

# Chapter 1

## Introduction

### 1 External Possession

In a number of languages, a possessor of a subject or an object can be expressed as a separate constituent and behave like an argument of the verb. The following are examples from some languages exhibiting this construction. This phenomenon is sometimes referred to as ‘External Possession’ (Payne & Barshi 1999).

(1) *Spanish*

- a. El enfermero le lavó la cara al paciente  
The nurse him-Dat washed the face to-the patient  
‘The nurse washed the patient’s face for him.’ (Kempchinsky 1992: 138)
- b. El hombre le cortó las ramas al árbol  
the man him-Dat cut the branches to-the tree  
‘The man cut the branches of the tree.’

(2) *Hebrew*

- a. Gil higdil le-Rina et ha-tmuna  
Gil enlarged to-Rina Acc the-picture  
‘Gil enlarged Rina’s picture.’ (Landau 1999: 5)
- b. ha-yalda kilkela la-Dan ’et ha-radio  
the-girl spoiled to-Dan Acc the-radio  
‘The girl broke Dan’s radio.’ (Borer & Grodzinsky 1986: 181)

(3) *German*

- a. Jan hat der Maria die Haare geschnitten  
Jan has Maria-Dat the hair-Acc cut  
‘Jan has cut Mary’s hair yesterday.’
- b. Tim hat der Nachbarin das Auto gewaschen.  
Tim has the neighbour(Dat, Fem) the car-Acc washed  
‘Tim washed the neighbour’s car.’ (Lee-Schoenfeld 2003: 1)

(4) *Japanese*

- a. usagi-ga      mimi-ga      naga-i.  
 rabbit-Nom    ear-Nom      long-Pres  
 ‘It is rabbits which have long ears.’ (modified from Takahashi 1994:395)
- b. dansei-ga    heikin-zyumyoo-ga    mizikai.  
 male-Nom    average-life-span-Nom    short-Pres  
 ‘It is men whose average life-span is short.’ (modified from Kuno 1973: 71)

(5) *Korean*

- a. Mary-ka      meli-ka      kil-ta  
 Mary-Nom      hair-Nom    long-decl  
 ‘It is Mary whose hair is long.’
- b. Mary-ka      John-ul      tali-lul      cha-ss-ta  
 Mary-Nom      John-Acc      leg-Acc      kick-Past-Decl  
 ‘Mary kicked John’s leg.’ (D.-I. Cho 1992: 15)

In the examples in (1), (2), (3) and (5b), a possessor of the direct object is realised externally to the constituent headed by the direct object, while in the examples (4) and (5a), a possessor of the subject is realised externally. I will call these possessors ‘external possessors’. Most common types of external possession found across languages involve possessors of direct objects, as in the Spanish, German and Hebrew examples above.

It is well known that external possessors display regular argument properties. Besides the superficial observation that they all bear Case associated with constituents at the clausal level, as opposed to genitive Case, which is typically found internally to a nominal projection, they exhibit other properties associated with arguments. They can be questioned by using a *wh*-phrase for arguments, passivised, host a floating quantifier, bind an anaphor and so on. The following examples illustrate some of the properties. The Hebrew example in (6) demonstrates that an external possessor of the object can be questioned by ‘who’ independently of the object. (7) shows that it is possible for an external possessor of an object to undergo passivisation in Korean. Finally, the Japanese example in (8) illustrates that an

external possessor of a subject can act as an antecedent for the subject-oriented reflexive *zibun*.

- (6) *lə-mi ha-yalda kilkela 'et ha-radio?*  
 to-who the-girl spoiled Acc the-radio  
 ‘whose radio did the girl break?’ (Borer & Grodzinsky 1986: 182)
- (7) *Mary<sub>i</sub>-ka John-hanthey t<sub>i</sub> tali-lul cha-i-ess-ta*  
 Mary-Nom John-by leg-Acc kick-pass-Past-Decl  
 ‘Mary was kicked in the leg by John.’
- (8) *John<sub>i</sub>-ga hahaoya<sub>j</sub>-ga zibun<sub>i/j</sub>-o seme-ta*  
 John-Nom mother-Nom self-Acc blame-Past  
 ‘John<sub>i</sub>’s mother<sub>j</sub> blamed self<sub>i/j</sub>.’ (modified from Tateishi 1988: 339)

The argument-like behaviour of an external possessor indicates that it is licensed syntactically as an argument of the verb which heads the clause. This implies however that in each of the examples in (1)-(5), there is one argument too many for the type of predicate which heads the sentence. For instance, the Spanish examples in (1) both contain a transitive verb, yet two internal arguments are present, and the Japanese sentences in (4) are each headed by an intransitive predicate, but there are two phrases marked with the nominative case marker *ga*.

Another striking property of this phenomenon is that there is an asymmetry in the interpretation between the external possessor of a subject and that of an object. An external possessor of the internal argument is, cross-linguistically, most typically interpreted as positively or negatively ‘affected’ by the action denoted by the verb and the internal argument. In Spanish, Hebrew and German, the dative external possessor is understood to be positively or adversely affected (Landau 1999, Lee-Schoenfeld 2003, Payne & Barshi 1999), while in Korean only the latter reading is available (Yoon 1989, 1990). On the other hand, no such restriction applies to the external possessor of a subject. Thus, in the Japanese example in (4a), *usagi* ‘rabbit’ is not understood as either positively or adversely affected by having long ears.

Presented with such observations as above, a question which naturally arises is: how are the external possessors licensed? This question will be the topic of this thesis.

There are in fact two aspects to this question. Traditionally, the licensing of an argument involves  $\theta$ -role assignment and checking / assignment of Case. Since an external possessor behaves like an argument of the verb, the relevant question becomes (i) how is an external possessor assigned a  $\theta$ -role and (ii) how is its Case checked / assigned? Let us first consider the question related to  $\theta$ -roles. The  $\theta$ -roles of a predicate are considered to be part of the lexical property of the predicate, which are assigned to appropriate arguments of the predicate (Williams 1981, Chomsky 1981). However, the above sentences are all grammatical without the external possessors. A  $\theta$ -role that an external possessor receives therefore cannot be part of the verb's lexical property. Where then does the extra  $\theta$ -role, in a sense, come from? Moreover, it is not sufficient that the external possessors are licensed as a syntactic argument of the verb. The semantics associated with this  $\theta$ -role must ensure that it is also construed as a possessor of another argument of the same verb.

