RELATIONAL STUDIES ON KOREAN

edited by

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CONTENTS

PREFACE

After nearly a decade of dormancy, our series *Buffalo Papers in Linguistics* resumes with this collection of papers on Korean syntax. Shortly after the last number, which appeared in 1978, the regular schedule of publication was interrupted when several enthusiastic contributors either left the department or became engaged in other projects. We are now able to offer a new beginning to the series, one that follows the original purpose of providing a forum for expressing interesting new ideas.

The unique feature of this working paper is that all three papers give accounts within Relational Grammar for problems in Korean syntax that have been previously studied only within the Generative Framework. Although the papers make no explicit comparison to a Generative treatment, research within Relational Grammar has provided some new and insightful ways of approaching the Korean data.

Youn's paper contains a brief introduction of the basic concepts of Relational Grammar. His paper treats the "Dative Subject" construction showing that it is best analyzed as an Inversion Construction. Arguments are given which parallel the Japanese evidence for Inversion discussed by Perlmutter (1985). In addition, Youn establishes that Korean Inversion is an *impersonal* construction.

Chun argues for Possessor Ascension for some constructions which involve Double Nominative or Double Accusative case marking. Arguments are given which show how these relate to constructions with Genitive Nominative or Genitive Accusative case.

Gerdts formulates a constraint on Passives, gives an analysis of Korean Causatives including Causatives where both the Causer and the Causee are marked Nominative, and discusses constructions which involve both Passive and Causatives.

The judgments on the data reported in the papers were made according to subjective assessments of native speakers. Opinions regarding the data may vary for other individuals. We might attribute some variation to the fact that natural narratives and conversations tend to drop many nominals with case markers, depending on the presuppositions or contexts shared by hearers and speakers.

Special thanks go to all the members of the Korean research group at SUNY-Buffalo--Manki Baek, Myongok Cheon, Bonghee Choi, Soonja Choi, Jinkyu Lee, and Cheong Youn. Their careful consideration of the data has greatly improved the quality of these papers.

All three articles use (various versions) of a special Romanization system--Buffalo transliteration--which was developed in order to avoid diacritics used in other systems such as Yale romanization. See the chart following the preface.

BUFFALO TRANSLITERATION

VOWELS

Simple Vowels

	Front		Mid		Back			
	i	[i]			ɨ	[ɯ]	u	[u]
	ey	[e]	e	[ə]			o	[o]
	ae	[æ]			a	[a]		

Semivowels and Vowel Combinations

ya	[ya]	wa	[wa]
ye	[yə]	we	[wə]
yo	[yo]	wi	[wi]
yu	[yu]		
yey	[ye]	wey	[we]
yae	[yæ]	wae	[wæ]

CONSONANTS

p	[b]	t	[d]	c	[d]	k	[g]
pp	[p]	tt	[t]	cc	[ts]	kk	[k]
ph	[pʰ]	th	[tʰ]	ch	[tʃ]	kh	[kʰ]
		ss	[s]				
		s	[sʰ]				
m	[m]	n	[n]			ng	[ŋ]
		l	[ɾ]/[l]				

INVERSION IN KOREAN

Cheong Youn

5.   Conclusion

Footnotes
References

0 Introduction

This paper examines the structure of clauses in Korean like the following where the nominal traditionally considered to be subject is marked with the dative particle:

(1) John-eykey manhin ton-i   philyoha-∅--ta.
     J.-DAT   much   money-NOM need-PRES-IND
     'John needs much money.'

Within the framework of Relational Grammar (RG), 'dative subjects,' which have been noted in a number of languages including Italian, Russian and Japanese, are referred to as 'inversion nominals' and clauses including these nominals as 'inversion constructions.'

The goal of this paper is to present arguments for the proper characterization of the Korean inversion construction, thereby adding to the cross-linguistic evidence for this construction.

In Sections 1 and 2, I give a brief overview of some basic concepts of RG and the basic structure of Korean to provide a better understanding of the analyses I present in the later sections.

