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A study of ascension constructions in Korean

Choi, Young-Seok, Ph.D.

University of Hawai'i, 1988
A STUDY OF ASCENSION CONSTRUCTIONS IN KOREAN

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF
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ABSTRACT

The main concern of this thesis is a proper characterization of the various manifestations of the rule of ascension in Korean. Within the theoretical framework of relational grammar, the thesis addresses ascension in both simplex and complex clauses and argues that ascension-type constructions are systematically distinct in their syntactic behavior from other superficially similar constructions. On the one hand, this implies that further structural distinctions among multiple nominative constructions are necessary in Korean; on the other hand, syntactic characteristics common to multiple nominative constructions and other ascension constructions, e.g., raising and multiple accusative constructions, are readily expressed under the present approach. This result suggests that monostratal approaches to a particular subset of multiple case constructions must miss generalizations that hold across ascension constructions. In this respect, the existence of multiple accusative constructions in Korean parallel to multiple nominative constructions has certain significant theoretical implications. It will be shown that claims based just on multiple nominative constructions turn out to be inadequate when multiple accusative constructions are taken into consideration.

After introducing the basic issues and the theoretical basis in chapter 1, chapter 2 explores the syntactic and semantic characteristics of ascension constructions taking the Possessor
Ascension construction as prototypical. Certain controversies and objections to an ascension analysis will be reviewed in some detail.

Chapter 3 argues for an ascension analysis of two raising constructions in Korean, the Subject-to-Object Raising and Subject-to-Subject Raising constructions. The raising hypothesis is contrasted with alternative hypotheses, including the Exceptional Case Marking hypothesis of the Government and Binding framework.

Chapters 4 and 5 extend the ascension hypothesis to Quantifier Floating and the so-called 'Double Object Construction' in Korean and examine the empirical consequences of the analysis.

Chapter 6 provides an overview of the previous chapters and discusses their theoretical implications.
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<td>Acc</td>
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<tr>
<td>Clas</td>
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<tr>
<td>Comp</td>
<td>Complementizer</td>
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Chapter 1
Introduction and Theoretical Background

1.1 Context, Goal, and Scope

The central issue of this thesis is ascension, a notion which incorporates a variety of superficially distinct constructions ranging from simplex to complex clauses. This thesis aims primarily to reveal certain syntactic generalizations across these diverse types of ascension constructions in Korean from the perspective of relational grammar. It will be shown that by recognizing the ascension process in superficially distinct constructions, many of the puzzling problems noted in the past (often in passing) can be given a simple and adequate characterization in terms of general conditions governing ascension in general, either language-specific or universal.

As a way of compromising between depth and scope, I will focus on ascension in simplex clauses, with only a secondary emphasis on Raising constructions, though cross-references will be made whenever applicable. This places the work in one of the most complicated contexts within the current field of Korean and Japanese linguistics, since this choice in scope inevitably leads to an exploration of what we may call Multiple Case Constructions (Multiple Nominative and Multiple Accusative Constructions) in these languages. Numerous works have been devoted to this area since late 1960's, and a number of
proposals are still coming forth, so that it would be a difficult task even to provide the roughest overview of all of the important work.

The diversity of opinions concerning the structure of Multiple Case Constructions (MCCs) in the two languages is quite understandable in several respects. First, as we will see in 1.3, there are a number of MCCs that appear to be the same in certain ways (tautologically so in terms of case marking), but not in every respect, and thus it is not an easy task to sort out which characteristics are common to these constructions and which are not, and which common characteristics are coincidental (i.e., due to different sets of conditions) and which are not. Furthermore, it is far more difficult to decide, even with a modest degree of confidence, which of these properties are structure-dependent and which are governed by semantic or pragmatic principles. Even assuming that we have obtained a consensus upon all these issues, there are a number of logically possible views as to what portion of the structure of these constructions is responsible for the superficial phenomena (for example, case or Case assignment), let alone the matter of diverse ways of representing them within one or more grammatical frameworks.

Apparently, a major source of the diversity of views regarding structural characteristics of MCCs is that many of them exhibit some properties in common but not all of them. The most general characterization of case (or Case) marking (e.g., Saito 1982, 1985), for instance, is thus most likely to make wrong predictions about some of the 'subject properties' of nominals with the same NOM(inative)-marker. For the same reason, the most general characterization of
Reflexivization (e.g., Kuno 1978a) is most likely to yield undesirable predictions about, for example, Subject Honorification. (See chapter 2 below for details.)

The dilemma is that if we take the other direction and claim there are two or more distinct types of Multiple Nominative Constructions (MNCs), there appears to be no obvious way of explaining their shared properties. It would not be unfair to say that in both lines of inquiry, the unexplained portion of the 'subject properties' (or the 'non-subject properties', for that matter) of some of the NOM-marked nominals has often been put aside as belonging to the marked periphery of core grammar, or attributed to 'some' (i.e., unknown) semantic/pragmatic principles.

Needless to mention, many of the proposals have shed new and insightful light upon formerly unnoticed facts, making surprising generalizations across diverse constructions and looking quite convincing within their scope. When we widen the scope to a certain degree, however, it is often the case that there are more questions left than answered. In the following chapters, I will discuss some of the prominent issues concerning MCCs in a somewhat wider context, one that includes both MCCs and some of the Raising constructions in Korean. In doing so, I will focus more on the task of sorting out the differences and similarities among the MCCs than on developing mechanisms or utilizing existing theoretical constructs to assign a well-formed structure (or 'derivation') for already known aspects of the MCCs. As a working assumption, I will take many of the well-known tests of subjecthood seriously, including Subject Honorification and
Subject-to-Object Raising, even if there are unclear borderline cases, provided we have a clear contrast most of the time.

The theoretical framework within which this study is carried out is that of relational grammar (RG), and many of the assumptions and concepts of the RG framework serve as the crucial basis of explaining the observed facts. It is beyond the scope of this work to compare every important aspect of different analyses in different frameworks, though references will be frequently made to the transformational grammar approaches when the relevance is clear. It is neither assumed nor claimed that RG is the only linguistic model that can adequately characterize MCCs in Korean, though of course I am implicitly claiming that it is an adequate grammatical framework inasmuch as it provides necessary and sufficient theoretical constructs for describing facts and making generalizations in an insightful and elegant way.

The discussion in this and other chapters assumes some familiarity with the GB framework as developed in Chomsky (1981, 1982, and 1986), along with certain basic issues about the Korean and Japanese MCCs, but little familiarity with the RG framework is assumed. The next section provides a brief synopsis of some of the major theoretical assumptions and concepts of RG that are crucially referred to in the following chapters.1

After a brief introduction of the relevant RG concepts and laws in 1.2, I provide in 1.3 a tentative typology of MCCs in Korean to ease later references as well as to further delineate the scope of this work. Section 1.4 clarifies an assumption about the case-marking system in Korean.
The overall organization of this thesis is as follows: chapter 2 examines the most controversial case of ascension, Possessor Ascension (PA). It will be argued that the simplest analysis is to restrict PA to stative verbs. Several syntactic restrictions on ascension constructions will be explored. The findings of this chapter will serve as diagnostics in sorting out ascension constructions from other types of multiple case constructions in the subsequent chapters.

In chapter 3, I argue that the Subject-to-Object Raising construction in Korean (and in other languages, by implication) indeed involves raising (hence ascension) to object position, and thus cannot be accounted for by the exceptional Case marking (or S'-Deletion) hypothesis of Chomsky (1981). Within the GB framework, this would mean that the simplest analysis of Korean SOR would lead to abandoning the widely held assumption that there is no subcategorized non-theta position (Chomsky 1981, 1986). This chapter also includes a brief discussion of what I consider to be the Subject-to-Subject Raising Construction in Korean, including the passive construction.

Chapter 4 examines ascension from the quantified nominal structure (or Quantifier Floating). Several arguments will be provided to establish that Quantifier Floating involves an ascension, mainly based on the syntactic properties common to this and the Possessor Ascension construction examined in chapter 2.

Chapter 5 argues that the so-called 'double object' construction in Korean involving the predicate ha 'do' is yet another instance of ascension. I will demonstrate that virtually every restriction observed in the past about this construction shows up in the
corresponding passive (or double nominative) construction, as well as in other instances of ascension discussed in the preceding chapters. This fact, along with certain differences between the ascension type MACs and the advancement type ones, will raise a serious problem for the single-level (or 'surfacist') approaches to these constructions, including the position that all MNCs in Korean are some sort of 'focus' construction.

Chapter 6 provides a summary of what I consider to be the most important results of this study and discusses their theoretical implications.

The following issues will underlie all of these chapters:

(1) a. Are the ascension constructions distinct from other Multiple Case Constructions in systematic ways? If so, what conditions or laws make them distinct?

b. What are the similarities and differences among different types of ascensions, and why are there differences, if any?

c. Not all MCCs in Korean can be treated as involving an ascension, and certain characteristics (case-marking and word order, for instance) are common to all MCCs. How, then, can the ascension analysis state the cross-constructional generalizations? Or are they just coincidental? And how should other MCCs be treated?

1.2 Some Theoretical Assumptions

1.2.1 Syntactic Representation in Relational Grammar

An important assumption of RG is that grammatical relations (GRs) such as 'subject of' or 'object of' are primitives of linguistic analysis. This assumption is a prominent characteristic of the framework that distinguishes it from the theories in which GRs are
defined in terms of phrase structure configurations such as 'NP of S' or 'NP of VP', or semantic roles such as 'agent of' or 'patient of'.

While Lexical Functional Grammar (LFG) shares this assumption with RG, one crucial difference between the two models lies in their views on the 'levels' of syntactic representations. RG recognizes the need for distinct linguistic levels at which nominals bear GRs to clauses, the claim being that monostratal (or 'surfacist') theories are inadequate in stating linguistic generalizations, either universally or internal to the grammars of particular languages (cf. Perlmutter (1982), Perlmutter and Postal (1983a)). On the other hand, the principle of Direct Syntactic Encoding in LFG (cf. Bresnan (1982), especially chapters 1 and 4) explicitly excludes multi-level representations of GRs (GFs, in LFG terms) within that model. The choice between the two views, of course, remains an empirical issue, and it is one of the claims of this thesis that single-level theories, as well as single-level approaches within multi-level theories such as RG or GB, are inadequate in dealing with multiple case constructions in Korean.

In RG, sentences of natural languages are reconstructed in terms of the formal object called a relational network (RN), which consists of three types of primitive entities:

(2) a. a set of 'nodes', which represent linguistic elements of all sorts (from morphemes to clauses)

b. a set of 'R(elational)-signs', which represent grammatical relations between elements

c. a set of 'coordinates', which represent distinct levels at which relations hold
The basic element in RNs is an 'arc', which is formally an ordered triple, of which the first element designates a GR; the second, a dominance relation between two nodes; and the third, linguistic levels in terms of a nonnull sequence of coordinates. An arc can be represented in one of the two equivalent notations below:

(3) a. [GR\(x\) (a, b) \(<c_1c_2>\)]
   b. b
      GR\(x\) | c_1c_2
      \(\downarrow\)
      a

The arc in (3) represents the fact that node a bears a certain grammatical relation GR\(x\) to node b at the c_1 and c_2 levels. A full RN is a set of arcs of the form represented in (3). For example, the passive sentence in (4) below can be represented either in terms of the arc notation of the form (3a) as in (5a), or in the simplified graph notation as in (5b):

(4) The city was destroyed by the enemy.

(5) a. [ P (destroyed, b) \(<c_1c_2>\) ]
   [ 1 (the enemy, b) \(<c_1c_2>\) ]
   [ 2 (the city, b) \(<c_1c_2>\) ]
   [ 1 (the city, b) \(<c_2c_2>\) ]
   [ Chô (the enemy, b) \(<c_2c_2>\) ]

b. [Diagram]

---

The diagram shows the relationships between the nodes and levels, with arrows indicating the direction of the GR and the levels of the nodes.
Here, the R-signs P, 1, and 2 are the names of the grammatical relations 'predicate', 'subject', and 'direct object', respectively. The R-signs are grouped into natural classes, in terms of a relational hierarchy, a portion of which is schematically represented below: (See Perlmutter and Postal (1983b:85 ff.) for more details.)

\[
\begin{array}{c}
\text{(6) Central R-signs} \\
\text{Core R-signs} & \text{Chō} \\
\text{Term R-signs} & \text{Oblique R-signs} \\
\text{Nuclear Term R-signs} & \text{Object R-signs} \\
\text{Subject (1)} & \text{Direct Object (2)} & \text{Indirect Object (3)}
\end{array}
\]

Thus, nuclear term R-signs consist of 1 and 2, term R-signs consist of 1, 2, and 3, and so on. The natural classes often enter into making generalizations over a class of GRs. For instance, the Host Limitation Law (which will be discussed in detail in chapter 2) requires the presence of a term R-sign as a necessary condition for an ascension construction, and the Nuclear Dummy Law postulates that only a nuclear term R-sign can be the R-sign of an arc headed by a dummy nominal (cf. Perlmutter and Postal 1983c:103 ff.).

Another way in which the relational hierarchy is linguistically significant is that it makes it possible to talk about a given R-sign
being 'higher than' (cf. 'outranking', cf. Johnson and Postal (1980:250-251)) another. Thus, the subject R-sign is higher in the hierarchy than the object R-signs, and so on, from bottom up and from left to right in (14). (See Bickford (1987:15) and references cited there for cases in which the notion 'outrank' plays a key role in certain linguistic generalizations.)

Oblique R-signs include 'adverbial' relations such as benefactive, instrumental, temporal, locative, and possibly some others. It is assumed in RG that oblique relations are initial relations, i.e., they are not acquired in post-initial strata (cf. the Oblique Law, Perlmutter and Postal (ibid.:88-92)).

Chô is the name of the chômeur relation, whose appearance in an RN is governed by the Chômeur Law and the Motivated Chômage Law. The chômeur relation plays an important role in many syntactic generalizations (e.g., Chung 1977), and will be crucially utilized in expressing generalizations across constructions in the subsequent chapters.

Another important concept in the RG representation of clause structure is that of 'strata'. Note that in (5b), the arcs A, B, and D share the coordinate c₁, and the arcs A, C, and E, the coordinate c₂. The maximal nonnull set of arcs with the same coordinate and a common second node (or 'tail', e.g., the clausal node b in (5b) above) is called a 'stratum', which provides the formal basis of representing the notion of linguistic levels. To give this notion of strata a more perspicuous representation, a 'stratal diagram' of the form (7) below is often used in lieu of the representation in (5):
In (7), the R-signs of all the arcs sharing the coordinate c₁ are given in the first horizontal row, and the R-signs of all the arcs sharing the coordinate c₂ in the second horizontal row, each horizontal row representing a stratum.

Notice also that a single nominal can bear more than one GR (e.g., 2 and 1 for the city above), and that there can be more than one subject (e.g., the enemy, and the city above) in a given RN. This makes it inaccurate to say that a certain nominal is a subject or a direct object without specifying the linguistic level in which the nominal bears the relation. For this reason, most of the RG laws are formulated with reference to a particular stratum or strata, as is the case, for example, with the Final 1 Law and the Stratal Uniqueness Law:

(8) **Final 1 Law** (Perlmutter and Postal 1983b:100)
If there is a cₖ stratum of b and no cₖ₊₁ stratum of b, we say that the cₖ stratum is the 'final' stratum of b.
Then: If b is a basic clause node, the final stratum of b contains a 1-arc.

(9) **Stratal Uniqueness Law** (Ibid.:92)
Let 'termₙ' be a variable over the class of term R-signs, that is, '1', '2', or '3'.
Then: If arcs A and B are both members of the cₖ stratum with tail b and A and B are both termₙ arcs, then A = B.
Informally stated, the Final 1 Law says that every basic clause has a final 1, and the SUL that no two nominals can bear the same term relation (1, 2, or 3) in a given stratum.

The initial stratum of a given clause is largely determined by the lexical properties (or relational valence) of its predicate (the element that heads the P-arc). For example, the English predicate *destroy* is a transitive predicate, and thus can occur only in an initially transitive stratum (i.e., a stratum with a 1 and a 2), and so forth. RG does not claim that all semantic aspects of a given sentence are represented in the initial stratum of the associated RN, though it is often assumed that the assignment of the initial GR of nominals in a clause is largely determined on the basis of their semantic roles (Perlmutter and Postal 1983a:12-13), but cf. Rosen (1984). The precise nature of the relationship between an RN and the semantic structure of the corresponding sentence, however, is not well understood, and much remains to be done in this area. It is generally assumed that all and only initial arcs are assigned a semantic role. Thus, a dummy that is inserted in a noninitial stratum will not have any semantic role. This assumption also implies that there is no direct semantic relation between an ascendee and other constituents of the clause to which the ascendee bears no GR at the initial stratum (cf. chapter 2).

The final stratum represents the superficial GRs of elements in a clause, which often coincide with the traditional notion of GRs. Also, the configurational definition of GRs such as 'NP of S' and 'NP of VP' often (but not always) corresponds to the final GRs. The final
stratum is also found to determine a large portion of superficial syntactic properties of nominals such as morphological case marking, word order, and agreement, as we shall see below. (Certain agreement phenomena, as well as certain word order restrictions, however, are sensitive to noninitial GRs, as will be discussed in later chapters.)

A complete linguistic representation of a sentence in terms of an RN will have to express all linguistically relevant aspects (syntactic, semantic, morphological, or phonological) of each node in the clause, and every relation between the nodes therein. In practice, however, all details about the sub-RNs are suppressed, and only those nodes that are directly relevant to the discussion are labelled. Representation of linear order and the internal structure of nominals is often omitted, as in (5) above. I will follow the convention of compressing details that are not crucial to the point under consideration.

In the recent RG conception, no 'derivational' relations are assumed between distinct RNs. A passive RN such as (5), for instance, is not obtained by applying the passive rule to an active RN. Rather, each RN is a "single static object" (Bickford 1987:37) representing the structure of the associated sentence. An active RN never 'becomes' a passive RN. Distinct RNs simply coexist as such (Dubinsky 1985:11-12), and any conceivable RN is well-formed if its presence is not ruled out by some constraint, universal or language-specific, which it is the linguist's task to find out. (However, I will continue to use derivational terms below, such as 'passivization' and
'relativization', to avoid the need for lengthy paraphrases in non-derivational terms.)

1.2.2 A Rule Typology: Ascensions and Advancements

1.2.2.1 Advancement

RG has recognized a number of syntactic processes which 'revalue' (or change) the GR of a nominal. A subset of these processes is known as advancement in which a nominal bearing a GR to a clause is promoted to a higher relation, 'higher' being defined in terms of the relational hierarchy mentioned above. Passive, for example, is an instance of an advancement which promotes a 2 to a 1. (For a more precise formulation of the rule in non-derivational terms, see Perlmutter and Postal (1983a:18-19).)

1.2.2.2 Ascension and Ascension Laws

Another class of processes that has been recognized from the earliest development of RG (cf. Perlmutter and Postal 1983b) is ascension constructions, which are the subject matter of this thesis. Roughly put, an ascension is a syntactic rule which promotes some subconstituent of a linguistic element (called the 'host') so that it bears a relation to a clause to which it has no relation at earlier levels.

Before we proceed, clarification of a methodological assumption seems in order. As is the case with other rules and laws of grammar, there are two ways of talking about ascension: first, we can consider an ascension as a rule that positively sanctions the existence of a
set of RNs with some particular formal characteristics, in a way analogous to the Passive rule as formulated in Perlmutter and Postal (1963a:18-19). With this sense of the term, ascension can be understood as a syntactic rule that is responsible for the existence of certain RNs in individual languages, and thus we could formulate a particular rule of ascension, for example, as follows:

(10) Ascend X.

This rule describes the fact that RNs of certain types are well-formed within languages whose grammar contains the rule.

Another way of looking at ascension is from the perspective of a purely nonconstructive grammar, in accordance with Postal's (1986:12-14) view that the sole function of rules and laws of grammar is to exclude certain RNs from the set of possible RNs (Pair Networks or PNs, in Arc-Pair Grammar terms) representing sentences of languages or language. In this view, there cannot be positive sanctioning of RNs by rules or laws of grammar, and thus the only usage of the term 'ascension', in particular, is to designate some sort of sub-RNs with certain specific formal characteristics. The fact that ascension of certain types exists in Korean but not in English, for example, means, under this conception of ascension, that English but not Korean has certain constraints that exclude the particular sort of ascension RNs from the set of possible RNs allowed by the principles of universal grammar (UG).

In spirit, I will remain (or try to remain) neutral with respect to the two views of rules and laws, but for methodological reasons, I
will frequently formulate rules of the form (10). As we shall see in
detail below, it is in many cases not obvious that what we are dealing
with is an ascension construction. When we try to compare two or more
alternative views on a given construction, it is often useful to have
a preliminary (or pretheoretical) description of the alternative views
as to the structural characteristics of the construction, and rules of
the form (10) provide a useful and simple way of describing the
structure of a construction.

Formally, an ascension construction is a particular type of
structure which contains a noninitial arc. To put it schematically,
any construction that contains a sub-RN of the form (11) below is an
instance of ascension:

\[(11)\]

\[\text{The element } X \text{ in (11), which bears no GR to node } b \text{ at the } c_i \text{ stratum,}
\]
\[\text{bears the relation } GR_y \text{ at the } c_{i+1} \text{ stratum. The term 'ascension' can}
\]
\[\text{then be understood as referring to a portion of an RN that has all the}
\]
\[\text{formal characteristics of (11), or alternately (given the discussion}
\]
\[\text{above), as the name of the syntactic rule which is responsible for the} \]
existence of such sub-RNs in natural language sentences reconstructed in terms of RNs. (I will use the term in both ways below.) Thus, we will speak of a Raising construction as an 'instance of ascension' with the sense that the RN representing the construction contains a sub-RN of this form. The element that ascends (X above) is called an 'ascendee'. We will refer to the first stratum in which the ascendee bears a GR to the clause to which it bears no relation in earlier strata (c_{i+1} above) as the 'ascension stratum'. The constituent that contains the ascendee and bears a GR to the clause to which the ascendee bears a relation at the ascension stratum (node a above) is called a 'host'.

RG has claimed that ascension across languages is governed by two universal principles: the Relational Succession Law and the Host Limitation Law, stated informally below (cf. Perlmutter and Postal 1983b:53):

(12) *Relational Succession Law* (RSL)^8
An ascendee must acquire the GR borne by the host out of which it ascends.

(13) *Host Limitation Law* (HLL)^9
Only a term grammatical relation can be the host of an ascension.

The RSL predicts that in the sub-RN of the form (11), GR_y must be the same as GR_w; and the HLL, that GR_w must be 1, 2, or 3. (Languages may differ as to what can be the host of an ascension within this limit. See Perlmutter and Postal (1983a) and references cited there.) The relation of the host at the ascension stratum (GR_z in (11)), is predicted by the Chômeur Law (cf. note 4).
Given the RSL, the HLL, and the Chômeur Law, the ascension structure in (11) can be further specified as follows:

\[(14)\]

\[\begin{array}{c}
C_i \\
C_{i+1}
\end{array} \]

\[\text{GR}_w \quad \text{GR}_x \quad \text{Chô} \]

\[\text{GR}_w = \{1, 2, 3\} \]

An ascension may involve either a simplex or a complex clause as its domain. For example, Possessor Ascension, attested in various languages including Korean (cf. Park 1985, Chun 1987, etc.), involves a simplex clause, and various raising rules (cf. Postal 1974, Eckman 1977, Gonzalez 1985, etc.) involve complex clauses. An example is given below for each of the two cases:

\[(15) \text{Possessor Ascension from Direct Object}\]

a. nay-ka ku ai-lul son-ul cap-assta.
   I-Nom the child-Acc hand-Acc hold-Past
   'I held the child's hand.'

b. 

\[\begin{array}{c}
P \\
2 \\
1
\end{array} \]

\[\text{Chô} \]

\[\text{Pos} \quad \text{na 'I'} \]

\[\text{ai son} \quad \text{'child' 'hand'} \]
(16) **Subject-to-Object Raising**
a. I believe John to be innocent.

![Diagram](image)

The two structures, (15b) and (16b), are thus instances of ascension as defined above, and if this is the correct analysis, we would naturally expect to find certain syntactic properties common to the two types of constructions.

As an illustration of the explanatory value of the RSL, let us take Eckman's (1977) account of a cross-linguistic generalization about the types of Raising constructions attested in individual languages. Eckman observes an implicational universal among three types of Raising constructions based on a dozen different languages, which is schematically summarized below:

(17)

<table>
<thead>
<tr>
<th>(i)</th>
<th>(ii)</th>
<th>(iii)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Object-to-Subject Raising (OSR)</td>
<td>Subject-to-Subject Raising (SSR)</td>
<td>Subject-to-Object Raising (SOR)</td>
</tr>
</tbody>
</table>

Each arrow in (17) denotes an implication: e.g., if a language has the OSR construction, it also has the SSR construction, but the converse is not necessarily true, and so forth.
Based on the fact that all of the languages examined have the SOR construction, Eckman deduces this implicational relation from the RSL (cf. (12) above) and the fact that all of the languages have clausal complements in the object position but some of them allow no clausal subjects: that is, given the RSL, the ascen Dee (or the 'raisee' in the case of raising) must inherit the GR of the host out of which it ascends. If a language does not allow any clausal subjects (e.g., Armenian, Egyptian, Hebrew, Lebanese, and Turkish), the putative raisee would not be able to inherit the subject relation. From this, it follows that such languages will not have the SSR or OSR constructions because these involve raising to subject. Eckman argues that this is indeed the correct prediction by showing that among the languages examined, all and only those that do not allow clausal subjects do not allow raising to subject.

Thus, the RSL provides the basis of predicting the kinds of raising constructions expected in a language from independent facts of the language. This same law governs ascensions from nonclausal nominals, as will be shown in later chapters.

As for the OSR constructions, Eckman attributes the nonexistence of the construction in a given language to a language specific constraint that prevents a direct object from moving into a subject position, based on the observation that such a language also lacks passive clauses. If this correlation is a valid one, it will have certain interesting implications for other rules, such as Unaccusative Advancement. It is beyond the scope of this introductory section to discuss this topic in detail. (It is not clear if the Korean
sentences involving 'tough'-predicates such as *swuyp* 'is easy' and *elyep* 'is difficult' involve raising. See Song (1985) for a discussion of such predicates in Korean. See also Gerdts and Youn (1987) for an important discussion.

Throughout the following chapters, I will not make any efforts to formalize the rules and conditions in standard RG or Arc-Pair Grammar terms, but instead will present them informally.

1.3 A Tentative Typology of Multiple Case Constructions

In this section, I provide a tentative classification of MCCs in Korean. This typology is a pretheoretical and rather prejudiced one based on my own assumptions on the structure of each of the constructions. I will provide justification for some of these conjectures in later chapters, but others will remain as conjectures.

The brief comments under each heading includes a few RG terms that have not been introduced. See the relevant chapters indicated there. The term 'structure' below implies the Relational Networks (RNs) as defined in 1.2, not the phrase structure configuration in terms of precedence and dominance relations. (In this latter sense, the 'structure' of most of the following sentences may be the same.)

1.3.1 Types of Multiple Nominative Constructions

**Topic Constructions**

By topic constructions (TC), I will refer to constructions that typically include a generic nominal but no gap elsewhere in the sentence corresponding to the topic.12
(18) **Generic Topic Construction (GTC)**

*kkoch-un cangmi-ka ceyil alumtapta.*

*flower-Top rose -Nom most pretty*

'As for flowers, the rose is the prettiest.'

The topic in a GTC can always be paraphrased as a conditional clause, such as *-ey tayhay malhaca-myen* 'If you mean X', or *-ey kwanhan han* 'as far as X is concerned'.

I also include in this category certain gapless topic sentences such as (19) (cf. Huang 1984:96).

(19) *ku pwul-un tahaynghi sopangtay-ka ppalli wassta.*

*the fire-Top fortunately fire-brigade-Nom quickly came*

'As for that fire, fortunately the fire brigade came early.'

I have little to say about such sentences in this work, except for purposes of comparison. (See, e.g., B. Park (1972), I. Yang (1972), Kuno (1973), Sohn (1980, 1986), and Na (1986) for discussion.)

A. **MNC-1 Possessor Ascension Construction (PAC)**

This construction is the major topic of chapter 2.

(20) *Youngsoo-ka khi-ka khuta.*

*Nom stature-Nom tall*

'Youngsoo is tall.'

B. **MNC-2 Double Subject Construction (DSC)**

This construction will be discussed in detail in chapter 2, along with the Possessor Ascension Construction. It will be argued that this construction is structurally distinct from the Possessor Ascension construction.
(21) Youngsoo-ka apeci-ka aphi-si-ta.
Nom father-Nom sick-Non-Dcl
As for Youngsoo, his father is sick.'

C. **MNC-3 Ascension from the Quantified Nominal Construction (QNC)**


**Ascension from Quantified Nominal Structure** (or Q-Float)

(22) haksayng-i seys (-i) wassta.
student-Nom three (-Nom) came
'Three students came.'

The following construction also seems to behave in the same way as Quantifier Floating.

**Ascension from the Appositive Nominal Structure**

(23) hakkyo kunche-ey aphiathu-ka ssa-n kes-i manhta.
school vicinity-Dat apartment cheap-Comp INM-Nom many
'There are many cheap apartments near the school.'

D. **MNC-4 Specifier Ascension Construction (SAC)**

This construction is the passive counterpart of the so-called 'Double Object Construction' and has not been given much attention, whereas the 'Double Object Construction' has been widely discussed in Korean and Japanese linguistics. This construction will be examined in chapter 5.
(24) ku tosi-ka phakoy-ka toy-essta.
the city-Nom destruction-Nom be done-Past
'The city was destroyed.'

E. MNC-5 Double Nominative Counterpart of the Inversion Construction

This is the construction that is often cited as one of the
typical 'focus' constructions (cf. Saito 1982:7), since Kuno (1973:76-78)
presented similar sentences in Japanese as "apparent
counterexamples to the [Subjectivization] rule":

(25) Honolulu-ka hankwuk salam-i manhta.
    Nom Korea person-Nom many
    'In Honolulu, there are many Koreans.'

There are some indications that (25) has the same structure as the
Inversion construction in (26) below. See Gerdts and Youn (to appear)
for discussion.

(26) ku pwun-i ton-i manhta.
    the person-Nom money-Nom much
    'He has a lot of money.'

F. MNC-6 Ascension from an Initially Unaccusative Complement

This construction has raised a number of problems and still
remains controversial in many respects. See also Song (1985), Kuroda
(1987), and references cited there for important discussion.

'Tough'-construction (A)

(27) a. enehak-i chwuycik-i elyepa.
    linguistics-Nom job-finding-Nom difficult
    'In linguistics, job-finding is difficult.'

b. ku yeça-ka seltuk-i pwulkanunghata.
    the woman-Nom persuasion-Nom impossible
    'As for that woman, persuasion is impossible.'
'Tough'-construction (B)

(28) a. enehak-i chwycik-ha-ki-ka elyepa.
    linguistics-Nom job-finding-do-NML-Nom difficult
   'In linguistics, it is difficult to find a job.'

   b. ku yeca-ka seltuk-ha-ki-ka pwulkanunghata.
      the woman-Nom persuasion-do-NML-Nom impossible
      'That woman is impossible to persuade.'

Sentence (27a) is another example often cited as an instance of the 'focus' construction, since Kuno (1973:250-253) presented such sentences as an instance of 'themes in the deep structure' along with what is labelled the 'Generic Topic Construction' above.

It is very unlikely that there is no structural connection between (27) and (28): first, in such pairs the (matrix) predicate is invariably a 'tough'-predicate. Second, the second NOM-marked nominal in sentences like (27) is invariably an action nominal (almost always of a Sino-Korean root), which is also a characteristic of the construction labelled as the 'Specifier Ascension Construction' above. Third, in both cases the superficial subject (the first NOM-marked nominal) cannot control honorific agreement on the verb.

I suspect that the above construction has essentially the same structure as the following construction with 'be' and 'become', except that the former requires a semantic Experiencer, overt or implied.

'Be' and 'Become'

(29) a. ku pwun-i wuli sensayngnim-i an-i-ta.
    the man-Nom our teacher -Nom not-be-Dcl
    'That person is not our teacher.'

   b. ku pwun-i sacang-i toy-essta.
      the man-Nom boss-Nom become-Past
      'That person became the boss (president).'

Sentences like (29) will be briefly discussed in chapter 3. The 'tough' construction will not be discussed in this thesis except in passing (cf. the references cited above, and also Gerdts and Youn (1987) for a proposal within the RG framework).

1.3.2 Types of Multiple Accusative Constructions

Of the six types of the MNCs as classified above, four have what I consider to be multiple accusative counterparts: A, B, D, and F above. The last two classes (32AC and MADC) below have no apparent multiple nominative counterparts.

A. MAC-1 Possessor Ascension Construction (PAC)

This construction, Possessor Ascension from the direct object, is ungrammatical in Japanese, due perhaps to a surface constraint. The existence of this construction in Korean is therefore significant in many ways, as will be discussed in 1.3.4 below and in chapters 2 and 5.

(30) emeni-nun ku ai-lul son-ul capassta.
    mother-Top the child-Acc hand-Acc held
    'Mother held the child’s hand.'

B. MAC-2 Ascension from the Quantified Nominal Construction (QNC)

This will be discussed in chapter 4, along with Quantifier Floating from 1.

(31) sensaephyng-un heksaeng-ul seys (-ul) pwullessta.
    teacher -Top student-Acc three (-Acc) called
    'The teacher called three of the students.'
C. **MAC-3 Specifier Ascension Construction (SAC)**


(32) cekkwun-i ku tosi-lul phakoy-lul ha-yeessta.
enemy-Nom the city-Acc destruction-Acc do-Past
'The enemy destroyed the city.'

D. **MAC-4 Ascension from the Initially Unaccusative Complement**

I suspect that sentences like the following are structurally related to the copulative construction (cf. (29) above).

(33) ku sako-ka ku salam-ul keci-lul mantul-essta.
the accident-Nom the man -Acc beggar-Acc make -Past
'That accident made him a beggar.'

I leave this construction for future studies.

E. **MAC-5 IO-to-DO Advancement Construction (32AC)**

This is an advancement construction, and will be discussed in comparison with ascension constructions. See Gerdts (1986) and references cited there.

(34) nay-ka ku ai-lul senmwul-ul cwuessta.
I -Nom the child-Acc present-Acc gave
'I gave the child a present.'
This construction will not be dealt with in this work. See Im (1979), B. Park (1981), Dubinsky (1985), and references cited there.

(35) wuli-nun kil-ul twu sikan-ul kelessta.
we -Top road-Acc two hour-Acc walked
'We walked the road for two hours.'

1.3.3 The Multiple Dative Construction

With the exception of I. Yang (1972), I know of no other literature discussing this construction in connection with MCCs in general. I speculate on this construction in chapter 2.

(36) a. ku cip-ey cengwen-ey namwu-ka nuesta.
the house-Dat garden -Dat tree-Nom many
'There are many trees in that house.'

b. ?i hotheyl-ey sam chung-ey saho-sil-ey yoksil-ey
this hotel -Dat three floor-Dat Rm. 4 -Dat bathroom-Dat
khuthen-i epsta.
curtain-Nom not exist
'There is no curtain in the bathroom in Room 4 on the third floor of this hotel.'

c. i mwulthong-ey patak-ey kwumeng-i nassta.
this bucket -Dat bottom-Dat hole -Nom occurred
'There occurred a hole in the bottom of this bucket.'

According to the Japanese speakers I have contacted, the occurrence of more than three Dative nominals is disallowed in Japanese.
1.3.4 Some Preliminary Remarks on Related Issues

1.3.4.1 Hypotheses for MCCs

Within the transformational grammar tradition, including current GB theory, approaches to MCCs in Japanese and Korean can be roughly divided into two groups (ignoring details within each): one that claims that they are derived from a more basic source, and the other that views them as base-generated Multiple Focus (or Topic) Constructions. Kuno (1973), Kang (1986), Choe (1985), among others, claim that sentences like (37b) below are derived from (37a) by a rule (Subjectivization) which moves a deep structure element to subject position. (See chapter 2 for details.)

(37) a. ku ai-uy son-i kopta.
    the child-Gen hand-Nom pretty
    'The child's hand is pretty.'

    b. ku ai-ka son-i kopta.
       Nom Nom

Saito (1982,1985) and Yoon (1987), on the other hand, take the position that all Multiple Nominative Constructions (MNCs) in Japanese and Korean, respectively, are some sort of Topic/Focus construction, as schematically illustrated below:

(38) S1
    \[ FOCUS \]
    [Nom]  \[ SUBJECT \]
    [Nom]  \[ VP \]

According to this view, the innermost (or lowest) NOM-marked nominal corresponds to the traditional notion of "subject", but all others are
a Focus or a Topic, which is licensed by some sort of 'aboutness' relation with respect to the rest of the sentences.  

It seems to me that many of the problems that accompany the strongest claims about the structure of MCCs are a result of taking the extreme position that either all MNCs should be derived in the same manner, or else all of them should be base-generated. For example, the claim that all of them must be Topic/Focus constructions is often based on the fact that there are some constructions that cannot be derived in the same manner as the Subjectivized sentences.

As discussed in 1.2, the notion "subject" in traditional grammar often coincides with the notion of final 1 within the RG framework. However, the set of final 1s is not a group of homogeneous entities, because a final 1 may be at the same time an initial 2, an initial oblique, or may not even bear a GR to the relevant clause in nonfinal strata. An important claim is therefore that there are syntactic phenomena that are governed by the grammatical relation a nominal bears at a level 'deeper' than the superficial level. This notion, together with the claim that ascension and advancement are subject to a distinct set of rules and laws, makes it possible to capture differences among constructions that look identical at the superficial level, while making generalizations across ascension and advancement constructions at the appropriate (in most cases, final) level.

As the tentative typology of MCCs above shows, many of the Multiple Nominative Constructions (MNCs) and Multiple Accusative Constructions (MACs) have similarities at the superficial level, especially in their case marking patterns. From the RG perspective,
it is only natural to expect there to be a number of distinct MCCs in languages like Korean, given that a particular rule, e.g., Passive, inevitably interacts with other rules of the grammar. To put it in derivational terms, the interaction of distinct rules within Korean would naturally produce a number of different MCCs, such as the following:

(39) ku mwune-ka tali-ka hana-ka kkuthpwupwun-i cokum-i
    the octopus-Nom leg -Nom one -Nom edge -Nom a bit-Nom
    pyensayk-i toy-essta.
    color-change-Nom become-Past
    'A bit of the edge of one of the legs of the octopus changed its color.'

(40) ai-ka ku mwune-lul tali-lul hana-lul kkuthpwupwun-ul
    child-Nom the octopus-Acc leg -Acc one -Acc edge -Acc
    cokum-ul celtan-ul ha-yessta.
    a bit-Acc cutting-Acc do-Past
    'The child cut a bit out of the edge of one of the legs of the octopus.'

Sentence (39), for instance, involves interactions among Unaccusative Advancement, Subject-to-Subject Raising (cf. appendix to chapter 3), Possessor Ascension (cf. chapter 2), and ascension from the quantified nominal structure (or Quantifier Floating, cf. chapter 4); and (40) involves interactions amongSpecifier Ascension (cf. chapter 5), Possessor Ascension, and Quantifier Floating. Each of these processes has its own restrictions and distribution. If the special properties each of these processes are not taken into account, generalizations across all multiple case constructions are likely to be misleading for some multiple case constructions.
As will be discussed in later chapters, there are certain clear contrasts between advancement-type MCCs and ascension-type MCCs which are quite natural when seen from the KG perspective.

With a few exceptions, most of the GB approaches to MCCs have focused on the MNCs, with no emphasis or only a secondary emphasis placed upon the Multiple Accusative constructions (MACs). Within Japanese linguistics, this tendency probably arises from the absence (or near-absence, cf. chapter 5) of overt MACs in Japanese, which has led linguists working exclusively on this language to draw conclusions that might not have been drawn.

Take, for instance, Fukui's (1986) rather ingenious proposal about category projections. Observing certain systematic differences between Lexical Categories and what he calls Functional (or Non-lexical) Categories,14 Fukui contends that while the maximal projection of the former is a single bar-level, the maximal projection of the latter is the double bar-level, because only the latter but not the former takes a unique, non-iterable 'specifier' position that 'closes off' the category projection. (See his chapter 2 for details). He further argues that in Japanese, there are no apparent Functional Categories such as COMF, INFL, or Det(terminer) corresponding to their English counterparts. This in turn implies that Japanese does not have any 'specifier' category that closes off category projections, and thus every category in this language is open, i.e., can freely recur or 'iterate', like, for example, certain English adjectives in phrases such as a dark, tall, handsome man. As one of the consequences of this proposal, it is predicted that
Japanese has multiple nominative constructions whereas English does not: that is, while English has a unique specifier position for the Functional Category INFL, Japanese either does not have or has only a very defective INFL, and therefore it cannot take a 'specifier' position in his sense. Thus, according to Fukui, a "subject" in Japanese lies within a projection of V, and therefore there is no reason for the "subject" position to be unique. (See his chapter 4 for details.)

When we consider just the MNCs, Fukui's argument would seem to make sense in Korean as well, since Korean shares all the properties with Japanese that motivated his claim that Japanese does not have any Functional Categories (or 'specifiers' for that matter), including the existence of MNCs, free co-occurrence of some putative determiners (i.e. 'this', ku 'that', John-uy 'John's) and other prenominal modifiers, and so on. (See Choung (1986), among others, for examples.) When we take the MACs into account, however, it is not difficult to see that Fukui's approach needs drastic modification. To point out just one problem, there seems to be no obvious way in Fukui's system to assign Objective Case to all of the accusative-marked nominals, for instance, in sentences like (40b) above, somewhat simplified in (41) below:

(41) ai-ka ku mwune-lul tali-lul hana-lul kkuth pwupwun-ul child-Nom the octopus-Acc leg -Acc one -Acc end part -Acc
cokum-ul call-assta.
a bit-Acc cut -Past
'The child cut a small portion of the edge of one of the legs of the octopus.'
It is not even clear how Fukui would deal with an English "double object" construction such as I gave John a book. The Korean construction, however, is fundamentally different from the English case in that there can in principle be an unlimited number of "object" positions within a clause, in the sense that we cannot claim the upper limit is, say, five or six. This implies that it is impossible to claim that the Case-marking is 'inherent' (cf. Chomsky 1981:170 ff.), because inherent Case-marking must be a lexical property of limited types of verbs, which presumably will have to be listed in the lexicon, but there is no way of listing things whose limit we do not know.

If we adopt Fukui's position that a "subject" is a sister of V and an "object" is a sister of V, and that only a sister of V can be assigned Objective Case, then, all of the accusative-marked nominals in (41) will have to be sisters to the V. This option has the same problem as the inherent Case-marking option. Fukui claims that both the theta-role and Case are assigned in accordance with the Saturation Principle, which states:

(42) (= Fukui's (34) p. 59)
   a. Every grid position is discharged.
   b. If X discharges a grid position in Y, then it discharges only one.