Turning to the second question concerning Case, it is obvious from the above examples that Case on an external possessor is subject to cross-linguistic variation and depends on what grammatical function the possessee bears to the verb. In Spanish, Hebrew and German, the external possessors appear in dative Case, as shown by the examples in (1), (2) and (3), respectively. Dative Case in these languages is typically associated with the grammatical function of indirect object and with certain thematic roles, such as Goal, Experiencer or Recipient. On the other hand, in Japanese and Korean, external possessors seem to take on the case of their possessee: the external possessor of a subject appears in the nominative, as in (4) and (5a), and that of an object bears accusative case, as illustrated in (5b).

A transitive verb typically has accusative Case to assign or a [+accusative] feature to check against its direct object. Since external possessors of internal arguments behave syntactically like internal arguments, it seems reasonable to assume that Case on these external possessors are also assigned / checked by the verb. However, how does a transitive verb, which is only specified for one accusative object, license dative or accusative Case on an external possessor? Similar observations can be made for examples in which the external possessor is in the

nominative, namely (4) and (5a). Whatever assigns or checks nominative Case in the respective language must be able to license an extra instance of nominative phrase.

In addition to the observed difference in Case-marking on external possessors, Japanese and Korean further differ radically from most other languages which permit external possession constructions. They allow an indefinitely large number of external possessors, one possessor modifying another which immediately follows it. This is demonstrated below. The following examples all contain more than one external possessor. The Japanese and Korean examples in (9)-(10) are grammatical, while the Spanish, Hebrew and German examples in (11)-(13) are all ungrammatical.

(9) *Japanese*

kitahankyuu-ga      anettai-ga      usagi-ga      mimi-ga      naga-i.  
 N.Hemisphere-Nom    subtropics-Nom    rabbit-Nom    ear-Nom    long-Pres  
 ‘It is the Northern Hemisphere, where rabbits in the subtropics have long ears.’

(10) *Korean*

Mary-ka      John-ul      pal-ul      kkuth-ul      cha-ss-ta  
 Mary-Nom      John-Acc      foot-Acc      end-Acc      kick-Past-Decl  
 ‘Mary kicked the end of John’s foot.’      (modified from S. Cho 1998: 86)

(11) *Spanish*

\*El enfermero le      le      lavó      la cara      a la hermana      al paciente  
 the nurse      her-Dat      him-Dat      washed      the face      to-the sister      to-the patient  
 ‘The nurse washed the patient’s sister’s face for him (and) for her.’  
 cf. El enfermero      le      lavó      la cara      a la hermana      del paciente  
 the nurse      her-Dat      washed      the face      to-the sister      of-the patient

(12) *Hebrew*

\*ha-yalda      kilkela      la -Dan      la-axot      et      ha-radio  
 the-girl      spoiled      to-Dan      to-sister      Acc      the-radio  
 ‘The girl broke Dan’s sister’s radio.’  
 cf. ha-yalda      kilkela      la-axot      Dan      et      ha-radio  
 the-girl      spoiled      to-sister      Dan      Acc      the-radio

(13) *German*

\*Jan hat der Maria gestern ihrer Schwester die Haare geschnitten

Jan has the Mary-Dat yesterday her sister-Dat the hair-Acc cut

‘Jan has cut Mary’s sister’s hair yesterday.’

cf. Jan hat gestern Marias Schwester die Haare geschnitten.

Jan has yesterday Maria’s sister the hair-Acc cut

Japanese and Korean thus obviously exhibit extreme cases of external possession constructions. As a consequence, the question of how an external possessor is licensed becomes much more critical. It seems highly unlikely that an external possessor is an optional argument of the verb in these languages. This is because such a view amounts to claiming that Japanese and Korean predicates can have an indefinite number of optional  $\theta$ -roles, which is clearly an undesirable claim to make. Whatever allows the assignment of an extra  $\theta$ -role to an external possessor must be a recursive operation. Furthermore, Case checking / assignment is traditionally regarded as a bijective relation, yet in Japanese and Korean, external possessors take on the case of the possessee, resulting in a clause containing multiple phrases bearing identical case-marking. These constructions are widely referred to as multiple nominative or accusative constructions. A theory of external possession must therefore be able to account for how in some languages, but not in others, an indefinite number of  $\theta$ -roles can be made available for assignment by a verb and how multiple occurrences of the same case can be licensed in a single clause. It appears that examining the extreme cases of the phenomenon may reveal more about the underlying mechanism that makes the licensing of external possessors possible. In this thesis, I will therefore concentrate specifically on Japanese and Korean. The two languages share a significant number of other properties in their syntax. Moreover, since Korean allows the possessor of an object to be licensed externally, while Japanese does not, comparing the two languages may provide some insight into why the ‘affected’ reading arises only for external possessors of objects.

The aim of this thesis is thus to provide a uniform account of the syntax of external possession in Japanese and Korean. I argue that there is an operation available to Universal Grammar, which I will call ‘re-association’. This operation permits a verb to syntactically license an additional argument which is semantically

construed as an argument of another argument of the same verb. Crucially, it applies precisely when an argument of the verb contains a variable. The additionally licensed argument acts as a binder for the variable. In the external possession constructions, the possessee contains a variable and the possessor acts as the antecedent for this variable. This operation licenses a possessor externally to the possessee argument regardless of whether it has the grammatical function of subject or object. In order to highlight the fact that a possessee is both a syntactic and semantic argument of the verb, while an external possessor is syntactically an argument of the verb, but is semantically an argument of the possessee, I will sometimes refer to the former as a ‘core’ argument of the verb, and the latter as a ‘derived’ argument of the verb.

The asymmetry with respect to the ‘affected’ interpretation of an external possessor follows from the way in which information related to participants in the eventuality described by the verb is composed. An external possessor of an internal argument must be interpreted as a participant in the eventuality, while that of a subject need not be.