According to RG, inversion nominals are subjects at one syntactic level but indirect objects at the following syntactic level. In Section 3, I argue that this is the case in Korean and give evidence from case marking, floating quantifiers, reflexives, subject honorifics and the -myense construction.

Two different inversion constructions have been proposed in RG: personal inversion where object is advanced to subject by unaccusative advancement and impersonal inversion (analogous to impersonal passive) where a dummy is introduced as object and advanced to subject via unaccusative advancement. In Section 4, I argue that Korean has impersonal inversion by giving evidence from reflexives, subject honorifics, the -myense construction, floating quantifiers and possessor ascension.

In the last Section, I give a brief summary of my arguments in the previous sections and conclude that the Korean data provide further support for the inversion construction as proposed in RG.

1. Outline of Relational Grammar

I give here a brief overview of the basic concepts of RG to provide a better understanding of the analyses I present below.

RG is a theory of syntax which has its roots in transformational grammar (TG) but the emergence of RG in the 1970's was a challenge to the basic assumptions of TG. Structuralist and transformational grammar shared the assumption that clause structure can be represented in terms of linear order and dominance relations. TG added transformations as operations moving constituents from one position in a phrase marker to another but retained the structuralist conception of clause structure. RG challenged this assumption by showing that there are both cross-linguistic and language-internal generalizations that can be captured in terms of grammatical relations but not in terms of phrase structure configurations or morphological case.

RG makes two basic claims that distinguish it from other syntactic frameworks:

(2) a. Grammatical relations must be considered to be primitives of syntactic theory.

   b. Distinct syntactic (i.e., nonsemantic) levels must be posited in the syntactic representations.

Thus the following information is needed in RG for the syntactic characterization of a clause:

(3) a. the grammatical relations which each element bears to other elements in the clause

   b. the level at which each element bears grammatical relations to the other elements

This information is represented in RG by means of relational networks, which represent the grammatical relations and the syntactic level(s) of a clause.

1.1 Grammatical Relations

The notion of grammatical relations (GRs) in RG differs from that in earlier generative work in that RG proposes the explicit recognition of GRs at all levels. This position contrasts with that of Chomsky (1965), which recognizes GRs in deep structure but not in derived structures. Chomsky took a configurational approach to GRs and proposed that GRs such as 'subject of' and 'direct object of' are derivative notions that can be read off structural configurations in phrase markers at the level of deep structure. This position also contrasts with that of Fillmore (1968) which recognizes the subject relation in surface structure but not in earlier stages of derivations. Fillmore accepted Chomsky's configurational approach to GRs and contrasted GRs such as 'subject of' with what he calls 'labelled relations,' such as 'recipient,' 'actor,' 'goal,' 'experiencer,' 'agent,' etc. Chomsky's characterization of relational notions in terms of structural configurations in phrase markers resulted in a notion of GRs in deep structure, and Fillmore's recognition that there is no semantically constant value associated with the notion 'subject of' led him to conclude that it is exclusively a surface structure phenomenon.

RG posits a large repertory of undefined GRs. Among the GRs used in RG are : predicate (P), subject(1), direct object(2), indirect object(3), oblique(obl) [locative(Loc), benefactive(Ben), instrumental(Instr), temporal(Temp), and an undetermined number of others], and chômeur(Cho).