Here, a 'grid' may be either the theta-grid or the Case grid of a lexical item. ((42) is intended to combine the Theta Criterion and the requirement that the Case grid must be saturated.) In order for a certain number of "objects" to discharge an Objective Case in the Case
grid of a verb such as 'cut', the verb's Case grid will have to include exactly that many occurrences of Objective Case to be discharged, or else the sentence will be ruled out by (42). But since we do not know how many "objects" there can be, it would be impossible to list all of the possible Case grids in the lexicon.

The only option for Fukui, therefore, seems to be to assume that the structure of (41) is a binary branching structure of the form (43):

However, it is not clear if anyone would accept the hypothesis that a lexical level category (V) can contain an unlimited number of distinct elements, including a clausal adjunct, as illustrated below:

The first ACC-marked nominal in (44) will have to get its Case from the verb (V₀) which includes two adjuncts and two "objects". In principle be an infinite number of "objects" and adjuncts can be added. For anyone who would not accept this view, then, it seems
clear that Fukui's system of category projection as it stands cannot account for the existence of the MACs in a language like Korean, whose MNCs are almost exactly parallel to the Japanese counterparts. In order to accommodate the MACs, then, it seems very likely that either his Saturation Principle (42) or the claim that Lexical Categories project only up to a single bar-level (or both) should be modified or altogether abandoned.

Moreover, the MACs in Korean suggest that it may be impossible to deduce the existence of MNCs in Korean and their nonexistence in English from the fact that English but not Korean has a unique specifier position for INFL, because, apparently, neither Korean nor English has a specifier position for V, and yet only Korean and not English has the MACs. It may be that there are independent reasons for the (non)existence of the MACs in the two languages. But then, there seems to be no reason not to expect the same 'independent' reasons to be responsible for the contrast between the two languages with respect to the MNCs, at least in part.

I am not by any means claiming that Korean MACs cannot in principle be incorporated into a system such as Fukui's. The point is that the two phenomena, the MNCs and the MACs, have a number of properties in common (as will be demonstrated in detail in the following chapters), and therefore that it is often misleading to draw conclusions based just on one of the two constructions (including treatments of certain MACs without reference to the corresponding MNCs, cf. chapter 5).
A similar point can be made about the position that all MNCs are Focus constructions. As mentioned above, Saito (1982) rejects Kuno's Subjectivization analysis of a subset of Japanese MNCs on the following grounds:

(45) i. There are certain MNCs in Japanese that cannot be derived by the Subjectivization rule but must be base-generated.

ii. Even with the Subjectivization rule, certain semantic constraints are needed anyway to block overgeneration.

iii. Therefore, though a majority of well-formed MNCs fall under the Subjectivization rule, the rule is superfluous, and a better alternative is to allow all MNCs in the base as Focus constructions and let semantics rule out overgeneration.

The second point seems to be immaterial. In a sense, all constructions are subject to certain semantic constraints, for example:

    Nom self-Acc too overdrive
    'Youngsoo overworks himself.'

b. * Youngsoo-ka caki-lul ssisessta.
    Nom self-Acc washed
    'Youngsoo washed himself.'

The Korean reflexive pronoun caki generally denotes a certain abstract characteristic (often personality) of the antecedent but not the physical body, unlike in English, and thus (46b) is not a possible sentence in Korean. Following the reasoning outlined in (45), one would reach the conclusion that, since certain semantic constraints
are necessary even with the Binding Conditions, the Binding Conditions are redundant.

The first point in (45) was briefly discussed above. After all, no one within the GB framework has claimed that all empty categories must be, say, PRO, but nothing else; then why should all MNCs have the same structure?

I do not have an explanation of all of the examples Saito has cited. However, a majority of the cases cited in the literature as typical 'counterexamples' to Kuno's Subjectivization rule involve an unaccusative predicate (a predicate which selects an initial 2 but not an initial 1) including 'exist', 'there are many', 'be difficult', and 'occur'. In chapters 2, and 3, I will briefly examine certain shared properties of these constructions that are not found in other MNCs.

Even if we accept the hypothesis that all MNCs are some sort of Focus construction, we still have to account for MACs in Korean. Clearly, it is difficult to maintain that they are some sort of focus constructions, because there is no place for a focus or a topic within a VP. As we will see in later chapters, ascension type MACs are much more restricted, and there is no multiple accusative pattern corresponding to the generic topic construction, a fact that must be accounted for in any adequate analysis of MACs in Korean. If we assume there is no position for a generic topic sentence-internally (as is assumed in virtually every approach), this fact automatically follows. Then, the MACs will have to be explained in other ways, for example, ascension within the RG framework, or a comparable process (movement, perhaps) within the GB framework. Once we allow this,
there is no reason to expect that the rule should be limited to the
direct object position; it is only natural to expect the same process
to occur in subject position.

1.4 An Assumption about Case Marking in Korean

I assume that the case-marking pattern in Korean is determined
by the GR of a nominal, as follows:

(47) GR of Nominal                                 Case Marking
    Acting 1s                                     Nominative
    Acting 2s                                     Accusative
    Acting 3s                                     Dative
    Oblique                                       various

An 'acting term' refers to a final term and the corresponding chômeur:
e.g., an acting 1 may be a final 1 or a 1-chômeur, and so on.18

This system is assumed to be a default system, i.e., if the
relevant rule in Korean has no side effect on the case marking, the
case marking will be determined by this system. A passive chômeur,
for instance, is not marked NOM, though it is an acting 1. I assume,
however, that this has to do with the nature of Passive itself, and as
such need not be mentioned in the general system. Certain advancement
1-chômeurs, for example, may be marked NOM if the relevant advancement
does not require otherwise.

Within the GB framework, there have been various proposals
regarding how case or Case is assigned. In general, linguists who
adopt a version of Kunć's Subjectivization hypothesis hold that Case
is assigned structurally either by a projection of V or by a
projection of INFL (e.g., Yim 1985, Choe 1985, Y. Kang 1986, G. Kim
1986), whereas those who take the view that all MNCs are Topic/Focus constructions maintain that nominative case is contextually or inherently determined by virtue of occurring as an NP of S (Saito 1985). It is not clear how Case is assigned in certain predicate nominals of unaccusative predicates such as 'be' or 'become', or certain sentential complements, as listed in 1.3. In all GB approaches I know of, a NOM marking is synonymous with 'subject' or 'NP of S'. Y. Kang (1986) proposes the following default Case assignment rule:

(48) Nominative Case is assigned to all non-Case-marked NPs.

This convention will presumably assign Case to predicate nominals as well as certain nonsubject nominals marked NOM. But then, it is not clear to me whether a Case system incorporating (73) will reveal interesting facts about the nature of the language under consideration. For example, the Case Filter will be rendered contentless if there is a default rule such as this.

Within the Relational Grammar framework, it has been claimed that grammatical relations are not in one-to-one correspondence either with case marking or with semantic roles, as mentioned in 1.2. I have little to say about how case (or Case) is assigned to nominals in the sense of the GB literature.
Notes to Chapter 1

1. Readers who are interested in more specific details are advised to refer to the references cited in this work, especially Dubinsky and Rosen (1983), which is a comprehensive RG bibliography cross-indexed by language and topic.

2. See Perlmutter (1982), Perlmutter and Postal (1983a), and Rosen (1984) for discussion of the determination of initial grammatical relations. See also Bresnan (1982:83 ff.) and Pinker (1982) for the learnability issue. Bresnan's work contains a response to Chomsky's (1981:10) criticism of theories in which grammatical relations are taken to be primitives based on the criterion of 'epistemological priority'.

3. For the R-sign 'chô(meur)' in (13), see below.

4. The two laws are informally stated below:

   (i) Chômeur Law
   If some nominal N₁ bears a term relation in a stratum, c_i, and some other nominal bears the same term relation in the next stratum, c_{i+1}, then N₁ bears the chômeur relation in c_{i+1}.

   (ii) Motivated Chômage Law
   If a clause contains a nominal a which heads an arc with the term R-sign n in stratum c_i and heads a Chô-arc in stratum c_{i+1}, then there must be a nominal b which heads an arc with R-sign n in c_{i+1}, where all arcs have the same tail.

5. See Postal (1986a:20-21) and Chapter 12 of Johnson and Postal (1980) for a discussion of the representation of precedence relations between nodes in the Arc-Pair Grammar model. As for the internal structure of nominals, research within the RG framework has started only recently (cf. Rosen (1987) and Bickford (1987:Chapter 6)).

6. Laws are universal constraints which all well-formed RNs in natural languages must satisfy, and rules are well-formedness conditions on RNs in a given language whose grammar choose them from the set of rules allowed by universal grammar. A well-formed RN in a language must be consistent with all the universal laws and rules of the grammar of the language.
7. Perlmutter and Postal's informal formulation of Passive is given below:

(i) Passive is the rule ... that sanctions the existence of a 1-arc for a nominal $N_a$ in stratum $c_{k+1}$ of a clause node $C$, where $N_a$ heads a 2-arc in stratum $c_k$ of $C$, and where there is some nominal, $N_b$, which heads a 1-arc in stratum $c_k$.

8. The universality of this law has been questioned by some linguists. See Davies (1981: chapter 5) and references cited there. Davies discusses Possessor Ascension to 3 in Choctaw, in which the possessor that ascends from a 2-arc host nominal bears the 3-relation.

9. Bickford (1987:246, note 4) shows that the HLL can be deduced as a theorem from the RSL, the Motivated Chômeur Law, and the Oblique Law (cf. chapter 1 above). That is, the GR of a host can logically be a term, an oblique, or a chômeur. If the host bears an oblique relation at the pre-ascension stratum, the ascende will also inherit the oblique relation from the host, in accordance with the RSL. But this violates the Oblique Law which requires an oblique arc to be an initial arc. If, on the other hand, the host bears the chômeur relation at the pre-ascension stratum, the ascende will inherit the chômeur relation. But the Motivated Chômeur Law restricts the occurrence of the chômeur relation to the context prescribed by the Chômeur Law, and thus the ascende cannot have the chômeur relation. The only possible GR of a host is therefore a term.

10. Eckman's observation is based on the grammaticality of sentences like (i)-(iii) below in the languages examined, each representing the Subject-to-Object Raising (SOR), the Subject-to-Subject Raising (SSR), and the Object-to-Object Raising (OSR):

(i) a. John believes that he is rich.
   b. John believes himself to be rich. (SOR)

(ii) a. It seems that you are rich.
    b. You seem to be rich. (SSR)

(iii) a. It is easy to like you.
    b. You are easy to like. (OSR)

11. Eckman's work is done within an early version of RG in which derivational relations among sentences are assumed. In the current RG/APG terms, the language-specific constraint would be tantamount to saying that in such languages, there is no 1-arc whose predecessor (local or foreign) is a 2-arc. (See Postal (1986a:14-18) for the notions 'predecessor', 'successor', 'local', and 'foreign'.)

12. I do not take the 'topicalization' construction into consideration such as the following:
(i) i chayk-un ku-ka ssessta.
this book-Top he-Nom wrote
‘As for this book, he wrote (it).’

See Na (1986) and references cited there for discussion.

13. These terms themselves have no theoretical significance: within the current Government-Binding (GB) framework, “focus” and “subject” are nothing more than different ways of saying ‘NP o2 S [NP, S]’. As for the nominative Case marking of nominals in MNCs, Saito argues that it is determined ‘inherently’ or ‘contextually’ by virtue of occurring as an NP of S [NP, S]. Yim (1985), on the other hand, claims that nominative Case is assigned by some projection of INFL, according to what he calls the X-bar Transparency Principle.

14. Fukui departs from the usual assumption that nouns are the head of NPs. He adopts Brame’s (1981, 1982) idea that "NPs" in English are in fact DPs, of which the determiner is the Functional Head, just as INFL and COMP are the Functional Head of S (= I’’) and S’ (=C’’), respectively. One conceptual problem that is puzzling to me about Fukui’s position has to do with the assignment of Case to such DPs. Since Case can only be assigned to a maximal projection as is assumed in general and also by Fukui himself (p. 93 note 27), the Case assigned to a DP (for example by a V or P) will presumably percolate down to the head of the maximal projection, the determiner in this case, just like other features of a maximal projection, as assumed in GB and many other frameworks. But determiners are obviously not possible Case recipients as Fukui himself states (p. 54), and the Case must be ‘discharged’ (cf. his Saturation Principle on p. 59) to the noun within the DP. It is not clear why DPs are an exception to the general feature percolation convention.

15. In fact, this is the position that Kang (1986:77) takes. He assumes a flat VP-internal structure for Korean, and holds that only a sister of V0 can be assigned Objective Case. We will see some reasons to reject such a view in later chapters.

16. Fukui employs the notion ‘Kase’, which includes Case and what he calls ‘F(unctional)-Features’ (pp. 53-56). Since this notion is irrelevant to our point, I will continue to use the term Case for simplicity.

17. I assume that it is possible for a grid to have more than one position with the same content, e.g., five positions of accusative Case or the ‘Patient’ theta-role, since (42) does not rule out this option. If this is in general not allowed, the flat VP-internal structure of sentences like (41) will be immediately ruled out because only one of the five “objects” will be assigned Case and/or a theta-role.
18. See Perlmutter and Postal (1984b:130-132) for a formal definition and the relevance of this notion in linguistic generalizations.
Chapter 2

Ascension in Simplex Clauses: Possessor Ascension

This chapter explores the syntactic and semantic characteristics of ascension constructions in Korean based on the most widely discussed construction in Korean, the Possessor Ascension (PA) construction. The facts discussed in this chapter will serve as an important basis for the subsequent chapters in which other instances of ascension are examined.

A large portion of this chapter is devoted to PA from 1 (subject), which has been the most controversial area since I. Yang (1972), B. Park (1972), and Kuno (1973).

In section 2.1, I first examine some apparent instances of PA, applying some well-known tests for subjecthood as well as a few others I will develop. On the basis of these tests, I explore a less clear case, i.e., MNCs involving 'alienable' possessive relation between NOM-marked nominals, limiting the discussion to kinship terms. I argue that there are sufficient reasons to distinguish the two types of MNCs structurally, the common properties being explained on independent grounds.

Section 2.2 briefly examines PA from a 2 (direct object), and in 2.3, I speculate on certain multiple dative construction. Section 2.4 discusses possible objections to the ascension analysis. 2.5 is concerned with the distribution of ascension from subject. This section also includes a brief discussion of Baker's (1988) proposal
concerning relation-changing processes. A brief summary of this chapter is provided in 2.6.

2.1 Possessor Ascension from Subject

This section argues for the existence of a Possessor Ascension construction (PAC) in Korean, as claimed in e.g., S. Park (1985) and Chun (1985).

As briefly mentioned in chapter 1, Kuno (1973:62-78, 1978a:240-256) has argued that certain MNCs in Japanese are derived by the syntactic rule of Subjectivization, stated below:

(1) Subjectivization (Kuno 1973:71)
Change the sentence-initial NP-[Gen] to NP-[Nom], and make it the new subject of the sentence.

To take an example from Korean, (1) derives (2b) from (2a):

(2) a. Sooni-uy maumssi-ka kopta.
   Gen nature-Nom pretty
   'Sooni is good-natured.'

b. Sooni-ka maumssi-ka kopta.
   Nom   Nom

Within the RG framework, the rule of Possessor Ascension may be stated, given the general rule Ascend X, as follows:

(3) X = (Poss, .......)

As discussed in chapter 1, this rule does not build or assemble an RN. It only states the fact that an ascension RN in which the ascendee is
an initial possessor (more precisely, the ascende arc is a foreign successor of a Poss-arc) is well-formed.

If no further conditions are added, Possessor Ascension will be licensed in any structure involving a term nominal with a possessor: i.e., from a 1, a 2, or a 3. As mentioned in chapter 1, however, languages may vary as to the possible set of hosts: e.g., Bell (1983) argues that in Cebuano, the line is drawn at final 1, and thus only final 1s can be the host of an ascension. In Korean, the line is drawn at 2 in the clearest cases, and thus the HLL for Korean may be tentatively stated as follows:

(4) Host Limitation Law (Korean)
Only a nuclear term can be the host of an ascension.

Sentence (2b) above, for instance, will be analyzed as in (5):

(5)  

Though the RG conception of Possessor Ascension (PA) is similar in essence to Kuno's Subjectivization rule (and analogous treatments within the GB framework), there are at least two important conceptual and empirical differences, aside from the aforementioned RG position on derivational relations between distinct RNs. First, in the RG view, PA is a subpart of a more general rule which incorporates all
biclausal and monoclausal ascensions, whereas in a view such as Kuno's, it is an isolated process that has nothing to do with, e.g., PA from 2, or the Raising rules.

Second, under an analysis such as Kuno’s, there are two subjects in sentences like (2b), whereas under the RG conception of PA, this possibility is excluded by the Stratal Uniqueness Law (cf. chapter 1). According to the RG view, only the ascendee is a 1 at the ascension stratum; the host bears the chômeur relation. I argue below that this difference is not just a matter of labelling but has certain linguistic consequences, i.e., the set of ascension chômeurs as opposed to the set of final subjects behaves as a natural class with respect to certain syntactic restrictions in Korean.

Other than these differences, the two views largely coincide in terms of their predictions. For this reason, arguments for or against one view often hold for the other. Below I briefly go over some of these arguments together with a few additional arguments for the ascension analysis.

2.1.1 Arguments for the Subjecthood of the Ascendee

2.1.1.1 Subject Honorification

One well-known test for subjecthood is honorific agreement, which is often referred to as Subject Honorification (SH). The agreement is marked by a verbal suffix -(u)si, and indicates speaker’s deference to a person mentioned within the sentence. In general, a subject can trigger SH, but nonsubjects cannot (ignoring ‘dative subjects’). In sentences involving PA, the ascendee can trigger SH:
(6) sensaŋgnim-i maumssi-ka kow-usi-ta.
   teacher -Nom disposition-Nom fine-Hon-Dcl
   'The teacher is good-natured.'

The acceptability of (6) therefore suggests that the ascendee sensaŋgnim 'teacher' is the subject of the sentence.

As observed by many (e.g., Kuno 1978a, Yoon 1987), certain pragmatic factors also influence the usage of honorification.² There are borderline cases where judgments are unclear, and the acceptability in such cases tends to be a matter of degree. However, this does not imply that in all cases the acceptability is a matter of degree but has nothing to do with syntactic conditions: such reasoning would be as false as concluding that there is absolutely no distinction between 'blue' and 'green' just because there is a certain unclear borderline range between the two in the color spectrum. For instance, no pragmatic considerations would allow the object of a transitive clause to control SH, though in the corresponding passive clause, the derived subject can. SH is thus clearly sensitive to the GR of a nominal, and to the extent that this is true, facts about SH provide evidence for the subjecthood of a nominal.

2.1.1.2 Subject-to-Object Raising

The second argument for the subjecthood of the ascendee in the PA sentences comes from its ability to be raised in the SOR construction, as illustrated below:
   I -Top Nom nature-Nom fine -Comp think
   'I consider that Sooni is good-natured.'

   I -Top Acc nature-Nom fine-Comp think
   'I consider Sooni to be good-natured.'

In general, a subject can be raised in the SOR construction, but a
nonsubject cannot. When a generic topic is raised as in (8) below,
the sentence always results in ungrammaticality:

(8) a. kkoch-un cangmi-ka cohta.
   flower-Top rose -Nom good
   'As for flowers, a rose is good.'

   I -Top rose-Acc rose -Nom good-Comp think
   'Among flowers, I think the rose is good.'

Yoon (1987) questions the validity of the SOR test for
subjecthood based on sentences like the following (judgment his):

(9) John-i ecey-lul nalssi-ka chuwuessta-ko sayngkakhanta.
   Nom yesterday-Acc weather-Nom was cold -Comp think
   'John thought yesterday was cold.'

Assuming this judgment, it is not obvious that the raisee in this case
is an adverb, as Yoon claims. It could well be that speakers who
allow such sentences consider 'yesterday' to be a subjectivized NP, as
in the following:

(10) a. ecey (-uy) nalssi-ka chuwuessta.
    yesterday (-Gen) weather-Nom was cold
    'Yesterday’s weather was cold.'

    b. ecey-ka nalssi-ka chuwuessta.
    Nom Nom
If we assume that what is raised in (9) corresponds to the ascendee in (10b), there is no need to claim that an adverb can be raised. When an uncontroversial adverb is involved, the sentence is always ungrammatical, for example:

    Nom    Nom always kind -Comp think
    'John thinks that Mary is always kind.'

    Nom    Acc always good -Comp think
    'John considers Mary to be always kind.'

    Nom always -Acc    Nom good -Comp think

It seems reasonable, then, to assume that only a subject can be raised in the SOR construction, in the absence of convincing evidence to the contrary. The fact that the ascendee in the PA sentences can be raised, then, shows that the ascendee is the final subject.

2.1.1.3 Equi Victim Test

The third argument for the final subjecthood of the ascendee in the PA construction comes from the fact that it can be the Equi victim in the obligatory Equi construction (in GB terms, its position can be occupied by a PRO in the obligatory control context), as illustrated below:

    child-Pl-Nom heart-Nom fine-Incho-Past
    'The children have become (more) kind-hearted.'

    child-Pl-Top heart-Nom fine-Incho-Comp tried
    'The children tried to become kind-hearted.'
The complementizer -(u)lyeko 'in order to' does not allow a tensed predicate. In complements with this complementizer, Equi must apply (i.e., the complements are subject to the 'Like-Subject Constraint' of Perlmutter (1968)), as shown by the ungrammaticality of the following example in which the embedded subject is different from the Equi controller:

     child-Pl-Top flower-Nom fresh -Incho-Comp tried
     'The children made efforts so that the flowers would become fresh.'

Thus, if the remaining NOM nominal in the embedded clause of (12b) is the "subject" of the complement clause, it will remain a mystery why just in this case the Like-Subject Constraint does not hold in the complement.

In clear cases, the Equi victim in such complements is invariably the subject of the embedded clause, as in English. If this is the correct generalization, the fact that the ascendee can be the Equi victim in such complements shows that it is the final subject.

2.1.1.4 Equi Control Test

Another related argument for the final subjecthood of the ascendee comes from its ability to control Equi. In general, only a final subject can serve as the Equi controller in adjunct clauses introduced by -mvenae 'while (simultaneous action)', -taka 'but then (interrupted action)', -axe 'and then (sequential action)', -(u)lyeko
'in order to', and so on. In such adverbial clauses, Equi is obligatory (i.e., it must apply when there is coreference), as illustrated below:

    school-Dat go-Comp Nom friend' -Acc met
    'While going to school, John met a friend.'

    Nom/he-Nom/self-Nom
    chinkwu-lul mannassta.
    'While John was going to school, John met a friend.'

Thus, if the ascendee is the final subject, we expect it to be able to control Equi in this context. This prediction is borne out:

(15) [ei i il-ul ha-si-taka] emenii-ka son-i kechil-e ci-essta.
    this work-Acc do-Hon-Comp Nom hand-Nom rough-Incho-Past
    'While she was doing this work, mother's hands became rough.'

Here, the empty subject in the adjunct clause must be controlled by the matrix subject 'mother', as indicated by the honorific agreement. That the controller of Equi in this case is not the second NOM nominal 'hand' is clear from the ungrammaticality of the following sentence:

(16) * emeni-uy son-i i il-ul ha-si-essta.
    mother-Gen hand-Nom this work-Acc do-Hon-Past
    'Mother's hands did this work.'

Thus, given that only a final subject can control Equi in adjunct clauses of the type shown above, the fact that the ascendee controls Equi in (15) provides evidence for its final subjecthood.
2.1.1.5 Honorific Nominative Marking

Another argument for final subjecthood has to do with the honorific NOM marking -kkeyse, illustrated below:

(17) sensayngnim -i/-kkeyse o-si-essta.
    teacher -Nom/-Nom[+hon] come-Hon-Past
    'The teacher came.'

Alternation between the plain and honorific NOM markers is not always possible. For example, the plain NOM marker shows up with the predicate nominal in negative sentences involving the copulative verb (18a), or with the predicate nominal of the verb 'become' (19a). The honorific NOM marking, however, is impossible in such cases, though there does not seem to be anything semantically odd about its occurrence in such positions.

(18) a. ce pwun-un wuli sensayngnim-i an-i-si-ta.
    that person-Top our teacher -Nom not-be-Hon-Dcl
    'That person is not our teacher.'

b. * ce pwun-un wuli sensayngnim-kkeyse an-i-si-ta.
    Nom[+hon]

(19) a. apeci -kkeyse/-ka sacangnim-i toy-si-essta.
    father-Nom[+hon]/-Nom president-Nom become-Hon-Past
    'Father became the president (of a company).'

b. * apeci -kkeyse/-ka sacangnim-kkeyse toy-si-essta.
    Nom[+hon]

I will discuss the structure of this type of sentence in chapter 3. For now, I just assume that predicate nominals are not final subjects.

Another case where alternation between the two NOM markers is not allowed is found in the so-called 'dative subject' construction, illustrated below:
(20) a. na-eykey-nun sensayngnim-i kulipta.
   I -Dat -Top teacher -Nom miss
   'I miss the teacher.'

      Nom[+hon]

Perlmutter (1984) argues that the 'dative subject' construction in
Japanese, along with many other languages, involves 'Inversion', a
process which demotes a 1 to 3. Youn (1985) argues for a similar
proposal for Korean. According to the Inversion analysis, the NOM
nominal in (20a) never heads a I-arc: it is an initial 2 and final 2-
chômeur. (I return to this analysis below.) Assuming the Inversion
analysis for Korean, the condition on honorific NOM marking in Korean
can be stated as follows:

(21) **Honorific Nominative Marking**
    Only a final 1 can be marked -kkeyse.

If (21) is valid, we expect that the ascendee from 1 can be marked
-kkeyse, since it is the final 1. This prediction is correct:

(22) sensayngnim-kkeyse maum-i coh-usi-ta.
    teacher -Nom[+hon] heart-Nom good-Hon-Dcl
    'The teacher is good-natured.'

Since a NOM-marked nominal cannot always be marked NOM[+hon] if it is
not a subject, a natural conclusion would be that the ascendee in (22)
etc. is the final subject.6

To sum up, there are at least five pieces of evidence suggesting
that the ascendee heads a final 1-arc: (i) it can trigger SH, (ii) it
can be raised in the SOR construction, (iii) it can be the Equi victim in the obligatory Equi construction, (iv) it can be the Equi controller in the subject-controlled Equi construction, and (v) it can be marked with the honorific NOM marking -kkeyse.

Among the arguments not mentioned above but discussed in the literature are arguments based on Reflexivization and Quantifier Floating (e.g., Kuno 1978a, Chun 1985). The latter will be discussed in chapter 4, but I will not discuss Reflexivization in detail in this work because it seems to me that facts about Korean anaphora are far from clear at present. (For one thing, judgments vary wildly among my informants as well as in the published literature.)

2.1.2 Arguments for the Chomage of the Host

We have seen above that the ascendance in the PA construction exhibits a number of subject properties. However, this alone does not establish that the ascension analysis is correct: to show this, the chomage of the initial host must also be established.

As mentioned above, one crucial difference between the transformational grammar approach (the Subjectivization analysis of Kuno, etc.) and the PA analysis lies in their views of the syntactic status of the inner nominals: ascension chômeurs in the latter view, but subjects in the former view. If it can be shown that the set of ascension chômeurs comprises a natural class as distinct from the set of final subjects with respect to certain syntactic phenomena, it can be maintained that the PA analysis is a better alternative, because
only this analysis makes the necessary distinction between final 1s and the other NOM nominals.

In this section, I argue that there are at least two syntactic phenomena with respect to which ascension chômeurs behave alike: a word order restriction on the host and the ascendee, and a restriction on Relativization.

2.1.2.1 Word Order Restriction on Ascension

As is well-known, the word order among clausemates in Korean (and in Japanese) is relatively free, subject to the 'verb-final' constraint (cf. Ken Hale 1980, Saito 1985, Y. Kang 1986). The word order in multiple case constructions, however, is much more restricted. In the case of Possessor Ascension, for example, the ascension chômeur cannot be positioned in front of the ascendee, as the following examples illustrate: (Sentences in (23) are from Chun (1985).)

(23) a. sikyey-ka cwul-i kkunh-e ci-essta.
watch-Nom chain-Nom cut -Pass-Past
'The chain of the watch is cut apart.'


Nom stomach-Nom ache
'John has stomach-ache.'


The generalization can be initially stated as follows:

(25) Precedence Condition (tentative)
An ascension chômeur may not precede the ascendee.
There are certain apparent counterexamples to this generalization, such as:

    Nom brain-Nom good
    'John's brain is good. (John is smart.)'

b. meli-ka John-i cohta.
    brain-Nom Nom good
    'As for brain, John's is good. (It is John that is smart.)'

Sentences like (26b), however, need not be a scrambled version of the corresponding PA sentences (26a). As noted in Sohn (1980), the particle -i/ka in Korean is ambiguous between a nominative case marker and a delimiter with contrastive meaning,7 and there are certain NOM-marked topics which are not ascendees.8 If we assume that the initial NOM nominal is a topic and that the ascension chômeur in sentences such as (26) is a phonetically null element coreferential with the topic, such sentences do not violate the precedence condition (25).

There are at least three empirical consequences of this assumption: first, topics in general are generic, not specific. Therefore, if the putative ascension chômeur is a non-generic specific nominal, there will be no sentences parallel to (26b) because the topic cannot be semantically licensed. In that case, it is predicted that the chômeur cannot precede the ascendee, given (25). This prediction is borne out, as shown in the contrast between the pairs below:
   Nom beach-Nom famous
   'As for Honolulu, its beaches are famous.'

   b. ? haypyen-i Honolulu-ka ywumyenghata.
      beach-Nom -Nom famous
      'As for beaches, Honolulu's are famous.'

    Nom Nom
    'As for Honolulu, Waikiki is famous.'

      Nom Nom famous

In (27b), we can think of the set of 'beaches' of which those in
Honolulu are famous; but in (28b), it is unlikely that there is a set
of places called 'Waikiki' other than in Honolulu. Thus, when only an
ascension structure but not a topic structure is possible, there is no
violation of (25).

Secondly, we would not expect the word order inversion between
the ascendee and the ascension chômeur when the ascension occurs from
the direct object position, because there is no place for a topic in
that position. This prediction again seems correct: there is no
violation of condition (25) in the case of PA from a 2. In fact, Y.
Kang's (1986:105) formulation of Kuno's 'crossing-over' constraint
(cf. Kuno 1980) confines the word order restriction to the direct
object position. An example is given below:

(29) a. ku-ka ku ai-lul son-ul capassta.
    he-Nom the child-Acc hand-Acc held
    'He held the child's hand.'

   b. * ku-ka son-ul ku ai-lul capassta.
      he-Nom hand-Acc the child-Acc held
Finally, it is also predicted that the first NOM nominal in sentences like (26b), as a topic, could not be raised in the SOR construction, given the assumption that only a subject but not a topic can be raised. This prediction is also borne out, as shown below:

    I -Top Acc brain-Nom good-Comp think
    'I consider John to be smart.'

    b. * na-nun meli-lul John-i cohta-ko sayngkakhanta. (cf. (26b))
    Acc Nom

For these and other reasons that will be discussed as we proceed, I conclude that genuine cases of PA do not violate (25). To the extent that (25) is a necessary condition in Korean, then, the word order phenomenon provides empirical motivation for the recognition of the category of ascension chômeur which plays a central role in (25).9

2.1.2.2 Relativization

The second argument for the chômeage of the initial host comes from a restriction on Relativization: in the PA construction in Korean, the first NOM nominal can be relativized, but none of the rest can. This is illustrated below:

(31) i tomapaym-i phipwu-ka saykkal-i pyenhanta.
    this lizard-Nom skin -Nom color-Nom change
    'The color of the skin of this lizard changes.'

(32) Relativization of the ascendee
     [\@i phipwu-ka saykkal-i pyenh-nun] tomapaym-
     skin -Nom color-Nom change-Comp lizard
     'the lizard whose skin changes its color'
(33) **Relativization of ascension chômeurs**

a. *[i tomapaym-i əj saykkal-i pyenha-nun] phipwu
this lizard-Nom color-Nom change-Comp skin
'the skin such that this lizard's changes color'

b. *[i tomapaym-i phipwu-ka əj pyenha-nun] saykkal
skin -Nom change-Comp color
'the color which the skin of the lizard's changes'

Under the ascension analysis, the descriptive generalization can
be stated informally as follows:

(34) **A Restriction on Relative Clause Formation (tentative)**

An ascension chômeur may not be the target of Relativization.

Kuno (1973:256 ff.) attributes the unacceptability of such
relative clauses in Japanese to their semantic implausibility: i.e.,
the oddity of such relative clauses is due to the fact that "one
rarely characterizes something generic by some specific event or
state" (p. 256). (Kuno assumes that what is relativized in Japanese
is always a topic.) In order for the semantic account to be valid,
however, it will have to be shown that no generic nominal can be
relativized. But this is not true: when a generic nominal occurs as
the subject or direct object of the sentence, for example, no such
restriction shows up:

(35) a. *[əʃ] tal-ul cengpokha-n] inlywu
moon-Acc conquer-Comp human race
'the human race which has conquered the moon'

b. *[əʃ hanttay əʃ kulehkey cohaha-ten] swulj -ul John-un
once so much like -Comp liquor-Acc Top

yocum ip-ey-to an taynta.
recently mouth-Dat-even not touch
'John does not even touch alcohol, which he once liked so
much.'
In both of the relative clauses above, the relative head may have a
generic reading; in (35a), for instance, the relative head does not
denote a specific set of human beings, and in (35b), the 'liquor' does
not have to be a specific sample of liquor. The question is then why
one can naturally characterize the generic noun such as 'human race'
by the specific event of 'conquering the moon' in the case of (35a).

Intuitively, Kuno's account is quite plausible, and I suspect
that the restriction observed above indeed has to do with genericity.
In the case of PA, in particular, the ascension chômeur rarely allows
attributive adjectives. For example:

    Nom    Gen    pretty hand-Acc held
    'John held Mary's pretty hand.'

    Nom    Acc    hand-Acc

The unacceptability of sentences like (36b) suggests that
ascension chômeurs in general tend to be nonspecific. If a proper
formulation of the functional account turns out to incorporate a
condition such as (34), there still is a clear reason to recognize the
class of ascension chômeurs as a syntactic/semantic natural class,
because final subjects or objects are not restricted in the same way
with respect to Relativization even when they are generic.

I conclude therefore that even if the restriction has something
to do with genericity, genericity alone is not a sufficient notion for
stating the observed fact, but that a crucial reference to the GR of the nominals is necessary.

Kuno claims that there are certain cases where relative clauses parallel to (33) above are acceptable. One such example is given below:

(37) [zoo ga nagai] hana wa, eigo de wa, elephant Nom long nose Top English in Top

'\(\text{trunk}'\) to yuu. Comp is called
'The nose, as for which the elephant's is long, is called a "trunk" in English.'

All five of my Japanese-speaking informants, however, find this sentence at best highly marginal, and the Korean counterpart is unacceptable to me.

Assuming for the moment that such sentences are acceptable, the task is then to account for the subject-object asymmetry: that is, as far as PA from 2 is concerned, there is no apparent violation of (34), for instance:

(38) a. nay-ka ku khokkili-lul kkoli-lul kuli-essta.
    I -Nom the elephant-Acc tail -Acc draw-Past
'I drew the elephant's tail.'

b. * [nay-ka ku khokkili-lul e₁ kuli-n] kkoli
    I -Nom the elephant-Acc draw-Comp tail
    'the tail which I drew the elephant’s'

I suspect that what is relativized in sentences like (37) may be the generic topic, rather than the ascension chômeur itself, for instance:
(39) kho-ka₁ khokkili-ka s₁ kilta.₇₇
       nose-Nom elephant-Nom long
    'As for a nose, the elephant's is long.'

In the preceding section, I showed that there are reasons to consider
sentences like (39) as topic constructions rather than scrambled
versions of PA sentences (cf. (26) above). If the relative clause in
(37) etc. is associated with (39) rather than a PA construction, the
subject-object asymmetry would follow, because there is no place for a
generic topic in sentence-internal position.

John Haig (personal communication) has pointed out to me that,
given sufficient context, relative clauses apparently violating (34)
may be acceptable.¹⁰ However, the fact that we need a lengthy,
complex context to make such relative clauses even marginally
acceptable seems to indicate that the constraint is real and that
these examples involve relativization of a topic. The remaining
problem then is why in most cases, such 'association with a topic' is
not possible to speakers who share my judgment, and why English does
not allow a topic to be relativized, but that is an issue I will not
pursue in this work.

I conclude therefore that (34) is a valid condition, which in
turn provides evidence for the chômage of all but the first among the
NOM nominals in the PA construction.
2.1.3 The Alienability Issue: Ascension vs. Double Subjects

Thus far, I have focused mainly on the sort of FA construction in which the ascendeew bears an 'inalienable' possessor relation with respect to the host (the possessed), including body parts and some abstract characteristics of the possessor such as 'name' and 'personality'.

In this section, I examine the so-called 'Double Subject Construction' (DSC), focusing on kinship term possessors such as 'John’s father' and 'Mary’s son'. I will argue first that the simplest analysis is to distinguish structurally the DSC from the PA construction, and then discuss the common characteristics of the two constructions.

2.1.3.1 The 'Double Subject Construction'

Even among linguists who generally accept the ascension (or Subjectivization) analysis of some subset of multiple case constructions, there is not general agreement as to the structure of sentences like (40) and (41), where the second nominal is not an 'inalienable' characteristic of the first:

    Gen father-Nom/-Nom [+hon] sick-Hon-Dcl
    'John’s father is sick.'

    Nom father-Nom/-Nom [+hon] sick-Hon-Dcl
    'As for John, his father is sick.'
(41) a. sensayngnim-uy aki-ka aphu(* -si)-ta.
   teacher -Gen baby-Nom sick (-Hon)-Dcl
   'The teacher's baby is sick.'

   b. sensayngnim-i/-kkeyse aki-ka aphu(* -si)-ta.
   teacher -Nom/-Num[+hon] baby-Nom sick (-Hon)-Dcl
   'As for the teacher, her baby is sick.'

Kuno (1973, 1978) claims that the Japanese counterparts of such sentences also involve Subjectivization, just as in the case of the inalienable possessive construction. (Chun (1985) also takes a similar view for Korean. See also Shibatani (1977b) and Haig (1979) for relevant discussion.)

On the other hand, Masuoka (1979) argues that, while multiple nominative constructions with an inalienable possessive relation are "single-subject" constructions, sentences like (40)-(41) are examples of the "bona fide double-subject construction" in Japanese (see below for further details).

One of Kuno's arguments for the subjecthood of the first NOM nominal is that it can trigger Reflexivization, as shown in the following example:

(42) Johni-i cakii (-uy) cip-eyse ayin-i casal-hayssta.
   Nom self (-Gen) house-Loc lover-Nom suicide-did
   'As for Johni, his lover committed suicide in self's house.'

If we assume that only a subject can trigger Reflexivization, the acceptability of (42) would indicate the subjecthood of the first nominal. This assumption, however, is controversial in Korean, and thus the force of the argument is unclear.
In any case, if we take the view that sentences like (42) involve PA, we have to conclude that the second NOM-marked nominal is an ascension chômeur, as dictated by the Chômeur Law. There are several problems with this view. The putative chômeur does exhibit certain subject properties: it can be marked with -kkeyse, and it can trigger SH, as shown in (40) above. It can also control Equi, as shown below: (Sentence (44) is from Yoon (1987).)

(43) ku pwun-i atuli-i [eį il-ul ha-taka] tachi-essta.
the man-Nom son-Nom work-Acc do-while be hurt-Past
'As for that person, his son_i got injured while eį working.'

(44) John-i ayinį-i [eį cwuk-ulyeko] sitohayssta.
Nom lover-Nom die -Comp attempted
'As for John, his lover_i attempted eį to commit suicide.'

On the other hand, as we will see below, the putative chômeur exhibits the same syntactic behavior as an ascension chômeur with respect to word order and Relativization. (I return to this issue below.)

In contrast, the putative subject cannot trigger SH, though it can be marked -kkeyse, as indicated in (41). We will consider the SOR construction and subject-controlled Equi below. Thus, we seem to have conflicting evidence about the structure of such sentences. The task then is finding a way of capturing the similarities and dissimilarities of MNCs corresponding to the alienable and inalienable possessive constructions.

Some of the logically possible hypotheses about the above type of MNCs (call them Double Subject Constructions, or DSCs, as opposed to PACs the type of PA constructions discussed in the preceding
sections), can be roughly summarized as follows: (I cite only works on Japanese.)

(45) A. There are no structural distinctions between DSCs and PACs.
   i) All are Topic/Focus constructions. (Saito 1982, 1985)
   ii) All involve PA/Subjectivization. (Kuno 1978a)

   B. The two are structurally different: only PACs, but not DSCs, involve PA.
      i) DSCs are base-generated Topic/Focus constructions.
      ii) DSCs have two subjects. (Masuoka 1979, Dubinsky 1985)

The first option, (45-A-i), does not really solve any puzzles about the distinctions between DSCs and PACs: whatever problems arise are to be explained by some (yet unknown) semantic/pragmatic principles. Ultimately, this direction may turn out to be right, but it seems to me that the putative semantic/pragmatic principles are very likely to be partially syntactic since the relevant phenomena are not independent of syntactic structure. (For example, in no case can an object or an oblique nominal control SH. As far as I can imagine, no pragmatic salvage would be possible in such cases.)

If we adopt (45-A-ii), we have to reformulate the conditions on SH, honorific NOM-marking, Equi-Control, and possibly others, so that only in the DSCs can the A-chômeur have control over these phenomena. The issue here is whether or not we have better alternatives. Stating the conditions is a trivial matter if we decide that it has to be done.11

Under the view stated in (45-B-i), the subject properties of the first (or leftmost) NOM-marked nominal in DSCs remain mysterious. For example, some speakers seem to allow it to be raised in the SOR
construction, as shown in the following sentence from Yoon (1987:156):

(Judgment is his. This sentence is highly marginal to me.)

Nom Acc father-Nom old -Past-Comp think
'John considered Mary’s father to be old.'