Furthermore, I will demonstrate that re-association is not always necessarily involved in licensing multiple phrases bearing identical case-marking in Japanese and Korean. In other words, it is possible for more than one phrase to appear in the same case without there being a possessive relation between them. I will illustrate this point with other non-possessive types of multiple nominative constructions in Japanese. Although Korean also displays non-possessive types of multiple nominative and accusative constructions, I will restrict the discussion to Japanese in this thesis.<sup>1</sup>

In the remainder of this chapter, I will develop the core of the operation of re-association, which will be applied to external possession constructions in Japanese and Korean in Chapters 2 and 4 respectively. I will also introduce some other aspects of external possession which are discussed in the rest of the thesis. The following section first provides some background by comparing the account to be proposed in this thesis with alternative approaches to external possession constructions offered in

---

<sup>1</sup> See Gerds & Youn (1988), Whitman (1991, 2000), Wechsler & Lee (1996), Schütze (1996, 2001) and J. H.-S. Yoon (2004) for non-possessive types of multiple accusative and nominative constructions in Korean.

the literature. In Section 3, I will propose a theory of  $\theta$ -role assignment and then describe in detail how a  $\theta$ -role is made available for an external possessor by means of re-association. Section 4 briefly addresses issues concerning Case on external possessors. Section 5 provides a summary of the thesis.

## 2 Licensing an External Possessor

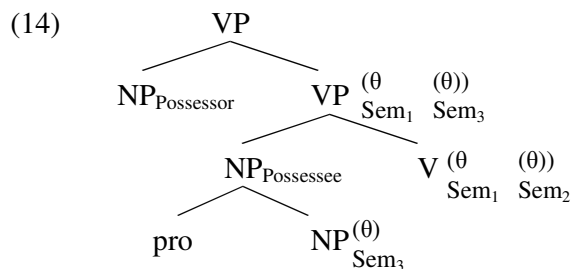
The question of how one argument can be licensed syntactically by a verb and be interpreted as a possessor of another argument has been a long-standing issue. The literature offers two major approaches. One claims that an external possessor is related to a null element within the DP/NP headed by the possessee. This approach is developed based on the observation that a possessor of an argument can generally appear in the genitive or with an appropriate preposition within the possessee DP/NP. Two views have further been proposed with respect to the nature of the null element. Some argue that it is a trace created by movement of the external possessor in an operation known as *Possessor Raising* or *Possessor Ascension* (Kuno 1973, Fukuda 1991, Tateishi 1991, Kitahara 1993, Takahashi 1994, 1996, Ura 1996, S. Cho 1998, 2000, Landau 1999, Lee-Schoenfeld 2003), while others argue that it is *PRO* or *pro* bound by a base-generated external possessor (Gueron 1985, Borer & Grodzinsky 1986, Cheng & Ritter 1987, Kempchinsky 1992, Doron & Heycock 1999, Heycock & Doron 2003, Vermeulen 2002).

The other approach maintains that there is no syntactic dependency between the external possessor and any position internal to the possessee DP/NP. Some researchers have proposed that the possessive interpretation between the two arguments is derived in semantics by operations such as  $\theta$ -identification in the sense of Higginbotham (1985) or Function Composition in the sense of Di Sciullo & Williams (1987) (Maling & Kim 1992, D.-I. Cho 1992, 1993, J. H.-S. Yoon 1989, 1990, J.-M. Yoon 1997) or inferred from semantics or pragmatics (Saito 1982, Heycock 1993b, Heycock & Lee 1989, 1990, Pylkkänen 2002, Shibatani 2001, Tomioka & Sim 2005).

In the theory developed in this work, the external possessor is associated with a variable, a resumptive *pro*, in the NP headed by the possessee. The presence of a variable in a core argument allows the verb to license a derived argument which acts



as an antecedent for that variable by the operation of ‘re-association’. More specifically, the semantic representation associated with the  $\theta$ -role assigned to the resumptive *pro* by the possessee is re-associated with the  $\theta$ -role in the verb’s  $\theta$ -grid which is assigned to the core argument. The re-associated  $\theta$ -role is then assigned to the derived argument. Thus, a clause containing an external possessor of an object has structures like the following. The details of this analysis are discussed in the next section.



One consequence of the proposed analysis is that an external possessor is licensed syntactically as an argument of the verb, since the  $\theta$ -role is in the verb’s  $\theta$ -grid, but is interpreted semantically as an argument of the possessee, as the associated semantic representation is related to the lexical meaning of the possessee. A  $\theta$ -role which is assigned to the external possessor becomes available in the verb’s argument structure only in the course of a derivation. This seems to be a desirable result, as it is not part of the lexical property of the verb to license a possessor of one of its core arguments as its own argument.

The ‘affected’ interpretation of an external possessor of an object has also received two kinds of explanation in the literature. Some argue that the external possessor is assigned a  $\theta$ -role or some features associated with an affected interpretation by a functional head (Lee-Schoenfeld 2003, Tomioka & Sim 2005), or by the verb, or by the combination of the verb and the possessee (Kempchinsky 1992, J.-M. Yoon 1997). On the other hand, many works on the Korean multiple accusative construction take the affected interpretation to be a primitive semantic / pragmatic condition constraining the grammaticality of the construction (Yoon 1989, 1990, Shibatani 1994, Yeon 1999). Analyses obviously vary in the precise manner in which the affected interpretation is obtained, but most assume that the affected interpretation of an external possessor of an object is derived independently of its

being licensed as a syntactic argument of the verb, while being interpreted as a semantic argument of another argument. Moreover, although it is not explicitly stated, it seems reasonable to assume that in these analyses the reason why an external possessor of a subject does not receive a comparable interpretation is due to the absence of a relevant head which can assign it an affected  $\theta$ -role or that the affectedness constraint does not apply to an external possessor of a subject.

By contrast, I will argue that the ‘affected’ reading arises as a consequence of the operation of re-association that derives the constructions. The semantic representations associated with  $\theta$ -roles in the verb’s  $\theta$ -grid usually provide information as to how the recipients of the  $\theta$ -roles participate in the eventuality described by the verb. However, as the semantic representation linked to a re-associated  $\theta$ -role, which is assigned to an external possessor, is related to the lexical meaning of the possessee, it provides no relevant information concerning the possessor’s participation in the eventuality. The affected reading obtains in such instances due to pragmatics. Considering that it must be part of the eventuality, it seems most natural to interpret it as somehow affected by the eventuality (Shibatani 1994). 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.

This, however, applies only to the external possessor of an object, which is licensed as an internal argument of the verb. I assume, following Neeleman & van de Koot (2002), that external  $\theta$ -roles are no longer part of the verb’s  $\theta$ -grid when they are assigned to subjects, which allows external  $\theta$ -roles to be distinguished from internal  $\theta$ -roles. The re-associated  $\theta$ -role assigned to the external possessor of a subject is an external  $\theta$ -role and therefore not part of the verb’s  $\theta$ -grid. As a result, it need not be interpreted as a participant in the eventuality and does not receive an ‘affected’ reading. The proposal is developed in detail in Chapter 4.