The nominal GRs are organized into classes. The term relations are subject(1), direct object(2), and indirect object(3); the nonterm relations are oblique and chômeur. The term relations are categorized into two partially overlapping subsets: the nuclear term relations (1 and 2) and the object relations (2 and 3). All the foregoing comprise the central relations. In addition to the central relations, there is a class of overlay relations such as Q, Rel, Top and others. The names 'central' and 'overlay' reflect the idea that no dependent can bear an overlay relation without also bearing a central relation. The GRs used in RG can be diagrammatically represented as in (4):

(4)

```
                                            R-signs
                                           /       \
                          Nominal R-signs          Non-nominal R signs
                         /              \
            Central R-signs          Overlay R-signs
           /            \            /   |   \   \
   Core R-signs      Retirement R-signs /   |    \   \
    /     \               |           Q   Rel   Top---
   /       \             Cho
Term R-signs  Oblique R-signs
  /    \      /   |    \    \
 /      \   Loc  Ben  Instr  Temp---
Nuclear Term   Object R-signs
   R-signs       /      \
  /   \         /        \
 1     2       2          3
```
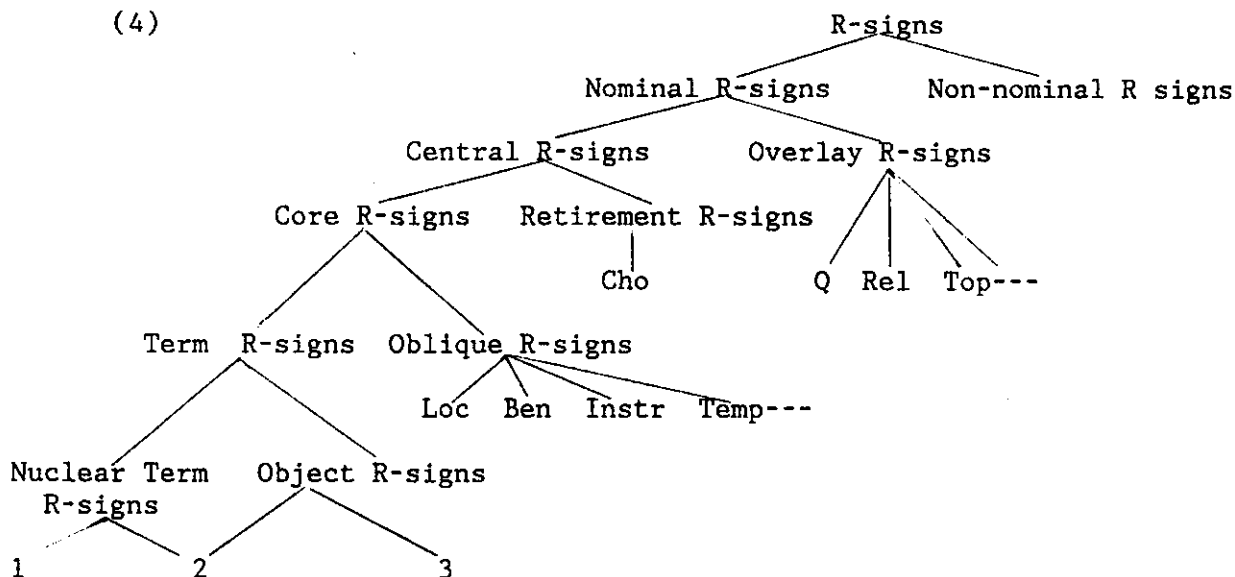
The notion of the chômeur relation is one of the major contributions of RG to linguistic theory. The term 'chômeur' (from French, meaning 'unemployed' or 'idle') refers to the relation assumed by a nominal whose previous relation has been taken over by some other nominal. A nominal that bears this relation in a given stratum does not bear the term relation in that stratum that it bears in a higher stratum by virtue of a hypothesized universal condition, i.e., the chômeur condition. The chômeur condition says that if some nominal, N_a, bears a given term relation in a given stratum, S_i, and some other nominal, N_b, bears the same term relation in the following stratum, S_{i+1}, then N_a bears the chômeur relation in S_{i+1}. A nominal that bears the 1-relation in the last stratum before it bears the chômeur relation can be called a '1-chômeur,' one that bears the 2-relation in the last stratum before it assumes the chômeur relation can be called a '2-chômeur,' and likewise for 3-chômeurs.