On the other hand, the inner nominal, the subject under this view, can never be raised:

(47) ** John-i apeci-lul Mary-ka nulk-essta-ko sayngkakhanta.
Nom father-Acc Nom old -Past-Comp think

Another problem under this view is that it requires a topic/focus be marked with -kkeyse, the honorific NOM marking. When an uncontroversial topic is involved, however, -kkeyse cannot be used, as shown below:

Nom advisor -Nom/-Nom [+hon] picky -Hon-Dcl
'As for John, his thesis advisor is picky.'

b. cito kyoswu-nun John-i ceyil kkatalopta.
advisor -Top Nom most picky
'As for thesis advisors, John’s is the pickiest.'

c. ?/?? cito kyoswu-ka John-i ceyil kkatalopta.
advisor -Nom Nom most picky
'As for thesis advisors, John’s is the pickiest.'

d. * cito kyoswu-kkeyse (~"un") John-i ceyil kkatalopta.
advisor -Nom [+hon] -Top Nom most picky

Given the discussion in 2.1.2.1, sentences like (48b) and (48c) are cases of the generic topic construction. Some speakers find (48c) marginal or unacceptable, though some accept such sentences. But none of my informants allow (48d). This shows that generic topics cannot
be marked with the honorific nominative marking, unlike the subjects in DSCs (cf. (40)-(41)). Thus, further distinctions among topics/focuses must be made under the option stated in (45-B-i).12

The last option is to view both of the nominals as subjects, as stated in (45-B-ii), along the lines suggested in Masuoka (1979). His analysis of Japanese DSCs, however, does not violate the SUL, because under his analysis, the first NOM-marked nominal is the subject of a higher clause of which the predicate is a copula, which is deleted later (cf. pp. 233-234, and note 10 on p. 235). A similar proposal is provided in the Appendix to Dubinsky (1985:348-351), according to which sentences like (49a) below, for example, would be analyzed as in (49b):

(49) a. Sooni-ka chinkwu-ka aphuta.
    Nom friendNom sick
    'As for Sooni, her friend is sick.'

b.  

According to this view, 'friend' is the initial and final 1 of the clausal predicate, and the possessor is phonetically unrealized (or 'deleted') under coreference with the higher 1. (The latter part of the hypothesis is not mentioned in Dubinsky's work. This part of
the analysis is from Masuoka's work.) To see the differences between this and a PA structure, compare (49b) with (50b) below:

(50) a. Sooni-ka maumssi-ka kopta.
   Nom nature-Nom pretty
   'Soon is kind-hearted.'

b. 

Given the structural distinctions between DSCs and PACs, most of the puzzles noted above disappear, and there are other desirable consequences as well. First, SH and honorific NOM marking are no longer problematic: both nominals in DSCs can be marked NOM [+hon] because they are final 1s, but the higher 1 cannot trigger SH because it is not the final 1 of the clause in which the agreement takes place. The Equi control phenomenon can be naturally accounted for because control is local, not global, and thus only the lower subject can control Equi in the complement clause. The SOR test is not clear because of unclear judgment as mentioned above, and the Equi victim test is not clear, either (cf. note 11). In clear cases, then, the structure postulated in (49) seems to yield the correct predictions.

In addition to the advantages mentioned above, there are other desirable predictions of the 'double subject' hypothesis. First, an apparent distinction between DSCs and PACs can be given a more general
characterization: that is, a resumptive pronoun can occur only in the
former, as illustrated below:

(51) a. ?? Youngsoo-ka caki(-uy) ayin-i casal-hayssta.  (DSC)
        Nom self(-Gen) lover-Nom suicide-did
        'As for Youngsoo, his lover committed suicide.'

   b. * Youngsoo-ka caki(-uy) khi-ka khuta.  (PAC)
        Nom self(-Gen) height-Nom tall
        'As for Youngsoo, his stature is tall.'

Sentence (51a) is slightly unnatural, but it is more or less
acceptable to me, and the contrast between the two sentences is very
clear. Kuno (1976:35-36) observes that in Japanese, the SOR
construction does not allow a resumptive pronoun as opposed to the
Equi constructions. As we will see later, the same contrast is
observed in Korean. Assuming for the moment that this is true, there
seems to be an exact parallel between Raising and the clear cases of
PA constructions. If we assume that DSCs involve Equi (as is the case
under the current hypothesis), the parallel is complete, and thus we
can say that while Equi constructions in Korean in principle allow a
resumptive pronoun, no ascension constructions do.  

Second, clear cases of PA from 1s in Korean are limited to an
intransitive stratum (cf. 2.4 below for further discussion), whereas
DSCs are not restricted this way. To take an example: (Sentence (52)
is from John (1980).)

(52) Youngsoo-ka hyeng-i cha-ul sassta.
        Nom brother-Nom car-Acc bought
        'As for Youngsoo, his brother bought a car.'
There are certain sentences that look like an instance of PA, such as:

(53) ku pwun-i nwunmay-ka wuli-lul wiapha (* -si)-n-ta.
    the man-Nom eye -Nom we -Acc intimidate (-Hon)-Proc-Dcl
    'As for that man, his eyes intimidate us.'

The relation between the two NOM-marked nominals above is that of 'inalienable' possession. If (53) involves PA, however, it is not clear why the ascendee cannot trigger SH, even when inalienable possession is involved. If, on the other hand, PA from 1 is limited to an intransitive stratum, (53) must be a DSC, and nothing rules out this possibility. If so, the ungrammaticality of the honorific agreement above automatically follows, given that agreement is local.

Also, Korean makes an explicit distinction between two types of predicates, i.e., between Action Verbs and Descriptive Verbs. The former in general denote a certain action, and the nonpast declarative form requires what has been called the 'processive mood' marker (cf. Martin 1954). The latter denote a state rather than an action (sometimes called 'adjectives' or 'adjectival verbs'), and cannot have the processive mood marker. The following contrast illustrates this:

(54) a. Youngsoo-ka o *(-n)-ta.
    Nom come-Proc-Dcl
    'Youngsoo is coming.'

b. Youngsoo-ka aphu (* -n)-ta.
    Nom sick -Proc-Dcl
    'Youngsoo is sick.'

Clear cases of the PA construction invariably involve 'descriptive' predicates in simplex clauses, as can be easily seen from the data in the preceding sections and in a number of works cited above. On the
other hand, DSCs are not restricted in terms of the type of predicates involved. If PA from 1 is restricted to descriptive predicates in simplex clauses, it automatically follows from this that PA from subject is impossible from a transitive stratum, since transitive clauses invariably involve an action verb.

Third, if it is true that PA from 1s is limited to inalienable possessive constructions, the fact that PA from 2s is restricted to inalienable possessive constructions (see below) is not a mystery, since all instances of PA are thus restricted.

Thus, the simplest of all the hypotheses listed in (44) seems to be the last one, as proposed in Dubinsky (1985), and also in Masuoka (1979) in a somewhat different context.

This leaves the problem I mentioned above, i.e., the fact that the putative chômeur under the PA analysis of DSCs exhibit all of the properties of an ascension chômeur. The next section examines this issue and motivates an extension of the conditions on word order and relativization.

2.1.3.2 Parallels between PACs and DSCs

In arguing for the chômage of certain nominals in the PA construction, I discussed two phenomena: a word order restriction on the ascende and the ascension chômeur, and a restriction on relativizing the ascension chômeur. This section discusses parallel restrictions on DSCs and speculate on the nature of the restrictions.
The word order restriction on DSCs is illustrated below:

    Nom father-Nom sick-Nom-Dcl
    'As for Youngsoo, his father is sick.'

    father-Nom Nom

c.

The question is why this restriction shows up when there is no PA involved. An obvious way of viewing this phenomenon is that it has to do with the P-hood of the downstairs clause. Given the 'verb-final' constraint in Korean, it would be reasonable to claim that no part of a P can precede its subject. This implies that neither the subject nor any other constituents of the clausal predicate can be preposed. This prediction is correct:

    Nom mother-Nom teacher Dat money-Acc gave
    'As for Mary, her mother gave money to the teacher.'


As in Japanese (cf. Saito 1985), Korean allows constituents to be long-distance preposed (i.e., over more than one clause boundary), as (57) illustrates:

(57) ku cha-lul [Mary-ka [John-i e hwumchyessta]-ko malhayssta.  
the car-Acc Nom Nom stole -Comp said  
'Mary said that John stole the car.'

Given the grammaticality of (57), it is otherwise mysterious why long-distance preposing is not allowed in (56). If we assume that no part of a predicate can be preposed over constituents in the upper clause, the observed fact naturally follows, given the hypothesis for DSCs under consideration.15

A comparison of the following sentences should make the point clearer:

(58) a. [John-i [apeci-ka Tom-pota-to te khu-si-ta]].  
Nom father-Nom than-even more big-Hon-Dcl  
'As for John, his father is taller than Tom.'

b. Tom-pota-to John-i apeci-ka te khu-si-ta.  
than-even Nom father-Nom more tall-Hon-Dcl
i. John’s father is taller than Tom’s.  
ii. * John’s father is taller than Tom.

In (58a), the comparative adjunct ‘than Tom’ modifies the verb, and ‘John’s father’ is compared to ‘Tom’. In (58b), in contrast, the comparison is between ‘Tom’ and ‘John’ with respect to their fathers, and thus the adjunct has only the wide scope interpretation. If the adjunct is claimed to have been preposed to sentence-initial position, there would be no reason why (58b) would be ungrammatical with the same meaning as (58a).
Thus, the word order phenomenon in DSCs may be independent of the constraint on ascension. The contrast between (59) and (60) below also indicates that PACs and DSCs are not restricted in the same manner in terms of word order:

    Nom height-Nom surprise-Comp extent big
    'John is awfully tall. (Lit. John is tall to the extent that (someone) will be surprised.)'


    Nom father-Nom surprise-Comp extent big
    'As for John, his father is awfully big/tall.'

b. * [nolla-l manhkum] [John-i apeci-ka khuta].

The above sentences show that, while a degree adverb in a sentence involving PA can be preposed to the sentence initial position (59b), the same adverb in a double subject sentence, which is part of the predicate, cannot (60b). Thus, the constraint relevant to DSCs seems to be more general than that which governs PACs.

Turning now to relativization, notice first that the embedded subject of the clausal P cannot be relativized:

(61) * [John-i gi khu-si-n] apeci
    Nom sick-Comp father
    'the father such that John's is sick'

Given that the embedded subject in complex clauses in general can be relativized as in (62) below, it is not obvious why (61) is ungrammatical.
The impossibility of relativizing nominals in DSCs is not limited to the embedded subject; no part of the clausal P can be relativized.

Compare (63) with the following, where a direct object from an ordinary embedded clause is relativized:

The contrast between (63b) and (64b) clearly indicates that depth of embedding is not responsible for the ungrammaticality of (63b).
The facts observed so far thus lead to the following generalization:

(65) No part of a P can be relativized or precede a constituent with the same tail.

The latter half of the statement is an extension of the 'predicate-final' constraint in Korean, which requires a predicate to be in sentence-final position. (65) will adequately capture the restrictions on DSCs observed in this section. It is not entirely clear whether (65) is independent of the restrictions on ascension in general or it is part of the same phenomenon. In the following section, I speculate further on this issue.

2.1.3.3 Further Speculations on the Parallels

In this section, I first motivate an extension of the conditions on word order and relativization based on the Subject-to-Object Raising (SOR) construction in Korean, and discuss a way of capturing the parallels between the DSCs and ascension constructions in a highly speculative manner.

2.1.3.3.1 The SOR Construction

If we assume that believe-type predicates in Korean are SOR triggers (see chapter 3 for arguments), (66b) below will be analyzed as in (66c):
Given the precedence condition on ascension (cf. (25) above), it is predicted that the complement in the SOR construction cannot precede the raisee, and this prediction turns out to be correct as (67) shows:

\[(67) \quad \ast \text{motwu-ka [ku cip-ey santa-ko] John-ul mitessta.} \]
\[
\text{all -Nom the house-Dat live-Comp Acc believed}
\]
\[
\text{Everyone believed John to be living in the house.'}
\]

The restriction on word order in the SOR construction, however, is not limited to the complement clause itself. No part of the complement can precede the raisee. The following sentences, in which a locative nominal is placed before the raisee, is also ungrammatical:

\[(68) \]
\[
a. \ast \text{motwu-ka ku cip-ey John-ul santa-ko mitessta.} \]
\[
\text{all -Nom the house-Dat Acc live-Comp believed}
\]
\[
b. \ast \text{ku cip-ey motwu-ka John-ul santa-ko mitessta.} \]
\[
\text{the house-Dat all -Nom Acc live-Comp believed}
\]
   I-Top Acc that school-Loc work -Comp thought
   'I believed John to be working in that school.'

   I-Top that school-Loc Acc work -Comp thought

   that school-Loc I-Top Acc work -Comp thought

When raising does not occur, scrambling of complement elements does not result in ungrammaticality. Compare the following sentences with (68) and (69), respectively:

   all -Nom the house-Dat Nom live-Comp believed
   'Everyone believed that John was living in that house.'

   the house-Dat all -Nom Acc live-Comp believed

   I-Top that school-Loc Nom work -Comp thought
   'I thought that John was working in that school.'

c. ku hakkyo-eyse na-nun John-i ilhanta-ko sayngkakhayssta.
   that school-Loc I-Top Nom work -Comp thought

It thus seems apparent that raising is crucial to the contrast between (68)-(69) and (68)'-(69)''. An obvious way to accommodate the observed fact is to generalize the precedence condition on ascension (stated in (25) above) as follows:

(70) **Precedence Condition on Ascension (Revised)**
    No part of an ascension chômeur can precede the ascendee.

This condition says that neither an ascension chômeur (since it is part of itself) nor any subconstituent of an ascension chômeur can
precede the ascendee. This will correctly rule out the ungrammatical sentences above as well as those sentences ruled out by (25) above.

In the case of the SSR construction, however, the (initial) constituents of the complement can freely occur in sentence-initial position, as illustrated below:19

      Nom the school-Loc work -Comp likely
      'John is likely to work in that school.'

b. ku hakkyo-eyse John-i ilha-l kes kathta.
      the school-Loc Nom work -Comp likely

A crucial difference between the two raising constructions is that in the SSR construction with kath 'likely', the raising trigger and the complement predicate form an inseparable syntactic unit so that no other constituents may intervene between them, as illustrated below:

(72) a. pi-ka kkok o-l kes kathta.
      rain-Nom certainly come-Comp likely
      'It sure is likely to rain.'

b. * pi-ka o-l kes kkok kathta.
      certainly

This is an indication of morphological cohesion (or merger) which could be the result of Clause Reduction (CR) in the sense of Perlmutter and Aissen (1983), a process which turns dependents of the complement P into dependents of the matrix P. (See chapter 3 for details and other instances of CR in Korean.) When CR occurs, all complement elements become the matrix constituents and therefore there is no complement clause at the superficial level: i.e., the initial
biclausal structure turns into a monoclausal structure. Given that the word order restriction is imposed upon the superficial level, therefore, (70) is irrelevant to the SSR construction in which there is no ascension chômeur (the initial complement) at the final level.

In the case of the SOR construction, constituents can freely intervene between the matrix and complement predicates, as illustrated below:

    I-Top Acc the school-Loc work-Comp till now believed 'Until now, I have believed John to be working in that school.'

The lack of morphological merger itself does not necessarily imply the absence of Clause Reduction, because there are instances of Clause Reduction in which the matrix and complement verbs are not adjacent, e.g., Ancash Quechua (cf. Aissen and Perlmutter 1983:395-396). As for the SOR construction in Korean, however, there is no independent reason to postulate Clause Reduction, and thus the simplest hypothesis is to regard the SOR construction as biclausal at all levels. It follows then that the SOR complement bears the chômeur relation at the superficial level, and thus is subject to condition (70).

Condition (70) thus yields correct predictions about the word order restriction on the raising and Possessor Ascension constructions.

The two raising constructions exhibit a parallel contrast with respect to relativization: while no part of the SOR complement can be relativized, no such restriction is observed in the SSR construction. This contrast is illustrated below:
(74) **RC formation from the SOR construction**

   I -Nom Acc live-Comp believe-Comp village
   'the village which I believed John to live (in)'

   I -Nom Acc work -Comp believe-Comp school
   'the school which I believed John to be working (at)'

(75) **RC formation from the SSR construction**

   -Nom the woman-Acc love -Comp likely
   'John is likely to love that woman.'

b. [John -i ə cohaha-l kes kath-un] yeça
   -Nom love -Comp likely-Comp woman
   'the woman that John is likely to love'

Notice also that without SOR, the RCs corresponding to (74) are
perfectly grammatical:

(74)' a. [nay-ka [John-ı əj santa-ko] mitess-tun]] tongney
   I -Nom Nom live-Comp believe-Comp village
   'the village which I believed John lived (in)'

   I -Nom Nom work-Comp think -Comp school
   'the school which I believed John was working (at)'

The restriction on relativization is thus an exact parallel to
the word order restriction, and this can be captured by an extended
version of the condition proposed above (34):

(76) **Condition on Relativization (Revised)**

No part of an ascension chômeur can be the target of
relativization.

Given the discussion about Clause Reduction, it is easy to see that
(76) is irrelevant to the SSR construction: there is no ascension
chômeur at the final stratum of the SSR construction. This condition will also yield the desired result for Possessor Ascension, given that an ascension chômeur is part of itself.

It remains to be seen whether the restrictions on word order and relativization are part of the same phenomenon, but I will not pursue this issue in this work. In the following chapters, I will assume that the conditions formulated in this section are correct generalizations about ascension constructions in Korean. The discussion in the next section will remain as speculation, and as such will not be crucially referred to in the subsequent chapters.

2.1.3.3.2 Ascension and Incorporation

In this subsection, I briefly speculate on the possibility of unifying the conditions discussed in the preceding section with the analogous constraint on DSCs stated in (65), repeated below:

(65) No part of a P can be relativized or precede a constituent with the same tail as the P.

It is easy to see that the clausal P of DSCs behaves in a way similar to the complement clause of the SOR construction with respect to word order and relativization: both prohibit a subconstituent from being relativized or occurring outside of the minimal clause.

One possibility is that ascension in general has the effect of forming a complex predicate. Suppose ascension universally requires the chômeur to form a unit with the P, whether it results in actual Clause Reduction (or morphological incorporation of the chômeur, in
the case of monoclausal ascension) or it is only an abstract process
with no observable effect on the morphological/syntactic cohesion
between the P and the ascension chômeur.

This idea has some intuitive plausibility in that there is
always some sort of direct semantic relation between the ascendee and
the putative unit formed by the chômeur and the P comparable to the
semantic relation between an initial P and other constituents heading
an initial arc. Similar intuitions have been expressed in a number of
different ways in regard to Possessor Ascension: e.g., in the notion
'aboutness' often mentioned in current GB literature; in M. Kang's
(1987) proposal that what is an ascension chômeur under the current
hypothesis adjoins to the V to form a complex predicate which in turn
assigns a theta role to the stranded possessor (the ascendee in the
current hypothesis); and in B. Park's (1988) GPSG approach in which
the lower sentence (ascension chômeur plus the P) has the feature
PREDICATIVE [+PRD], which participates in semantic translation to
'change the lower sentence into an intransitive predicate which
expresses a certain property'.

Let us call the complex predicate formed by the initial P and
the ascension chômeur the Quasi-Predicate (QP). When CR takes place,
the QP will consist of the matrix P and the complement P, and the
initial dependents of the complement P will be dependents of the QP.
When CR does not occur, the complement clause itself will be part of
the QP, and the chômeur in monoclausal ascension similarly forms a QP
with the initial P. Now if we extend the notion QP to include initial
predicates (which can be done, for instance, by defining QP as being
formed by a P and an ascension chômeur when it is present), the
condition on relativization can be simply stated as follows:

(77) **Condition on Relativization (putative)**
    No part of a QP can be the target of relativization.

In the case of PACs, the chômeur is part of the QP, and thus it cannot
be relativized. In DSCs, the clausal P itself is a QP, there being no
ascension chômeur in the sentence. In the SOR construction, the
complement itself (an ascension chômeur) is part of the QP. The
parallel relativization phenomena between the clausal predicates of
DSCs and SOR complements is thus directly expressed: they are all
(part of) QPs, and thus none of their subconstituents can be
relativized. In the SSR construction, Clause Reduction results in
monoclausal final stratum, and therefore there is no ascension
chômeur; the QP in this case will be the complex predicate consisting
of the matrix and complement predicates. In this way, (77) will rule
out all and only the ill-formed relative clauses discussed in this
chapter.

The word order restrictions, on the other hand, cannot be so
readily unified, even with the notion QP. The following condition
seems to be descriptively adequate:

(78) **Precedence Condition (putative)**
    No part of a QP can occur outside of its minimal clause boundary
    or precede the ascendee.

The second half of the condition is necessary because in the case of
monoclausal ascension, there is no clause boundary between the
ascension chômeur and the rest of the sentence, and thus the rule must specifically mention 'ascendee'. But since there is no ascendee in DSCs, the first half is also necessary. The way (78) is formulated thus suggests that it may be a spurious generalization in the sense that it enumerates two distinct conditions with no principled connection.

2.1.4 Summary

In this section, I argued for the PA analysis based on the subject properties of the ascendee and the nonsubject properties of the ascension chômeur. I also argued that there is sufficient reason to structurally distinguish the Possessor Ascension Construction from the Double Subject Construction. As for the properties shared by the two constructions, I have no conclusive evidence to decide whether they are part of the same phenomenon or just superficial similarities that have to be explained in different terms.

To refute the structural distinction between DSCs and PACs, it will not be sufficient to point out certain problems that do not fall under any of the conditions I have proposed above: more specifically, any hypothesis that claims all MNCs have the same structure will have to be able to account for all the differences between PACs and DSCs in a nonarbitrary way.
2.2 Possessor Ascension from Direct Object

Since most of the controversial issues were discussed in the previous section, I will not repeat the arguments for the chômage of the initial host. In a sense, PA from 2s reveals the nature of ascension much more transparently than PA from 1s, because there is no possibility of structural ambiguity between PACs and Topic constructions due to the absence of topics in sentence-internal positions.

As mentioned above, PA from 2 is in general limited to inalienable possessive constructions (79); it is not possible when kinship terms are involved (80).

(79) a. ku-nun ku ai-uy ppyam-ul ttauyly-essta.
    he-Top the child-Gen cheek-Acc hit -Past
    'He hit the child's face.'

    b. ku-nun ku ai-lul ppyam-ul ttauyly-essta.
       Acc   Acc
       'He hit the child on the face.'

(80) a. ku-nun ku ai-uy tonsayng-ul ttauyly-essta.
    he-Top the child-Gen brother-Acc hit -Past
    'He hit the child's brother.'

    b. * ku-nun ku ai-lul tonsayng-ul ttauyly-essta.
       Acc   Acc

One possible source of structural ambiguity comes from distinct advancements to 2, such as 3-to-2 Advancement (32A, henceforth) discussed in Gerdts (1986). An example of the 32A construction is given below, with the corresponding stratal diagram:
(81) a. nay-ka John-eykey ku chayk-ul cwuessta.
   I -Nom Dat the book -Acc gave
   'I gave John a book.'

b. nay-ka John-ul chayk-ul cwuessta.
   Acc  Acc

c. (=b)

```
1    3    2  P

1    2  Chō  P

na   John  chayk  cwu-
'I'  'book'  'give'
```

The motivation for this structure comes from the impossibility of advancing a noninitial 2 to a 1. (See Gerdts (1986, 1987) for details.) In (81c), for example, the initial 3 advances to 2, putting the initial 2 en chomage. The passive sentence corresponding to (81b) is ungrammatical:

    Nom I- by book-Acc give-Pass-Past
    'John was given a book by me.'

b.

```
1    2    3  P

1  Chō   2  P

Chō  Chō   1  P

John  chayk  Bill  cwu-
'book' 'give'
```

Gerdts argues that a structure such as (82b) is ruled out by the following language-specific constraint:21

(83) Only an initial 2 can be passivized in ci-passive.
This same constraint blocks an ascendee to 2 from being passivized, for example:

(84) a. nay-ka ku ai-lul ilum-ul pwullessta.
   I -Nom the child-Acc name-Acc called
   'I called the child by name.'

   the child-Nom I -Dat name-Acc call -Pass-Past

c. (= b)

In the preceding section, it was shown that a chômeur in the PA construction cannot be relativized or be preceded by its host. The advancement chômeur in 32A construction, in contrast, is not subject to either of these restrictions, as illustrated below:

(85) a. ku chayk-ul nay-ka John-ul cwuessta. (cf. (81b))
   the book-Acc I -Nom Acc gave
   'The book, I gave John.'

b. [nay-ka John-ul cwu-n] chayk
   I -Nom Acc give-Comp book
   'the book which I gave John'

Unlike an ascension chômeur, the advancement chômeur in the 32A construction is not restricted in terms of word order (85a), and it can be the target of relativization (85b). This contrast between the PA and 32A constructions is a strong piece of evidence for positing a
structural distinction between the two. Any claim that all multiple accusative constructions have the same structure, therefore, cannot be taken seriously unless it can be shown that the observed contrast follows from nonarbitrary principles. In Baker's (1988) theory of Incorporation, for instance, both Possessor Ascension and 32A are treated as involving the same process of head movement. As will be shown in 2.5, Possessor Ascension in Korean does not seem to fall under Baker's theory as it stands. Even if the theory can be maintained for Korean, the systematic differences between the ascension and advancement constructions will remain unexplained.22

One objection which has been raised against the PA analysis is that both the ascende and the chômeur can 'float' a quantifier, as discussed in Shibatani (1977a) and Chun (1985). It will be argued in chapter 4 that Quantifier Floating is another instance of ascension, and thus it is not a problem for the PA analysis or the 32A analysis.

One of the remaining problems is to provide a better understanding of the semantic condition on PA constructions. While it is in general true that PA from 2s is limited to inalienable possessive constructions (cf. (79)-(80)), alienability is not sufficient to constrain ill-formed sentences, for example:

(86) a. nay-ka ku ai-lul ilum-ul pwullessta.
    I -Nom the kid-Acc name-Acc called
    'I called the kid by name.'

b. * nay-ka ku ai-lul ilum-ul ssessta.
    I -Nom the child-Acc name-Acc wrote
    'I wrote the child's name.'
In (86b), we have the same 'inalienable' possessor as in (86a), but the ascension results in an unacceptable sentence. In (87), on the other hand, it is hard to decide if 'sleeve' is in an inalienable relation to its possessor. When PA from a 2 is involved, there often seems to be what we may call an affectedness relationship between the ascendee and the rest of the sentence, so that the ascendee is in some way directly affected by the action denoted by the predicate. In sentences like (88) below, on the other hand, it is hard to imagine that the ascendee is in any sense directly affected:

(88) nay-ka camtun aki-lul elkwlul-ul kulyessta.
I -Nom asleep baby-Acc face -Acc drew
'I drew the sleeping baby's face.'

Y. Kang (1986) argues that when there is no direct semantic relation between the ascendee and the predicate, the sentence is ungrammatical, based on sentences like the following:

(89) a. ?* Chelswu-ka Yenghi-lul sonthop-ul kkakkassta.
Nom Acc fingernail-Acc clip-Past
'Chelswu clipped Yenghi's fingernails.'

b. ?* Chelswu-ka Yenghi-lul kkakkassta.
Nom Acc clipped
'Chelswu clipped Yenghi.'
He claims that the acceptability of PA from a 2 in our terms is parallel to that of the corresponding sentence without the chômeur, a 'locative' nominal in his terms. This claim, however, seems to be too strong. Compare the following sentences:

(90) a. kyengchal-i ku haksayng-ul (kangceylo) meli-lul callassta.
   police -Nom the student-Acc (by force) hair-Acc cut
   'The policeman cut the student's hair (by force).'

b. * kyengchal-i ku haksayng-ul (kangceylo) callassta.
   police -Nom the student-Acc (by force) cut
   'The policeman cut the student (by force).'

When the ascendee is adversely affected by the action denoted by the sentence, no direct semantic relation between verb and the ascendee is required.

Furthermore, when different kinds of ascension rules interact to produce a series of accusative nominals, there seems to be no way to maintain that the first accusative-marked nominal has a direct semantic role to a single (the final) predicate, for example:

(91) a. ku-nun tomapaym-ul twu-mali-lul kcoli-lul celtan-ul  hayssta.
   he-Top lizard -Acc two-Clas-Acc tail -Acc cutting-Acc did
   'He cut the tail of two lizards.'

b. * ku-nun tomapaym-ul  hayssta.
   he-Top lizard -Acc did
   'He did the lizard.'

(91a) involves what I will call Specifier Ascension (cf. chapter 5) and Possessor Ascension, followed by Quantifier Floating (cf. chapter 4). (91b) is completely ungrammatical. This is not surprising under
the current hypothesis, since at the initial stratum, the final direct object of (51a) does not bear a semantic relation to the clause of which the main verb is the predicate.

In the absence of convincing evidence to the contrary, then, I conclude that all PA sentences are syntactically well-formed in principle, the semantically anomalous sentences being ruled out by 'some' set of semantic conditions that incorporates the 'affectedness condition', the 'alienability condition', and possibly some others. Note that the search for the relevant semantic condition is independent of a particular analysis of the PA construction, because the same task would remain even if an infinite number of "objects" are base-generated within a VP, flat or binary-branching. (S. Park (1985:342 ff.) discusses other semantic restrictions on PA constructions in some detail, which I will not repeat here.)

In conclusion, I have argued in this section that advancement chômeurs are not subject to the constraints on ascension chômeurs and therefore that the distinction between ascension and advancement is necessary in any adequate analysis of the MACs in Korean.

2.3 Possessor Ascension from Indirect Objects

In this section, I speculate on other Multiple Case Constructions in Korean, focusing particularly on the Multiple Dative Constructions (MDCs). There seem to be certain clear indications that the MDCs involve Possessor Ascension, though in more restricted contexts than PA from 1s or 2s. Below, I will discuss this issue in connection with the Inversion Construction.
Chun (1985) claims that Possessor Ascension (PA) from a 3 is impossible in Korean because 3s are usually animate and animate nominals usually do not appear in inalienable part-whole possessive construction bearing a 3 relation. While it seems true in general that animate nominals cannot appear in a Multiple Dative Construction (92b), there seems to be no such restriction on inanimate nominals (93b):24

(92) a. sensayngnim-uy elkwul-ey sangche-ka na-ssta.
   teacher -Gen face -Dat scratch-Nom occur-Past
   '(Lit.) A scratch occurred to the teacher's face.'

   b. * sensayngnim-eykey(-nun) elkwul-ey sangche-ka na-ssta.
      Dat (-Top) Dat Nom

(93) a. i mwulthong-uy patak-ey kwumeng-i na-ssta.
   this bucket-Gen bottom-Dat hole -Nom occur-Past
   '(Lit.) A hole occurred at the bottom of this bucket.'

   b. i mwulthong-ey patak-ey kwumeng-i na-ssta.
      Dat Dat Nom

The major goal of this section is to establish that at least in some cases, MDCs can be best analyzed as involving PA from a 3. I first argue that the DAT nominal in (93a) is a 3, based on parallels between sentences like (93) and the Inversion Construction, and then argue for the chômage of the second DAT nominal in (93b).

Since the discussion is in close connection with the Inversion Construction, I will briefly consider this construction.
2.3.1 The 3-hood of the 'Locative' Nominal

Kuno (1973: 77-78, and 366 ff.) observes that in Japanese there is a rule which 'subjectivizes' a sentence-initial locative nominal, and that the rule is limited to 'existential statements'. Below are given some examples adapted from his Japanese data:

(94) a. New York-ey kochungkenmwul-i manhta.
   Dat skyscraper -Nom many
   'In New York, there are many skyscrapers.'

   Nom Nom

   Nom Dat went
   'John went to New York.'

   Nom Nom went

The puzzle is what limits the subjectivization to existential sentences. Kuno attributes this fact to the position of the 'locative' nominal within the sentence: that is, the basic word order in existential sentences is 'NP-[Dat] NP-[Nom]', but with predicates such as 'went', the 'locative' nominal is not in sentence-initial position in the underlying structure. Since subjectivization applies only to sentence-initial 'locatives', it cannot apply to (95a).

An important fact to note here is that the kind of DAT-NOM alternation observed above is not limited to existential sentences, but can occur with many of the predicates that have been known as Inversion triggers (i.e., those predicates that appear in the 'dative subject' construction).25 To take some examples:
(96) a. ku hakkyo-ey yenge sensayngnim-i philyohata.
    the school-Dat English teacher -Nom needed
    'An English teacher is needed in that school.'

    b. ku hakkyo-ka yenge sensayngnim-i philyohata.
    Nom Nom
    'The school needs an English teacher.'

(97) a. ku cip-ey pwul-i na-ssta.
    the house-Dat fire-Nom occur-Past
    '(Lit.) A fire occurred to that house.'

    b. ku cip-i pwul-i na-ssta.
    Nom Nom

(98) a. i mwulthong-ey kwumeng-i sayngki-essta.
    this bucket -Dat hole -Nom occur -Past
    '(Lit.) A hole occurred/happened to this bucket.'

    b. i mwulthong-i kwumeng-i sayngki-essta.
    Nom Nom

To see that the predicates in these sentences trigger Inversion,
consider the following sentences:

(99) a. sensayngnim-eykey(-nun) ton-i manh-usi-ta.
    teacher -Dat (-Top) money-Nom much-Hon-Dcl
    'The teacher has a lot of money.'

    b. sensayngnim-i/-kkeyse ton-i manh-usi-ta.
    -Nom/-Nom[+hon] Nom

(100) a. sensayngnim-eykey ye ca chinkwu-ka sayngki-si-essta.
    teacher -Dat girl friend-Nom occur -Hon-Dcl
    '(Lit.) A girl friend occurred to the teacher. (The teacher
came to have a girl friend.)'

    b. sensayngnim-i/-kkeyse ye ca chinkwu-ka sayngki-si-essta.
    -Nom/-Nom[+hon] Nom

(101) a. sensayngnim-eykey ton-i philyoha-si-ta.
    teacher -Dat money-Nom needed -Hon-Dcl
    '(Lit.) Money is needed to the teacher.'

    b. sensayngnim-i/-kkeyse ton-i philyoha-si-ta.
    -Nom/-Nom[+hon] Nom
These sentences have raised a number of issues concerning the subjecthood of the DAT nominal: it can trigger SH, it can control subject-controlled Equi, and it can also be an antecedent of reflexives in many languages. (For details, see Shibatani (1977a, b), Kuno (1973, 1978a), Perlmutter (1984b), Youn (1987), Gerdts and Youn (1987, 1988), O'Grady (1987, 1988), and references cited there.) Kuno (1973) and many other linguists consider the NOM nominals in the (a)-sentences above to be objects and the DAT nominals to be subjects.

There are at least four pieces of syntactic evidence that the inanimate 'locative' nominals in sentences like (96)-(98) and the 'dative subjects' in (99)-(101) have the same grammatical relation. First, the two have the same case marking pattern, as shown above. 26

Secondly, one of the reasons that Shibatani (1977 a, b) and Kuno (1973) view the DAT nominals in the Inversion Construction as the subject is that the NOM nominal cannot trigger Subject Honorification (SH). The same phenomenon is observed when a 'locative' nominal is involved.

(102) * ku hakkyo-ey yenge sensaygnim-i philyoha-si-ta.
      the school-Dat English teacher -Nom needed -Hon-Dcl
      'An English teacher is needed in that school.'

(103) * ku cip-ey noin-i iss-usi-ta.27
      the house-Dat old man-Nom exist-Hon-Dcl
      'There is an old man in the house.'

The NOM nominal in these sentences cannot trigger SH, just as in Inversion Construction, even though it is the only [+ human] nominal there. The only way to interpret the honorific agreement in such
sentences is that it agrees with the 'locative' nominal, though such a 
use is, of course, deviant in that inanimate nominals do not deserve 
deference.

Third, the NOM nominal in these sentences cannot be marked with 
- kkeyse, the honorific NOM-marking:

(104) * ku hakkyo-ey yenge sensayngnim-kkeyse philyohata. 
the school-Dat English teacher -Nom [+hon] needed

This is another characteristic of the Inversion construction, as 
illustrated below:

(105) * Youngsoo-ekey yenge sensayngnim-kkeyse philyohata. 
Dat English teacher -Nom [+hon] needed
'An English teacher is needed to Youngsoo.'

Fourth, in the subject-controlled Equi construction, only the 
'locative' nominal and not the NOM nominal can be the controller:

(106) [e_i/*j cwulip-i-myense-to] ku hakkyo_i-ey pyengwen_j-i epsta. 
state-owned-be-but-even the school-Dat hospital-Nom lack 
'Though e_i/*j state-owned, there is no hospital_j in that 
school_i.'

The Equi control phenomenon illustrated above has been used as 
evidence for the Inversion analysis of the 'dative subject' 
construction in many languages, e.g., the nagara construction in 
Japanese discussed in Perlmutter (1984). In this respect, too, the 
'locative' nominal behaves like the 'dative subject'.

Thus, there is good reason to treat the inanimate 'locative' 
nominal on a par with the Inversion nominal, the only difference being 
amimacy. The task is then to determine the GR of the DAT nominal.
The settlement of this issue ultimately depends on the analysis of the Inversion Construction. The precise structure of the Inversion Construction is not clear to me. Perlmutter (1984) argues that the Inversion Construction in Japanese is impersonal, and Youn (1987) and Gerdts and Youn (1987) express essentially the same view for Korean, so that the structure of (94a), for instance, will be analyzed as in (94b): (I use a further simplified graph notation just indicating the 'career' of each nominal, when there is no danger of confusion.)

(107) a. sensayngnim-eykey ton-i iss-usi-ta.
    teacher -Dat money-Nom exist-Hon-Dcl
    'The teacher has money.'

b.  
1  2  
3  2  P
3  chô  2  P

senseayngnim  ton  
'teacher' 'money'

According to this view, the initial stratum is transitive, and the initial 1 retreats to 3. A dummy is inserted in the third stratum, putting the initial 2 en chômage. The dummy then advances to 1, thus satisfying the Final 1 Law. The initial 2 is marked NOM by virtue of the dummy being the final 1 (in accordance with what Perlmutter calls the 'Brother-in-Law' case marking rule). The dummy in Korean is a 'silent' one that never surfaces, unlike in other languages such as English or Dutch. (Note that English counterparts of the Korean predicates such as iss 'exist', sayngki 'arise', na 'occur', etc., all appear in dummy (There-Insertion) constructions.)
On the other hand, ‘predicates of existing and happening’ are typical examples of unaccusative predicates according to the semantic criteria provided by Perlmutter and Postal (1984a). (See the appendix to chapter 3 below for more details.) If the hypothesis that initial clausal structure is universally determined by semantic criteria (the Universal Alignment Hypothesis) is in general correct, therefore, the initial stratum of the Inversion Construction must be unaccusative. One possibility is that (107a) has the following structure:

(108)

\[
\begin{array}{ccc}
3 & 2 & P \\
3 & 1 & P \\
3 & \text{Chō} & 1 & P \\
1 & | & | & |
\end{array}
\]

sensayngnim ton D(ummy) iss- ‘teacher’ ‘money’ ‘exist’

The subject properties of the DAT nominal will then have to be explained on independent grounds. Since this issue is not crucial to the major topic of this thesis, however, I will leave all related issues to future studies, including the double nominative pattern corresponding to this construction (e.g., (96)-(98)). (I briefly return to this issue in chapter 3.)

What is crucial to the main concern of this section is the (final) 3-hood of the Inversion nominal, and it is sufficient to note that there is good reason to regard the locative nominals in the above examples as final 3s on a par with the ‘dative subjects’.28
2.3.2 Arguments for the Possessor Ascension Analysis

To turn to the ascension constructions, consider the following sentences:

(109) a. i mwulthong-uy patak-ey kwumeng-i na-ssta.
    this bucket-Gen bottom-Dat hole -Nom occur-Past
    '(Lit.) A hole occurred at the bottom of this bucket.'

    b. i mwulthong-ey patak-ey kwumeng-i na-ssta.
       Dat        Dat       Nom

(110) a. i cip-uy an-ey cengwen-i issta.
    this house-Gen inside-Dat garden-Nom exist
    'There is a garden in this house.'

    b. i cip-ey an-ey cengwen-i issta.
       Nom        Dat

Given the conclusion of the preceding section regarding the DAT nominals in sentences with 'predicates of existing and happening', the DAT nominal in the (a) sentences above must be the final 3. The task is to determine the GR of nominals in the corresponding (b) sentences, where two DAT nominals occur. In principle, there is no limit on the number of dative-marked nominals within a clause, for instance:

(111) ?i hoteyl-ey sa-chung-ey samhosil-ey yoksil-ey
    this hotel-Dat fourth floor-Dat room 3-Dat bathroom-Dat
    khetheyn-i epsta.
    curtain-Nom not exist
    'There is no curtain in the bathroom in room 3 on the fourth floor in this hotel.'

In my judgment, sentences such as this are only slightly worse than repeating as many nominative nominals in the same sentences. (All of the dative markings can be replaced by NOM markings in this sentence.) According to my Japanese informants, however, sentences like (111) are
unacceptable, whereas most of my Korean informants find such sentences acceptable, and all of them allow two or three dative nominals in a row. \(^29\)

Evidence for the GR of the DAT nominals in the Multiple Dative Construction (MDC) of this sort comes from restrictions on word order and relativization. First, parallel to Possessor Ascension from subject and direct object, only the first DAT nominal can be relativized in sentences like (109b) and (110b):

\[(112)\]
\[
a. \quad \text{nay-ka} [[i\ mwulthong-ey} \ e_i kwumeng-i na-n] \\
   I -Nom this bucket -Dat hole -Nom occur-Comp \\
   patak\_i]-ul kochyessta. \\
   bottom-Acc fixed \\
   'I fixed the bottom where this bucket has a hole'
\]
\[
b. \quad \text{nay-ka} [[ e_i patak-ey kwumeng-i na-n] mwulthong\_i]-ul \\
   I -Nom bottom-Dat hole -Nom occur-Comp bucket -Acc \\
   kochyessta. \\
   fixed \\
   'I fixed the bucket which has a hole at the bottom.'
\]

\[(113)\]
\[
a. \quad \text{nay-ka} [i\ cip-ey} \ e_i cengwen-i iss-nun] ani\_i]-ul \\
   I -saw this house-Dat garden-Nom exist-Comp inside-Acc \\
   poassta. \\
   saw \\
   'I saw the inside such that this house has a garden (in it).'</n\]
\[
b. \quad \text{nay-ka} [e_i an-ey cengwen-i iss-nun] cip\_i]-ul poassta. \\
   I -saw inside-Dat garden-Nom exist-Comp house-Acc saw \\
   'I saw a house which has a garden in it.'
\]

If the inner DAT nominals in (109)-(110) are ascension chômeurs, the ungrammaticality of (112b) and (113b) automatically follows from the condition on ascension, repeated below:
(114) **Condition on Relativization**

No part of an ascension chômeur can be the target of relativization.

The fact that these multiple dative sentences are subject to the condition on ascension constructions therefore suggests that they involve ascension.