Thus, in the theory proposed in this thesis, the affected reading follows from the interaction of the operation that derives the construction with the independent property of language that external and internal  $\theta$ -roles must be distinguished.

### 3 Re-association

In this section, I will first spell out my assumptions about how an argument is licensed syntactically and semantically. Subsequently, I will demonstrate how a derived argument is licensed by the operation of re-association.

#### 3.1 $\theta$ -role assignment

It is a widely held assumption that  $\theta$ -roles are purely syntactic objects and are mapped onto particular semantic representations determined by the predicate's lexical semantic structure or lexical conceptual structure at the syntax-semantics interface (Grimshaw 1990, Jackendoff 1983, 1990, Zubizarreta 1987, Levin & Rappaport 1995, among many others). Thus, a verb like *kick* has a representation as in (15), in which the two  $\theta$ -roles are associated with the semantic roles, *Agent* and *Patient*, respectively.

(15) kick    ( $\theta$             ( $\theta$ ))  
                  Agent        Patient

Although the associated semantics in the above representation 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 what is sometimes referred to as the neo-Davidsonian approach to argument-structure, the verb *kick* can be represented as in (16) (cf. Dowty 1989) and the labels *Agent* and *Patient* refer to the representations in (17a) and (17b), respectively.<sup>2,3</sup>

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

---

<sup>2</sup> Predicates such as *Agent* and *Patient* are themselves 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 thesis. I will therefore use the simplified labels.

<sup>3</sup> Re-association does not depend upon the neo-Davidsonian approach. I adopt it here only because it allows simple exposition of which part of semantic information is being (re-)associated with a  $\theta$ -role by the proposed operation.

- (17) 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 correctly with respect to the event 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 the term (*john*) replaces  $y$ . This ensures that *Mary* and *John* are interpreted as the agent and the patient in a kicking event. However, for ease of exposition, I will use the notation in (15), unless an explicit reference to the more complex semantic representation is required.

- (18) 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*,  $e$ )]

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  $\theta$ -role represents syntactic selectional requirements on the properties of an argument, such as category and that it bears Case. An argument is licensed as a syntactic argument of the predicate, if it meets the syntactic requirements of a  $\theta$ -role in the predicate's  $\theta$ -grid in the configuration of sisterhood.<sup>4</sup> I assume that  $\theta$ -roles in a  $\theta$ -grid are structured according to the thematic hierarchy and that an argument must always satisfy syntactic conditions of the least prominent  $\theta$ -role first (Grimshaw 1990). Although there are numerous versions of a thematic hierarchy on offer in the literature, I adopt here the following hierarchy proposed by Grimshaw (1990).<sup>5</sup>

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

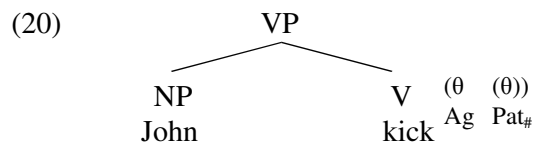
---

<sup>4</sup> Neeleman & van de Koot (2002) argue that the only structural relation which adheres to Inclusiveness (Chomsky 1995b) is in fact direct domination, rather than sisterhood. I believe that domination is equally compatible with the theory proposed in the main text. However, here, I will follow the general practice and assume that the relevant relation is sisterhood.

<sup>5</sup> See Grimshaw (1990) for references for other versions of thematic hierarchy.

When an argument satisfies the selectional requirements represented by a particular  $\theta$ -role, it must also replace the variable contained in the semantic representation associated with that  $\theta$ -role. This allows the argument a particular interpretation with respect to the verb, licensing the argument semantically. Thus, an argument is licensed if it meets the syntactic conditions of a relevant  $\theta$ -role under sisterhood and replaces the variable contained in the semantic representation associated with the same  $\theta$ -role. Consequently, when an argument and a node containing the verb's  $\theta$ -grid appear in the structural configuration of sisterhood, a  $\theta$ -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 1995b), but the configuration merely triggers a process which allows the argument to be interpreted in a way specified by the semantic representation associated with that  $\theta$ -role. 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 how re-association is executed in the next section, I will often refer to this process simply as '  $\theta$ -role assignment' for convenience.

In the following structure, *John* satisfies the syntactic requirements represented by the internal  $\theta$ -role of the verb *kick*, the least prominent  $\theta$ -role in the verb's  $\theta$ -grid: *John* has appropriate syntactic properties, such as the category NP and that it bears Case, and it appears in the sisterhood configuration to the node containing the verb's  $\theta$ -grid, namely V.<sup>6</sup> (The order of NP and V is irrelevant here.) *John* then replaces the variable contained in the semantic representation associated with the  $\theta$ -role, labelled *Pat* (Patient), as in (18b). This allows *John* to be interpreted as the patient of *kick*. # indicates that the semantic representation no longer contains a variable.



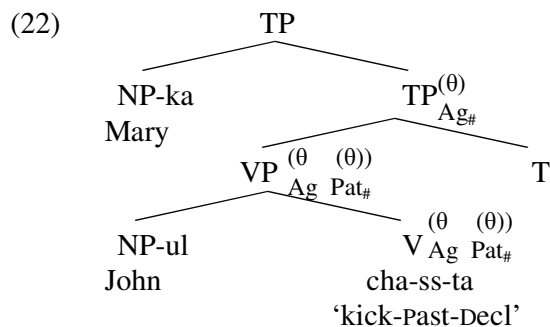

---

<sup>6</sup> The argument is represented as NP in the structure in (20). This is because I assume that nominal phrases in Japanese and Korean are NPs rather than DPs and can function as saturated arguments. However, nothing in the proposal hinges on this assumption.

Note that the  $\theta$ -grid is represented with the associated semantic representations in the above structure. However, I believe that semantic information is actually not present in syntactic structures, but in the corresponding semantic structures, which mirror the syntactic structures in accordance with principles of compositionality. The above notation 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 semantic information is available on that node in the corresponding semantic structure.

