the interpretation of an external possessor of an object and that of a subject arises as a result of the interaction between re-association and the difference in the grammatical function of the possessee. The proposed account correctly predicts the pragmatic influence on the possible interpretations of the external possessor of an object. Before concluding, the next section examines some alternative analyses of licensing an external possessor and the affected reading.

6 Alternative Analyses

The literature offers a wide range of alternative approaches to external possession in Korean. Here, I will discuss three approaches, which are similar to the proposed

approach.²⁴ The alternatives deal exclusively with external possession involving an object. However, considering the syntactic similarities between an external possessor of a subject and that of an object, an uniform approach to the syntax of external possession appears desirable. I will therefore discuss the analyses with reference also to external possession involving a subject.

A first alternative is in terms of θ -identification in the sense of Higginbotham (1985) (Yoon 1989, 1990, Maling & Kim 1992, O'Grady 2002). According to Higginbotham, θ -role assignment involves two separate processes: a verb θ -marks an argument and the argument in turn θ -binds the relevant position in the verb's argument structure. Verbs θ -mark only saturated arguments, which contain no unassigned θ -role in its θ -grid. However, a possessee argument contains an unassigned θ -role, because its argument, the possessor, is not realised internally to the projection it heads. This means that a possessee is unsaturated and cannot be assigned a θ -role by the verb. Under such a circumstance, the proponents of this alternative argue, the unassigned θ -role in the possessee's θ -grid and that in the verb's θ -grid can be 'identified', with the effect that the recipient of the identified θ -role is interpreted as a semantic argument of both the verb and the possessee.

Since the identified θ -role is assigned by the verb, it follows that the external possessor behaves like an argument of the verb and through θ -identification, its semantic relation with the possessee is accounted for. Moreover, the approach captures some properties observed in section 4. As unsaturated arguments are non-referential, the possessee's inability to undergo movement and to tolerate appositive modification is explained (cf.(58)-(63)). However, according to this analysis, the external possessor has the same semantic / pragmatic relation to the verb as the possessee does to the verb.²⁵ As we saw in (64) and (65), this is not true.

A second alternative also involves a thematic operation, according to which the possessee's θ -role for the external possessor is inherited by the verb's θ -grid (Cho 1992, 1993, Yoon 1997).²⁶ Yoon implements this idea in terms of Higginbotham's (1985) system of θ -role assignment. The verb and the possessee form a complex

²⁴ One other major approach which ought to be noted here involves an operation known as 'possessor-raising', where the external possessor originates within the DP headed by the possessee and moves to a position where its Case can be assigned / checked (Kang 1986b, Kitahara 1993, Cho 1998, 2000, cf. also Tateishi 1991, Ura 1996 and references therein for external possession in Japanese). However, this approach has frequently been claimed to face problems (Yoon 2001, Tomioka & Sim 2005, Heycock & Doron 2003).

²⁵ Maling & Kim (1992) propose a complex manner in which the possessor and the possessee are assigned θ -roles in terms of θ -marking, θ -binding and θ -identification. However, the end result still seems to imply that the possessor and the possessee have the same thematic relation to the verb, since they together θ -bind the open position in the verb's θ -grid.

²⁶ Cho's (1992, 1993) analysis is not quite as specific as Yoon's (1997) about how an external possessor is assigned a θ -role. The former simply states that a θ -role contained by the possessee is 'compositionally' assigned to the external possessor by the possessee and the verb.

predicate, which takes the external possessor as its complement and assigns it the inherited θ -role. This approach is very similar to the proposed account in that the verb thematically selects the possessee and the possessor is assigned a θ -role which is linked to the lexical meaning of the possessee.

The selectional restriction by the verb on the possessee argument alone is therefore explained. The observations concerning the impossibility of moving the possessee and modifying it with an appositive adjective are also captured by virtue of its unsaturated status, as in the θ -identification approach above. However, Yoon claims explicitly that a *pro* cannot be present in the possessee, as it would render the possessee referential. Contrary to his claim, we saw in section 3.1 that it is possible to overtly realise a *pro* associated with an external possessor.

Furthermore, this approach makes some incorrect predictions. A first prediction is that more than one semantic argument of the possessee can be licensed externally. This is because nothing in the operation appears to restrict the number of θ -roles being inherited by the verb's θ -grid. A second prediction is that the external possessor can be a PP, since there is no categorial restriction on the recipient of the θ -role that is inherited. Finally, it should be possible for the possessee to be an adjunct. Nothing appears to prevent an unassigned θ -role contained in an adjunct to be inherited by the verb's θ -grid. We saw in section 4.1 that all three predictions are incorrect (cf. (42), (46)-(47), (49)).