Secondly, the multiple dative sentences are restricted in terms of word order in the same manner as Possessor Ascension from 1s and 2s, as illustrated below:

(115) a. * patak-ey i mwulthong-ey kwumeng-i nassta. (cf. (109b))
   bottom-Dat this bucket -Dat hole -Nom occurred
   b. * an-ey i cip-ey cengwen-i issta. (cf. (110b))
   inside-Dat this house-Dat garden-Nom exist

The ungrammaticality of these sentences is another indication that they are governed by the same condition that restricts word order in ascension construction.

(116) **Precedence Condition**

No part of an ascension chômeur can precede the ascendee.

Note that not all MDCs are restricted in terms of word order or relativization:

(117) a. na-nun yel-si-ey hakkyo-ey kanta.
   I -Top ten-o’clock-Dat school-Dat go
   ‘I go to school at 10:00.’
   b. na-nun hakkyo-ey yel-si-ey kanta.
   school-Dat ten-o’clock-Dat
   c. [nay-ka hakkyo-ey ka-nun] sikan
   I -Nom school-Dat go-Comp time
   ‘the time when I go to school’
The two DAT nominals in (117a) have no possessor-possessed relation, and thus an ascension analysis is impossible. The word order between the two DAT nominals is not restricted, and either can be relativized. I conclude therefore that the restrictions on word order and relativization observed in this section are typical characteristics of ascension constructions. This in turn suggests that at least some multiple dative sentences involve Possessor Ascension. As far as I can tell, there seems to be no reason, even on intuitive grounds, to fundamentally distinguish sentences such as (109b) and (110b) from MNCs or MACs of the type discussed in the previous sections. If these sentences involve ascension, it turns out that all possibilities allowed by the Host Limitation Law are attested in Korean.

2.3.3 Summary

In this section, I have motivated PA from a 3 based largely on unaccusative clauses. A more specific structural analysis of the ascension type MDCs presupposes an adequate understanding of the Inversion Construction, which I have not been able to achieve.

If the ascension analysis of the MDCs examined above is correct, it will confirm the view that the 'locative' nominals in unaccusative clauses are 3s, given the Host Limitation Law which restricts the set of hosts to terms. If, on the other hand, there is no ascension
involved in MDCs, it is not clear how else the MDCs can be accommodated within the RG framework, given the parallels between the MDCs and other multiple case constructions.\textsuperscript{30}

Evidence available at this point does not seem to be sufficient to confirm the ascension hypothesis especially because the basic clausal structure of Inversion Construction is not quite clear.

2.4 Possible Objections to the Possessor Ascension Analysis

Thus far, I have argued for the ascension analysis of certain multiple case constructions focusing on specific instances of Possessor Ascension. In this section, I examine two possible objections to the ascension analysis in general: one syntactic, and the other semantic.

A possible objection to PA analysis would be that the final 1 in constructions involving PA from 1 does not coincide with the traditional notion of "subject". To take an example:

(118) John-1 nwun-1 khuta.  
    Nom eye-Nom big
    'John has big eyes.'

In the PA analysis, ‘John’ is the final subject, but ‘eye’ is a final 1-chômeur. Intuitively, however, what is big is not ‘John’, but ‘his eyes’, and thus from the viewpoint of traditional notion of grammatical relations, it may seem absurd to claim that ‘John’ is the final subject.
From the viewpoint of current RG assumptions about the initial stratum, however, this is only natural because all and only those nominals that bear an initial GR to a clause are assigned a semantic role with respect to that predicate, as mentioned in chapter 1. Within the GB framework, too, this assumption has been made explicit, e.g., in Chomsky (1982), in which the D-structure level is defined as one in which all and only theta positions are lexically filled.

In the case of raising constructions, the motivation for this assumption is clear. Take, for instance, the following sentences:

(119) a. John seems to be unhappy.
    b. * John seems.

No one will deny that 'John' is the subject of (119a) just because (119b) does not make sense. Since an ascendee does not head an initial arc with respect to the clause to which it ascends, it is natural that the final subject does not bear a direct semantic relation to the matrix predicate. The same thing happens in monoclausal ascension, e.g., in (118). That is, because the ascendee bears no relation to the clause at the initial stratum, it does not have a direct semantic relation to the matrix predicate.

While this semantic objection may not seem to be quite serious, it seems to me that the same intuition has been underlying Chomsky's objection to the SOR analysis of raising constructions involving 'believe'-type predicates in English, for example:

(120) a. I consider John to be a fool.
    b. * I consider John.
Chomsky (1981:32-33, 1986:90-91) argues that since predicates such as 'consider' semantically select (s-selection, in his terms) a proposition, the LF structure (a structure where a preliminary representation of 'meaning' is included) of sentences like (120a) must represent this fact, so that the LF structure would look like the following:

(121) I [vp consider [S John to be a fool]]

The Projection Principle itself does not preclude the complement subject from being raised into the matrix object position. The only principle that blocks a non-theta matrix object position is the assumption that there is no subcategorized position (including the object position) that is not a theta position. This view is also intuitively plausible because a (final) object of a verb generally has a direct semantic relation to the predicate: other than ascension from direct object and dummy objects, a final 2 is always a D-structure element in GB terms, and an initial arc in RG terms (including advancees to 2). Since ascension from a direct object position happens to be quite restricted in English (the only case being the SOR construction), such constructions are treated with the 'exceptional Case marking' convention.

As I will argue in later chapters, however, Korean has many distinct kinds of ascensions from a 2 other than PA from 2 discussed above, and, as discussed in chapter 1, there is in principle no upper limit on successive ascension in the case of monoclausal ascension, unlike in the Raising constructions. It will thus be impossible to
argue that all such positions are exceptionally Case-marked by some limited types of predicates for reasons discussed in chapter 1. If we allow an object non-theta position for monoclausal ascensions (no matter how such positions are licensed at the relevant syntactic levels), there is no reason why the SOR construction must be exceptional. It thus is not true that all final objects bear a direct semantic role to the clause (or the predicate of the clause, depending on assumptions) of which they are the final objects, as much as it is not true that all final subjects bear a direct semantic relation to the predicate of the clause to which they bear a final GR, though this fact is much less clear in English due to the absence of apparent monoclausal ascensions in that language. I will return to this issue in chapter 3.

The second objection to the ascension analysis of certain multiple case constructions comes from an interesting observation presented in Yoon (1987). Yoon argues that certain MNCs cannot be analyzed as being 'derived' by ascension ('movement', in GB terms) because the derivation of certain MNCs violates the Subjacency Condition. An example is given below (Yoon 1987:150):

Nom father-Gen friend-Gen colleague-Gen friend -Nom
cwuksests.
died
'As for John, his father's friend's colleague's relative died.'

In (122), the putative movement will cross four bounding nodes, in apparent violation of Subjacency.
This objection cannot be directly evaluated in relation to a RG analysis due to different sets of assumptions, and (122) itself does not provide a challenge to the current hypothesis since ascension is limited to inalienable possession and thus there is no possibility of an ascension in this sentence. The problem Yoon raises is relevant in the present context only in regard to the alternative it leads to: i.e., the view that all MNCs must be base-generated, or, in RG terms, they must have monostratal structure.

In the case of MNCs, it is possible to claim that all of them are some sort of topic/focus constructions as a point of departure, relegating the burden of explaining details to semantic/pragmatic principles. As I pointed out in chapter 1, however, no such claim makes sense for MACs because there is no place for a topic/focus in sentence-internal positions. The same 'Subjacency violation' (assuming movement) shows up in MACs, as illustrated below:

(123) a. ai-ka ku tomabaym-uy [[skkkoli-uy] kkuth pwupwun-uy] child-Nom the lizard-Gen end part -Gen
cokum]-ul callassta.
a bit-Acc cut
'The child cut a bit of the edge of the tail of the lizard.'

b. ai-ka [ku tomabaym-uy kkoli]-ul [[skkkuth pwupwun]-uy child-Nom the lizard-Gen tail -Acc end part -Gen
cokum]-ul callassta.
a bit-Acc cut

c. ai-ka [ku tomabaym-uy kkoli-uy kkuth pwupwun]-ul child-Nom the lizard-Gen tail-Gen end part -Acc
[skcokum]-ul callassta.
a bit-Acc cut
What (123) shows is that any possessor can ascend, regardless of the depth of embedding. In (123a), for instance, it is the lowest possessor that ascends. The partial structure of the sentence is given below:

$$(124) \quad (= (123a))$$

Since PA is optional and successive ascension is possible in Korean, many distinct superficial structures ($2^3$ or eight, when there are three possessors as in (124)) can result from the initial structure containing a possessive construction such as (124), given no other constraint. The existence of sentences like (123) thus simply means that any possessor can ascend.

Since MACs cannot be considered as topic/focus constructions, the existence of sentences like (123) cannot be dismissed as irrelevant to syntax based on the fact that it violates a syntactic constraint under a particular analysis of the construction. Given the GB assumption that all and only theta-positions are lexically filled at D-structure, it is unlikely that all of the ACC nominals are D-structure elements since they do not bear (except the initial host) a direct semantic/thematic relation to the predicate, as discussed above. If postulation of ascension (or movement) is necessary in the
direct object position, therefore, a 'Subjacency violation' must be part of the nature of the process, which must be allowed or accommodated even with the monostratal analysis of MNCs.

Yoon argues that one cannot resort to devices that somehow exempt the postulated movement from Subjacency violation because doing so would result in overgeneration, for instance:

(125) a. [Chelswu-uy [wangwi-uy kyeysung]-i wuyeniessta. Gen throne-Gen inheritance-Nom by-chance 'Chelswu's inheritance of the throne was by chance.'

b. * wangwi-i-ka [Chelswu-uy [t_i kyeysung]]-i wuyeniessta.

Notice, however, that the kind of ascension (or extraction) shown in (125) is impossible regardless of depth of embedding:

(126) a. [wangwi-uy kyeysung]-i enceyna wihemhata. throne-Gen inheritance-Nom always dangerous 'Inheritance of the throne is always dangerous.'

b. * wangwi-i-ka [t_i kyeysung]-i enceyna wihemhata.

(127) a. ku-nun [wangwi-uy kyeysung]-ul nolinta. he-Top throne-Gen inheritance-Acc aim-at 'He aims at the inheritance of the throne.'

b. * ku-nun wangwi_i-lul [t_i kyeysung]-ul nolinta. Acc

Thus, independent of Subjacency, we need a constraint to preclude ascension when the ascendee is semantically a Patient with respect to the host.31

In conclusion, neither the semantic nor the syntactic objections to the PA analysis seems to provide sufficient motivation to abandon the current hypothesis concerning ascension constructions in Korean.
2.5 On the Distribution of Ascension

In 2.1.3, I argued that certain MNCs do not involve Possessor Ascension but contain double subjects, and that PA from 1 is limited to intransitive strata. In this section, I will first briefly examine a recent proposal by Baker (1988) and then speculate on a well-formedness condition on RNs that restricts the distribution of ascension RNs as well as certain instances of advancement.

2.5.1 Baker's Proposal

Baker (1988) claims that all "true" relation-changing processes can be reduced to the notion 'Incorporation', a process which moves a word level (lexical) category and adjoins it to \( V \) to form a complex predicate. The movement can occur either at the level of S-structure or at LF: when the head (or \( X^0 \)) movement takes place in the mapping between D-structure and S-structure, it results in morphological incorporation of the moved category and the \( V \), changing the government relations in the structure. This structural change, in turn, has the effect of changing grammatical relations (or GFs). Baker extends this hypothesis to include cases where no actual combination of morphological forms are visible, which he calls Reanalysis (or Incorporation without incorporation). In this case, Baker assumes that the \( X^0 \) movement takes place at LF, a level which does not feed into the PF component of the GB model. Possessor Ascension in certain
languages, in particular, involves Noun Reanalysis, or the LF movement of the head, which is parallel to overt Noun Incorporation (cf. his 5.3.4.2 for details).

The following illustrates Baker's hypothesis for PA as applied to Korean (from M. Kang 1987):

   Nom    Acc    hand-Acc held
   'Chelswu held Yenghi by the hand.'

b.

```
   S
      /\      \    
     /       \   
    NP       VP
    /\       /\  
   /  \     /  \ 
  Chelswu NP  N' N  V
   /\   /\   /\       
  Yenghi N  soni  cap  'hand' 'hold'
    /\     /\         
   ti  ti
```

The X^0 movement, as an instance of Move Alpha, is governed by all constraints on movement, the Empty Category Principle (ECP), in particular. As one of the consequences of Baker's analysis, it is predicted that PA from subject is restricted to unaccusative clauses, which seems to be correct in Korean if we assume that adjectival (or descriptive) predicates are unaccusative predicates.\(^{32}\) This is because if a trace is in subject position, the X^0 that is incorporated into the verb cannot c-command and govern the trace. It follows from this that no language allows PA from the subjects of transitive or initially unergative clauses.
Before I discuss the empirical data, let me first discuss a few theoretical points on which Baker is not clear. Baker makes the following assumptions:

(129) i. The internal argument of an unaccusative verb moves to the subject position by S-structure. (p. 88)

ii. Noun Reanalysis takes place (possibly) at LF. (p. 203, 259)

iii. ECP is a condition on LF representations. (p. 203)

In a language where FA does not result in actual morphological incorporation, then, the internal argument of an unaccusative clause moves to the subject position followed by X0 movement at LF. But this is exactly what the ECP does not allow, given (iii). When taken literally, therefore, Baker's theory as it stands seems to be predicting that FA from subject is possible only if it results in actual Incorporation, which is obviously not what Baker claims. It is thus not clear if Baker's theory makes any prediction about the distribution of FA in languages without morphological incorporation of the head.33

Secondly, Baker claims that the stranded possessor, e.g., Yenghi in (128b), is assigned Case by the complex predicate formed by the moved head and the V. If head movement takes place at LF, however, it is not clear how the movement could affect Case assignment which is generally assumed to be done at S-structure. Even assuming that some Case assignment is possible at LF, the accusative marker, which is perhaps the surface realization of abstract Case, should not be possible because LF does not feed into the phonological component.
The above problems could be remedied by altering one or more of the assumptions stated in (129). Even so, the PA construction in Korean does not seem to fit into Baker’s theory as it is intended. First, the ascension chômeur in Korean is not always a lexical category, as is clear from (123).

(130) (= (123b))
ai-ka[ku tomapaym-uy kkoli]i-lul [gi kkuth pwupwun]-uy
cokum]-ul callassta.
child-Nom the lizard-Gen tail -Acc end part -Gen
'a bit-Acc cut
'The child cut a bit of the edge of the tail of the lizard.'

What Baker assumes to move in PA is equivalent to the ascension chômeur under the current hypothesis. In order for Baker’s theory to account for the case marking of (130), it will be necessary to assume that what moves is the whole phrase *kkuth pwupwun-uy cokum* ‘a bit of the edge’. Given that morphological incorporation is restricted to heads, sentences like (130) suggests that the parallel between morphological incorporation and Baker’s notion of Incorporation is not a true generalization.

Secondly, what Baker must claim moves in PA is not necessarily a single constituent, including the ascension chômeur in (130). The initial object in this sentence presumably has the following structure:
Whether movement takes place at LF or S-structure, movement of a nonconstituent is otherwise unattested, and its impossibility is due to "the most fundamental constraint of all on transformations which has been assumed in all transformational work" (Radford 1981:223). If (130) involves PA, therefore, it follows that some instances of PA cannot be analyzed as head movement.34

Third, Baker argues that multiple Noun Incorporations are ruled out by both Case theory and the ECP (cf. his 7.2.2). As discussed in the preceding sections, however, successive ascension is the major source of multiple case constructions in Korean. Compare (132), for instance, with (130):

(132) ai-ka ku tomapaym-ul kkoli-lul kkuth pwupwun-ul
tomapaym kkoli
cokum-ul callassta.
child-Nom the lizard-Acc tail -Acc end part -Acc
da bit-Acc cut
'The child cut a bit of the edge of the tail of the lizard.'

If (132) involves head movement, the successive movement will thus be incorrectly ruled out under Baker's theory along with what he calls 'Acyclic Incorporations'. (For details, see his chapter 7.) If (132)
involves PA, therefore, Baker's theory of Incorporation turns out to be incorrect for some instances of PA.\textsuperscript{35}

It remains to be seen whether these problems can all be accommodated within Baker's theory. As it stands, however, his theory of Incorporation seems to be far from an adequate account of PA constructions in Korean.

2.5.2 A Proposal: Nonprimary 1 Law (NP1L)

In this section, I speculate on a way to capture the distribution of ascension and certain interactions among advancements. There are some unresolved empirical problems with the proposal, but there also seem to be certain desirable consequences.

Suppose we had the following condition on RNs:

(133) Nonprimary 1 Law (NP1L)
No stratum can have a nonprimary 1 and a 2 with the same tail.

Definition: A 1 is primary if it heads no other GR anywhere.

The NP1L predicts that all instances of advancements to 1 (from a 3 or an oblique) as well as ascensions to 1 are impossible if a 2 remains unaffected by the process. (See chapter 4, though.) In the case of Possessor Ascension, in particular, (120) predicts that PA to 1 is restricted to intransitive strata in all languages. (It does not exclude ascension from initially unergative clauses, though, unlike Baker's theory of Incorporation.)
The NPIL as stated above does not exclude a dummy from being inserted as a 1 in a transitive stratum, since it bears no other GR anywhere. (See Perlmutter and Postal (1984 b, :) , Perlmutter and Zaenen (1984), Bickford (1987), among others, for discussion about dummy constructions.)

The condition also predicts that all instances of Subject-to-Subject Raising (SSR) are limited to intransitive strata, so that no language would allow structures like (135b) or (135b)', as opposed to (134b):

(134) a. It seems to us that John is unreliable.
    b. John seems to us [e1 to be unreliable].

(135) a. [For us to sleep late] bothers John.
    b. * We[ ei to sleep late] bother John.

(135)' a. It bothers John [for us to sleep late].
    b. * We bother John [e1 to sleep late].

The putative SSR in (134b) or (134b)' would result in a nonprimary 1 in a stratum that contains a 2, and thus is ruled out by (133), i.e., for the same reason as PA to 1 is disallowed in a transitive stratum. There is no logical reason that SSR should be restricted in this way, and no known RG principle expresses this generalization.36

Another restriction that falls under (133) is what Postal (1986a:81) calls 'tertiary passives', and is discussed in detail in Bickford (1987). To cite a Korean example, consider the following sentence discussed earlier concerning the 32A Construction with the condition mentioned in Gerdts (1986):
   Nom by book-Acc give-Pass-Past
   'John was given a book by Bill.'

b.  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chō</td>
<td>2</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Chō</td>
<td>Chō</td>
<td>1</td>
<td>P</td>
</tr>
<tr>
<td>Bill</td>
<td>chayk</td>
<td>John</td>
<td>cwu-</td>
</tr>
<tr>
<td></td>
<td>'book'</td>
<td>'give'</td>
<td></td>
</tr>
</tbody>
</table>

(137) Only an initial 2 can be passivized in ci-passive.

One possible problem is that even with (137), the ungrammaticality of sentences like (138a) below is not predicted, because nothing rules out a structure such as (138b):

   book-Nom by Acc give-Pass-Past
   'A book was given Bill by John.'

b.  

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
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<tr>
<td>Chō</td>
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</tr>
<tr>
<td>John</td>
<td>chayk</td>
<td>Bill</td>
<td>cwu-</td>
</tr>
<tr>
<td></td>
<td>'book'</td>
<td>'give'</td>
<td></td>
</tr>
</tbody>
</table>

This is an instance of 'tertiary passive', the impossibility of which is convincingly demonstrated in Bickford (1987). Bickford proposes to rule out tertiary passives by a universal condition called the Nuclear Novice Law (NNL). I will not discuss this hypothesis in detail here, because it would require many technical concepts that have not been introduced above. The condition stated in (133) also precludes 'tertiary passives', though for a different reason: (138b) is excluded by (133) because there is a 2 and a noninitial (hence nonprimary) 1 in
the final stratum. (A difference between the NNL and (133) is that
the former precludes an ascension to 1 after Passive or Unaccusative
Advancement, while the latter does not, because there is no 2 after
Passive has applied. See Bickford (ibid.:236-242) for some discussion
of this matter.)

The NPIL overlaps with the IAEX to a large extent. For
instance:

\[
\begin{align*}
(139) & \quad \text{GRx} & (\text{GRw}) & \quad \text{GRx} = \{2, 3, \text{Obl}\} \\
1 & \quad 1 & (\text{GRw}) & \\
1 & \quad 2 & & \\
\text{chô} & \quad 1 & &
\end{align*}
\]

All RNs containing a sub-RN of this form are precluded either by the
IAEX or (133), though the latter rules out the third stratum whereas
the former rules out the final stratum, which involves a second
advancement to 1 within the clause.

One of the problems I have noticed is that the NPIL is
inconsistent with the analysis of the German personal or impersonal
I have no alternative analysis of such constructions to offer. Also,
Bell’s (1983) analysis of various advancements to 1 in Cebuano comes
in direct conflict with the NPIL as stated above (e.g., her (67b) on
p. 170, (90) on p. 179, (92) on p. 180, etc.). In all of such cases,
a 3 or an oblique nominal advances to 1 in a transitive stratum
without putting the 2 en chômage. From the arguments given there,
however, it is not clear if 3/OBL-2-1 analysis is impossible: other
than some putative cases of clausal 2-chômeurs, no instances of a 2-chômeur are found in her analysis of Cebuano.

Another possible problem comes from Japanese, where sentences like (136) above are grammatical. For instance:

(140) Tanaka sensei-ga Yosida syusyoo-ni yotte kunsyoo-o
        teacher-Nom prime minister-by medal -Acc
        ataer-are-ta.
give-Pass-Past
'Mr. Tanaka was given a medal by the prime minister.'

Whether (140) constitutes a counterexample to (133), however, depends on which of the two structures below is correct:

(141) a. 1 2 3
    !    !    !
    prime minister medal Mr. Tanaka
    [ACC] [NOM]

b. 1 2 3
   1  Chô  2
   Chô  Chô  1
    !    !    !
    prime minister medal Mr. Tanaka
    [ACC] [NOM]

I have no evidence to choose between the two analyses, and thus it is unclear if sentences like (140) are genuine counterexamples to (133).

Other than the cases discussed above, (133) has certain consequences for the Inversion Construction discussed above, but I will not elaborate on this issue here since the nature of the construction is not clear to me at this point. I will leave (133) as a first approximation of the constraint on the distribution of ascension constructions.
2.6 Summary

In this chapter, I have argued for the PA analysis of a subset of multiple case constructions in Korean, following S. Park (1985) and Chun (1985), among others, with certain modifications in some of their assumptions. The discussion can be schematically summarized as follows:

(142) A. Ascension in General
    Ascend X.

B. Language-Specific Conditions
   i) X = (Poss, .......

   ii) If X is Poss, then:
       (a) X is an inalienable possessor,
       (b) if the GR of the host is 1, then the predicate is [-Action] (perhaps unaccusative),
       (c) if the GR of the host is 2, the ascendee is affected by the action denoted by the predicate. (Precise details unknown.)

As for the MNCs, I argued that there are at least two different types of constructions; one involves PA, but the other involves distinct subjects.

The conditions proposed in this chapter are repeated below:

(143) Condition on Relativization
    No part of an ascension chômeur can be the target of relativization.

(144) Precedence Condition on Ascension
    No part of an ascension chômeur can precede the ascendee.

(145) Nonprimary 1 Law (NPI1)
    No stratum can have a nonprimary 1 and a 2 with the same tail.
Arguments for an ascension analysis of a given construction in the following chapters will largely come from syntactic properties common to the construction under question and the PA construction discussed in this chapter.
Notes to Chapter 2

1. According to Perlmutter and Postal's (1984b) semantic criteria, the adjectival predicates such as konta 'is pretty' (also known as 'descriptive verbs') belong to the class of unaccusative predicates, i.e., intransitive predicates which select an initial 2. I will return to this issue below. For now, I treat them as unergative predicates for simplicity of representation, since nothing crucial in this section hinges upon this assumption.

2. For example, as in Japanese (cf. Kuno 1978a:246), Korean allows deference to be transferred from a person to his belongings:

(i) sensayngnim-uy son/nwun -i acwu khu-si-ta.
   teacher -Gen hand/eye -Nom very big-Hon-Dcl
   'The teacher's hands/eyes are very big.'

Yoon (1987) argues that honorific agreement is not a reliable test for subjecthood based on similar sentences, for example (judgment his):

(ii) a. ? sensayngnim-uy kohyang-i acwu me-si-ta.
    teacher -Gen hometown-Nom very far-Hon-Dcl
    'The teacher's hometown is very far away.'

   b. ? sensayngnim-i kohyang-i acwu me-si-ta.
      teacher -Nom hometown-Nom very far-Hon-Dcl

Yoon states that the use of SH in (ii) is 'grammatically ill-formed' but 'pragmatically salvaged'. However, if there is a grammar that rules out honorific agreement in (ii), and if such a grammar requires only a subject can trigger SH (as Yoon assumes), SH must be a valid test for subjecthood in terms of that grammar. (According to Kuno (1978), the Japanese counterpart of (iia) is highly marginal whereas (iib) is quite acceptable, which means that even when transfer of deference is impossible for some reason, the subjectivized NP can trigger SH.) The issue is how to determine which occurrences of SH are pragmatically controlled and which are free from pragmatic influences. One possible test is relativization: it seems that 'transfer of deference' is much more difficult when the controller is relativized, as shown below:

(iii) * [gi acwu khu-si-n ] sensayngnim-uy son/nwun_i very big-Hon-Comp teacher -Gen hand/eye
    'the teacher's hands/eyes that are very big'
In contrast, relativization of an uncontroversial subject does not affect the acceptability of SH, for example:

(iv) [ei i hakkyo-eyse kaluchi-si-nun] sensayngnim
    this school-Loc teach -Hon-Comp teacher
    'the teacher who teaches in this school'

The same contrast shows up in the relative clauses below, corresponding to the two sentences in (ii): (Judgments are mine.)

(v) a. * [g acwu me-si-n] sensayngnim-uy kohyang
    very far-Hon-Comp teacher -Gen hometown
    'the teacher's hometown which is very far away'

b. (?) [g kohyang-i acwu me-si-n] sensayngnim
    hometown-Nom very far-Hon-Comp teacher
    'the teacher whose hometown is far away'

I will not attempt to discuss why relativization prevents the use of SH in certain cases. The point is that if it is in general true that transfer of deference from a nonsubject nominal to the subject nominal is not possible when the subject is relativized (whatever the reason may be), relativization provides a pragmatically neutral context in which the true subject can be identified based on SH. If this test is valid, the acceptability of the relative clause in (vi) below indicates that the ascendee is the subject in (6):

(vi) [maumssi-ka kow-usi-n] sensayngnim
    disposition-Nom fine-Hon-Comp teacher
    'the kind-hearted teacher'

3. I use an auxiliary verb at the end of the predicate because the control test is inapplicable to static predicates by their semantic nature. The point, however, should remain the same.

4. There are numerous other complementizers of this type. See Kwon (1985, especially pp. 107-120), among others, for a comprehensive list of complementizers in Korean and their classification based on semantic criteria. See also N. Kim (1984) for a transformational grammar approach to a variety of complement types in Korean. Many of these complementizers have more than one meaning, including -myense, which can denote either simultaneous action or contrast. See Dubinsky (1985:47-54) for relevant discussion about nagara clauses (the Japanese counterpart of -myense clauses).

5. The ungrammaticality of (16) also shows that the honorific agreement in this case is not determined by transfer of deference from a nonsubject (cf. note 2).
6. When a kinship term is involved, however, both the first and the second Nom nominals can be marked -kkeyye. I return to this issue shortly.

7. See I. Yang (1972) for a comprehensive lists of delimiters and their classification.

8. An example is given below (adapted from Saito (1982)):

\[(i) \text{yelum}-i \quad \text{maykcwu-ka cohta.} \]
\[
\text{summer-Nom beer -Nom good}
\]

'It is during the summer when beer tastes good.'

Here, there is no possessor-possessed relation between yelum 'summer' and maykcwu 'beer'.

9. There are alternative ways of constraining the word order. One option would be assuming with Saito (1985) that a "subject" cannot scramble, the reason being that the nominative Case is not structural, but 'contextual': i.e., if a "subject" moves, the trace is not assigned Case, in violation of the requirement that variables be Case-marked. Even if this assumption is a valid one, such an explanation would have nothing to say about PA from the direct object, since according to Saito, the accusative case marker is a realization of structural Case.

Two other possibilities remain: one is to rely on a functional pragmatic anti-ambiguity device which bans scrambling of a nominal over another nominal with the same case marker and the same grammatical function, along the lines suggested in Kuno (1980). Another option would be to state the precedence condition in terms of the Macro-Micro (or whole-part) relation between nominals (cf. I. Yang 1972); e.g., when two nominals are in part-whole relation and have the same case marking, the word order must be 'whole'-first. These are all intuitively plausible possibilities, and some such constraints may be independently necessary even with the precedence condition stated above. As will be shown below, however, the functional account cannot make the necessary distinction between ascension and advancement constructions with respect to the word order constraint. A condition based on the Macro-Micro relation, on the other hand, has nothing to say about ascension constructions in which there is no whole-part relation between the ascendee and the host, as is the case, for example, with the Raising and Specifier Ascension Constructions, which will be discussed in chapters 3 and 5, respectively.

Within the GB approaches incorporating a version of Kuno's Subjectivization hypothesis, the word order restriction would seem to follow from the binding condition on traces stated in (i) below:
(i) Traces must be bound.

(See Saito (1985) for its relevance to rightward scrambling in Japanese.)

10. The following is a rough Korean translation of a Japanese example he provided:

(i) sayngmwulhak hyengthaylon-eyse-nun kikwan-ul ku kinung-kwa
biology morphology -Loc -Top organ-Acc its function-and
kwuco-ey uyhay pwunsekhanta. ttalase, yey-lul tul-myen
structure-by analyze so example-Acc take-if
[khokkili-ka kil-ko, tolkolay-ka ccaip-ase cal
elephant-Nom long-and dolphin-Nom short-because well
po-i-ci-to anh-nun] kho-nun, hyengthaylon-uy
see-Pass-Comp-even not-Comp nose-Top morphology-Gen
ipcang-eyse po-myen motwu-ka kath-un kes-ulo kancwu-toynta.
viewpoint-Loc see-if all -Nom same-Comp thing-as consider-Pass

'In the theory of biological morphology, we analyze organs in
terms of their function and structure. Therefore, for example,
when we consider the nose, of which the elephant has a long one
and the dolphin one that is so small that it can hardly be seen,
from a morphological point of view, they are considered to be
all the same.'

(When the NOM markers within the relative clause are replaced by the
topic marker ~nun, the sentence becomes more natural than as it
stands.)

However, there is no attested case I know of in which a relative
head corresponds to two distinct objects within a relative clause.
Consider the following:

(ii) a. I hit John on the face, and he hit Tom on the face.
b. * the face [on which I hit John and he hit Tom]

b. * a booki+j [which I read ei and he read ej]
c. a booki [which I read ei and he also read ei]
is violating, if it is assumed that the relative head corresponds to two distinct gaps, as in (iib) or (iiib). The only possibility thus seems to be that in (i), what corresponds to the relative head is the single topic of the coordinate clause within the relative clause along the lines suggested in Kuno (1973). Otherwise, the grammaticality of (i) would remain a complete mystery.

11. The conditions on -kkeyse marking and SH, for example, could be stated along the following lines:

(i) Definitions
   a. A nominal is exhaustively demoted if none of its constituents is left undemoted.
   b. Given two distinct elements X and Y, both heading a GRx-arc, X is earlier than Y iff the first stratum in which X heads a GRx-arc is earlier than the first stratum in which Y heads a GRx-arc.

(ii) Condition on Honorific Nominative Marking (putative)
    Only a 1 not exhaustively demoted can be marked -kkeyse.

(iii) Condition on Subject Agreement (putative)
    The earliest animate 1 not exhaustively demoted triggers SH.

12. It is not clear if the first nominal in DSCs can control Equi. There seems to be split judgment among native speakers for sentence (ib) below with the first reading, though the same sentence with the second reading is apparently ungrammatical:

(i) a. [g₁ hwulywunghan uysa-i-myense(-to)] ku pwun-uy atul₁-i
good doctor-be-while(-even) the man-Gen son-Nom
cwuk-essta.
die -Past
'Though he₁ is a good doctor, his son₁ died.'

b. [g hwulywunghan uysa-i-myense(-to)] ku pwun-i atul-i
Nom Nom
cwuk-essta.

   i. ?/??/?* Though he₁ is a good doctor, his son₁ died.
   ii. * Though he₁ is a good doctor, his son₁ died.

Given the unclear status of such sentences, no definite conclusion is possible at this point. (If some such sentences are acceptable, it would be evidence that the first nominal is also a subject.)
13. There are attested instances of 'copy ascension' in other languages, e.g., in Welsh (cf. Perlmutter and Postal 1984c:147-48) and Seri (cf. Marlett 1984:219-20). The restriction in Korean therefore cannot be attributed to a universal constraint.

14. In this chapter, I am excluding the auxiliary verb constructions from consideration. When the descriptive verb combines with a [+ action] auxiliary verb by Clause Reduction, the resulting complex predicate is an action verb, and in this case, PA from I is possible. Chapter 3 discusses a piece of syntactic evidence that descriptive verbs are unaccusative predicates (cf. note 1). Given this and the hypothesis that intransitive raising triggers universally determine an initially unaccusative clausal structure (Perlmutter and Postal 1984b, Postal 1986b), the generalization is that PA from I is restricted to initially unaccusative strata. See below and chapter 3 for further discussion.

15. Notice that this is entirely different from saying that the clause is dominated by a S-node or a VP-node, because being dominated by such a node does not prevent long-distance scrambling in general, as is obvious from (57).

16. A similar contrast is observed in the following, where a locative adverb is used:

       Nom height-Nom the school-at most tall
       'John is the tallest in that school.'

   b. ku hakkyo-eyse [John-i khi-ka ceyil khuta].

   (ii) a. [John-i [apeci-ka ku hoysa-eyse ceyil khuta]].
       Nom father-Nom the company-at most tall
       'As for John, his father is the tallest in the company.'

   b. * ku hoysa-eyse [John-i [apeci-ka ceyil khuta]].

Sentence (ib) is acceptable if 'John' is compared with others in John's school. In (iia), only 'John's father' is compared with others in John's father's company.

17. The SOR construction in Korean is in general limited to intransitive embedded clause (but cf. S. Park (1985:331-2) for exceptions). The examples below are confined to intransitive complements.

18. Long-distance scrambling of adverbials results in differing degree of acceptability depending on their types. See Saito (1985) and references cited there for relevant discussion.
19. I assume here without argument that (71) involves SSR. The morpheme -kes is a bound noun denoting an inanimate object, and the embedded predicate is in noun modifier form. It is thus parallel to a RC in syntactic form. I discuss this construction briefly in chapter 3.

20. Assuming that kath 'is likely' is an unaccusative predicate, the structure of (71a), for instance, will be as follows:

(i) (= (71a))

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(ii) 3-to-2 Advancement
   a. ku-nun [nuckey o-n] ai-eykey pel-ul cwuessta.
      he-Top late come-Comp kid-Dat punishment-Acc gave
      'Lit. He gave punishment to the kid who came late.'
   b. ku-nun [nuckey o-n] ai-lul pel-ul cwuessta.
      Acc

23. Note, however, that the term 'locative' is misleading in
    that in many of the sentences above, there is no 'locative' relation
    between the predicate and the chômeur: for example, in no sense is
    'one's name' a location in sentences like (86a).

24. The dative marker has two variants depending on animacy:
    -eykey for animate nouns, and -ey for others.

25. Gerdts and Youn (to appear) hypothesize that the kind of
    DAT-NOM alternation observed above (advancement of an oblique nominal,
    in their terms) is restricted to initially unaccusative clauses. (I
    independently made a similar proposal in an earlier version of this
    chapter.) While it seems to be generally true that clauses that allow
    the DAT-NOM alternation involve typical unaccusative predicates, it
    may be too strong to say that if a predicate does not allow the
    alternation in some sentences, the predicate is (always) unergative.
    For instance, I hypothesized earlier that tuleka- 'enter' is an
    unergative predicate based on the impossibility of the DAT-NOM
    alternation (ia) and the ungrammaticality of SH (ib):

   (i) a. sensayngnim-i nwun -ey/* -i thi-ka tulekassta.
      teacher-Nom eye -Dat/* -Nom mote-Nom entered
      'A mote went into the teacher's eye.'
      Hon

Gerdts and Youn (ibid.) treat predicates such as anc- 'sit' and
    tuleka- 'enter' as unergative predicates based on similar reasons.
    However, there are cases where clauses with these predicates allow the
    DAT-NOM alternation.

   (ii) i non -ey/-i mwul-i cal tuleka-n-ta.
      this rice paddy -Dat/-Nom water-Nom well enter-Proc-Dcl
      'Water enters this rice paddy well.'
   (iii) i uyca-ey/-ka menci-ka cal anc-nun-ta.
      this chair-Dat/-Nom dust-Nom well sit-Proc-Dcl
      'Dust easily sits/cumulates on this chair.'
The predicate ka- 'go/occur' also sometimes allows DAT-NOM alternation for a 'locative' nominal, as shown below (cf. (95)):

(iv) i hangali-ey/-ka kum-i ka-sta.
    this jar -Dat/-Nom crack-Nom go/occur-Past
    'A crack occurred on this jar. (This jar is cracked.)'

The predicate ka- in (iv) is presumably not the same as ka- in (95): the two seem to have different meaning. The predicate tuleka- in (i) and (ii), however, clearly has the same meaning. This suggests that one cannot conclude that tuleka- 'enter' is an unaccusative predicate based on the impossibility of the DAT-NOM alternation in some sentences.

26. I am not claiming that all DAT-marked nominals must be a 3. The usage of the dative marker includes the following:

(i) a. Time
   ahopsi-ey hakkyo-ey kanta.
   nine o'clock-Dat school-Dat go
   '(I) go to school at nine.'

b. Unit
   i sakwa-nun han kay-ey elma-i-pnikka?
   this apple-Top one piece-Dat how much-be-Q
   'How much is this apple apiece?'

c. Goal
   CIA-e:y phyenci-lul ponayssta.
   Dat letter -Acc sent
   'I sent a letter to the CIA.'

d. Cause (Passive Agent, etc.)
   os-i pi-ey ceceysssta.
   suit-Nom rain-Dat got wet
   '(My) suit got wet with rain.'

In addition, the dative marker can be used with other particles to form a number of different combinations, such as -ev(ke)y-lo 'to (destination)', -ev(ke)y-se-pwuha 'from (starting point)', and so on. See I. Yang (1972) and Sohn (1977) for further details.

Of these, I consider the latter two types as a 3, though there is no evidence to consider the first two as such. The usage of the marker as the Goal marker is not controversial, since this has been the traditional assumption within Korean grammar as well as in most of the RG treatments I know of. The last category is somewhat controversial. I will briefly discuss the DAT marked nominals in lexical passive sentences in chapter 3.
One crucial difference between the last two categories and the first two categories is that with the former meaning, the animate dative marker -eykey is impossible even when an animate nominal is used. One relevant example is given below:

(ii) sawen-tul-i yel-salam -ey/* -eykey han-myeng employee-Pl-Nom ten-Clas -Dat/* -Dat[+animate] one-Clas

piywul-lo kamki-ey kellyessta.
ratio-with cold -Dat be afflicted (caught)
'The employees got cold at the ratio of one out of ten.'

27. The inherently honorific verb kyeysi 'exist [+hon]' can be used in the same sentence. The verb itself must be considered as distinct from iss: the latter behaves like a 'descriptive' verb in terms of the nonpast declarative form in that it does not allow the processive mood marker '-(n)un', whereas the former behaves like an action verb in this respect.

The verb iss does not always disallow honorification. For instance, when the 'dative subject' is human, honorific agreement is perfectly acceptable with this verb, while the inherently honorific kyeysi is not allowed:

(i) a. sensaygnim-eykey mwuncey-ka iss-usi-ta.
   teacher -Oat problem-Nom exist-Hon-Ocl
   'The teacher has a problem.'

b. * sensaygnim-eykey mwuncey-ka kyeysita.
   exist [+hon]

28. Gerdts and Youn (1988), however, argue for the traditional position (e.g., Shibatani 1977 a,b) that the DAT nominal is the dative-marked subject. Their analysis is illustrated below:

(i) a. sensaygnim-eykey ton-i philyoha-si-ta.
   teacher -Dat money-Nom needed -Hon-Dcl
   '(Lit.) Money is needed to the teacher.'

b. OBL 2 P
    2 Chô P
    1 Chô P
    | | |
    'teacher' 'money' 'needed'

Under this analysis, the 'dative subject' construction is initially unaccusative, and the 'dative subject' is an initial oblique, which advances to 2 and then to 1. I will not discuss this proposal in this work.
29. When nominals which are clearly oblique are involved, however, there seem to be no sentences parallel to (Ill) above. For instance, when the postposition -(ul)lopwuhe 'from' is used, multiplication always seems to result in ungrammaticality, as illustrated below:

(i) * i 
hoteyl-lopwuhe samhosil-lopwuhe yoksil-lopwuhe
this hotel -from room No. 3-from bathroom-from

pwul-i pencie-estta.
fire-Nom spread-Past
'The fire spread from the bathroom of room 3 of this hotel.'

30. I. Yang (1972:52-53) gives some examples that appear to be parallel to multiple case constructions, for example:

(i) Mary-ka cip-eysa, pang-eysa kongpwuha-yesta.
Nom home-at room-at study -Past
'Mary studied in the house, in the room.'

Most such multiple oblique constructions, however, seem to involve repetition, the second oblique nominal being parenthetically inserted to reinforce the already mentioned information. Unlike the ascension constructions examined above, sentences like this require a noticeable pause between the two oblique nominals. In English, too, this kind of repetition often occurs in colloquial speech, for instance, as in (ii) below:

(ii) I studied at school, (I mean) in the library.

I will not discuss this issue any further in this work.

31. The only case I know of in which ascension is possible in this context is when the predicate is ha 'do', toy 'become/be done', or a 'tough'-predicate. The first two cases will be discussed in detail in chapter 5, but the 'tough'-constructions will not be examined in this work. See the classification of MNCs in chapter 1 for an example.

32. See chapter 3 for a piece of syntactic evidence for this position.

33. When there is actual morphological incorporation, movement of the 'stranded possessor' to the subject position does not result in violation of the ECP (Baker does not mention this sort of movement, though). To take a hypothetical example from Korean, suppose (ia) below involves morphological incorporation of the head of the initial internal argument. Then, the S-structure of this sentence may be like (ib) below:
(i) a. Youngsoo-ka khi-khuta.
   Nom height-tall
   'Youngsoo is tall.'

b. 

```
  S
   NP
    I
     I
       VP
          Youngsoo
          NP
           N
           N
           N
           V
           ti
           t:j
           khi
           khuta
```

The trace $t_i$ in this case is governed by the complex predicate khi-khuta due to what Baker calls the Government Transparency Corollary (GTC), according to which the lexical category into which an item is incorporated governs everything that the incorporated item (khi, 'height' in this case) governs in its D-structure position (cf. Baker's 2.2.4).