Following Neeleman & van de Koot (2002), I assume that the  $\theta$ -grid is copied up the tree until the selectional requirements of all the internal  $\theta$ -roles contained in the  $\theta$ -grid are satisfied. The external  $\theta$ -role is copied up on its own without any information related to the internal organisation of the  $\theta$ -grid. This assumption derives welcome effects in explaining properties unique to external arguments. However, since the assumption has no direct consequences for the analyses proposed in Chapters 2 and 3, I will simply adopt this assumption here and defer its elaboration until Chapter 4. Thus, the Korean sentence in (21) has the structure in (22) under this approach.

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



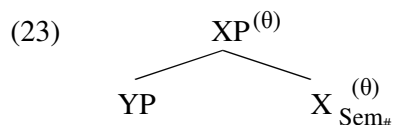
The subject *Mary-ka* satisfies the syntactic requirements of the verb’s external  $\theta$ -role, which has been copied up to TP. As the above structure implies, I assume that the subject is base-generated in a specifier position of a functional projection above VP. I will argue in Chapter 5 that this is a consequence of the general view that

syntactic predicates must be maximal projections (cf. Williams 1980, Heycock 1994, Chomsky 1995b).

Thus, an argument is licensed as such if it satisfies the syntactic conditions represented by a  $\theta$ -role of the predicate and replaces a variable in the semantic representation associated with the same  $\theta$ -role. I will now turn to the issue of how a  $\theta$ -role can be re-associated so that an extra argument can be licensed.

### 3.2 Re-associating a $\theta$ -role

The common view that  $\theta$ -roles are mapped onto particular semantic representations only at the interface suggests that a  $\theta$ -role and its associated semantic representation exist independently of each other and various operations may refer to them separately (Samek-Lodovici 2003). If this is indeed the case, it should be possible for them to be dissociated from one another and for a dissociated  $\theta$ -role to be re-associated with a different semantic representation during the course of a derivation. Samek-Lodovici (2003) shows that a very similar situation is attested in Italian light verb constructions, to which I will return in Chapter 6. Here, I propose that a  $\theta$ -role may be dissociated from its corresponding semantic representation, if an argument has satisfied the syntactic requirements of the  $\theta$ -role. One way of representing this idea is as in (23), where YP, an argument, satisfies the  $\theta$ -role in the predicate's  $\theta$ -grid under sisterhood and in copying up the  $\theta$ -role to the dominating node, it is dissociated from its associated semantic representation, *Sem*, yielding a  $\theta$ -role without any semantic representation linked to it. Recall that *Sem* is simply a label for a more complex semantic representation.



However, a  $\theta$ -role that is not mapped onto any semantic representation is not a legitimate object. An argument may satisfy the requirements of a  $\theta$ -role, but it cannot be interpreted with respect to the predicate if the  $\theta$ -role is not associated with any semantics. The principle of Full Interpretation, a condition which disallows the presence of an uninterpretable material in a structure, would prohibit such a

semantics-less  $\theta$ -role, rendering a sentence containing it ungrammatical. (Chomsky 1986, cf. also Samek-Locovici 2003).

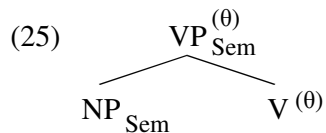
In order for a dissociated  $\theta$ -role to be able to license an argument, it must be re-associated with some semantic representation. I argue that this effect can be achieved by an operation called ‘re-association’, which is formulated as follows. I assume furthermore that the operation is part of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

(24) *Re-association*

A  $\theta$ -role can be re-associated with an appropriate part of the semantic representation of an argument that satisfies the  $\theta$ -role.

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  $\theta$ -role. In other words, the part also contains a predicate which corresponds to the kind of semantic roles usually linked to  $\theta$ -roles, such as *Agent* and *Patient*. The process of re-association will be demonstrated more in detail presently. In what follows, I will sometimes refer to such appropriate parts as independent representations, but this practice is merely for convenience. I will remain agnostic as to whether they exist as autonomous entities.

Re-association essentially allows a dissociated  $\theta$ -role to be re-associated with a semantic representation so that it is no longer uninterpretable, as shown below. Thus, a  $\theta$ -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.



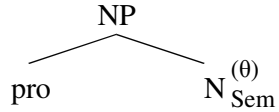
In (25), part of the semantic representation of the verb’s argument is available for re-association. One question which immediately arises is: when does such a situation occur? Considering that the semantic representation in question must contain a variable, the argument NP must be headed by an argument-taking noun. However,  $\theta$ -roles of a predicate are generally assigned within the maximal projection or the extended projection of that predicate. Moreover, I have claimed above that an



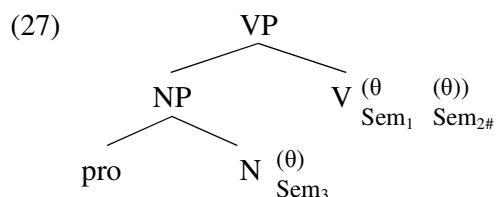
argument that satisfies the requirements of a  $\theta$ -role must also replace the variable in the associated semantic representation. It seems therefore unclear at first sight when the desired situation would arise.

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, are variables at LF, since they depend on another element in the sentence for their interpretation. That pronouns in certain environments, such as VP-ellipsis contexts, may receive a bound variable interpretation is well-known (cf. Reinhart 1983 and references therein). They are legitimate syntactic items, which function as arguments.

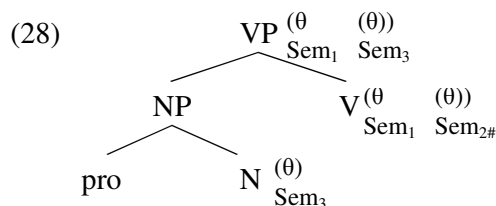
Thus, if, for instance, a resumptive *pro* appears as an argument of the argument-taking noun, as in (26a), the syntactic requirements represented by a relevant  $\theta$ -role in the noun's  $\theta$ -grid are satisfied. However, replacing the variable in the semantic representation linked to the  $\theta$ -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 (26a) has the semantic representation in (26b), which basically states that the noun takes one thematic argument and its relation to the noun is specified by the predicate *Sem*. The representation associated with the  $\theta$ -role, namely part of the representation in (26b) that is relevant for interpreting the thematic relation between the noun and its argument, is illustrated in (26c). The lambda-bound variable  $y$  is replaced by the variable  $z$ , which corresponds to *pro*, as demonstrated in (26d).