On the proposed account, the first and the last properties follow from the fact that re-association makes direct use of the θ -role assigned to the possessee. An adjunct does not receive a θ -role. A possessor of a noun contained in an adjunct therefore cannot be licensed externally. As for the last property, because an argument usually receives one θ -role, a semantic representation linked to only one argument can undergo re-association. Finally, the presence of a *pro* is crucial for re-association. The absence of PP-*pro* in the language thus explains the second property.

A third alternative analysis is proposed by Tomioka & Sim (2005), in which a phonologically null verb, *v*, with the meaning 'affect' is posited. This functional head is located above VP containing the possessee and the lexical verb. The external possessor of an object is base-generated in the specifier position of the functional head and receives an affected θ -role from the functional head, explaining its argument-hood and affected interpretation. VP and vP each represent an event.²⁷ The event corresponding to VP is a material part of the event represented by vP. Thus, in sentences such as (2a), the *kicking-the-leg* event is a material part of the *affecting-John* event. In other words, (2a) is interpreted as 'Mary affected John by kicking the leg.'

²⁷ For Tomioka & Sim (2005), the relevant notion is 'event' rather than 'eventuality' in the sense that states are excluded (Changyong Sim, p.c.). This assumption is problematic, because external possessors of objects are allowed in stative sentences, as we saw in section 3.2.

This alternative appears similar to the proposed approach in that it integrates the external possessor as a participant in the event expressed by the sentence. However, a general problem with this kind of decompositional approach is that it predicts that the two events can be modified separately. As the following example illustrates, the *affecting* event cannot be modified independently from the *kicking-the-leg* event. The fact that such modification does not result in semantic anomaly is shown by the grammaticality of the English translation.

- (80) *Mary-ka ppalli John-ul seoseohi tali-lul cha-ss-ta
 Mary-Nom quickly John-Acc slowly leg-Acc kick-Past-Decl
 Intended: 'Mary quickly annoyed John by slowly kicking his leg.'

Moreover, the semantic content of the functional head seems arbitrary. It is unclear why it should be *affected*, rather than, for instance, *seen*, yielding an interpretation in which John was seen by Mary while she was kicking his leg.

The authors also claim that the tendency for the inalienable possession relation is due to pragmatic factors. However, it is unclear how this property follows from the proposal. No *pro* is postulated internal to the possessee's projection. One can conceive of a variety of ways in which an argument can be affected by the event described by the lower VP without it being an inalienable possessor of the object. In particular, the proposal incorrectly predicts an example like the following to be grammatical, where John is understood to be affected by Mary kicking Bill's leg.

- (81) *Mary-ka John-ul Bill-uy tali-lul cha-ss-ta
 Mary-Nom John-Acc Bill-Gen leg-Acc kick-Past-Decl
 Intended: 'Mary affected John by kicking Bill's leg.'

In addition to the problems each alternative faces, one feature that all three analyses share is that the affected interpretation must be simply stipulated as a characteristic unique to the external possessor of an object. The first two alternatives propose an interpretive constraint on the phrase in question and the third alternative posits a functional head especially to capture the interpretation. The absence of the reading for the external possessor of a subject remains unexplained. There appears to be no reason why the interpretive constraint should not hold of both types of external possessors or why another functional head with comparable semantic content cannot be posited above the subject. On the proposed analysis, the contrast in the reading can be explained as a consequence of the necessity in language to distinguish external θ -roles from internal θ -roles.

7 Summary

In the preceding sections, I offered a uniform analysis of external possession in Korean in terms of a thematic operation. I proposed that in general a θ -role can be re-associated with different semantics made available during the course of a derivation. In external possession, the θ -role assigned to the possessee argument is re-associated with the *Possessor* semantics related to the possessee. The re-associated θ -role is subsequently assigned to the external possessor, which is base-generated in its surface position. This operation is possible only if the possessee argument contains a *pro* related to the external possessor.

The obligatory affected reading of the external possessor of an object followed from the claim that it is assigned a re-associated internal θ -role. Being a recipient of a θ -role contained in the verb's θ -grid, it must be construed as a participant in the eventuality described by the verb. However, as the semantic representation associated with the θ -role provides no relevant information, the affected reading arises due to pragmatic considerations. The absence of a comparable reading for the external possessor of a subject is explained as a consequence of the necessity in grammar to distinguish external θ -roles from internal θ -roles.

I also showed that the proposed account is able to capture a number of properties which are difficult to capture under alternative approaches, which included restrictions on the types of constituents that may take part in external possession and the absence of the 'affected' reading for the external possessor of a subject.

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