M. Kang (1987) proposes "free deletion of head trace" to avoid ECP violations entailed by his analysis of PA sentences and claims that "this will not violate the Projection Principle since we are deleting only the head of an NP, not the whole argument." Assuming that certain additional assumptions about theta-role assignment could save deletion of head traces from violating the Projection Principle (M. Kang suggests that theta-role assignment in D-structure is optional), it is not clear if the ECP would retain much empirical content with devices that erase its violations. Furthermore, such a device will in effect nullify the most salient result (or alleged result) of Baker's theory of Incorporation: i.e., with such a device, the theory cannot in principle make any prediction about the distribution of Possessor Raising since abstract Incorporation would always obey the ECP, regardless of the D-structure position of the incorporated item.

34. A possible way out of this problem is to claim that the initial object has the following structure:

```
(i) NP
    NP
      N'
      N
      |   |   |   |
      |   |   |   |
      NP   N'   NP   N
      |   |   |   |
      |   |   |   |
      N   N   N   N
      |   |   |   |
      |   |   |   |
      'lizard' 'tail' 'edge' 'a bit'
```
In this structure, 'tail of the lizard' is the specifier of N', and 'edge' is the complement of N. To account for other sentences in (123), then, several other structures will have to be postulated. Even if we allow distinct D-structures for the same noun phrase, what must move in (130) is the intermediate category N’, contrary to Baker’s claim.

35. Baker proposes the Uniformity of Theta Assignment Hypothesis as the guiding principle of his theory, stated below:

(i) The Uniformity of Theta Assignment Hypothesis (UTAH)

Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-structure.

Under this hypothesis, it is required that (132) have the same D-structure as other sentences in (123), since each of these sentences is arguably a "thematic paraphrase" of the others.

36. Within GB theory, (135b) and (135b)’ will be ruled out by the ECP, given the assumption that unlike seem, predicates such as bother are not S’-Deletion triggers (or that seem selects an S, whereas bother selects an S’).
Chapter 3
Raising Constructions in Korean

This chapter concerns ascension in complex clauses in Korean: Subject-to-Object Raising (SOR) and Subject-to-Subject Raising (SSR). Arguments will be provided for the ascension analysis of each construction, and the relation between these and other constructions, Passive, in particular, will be discussed.

Section 3.1 provides arguments for a raising analysis of the SOR construction. Section 3.2 is concerned with SSR. After a brief examination of an instance of SSR, I argue in 3.2.2 that the so-called 'syntactic' passive (the -ci passive) also involves SSR, in accordance with the proposal by Perlmutter and Postal (1964b:153-54) and Postal (1986b), according to which intransitive predicates governing raising and the so-called auxiliary verbs universally occur in initially unaccusative clauses. Under this hypothesis, 'passive morphology' will be viewed as a result of Clause Reduction after SSR. This section also briefly examines the 'lexical passive' construction.

3.1 Subject-to-Object Raising

In this section, I take the 'believe'-type predicates in Korean and argue for a raising analysis of (1b).
Specifically, I will compare the raising (SOR) hypothesis with two alternative hypotheses: the exceptional Case marking (ECM) hypothesis of Chomsky (1981), and the Equi hypothesis of Saito (1982, 1985), as it is applied to Korean.

Since comparison of hypotheses within different frameworks can be difficult, I will sometimes assume, as in the traditional raising hypothesis, that movement is involved in the SOR construction, and borrow notation from the GB framework when appropriate.

3.1.1 Hypotheses

According to the SOR hypothesis, the D-structure and S-structure of (1b) are as in (2) below:

(2) a. D-structure of (1b)
na-nun e [g, John cengcikhata-ko] mitnunta.
I -Top [g, John honest -Comp believe

b. S-structure of (1b)
na-nun Johni [g, ti cengcikhata-ko] mitnunta.

The second hypothesis is the 'exceptional Case marking' hypothesis (ECM, hereafter) of Chomsky (1981). Under this hypothesis, the structure of (1b) would be roughly like (3) below at all syntactic levels, from D-structure to LF:
As discussed at the end of chapter 2, the current GB assumption that a verb must theta-mark any position which it subcategorizes (Chomsky 1981:37) is incompatible with a D-structure such as (2a), if the only way a nominal can occur in object position is by being subcategorized by the verb, i.e., if a non-theta object position cannot be created by some later processes.

Within the GB framework, it is not possible to view the object position as lexically filled at the D-structure level, because this position is not a theta position. In RG terms, the raisee cannot be an initial 2-arc since it does not bear a direct semantic relation to the matrix clause. In English, this is apparent because pleonastic elements such as _it_ or _there_ can appear in this position. The absence of such expletives in Korean makes it difficult to show that the object position of believe-type predicates is a non-theta position.

However, there is a semantic contrast between the SOR triggers and the Equi triggers. Consider the following pairs of sentences:

(4) a. na-nun Sooni\(i\)-eykey/-lul [\(\delta_i\) ttena-tolok] seltukhayssta.
   I -Top -Dat/-Acc leave-Comp persuaded
   'I persuaded Sooni to leave.'

b. na-nun Sooni\(i\) -eykey/-lul seltukhayssta.
   I -Top -Dat/-Acc persuaded
   'I persuaded Sooni.'
The complement clause in the (a)-sentences above is absent in the corresponding (b)-sentences. With control predicates, it holds without exception that the truth of the (a)-type sentence implies the truth of the corresponding (b)-type sentence. With believe-type predicates, this is not necessarily true, as is apparent from (5) above. This contrast suggests that with predicates of the latter type, the object position is not s-selected (in the sense of Chomsky (1986:90-92)) by the matrix predicate. In RG terms, the matrix object does not head an initial arc with respect to the matrix clause.

The third hypothesis is that the SOR construction is in fact an Equi construction, so that sentence (1b), for example, has the following structure at all levels:

(6) na-nun Youngsoo-lul [pro\_i cengcikhata-ko] mitnunta.
I -Top -Acc honest -Comp believe

This is the position argued for in Saito (1982, 1985) for the Japanese counterpart of the SOR construction.

Some of the arguments presented below apply to both the ECM and the Equi hypotheses, and others apply to only one of them. Overall, the evidence suggests that the SOR hypothesis is the simplest of the three alternatives.
3.1.2 Arguments for SOR

3.1.2.1 Quantifier Floating and Case Marking (against ECM)

A quantifier in Korean can appear in three different positions with respect to the position of the noun it quantifies: prenominal (6a), postnominal (7b), or floated (7c) position:

(7) a. sey haksayng-i wassta.
three student-Nom came
'Three students came.'

b. haksayng seys-i wassta.
student three-Nom came

c. haksayng-i seys (-i) wassta.
student-Nom three(-Nom)

In this section, I will be concerned only with floated quantifiers such as those illustrated in (7c), limiting the discussion to the universal quantifier motwu 'all'. (See chapter 4 for further discussion.) One characteristic of such floated quantifiers in Korean is that they can optionally have a case marker, either nominative or accusative. In simplex sentences, the case marker of a floated quantifier must agree with that of its antecedent (i.e., the noun it quantifies).

(8) a. haksayng-tul-i motwu-ka wassta.
student-Pl-Nom all -Nom came
'Students all came.'

Nom Acc
(9) a. emeni-ka haksayng-tul-ul motwu-lul chotayhayssta.
    mother-Nom student-Pl-Acc all -Acc invited
    'Mother invited all of the students.'

       Acc Nom

From this, we obtain the following generalization, to which I know of
no exceptions, as far as nominative and accusative markers are
concerned: 2

(10) If both a floated quantifier and its antecedent belong to the
    same minimal clause, their case marking must agree.

Or equivalently:

(11) If a floated quantifier and its antecedent do not agree in case
    marking, they are not clausemates (or else the sentence is
    ungrammatical).

In certain complex sentences, however, the case markers may be
different. (See Gerdts (1987) for more examples.) Consider the
following:

(12) a. emeni-nun ai-tuli-ul motwu-lul [ς, PROι yelsimhi
    mother-Top child-Pl-Acc all -Acc hard
    kongpwuha-tolok] seltukhayssta.
    study -Comp persuaded
    'Mother persuaded all the children to study hard.'

    b. emeni-nun ai-tuli-ul [ς, PROι motwu-ka yelsimhi
       child-Pl-Acc all -Nom hard
       kongpwuha-tolok] seltukhayssta.
       study -Comp persuaded
That the quantifier in (12a) is contained in the matrix clause and that the quantifier in (12b) lies within the complement clause is obvious because there is no other way they can get the appropriate case marker, whether Case is assigned contextually (Saito 1985), structurally by a projection of V (Y. Kang 1986), or by a projection of INFL or V according to the X'-Transparency convention (Yim 1985).

Now consider the following sentences with and without SOR:

(13) a. sensayngnim-un [g, haksayngtul-i motwu-ka cengcikhata-ko] teacher -Top students -Nom all -Nom honest -Comp mitessta. believed 'The teacher believed that the students were all honest.'

b. sensayngnim-un haksayngtul-ul motwu-lul cengcikhata-ko Acc all -Acc mitessta. 'The teacher believed all the students to be honest.'

c. sensayngnim-un haksayngtul-ul motwu-ka cengcikhata-ko Acc all -Nom mitessta.

In (13c), the quantifier is marked nominative, whereas its antecedent is marked accusative. From the grammaticality of (13c) and the generalization stated in (11), it follows that the quantifier and its antecedent in (13c) are not within the same minimal clause. This leads to the conclusion that haksayngtul-ul 'students-Acc' in (13c), and hence raisees in general, by implication, must be in the matrix object position at some level. If a non-theta A-position cannot be
created by a later rule, therefore, there must be an object A-position at all syntactic levels, as required by the Projection Principle.

Though there may be ways of accommodating the observed phenomenon without taking the position that the raisee lies outside of the complement clause (cf. Choi 1988a), the simplest hypothesis is to regard the raisee as a matrix constituent at the level where Case is assigned. Therefore, either the SOR or the Equi hypothesis is simpler than the ECM hypothesis.

3.1.2.2 Word Order Restriction (against Equi and ECM)

Kuno (1976:35) observes for Japanese that while the complement clause in the Equi construction can scramble over the Equi controller, the complement clause in the SOR construction cannot precede the raised nominal. The same is true of Korean, as the contrast between (14b) and (15b) shows:

    I -Nom -Dat/-Acc early leave-Comp persuaded
    'I persuaded John to leave.'


(15) a. na-nun Johni-ul [e4 chencay (-i)-lako] mitnunta.
    I -Top -Acc genius (-be)-Comp believe
    'I believe John to be a genius.'


If the empty category in the complement of (15b) is a trace, the ungrammaticality of the sentence will follow from the existing
principle that requires traces to be bound. If the empty sites in both (14b) and (15b) are a pro or PRO, on the other hand, the contrast between the two sentences will be left unexplained.

Under the ECM hypothesis, there is no empty category in (15b), and thus it is predicted that the embedded subject in the complement clause cannot be placed after the predicate, given the 'verb-final' word order in Korean.

As was shown in chapter 2, however, the word order restriction in the SOR construction is not limited to the complement itself. No constituent within the embedded clause can move out of the complement clause. An additional example is given below:

    I -Top Acc to went -Comp thought
    'I believed/considered John to have left for New York.'


Without SOR, clause-internal scrambling of an adjunct results in perfectly acceptable sentences:

    Nom

Under the ECM hypothesis, sentences like (16b) involve clause-internal scrambling, and thus it remains a mystery that an adverb cannot be preposed within the minimal clause just in the SOR construction.

Under the SOR hypothesis, (16b) is ruled out by the following constraint proposed in chapter 2:

(18) Precedence Condition
    No part of an ascension chômeur can precede the ascendee.
If the construction is an Equi construction, on the other hand, there is no reason for the ungrammaticality of (16b), because long-distance scrambling is in general possible with the Equi construction, as shown below:3

    I -Top to Acc leave-Comp persuaded
   'I persuaded John to leave for New York.'

The simplest hypothesis of the three therefore is the SOR hypothesis.

3.1.2.3 Restriction on Relativization (against Equi and ECM)

A similar argument can be made on the basis of the restriction on relativizing constituents of the complement of the SOR construction (cf. chapter 2). Compare the following sentences:

    he-Nom -Dat/-Acc Dat go-Comp persuaded
    'He persuaded John to go to New York.'

    b. [ku-ka Johni-eykey/-ul [e1 e2] ka-tolok] seltukha-n] tosi
    he-Nom -Dat/-Acc go-Comp persuade-Comp city
    'the city where he persuaded John to go'

    I -Nom Acc Dat went -Comp believed
    'I believed John to have gone to New York.'

    I -Nom Acc went-Comp believe-Comp city
    'the city which I believe John to have gone to'

    I-Nom Nom went-Comp believe-Comp city
    'the city which I believe John went to'
Sentences in (20) show that the Goal nominal within a complement clause of an Equi construction can be relativized. Without SOR, the Goal nominal can be relativized out of the complement of mit 'believe' (21c), but the same nominal cannot be relativized if SOR does occur (21b). This contrast is as expected under the SOR hypothesis, given the restriction on relativization discussed in chapter 2:

(22) **Condition on Relativization**

No part of an ascension chômeur can be the target of relativization.

Under the Equi or ECM hypotheses, there is no obvious reason for the observed contrasts. If no structural distinction exists between the Equi complement and the SOR complement in sentences such as (20)-(21), it is unclear why they behave in different ways with respect to Relativization. The SOR hypothesis thus turns out to be the only hypothesis that provides a natural way of accounting for the impossibility of relativizing constituents of the raising complements.

### 3.1.2.4 Control and Trace (against Equi)

D. Park (1987) observes that the obligatory control context is largely predictable based on the types of complementizers.\(^4\) That is, when the complementizer cannot coocur with the past tense marker - *Ass\(^5\), the PRO in the complement clause is obligatorily controlled by a matrix constituent (subject or indirect object), whereas when the complementizer is compatible with a tense marker, the interpretation of the empty category is determined on the basis of discourse context,
regardless of whether or not there is an overt subject and/or an object in the matrix clause. Some examples are given below:

    I -Nom Dat just now come-Past-Dcl-Comp said
    'I told Youngsoo that he just came.'

    I -Nom Dat come (*-Past)-Imp-Comp said
    'I told Youngsoo to come.'

    I -Nom Dat leave-Past-Dcl-Comp persuaded
    'I persuaded Youngsoo that he had left.'

    I -Nom Dat leave (*-Past)-Comp persuaded
    'I persuaded John to leave.'

In the (a) sentences above, the empty category (pro or PRO) can refer to anyone mentioned in the discourse, including the subject or the indirect object (if pragmatically plausible, of course). In the (b)-sentences, in contrast, the empty category must be locally controlled (by the indirect object in the above cases); it cannot refer to someone mentioned in the previous discourse under any conditions. The difference is that complementizers such as -tolok or -(u)la-ko (assuming that these are both complementizers) are incompatible with a tense morpheme: in GB terms, the INFL is [-TENSE]. (This feature has nothing to do with overt presence or absence of a tense morpheme within a given complement clause. The present (or nonpast) tense, for example, is signaled by the absence of the past tense marker, not by the presence of a present tense marker. But the INFL is considered [+TENSE] if it is in principle compatible with a tense marker.)
The same generalization holds for the mood marker -keyss, which may indicate either speaker's volition or presumption. The tense marker is compatible only with the latter meaning, but not with the former meaning. Thus, it is predicted that with the volitional mood, the complement clause INFL is [-TENSE], and therefore control is obligatory, whereas with the conjectural mood, the interpretation of the empty category is discourse-bound. This prediction is correct:

    Nom Dat leave (*-Past)-Volition-Dcl-Comp said 
    'John1 said to Mary @1 would leave.'

   (-Past)-Conjecture-Dcl-Comp said 
   'John said to Mary that @ may leave (might have left).'

The relevant generalization can be informally stated as follows:

(26) If the INFL of a complement clause is [-TENSE], control is obligatory; if it is [+TENSE], the interpretation of the empty category is determined by discourse context.

An apparent counterexample to this otherwise strict generalization comes from the SOR construction, for example:

    I -Top Acc leave-Past-Dcl-Comp believed 
    'I believed John to have left.'

In SOR sentences, the empty category is obligatorily controlled by the matrix object even when the complement clause has an overt tense marker.
If it involves raising (or movement), the explanation is straightforward because a trace is obligatorily coindexed with the moved NP at the level where the movement takes place (S-structure). If the construction under consideration is an Equi construction, on the other hand, it will be the only exception to the generalization stated in (26). Under the ECM hypothesis, the accusative-marked nominal in (27) is the subject of the complement clause with no empty category, and thus the only possible interpretation is that the accusative-marked nominal is the subject of the complement verb, as predicted. Other things being equal, then, either the SOR hypothesis or the ECM hypothesis is a better alternative than the Equi hypothesis, because the complication that arises under the Equi hypothesis is automatically explained under either of the other two hypotheses.

3.1.2.5 Resumptive Pronoun in the Empty Category Position (against Equi)

Saito (1985:114-122, 202-244, etc.) observes that when a constituent is scrambled in Japanese, there cannot be a resumptive pronoun in the position of the trace. The same thing seems to be true in Korean, as the following sentences show:

    Nom   Acc saw
    'Sue saw John.'

b. * Johni-ul Sue-ka ku_i-lul poassta.
    Acc   Nom    he -Acc saw
   Nom     Nom the book-Acc bought-Comp said  
   'John said that Sue bought the book.'

   the book-Acc Nom Nom it -Acc bought-Comp said

As mentioned in chapter 2, the Possessor Ascension construction in Korean does not allow a resumptive pronoun in the position of the ascendee, as opposed to the Double Subject Construction. Relevant examples are repeated below:

(30) a. ?/?? Youngsoo₁-ka caki₁ apeci-ka cha-lul sassta.  
   Nom self's father-Nom car-Acc bought  
   'As for Youngsoo, his father bought a car.'

b. * Youngsoo₁-ka caki₁ khi-ka khuta.  
   Nom self's height-Nom tall  
   'Youngsoo is tall.'

Kuno (1976) observes that, in the SOR construction, no resumptive pronoun can occur in the complement subject position (the position of a trace, under the movement hypothesis). The following examples illustrate that the same is true in Korean:

(31) Resumptive Pronoun in Equi Complement

   I -Top Dat he -Nom it -Acc do-Comp -Acc ordered  
   'I ordered John that he do it.'

(32) Resumptive Pronoun in SOR Complement

* na-nun John₁-ul [ku₁-ka papo(-i)-lako] sayngkakhanta.  
   I -Top Acc he-Nom fool (be)-Comp consider  
   'I consider John to be a fool.'

In general, then, it seems to be true that when an ascension (movement) occurs, no resumptive pronoun is allowed in the position of the ascendee in Korean. This result is expected either under the ECM
or the SOR hypothesis: the former postulates no empty site, and thus there is no place for a resumptive pronoun, and the latter predicts the resumptive pronoun to be as ungrammatical as in other instances of ascension (movement) within the language. If the empty category is the same both in (31) and (32), on the other hand, it will remain unclear why, in just this kind of control construction, a resumptive pronoun is disallowed.

3.1.2.6 Case Marker Alternation (against Equi)

In the object-controlled Equi construction in Korean, the controller may be marked either dative or accusative (33), whereas in the SOR construction, only an accusative marker is allowed (34):

(33) John-i Mary-eykey/-lul [əi ttena-tołok] seltukhayssta. Nom -Dat/-Acc leave-Comp persuaded
  'John persuaded Mary to leave.'

(34) John-i Mary-lul/*-eykey [əi papo(-i)-lako] sayngkakhanta. Nom -Acc/*-Dat fool (be)-Comp consider
  'John considers Mary to be a fool.'

Within the GB framework, the case marking alternation in (33) will follow from the stipulation that 'persuade'-type predicates sometimes select an NP and sometimes a PP. Within the RG framework, this fact is accounted for in terms of 3-to-2 Advancement discussed in chapter 2 to account for sentences such as (35):

(35) nay-ka Youngsoo-eykey/-lul chayk-ul cwuessta. I -Nom -Dat/-Acc book-Acc gave
  'I gave Youngsoo a book.'
That is, if we assume that the initial 3 of seltukha 'persuade' can optionally advance to 2, the DAT-ACC alternation will follow.

Indirect evidence for the assumption that the Equi controller selects an initial 3 comes from Japanese, in which only the dative marking is possible in Equi constructions such as (33) (cf. Kuno 1976:34).

In the SOR construction, in contrast, no dative marked nominal can appear in the position of the raisee. Under the ECM hypothesis, this follows from the fact that Case assignment is limited to accusative or nominative Case, since the dative marker is viewed as a postposition. (That is, only accusative and nominative Case are assigned under government.) Under the SOR hypothesis, the raisee is a matrix direct object, and hence the only possible case marking is accusative.

Under the Equi hypothesis, in contrast, the impossibility of the dative case marking in (34) remains an accident.

Thus, either the ECM or the SOR hypothesis yields a more desirable prediction than the Equi hypothesis about the case marking of the raisee.

3.1.3 Conclusion

In this section, I have discussed six phenomena in comparing the three hypotheses: (i) the case marking of the floated quantifiers, (ii) a word order restriction on the SOR construction, (iii) a restriction on Relativization, (iv) a restriction on Equi (or control), (v) the distribution of resumptive pronouns, and (vi) the case marking alternation. The Equi hypothesis is inconsistent with
five among the six phenomena discussed above, and the ECM hypothesis fails to account for three of them. As for the ECM hypothesis, I know of no serious attempts among Korean linguists to pursue it, though some touch upon this issue in passing (e.g., Hong 1985). The presence of an overt tense marker and an overt complementizer within the complement in the SOR construction (e.g., (27) above) casts doubt upon the claim that 'believe'-type predicates in Korean select an \( S \) rather than an \( S' \) (or that there is a rule which reduces a barrier). The fact that the hypothesis has several empirical problems even with an exceptional device with no empirical basis is a clear indication that the hypothesis is wrong. As mentioned at the outset, the only motivation for the ECM hypothesis is the assumption that there is no non-theta object position. If this assumption must be abandoned for monoclausal ascensions (cf. chapter 2), there is no compelling reason to maintain the ECM hypothesis for the SOR construction.

Overall, then, it seems reasonable to conclude that the SOR hypothesis is a better alternative than the ECM or the Equi hypothesis, since it is the only one that provides a natural account of all of the observed phenomena.

3.2 Subject-to-Subject Raising

In this section, I discuss the SSR construction in Korean. After a brief discussion of one instance of the SSR construction, I argue in 3.2.2 that the so-called syntactic passives in Korean also involve SSR followed by Clause Reduction, which is in fact a natural
consequence of the recent RG view of auxiliary verbs. In 3.2.3, I briefly speculate on a lexical passive construction.

3.2.1 -ul kes kath- 'likely'

This section argues that kath 'likely' is an SSR trigger. The initial motivation for this view is semantic in nature. To take an example:

(36) pi-ka o-l-kes kath-ta.
    rain-Nom come-Comp-NML like-Dcl
    'Rain is likely to come. (It is likely to rain.)'

The complement clause in (36) is in the form of a noun modifier clause, where the bound noun -kes is modified by an embedded clause. This seeming relative clause, however, has no characteristics of a noun phrase in this position. For one thing, it cannot be marked either accusative or nominative, though certain delimiters such as -man 'only' or -to 'also' can be attached to it. As briefly mentioned in chapter 2, no other constituent may occur between the complement clause and the matrix predicate, as illustrated again below:

(37) a. pi-ka kkok o-l-kes kath-ta.
    rain-Nom certainly come-Comp-NML like-Dcl
    'It certainly is likely to rain.'

b. * pi-ka o-l-kes kkok kath-ta.
    certainly

It is not obvious why the complement of the verb kath 'like' has the form of a relative clause. I will return to this matter below. For now, I assume that noun modifier endings such as -(u)l and -(u)n
(glossed 'Comp' in (37)) together with the bound noun -kes function as a single complementizer, parallel to, e.g., the nominalizer -ki as in the following example:

(38) ku-nun ilk-ki-lul kaluchinta.
    he-Top read-NML-Acc teach
    'He teaches reading.'

The predicate kath 'like' also selects a noun complement in sentences such as (39).

(39) a. ku ai-ka kkok papo kathta.
    the kid-Nom just fool like
    'That kid is (looks) just like a fool.'

b. * ku ai-ka papo kkok kathta.
    just

In simplex clauses like (39), too, the same syntactic restriction shows up: i.e., the noun papo 'fool' does not allow case marking, and no constituent can intervene between the nominal complement and the predicate, as shown by the ungrammaticality of (39b). In this regard, the nominal complement behaves just like the nominal complement of the copula:

(40) ku ai-ka papo-i-ta.
    that kid-Nom fool-be-Dcl
    'That kid is a fool.'

The nominal complement in (40) is morphologically incorporated into the copula, and no other element (including delimiters) can intervene between the predicate and the nominal complement. In the
case of (40), indirect evidence for the status of the nominal complement is available from its negative counterpart: 7

(41) ku pwun-i sacangnim -i/* -kkeyse an-i-si-ta.
   the person-Nom boss -Nom/* -Nom[+hon] not-be-Hon-Dcl
   'That person is not the boss.'

The nominative marking in (41) suggests that the nominal complement is an acting 1; its incompatibility with the honorific nominative marking suggests that it is not the final 1. Further evidence (though indirect) for its status comes from other languages: i.e., in languages like Chamorro and Russian, for example, a nominal can be a predicate without the copulative verb, and thus it does not seem unreasonable to view that the same thing happens in Korean, except that Korean requires a verbal predicate in all matrix clauses for purposes of inflection, including the various suffixes indicating speech levels which cannot be attached to a nominal. If so, sentences like (40) may be analyzed, for example, as follows:

(42) (= (40))

2  P
1  P
P

1  Chô
P

2  P
 P

1  P
 P

ku ai papo
'the kid' 'fool'

i- 'be'
Whether the copula is unaccusative or not is not crucial here. I assume without argument that it is, following the dominant RG view. As for the unaccusativity of the predicate nominal, indirect evidence is available from a similar construction with the predicate toy. Since pursuing this matter here would lead us away from the main issue, I will postpone discussion of this matter until the Appendix to this chapter.

A similar analysis is plausible for sentences like (39), as in the following:

(43) (= (39))

The primary reason for the view that the final subject in sentences like (39) is not initially selected by the predicate kath- comes from semantic considerations, i.e., there is no direct semantic relation between the predicate and the final 1. The word order inversion test and relativization test do not seem to make much sense in this particular case, because it must be independently postulated that the nominal complement and the predicate form an inseparable unit so that the nominal cannot move away from its position under any situation, as
the adverb intervention test shows (cf. (39b)). Assuming for now that
the semantic criterion is valid, the fact that there is a relative
clause-like complement in complex clauses such as (36) (repeated below
as (44a)) can be ascribed to the fact that the predicate must select a
complement with a head noun, unlike SOR triggers which select
complements with no nominal head. Given this stipulation, (36) can
now be analyzed in the same way as (39), as follows (details ignored):

(44) a. pi-ka o-l-kes kath-ta.
    rain-Nom come-Comp-NML like-Dcl
    'Rain is likely to come. (It is likely to rain.)'

b.

The generalization is thus that the predicate kath- always selects a
clausal complement, whether it superficially looks like a simple noun
as in (39) or its clausal status is more transparent as in (44). The
same is true of the complement of the copulative predicate, as shown
below:
(45) a. pi-ka o-l-kes-i-ta.
rain-Nom come-Comp-NML-be-Dcl
'Rain will come.'

b. ku ttay kapcaki pi-ka o-nun-kes-i an-i-nka!
the time suddenly rain-Nom come-Comp-NML-Nom not-be-QE
'Then, suddenly, it rained! (Lit. Isn't it that the rain came at that moment, all of a sudden?')

The biclausal nature of sentences like (44) is obvious: there are two predicates, and honorification can occur with either of the two predicates:

(46) a. sensayngnim-i phikonha-si-n-kes kathta.
teacher -Nom tired -Hon-Comp-NML like
'The teacher appears to be tired.'

b. (?) sensayngnim-i phikonha-n-kes kath-usi-ta.
tired -Comp-NML like-Hon-Dcl

The honorific agreement with the matrix predicate is slightly unnatural to me, but it is not uncommon.

That the raisee is a matrix constituent at the superficial level can be seen from the following sentences, where a matrix adverb is placed between the raisee and the initial complement predicate:

(47) a. tomwuci pi-ka o-l-kes kath-ci ani hata.
at-all rain-Nom come-Comp-NML like-NML not do
'It is not likely to rain at all.'

b. pi-ka tomwuci o-l-kes kath-ci ani hata.
at-all

The adverb in these sentences modifies only a negative verb (sometimes called a 'negative polarity' adverb), and as such cannot be understood as modifying the embedded predicate, which is not in negative. Since there is no case where a matrix adverb can move down into a lower
clause, the fact that this matrix adverb can occur between the raisee and the complement shows that the raisee is outside of the complement clause.

In sum, the fact that the raisee can trigger SH on the complement predicate shows that it is the final 1 of the downstairs clause at some level, and the fact that it can trigger SH of the matrix predicate, together with the fact that a matrix adverb can occur between the raisee and the complement predicate, shows that it is the final 1 of the matrix clause.

Though the possibility remains that such sentences involve Equi rather than SSR, semantic considerations favor the SSR hypothesis. In addition, there are two pieces of syntactic evidence against the Equi analysis of these sentences. The first argument comes from facts about obligatory control contexts in Korean which were discussed in the previous section in relation to the SOR construction. The relevant condition on obligatory control is restated below (cf. (26) above):

(48) If the predicate of a complement clause is not compatible with tense, control is obligatory; if it is, the interpretation of the empty category is determined by discourse context.

The complement of kath- allows a past tense marker, as shown below:

(49) ku pwun_i [e_o-ass-ul-kes] kathta.
the person-Nom come-Past-Comp-NML like 'He is likely to have come.'
In sentences such as (49), however, there is no possibility of the empty category (or the putative Equi victim) referring to someone other than the matrix subject. If (48) is the correct generalization, therefore, the SSR hypothesis is preferable to the Equi hypothesis, because only the former provides a natural explanation for why sentences like (49) involve obligatory “control”.

Secondly, the subject of certain sentential idioms can be raised, as shown below:

(50) a. ttangkemi-ka ci-n-ta.
ground-spider-Nom set-in-Proc-Doc
‘The dusk is gathering.’

b. ttangkemi-ka kot ci-l-kes kathta.
ground-spider-Nom soon set-in-Comp-NML like
‘It is likely that it will soon become dark.’

The precise meaning of ttangkemi above is not quite clear, and its use with the meaning of ‘dusk’ or ‘twilight’ is strictly limited to the verb ci- ‘set in’. One cannot say, for example, * ttangkemi-lul poasata ‘ground-spider-Acc saw’ with the meaning ‘(I) saw the twilight.’, or * ttangkemi-ka alumptapa ‘ground-spider-Nom is beautiful’ with the meaning ‘The dusk is beautiful.’ Given this restriction, ttangkemi cannot appear as the matrix subject of kath- to trigger Equi, and if so, the raising hypothesis is preferable to the Equi hypothesis because it provides a natural account of the appearance of a part of the fossilized expression occurring as the superficial subject of kath-.

These considerations thus lead to the conclusion that sentences involving the predicate kath- are instances of SSR rather than Equi.
3.2.2 Passive as Raising

According to a recent hypothesis of Perlmutter and Postal (1984b:153-54) and Postal (1986), intransitive raising triggers such as 'tend' and 'seem', and the so-called auxiliary verbs universally occur in initially unaccusative clauses. (See the cited works and also Gonzalez (1987) for empirical motivation for this hypothesis.) Taking this hypothesis as a working assumption, I examine in this section the auxiliary verb *ci-* in Korean (also known as the inchoative mood marker, or sometimes as the passive morpheme) which roughly means change of state (comparable to become or get in English, as in sentences like I often become/get tired). This auxiliary verb occurs not only in the passive construction but also in other types of sentences, including intransitive sentences and the Inversion construction, for example:

(51) **Intransitive complement of 'ci-'

a. naissi-ka chwuwu-e ci-n-ta.
   weather-Nom cold-Comp get-Proc-Dcl
   'The weather is getting colder.'

b. nay-ka ku swulcip-ey cakkwu ka-a ci-n-ta.
   I -Nom the bar -Dat repeatedly go-Comp get-Proc-Dcl
   'Lit. I become going to the bar repeatedly. (I keep going to that bar in spite of myself.)'

(52) **Inversion structure with 'ci-'

a. na-eykey (-nun) emeni-ka kuliwu-e ci-n-ta.
   I -Dat (-Top) mother-Nom miss-Comp get-Proc-Dcl
   'Lit. To me, mother is becoming missed. (I miss mother.)'

b. sensaygnim-i ton-i philyoha-y(e) ci-si-ess-ta.
   teacher -Nom money-Nom need -Comp get-Hon-Past-Dcl
   'The teacher has come to be in need of money.'
(53) **Passive**

a. kkotpath-i ai-tul-ey uyhay kakkwu-e ci-n-ta.
   garden-Nom child-Pl-by care-Comp get-Proc-Dcl
   'The garden is (being) taken care of by the children.'

b. i chayk-i haksayng-tul-eykey manhi ilk-hi-e ci-n-ta.
   this book-Nom students -Dat widely read-Pass-Comp get-Proc-Dcl
   'Lit. This book gets widely read by students.'

As shown in (53b), the auxiliary verb also appears after the 'lexical passive' morpheme, a fact which would be mysterious if ci- were a 'passive morpheme'.

It is not clear precisely in which contexts this auxiliary verb can appear, though there seems to be a general concept present in all of these sentences: i.e., either the final subject undergoes certain changes, or, in the case of Inversion structure, the Experiencer experiences a certain change of mood, which also seems to be part of the meaning of English predicates such as 'become' and 'get'.

Given P&P's hypothesis mentioned at the beginning of this section, it naturally follows that the auxiliary verb ci- selects a clausal complement as a 2 in all constructions where the auxiliary verb occurs, including the passive construction. This would mean that the verb is a raising trigger, since, clearly, the final 1 in passive sentences in Korean is not the clausal complement: e.g., it is not marked nominative. It also follows from this that Passive itself has no effect on verbal morphology in Korean, as in Mandarin Chinese and Achenese, where no change in verbal morphology is entailed by Passive (cf. Perlmutter and Postal 1983a:8-9, and references cited there).

Sentences like (54a) will thus be analyzed along the following lines:
Whether the complement clause is a 1-chômeur or a 2-chômeur is not testable, because neither accusative nor nominative marking is allowed in this position, though some delimiters may occur after the complement (e.g., -man 'only' or -num 'as for (contrastive)'). I assume without justification that the complement is a 2-chômeur. The unaccusativity of the complement clause will be discussed shortly.

Turning now to the passive construction, suppose the partial structure of passive sentences like (55a) is as in (55b) below:

(55) a. ku-eykey hwuncang-i cwu-e ci-essta.
    he-Dat medal -Nom give-Pass-Past
    'A medal was given to him.'
The only difference between the analysis in (55) and traditional treatments of the passive construction is that the biclausal nature of the passive construction is made explicit in (55). The reason that many treatments of the passive construction have not made this point explicit seems to be that all complement elements behave like a matrix constituents at the superficial level, unlike, for example, in the SOR construction discussed above. This is a characteristic of Clause Reduction (or Clause Union), a phenomenon which was mentioned in chapter 2.

I therefore propose that the raising trigger also induces Clause Reduction after raising, like, for example, the Spanish raising trigger *soler* 'tend' as discussed in Aissen and Perlmutter (1983). In the case of Clause Reduction after raising, the downstairs constituents will bear the same GRs in both clauses, in accordance with the Inheritance Principle of Gibson and Raposo (1986), according to which the complement elements other than the 1 bear the same GR to the matrix clause when Clause Union occurs, unless the Stratal
Uniqueness Law (SUL) would be violated. (See the cited work for details.) Following the traditional RG notation for union structures, a tentative analysis of (55a) can now be represented as follows:

This structure represents the fact that the SSR in this case is followed by Clause Reduction, and Passive occurs in the embedded clause.

One question that arises at this point is what happens if Passive does not occur in the complement clause. Given that ci-triggered obligatory SSR and Clause Reduction, the unspecified initial 1 (PRO) will be raised, and at the Union stratum, the complement 2 and 3 will be revalued as a 2-chômeur and a 3, respectively, in accordance with the Inheritance Principle (see above). 10

(57) * PRO ku-eykey hwuncang-ul cwu-e ci-essta.
   he-Dat medal -Acc give-Comp get-Past
   '(Someone) gave a medal to him.'
Recall at this point the following condition cited from Gerdts (1986):

(58) Only an initial 2 can be passivized in ci- passives.

As discussed in chapter 2, the motivation for this condition comes from the impossibility of passivizing a 3-to-2 advancee or an ascendee to 2, as in the following sentences:

(59) a. cangkwun-un ku-lul hwuncang-ul cwuessta.
    general-Top he-Acc medal -Acc gave
    'The general gave him a medal.'

        b. * ku-ka (cangkwun-ey uyhay) hwuncang-ul cwu-e ci-essta.
           he-Nom general -by medal -Acc give-Comp get-Past
           'He was given a medal (by the general).'

(60) a. ku-ka Sooni-lul elkwul-ul kulyessta.
    he-Nom Acc face -Acc drew
    'He drew Sooni's face.'

           Nom he-by face -Acc draw-Comp get-Past
           'Sooni was drawn her face by him.'

Under the current hypothesis, (58) can be understood as a condition on what can be raised from the complement of ci-. The following variant of (58) will have roughly the same effect on sentences like (59)-(60), given the raising analysis of the passive construction:11

(61) Condition on SSx with ci-
    Only an initial 2 can be raised from the complement of ci-. 
This condition, however, does not itself prevent a noninitial 2 from advancing to 1; it only predicts that a noninitial 2 cannot be raised even if it advances to 1. To illustrate: if the advancee to 2 in (59b) advances to 1 in the complement, it cannot be raised given (61). Since subject raising is obligatory with ci-, therefore, no grammatical sentence can be obtained.

To return to (57), the reason that Passive must apply in a transitive complement of ci- now follows from (61), which predicts that the only possible raisee from a transitive clause is the initial direct object. Since only a subject can be raised, the 2 must advance to 1.

This condition also makes a prediction about possible intransitive complements of the auxiliary verb ci-: i.e., only an initially unaccusative clause can occur as its complement. This is because an initially unergative clause has no 2 and thus the obligatory SSR will always result in violation of (61). If (61) is correct, therefore, intransitive predicates such as chwup-'cold' and ka- 'go' (cf. (51)-(52) above) must be unaccusative predicates. A particularly interesting implication of (61) is its prediction about the Inversion Construction: given (61), the pivot nominal must be the final 1 because it is the only nominal that satisfies (61). The only structures possible for (62a), for example, turn out to be either (62b) or (62c):12

(62) a. na-eykey (-nun) emeni-ka kulipta. (cf. (52a))
   I Dat (-Top) mother-Nom miss
   'I miss mother.'

...
This result leads to a number of intricate issues which, though
important, are not directly relevant to the major topic of this work.
I will not further pursue the related issues in this thesis. The
Appendix to this chapter demonstrates that constraint (60) also holds
for the verb toy- 'become', which has been often considered to be a
morphological variant of ha- 'do' in passive constructions.

Another auxiliary verb that restricts its complements in a
similar way is iss- 'exist' as used with the complementizer -a/-e/-ye.
(I have sometimes abbreviated this morpheme as -A above. The verbal
form with this morpheme is sometimes called the 'infinitival form'.)

    Nom Korea -Dat go-Comp exist
      'John has gone to Korea.'

    b. mwun-i yel-li-e issta.
       door-Nom open-Pass-Comp exist
       'The door is (kept) open.'

    c. i pyek-ey kulim-i kuli-e ci-e issta.
       this wall-Dat picture-Nom draw-Comp get-Comp exist
       'A picture is drawn on this wall.'

       Nom apple-Acc eat-Comp exist
       'John ate the apple (and the effect still continues).'
The auxiliary verb with the complementizer -A roughly means that a certain state or the effect of a certain action continues at the moment of utterance. Complements with Action verbs such as ka- 'go', camtul- 'fall asleep', cwuk- 'die', sal- 'live', or anc- 'sit', and the passive form (lexical or syntactic) of a large class of transitive verbs can occur with iss-. It holds without exception that iss- cannot co-occur with a final transitive complement with -A, as illustrated in (63d). Complements with typical unergative verbs such as no1- 'play', ssau- 'fight' and ilha- 'work' are not allowed. The following condition seems to be true:

(64) Condition on SSR with 'iss-
Only an initial 2 of an action verb can be raised from the complement of iss- when the complementizer is -A.13

A difference between ci- and iss- is that the latter always selects a complement with an action verb.14 Condition (64), assuming that it is valid, suggests that the condition on ci- complement stated in (61) is not a peculiar, isolated restriction but is one of the common restrictions on auxiliary verbs in general. (See also Appendix.)

To summarize the discussion so far, I have tried above to make explicit the biclausal analysis of the syntactic passive construction, which I believe many Korean linguists have implicitly assumed. Under this analysis, Passive itself has no effect on the morphology of the verb, but rather the higher (unaccusative) auxiliary verb requires Passive to occur in the complement clause due to a restriction on the raisee (61). A crucial difference between Korean and languages like Mandarin Chinese, Achenese (cf. Perlmutter and Postal 1983a), or
Indonesian (cf. Chung 1977) is therefore that, unlike the latter, the former requires an auxiliary verb to express the 'passive meaning'.

There are many issues related to the auxiliary system in Korean that I have not mentioned, including complex case marking patterns of the complement constituents at the superficial level, and the interaction of Unaccusative Advancement and raising. I leave all these issues to future studies.

In the next section, I briefly examine a lexical passive construction mainly to examine a particular interaction of Possessor Ascension and Passive.

3.2.3 Possessor Ascension and Lexical Passive

In many treatments of the lexical passive (LP) construction, it has been assumed that there is no fundamental distinction between syntactic passive and lexical passive except the verbal morphology. Chun (1985), for instance, analyzes sentences like (65a) as involving Possessor Ascension followed by Passive, as illustrated below:

    Nom dog-Dat foot-Acc bite-Pass-Past
    'Mary had her foot bitten by a dog.'

b. 

\[
\begin{array}{c}
1 & 2 & \text{P} \\
\text{Chö} & \text{Chö} & \text{P} \\
\text{kay} & \text{Mary} & \text{pal} \\
\text{dog'} & \text{pal} & \text{'bite'} \\
\text{mwul-} & \text{li-} & \text{essta}.
\end{array}
\]
However, there are reasons to believe that PA is not involved in sentences like (65a). As shown in chapter 2, clear instances of PA chômeurs are strictly restricted in word order, and cannot undergo Relativization. The putative ascension chômeur in (65a), however, is not subject to these restrictions:

(66) a. pal-ul Mary-ka kay-eykey mwul-li-essta. foot-Acc Nom dog-Dat bite-Pass-Past
'Mary had her foot bitten by a dog.'

 b. [Mary-ka kay-eykey ei mwul-li-n] pal Nom dog-Dat bite-Pass-Comp foot
'the foot which Mary had bitten by a dog'

Secondly, it was shown in 3.1 that a resumptive pronoun cannot appear in the position of an ascends; the LP construction is exceptional in this regard as well:

'Mary had her handkerchief bitten by the dog.'