- (26) 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 (26a) is ungrammatical as it is, as the argument of the noun lacks interpretation.<sup>7</sup> Suppose that the NP in (26a) is realised as an internal argument of a transitive verb, as illustrated below. Here, it satisfies the syntactic requirements represented by the internal  $\theta$ -role in the verb's  $\theta$ -grid and replaces the variable in the associated semantic representation  $Sem_2$ , indicated by #.



Under this specific circumstance, it is possible to dissociate the verb's internal  $\theta$ -role from its associated semantic representation,  $Sem_2$ , because it can be re-associated with a distinct semantic representation, namely  $Sem_3$ .  $Sem_3$ , which is the resultant representation in (26d), is appropriate for re-association with the internal  $\theta$ -role, because it contains a variable and is part of the semantic representation of the argument which has satisfied the  $\theta$ -role. This process yields the following representation.



In terms of semantics, re-association can essentially be viewed as an operation that introduces a lambda operator into a representation which would otherwise contain a unbound, uninterpretable variable. Notice that a representation that is appropriate for re-association always contains a free variable. Thus, in the resultant representation in (26d), repeated below as (29a), the variable  $z$  is unbound. As a result of re-association with the internal  $\theta$ -role, the representation looks like (29b), allowing the variable  $z$  to be replaced by an appropriate argument. The idea that re-association with a  $\theta$ -role introduces a lambda operator seems reasonable. A variable

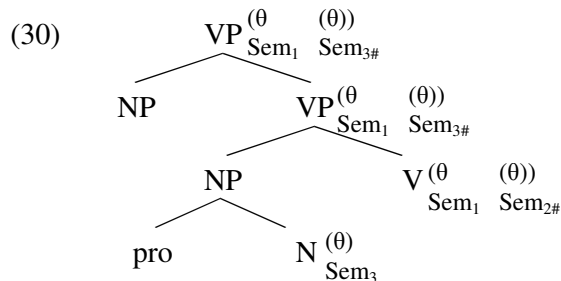
---

<sup>7</sup> 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.

cannot be replaced by an argument if the representation containing it is not associated with a  $\theta$ -role or if it is not bound by a lambda operator. Recall that an argument must satisfy the syntactic conditions of a  $\theta$ -role in order to be interpreted as specified by the semantic representation associated with that  $\theta$ -role.

- (29) a.  $\lambda x [\text{Sem}(x, z)]$   
 b.  $\lambda x \lambda z [\text{Sem}(x, z)]$

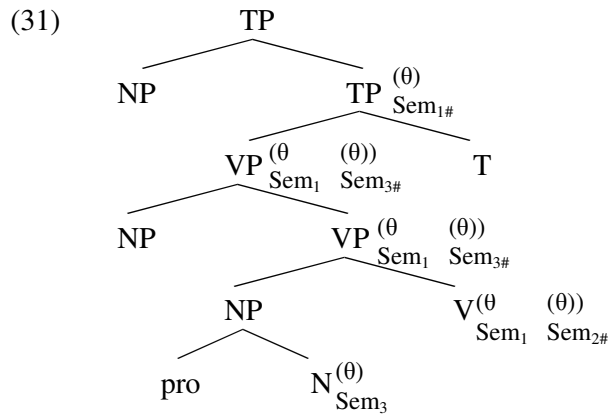
The  $\theta$ -grid of the VP in the structure in (28) is now identical to that of a transitive verb: it contains two  $\theta$ -roles. Another argument must therefore be merged with the structure to fulfil the syntactic requirements of the re-associated  $\theta$ -role and to replace the variable in the associated semantic representation. This is illustrated in (30). Recall that  $\theta$ -role assignment involves satisfaction of syntactic requirements by an argument under sisterhood. Thus, although the conditions represented by the internal  $\theta$ -role are met at V, those represented by the same internal  $\theta$ -role at VP are not.



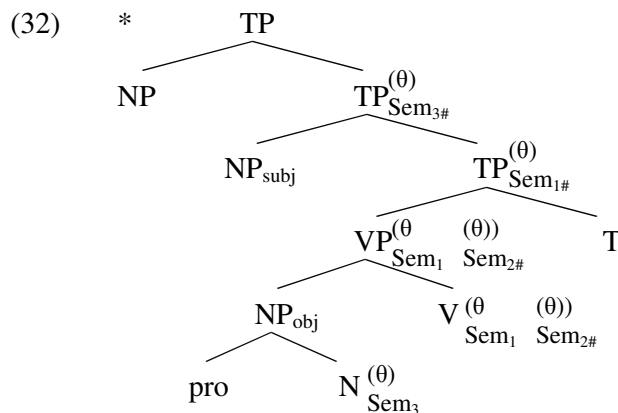
The newly introduced argument functions syntactically as an internal argument of the verb. It satisfies the syntactic conditions represented by the internal  $\theta$ -role, as this is the least prominent  $\theta$ -role in the  $\theta$ -grid. Furthermore, it is interpreted as a semantic argument of the other internal argument, because the semantic information represented here by  $Sem_3$  has its source in the lexical meaning of the noun and not of the verb. The operation of re-association is potentially recursive. The derived argument in (30) can itself contain a *pro*, making an appropriate semantic representation available for further re-association with the  $\theta$ -role which it is assigned.

Finally, an external argument is introduced into the derivation in (30) to fulfil the syntactic conditions represented by the external  $\theta$ -role in the verb's  $\theta$ -grid and

replace the variable in the associated semantic representation. This is demonstrated below in (31). Recall that only the verb's external  $\theta$ -role and not the whole  $\theta$ -grid is copied up beyond the verb's maximal projection.



Note the extremely local nature of the operation. According to the formulation in (24), it is not possible, for example to base-generate an argument of the object above the subject. The following structure illustrates this illegal instance of re-association. This process is disallowed, because the  $\theta$ -role whose conditions the subject has satisfied is re-associated with a semantic representation present in an argument other than the subject, namely the object.  $Sem_3$  present in the object can only be re-associated with the  $\theta$ -role the object satisfies, as in (31).