The nominal-clausal GRs are also conceived of being organized hierar-chically, as follows:

(5) Relational Hierarchy: 1>2>3> nonterms

The empirical basis of this hierarchy derives from the support that has been amassed for a wide range of claims involving relative clauses, coreferential control, quantifier floating, dummy insertion, raising, causative clause union and many other phenomena.

The GR held by a nominal before its relation changes in the clause is called its 'initial GR.' Although it is not entirely clear what principles would determine the assignment of the GRs at the initial level, Perlmutter and Postal (1977) claim that the assignment of initial GRs is universally determined by principles referring to the semantic roles of the nominal. Thus, as traditionally recognized, agent nominals are initially 1s, patients 2s, etc.

1.2 Relational Networks

RG represents the structure of a sentence as a relational network(RN), instead of phrase markers. An RN involves three types of primitive ele-ments:

    (6) a. a set of nodes, which represent linguistic elements of all
           sorts, including morphophonemic forms of morphemes and
           abstract elements such as clauses, phrases, etc.

        b. a set of relational signs, which are the names of the
           grammatical relations that elements bear to other elements

        c. a set of coordinates, which are used to indicate the level at
           which elements bear grammatical relations to other elements

The basic building block of RNs, which is called an 'arc', can be defined in terms of these three types of primitives. The fact that an element bears a GR at a certain level can be represented by the following arc:

(7) a.   b.

GR_x b   Tail
             R-sign
    c_i Coordinate
     a   Head
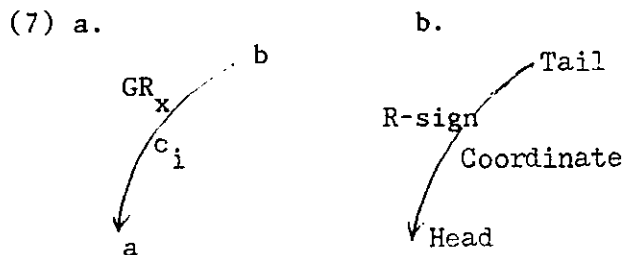
The interpretation of (7) is that element $\underline{a}$ bears the relation whose name is GR_x to element $\underline{b}$ at the c_i level. There are four pieces of information in an arc, as indicated in (7b). The R-sign is the name of GR and the coordi-nate identifies the level of structure at which the relation holds. Thus,

if GR_x is 1 and c_i is c_1, then the arc indicates that a bears the subject relation to b at the first level of b.

A full RN is a set of arcs meeting certain conditions. A clause d with three elements (a, b, c) bearing GRs (x, y, z) at the c_1 level can be represented by the following RN.

(8)
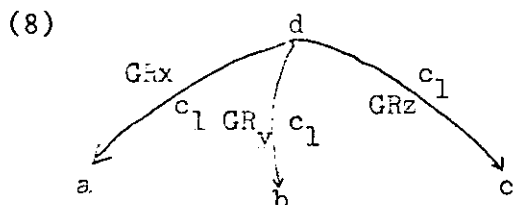
If properly indexed, the arcs could be listed in any sort of array and they would still continue the same RN. No importance is to be attached to their ordering. Consider the following sentence and its RNs, shown in (9).

(9) a. Marcia criticized Sally.

b.
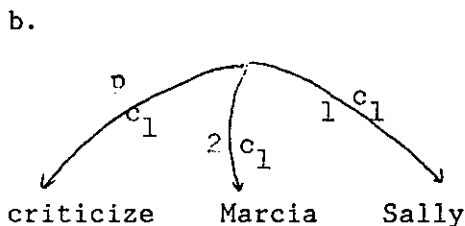
In some grammatical constructions, a nominal bears different relations at different levels of the same clause. Speaking in an informal way, it can be said that such constructions involve 'changes in grammatical relations.' In passive clauses, for example, a nominal bearing the 2-relation at the c_i level, in which there is also a nominal bearing the 1-relation, bears the 1-relation at the c_{i+1} level. The passive clause in (10a) is represented by the RN in (10b).