Third, as briefly mentioned in chapter 2, Possessor Ascension chômeurs in general do not allow an attributive adjective (see also M. Kang (1987)). The putative chômeur in the LP construction is exceptional in this respect, too, as the contrast between the following two sentences shows:
(68) a. nay-ka Mary-lul yeppun son-ul cap-assta.
    I-Nom Mary pretty hand-Acc hold-Past
    'I held Mary's pretty hands.'

    Nom the dog-Dat pretty handkerchief-Acc bite-Pass-Past
    'Mary had her pretty handkerchief bitten by the dog.'

Finally, there are LP sentences with no possessor-possessed
relation implied between the subject and the accusative-marked
nominal:

(69) Mary-ka ku kay-eykey nay kapang-ul mwul-li-essta.
    Nom the dog-Dat my bag -Acc bite-Pass-Past
    'Mary had my bag bitten by the dog.'

Though it is generally true that the subject is in possession of
something that is adversely affected in LP sentences of this type,
semantic consideration alone does not justify a syntactic analysis
with a number of syntactic problems. In (69), in particular, it is
hard to imagine that 'Mary' and 'my bag' form a syntactic constituent
at any level (Mary's my bag is ill-formed both in English and in
Korean), though semantically, 'Mary' must have been in temporary
possession of 'my bag' in order to be adversely affected by a dog's
biting it.

All of these facts suggest that Possessor Ascension is not
involved in LP sentences such as (65). As for the passive rule
postulated in (65), the only motivation seems to be the adversative
meaning, which may instead be due simply to the LP affix (the 'I'-
morpheme). There are verbs which denote adversity without Passive,
for example:
(70) a. ku pwun-i sako-lul tang-ha-yessta.
    the man-Nom accident-Acc suffer-do-Past
    'He had an accident.'

    b. ku-ka kancheep-eykey atul-ul napchi (-lul) tang-ha-yessta.
        he-Nom spy -Dat son-Acc kidnap (-Acc) suffer-do-Past
        'He had his son kidnapped by a spy.'

The monosyllabic root tang- in this sentence (glossed 'suffer') is of Chinese origin, and usually occurs with Sino-Korean verb stems, with the meaning that the subject is adversely affected by the action denoted by the verb stem. (See K. Shin (1982) and references cited there for a discussion of this construction.) The Agent in such cases, if present, is invariably marked dative. This construction is similar to the LP construction both in meaning and in the case marking pattern of the nominals involved. Sentences like (69) can hardly be regarded as involving Passive because, for example, it is difficult to imagine what the active counterpart would look like. If LP does not involve Passive then the dative-marked nominal in LP sentences is not a passive chômeur.

In sum, adversative meaning shows up without Passive, and thus meaning alone cannot be evidence for Passive. The question then is what alternatives are possible for sentences like (65). I will just mention two possibilities here without attempting to pursue the alternatives in detail. One option is to regard the LP predicates as single lexical entries so that mwul-li- 'bite-Pass' in (65) will be a ditransitive predicate with pal 'foot' as its object. (I will refer to this view as the 'lexicalist hypothesis'.) Under this view, (65a) would be analyzed as follows:
Another possibility is to view the LP affixes as the higher predicates, along the lines suggested by Marantz (1985) and K. Park (1986). (I will refer to this view as the decomposition hypothesis.) According to this view, affixes constitute a single lexical entry along with other words. The decomposition hypothesis translates rather straightforwardly into the Union analysis of the RG framework ('d structure merger', in Marantz's terms). Under a version of the decomposition hypothesis, (65a) can be analyzed as follows, an analysis essentially based on the insight of Otsuka's (cited in Perlmutter and Postal 1984a) and Unetani's (1987) analyses of the Japanese adversity passive construction with some modifications:
This analysis is crucially different from Mrantz's or K. Park's analysis of the same construction in that the affix is not viewed as having the feature [- logical subject], which roughly means a 'raising trigger' in RG terms. I do not see any motivation to postulate raising in this case, though I do not have evidence to refute it either.

The choice between the lexicalist hypothesis and the decomposition hypothesis is an important issue, but I will leave this matter open here since this issue has little bearing on the main topics of this chapter. It is sufficient for the purpose of this section to note that the analysis given in (65b) is not the only logical possibility and thus there is no reason to believe that sentences like (65a) involve Possessor Ascension and 2-to-1 Advancement. Under either of the two alternatives mentioned above, there is no Possessor Ascension postulated for the sentence, consistent with the facts discussed above.

3.3 Summary and Conclusion

This chapter has examined ascension structures involving complex clauses. I argued first that the SOR construction in Korean indeed involves raising to object position in a way analogous to Possessor Ascension to 2. This position was contrasted with two alternative views, the ECM hypothesis and the Equi hypothesis. The overall results suggest that neither is an adequate alternative to the raising hypothesis. (Within the GB framework, this would imply that either the assumption about nontheta object positions must be abandoned or
nontheta A-positions must be allowed to be created during the mapping between the D- and S-structure.) The SOR construction, as an instance of ascension, is subject to the same set of constraints that governs monoclausal ascension, i.e., the word order restriction between the host and the ascendee, and the restriction on relativization, to which the Equi construction and the advancement type multiple accusative constructions (cf. chapter 2) are not subject. This provides empirical support for the view that raising and monoclausal ascension constructions have certain structural characteristics in common, as opposed to advancement or Equi constructions.

This chapter also briefly examined the SSR constructions in Korean, an area which has largely remained unexplored within Korean linguistics. In particular, I made explicit the biclausal analysis of the 'syntactic' passive construction in which the passive auxiliary -ci is taken to be the unaccusative predicate selecting a clausal complement in the same way as certain other SSR triggers such as kath-'like(ly)', except that the passive auxiliary, along with iss- 'exist', restricts the raisee to initial 2s so that Passive must apply in a transitive complement before raising and Clause Reduction occur. If the conditions proposed above ((61) and (64)) are essentially correct, they can provide useful information about the nature of the constructions (e.g., the Inversion Construction) that occur as the complement of SSR triggers such as ci-. The rich auxiliary verb system in Korean is an area in which much work remains to be done.
Appendix: On the Complement of *toy* 'become'

I. The Issue

In 3.2, I proposed the following conditions on the SSR constructions:

(A1) **Condition on SSR with 'ci-'
Only an initial 2 can be raised from the complement of *ci-*.

(A2) **Condition on SSR with 'iss-
Only an initial 2 of an action verb can be raised from the complement of *iss-* when the complementizer is *-A*.

Another predicate that restricts the raisee in a similar manner is *toy-* 'become'. The purpose of this appendix is to motivate the following condition:

(A3) **Condition on SSR with 'toy-
Only an initial 2 can be raised from the complement of *toy-*.

The constructions examined below are related to the constructions to be discussed in chapter 5, but since the issue is more relevant to this chapter than to chapter 5, I include the discussion in this appendix.

Observe first the contrast between the following pairs of sentences where the (a) sentences contain *ha-* 'do' and the (b) sentences *toy-* 'become':
Superficially, both (A4-a) and (A5-a) appear to be transitive sentences with canonical case marking for transitives: there is a NOM nominal and an ACC nominal. The puzzle is the contrast between (A4-b) and (A5-b) corresponding to the seemingly transitive sentences. The two sentences in (A5) are roughly synonymous, and the second nominal is almost always of Sino-Korean origin as in the case of the Double Object Construction that will be discussed in chapter 5.

After presenting facts relevant to condition (A3), I will show that there are further contrasts between (A4-a) and (A5-a) which follow from the raising analysis of tov-. 

II. Unaccusative Nominal Predicates

An obvious difference between (A4-a) and (A5-a) is semantic: while the former denotes some sort of activity ('He did/was doing something.'), the latter does not (* 'Prices did/were doing something.'). More examples of Sino-Korean nominals that semantically pattern with halak 'drop' are given below: 

(A4) a. ku-ka yehayng-ul ha-yessta.
   he-Nom trip -Acc do-Past
   'He made a trip.'

   b. * ku-ka yehayng-i toy-essta.
      he-Nom trip -Nom become-Past

(A5) a. mwulka-ka halak-ul ha-yessta.
    price-Nom drop-Acc do-Past
    'Prices went down.'

   b. mwulka-ka halak-i toy-essta.
      price-Nom drop-Nom become-Past
      'Prices went down.'
sangsung-hata 'to rise'
hakang 'to fall'
cungka 'to increase'
kamso 'to decrease'
sengcang 'to grow'
phokpal 'to explode'
yaki 'to arise'
phungkoy 'to collapse'
silcong 'to be missing'
nwusel 'to leak'
pwuphay 'to be rotten'
chwulsayng 'to be born'
sicak 'to begin'
kyeysok 'to continue'

All of these nominals can occur in a pair of sentences parallel to (A5) without meaning difference. The superficial subjects of such sentences are typically inanimate, though there are exceptions such as the following:

(A7) a. yeyppun aki-ka thansayng-ul ha-yessta.
pretty baby-Nom birth -Acc do-Past
'A pretty baby is born.'

b. yeyppun aki-ka thansayng-i toy-essta.
Nom Nom become-Past

(A8) a. ku-ka silcong-ul ha-yessta.
he-Nom missing-Acc do-Past
'He is missing.'

b. ku-ka silcong-i toy-essta.
Nom Nom

Nominals that denote a certain activity, on the other hand, cannot occur in sentences parallel to (A5-b), including the following: (The first three are pure Korean, and others are Sino-Korean.)

(A10) kichim-hata 'to cough'
haphwum 'to yawn'
ssawwn 'to fight'
thwucayng 'to resist'
nongtam  'to joke'
ceshang  'to resist'
swuyeng  'to swim'
sanpo    'to take a walk'
wuncen   'to drive'
chwungko 'to advise'

Perlmutter and Postal (1984b) hypothesize that the initial GR borne by a nominal in a clause is universally determined on the basis of the meaning of the clause (the Universal Alignment Hypothesis). According to Perlmutter and Postal's semantic criteria, predicates determining initially unergative clauses are typically those which describe willed or volitional acts and certain involuntary bodily process such as 'cough' and 'vomit'. In contrast, predicates whose initial nuclear term is semantically a Patient, predicates of existing and happening, and aspectual predicates determine initially unaccusative clauses. (See pp. 96-97 for details.)

While syntactic evidence in many languages has shown that unaccusative-unergative distinction is a necessary concept in linguistic analysis, the Universal Alignment Hypothesis (UAH) remains controversial, and Rosen (1984) demonstrates that initial GRs cannot be reconstructed in terms of meaning alone and thus the UAH is incorrect. For our purpose, however, it is not necessary that the UAH is quite true; to the extent that it is "nearly true" (Rosen 1984:54), the semantic criteria can serve as the initial guiding principle of linguistic analysis.

It is easy to see that the predicates listed in (A6) and (A10) have typical semantic characteristics of unaccusative and unergative predicates, respectively. The fact that the contrast parallel to that
between (A4-b) and (A5-b) consistently shows up for the two classes is thus a strong indication that unaccusativity is relevant.

Now, in sentences like (A5) and (A7), what determines the valency of the clause relevant to the unergative vs. unaccusative dichotomy is not the main verb ha- or toy- but rather the pivot nominals such as halak 'drop' or thansayng 'birth'; the predicate ha- itself remains constant both in (A4) and in (A5). Since only a predicate selects, e.g., a 1 or a 2, the nominals must bear the P relation, as in the case of the predicate nominal in the copulative construction (cf. 3.2 above). Given this and the assumption that the semantic criteria are nearly valid, (A5-a), for instance, can be analyzed as follows:

(A11) a. mwulka-ka halak-ul ha-yessta. (= (A5-a))
   price-Nom drop-Acc do-Past
   'Prices went down.'

b. 

In the case of an initially unaccusative complement such as (A11), it is intuitively clear that the superficial subject is not in direct semantic relation with respect to the verb ha-: the sentence cannot
mean 'The price did something.' because the predicate has no specific meaning. This is the reason why in some early transformational grammar approaches, ha- was treated as a meaningless element (sometimes called a 'verbalizer') introduced by a later transformational rule (cf. references cited in chapter 5). In this sense, the raising analysis postulated above is semantically plausible. (Syntactic evidence will be discussed in section III.)

Given the hypothesis that auxiliary verbs universally occur in initially unaccusative clauses (Perlmutter and Postal 1984b:153-154, Postal 1986), the initial GR of the complement must be 2. In fact, this is the only way that a raising analysis can explain the accusative marking of the predicate nominal.

Turning now to (A5-b), a similar analysis suggests itself:

(A12) a. mwulka-ka halak-i toy-essta. (= (A5-b))
price-Nom drop-Nom become-Past
'Prices went down.'

b.

Now, given that toy allows a complement with a nominal predicate, what blocks an initially unergative complement? This is
the issue raised at the outset, i.e., the ungrammaticality of (A4-b), repeated below with a putative structure:

(A13) a. * ku-ka yehayng-ì toy-essta. (= (A4-b))
    he-Nom trip -Nom become-Past

b.

<table>
<thead>
<tr>
<th>2</th>
<th>P</th>
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<tr>
<td>1</td>
<td>P</td>
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<td>1</td>
<td>Chô</td>
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<td>P</td>
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</table>

ku yehayng ‘he’ ‘trip’

Given the structural distinction between (A12) and (A13), the following condition, mentioned at the outset, correctly rules out (A13) and allows (A12):

(A14) Condition on SSR with ‘toy-’ (= (A3))

Only an initial 2 can be raised from the complement of toy-.

(A14) is identical to the condition on ci- discussed in 3.2 (cf. (A1) above), a fact which suggests that similar conditions may in fact be quite common in the auxiliary verb constructions in Korean.

One of the implications of this condition is that the predicate nominal in sentences like (A15-a) below also heads an initial 2-arc, as illustrated below:

(A15) a. ku-ka kwunin-ì toy-essta.
    he-Nom soldier-Nom become-Past
    ‘He became a soldier.’
Recall that (A15-b) is identical to the structure I postulated for the copulative construction in 3.2. In many ways, the pivot nominal of the copulative construction and toy- construction behave in the same way, e.g., in terms of case marking pattern of nominals, honorific nominative marking, and Quantifier Floating. As shown in chapter 2, the pivot nominals in these constructions cannot be marked with the honorific nominative marking. This automatically follows from the fact that the pivot nominal is not the final 1 but the predicate. In chapter 4, it will be shown that the pivot nominals in the copulative and toy- constructions do not allow Quantifier Floating or Possessor Ascension, a result which automatically follows from the Host Limitation Law. (See the relevant chapters for examples.) Given the parallels between copulative sentences and (A15), it seems reasonable to treat the two constructions in the same way.
III. Further Contrasts

In this section, I will justify the raising analysis proposed above based on further contrasts between (A4) and (A5). Specifically, I will show that the two superficially similar sentences, (A4-a) and (A5-a), behave in different ways with respect to word order, relativization, and Passive, indicating that the two sentences are structurally distinct. The sentences are repeated below:

(A4) a. ku-ka yehayng-ul ha-yessta.
   he-Nom trip -Acc do-Past
   'He made a trip.'

   b. * ku-ka yehayng-i toy-essta.
      he-Nom trip -Nom become-Past

(A5) a. mwulka-ka halak-ul ha-yessta.
   price-Nom drop-Acc do-Past
   'Prices went down.'

   b. mwulka-ka halak-i toy-essta.
      price-Nom drop-Nom become-Past
      'Prices went down.'

I postulated above that the halak 'drop' is an unaccusative predicate. However, from the fact that certain Sino-Korean nominals (or other predicate nominals, for that matter) can bear the P-relation in certain constructions, it does not follow that all such nominals must bear the P-relation regardless of their positions in a sentence, just as it is not true that a given nominal always bears the same relation everywhere it occurs. In (A4-a), in particular, yehang 'trip' does not need to be a predicate nominal; it is a noun, and as such can be the direct object of the predicate ha- 'do' or it can be the subject of a sentence. In (A4-a), the predicate ha- has the
meaning of an action, i.e., 'doing', with respect to the subject ku 'he' and to the direct object yehang 'trip' and thus there is no reason to posit raising. The verb ha~ in (A5-a), in contrast, does not have a specific meaning and thus it bears no direct semantic relation to the nominals in the sentence. The tests provided in the following will further justify this view.

Relativization

Unlike the direct object of transitive sentences like (A4-a), the predicate nominals in (A5) cannot be relativized.

\[(A16) \text{[ku-ka e} \text{i ha-n] yehayng}_i \quad \text{(cf. (A4-a))} \]
\[\text{he-Nom do-Comp trip} \quad \text{'}the trip he made'\]

\[(A17) a. * \text{[mwulka-ka e} \text{i ha-n] halak}_i \quad \text{(cf. (A5-a))} \]
\[\text{price-Nom do-Comp drop} \quad \text{'}the drop that the price did'\]
\[b. * \text{[mwulka-ka e} \text{i toy-n] halak}_i \quad \text{(cf. (A5-b))} \]
\[\text{price-Nom become-Comp drop} \quad \text{'}the drop that the price did'\]

The same restriction shows up with sentences like (A15), repeated below as (A18):

\[(A18) a. \text{ku-ka kwunin-i toy-essta.} \]
\[\text{he-Nom soldier-Nom become-Past} \quad \text{'}He became a soldier.'\]

\[b. * \text{[ku-ka e} \text{i toy-n] kwunin} \]
\[\text{he-Nom become-Comp soldier} \quad \text{'}the soldier that he became'\]

The ungrammaticality of the ill-formed relative clauses above straightforwardly follows from either the condition on predicates in
general or the condition on ascension: it was shown in chapter 2 that no part of a clausal predicate can be the target of relativization in connection with the Double Subject Construction. Given the raising analysis of these sentences proposed above, the ungrammatical relative clauses are also ruled out by the condition that prevents part of an ascension chômeur from being relativized. (See chapter 2 for speculation about uniting the two conditions.)

If both (A4-a) and (A5-a) are simple transitive clauses, on the other hand, the contrast observed above remains unexplained.

**Word Order**

A similar contrast in word order is illustrated in the following examples:

(A19) yehang-ul ku-ka ha-yessta. (cf. (A4-a))
trip -Acc he-Nom do-Past
'A trip, he made.'

(A20) a. * halak-ul mwulka-ka ha-yessta. (cf. (A5-a))
drop -Acc price-Nom do-Past
'Drop, prices did.'

   b. * halak-i mwulka-ka toy-essta. (cf. (A5-b))
drop -Nom price-Nom do-Past
'Drop, prices did.'

(A21) * kwunin-i ku-ka toy-essta. (cf. (A18))
soldier -Nom he-Nom become-Past
'A soldier, he became.'

Unlike a direct object in simple transitive sentences (A19), predicate nominals cannot precede their initial subjects (A20)-(A21). Given the 'predicate-final' word order (or the precedence condition on
ascension, cf. chapter 2), the ungrammaticality of sentences in (A20)-(A21) is an expected result. (A19) is a simple transitive sentence, and thus there is nothing that rules out scrambling of the direct object.

**Passivization**

Another difference between transitive clauses and predicate nominal constructions such as (A5-a) is that the ACC nominal in the latter cannot be passivized, whereas some action nominals can be passivized if they occur as the direct object of a transitive clause. In general, passive sentences with an inanimate final subject are not very natural, and the passive counterpart of (A4-a) is at best highly marginal:

(A22) ?? yehayng-i ku-ey uhay ha-ye ci-essta.
    trip -Nom he-by do-Comp get-Past
    'A trip was made by him.'

However, context can improve passive sentences like (A22), for example:

(A22)' (?) taylywuk hoyngtan yehayng-i ku-ey uyhay choycholo
    continent crossing trip -Nom he-by first time
        ha-ye ci-essta.
    do-Comp get-Past
    'The cross-country trip was first made by him.'

In the case of raising sentences like (A5-a), however, passivization is totally ungrammatical, and, as far as I can imagine, no context could improve its acceptability.
Under the raising analysis I postulated above, the ungrammaticality of passive sentences like (A23) is an expected result since a predicate cannot advance, and even if it could, it would not be an initial 2 and thus the resulting sentence will be ruled out by the condition on ci-construction (cf. 3.2).

In sum, the contrasts observed in this section provide further reasons to distinguish predicate nominal constructions such as (A5) from transitive clauses, and the raising analysis of predicate nominal constructions turns out to be consistent with all of these contrasts.

IV. Concluding Remarks

In this appendix, I have examined another SSR trigger which restricts the raisee in the same way as the 'passive' auxiliary ci-, i.e., to initial 2. The semantic criteria of Perlmutter and Postal, which were established on the basis of other languages, turn out to largely coincide with the prediction of the condition on the toy-construction.

Independent (though indirect) evidence for the unaccusative-unergative distinction comes from Japanese. That is, the Sino-Japanese counterparts of what I classified as unaccusative nominal predicates (A6) cannot be marked by the accusative marker ə, whereas those in (A10) can. (All of the Sino-Korean nominals given in this
appendix have their Sino-Japanese counterparts with the same or similar Chinese roots.) The following examples from Dubinsky (1985) illustrate this:

(A24) a. Undo wa zyoosyoo-sita.
   temperature Top rise -did
   'The temperature went up.'

   b. * Undo wa zyoosyoo o sita.
      Acc

It is not clear why the unaccusative nominal predicates must be incorporated into suru 'do', unlike in Korean.17 In any case, the Japanese fact provides indirect evidence for the unaccusative-unergative distinction in Korean in the sense that a similar distinction is independently necessary in languages other than Korean. In chapter 5, I will briefly discuss Dubinsky's treatment of the Japanese counterpart of the 'Double Object Construction' in Korean.

Certain English loan words such as open also seem to retain their unaccusativity in Korean.

   restaurant-Nom open-Acc do-Past
   'The restaurant opened.'

   b. umsikcem-i ophun-i toy-essta.
      restaurant-Nom open-Nom become-Past
      'The restaurant opened.'

The two sentences in (A25) are parallel to those in (A5). Given synonymity of the two sentences and the condition on the toy-construction, ophun 'open' turns out to be an unaccusative predicate in Korean in sentences like (A25-a).
If the condition on the *toy-* construction is correct, it would be mysterious if the restriction showed up just for loan words; rather, it would be natural to expect a similar constraint to be operative elsewhere. In this respect, the condition on the 'passive' (*ci-*) constructions in Korean, which is identical to that on *toy-* constructions, is hardly a peculiar phenomenon.

The proposed analysis raises many issues, including the ACC marking of the initial predicate nominal in sentences like (A25-a). In general, an unaccusative predicate does not 'assign accusative Case to its internal argument' in the sense of GB theory (known as Burzio's Generalization). Assuming that the raising analysis of such sentences (e.g., (A11) above) is valid, why is it that only a clausal complement of an unaccusative predicate can be marked accusative? This issue arises independently in other auxiliary constructions in Korean, for instance, with the predicate *iss*—'exist' with progressive meaning, mentioned in note 13 of this chapter.

(A26) a. pihayngki-ka nal-ko (-lul) issta.
    airplane-Nom fly-Comp (-Acc) exist
    'An airplane is flying.'

b. ai-ka sakwa-lul mek-ko (-lul) issta.
    child-Nom apple-Acc eat-Comp (-Acc) exist
    'The child is eating an apple.'

If these sentences involve raising (I omit arguments), the ACC marking of a clausal complement of the raising trigger *iss*—(which must be an unaccusative predicate if Perlmutter and Postal's (1984a:153-154) hypothesis is correct) must be due to its final GR (i.e., 2-chômeur).
A related issue is the passive counterpart of the 'Double Object Construction' (cf. chapter 5). For example:

(A27) a. cekkwun-i ku tosi-lul phakoy-lul hayssta.
    enemy-Nom the city-Acc destruction-Acc did
    'The enemy destroyed the city.'

b. ku tosi-ka cekkwun-ey uyhay phakoy (-ka) toy-essta.
    the city-Nom enemy -by destruction (-Nom) become-Past
    'The city was destroyed by the enemy.'

The predicate toy- in this case is often considered as the passive counterpart of ha- (or a morphological variant of ha-ve-ci 'do-Comp-get'), an assumption which I also adopt in chapter 5. It is not clear if (A27b) has the same structure as other types of toy- constructions discussed above. I will leave this possibility open in this thesis and will instead propose a different structure for sentences like (A27-b) without comparing the two possibilities.
Notes to Chapter 3

1. SOR complements in Korean allow tense (cf. 3.1.2.4 for examples), which means that their subject is governed. Under the Equi hypothesis, this implies that the empty category must be pro rather than PRO. Under the ECM hypothesis, it must be assumed that nominative Case is only optionally assigned by AGR so that ECM applies only when the complement subject is not assigned Case.

2. There are sentences like (ib) below, where we have a dative-marked quantifier associated with an accusative-marked NP:

(i) a. emeni-nun ai-tul-ul motwu-lul senmwul-ul cwuessta.
   mother-Top child-Pl-Acc all -Acc present-Acc gave
   ‘Mother gave a present to all of the children.’

   mother-Top child-Pl-Acc all -Dat present-Acc gave

When the case marker of the quantifier is either nominative or accusative, however, there is no exception to (10). See chapter 4 for an account of the case marking of floated quantifiers.

3. Long-distance preposing of an adverb is in general not very natural in Korean, as in Japanese (cf. Saito 1985:172-86). But there is a clear contrast between (16) and (19).

4. The observation and conclusion presented in D. Park’s paper were based on an informal discussion among the Korean syntax group at the University of Hawaii.

5. The first vowel in -Asm has two phonological variants depending on the vowel in the preceding syllable. When the verb stem is ha ‘do’, the past tense marker is -vesa.

6. The comitative marker -(k)wa ‘with’ sometimes occur in this position, and with this particle, an adverb may also occur between the nominal complement and the verb:

(i) i cha-ka ku cha-wa kkok kathta.
   this car-Nom that car-with just like
   ‘This car is just like (the same as) that car.’

The predicate in this case, however, means ‘the same’ rather than expressing the speaker’s presumption (the meaning of ‘likely’).
It seems to me that sentences like (i) involve an ascension from the coordinate nominal structure, its nonascended counterpart being:

(ii) i cha-wa ku cha-ka kkok kathta.
    this car-and that car-Nom just like
    'This car and that car are the same.'

In this section, I will not consider this particular usage of kath.

7. It may be that historically, the predicate nominal in the copulative construction regularly had the NOM marker -i, but it was phonologically deleted by vowel degemination before the copula i. (The other NOM marker, -ka, is a relatively recent introduction, possibly from Japanese.)

8. Following Song (1967), I assume that the complementizer -ci used in negative sentences is a nominalizer. An interesting fact about negative sentences in Korean is that the auxiliary verb ha- optionally allows either an accusative or a nominative marker for the complement (nominalized with -ci), as illustrated below:

(i) pi-ka o-l-kes kath-ci -ka/-lul ani hata.
    rain-Nom come-Comp-NML appear-NML -Nom/-Acc not do
    'It is not likely to rain.'

If we assume that ha- in this case is an unaccusative predicate which selects a complement, the case marking alternation will follow straightforwardly from the free interaction of Unaccusative Advancement and raising. To illustrate, the following structure will predict the NOM marking for the complement:

(ii)

However, if raising occurs before Unaccusative Advancement, the complement will then be a 2-chômeur, and accordingly will be marked accusative. Thus, if no restriction is imposed on the auxiliary
verb, the case marking pattern of the complement will automatically follow.

I will return to the predicate ha- in Chapter 5.

9. The first two sentences are adapted from H. Choi (1980 [1929]). Hereafter, the auxiliary verb will be glossed 'get', regardless of the type of sentences, instead of 'Pass' which was used in the preceding sections and chapters. For the lexical passive morpheme, I will continue to use 'Pass'.

10. If Unaccusative Advancement comes prior to Clause Reduction, the complement 2 will inherit its own GR since the raisee bears the 1-relation. The Union stratum in this case will be transitive, but given the 1AEX, Passive cannot apply in any later strata. This will also result in (57), because both final 2s and final 2 chômeurs are accusative-marked in Korean.

11. However, (61) itself does not rule out Possessor Ascension occurring before Unaccusative Advancement, which will result in ungrammatical sentences like (60b). This issue arises independently of the passive construction. For example, if Possessor Ascension from subject is limited to initially unaccusative clauses, Unaccusative Advancement must precede Possessor Ascension to avoid ungrammatical sentences such as (ib):

    Nom eye-Nom big
    'John's eyes are big.'

    Nom Acc

c. (= (b))

I will leave this problem as it stands without further elaboration.

12. (62c) represents 'personal Inversion' structure. See Harris (1983) and Perlmutter (1983) for relevant discussion.
13. The auxiliary verb \textit{iss-} 'exist' allows the subject of a transitive complement to be raised if a different complementizer is chosen.

(i) a. pihayngki-ka nal-ko (-lul) isssta.
    airplane-Nom fly-Comp (-Acc) exist
    'An airplane is flying.'

b. ai-ka sakwa-lul mek-ko (-lul) isssta.
    child-Nom apple-Acc eat-Comp (-Acc) exist
    'The child is eating an apple.'

I will not give arguments for a raising analysis of this construction here.

On the other hand, certain auxiliary verbs in Korean do allow transitive complements with -A, including \textit{po-} 'see (try)', \textit{pel-} 'end up (doing, once and for all)', among many others. (See Sohn (1973) for an important discussion of auxiliary verbs in Korean.) One example is given below:

(ii) ai-ka mwun-ul yeï-e po-assta.
    child-Nom door-Acc open-Comp see-Past
    'The child tried and opened the door. (Lit. The child opened the door and saw.)'

In all of these cases, the 'infinitival verb' and the auxiliary verb intuitively constitute a single complex verb, and many linguists have treated the complex predicate as compounds. I assume that all such cases involve Clause Reduction.

14. Action verbs allow the processive mood marker -(nu)n, and descriptive verbs do not. This criterion does not necessarily coincide with the intuitive notion of action vs. state. The 'passive' auxiliary \textit{ci-}, for instance, belongs to the class of action verbs according to this criterion.

15. LP predicates have an affix (sometimes called the 'I'-morpheme) attached to them. There are four allomorphs of this affix: ı, hi, li, and ki. The distribution of these variants is not entirely predictable from the phonological shape of the verb.

The view that the LP construction involves 'passive' is so prevalent that K. Shin (1982) states it would not even be necessary to justify this view "since nobody disagrees to it" (p. 211).

16. Grimshaw and Mester (1988) distinguish between two types of \textit{suru} 'do' in Japanese: the 'light' type which has no theta role assigning capability (e.g., the auxiliary verb \textit{do}), and the 'heavy' type which does (e.g., the main verb \textit{do}). The predicate \textit{ha} in
(A4), for instance, would belong to the "heavy" type, and that in (A5) to the "light" type. In RG terms, this would suggest that the nominals in (A5) do not bear a GR at the initial stratum of the clause of which ha is the predicate, whereas the nominals in (A4) do.

17. Dubinsky (1985) attributes the ungrammaticality of (A24b) to the Stratal Uniqueness Law (see his chapter 4 for details). Dubinsky's explanation, however, does not seem to be convincing in that the Korean counterpart of (A24b) is grammatical.

Dubinsky also provides independent evidence for the unaccusativity of predicates like syussan 'birth' (chwulsan in Korean) from the potential construction in Japanese. He proposes that the final subject of dekiru 'be able' must be an initial 1 and this correctly rules out dekiru with the final 1 of an unaccusative clause. (See his 4.2 for details.)
Chapter 4

Ascension from the Quantified Nominal Structure: Q-Float

In the previous chapters I focused on relatively well-known ascension constructions in Korean for the purpose of uncovering the syntactic characteristics of ascension in general. Based on the results of the preceding chapters, this chapter examines another instance of ascension in Korean, focusing on what has been known as Quantifier Floating. To take a specific example, I argue that the Quantifier Floating phenomenon in Korean illustrated in (1) below involves ascension, as illustrated in (2):

(1) a. sonnim twu-pwun-i o-si-essta.
    guest two-Clas-Nom come-Hon-Past
    'Two guests came.'

    b. sonnim-i twu-pwun (-i) o-si-essta.
    guest-Nom two-Clas (-Nom)

(2) (= (1b))

\[
\begin{array}{c}
\text{Spec} \\
\text{sonnim twu-pwun} \\
\text{'guest' 'two-Clas'}
\end{array}
\]

In this analysis, there is no 'floating' of a quantifier but the nominal specifier of a quantifier ascends, placing the initial head (the quantifier) en chômage. The major purpose of this chapter is to
justify the analysis postulated above and explore its consequences. After a brief overview of previous treatments of the Quantifier Floating phenomenon in Korean, I provide several arguments for the ascension hypothesis in 4.2. It will be demonstrated that the ascension hypothesis yields many desirable predictions about the behavior of floated quantifiers which are left unexplained in alternative hypotheses. Section 4.3 discusses residual issues and speculates on some of the problems with the proposal.

4.1 Previous Views on Q-Float

There have been at least three different views on the factors crucial in sanctioning the floated quantifiers: Grammatical Relations (GRs) (cf. Postal 1976, Youn 1985), surface case (Shibatani 1977 a,b), or the configurational relation between the quantifier and its binder (O'Grady 1986a, Gerdts 1987). This section discusses the claims of each of these hypotheses by way of introducing the issues.

4.1.1 Grammatical Relation vs. Surface Case

Shibatani (1977 a,b) claims that Korean and Japanese grammar must recognize the distinction between rules that are sensitive to GRs (e.g., Subject Honorification and Reflexivization) and those which are sensitive to surface case. According to Shibatani, Q-Float belongs to the latter. His arguments include the dative subject (or Inversion) construction discussed in chapter 2. To take an example:
(3) a. ku sensayngnim-tul twu-pwun-eykey ton-i phi1yohata.
   the teacher -Pl two-Clas-Dat money-Nom need (Hon)
   'The two teachers need money.'

b. * ku sensayngnim-tul-eykey twu-pwun ton-i phi1yohata.
   Dat

(4) Youngsoo -eykey (-nur.)i Sooni-ka\j casin-uyi/*j emenipota
   Dat Top Nom self -Gen mother-than
tehohta.
more like
'Youngsoo likes Sooni more than his/\her mother.'

Shibatani takes the ability of the dative-marked nominal to control
Honorification (3a) and Reflexivization (4) as evidence for its
(final) subjecthood. However, this nominal cannot trigger Q-Float
(3b), whereas some nonterm nominals marked nominative or accusative
can, as shown below:

(5) wang-i ku coyin-ul sonkalak-ul twul(-ul) callassta.
   king-Nom the criminal-Acc finger-Acc two(-Acc) cut
   'The king had two fingers of the criminal cut off.'

(6) ku mwune -ka tali-ka seys-i tteleciessta.
   the octopus-Nom leg-Nom three-Nom torn off
   'The octopus had three legs torn off.'

As argued in chapter 2, the nominal that antecedes the quantifier in
sentences like (5)-(6) is an ascension chômeur. Shibatani therefore
concludes that Q-Float must be stated in terms of surface case rather
than GRs. The same generalization can in principle be stated in terms
of GRs, for instance, as follows:

(7) Only acting 1s and acting 2s can launch Q-Float except passive
   chômeurs.
(Acting 1s include final 1s and 1-chômeurs, and acting 2s, final 2s and 2-chômeurs.) As Gerdts (1987) points out, however, (7) is not very revealing in that the exclusion of passive chômeurs has no apparent motivation other than their surface case marking, i.e., only passive chômeurs, among all acting 1s and 2s, are not marked nominative or accusative in Korean.

4.1.2 Constituent Structure

There is another approach to Q-Float which yields roughly the same prediction as Shibatani's. This is the view that a floated quantifier is a type of anaphor and thus is subject to the conditions governing anaphors in general (e.g., Belletti 1982, O'Grady 1986a, Gerdts 1987). The essence of the claim is summarized below:

(8) Floated quantifiers must be bound by a c-commanding antecedent within the minimal clause.

A crucial assumption of this hypothesis is that only accusative- or nominative-marked nominals are NPs but others (dative-marked or oblique nominals) are PPs, so that only the former may c-command the quantifier, as indicated below:

\[
\begin{array}{c}
\text{(9) a.} & \text{NP} \\
\text{b.} & \text{PP} \\
\text{N-}\{\text{Nom}\} & \text{PP} \\
\text{[Acc]} & \text{NP} \\
& \text{P} \\
& \text{N} \\
& \text{Dat}
\end{array}
\]

As far as overt NPs are concerned, this hypothesis is not much different from Shibatani's in the set of controllers it predicts,
i.e., the accusative- or nominative-marked nominals. Gerdts (1987) brings up three cases where Shibatani's account as it stands does not work:

    Nom student-Acc three-Nom genius is-Comp believed 'John believed the three students to be geniuses.'

b. nay-ka haksayng-eykey seys-i ttena-key hayssta.
    I-Nom student-Dat three-Nom leave-Cause did 'I made the three students leave.'

c. chayk-un nay-ka seys-ul sassta.
    book -Top I-Nom three-Acc bought 'As for books, I bought three (of them).'

Sentence (10a) and (10b) involve the raising and causative constructions, respectively. Shibatani's problem is then how to explain the difference in the case-marking of the quantifier and its binder in (10a), and how to allow for (10b) and (10c) where the nominals that antecede the quantifier are not marked nominative or accusative.

The analysis based on 'c-command' does not have this difficulty with the above sentences, given the assumption that what binds the quantifier in such sentences is the empty category in the subject position in (10a) and (10b), and that in the object position in (10c), respectively.

However, the c-command hypothesis is not without problems. First, there is an apparent asymmetry between floated quantifiers and other well-known anaphors such as reflexives and reciprocals, as pointed out by Shibatani and also by the proponents of the c-command hypothesis: i.e., while the latter can be bound by the 'dative subject', the former cannot (cf. (3)-(4) above).
A similar problem arises from sentences like (11):

(11) * Youngsoo₁-eykey(-nun) ku₁-ka mwusepta.
     Dat -Top he -Nom frightening
     'To Youngsoo₁, he₁ is frightening.'

Within the GB framework, the most likely explanation for the ungrammaticality of (11) is Chomsky's Binding Principle B, which roughly states:

(12) A pronoun is free in some local domain.

If (12) is responsible for the ungrammaticality of sentences like (11), the dative-marked nominal must be taken to c-command its antecedent in the relevant local domain.

Also, consider the following:

(13) * nay-ka ku₁-eykey John₁-uy chayk-ul tolyecwuessta.
     I-Nom he -Dat Gen book-Acc returned
     'I returned to him₁ John₁'s book.'

Sentences like (13) would presumably be ruled out within the GB theory by a version of Principle C of Chomsky's Binding Theory (cf. Chomsky 1981, Higginbotham 1983), which states:

(14) A pronoun may not c-command its antecedent. (Or, an R-expression is A-free.)

In order for (14) to rule out sentences like (13), the dative phrase in such sentences must be assumed to c-command its antecedent.

If this is true, the c-command approach to Q-Float is incorrect in its assumption about the structure of the dative-marked NPs.
The above discussion boils down to the conflict stated below:

(15) i. Either the c-command approach to Q-Float is wrong, or
    c-command is irrelevant to Korean anaphora except for Q-Float;

or ii. c-command is defined in different ways depending on the type
    of anaphor.

As things now stand, the plausibility of the c-command analysis
of Q-Float depends on how this conflict is resolved. Besides, as we
shall see shortly, the c-command hypothesis gives empirically wrong
results for certain types of sentences.

4.2 A Proposal: the Ascension Hypothesis

Thus far, I have discussed three different analyses of Q-Float,
each facing different kinds of problems. This section presents and
defends the ascension analysis of Quantifier Floating. The data
examined below is mostly limited to numerals with or without case-
markers.

4.2.1 Some Preliminary Remarks: Q-Shift vs. Q-Float

This section discusses some asymmetries in the distribution of
prenominal quantifiers and floated ones and establishes that there is
no direct syntactic relation between the two. The different positions
for a quantifier are illustrated in the following sentences:
Within transformational grammar, there have been at least two different positions as to the relations among these sentences: the transformational approach (Shibatani 1977a, b and Haig 1980) vs. the interpretive approach (Kitagawa 1980). The former holds (roughly) that both (16b) and (16c) are transformationally derived from (16a) by Quantifier Shifting and Quantifier Floating, respectively (Shibatani 1977a:798). This view was challenged by Inoue (cited in Haig 1980) and Kitagawa, among others and was subsequently defended by Haig. Inoue and Kitagawa’s objections to the derivational hypothesis largely center around asymmetries in the distribution of the prenominal quantifiers (as in (16a)) and the floated quantifiers (as in (16c)):

(16) a. sey/sey-myeng-uy ai-ka matang-eyse nolkoissta.
three/three-Clas-Gen child-Nom yard-Loc play
'Three children are playing in the yard.'

b. ai seys/sey-myeng -i matang-eyse nolkoissta.
child three/three-Clas-Nom yard-Loc play

c. ai-ka seys/sey-myeng -i matang-eyse nolkoissta.
child-Nom three/three-Clas-Nom yard-Loc play

i.e., some quantifiers occur only in floated position, but not in prenominal position. Since, according to them, these floated quantifiers must be base-generated in an adverbial slot anyway, the rule of Q-Float is rendered superfluous. (See the cited works for details.)

There are at least three cases in Korean where we observe asymmetries in the distribution of floated quantifiers and prenominal quantifiers. The first case involves demonstrative pronouns:
The second case has to do with quantifiers consisting of a numeral followed by some form of universal quantifier:

(19) a. sensayngnim-i haksayng -ul twul-ta mannassta.
    teacher -Nom student-Acc two-all met
    'The teacher met both of the two students.'

b. sensayngnim-i haksayng twul-ta -lul mannassta.
    student two-all-Acc

c. * sensayngnim-i twul-ta (-uy) haksayng-ul mannassta.
    two-all (-Gen) student-Acc

That pronouns cannot take a prenominal quantifier (17)-(18), and that certain types of quantifiers cannot occur before nouns (19) will have to be stated in the lexicon, and if so, the existence of floated quantifiers in the above sentences must be taken to be independent of the prenominal quantifiers.