In sum, when an argument of the predicate contains a variable, the  $\theta$ -role whose syntactic conditions the argument satisfies can be dissociated from its associated semantic representation and be re-associated with the representation that contains the variable. This allows the verb to syntactically license a semantic

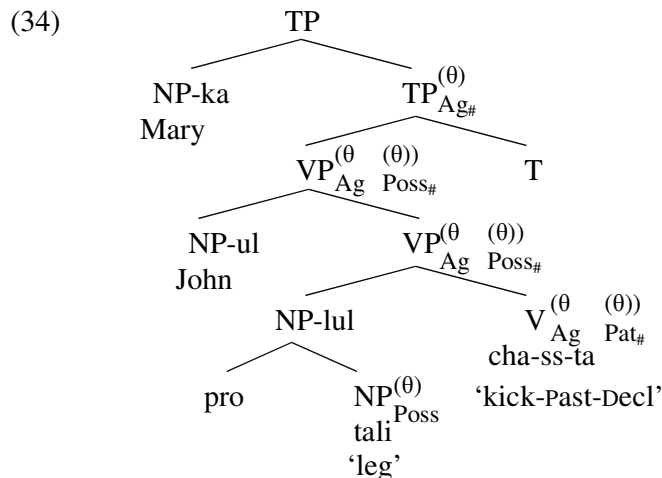
argument of another one of its arguments. In the following section, I will briefly illustrate how re-association can derive external possession constructions in Korean and Japanese.

### 3.3 External possession in Korean and Japanese

We saw in the previous section that applying the operation of re-association to the verb's internal  $\theta$ -role allows a transitive verb to syntactically license an extra internal argument which is interpreted as a semantic argument of another one of its core internal arguments. I argue that this is precisely the situation which is attested in a Korean multiple accusative construction such as (5b), repeated here as (33).

- (33) Mary-ka      John-ul      tali-lul      cha-ss-ta      (Korean)  
 Mary-Nom      John-Acc      leg-Acc      kick-Past-Decl  
 'Mary kicked John's leg.'

Here, *tali*, 'leg' is the argument-taking noun and *John* is the extra internal argument. The above example has a structure like the following. I assume that a possessor is generally base-generated in a specifier position of NP.



The noun *tali* 'leg' has the semantic representation in (35a). The  $\theta$ -role in its  $\theta$ -grid is associated with part of the representation shown in (35b), which contains the relevant information for interpreting its argument as a possessor of the noun. In other words, *Poss* in the above structure is a label for the representation in (35b).

- (35) a.  $\lambda x \lambda y$  [leg (x) & Possessor (x, y)]  
 b.  $\lambda x \lambda y$  [Possessor (x, y)]

The resumptive *pro* satisfies the syntactic requirements of the  $\theta$ -role of the noun under sisterhood and replaces the variable in the associated semantic representation. This results in the representation still containing a variable, as a resumptive *pro* is a variable in the semantics. This is demonstrated below, where the variable  $z$  corresponds to the *pro*. Thus, the argument of the noun *tali* ‘leg’ is licensed syntactically, but not semantically.

- (36)  $\lambda x \lambda y$  [Possessor (x, y)]( $z$ )  $\rightarrow$   $\lambda x$  [Possessor (x, z)]

By contrast, the NP headed by *tali* is licensed syntactically and semantically as the internal argument of the verb in the standard manner described in Section 3.1. It satisfies the syntactic conditions of the verb’s internal  $\theta$ -role and replaces the variable in the associated semantic representation, resulting in being interpreted as the patient of the action expressed by the verb. The internal  $\theta$ -role assigned to this argument can be dissociated from its associated semantic representation, as part of the semantic representation of the argument is appropriate for re-association, namely the representation in (36). Re-association of the dissociated  $\theta$ -role with the semantic representation in question introduces a lambda operator, yielding the representation below.

- (37)  $\lambda x \lambda z$  [Possessor (x, z)]

*John* fulfils the syntactic conditions of the re-associated internal  $\theta$ -role in the verb’s  $\theta$ -grid, the least prominent  $\theta$ -role, and replaces the variable in the associated semantic representation, (37). As a result, *John* functions syntactically as an internal argument of the verb, but is interpreted as the possessor of *tali*, ‘leg’.

Re-association is equally applicable to the verb’s external  $\theta$ -role, if a subject is headed by an argument-taking noun and its argument is realised as a variable. I argue that this is the situation found in Japanese and Korean multiple nominative



noun. This enables *usagi* ‘rabbit’ to be licensed as an additional external argument of the adjective, but be interpreted as a possessor of *mimi* ‘ear’. External possession in Japanese and Korean are examined in detail in Chapters 2 and 4, respectively.

## 4 Case

### 4.1 Cross-linguistic perspective

I claimed in the previous section that re-association is universally available. However, if this is true, why does every language not allow an indefinitely large number of possessors, as in Japanese and Korean (cf. (9)-(13))? Or, why are there languages which do not permit the external possession construction at all?

Following Yoon (1989, 1990), I propose that Case is responsible for the observed cross-linguistic variation. An external possessor is licensed as an argument and as such it is subject to the Visibility Condition (Chomsky 1986), a requirement that an argument bear Case. A language must have means to assign or check Case on an external possessor. I maintain that the phenomenon of external possession is universal, while its availability and/or form are determined by the case properties of each language. Thus, if a particular language has only one instance of Case available for an extra argument, at most one extra possessor is permitted. This seems to be the situation in Spanish, Hebrew and German, which allow at most one external possessor, as we saw in Section 1. On the other hand, if a language permits multiple occurrences of case, more than one external possessor is allowed, as seems to be the situation in Japanese and Korean. The cross-linguistic variation is therefore reduced to differences in the Case system among languages.

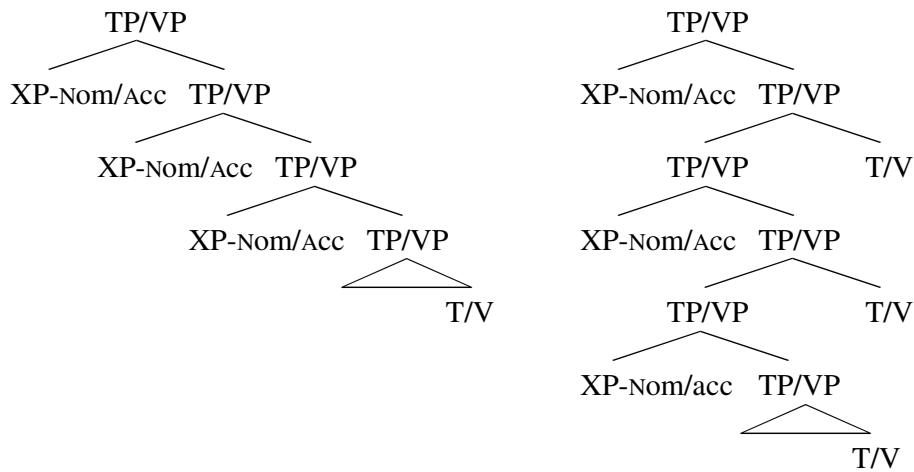
I will not discuss why Japanese and Korean differ from other languages in this respect in this thesis, but speculate in Chapter 6 that the presence of a separate particle for nominative case in a language is a prerequisite for that language permitting multiple nominative phrases. In Japanese and Korean, nominative is realised by distinct morphology, which is cross-linguistically extremely rare, accounting for the remarkable scarcity of multiple nominative constructions. Two further languages are also considered in this light in Chapter 6, namely Modern Standard Arabic and Chickasaw, a West Muskogean language.