(10) a. Sally was criticized by Marcia.

b.
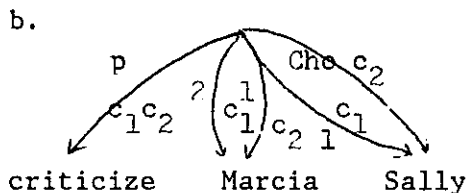
The notion of level can be restated formally in terms of the stratum exemplified as follows: the c_i or ith stratum of clause b, where b is a node and c_i is an arbitrary coördinate, is the set of all arcs with tail b and coördinate c_i. Thus, in the c_1 stratum of (10a), 'criticize' heads a P-arc, 'Marcia' heads a 1-arc, and 'Sally' heads a 2-arc, as shown in (11).

(11)

$$c_1c_2 \quad P \quad ?\ c_1 \quad 1\ c_1 \quad c_1$$

criticize   Sally   Marcia
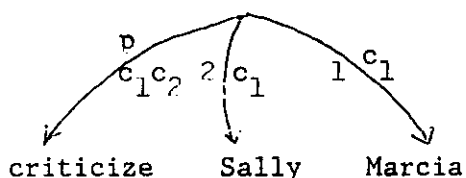
In the c_2 stratum of (10a), 'criticize' heads a P-arc, 'Sally' heads an 1-arc, and 'Marcia' heads a Cho-arc, as represented in (12)

(12)

$$c_1c_2 \quad P \quad 1\ c_2 \quad Cho\ c_2 \quad c_2$$

criticize   Sally   Marcia
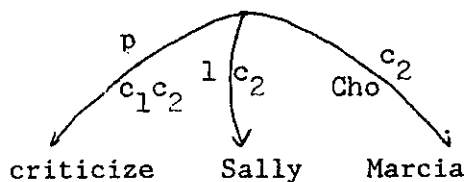
Since RNs with several strata are hard to read, they are often repre-sented in the form of stratal diagrams, which make each stratum stand out more clearly. The stratal diagram corresponding to (10a) is given in (13).

(13)

$$P \quad D \quad 2\ 1 \quad 1 \quad 1$$

criticize   Sally   Marcia
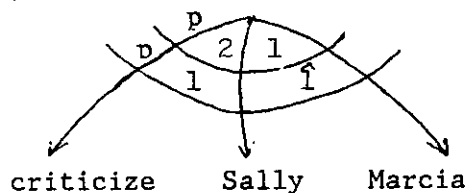
Each stratum is represented by a horizontal row and the GR borne by an element at each stratum is represented by a cell. In stratal diagrams, it is common to use the symbols $\hat{1}$, $\hat{2}$, and $\hat{3}$ to represent 1-chomeur, 2-chomeur, and 3-chomeur respectively. An n-chomeur in a stratum c_i is a nominal heading a Cho-arc in the c_i stratum and n-arc in the stratum immediately before the first stratum in which it heads a Cho-arc.

1.3 Grammatical Constructions

Viewing grammatical constructions in terms of grammatical relations enables one to see that the same constructions recur across languages, despite differences in morphology and word order. This section defines and exemplifies terminology which recognizes various constructions localized in two adjacent strata of a clause.

1.3.1 Advancements

A revaluation is an instance where a nominal heads a GR_x arc in the c_i stratum and a GR_y arc in the c_{i+1} stratum. A revaluation is said to be an advancement if GR_y outranks GR_x on the hierarchy of R-signs: 1>2>3> nonterm R-signs. One example of advancement is passive, which is a 2-to-1 advance-

ment from a transitive stratum. Consider again the RN given in (10b), in which a nominal bearing the 2-relation in the c_1 stratum bears the 1-relation in the c_2 stratum via Passive.

criticize   Sally   Marcia
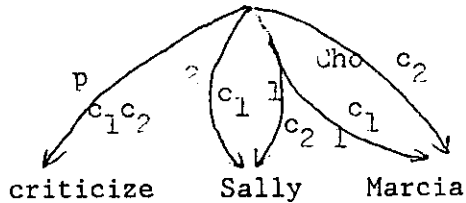
1.3.2 Demotions