There are also cases where more than one quantifier occurs within the same sentence:

(20) a. i twu'ai-ka motwu-ka emeni-lul talmasssta.
    this two child-Ncm all-Nom mother-All resemble
    'Both of these two children resemble their mother.'
As far as I can tell, Korean never allows two distinct quantifiers in prenominal positions (20c), but it does allow corresponding floated quantifiers (20a-b). The derivational hypothesis, however, must make the implausible assumption that Korean basic sentence structure allows two prenominal quantifier slots.

Within the GB framework, the movement of the prenominal quantifier will result in violation of the binding condition on traces, stated below:

(21) Traces must be bound.

If Q-Float is a rule that moves a prenominal quantifier, as is assumed in the derivational hypothesis, one would expect the trace of Q-Float to obey the above condition, like other instances of movement. This prediction, however, is not borne out, as illustrated in (22b) below:

(22) a. 
   \[ \text{i ai-ka matang-eyse seys}_i(-i) \text{nolkoissta.} \]
   child-Nom yard -Loc three (-Nom) play
   'Three children are playing in the yard.'

b. 

\[
\begin{aligned}
&\text{NP} \\
&\text{S} \\
&\text{VP} \\
&\text{PP} \\
&\text{Q} \\
&\text{N} \\
&\text{V'} \\
&\text{Q} \\
&\text{V} \\
&\text{i ai-ka matang-eyse seys}_i(-i) \text{nolkoissta}
\end{aligned}
\]
Thus, the view that Q-Float is a rightward movement rule is not a desirable hypothesis within GB theory.

On the other hand, the so-called Q-Shifting (the NP-internal floating of quantifiers) is very productive: whenever we have a prenominal quantifier, we find a corresponding internally shifted form, but the converse is not always true. In fact, internal shifting is possible even when external shifting is not allowed:

(23) a. nay-ka haksayng twul-eykey swuhak-ul kaluchyessta.
    I -Nom student two -Dat math -Acc taught
    'I taught math to two students.'

b. * nay-ka haksayng-eykey twul(-eykey) swuhak-ul kaluchyessta.
    student -Dat two (-Dat)

The preceding discussion is schematically summarized in (24) below. (The relation indicated by an arrow is an implication. For example, the two arrows marked (i) and (ii) indicate that if there is a well-formed prenominal quantifier, there also is a corresponding internally floated form, but not conversely, and so forth.)

(24)

![Diagram of the relations between prenominal quantifiers, Q-Shift, Q-Float, and internal/external shifting.](attachment:diagram.png)
Below, I will take the position that there is no direct connection between the prenominal quantifiers and the externally floated ones. (To reject this position would require an adequate account of the problems I have raised above.)

As for the relation between the internally shifted forms and prenominal quantifiers, two different hypotheses have been proposed: Shibatani (1977a), Gerdts (1987:182), and Y. Kim (1984:129-130), among others, assume internal 'floating' in the literal sense, whereas Song (1967:228-229) views the postnominal (N-Q) forms as basic and the prenominal forms as derived, noting that "numerals usually do not precede nouns directly" (cf. 213-215). His examples include *twu pay 'two ships', *sey yenphil 'three pencils', and *sey tol 'three stones'. Since the choice between the two positions is not crucial for the purpose of this study, I will leave this issue open here.

This leaves out the relation between the postnominal quantifiers and the externally floated quantifiers, indicated in (26) by the arrows (iii) and (iv), which is the main concern of this section.

4.2.2 Q-Float as an Ascension

As Gerdts (1987) points out, any adequate characterization of Q-Float will have to account for at least two aspects of the phenomenon: (i) what sanctions the floated quantifiers, and (ii) what determines the case-marking of such quantifiers. None of the three alternatives examined in the above, however, provides even a tentative answer to the second basic question. I will show below that, under the ascension hypothesis I propose, both of these questions can be given a
simple and adequate answer without any stipulation for floated quantifiers alone. In particular, I propose to analyze sentences like (25b), for example, as in (25c) below:

(25) a. ai seys/sey-myeng -i matang-eyse nolkoissta. 
   child three/three-Clas-Nom yard-Loc play 
   'Three children are playing in the yard.'

   b. ai-ka seys/sey-myeng -i matang-eyse nolkoissta.
      child-Nom three/three-Clas-Nom yard-Loc play

   c. 

      The internal structure of the quantified nominal phrase (the nominal heading the initial 1-arc) in the above is not clear, and further research seems necessary in this regard. Postponing the discussion of this matter until 4.3, I will tentatively assume that the quantifier is the head and the preceding nominal the specifier in accordance with the general head-final phrase structure of Korean.

The view that Q-Float is an instance of ascension is not entirely new: Y. Kim (1984:155-157) states basically the same idea within a version of Relational Grammar, and Frantz (1981:30-31) suggests that Q-Float in English may be analyzed as involving an ascension, where, for example, the student in (26a) below ascends, placing the quantifier all en chômage:

\[ \text{The student is on the second floor.} \]
(26) a. All (of) the students can understand.
   b. The students can all understand.

Below, I present syntactic evidence for this proposal in Korean, based on the general characteristics of ascension discussed in the preceding chapters.

4.2.3 Arguments

4.2.3.1 Empirical Differences

In 4.1.1, I discussed three alternative hypotheses concerning what can sanction the floating quantifiers, all of which seem to achieve a more or less equivalent level of descriptive adequacy. In the ascension hypothesis, the result follows from the Host Limitation Law with the minimal parameterization.

(27) Host Limitation Law

Only a term grammatical relation can be the host of an ascension.

As Perlmutter and Postal (1983c) observe, languages may differ as to what can be the host of an ascension within the limit of what delineates. For instance, Bell (1983) argues that in Cebuano the line is drawn at 1; that is, only final 1s can be the host of an ascension. Also, the set of legitimate hosts may vary within the same language depending on the construction. For example, I argued in chapter 2 that Possessor ascension from 3 is possible in Korean. However, numeral quantifiers do not 'float' from a 3, as discussed in 4.1.1, though other types of quantifiers can be anteceded by a 3 (e.g., the universal quantifier morwu, and approximate quantifiers
such as *twu seys 'two or three'). Thus, it is necessary to stipulate different sets of hosts for the postulated ascension from the quantified nominal structure depending on the type of quantifier: nuclear terms for the pure numeral quantifiers, and (any) terms for the universal and approximate quantifiers. This stipulation, however, is not a disadvantage of the ascension hypothesis as opposed to the surface case hypothesis or the c-command hypothesis, since a similar stipulation will be necessary in these approaches as well.

As an illustration, take sentences (5) and (6) above, repeated below with the corresponding stratal diagrams:

(28) a. wang -i ku coyin -ul sonkalak-ul twul (-ul) callassta.
   king-Nom the criminal-Acc finger -Acc two (-Acc) cut
   'The king had two fingers of the criminal cut off.'

(29) a. ku mwune -ka tali-ka seys (-i) tteleciessta.
   the octopus-Nom leg-Nom three (-Nom) torn off
   'The octopus lost three of its legs.'
As discussed at the outset, Shibatani (1977a) claims that the GR of a nominal is irrelevant to Q-Float because even a chômeur can launch Q-Float. Given the above analysis, however, an ascension chômeur does not 'launch' Q-Float, contrary to what Shibatani assumes: it is simply an ascension from a nuclear term, followed by a subsequent ascension, just as in the case of successive Possessor Ascension (cf. chapter 2).

There are important empirical differences between the proposed analysis and the other two hypotheses, the crucial cases being sentences with nominative- or accusative-marked nominals which are not nuclear terms (i.e., 1s and 2s). While the surface case hypothesis and the c-command hypothesis equally predict that such nominals must be able to bind quantifiers, the ascension analysis predicts the contrary. A relevant example comes from the nominal complements of the verbs toy 'become' and là 'be':
(30) a. ku pwupwu-ka (cwuk-ese) ceypi twu-mali-ka toyessta.  
the couple-Nom (die-and) swallow two-Clas-Nom became  
'The couple (when they died) became a couple of swallows.'

b. * ku pwupwu-ka (cwuk-ese) ceypi-ka twu-mali (-ka) toyessta.  
(Nom) became

(31) a. hanul-ey ollakan onwui-nun cakun pyel  
heaven-Loc went up brother & sister-Top little star  
twu-kay -ka toyessta.  
two-Clas-Nom became  
'The brother and sister who went up to the heaven became  
two little stars.'

b. * hanul-ey ollakan onwui-nun cakun pyel-i  
Nom

twu-kay(-ka) toyessta.  
(-Nom)

(32) a. sang-un so han-mali-ka an-i-ta.  
prize-Top cow one-Clas-Nom not-be-Dcl  
'The prize is not a cow.'

b. * sang-un so-ka han-mali (-ka) an-i-ta.  
Nom  
(-Nom)

In the appendix to chapter 3, I argued that the predicate toy-  
'become' is a raising trigger which selects a complement clause, as is  
the predicate i- 'be'. The analysis is illustrated below:

(33) a. ku pwupwu-ka ceypi-ka toy-essta.  
the couple-Nom swallow-Nom become-Past  
'The couple became swallows.'
Since the predicate nominal never heads a term arc, the ungrammaticality of the (b)-sentences follows from the Host Limitation Law. The surface case hypothesis and the c-command hypothesis, on the other hand, incorrectly predict that such sentences should be grammatical.

As expected, Possessor Ascension is also disallowed in this context:

(34) a. ku tol-i hwu-ey sengcen-uy chosek-i toyessta.
  the stone-Nom later holy house-Gen cornerstone-Nom became
  'later, the stone became the cornerstone of a church.'

  b. * ku tol-i hwu-ey sengcen-i chosek-i toyessta.
     Nom          Nom

(35) a. ikes-un ku pwun-uy moksoli-ka an-i-ta.
  this-Top the person-Gen voice -Nom not-be-Dcl
  'This is not his voice.'

  b. * ikes-un ku pwun-i moksoli-ka an-i-ta.
     Nom          Nom

It follows, then, that the ascension analysis yields more accurate empirical predictions than the alternatives.
4.2.3.2 Case Marking

A second obvious advantage of the ascension analysis is that it provides an account of the case-marking of the quantifiers with no special stipulation for quantifiers alone. The relevant part of the assumption about case marking is repeated below:

(36) Grammatical Relation  Case
acting 1s  Nominative
acting 2s  Accusative

Under the current hypothesis, floated quantifiers of the type discussed above can only be ascension 1-chômeurs or 2-chômeurs due to the nuclear termhood of the host. It follows from this that they can only be marked nominative or accusative. The only difference between other ascension chômeurs and the floated quantifiers is that, with the latter, the case-markers are optional whereas they must occur on the surface with the former.4

Raising and causative constructions (cf. (10) above) do not require special treatment: if Possessor Ascension comes in an earlier stratum than Raising or Causative Clause Union, we will have sentences like (37):

(37) a. nay-ka haksayng-ul seys-i ttena-key ha-yessta.
    I-Nom student-Acc three-Nom leave-Cause-did
    'I made the three students leave.'

b. na-nun ku salamul-ul motwu-ka papola-ko mit-essta.
    I-Top the people -Acc all -Nom fool-Comp believe-Past
    'I believed all of the people to be foolish.'
If, on the other hand, Raising or Clause Union comes in an earlier stratum, then the quantifiers have an accusative marker, for instance:

(38) a. nay-ka haksayng-ul seys-ul ttena-key ha-yessta.
   Acc   Acc
   'I made the three students leave.'

b. na-nun ku salamτul-ul motwu-lul papola-ko mit-essta.
   Acc   Acc
   'I believed all of the people to be foolish.'

A more complex case marking pattern is illustrated in the following:

(39) a. na-nun ku ai-tul sey-myeng motwu-lul papola-ko mitessta.
   I -Top the child three-Clas all -Acc fool -Comp believed
   'I believed all of the three children to be foolish.'

   Acc   Nom   Nom

   Acc   Acc   Nom

d. na-nun ku ai-tul-ul sey-myeng-ul motwu-lul papola-ko mitessta.
   Acc   Acc   Acc

e. * na-nun ku ai-tul-ul sey-myeng-i motwu-lul papola-ko
   Acc   Nom   Acc
   mitessta.

All these case marking patterns follow straightforwardly from the interaction of SOR and ascension: e.g., (39b) involves successive ascensions followed by SOR; (39c), SOR followed by ascension; and (39d), SOR and successive ascensions. The ungrammaticality of sentences like (39e) also follows: given the Relational Succession Law and the assumption about case marking (36), there is no way the
numeral quantifier sey-myeng 'three-Clas' can be marked NOM when the
host (motwu 'all') is marked ACC.

There are also simplex sentences in which the case marking of a
floated quantifier does not agree with that of its antecedent (cf.
note 2 of chapter 3). 6

(40) a. ku-nun ai-tul motwu-eykey senmwul-ul cwu-essta.
   he-Top child-Pl all -Dat present-Acc give-Past
   'He gave a present to all of the children.'

b. ku-nun ai-tul-eykey motwu-eykey senmwul-ul cwu-essta.
   Dat Dat

c. ku-nun ai-tul-ul motwu-lul senmwul-ul cwu-essta.
   Acc Acc

   Acc Dat

e. * ku-nun ai-tul-eykey motwu-lul senmwul-ul cwu-essta.
   Dat Acc

(40a) is simple ditransitive sentence without ascension, and (40b) is
a case of ascension from a 3. While ascension from 3 is quite rare,
it was shown in chapter 2 that there is evidence for Possessor
Ascension from 3. Sentence (40c) involves 3-to-2 Advancement (32A)
followed by ascension. What is interesting is the contrast between
(40d) and (40e). (40d) can be obtained by ascension followed by 32A,
as illustrated in (41) below:
The reason for the ungrammaticality of (40e) is also obvious from its structure, represented below:

In order for the ascende to be marked dative, the host must be a 3 and a chômeur at the ascension stratum. The only way for the host to be marked accusative after ascension is therefore by advancement to 2. The advancement, however, violates the Chômeur Advancement Ban, which prohibits a chômeur from advancing.

Thus, the ascension analysis provides a simple characterization of the case marking of floated quantifiers, whereas the other hypotheses discussed earlier leave this basic issue unanswered.
4.2.3.3 Word Order Restriction

As discussed in the previous chapters, the word order in ascension constructions is restricted. The following pairs of sentences illustrate the contrast between the ascension-type multiple case construction and the advancement type:

(43) a. nay-ka Mary-lul elkwul-ul kulyessta.
   I -Nom Acc face -Acc drew
   'I drew Mary's face.'

b. * nay-ka elkwul-ul Mary-lul kulyessta.

   Nom -Acc book-Acc gave
   'Sooni gave Youngsoo a book.'

b. Sooni-ka chayk-ul Youngsoo-lul cwuessta.

In chapter 2, I proposed an explanation for the ungrammaticality of sentences like (43b) with a general word order constraint that states:

(45) Precedence Condition
No part of an ascension chômeur can precede the ascendee.

Given the ascension analysis of Q-Float, we would expect Q-Float to be subject to the same constraint. This prediction is borne out, as shown below:

(46) a. akka haksayng-i twu-myeng (-i) wassta.
   a while ago student-Nom two-Clas -Nom came
   'Two students came a little while ago.'

b. * twu -myeng (-i) akka haksayng-i wassta.
(47) a. nay-ka cemsim ttay sakwa -lul twu-kay (-lul) mekessta.
    I -Nom lunch time apple -Acc two-Clas (-Acc) ate
    'I ate two apples during lunch time.'

   b. * nay-ka twu-kay (-lul) cemsim ttay sakwa -lul mekessta.

Under the present hypothesis for Q-Float, the ungrammaticality of
(46b) and (47b) is exactly as expected, since the ascendee (the
antecedent of the quantifier) occurs after the host (the initial
nuclear term arc), in violation of (45).

Thus, the ascension hypothesis provides a simple account of the
word order in sentences involving Q-Float, whereas hypotheses based on
surface case or c-command would need some stipulation exclusively for
the floated quantifiers, and I take this as an additional piece of
evidence for the proposed analysis.

4.2.3.4 Restriction on Relativization

The fourth argument comes from the impossibility of forming a
relative clause of which the head correspond to (a constituent of) an
ascension chômeur, as discussed in chapters 2 and 3. The relevant
constraint is repeated below:

(48) Restriction on Relativization
    No part of an ascension chômeur can be the target of
    relativization.

Quantifiers, when they occur in isolation (i.e., when they are
not chômeurs), can be relativized (49), but floated quantifiers cannot
(50):
Thus, floated quantifiers are subject to the same restriction that
governs ascension in general with respect to relativization, and I
claim that this similarity in their behavior is due to their parallel
(i.e., ascension) structure.

To summarize the arguments so far, I have argued that the
ascension hypothesis (i) yields desirable predictions as to the set of
possible antecedents of the floated quantifiers, (ii) automatically
predicts their case marking pattern, and (iii) & (iv) correctly
predicts the restrictions on relativization and word order between the
floated quantifier and its antecedent.

There are also some problems with the proposed analysis to which
I have no clear answer at this moment. In the next section, I discuss
these issues and speculate on the nature of these problems.
4.3 Residual Issues

4.3.1 NP1L and Q-Floa
t

In chapter 2, I concluded that Possessor Ascension is limited to
intransitive strata and formulated the following generalization which
captures not only this fact but also applies to other processes such
as Subject-to-Subject Raising and tertiary passives:

(53) **Nonprimary 1 Law (NP1L)**
No stratum can contain a nonprimary 1 with a 2 with the same
tail.

Definition: A 1 is primary if it bears no other GR anywhere.

If Q-Floa involves ascension of the nominal specifier of the
quantifier, as has been argued above, it is an apparent counterexample
to this proposed law, since Q-Floa is possible from transitive
subjects as illustrated below:

(54) a. haksayng sey-myeng-i socwu-lul masinta.
student three-Clas-Nom whiskey-Acc drink
'Three students are drinking whiskey.'

b. haksayng-i sey-myeng (-i) socwu-lul masinta.
Nom Nom

c. (= b)

```
     1  2  P
   Chô
 Spec: socwu masi- 'drink'
 haksayng sey-myeng
 'student' 'three-Clas'
```

The ascendee in this case is not a primary 1 as defined above,
because it bears a relation within the host 'Spec' like, e.g., the
ascendee in Possessor Ascension constructions which bears the 'possessor' relation within the host. Given that attested instances of ascension from subject in various languages are restricted to intransitive clauses, the fact that Q-Float is possible from transitive subjects suggests that the process under consideration may not be ascension, and if so, the shared properties of Q-Float and other instances of ascension will have to be explained on independent grounds. However, this is not the only logical possibility. If it can be maintained that the quantified nominal structure such as haksayng sey-myeng 'student three' is in fact an exocentric nominal construction like, for example, a coordinate nominal structure with two distinct heads, it is possible that both of the conjuncts in some sense 'share' the 1-hood at the initial stratum, and this may be what allows the ascension from transitive subjects.

In fact, if ascension from coordinate nominal structure is possible, as suggested in Kuno (1973:116-117) for Japanese, Frantz (1981:31) for English, and Y. Kim (1984:154) for Korean, the prediction is that the ascension will be also possible from transitive subjects, for example:

   and -Nom talk -Acc share-Past
   'John and Mary shared a conversation.'

   Nom Comit
   'John shared a conversation with Mary.'
If the above analysis turns out to be correct, some ascension from transitive subjects will have to be allowed.

It is not clear whether a quantified nominal structure such as haksayng sey-myeng 'student three' is in fact an exocentric nominal construction. Marantz (1984: 38) defines the notion "head" of a phrase as follows;

(56) The head of a phrase Y is
i. the immediate constituent of Y that determines the category of Y, or
ii. the head of this constituent.

According to this definition, both the quantifier 'three' and the noun 'student' qualify as the head: both are of the same category type as the immediate containing phrase haksayng sey-myeng 'student three-Clas', and either can be held to determine the category type of the dominating constituent as much as the other, since both of them can independently head a nominal phrase. Given that Korean phrase structure is otherwise strictly head-final, the quantifier in (54) is presumably the head. On the other hand, the nominal haksayng 'student' does not allow a genitive marker, which is a characteristic
of nominal specifiers in Korean, as, for example, in the case of possessive constructions.

(57) * haksayng-uy seys/sey-myeng
    student-Gen three/three-Clas

This contrasts with the corresponding prenominal quantifier, which requires a genitive marker:

(58) sey-myeng-uy haksayng
    three-Clas-Gen student

Thus, given that a nominal specifier of a head noun in general has a genitive marker, the non-occurrence of the genitive marker in quantified nominal phrases such as (57) suggests that the noun phrase preceding the quantifier cannot be taken to be the specifier of the quantifier. If quantified nominal constructions turn out to have an exocentric structure like coordinate nominal constructions, and if ascension from coordinate nominal constructions is justifiable, the NPIL (or any other condition that governs the distribution of ascension) will have to be revised to allow for legitimate ascension from transitive subjects. Unfortunately, neither of these assumptions have compelling evidence to support them, though it seems to be equally premature to conclude that Q-Float cannot be an instance of ascension based on the fact that the process is possible from transitive subjects. I leave this problem as it stands, relegating it to future studies.
4.3.2 Dative Subjects and Passive Chômeurs

This section briefly discusses the impossibility of Q-Float from the Inversion nominal (or 'dative subject') and the passive chômeur. Shibatani (1977 a,b) considers the dative-marked nominal in (59), for example, to be the subject, based on evidence from subject honorification and reflexive interpretation:

(59) a. ku sensayngnim-tul sey-pwun -eykey casik-i epsta.
    the teachers -Pl three-Clas-Dat child-Nom not have
    'Those three teachers do not have children.'

b. * ku sensayngnim-tul -eykey sey-pwun casik-i epsta.13
    Dat

As mentioned in 4.1.1, Shibatani takes the impossibility of Q-Float from the 'dative subject' as evidence for the position that the conditioning factor for Q-Float is surface case rather than grammatical relation. Under the ascension analysis, the question that the impossibility of Q-Float from the 'dative subject' raises is why this particular ascension is impossible from such a nominal. An adequate answer to this question would require a precise understanding of the construction under question: i.e., whether the 'dative subject' construction involves Inversion as Perlmutter (1984) argues for Japanese,14 or whether the 'dative subject' is indeed the final 1 as argued in Shibatani (1977 a,b) and Gerdts and Youn (to appear). It is also a logical possibility that the 'dative subject' never heads a nuclear term arc but is the initial and final 3, as mentioned in chapter 3. The account of the ungrammaticality of Q-Float from
'dative subjects' will depend on the analysis of the construction under question, and I will not elaborate further on this issue in this section.

A similar problem arises concerning the impossibility of Q-Float from the passive chômeur, illustrated below:

(60) a. ku chosanghwa-ka hwaka twu-myeng-ey uyhay kuli-e ci-essta.
    the portrait-Nom artist two-Clas -by draw-Comp get-Past
    'The portrait was drawn by two artists.'

    by two-Clas

If Q-Float is ascension, the question is why ascension cannot apply to the initial l prior to Passive, as represented in (61). (The higher predicate ci- and the Clause Reduction part of the structure are omitted. Cf. chapter 3.)

(61) (= (60b))

No known principle rules out a structure like (61) above, and thus a stipulation is necessary under the ascension hypothesis to exclude the interaction of ascension and advancement illustrated above. This is essentially the same problem that faces the claim that
the conditioning factor for Q-Float is the grammatical relation, as discussed in 4.1.1 and it is a major disadvantage of the current hypothesis as opposed to the hypotheses based on surface case or constituent structure (c-command).

4.4 Conclusion

In this chapter, I argued that the traditional notion of Q-Float is questionable on several grounds and that Q-Float is in fact a subcase of ascension. I have shown that many of the syntactic properties of Q-Float can be accounted for by conditions governing ascension in general: the distribution of floated quantifiers, their case marking pattern, and restrictions on word order and relativization. If it is not a matter of coincidence that Q-Float exhibits these typical characteristics of ascension constructions, the natural conclusion is that the phenomenon of Q-Float can be best understood as an instance of ascension.

As discussed in the preceding section, a crucial difference between Possessor Ascension and Q-Float is that the latter is possible from the subject of a transitive clause, whereas the former is not. I speculated on the possibility that this difference may be due to the distinct internal structure of the host nominal, i.e., unlike other instances of ascension, Q-Float is an ascension from an exocentric nominal structure. If this speculation turns out to be untenable, it is likely that the ascension hypothesis for Q-Float is on the wrong track, given that attested instances of ascension across languages do not include subjects of transitive clauses.
Notes to Chapter 4

1. I assume here without argument that the nominal phrase preceding the quantifier is the specifier of the quantifier. I discuss this assumption in 4.3.

2. For such exceptions as *twu salam* 'two persons', *sey cip* 'three houses' etc., Song hypothesizes that they are derived by deleting the head from such forms as *salam twu salam* 'persons two-Clas'), observing that the 'numeral-noun' sequences are possible only when the nouns quantified themselves can also be used as a classifier. There seem to be some exceptions to his observation, though, including *twu haksayng* 'two students', and *sey ai* 'three children', where the quantified nouns cannot be used as a classifier. It is not clear to me precisely under what condition numerals can directly precede a noun. For all such ill-formed strings, the corresponding internally shifted forms are acceptable.

3. Some examples are given below:

(i) sensayngnim-i ai-tul-eykey motwu (-eykey) semwul-ul cwu-essta.
    teacher -Nom child-PI-Dat all (-Dat) present-Acc give-Past
    'The teacher gave a present to all of the children.'

(ii) ku-nun pam-mata swulcip-ey twu sey-kwuntey tullunta.
    he-top night-each bar -Dat two three-Clas drop-in
    'Every night, he drops in a couple of bars.'

See Kuno (1978), Haig (1980), and references cited there for discussion and examples of approximate quantifiers in Japanese.

4. Japanese does not allow case-markers to attach to floating quantifiers. I have no explanation for the optionality of case-markers in Korean and their non-occurrence in Japanese.

5. See Gerdts (1986, 1987) for an approach to the causative construction in Korean within the RG framework. As noted in Gerdts (1986:119, note 26), some speakers (including myself) perceive a meaning difference between (37a) and (38a): i.e., the former means that the students left together, while the latter could mean they left separately. Also, some speakers seem to find pure numeral quantifiers with a nominative marker somewhat marginal in such contexts, though many of my informants find them acceptable. When the universal quantifier *motwu* 'all' is used in the same context, however, the sentences are quite natural. The significance of this contrast is unclear to me.
6. I owe these examples to Professor Ho-min Sohn. Sentence (40d) is slightly unnatural to me though many of my informants readily accept it.

7. I assume that 2-3-Retreat is impossible in Korean. If it were possible, the following structure could represent the ungrammatical sentence (40e):

(i)

I know of no attested instance of 2-to-Retreat in Korean.

8. The c-command hypothesis cannot rely on Principle C of Chomsky's (1981) Binding Theory (or any account of 'strong crossover' for that matter) to rule out e.g., (46b). This is because the hypothesis contends that the floated quantifier is an anaphor, but a trace of an anaphor must be somehow exempted from this condition (cf. Saito (1985:144, note 27), and references cited there). For example:

(i) Himself, John hates Ei.

Here, the trace (an R-expression) is A-bound by John, in violation of Principle C, but the sentence is grammatical.

9. If we assume that Q-Float is essentially the same process as Possessor Ascension in its relation-changing nature, Baker's (1988) claim that the distribution of relation-changing rules is predictable from the Empty Category Principle also faces the same problem: that is, no 'Incorporation' or X0-movement should be allowed from subject position because the trace will not be governed by the complex predicate formed by the moved head and the predicate (whether the movement takes place at the level of S-structure or LF).

10. See Baker (1988) and references cited there. As discussed in chapter 2, Baker claims that Possessor Raising, like other instances of relation-changing rules (or X0 Movement), is possible
only from the object of a transitive clause and the superficial subject of an unaccusative predicate, as required by the Empty Category Principle.

11. Choung (1986) analyzes phrases like *ai sey-myeng* 'child three-Clas' as exocentric constructions, as follows:

(i) 

![Diagram](https://via.placeholder.com/150)

Choung assumes that the above structure is derived from internal floating of the quantifier.

12. If ascension is possible from the coordinate nominal structure, the fact that quantifiers sometimes allow split antecedents can be given a simple explanation. For instance:

(i) Youngsoo-ka pang-eyse hyeng-kwa twul-i-ka nolkoissta.
   Nom room-Loc brother-Comit two-Human-Nom play
   'Youngsoo, with his brother, the two are playing in the room.'

(The morpheme \(\downarrow\) between the quantifier and the NOM marker is a suffix denoting a human referent. It cannot be used when the antecedent of the quantifier is e.g., an animal.) Under the ascension hypothesis of Q-Float, it is claimed that the floated quantifier is an ascension chômeur, its antecedent being the ascendee. The problem with sentences like (i) is that the ascendee is 'split' into two, one piece with the nominative marker, and the other with the comitative marker.

If (i) involves ascension from the coordinate nominal structure, the sentence will be analyzed as follows (ignoring the locative nominal):
If this analysis turns out to be correct, the problem of split antecedents disappears because at the initial level, the antecedent is not split. However, the postulated ascension from the coordinate nominal structure will have to be treated as distinct from other instances of ascension, because, for one thing, the ascension chômeur is not marked nominative in such cases. Moreover, the putative ascension is highly restricted in that not all coordinate NPs allow such an ascension. (See Kuno (1973) for details.)

13. Numeral quantifiers are marginal when they are floated from 'dative subjects' even with overt case marking, unlike the universal quantifier motwu 'all' in sentences like (40) discussed in 4.2.3.2 above. For example:

(i) ku sensayngnim-tul-eykey sey-pwun-eykey casik-i epsta.
   the teacher -P1 -Dat three-Clas-Dat child-Nom not have
   'Those three teachers do not have children.'

Adding a universal quantifier after the floated quantifier improves the sentence:

(ii) ku sensayngnim-tul-eykey sey-pwun-eykey motwu casik-i epsta.
   the teacher -P1 -Dat three-Clas-Dat all child-Nom not have
   'Those three teachers all do not have children.'

The reason for the contrast between (i) and (ii) is not clear.

Chapter 5

Ascension and the 'Double Object' Construction

This chapter explores another set of multiple nominative and accusative constructions in Korean involving the verb ha 'do' or toy 'become' which have raised a variety of interesting issues both within and outside the tradition of generative grammar.¹

To start off, consider the following pairs of sentences:

(1) a. Sooni-ka kongpwu-ha-n-ta.
   Nom study-do-Proc-Dcl
   'Sooni studies.'

   b. Sooni-ka kongpwu-lul ha-n-ta.
   Nom study -Acc do-Proc-Dcl

   Nom math -Acc study -do
   'John studies math.'

   Nom math -Acc study -Acc do

Among the issues these sentences raise are the following:

(3) i. What is the relation between the two sentences in such pairs?

   ii. What is the grammatical relation of the accusative-marked nominals in such sentences?

In regard to sentences like (2b) in particular, where we observe two accusative-marked nominals (hence 'Double Object' construction), B. Park (1981:94) formulates the questions as follows:
Are both NPs direct objects? If so, of what are they direct objects? If not, what are they? Or is only one of them the direct object? If so, what is the other?

Thus put, the importance of the issue in relation to the well-motivated RG principle, the Stratal Uniqueness Law (SUL), becomes apparent. Dubinsky (1985), for example, takes the position that both of the accusative-marked nominals in the Japanese counterpart of (2b) are direct objects, observing that such sentences are all ungrammatical in Japanese. These sentences are therefore ruled out, under his analysis, by the SUL. The obvious question is then whether Dubinsky's analysis is correct for Korean: if it is, the SUL will be falsified. One of the goals of this chapter is to show that this not the case, by showing that there is an alternative analysis which is consistent with the SUL and is supported on independent grounds.

After a very brief review of some of the issues discussed in the past, I present in 5.2 an alternative analysis which is basically the same as that hinted at in the appendix to Gerdts (1986), with some relatively minor conceptual differences. Three pieces of evidence in favor of the proposed analysis are then presented and discussed in detail in comparison with alternative hypotheses. Section 5.3 summarizes the major issues of this chapter.

5.1 Hypotheses and Problems with ha 'do' Verbs

This section presents a brief overview of some previous discussions of the structure of sentences involving predicates of the
form N(P)-ha and clarifies the issues to be dealt with in subsequent sections.

5.1.1 Base-Generation vs. Transformational Introduction of ha-Verbs

Within transformational grammar, linguists have held different views as to the relation between the verb ha and the nominal element preceding the verb, i.e., whether ha itself should be treated as the main verb at all levels or as a meaningless element (sometimes referred to as a 'verbalizer' or 'pro-verb') that is introduced at some later level.

Suh (1975), among others, takes the position that in all of the sentences in (1) and (2) above, kongpwu is the main verb, with ha being inserted later by a transformation. His analysis is illustrated below:

(4) a. Sooni-ka kongpwu-lul hanta. (= (1b))
   Nom study -Acc do
   'Sooni studies.'

b. Deep Structure:

c. Surface Structure:

```
          S                         S
          |                         | 'ha'-Insertion
          NP                       NP
          | V                         | V
          |                           'study'
          Sooni                    Sooni kongpwu ha
          'study'                  'study' 'do'
```

The structure (4c), however, corresponds to sentence (1a), not (1b). To derive (1b), Suh introduces a transformation which optionally attaches the accusative marker, which he assumes to be different in
some way from the ordinary object marker. B. Park (1981) points out that this analysis has the problem of accounting for sentences like (5c) below, where the adverb yelsimhi 'hard' precedes the verb ha:

    Nom hard study -do
    'Sooni studies hard.'

   b. Sooni-ka yelsimhi kongpwu-lul hanta.
      study -Acc do
c. Sooni-ka kongpwu-lul yelsimhi hanta.

B. Park takes the grammaticality of sentences like (5c) as evidence that kongpwu 'study' is not a verb, given that Korean is otherwise a strictly verb-final language. However, the possibility remains that the adverb in (5c) modifies the higher verb ha rather than kongpwu, in which case no violation of the 'verb-final' constraint results.

A more serious problem is that the putative verb can be preposed to sentence-initial position, as shown below:

(6) kongpwu-lul Sooni-ka yelsimhi hanta.
    study -Acc Nom hard do
    'Study, Sooni does hard.'

While word order in Korean is relatively free in general, scrambling of a predicate to sentence-initial position is unattested within the language.

B. Park also notes that the accusative-marked nominal in the above and similar sentences can be the target of relativization, as illustrated below:
(7) [Sooni-ka a1 ha-nun] kongpwu
   Nom  do-Comp study
   'the study that Sooni does'

In general, only a noun can serve as the head of a relative clause, and therefore the existence of well-formed relative clauses like (7) indicates that kongpwu is a nominal object of the main verb ha rather than a verb.

The above facts seem to be sufficient to establish that the accusative-marked nominal in the above sentences cannot be taken as a verb. I assume below that sentences like (1b), for instance, are simple transitive sentences in which kongpwu 'study' is the direct object and ha is the main verb, following Song (1967) and B. Park (1974, 1981), among many others.

5.1.2 Stem-Floating vs. Noun-Incorporation

Another related issue is how the (b)-sentences in (1)-(2) above are related to the corresponding (a)-sentences. Two different positions have been proposed. Im (1979) claims the position that (1b) is derived from (1a) by a process that separates out part of the verb stem and 'topicalizes' it, and the accusative marker is taken to be some sort of topic marker. As pointed out in B. Park (1981:98-99), however, it is unclear why an accusative marker should be chosen for the topic marker in the above cases, while in sentences like (8b) below, a nominative marker must be chosen.
(8) a. kion-i cungka-toy-essta.
   temperature-Nom increase-be done-Past
   'The temperature rose.'

   b. kion-i cungka-ka toy-essta.
   Nom

If the second ACC-marked nominal in (5b) and the second NOM-marked nominal in (1b) and (2b) are the topics of their respective sentences, and if the markers are topic markers that have nothing to do with case or transitivity, it is unclear why there is such a strict restriction on the choice of the topic marker, unlike the well-known topic marker -(n)un, which can occur in either context.

Kageyama (1982:242-248) argues that the Japanese counterpart of (1a) involves noun incorporation, a synthetic (or syntactic) compounding process which combines a V and a N to form a new complex V. (See Miyagawa (1984) for a different position.) Gerdts (1986:Appendix) also proposes the same idea for Korean, which I will adopt in what follows.

5.2 Double Accusative and Nominative Constructions with ha

Having clarified relevant assumptions, I now turn to one of the major topics of this chapter: an account of double accusative/nominative sentences of the sort illustrated below:

(9) a. Columbus-ka sintaylywuk-ul palkyen-ha-yessta.
   Nom new continent-Acc discovery-do-Past
   'Columbus discovered a new continent.'

   b. Columbus-ka sintaylywuk-ul palkyen-ul ha-yessta.
   Nom new continent-Acc discovery-Acc do-Past
5.2.1 Some Preliminary Remarks

As noted in B. Park (1981), the type of double accusative construction illustrated in (2b) typically involves a Sino-Korean nominal such as kongpwu 'study,' yenkwu 'research,' chilvo 'medical treatment,' sinap 'suppression,' etc. B. Park hypothesizes that, while these words were used either as a noun or as a verb in classical Chinese without any morphological distinction, they were all borrowed into Korean as nouns, and as such were used as direct objects in the context N-lul ha by analogy with existing indigenous patterns. When the loan word itself comes from a two-place predicate, however, the resulting phrase is also semantically transitive, requiring a direct object of its own, whence come double direct objects. The structure below illustrates his analysis of (9b):

(11)

```
(11) S (= V''')
   / \  
  /   \  
 /     \  
      /   
      /    
      /     
      /      
      /       
      /        
      /         
      /          
    NP V'      
    /   \     
   /     \    
  /       \   
 /         \  
/           \ 
/             
NP V'         
/   \         
/    \        
/      \      
/        \    
/          \  
/            \ 
/              \ 
Columbus sintaylywuk palkyen ha
   'new continent' 'discovery' 'do'
```
S. Park thus takes the view that some Korean sentences involve two (final) direct objects. Translated into RG terms, the structure in (11) would look like (12) below, which Dubinsky (1985) proposes for the corresponding (ill-formed) Japanese sentences:

\[
\text{(12)}
\]

\[
\text{do Columbus new discovery continent}
\]

In the following section, I provide an alternative analysis of the 'double object' construction, and show that some peculiarities of the construction can be given a simple, adequate explanation under the proposed analysis. After presenting the analysis and syntactic evidence for the proposed analysis, I will discuss some further details of the analysis in comparison with a similar proposal by Gerdts (1986). I also argue that the ascension rule responsible for the existence of the type of double accusative construction under concern cannot be reduced to a single rule of Possessor Ascension.

5.2.2 Ascension Analysis of 'Double Object' Construction

5.2.2.1 The Analysis

In this section, I argue that the type of double accusative construction introduced above involves a special instance of ascension, and therefore that there is no stratum which involves more than one direct object, as illustrated in the following structure:
I assume here that the nominal sintaylywuk 'new continent' in (13) is a specifier of the head nominal palkyen 'discovery' at the initial stratum. As mentioned in the preceding section, some Sino-Korean action nominals such as palkyen 'discovery' require the presence of a semantic patient, which may ascend as in (13a) above, or form a compound with the head nominal as in (14) below:

(14) Columbus-ka sintaylywuk palkyen-ul ha-yessta.
    Nom new continent discovery-Acc do-Past
    'Columbus did the discovery of a new continent.'

When there is no semantic patient within the sentence as in (15), the sentence is incomplete, and therefore the sentence cannot be fully interpreted without discourse context:

(15) Columbus-ka e palkyen-ul ha-yessta.
    Nom discovery-Acc do-Past
    'Columbus discovered e.'
When ascension applies, the chômeur can be optionally incorporated into the predicate ha, in which case (16) will result:

(16) Columbus-ka sintaylywuk-ul palkyen-ha-yessta.
Nom new continent-Acc discovery-do-Past
'Columbus discovered a new continent.'

If the nominal specifier has certain properties that block the morphological process of compounding, ascension must apply. For example, consider the following sentences:

(17) a. kyengchal-i John-ul palkyen-ha-yessta.
   police -Nom Acc discovery-do-Past
   'Police discovered John.'

   b. kyengchal-i John-ul palkyen-ul ha-yessta.
      Nom Acc discovery-Acc do-Past


(18) a. kyengchal-i ku pemin-ul cheypho-ha-yessta.
    police -Nom the criminal-Acc arrest-do-Past
    'Police arrested the criminal.'

    b. kyengchal-i ku pemin-ul cheypho-ul ha-yessta.
       police -Nom the criminal-Acc arrest-Acc do-Past

    c. * kyengchal-i ku pemin cheypho-lul ha-yessta.

When the specifier is referential (17) or specific (18), or, more generally, when it is not a 'generic' noun, compounding cannot take place in Korean, and in such cases, ascension is obligatory. The genericity condition on nouns in compounds has been repeatedly noted in the literature. (See, for example, Levi (1978), Mithun (1980), Sugioka (1984), and references cited there.) Thus a baby-sitter does not mean a person who takes care of a specific baby or babies, nor can we say sentences such as * She is some baby-sitting or * She is the
baby-sitting. It may not be universally true that nongeneric nouns cannot be incorporated. Sadock (1980:307), for instance, observes that in Greenlandic Eskimo, an incorporated object may be modified by a separate word, and similar examples from several other languages are cited and discussed in Baker (1988:92 ff.). For the purpose of this chapter, it is sufficient to note that the genericity condition holds strictly in Korean.

Similarly, noun incorporation may not occur if the action nominal is further specified by a modifier, as shown in (19) below:

    Nom Acc passionate play -Acc do-Past
    'Sooni gave a passionate recital of a Brahms sonata.'


I assume that sentences like (19b) are ruled out by the 'No Phrase Constraint' on compounding, as Kageyama (1982:244, 248, etc.) argues for Japanese.

The rule of ascension and the morphological operation of noun incorporation assumed above are stated informally below:

(20) **Specifier Ascension**
    Ascend the nominal specifier of an action nominal when the verb is ha.

(21) **Noun Incorporation**
    Incorporate an action nominal into the verb ha if it is an acting 1 or 2.

Before I present the syntactic evidence for the above analysis, I will first clarify some important assumptions. First, the ascension rule as stated here allows iterative application of ascension, as in
the case of Possessor Ascension. That is, it is predicted that Specifier Ascension operates on any 2, i.e., not only an initial 2 but also an ascendee to 2. If this is correct, we would expect to find sentences of the same type with more than two accusative or nominative-marked nominals. This prediction seems to be correct for (22), dubious for (23), and incorrect for (24):

(22) a. cengpwu-ka tampay swuip-ul cwungtan-ul ha-yessta.
government-Nom cigarette import-Acc stop -Acc do-Past
'The government ceased (its own) cigarette import.'

b. cengpwu-ka tampay-lul swuip-ul cwungtan-ul ha-yessta.
cigarette-Acc import-Acc stop -Acc

(23) a. cengpwu-ka enlon thanap-ul cwungtan-ul ha-yessta.
government-Nom journalism oppression-Acc stop -Acc do-Past
'The government ceased oppression of journalism.'

b. */?? cengpwu-ka enlon-ul thanap-ul cwungtan-ul
journalism-Acc oppression-Acc stop-Acc

(24) a. hakca-tul-i tampay swuip-ul piphan-ul ha-yessta.
scholar-Pl-Nom cigarette import-Acc criticism-Acc do-Past
'Scholars criticized the import of cigarettes.'

cigarette-Acc import-Acc criticism-Acc

The passive counterparts of the (b)-sentences above are similar in terms of their degree of acceptability:

(22)' tampay-ka swuip-i cwungtan-i toy-essta.
cigarette-Nom import-Nom stop -Nom be done-Past
'The import of cigarettes has been terminated.'