## 4.2 Licensing of multiple nominative and accusative phrases

Considering that external possessors may bear the same case as their possessees, it must be possible in Japanese and Korean for a single head to license multiple occurrences of one case. A question arises as to what the configuration is in which the multiple phrases bearing identical case-marking are licensed. There are *a priori* two possible configurations. One assumes recursion in the projection of a specifier within one particular projection such as TP or VP, resulting in one projection containing multiple specifiers, as illustrated in (41a). In this approach, one head licenses multiple nominative and accusative phrases within one maximal projection. Another possibility is to allow recursion in the projection of a head of the same category such as V or T, each of which projects its own projection. This yields a structure which contains multiple licensing heads, as shown in (41b). One head licenses no more than one instance of nominative or accusative phrase in its own projection. Multiple phrases with identical case-marking are therefore each licensed in distinct projection headed by the licensing head.

(41) a. Multiple Specifiers Configuration      b. Multiple Heads Configuration



Both structures have been proposed for Korean multiple accusative constructions, while the multiple specifiers configuration in (41a) has been predominantly assumed for Japanese multiple nominative constructions.

The two configurations are equally adequate within the empirical domains of multiple nominative and accusative constructions considered in this thesis. They

should therefore be compared from a theoretical perspective. I will argue in Chapter 5 that grammar in fact makes both configurations available and that the thematic nature of the phrase to be licensed determines which structure is employed. The existence of both licensing configurations is supported by the general characteristic of languages that internal arguments are licensed internally to the maximal projection of the predicate, while some maximal projection functions as a predicate for an external argument. Repercussions of the multiple heads configuration for verb movement is also discussed.

## 5 Organisation of the Thesis

The thesis is organised as follows. Chapter 2 first elucidates the syntax of external possession in Japanese, which was exemplified by (4) and (9). I will call this construction the possessive multiple nominative construction. I demonstrate that the operation of re-association as developed in this chapter explains various properties of the construction straightforwardly. The present analysis makes further correct predictions regarding restrictions on the nature of the external possessor. In particular, it will be demonstrated that an external possessor cannot be an adjunct or a PP and a possessee cannot be an adjunct. In discussing alternative analyses proposed in the literature I will point out that reference to  $\theta$ -roles in the operation deriving the construction is crucial in accounting for such properties. An appendix to this chapter addresses issues regarding the licenser of nominative case in Japanese.

The analysis proposed in Chapter 2 invites external possession in Japanese to be compared with two other kinds of constructions, namely other types of multiple nominative constructions, which do not entail thematic relations among nominative phrases, and external possession involving objects. Accordingly, the two ensuing chapters examine the constructions in question.

I demonstrate in Chapter 3 that re-association is not necessarily involved in licensing an additional nominative phrase in a clause in Japanese. I develop a theory of focus which uniformly explains the obligatory focus reading found with the first nominative phrase in all the three types of multiple nominative constructions. I argue that the particle *ga*, which is generally considered to be the nominative case marker, can in fact encode information regarding case as well as focus. Furthermore, I

provide analyses of each type of non-possessive constructions couched in this theory of focus. Considerations concerning focus effects restrict the distribution of some types of *ga*-phrases. The proposed analyses also account for how the three constructions may interact with each other.

Chapter 4 examines an instance of external possession in Korean, where a possessor of an accusative object is licensed externally in the accusative, which was illustrated by the examples in (5b) and (10). Japanese does not permit this kind of construction. I demonstrate that the operation of re-association can be easily carried over to external possession involving objects. Various properties of the accusative possessor as well as the possessee, including their object-hood and their contrasting behaviour with respect to movement, are correctly predicted. Here, I also provide an explanation for the observation that the external possessor of an object, but not of a subject, must be interpreted as ‘affected’. I argue that the contrast is a result of the interaction between re-association and the independent property of language that external and internal  $\theta$ -roles must be distinguished. In other words, the grammatical function of the possessee has consequences for the interpretation of its external possessor.

The analyses in Chapters 2-4 are presented in structures which assume that multiple nominative or accusative phrases are licensed in multiple specifier positions in one projection. In Chapter 5, I point out that there is no reason why this configuration should be employed exclusively and explore the potential of an alternative configuration involving multiple copies of the licensing head, as illustrated in (41b). In doing so, I will claim that there are no advantages in adopting the Universal Base Hypothesis, which states that clause structure is invariant across languages (cf. Cinque 1999). The hypothesis is generally adopted in the minimalist framework and forces recursion in the projection of a specifier. Moreover, assuming either one of the configurations exclusively requires extra assumption prohibiting the generation of the other. I conclude therefore that both licensing configurations are permitted. The thematic nature of the phrase to be licensed dictates in which configuration it is licensed. The existence of a multiple heads configuration implies the existence of verb movement in the language. I will demonstrate that there is some evidence for finite verb movement in Japanese, also pointing out that

alternatives without verb movement offered in the literature face several serious theoretical and empirical problems.

In Chapter 6, I provide a summary of the findings of the thesis as well as suggestions for how the present work may be further extended. In particular, I propose that cross-linguistic variation in the form of external possession might be explained in terms of Case theory, namely that its form is determined by the Case properties of each language. I also note some peculiarities with respect to the case paradigm of languages which permit multiple nominative constructions, namely Japanese, Korean, Modern Standard Arabic and Chickasaw, a West Muskogean language. Moreover, I suggest that the domain of application of re-association could be further explored. Nothing in the operation limits its application to external possession. I consider a possible extension of the operation to light verb constructions in Italian.