(23)' */?? enlon-i thanap-i cwungtan-i toy-essta.
journalism-Nom oppression-Nom stop -Nom be done-Past
'The oppression of journalism has been lifted.'
As for sentences like (24b) and (24)', there seems to be a semantic constraint requiring the implied agent of the action denoted by the head nominal to be identical to the subject of the clause. In (24b), for example, the implied agent of 'import' is different from the subject of ha, or, 'criticize'. In such cases, the ascension always results in ungrammaticality. In a sense, this restriction is reminiscent of the 'Like-Subject Constraint' on some Equi-constructions (cf. chapter 2).

Pending further research on the exact nature of the relevant constraint responsible for the differing degree of acceptability of sentences involving successive applications of Specifier Ascension, I will leave the rule as it stands.

Second, the noun incorporation rule as stated in (21) above allows incorporation of any nuclear term or the corresponding chômeur, including the final 1. As Gerdts (1986:124) notes, however, final 1 cannot be incorporated:

(25) * chelhak-ey kwanhay yenkwu-ha-ye ci-essta.
    philosophy-about research-Comp get-Past
    'It has been studied about philosophy.'

(25) is grammatical if it is intended to mean 'Something about philosophy has been studied', i.e., if it is assumed that there is an understood subject, for example, as in (26) below:
(26) chelhak-ey kwanhay (manhun sasil-i) \{yenku-ha-ye ci-essta\}.
\{do-Comp get-Past\}
\{yenku-toy-essta become-Past\}

'Many facts were studied about philosophy.'

(Following Gerdts (1986), I assume in this chapter that toy in sentences like (26) is a morphological variant of ha-ye ci.) However, this fact itself need not be stipulated, because, if we assume that incorporation is a morphological operation reducing the number of arguments of the clause, incorporation of a final subject will always result in violation of the Final 1 Law.

Finally, note that the morphological operation stated in (21) will operate on the output of the syntactic operation of ascension. This is inconsistent with the strict lexicalist view of morphological rules, according to which the domain of morphological operations is restricted to the lexicon, and thus no word formation rules should be allowed to apply in the domain of syntax (cf. Aronoff 1976, Lieber 1980, Selkirk 1982). This lexicalist hypothesis, however, has been recently challenged by many, including Sadock (1980) and Sugioka (1984): the former claims that the noun-incorporation processes in Greenlandic Eskimo must follow certain syntactic rules; and the latter, that certain derivational morphology in English and Japanese has a syntactically generated phrase as input. (See also Baker (1988) for relevant discussion.) While the extent to which morphological operations can interact with syntactic operations still remains...
controversial, I will assume here without argument that the noun incorporation process stated above can freely interact with the rule of ascension.

5.2.2.2 Arguments

In this section, I present three pieces of evidence that support the analysis proposed above. Most of the facts discussed below have been noted in the previous treatments of the construction (e.g., Suh (1977), Im (1979), B. Park (1981)), but left either unexplained or given only partial treatments. I will show that, under the proposed analysis, all of these facts follow straightforwardly from general constraints that hold across the various kinds of ascension constructions discussed in earlier chapters.

5.2.2.2.1 Argument 1: Case Marking and Passive-Active Correspondence

The first argument for the ascension analysis of the 'double object' construction (DOC) comes from its simple account of case marking of the nominals involved in the construction both in its active and passive realizations. To illustrate the assignment of case marking in the proposed analysis, observe first the following sentence with its structure:

(27) a. Columbus-ka sintaylywuk-ul palkyen-ul ha-yessta.
   Nom new continent-Acc discovery-Acc do-Past
   'Columbus discovered a new continent.'
The passive counterpart of this sentence, (28a), will be analyzed as in (28b), given the analysis of the passive construction discussed in chapter 3:11

(28) a. sintaylywuk-i (Columbus-ey uyhay) palkyen-i toy-essta.
    new continent-Nom by discovery-Nom become-Past
    'A new continent was discovered (by Columbus).'

In this structure, Passive occurs in the complement clause, followed by SSR, Clause Reduction and Specifier Ascension. If Passive does not apply in the complement, the initial 1 of the complement will have to be raised, given that ci is an obligatory SSR trigger. The raisee in
this case, however, is not an initial 2, and thus the resulting sentence will be ruled out by the following condition discussed in chapter 3:

(29) Only an initial 2 can be raised from the complement of ci.

Assuming that ha-ve ci is morphologically replaced by toy (cf. note 11), sentence (28a) will result.

The account of case marking of the nominals in the above sentences is straightforward under the ascension analysis: final 1s and ascension 1-chômeurs are marked nominative, and final 2s and ascension 2-chômeurs are marked accusative, consistent with earlier assumptions. In section 5.1.2, I briefly discussed Im's hypothesis that one of the accusative markers in sentences like (27a) is a topic marker. As noted there, the hypothesis would leave unexplained why the same topic marker cannot be used in passive sentences of the form (28a), for example as in (30):

(30) * sintaylywuk-i palkyen-ul toy-essta.
       new continent-Nom discovery-Acc be done-Past

Under Dubinsky's analysis as applied to Korean, in which both of the accusative-marked nominals are considered initial and final direct objects (ignoring for the moment the violation of the SUL), the ungrammaticality of sentences like (30) will also remain mysterious. Under the ascension hypothesis, however, sentences like (30) are ruled out by the same condition that limits the raisee from the complement of ci to initial 2s (cf. (29)): sentences like (30) will result if
ascension occurs in the complement, i.e., prior to raising. The ascendee is thus not an initial 1, and thus it is predicted that no well-formed sentence can result.

Under a monostratal analysis of multiple nominative constructions such as Saito's (1982, 1985), the second nominative-marked nominal in (28a) would be considered the subject of the sentence, and the first nominal, sintaylywuk 'new continent', a topic that is licensed by some sort of aboutness relation with respect to the rest of the sentence. There are several reasons to reject such a view. First, as mentioned above, incorporation of final 1s is not in general allowed in Korean. In sentences like (28a), however, the second nominal can be incorporated, resulting in (31) below:

(31) sintaylywuk-i (Columbus-ey uyhay) palkyen-toy-essta.
    new continent-Nom by discovery-become-Past
    'A new continent was discovered by Columbus.'

The grammaticality of (31) thus suggests that palkyen 'discovery' is not the final 1 of the clause.

Second, sentences like (28a) above represent the only kind of multiple nominative construction in which the first nominative-marked nominal bears a semantic patient relation to the second nominal. In general, ascension is not allowed when the eligible ascendee has a patient relation to the head nominal, as illustrated below:

(32) a. ku pwun-uy yenkwu-ka ywumyenghata.
    the person-Gen study-Nom is famous

    i. 'His study is famous.'
    ii. 'The study about him is famous.'
b. ku pwn-ı  yenkwu-ka ywumyenghata.
the person-Nom study-Nom is famous
   i. 'His study is famous.'
   ii. *'The study about him is famous.'

While (32a) is ambiguous between the two readings indicated, the corresponding ascended version allows only the reading in which the ascendee has the agent relation to the action denoted by the nominal yenkwu 'study'. Thus, the semantic licensing of the 'topic' will have to specifically mention that the otherwise ill-formed aboutness should be allowed only when the verb is tov. It is true that the complication is incorporated into the syntactic rule of ascension in the proposed analysis. Notice, however, that in an approach such as Saito's, the complication is necessary just for the special kind of double nominative construction above, independent of the account of the double accusative construction under question, missing the generalization that only when there is a corresponding double accusative construction of the type (27a) can we find exceptional double nominative constructions of the form (28a) (cf. B. Park 1981:106), a generalization that follows automatically under the proposed analysis.

Third, there are at least five pieces of evidence suggesting that the first nominative-marked nominal is the subject of the clause, and some of these tests exclude the possibility of its being a non-subject topic: Subject-to-Object Raising (SOR), Subject Honorification (SH), subject-controlled Equi (control), object-controlled Equi (the
Equi victim test), and interactions with other types of ascension. To
take the SOR construction first, consider the following:

(33) a. na-nun  [Caesar-ka  Brutus-ey uyhay  salhay-ka
I -Top   -Nom   -by  murder-Nom
toy-essta]-ko  mitessta.
be done-Past-Comp believed
'I believed that Caesar was murdered by Brutus.'

b. na-nun  Caesar-lul  Brutus-ey uyhay  salhay-ka  toy-essta-ko
   Acc
mitessta.
'I believed Caesar to have been murdered by Brutus.'

As we discussed in chapter 2, only a subject can be raised in the SOR
construction, but a true generic topic or focus cannot. The fact that
the first nominative-marked nominal can be raised, as in (33b),
therefore shows that it is the subject rather than a topic.

Turning now to the Subject Honorification test, consider (34b),
which is the passive counterpart of (34a):

(34) a. kyengchal-i sensayngnim-ul cheypho-lul ha-yessta.
police -Nom teacher -Acc arrest-Acc do-Past
'The police arrested the teacher.'

b. sensayngnim-i kyengchal-ey uyhay cheypho-ka toy-si-essta.
teacher -Nom police -by  arrest-Nom become-Hon-Past
'The teacher was arrested by the police.'

Given that only a final 1 can control SH, the grammaticality of the
honorific agreement in (34) suggests that the first NOM marked nominal
in the sentence must be the final 1.
The third piece of evidence for the subjecthood of the first nominative-marked nominal in passive sentences of the form (28a) comes from its ability to serve as the controller in some obligatory Equi constructions. As discussed in chapter 2, only a subject can control Equi in an adjunct clause of which the complementizer is -ase 'and then (sequential action)', -myense 'while (simultaneous action)', -taka 'but then (interrupted action)', -(u)lyeko 'in order to' and so on. With these complementizers, Equi is obligatory. Thus, if the first-nominative marked nominal in passive sentences of the form (28a) is the subject, it would be able to control Equi in the adjunct clause of the type discussed. This prediction is borne out:

(35) [e] ilpon-ulo ka-taka] ku1-ka cheypho (-ka) toy-essta.
  Japan-to go-while he -Nom arrest (-Nom) become-Past
  'While going to Japan, he was arrested by the police.'

Also, the first nominative-marked nominal can be the Equi victim in object-controlled Equi in certain untensed complement clauses. For example:

  he-Top criminal-Acc arrest (-Nom) become-Comp led
  'He led the criminal to be arrested.'

In general, only a subject can be an Equi victim in this context, and if this is true, the position marked e in (36) must be the subject position.
Finally, the first nominative-marked nominal in the double nominative construction under consideration can be the host to other types of ascension, i.e., Quantifier Floating (37) and Possessor Ascension (38), as illustrated below:

(37) a. haksayng twu-myeng-i cheypho(-ka) toy-essta. 
student two-Clas-Nom arrest(-Nom) be done-Past 
'Two students were arrested.'

b. haksayng-i twu-myeng (-i) cheypho(-ka) toy-essta. 
student-Nom two-Clas (-Nom)

(38) a. ku cengchika-uy elkwul-i sinmwun-ey cheum-ulo 
the politician-Gen face-Nom newspaper-Loc for the first time 
sokay(-ka) toy-essta. 
introduction (-Nom) be done-Past 
'The politician's face was introduced in the newspaper for the first time.'

b. ku cengchika-ka sinmwun-ey cheum-ulo elkwul-i 
the politician-Nom newspaper-Loc for the first time face -Nom 
sokay(-ka) toy-essta.

In chapters 2 and 4, I argued that Possessor Ascension and Quantifier Floating, as instances of ascension, are subject to the Host Limitation Law, which limits the host to a term. Given this, the fact that these rules can apply to the first nominative-marked nominal in the (a)-sentence above shows that it heads a term arc. Since the possibility of its being a 2 or 3 is ruled out by the case marking, it must head a 1-arc.

To summarize the discussion in this section, the case marking of the nominals involved in the double accusative or nominative construction involving the predicate ha can be given a simple account
within the proposed analysis; the active-passive correspondence follows as an automatic result of the analysis; and finally, the analysis is consistent with available tests for subjecthood.

5.2.2.2.2 Argument 2: Word Order Restriction

The second piece of evidence for the proposed analysis of the DOC is based on the word order constraint between the two accusative- or nominative-marked nominals in the construction, a phenomenon that has been repeatedly noted and discussed in the past (cf. Suh (1975:81-83) and B. Park (1981:107-110)). These discussions, however, were invariably focused on the 'double object' construction, excluding from consideration the corresponding passive (or double nominative) construction, where the word order restriction is equally rigid. The phenomenon is illustrated below: (Sentence (39) is from Suh (ibid.:82).)

(39) a. cekkwun-i tosi-lul phakoy-lul ha-yessta.
   enemy-Nom city-Acc destruction-Acc do-Past
   'The enemy destroyed the city.'
   b. * cekkwun-i phakoy-lul tosi-lul ha-yessta.
      destruction-Acc city-Acc

(40) a. tosi-ka (cekkwun-ey uyhay) phakoy-ka toy-essta.
   city-Nom enemy -by destruction-Nom become-Past
   'The city was destroyed by the enemy.'
   b. * phakoy-ka tosi-ka (cekkwun-ey uyhay) toy-essta.
      destruction-Nom city-Nom

Suh takes the ungrammaticality of sentences like (39b) as evidence that the two accusative-marked nominals do not hold equal status as direct objects, and that the second one is a denominal verb.
In 5.1.1, however, we saw some of the inadequacies of his position that the second accusative-marked nominal is a verb. B. Park (1981), on the other hand, formulates a special kind of island constraint stated and schematically represented below (his (42)):

(41) **Object-over-Object Constraint (Revised)**

The second object (NP2) may not move over the first object (NP1) nor may it refer to any preceding noun over the first object.

(Emphasis mine.)

Ignoring the underlined part for the moment, note first that the constraint has nothing to say about the corresponding passive sentence, e.g., (40b), where crossing is also disallowed, since the constraint specifically mentions 'object'. Note also that the structure above is similar to what Chomsky (1981) postulates for the double NP construction in English, as in (42):

(42) John [\_vp [\_v gave Bill] a book]

If we assume a similar structure for corresponding Korean sentences for reasons discussed in Chomsky (ibid.:170-172), we will have a structure identical to what B. Park postulates for the 'double object' construction:
As mentioned in chapter 2 (cf. Suh (1975:82)), however, the two accusative-marked nominals in (43) and similar sentences can freely switch, as shown below:

    Nom book-Acc Acc give-Past

In order for the Object-over-Object Constraint to distinguish between the two types of 'double object' constructions, then, it would be necessary to show that there are independent reasons to postulate different structures for them.

In the present hypothesis, the word order restriction both in the double accusative sentences such as (39) and their double nominative (passive) counterparts like (40) follows from the same constraint that has been independently motivated in the preceding chapters based on Possessor Ascension, Quantifier Floating, and Raising constructions:

(45) **Precedence Condition on Ascension**
    No part of an ascension chômeur can precede the host.

To illustrate, the second accusative-marked nominal in (39a) and the second nominative-marked nominal (40a) are both ascension chômeurs, and thus it is predicted that they cannot precede the ascendee, the
final 2 and 1, respectively. Sentences like (43), on the other hand, are instances of 3-to-2 Advancement, and thus are not subject to the constraint on ascension, and therefore, the grammaticality of their scrambled version, e.g., (44), is as expected.

Thus, the ascension hypothesis yields the desirable prediction about the word order restriction exhibited in the double accusative and nominative construction involving ha without recourse to additional machinery.

The impossibility of pronominalizing the second accusative-marked nominal in the 'double object' construction was, to my knowledge, first noted in Im (1979). An example is given below:

   English-Acc study -Acc do
   'Youngsoo studies math, and Sooni studies English.'

   English-Acc it -Acc do

Im takes the ungrammaticality of sentences such as (46b) as evidence for the position that the action nominal is not an NP but a verb.

(See B. Park for a critique of Im's proposal.) As in the case of the word order restriction, this phenomenon is not restricted to the 'double object' construction but is also observed in the double nominative (passive) counterparts, for example:
(47) a. Pompeii-ka phakoy-ka toy-ko, Loma-to Pompeii-Nom destruction-Nom become-and Rome-also phakoy-ka toy-essta. destruction-Nom become-Past 'Pompeii was destroyed, and Rome was destroyed, too.'


As noted also by Im, it is not that such action nominals can never be pronominalized. For example, the following sentence, in which kongpwu 'study' is pronominalized, is well-formed:

(48) Sooni-to kongpwu-lul coh-a ha-ko Youngsoo-to kukes-i-ul
    also study -Acc like -and also it -Acc
    coh-a ha-nta.
    like
    'Sooni likes studying, and Youngsoo also likes it.'

Such a restriction on pronominalization, however, does not seem either to support the view that the action nominal is indeed a verb or to necessitate a specific constraint just for the DOC (or the corresponding double nominative construction). The same restriction is also exhibited in the Possessor Ascension construction, shown below:

(49) a. Youngsoo-to khi-ka khu-ko, Sooni-to khi-ka khuta. also height-Nom tall-and also tall 'Youngsoo is tall, and Sooni is tall, too.'

b. *Youngsoo-to khi-i-ka khu-ko, Sooni-to kukes-i khuta. height-Nom it
(50) a. sensayngnim-i ku ai-lul ilum-ul pwulu-ko, na-to
teacher -Nom the child-Acc name-Acc call-and I-also

ku ai-lul ilum-ul pwull-essta.
the child-Acc name-Acc call -Past
'The teacher called the child by name, and I also called the
child by name.'

b. * sensayngnim-i ku ai-lul ilum1-ul pwulu-ko, na-to
name-Acc

ku ai-lul kukes1-ul pwull-essta.
it -Acc
'The teacher called the child by name1, and I also called the
child by it1.'

It is not entirely clear to me at the moment what makes such
pronounalization impossible. The only definite conclusion that can
be drawn from the above discussion at this point thus seems to be that
the ungrammaticality of the pronounalization in the above sentences
has nothing to do with the categorial status of the antecedent
involved, contrary to what Im suggests (since no one would deny that
khi 'height' and ilum 'name' in (49)-(50) are nouns), and that a
constraint more general than the Object-over-Object Constraint is
called for (since the same restriction shows up in the passive
counterpart of the DOC and the Possessor Ascension construction).

In sum, I argued in this section that the word order restriction
exhibited in the double accusative and nominative construction
involving ha-verbs can be given a simple characterization under the
ascension hypothesis.
5.2.2.2.3 Argument 3: Relativization

The third argument has to do with the impossibility of forming a relative clause where the second accusative-marked nominal in the 'double object' sentences is the target of relativization, as indicated in (41). For example:

(51) a. Sooni-ka swuhak-ul kongpwu-lul ha-nta.
   Nom math -Acc study -Acc do
   'Sooni studies math.'

b. [Sooni-ka e₁ kongpwu-lul ha-nun] swuhak₁
   Nom study -Acc do-Comp math
   'math, which Sooni studies'

c. * [Sooni-ka swuhak-ul e₁ ha-nun] kongpwu₁
   Nom math -Acc do-Comp study
   'the study Sooni does (in) math'

A similar restriction shows up in the double nominative pattern:

(52) a. ku tosi-ka (cekkwun-ey uyhay) phakoy-ka toy-essta.
   the city-Nom enemy -by destruction-Nom become-Past
   'The city was destroyed (by the enemy).'

b. [e₁ (cekkwun-ey uyhay) phakoy-ka toy-n] tosii₁
   enemy -by destruction-Nom become-Comp city
   'the city that was destroyed (by the enemy)'

c. * [ku tosi-ka (cekkwun-ey uyhay) e₁ toy-n] phakoy₁
   the city-Nom enemy -by become-Comp destruction
   'the destruction that the city was done (by the enemy)'

Furthermore, as in the case of the word order restriction, certain double accusative sentences (the 3-to-2 Advancement construction) allow either of the two accusative-marked nominals to be relativized:
Any adequate characterization of the double accusative constructions in Korean will therefore have to be able to make the distinction between the two types of multiple accusative constructions, while capturing the parallelism between the passive-active counterparts within the same type of construction. Given the ascension hypothesis of the DOC, the desired result from the same generalization that was discussed in the preceding chapters:

(54) Restriction on Relativization
No part of an ascension chômeur can be the target of relativization.

In both (51c) and (52c), the nominal that is relativized is an ascension chômeur, and therefore such relative clauses are expected to be ill-formed as in the case of other instances of ascension.

In sum, I argued in this section that the impossibility of relativizing or clefting certain nominals in the ‘double object’ and the corresponding double nominative construction follows, under the ascension hypothesis, from the general restriction on ascension chômeurs, and therefore that the prediction of the hypothesis is correct and desirable.
5.2.2.2.4 Summary of Arguments

In this section, I have shown that the ascension hypothesis provides a straightforward account of some of the puzzles concerning double accusative construction involving the predicate ha, including the case marking of the nominals in both the active and the passive realization of the construction, the word-order restriction, and the constraint on relative clause formation. In accounting for these problems that have thus far been left only partially understood at best, we have not added a single device except for the ascension rule itself, which would be necessary in some form or other in any attempt to generate (or 'license') the 'double object' construction, independent of the corresponding double nominative construction.

I presented five independent pieces of evidence showing that the first nominative nominal in the double nominative construction under concern is the final 1: (i) it can be raised in the SOR construction, (ii) it can trigger Subject Honorification, (iii) it can control subject-controlled Equi, (iv) it can be the Equi victim in the object-controlled Equi construction, and (v) it can be the host to other instances of ascension (Q-Float and Possessor Ascension). The passive-active correspondence together with the case marking of the nominals follows as an immediate result of the analysis. Facts about the relativization and word order restriction are accounted for in terms of general constraints governing all instances of ascension constructions exhibited in Korean. These facts also show that the second accusative nominal in the double accusative construction and
the second nominative nominal in the corresponding passive
collection are final chômeurs and not final terms. In addition, the
fact that the second nominative-marked nominal can be incorporated
shows that it cannot be the final 1.

5.2.3 Modifier Ascension vs. Specifier Ascension

So far, I have argued that the double accusative/nominative
construction with ha-verb can be best analyzed as involving an
ascension, by showing that many important properties of the
construction can be given a straightforward explanation under the
ascension hypothesis. In this section, I will discuss some further
details as to the nature of the ascension process postulated above in
comparison with a similar proposal by Gerdts (1986), who discusses the
kind of double accusative/nominative construction dealt with in this
chapter. In particular, she proposes to analyze sentence (55a) below
as in (55b):

(55) a. na-nun chelhak-ul yenkwu-lul ha-yessta.
    I -Top philosophy-Acc study -Acc do-Past
    'I studied philosophy.'

b.)
She further claims that the sentence corresponding to the initial stratum of the above RN is (56) below:

(56) na-nun chelhak-ey kwanhayse yenkwu-lul ha-yessta.
    I -Top philosophy-about study -Acc do-Past
    'I studied about philosophy.'

Note that Gerdts's analysis is formally identical to the analysis I presented above (cf. (13b)). One conceptual difference between her view and mine lies in the assumptions about the nature of the initial stratum. While she claims that the non-ascended counterpart of (55a) is (56), I proposed that the non-ascended specifier forms a compound with the head noun, after which the initial stratum of (55b) would result in sentence (57) below:

(57) na-nun chelhak yenkwu-lul ha-yessta.
    I -Top study -Acc do-Past
    'I studied philosophy. (Lit. I did philosophy study.)'

The postpositional phrase (PP) chelhak-ey kwanhayse 'about philosophy', however, is in an adverbial form which cannot modify a noun. That chelhak-ey kwanhayse 'about philosophy' and yenkwu 'study' in sentence (57) above do not form a constituent becomes clear in the following example, in which the adverbial phrase is scrambled to sentence-initial position:

(58) a. chelhak-ey kwanhayse na-nun yenkwu-lul ha-yessta.
    philosophy-about I -Top study -Acc do-Past
    'About philosophy, I studied.'

    b. na-nun yenkwu-lul chelhak-ey kwanhayse ha-yessta.
    I -Top study -Acc philosophy-about do-Past
Since Korean never allows a modifier of a noun to be displaced out of the noun phrase, the grammaticality of (58a) clearly shows that the scrambled PF is an adverbial phrase, not a modifier of a noun. Note also that the PF in (58b) is placed after the noun yenkwu. Given that Korean is a strictly head-final language, the grammaticality of (58b) confirms that the PF cannot be a modifier of the noun.17

This problem, however, is a minor one which can be remedied simply by claiming that the sentence corresponding to the initial stratum of (55b) is (59) below, with the appropriate choice of noun modifier form:

(59) na-nun chelhak-e ywan-ka-n yenkwu-lul ha-yessta.
    I -Top philosophy-about study -Acc do-Past
    'I did study about philosophy.'

A more serious problem with the Modifier Ascension hypothesis (with the aforementioned modification) is that in many cases there is no semantic relation between the ascended and non-ascended sentences. To take an example, compare the two sentences below:

(60) a. Columbus-ka sintaylywuk-ul palkyen-ul ha-yessta.
    Nom new continent-Acc discovery-Acc do-Past
    'Columbus discovered a new continent.'

b. Columbus-ka sintaylywuk-ey kwanhan palkyen-ul ha-yessta.
    Nom new continent-about discovery-Acc do-Past
    'Columbus made a discovery about the new continent.'

Sentence (60a) will be true only if a new continent was found by a person, whereas (60b) can be true even if no new continent was ever found, or if the new continent was discovered by someone other than
Columbus. Thus, the two sentences are not related in meaning, and therefore it is not likely that they share the same initial stratum.

Furthermore, with a number of action nominals including phakoy 'destruction', salhay 'murder', cheypho 'arrest', chengso 'cleaning', seythak 'laundry' and kwiip 'purchase', the corresponding phrase of the form NP-ey tayhan N is ill-formed, whereas the ascended version is well-formed, as illustrated below:

(61) a. * ku-ka Caesar-ey tayhan salhay-lul ha-yessta.
    he-NOM about murder-Acc do-Past
    'He committed murder about Caesar.'

    b. ku-ka Caesar-lul salhay-lul ha-yessta.
       Acc Acc
       'He murdered Caesar.'

The Modifier Ascension hypothesis, then, will have to add specific conditions to ensure that the ascension applies obligatorily when such nominals are involved, a complication which does not arise under my proposal.

In light of the above considerations, I conclude that it is the non-case-marked nominal specifier that ascends in the double accusative or nominative construction discussed above.

5.3 Conclusion

In this chapter, I argued that the so-called 'double object' construction in Korean involves an ascension which is distinct from other types of ascension we have examined in the preceding chapters in what the rule takes as input but is subject to the same constraints governing ascension processes in general. I have shown that the two
most prominent issues that have been associated with the construction, the word order phenomenon and the restriction on relativization, can be given a simple and satisfactory treatment under the hypothesis without any special device for this type of construction alone. It has been demonstrated that any attempt to characterize these restrictions in terms only of the 'double object' construction would necessarily miss the generalization that the same restrictions show up in the corresponding passive (or double nominative) construction, a generalization that is automatically expressed in the proposed analysis.

Seen from the opposite direction, the above issue brings back the question that I touched upon earlier in chapter 2, i.e., the possibility of treating 'all' multiple nominative constructions as some sort of topic (or focus) constructions (cf. Saito (1982, 1985)). If one attempts to characterize the particular kind of double nominative construction on a par with base-generated multiple topic constructions, one will have to duplicate many of the relevant restrictions (which will be necessary for the proper licensing of the topic in some component of the grammar) for the corresponding double accusative pattern. Worse still, it would be impossible to state the relevant generalization across the passive and active constructions even with the duplication, since there is no place for a topic (or a focus) within the VP, and it is the topic and one of the 'double objects' that share syntactic properties. Anyone who is willing to accept the view that the first accusative-marked nominals in the 'double object' construction is the real direct object but the second
one is not (as indicated by facts about the relative clause formation), therefore, will also have to accept the view that the first nominative-marked nominal in the corresponding passive construction is the real subject, as amply evidenced by a variety of syntactic tests. If so, it turns out that there are some multiple nominative constructions that cannot be treated as multiple focus construction.

As for Dubinsky's analysis of the Japanese double accusative construction involving the predicate -suru 'do', in which each of the accusative-marked nominals is viewed as an initial and final 2, there does not seem to be any reason to believe that this is valid for Korean. That is, there is an alternative analysis that is consistent with the SUL and is supported on independent grounds, and therefore we have no reason to believe that the Korean sentences violate the otherwise well-motivated law. In fact, I suspect that the ascension analysis might be valid for the Japanese 'double object' construction. One difference between the Korean and the Japanese constructions seems to be that in the latter, incorporation of the ascension chômeur is almost always obligatory, due perhaps to the surface constraint that Harada (1973) calls the 'Double-o constraint', which rules out a simple clause with more than one accusative-marked nominal. One piece of evidence for this position is that there are, in fact, well-formed sentences in which the second accusative-marked nominal (a 2-chômeur in the present analysis) surfaces, i.e., without being incorporated. Consider the following Japanese examples:
Columbus-Nom America-continent-Acc discovery-Acc did
'Columbus discovered the American continent.'

b. Amerika-tairiku-wa Koronbusu-ga e hakken-o sita.
America-continent-Top discovery-Acc did
'As for the American continent, Columbus discovered (it).'

c. [Koronbusu-ga e hakken-o sita] tairiku
Columbus-Nom discovery-Acc did continent
'the continent that Columbus discovered'

Sentence (62b) and the relative clause in (62c) show that when the
direct object is phonetically unrealized, the incorporation is not
obligatory, suggesting that the obligatoriness of the incorporation is
due to a tendency in Japanese to avoid more than one accusative-marked
nominal within the simplex sentence. In Dubinsky's analysis, on the
other hand, both (62b) and (62c) will be incorrectly ruled out by the
SUL along with sentences like (62a). Without a deeper understanding
of the constraint relevant to the ungrammaticality of sentences like
(62a), however, it seems premature to draw any definite conclusion as
to the validity of the ascension hypothesis for Japanese.
Notes to Chapter 5

1. For a comprehensive bibliography on this topic, see Suh (1975).

2. This is not to say that the nouns cannot be predicates. As discussed in chapter 3, predicates like i 'be' and toy 'become' select a complement with a nominal predicate.

3. For a more detailed discussion of this point, see B. Park (1981:98 ff.).

4. Though B. Park (1981:112) claims that the "second object nouns" in double accusative constructions are "invariably Sino-Korean", this statement seems to be too strong. Sentence (iib) below, for instance, involves a pure Korean nominal nolay 'singing, song':

   (i) a. Youngsoo-ka Alilang-ul nolay-ha-yessta.
       Nom Acc singing-do-Past
       'Youngsoo sang Arirang.'
   
   b. Youngsoo-ka Alilang-ul nolay-lul ha-yessta.
       singing-Acc dc-Past

Also, some recent loan words from European languages can participate in the double accusative construction, for example:

   (ii) a. ku-ka umsikcem-ul ophun-ha-yessta.
       he-Nom restaurant-Acc open-do-Past
       'He opened a restaurant.'
   
   b. ku-ka umsikcem-ul ophun-ul ha-yessta.
       open-Acc

5. The same can be said of more recent loans from European languages, as we observe in phrases like sepu-lul hata 'to serve (in tennis, volleyball, etc.), ophun-ul hata 'to open', philisvnthu-lul hata 'to present', and so forth. For an extensive discussion of loan words from various languages, see Sohn (forthcoming).

6. Miyagawa (1987) makes similar comments on Sino-Japanese 'Verbal Nouns (VN)'. According to him, "virtually all VNs are Sino-Japanese nouns that originated as a verb in Chinese." He hypothesizes that the theta-role assigning property of the Chinese verbs was inherited by the Sino-Japanese VNs, and that the verb suzu 'do', when it is used as an "affix" or a "verbalizer", lacks theta-role assigning capability, and therefore must inherit this ability from the VN to
which it attaches. When the same verb occurs in isolation (the "free-occuring suru"), however, it has its own theta-grid, and assigns the Agent role to its subject. It is not clear how his analysis would account for the 'double object' construction. (See 5.3 below, where I discuss some evidence suggesting that Japanese does have the 'double object' construction, though it never surfaces due perhaps to the 'Double-Constraint'.)

7. Here, I assume that the non-ascended specifier and the head noun form a compound noun without attempting to justify this position. This assumption itself is not crucial to the analysis, and none of the predictions yielded by the analysis would be seriously affected if sintaywun palkyen 'discovery of a new continent' etc. turned out to be a phrase consisting of two separate words rather than a single word.

8. The same can be said of Possessor Ascension, for instance:

(i) e khi-ka khuta.
    height-Nom is tall
    '(Someone) is tall.'

Sentence (i) without the understood subject cannot be a full-fledged proposition, and thus its truth value cannot be determined without context, for the abstract noun khi 'height' itself cannot be characterized as either tall or short without knowing whose height it refers to.

9. There is a stylistic constraint on the incorporation; i.e., when a monosyllabic Sino-Korean word is involved, the incorporation is obligatory. Compare, for example, (ib) below with (iib), both of which involve words with identical meanings:

(i) a. sitay-ka pyen-ha-yessta.
    time-Nom change-do-Past
    'Time has changed.'

b. * sitay-ka pyen-ul ha-yessta.
    change-Acc do-Past

(ii) a. sitay-ka pyenhwa-ha-yessta.
    time-Nom change -do-Past

b. sitay-ka pyenhwa-lul ha-yessta.
    change -Acc do-Past

Monosyllabic pure Korean nominals, in contrast, are not subject to this constraint, as shown below:
(iii) a. John\(_i\) keki-eyse il-ha-nta.
    Nom there-Loc work-do
    'John works there.'

b. John\(_i\) keki-eyse il-ul ha-nta.
    work-Acc do

10. Sentence (20a) is a slightly modified version of an example in B. Park (1981:96, fn.4).

11. However, ha-ye ci in the case of passive sentences like (28a) is unacceptable, while in some contexts (e.g., (26) above), it is interchangeable with toy. The reason for this variation is not clear to me.

12. In fact, the same thing can be said of B. Park's analysis of the 'double object' construction (cf. (11) above) as it is applied to the corresponding double nominative construction, which would presumably retain the same hierarchical structure between the nominals as indicated in (ii) above.

13. In this and other arguments, I ignore the Inversion construction.

14. I.e., the rule must apply when the condition is met. As far as I can tell, case 'and then' with the given meaning does not allow an overt subject in the complement clause, i.e., the adjunct is subject to the 'Like-Subject Constraint'. (But the same form with the meaning 'because' does allow an overt subject that is different from the matrix subject.) See Kwon (1985:109 ff.) for a classification of complementizers of this type.

15. Another reason to posit a binary branching VP structure for the dative verb cwu 'give' in Korean within the GB framework can be found in sentences like the following:

(i) nay-ka John\(_i\)-uy chayk-ul ku\(_i\)-lul cwu-essta.
    I -Nom Gen book-Acc he -Acc give-Past
    'I gave John's book to him\(_i\).'

If the VP internal structure of (i) above is flat, the sentence will be incorrectly ruled out by some version of Principle C of the Binding Theory (Chomsky 1981), which requires an R-expression to be A-free, because then the pronoun ku c-commands its antecedent John. The only way to prevent (i) from being ruled out by the Binding Theory will thus be by postulating a structure of the form (43b), or (ii) below for sentence (i):
Note that the structure is identical to what B. Park postulates for 'double object' sentences. Whether the underlying word order is patient-benefactive or the other way around is immaterial, because in either case the sentence will be ruled out. Suppose, for example, that the VP structure of dative sentences is flat and sentence (i) is the result of scrambling of the benefactive argument, as indicated below:

[(iii)]

If this is the correct structure, the sentence will be ruled out for the same reason as sentences like (iv) are, i.e., as an instance of crossover:

[(iv)]

Notice that there is no difference between (iv) and (iii) in terms of 'depth of embedding' of the antecedent, or of the relative positions of the trace and the pronoun. (See Saito (1985) for a detailed discussion of 'cross-over' phenomena in Japanese.)

See also Baars and Lasnik (1986) for reasons to postulate a structure like (43b) for the English double object construction as one of the options for some problems with the Binding Theory.

16. The form -ev kwanhayse is derived from the verb phrase -ev kwan-ha 'Dat relate/concern-do' plus the complementizer -ve, which has been known as the infinitival suffix in Korean. (The morpheme -se can be optionally deleted, and its meaning is not clear.) In general, any verb stem plus the infinitival suffix followed by -se forms an adverbal clause denoting either a reason or an action that serves to lay the background for the action or event denoted by the main clause. For example:
(i) pi-ka o-a-se hakkyo-ey an ka-assta.
   rain-Nom come-Comp school-Dat not go-Past
   'Because it rained, I did not go to school.'

In the case of -ey kwanhay(se), however, the form seems to have been
lexicalized as a postposition, the verb never being used as a main
verb. (Note also that the passive agent marker -ey uy-ha-ye(-se) 'Dat dependence-do-Inf (-?)' is of the same morphological shape, though
many linguists now consider it a lexicalized postposition.)

To make a noun modifier form of such phrases, the complementizer
must be replaced by -(u)n, as in the following example:

(ii) chelhak-ey kwan-ha-n yenkwu
   philosophy-Dat relation-do-Comp study
   'study about philosophy'

17. Postpositional phrases in general cannot modify a noun in
Korean. A comparison of the following English phrases with their
Korean counterparts will illustrate this point:

(i) a. the book on the table
   b. * chayksang wuy-ey chayk
      table top-Loc book

(ii) a. the way to New York
    b. * New York-ulo kil
       -to way

18. Dubinsky rejects Harada's account for reasons which I will
not discuss here. See Dubinsky (1985:89-107). I have no definite
explanation to offer for some of the counterexamples to Harada's
constraint cited there.
Chapter 6
Conclusion

In dealing with complex grammatical constructions such as Multiple Case Constructions (MCCs) in Korean, it is essential to take into account both the differences and the similarities between the individual constructions grouped together. The claim that there is more than one type of Multiple Nominative Construction (MNC), for instance, will not be convincing if the hypothesis does not offer an account of the similarities of the different types of MNCs; likewise, any hypothesis that claims all MNCs have the same structure cannot be taken seriously if it does not provide a way of capturing the differences.

This thesis has claimed that ascension-type MCCs are systematically distinct from other types of MCCs in that the former are governed by a set of constraints which the latter are not subject to. It was shown that the restrictions on word order and relativization that hold for Possessor Ascension, Subject-to-Object Raising, Subject-to-Subject Raising (cf. appendix to chapter 3), Quantifier Floating, and Specifier Ascension are irrelevant to the 3-to-2 Advancement or Equi constructions. The ascension hypothesis of these superficially distinct constructions has made it possible to capture generalizations between ascension from subject and ascension from object (direct or indirect) on the one hand, and between monoclausal and biclausal ascensions on the other, while making the
necessary distinction between ascension-type constructions and advancement-type (or other) constructions. For each of the constructions analyzed as an ascension structure, it was shown that the postulated structure is consistent with independent syntactic evidence, in addition to semantic considerations, i.e., the lack of direct semantic relation between the ascendee and the predicate.\(^1\)

As far as Multiple Accusative Constructions (MACs) are concerned, the ascension hypothesis is much less controversial than Multiple Nominative Constructions (MNCs) due to the absence of an obvious alternative comparable to the monostratal (or base-generation) analysis of MNCs. Though advancement processes can also result in MACs, there are only limited types of advancements (at least in Korean), and thus they cannot be responsible for an indefinite number of accusative-marked nominals within a single clause, since, unlike ascension, an advancement cannot apply successively by definition. The existence of ascension-type MACs in Korean will remain a serious challenge to monostratal theories as well as monostratal analyses within multi-level theories.

The primary motivation for the position that all MNCs are structurally identical is the nominative marking of the nominals (e.g., Saito 1985). However, it has been made clear in this thesis (I hope) that nominative-marked nominals in Korean do not constitute a set of homogeneous entities: a nominative-marked nominal can be a final 1, a 1-chômeur, or perhaps a focus (cf. chapter 2), each exhibiting distinct syntactic behavior, e.g., in terms of honorific nominative marking. Furthermore, an ascension 1-chômeur may or may
not be a 1 at an earlier level: some nominals heading an initial P-arc may also be a 1-chômeur at the final level, in which case the predicate nominal is marked nominative though it cannot be marked with the honorific nominative marking (cf. chapter 3). A uniform account of nominative case marking is certainly desirable, but not if it fails to explain the differences between the nominals treated in the same way, e.g., as 'focus', 'subject', or 'NP of S'.

Many of the issues touched upon in this work remain unresolved, including the following:

(1) i. Are Possessor Ascension constructions and Double Subject constructions in fact subject to the same set of constraints in terms of word order and relativization?

ii. Is ascension in principle impossible from transitive subjects? If so, Quantifier Floating cannot be an ascension. How, then, can the parallels between Quantifier Floating and other ascension processes be captured? If not, what makes certain instances of ascension exceptional?

iii. There are some indications that the Inversion Construction must be initially unaccusative. How, then, should the subject properties of the Inversion nominal and the nonsubject properties of the pivot nominal be understood?

iv. It was shown in chapter 3 (appendix) that the nominal predicates of toy- constructions must select a 2, and only an initial 2 can be raised in this case just as in the case of ci- constructions. Is there any principled connection between the two constructions, or is it a matter of coincidence that they are subject to the same constraint?

A number of other issues also remain unclear, including the limited distribution of ascension from indirect object (chapters 2 and 4), and the connection between toy- constructions discussed in chapter 3 and the passive counterpart of the 'Double Object Construction', which I have not pursued in this work. Obviously, many more questions are
left than answered, and the contribution of this work, perhaps, lies
in the issues it has raised rather than in any of the solutions it has
provided.
Notes to Chapter 6

1. The semantic criterion does not hold for Quantifier Floating, in which the ascendee always appears to have a direct semantic relation with respect to the clause to which it ascends. For instance:

(i) a. haksayng seys-i wassta.
    student three-Nom came
    'Three students came.'

b. haksayng-i seys (-i) wassta.
    student-Nom three(-Nom) came

c. haksayng-i wassta.

The truth of (ia) or (ib) in this case implies the truth of (ic), where the ascension chômeur (which is the head of the initial host) is absent, and the same thing seems to be true for all instances of Quantifier Floating (ignoring cases where scope phenomena are involved, e.g., when the verb is negated). This may be due to the fact that the quantified nominal structure in sentences like (ia) is an exocentric construction, as mentioned in chapter 4.
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