A revaluation is said to be a demotion if GR_x outranks GR_y on the relational hierarchy. Antipassive, Inversion and 2-3 Retreat are three types of demotions that have been discussed in the literature of RG. In Inversion constructions, for example, a nominal heads a 1-arc in one stratum and heads a 3-arc in the following stratum. Consider the following RN associated with an Inversion clause in Russian:

(14) a. Takaja   rubaška   nuzna   Borisu.
       such   shirt-NOM   needs   Boris-DAT
       'Boris needs that kind of shirt.'

    b.

Boris
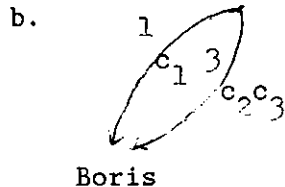
1.3.3 Dummy Constructions

The term 'dummy' is used to refer to nominals such as those under-scored in the English examples below:

(15) a. <u>It</u> rained.

    b. <u>It</u> is clear that he is guilty.

    c. <u>There</u> is a daffodil under the pillow.

    d. John made <u>it</u> clear that he would resign.

Dummy constructions always contain a birth where some nominal heads an arc in a non-initial stratum and heads no arc in the preceding stratum: (15a) is represented by the RN in (16).

(16)
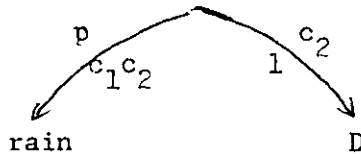
A clause may itself be a dependent of another clause. Ascensions (raising constructions and Possessor Ascension) and unions (causative constructions) are two-clause structures of this type recurring across languages. These constructions have in common the fact that the higher (i.e., upstairs) clause includes one or more non-initial arcs headed by nominals which are also dependents of the lower (i.e., downstairs) clause. The difference between the two constructions is that an ascension rule authorizes upstairs dependency for exactly one down-stairs dependent, while a union rule authorizes upstairs dependency for all downstairs dependents. Detailed descriptions of ascensions and unions are given as they become relevant to the discussion.

1.4 Well-formedness Conditions on RNs

RC claims that the recurrence of constructions across languages is a basic fact that should follow from linguistic theory. Thus, in RG, syntactic theory can be conceived of as the task of characterizing the set of well-formed RNs and developing a set of universal conditions on RNs for natural languages. The task of a grammar of a language is to state which subset of the set of universally available RNs are well-formed in that language by establishing various particular rules and generalizations.

Since the inception of RG, Perlmutter and Postal have proposed a number of laws (i.e., well-formedness conditions on RNs) stated in terms of grammatical relations. The following are some laws governing the form of one-clause RNs. All of them are restated in an informal way for the sake of brevity.

(17) a. The Stratal Uniqueness Law: No two nominals can bear the same term relation in the same stratum.

b. The motivated Chômage Law: A nominal N_a can bear the chômeur relation only if some other nominal N_b assumes N_a's relation.

c. The Final 1 Law: Every basic clause must have a 1-arc in the final stratum.

d. The Nuclear Dummy Law: A dummy never bears any relation other than 1 or 2.

e. The Active Dummy Law: A dummy must put some nominal en chômage (if its departure stratum contains a nuclear term arc).

2. Introduction to Korean

In this section, I give a brief outline of the phonemic system and basic structure of Korean.

2.1 Phonemic System

I show here the phonemic inventory and syllable structure of Korean for a better comprehension of the symbols used in later examples.

2.1.1 Phonemic Inventory

Standard Korean, spoken by educated natives of Seoul, has an inventory of 19 consonants, 2 glides and 8 vowels:

(18) <u>Consonants</u>: p   t   c   k   <u>Vowels</u> i   ɨ   u
                         pp   tt   cc   kk   ey   e   o
                         ph   th   ch   kh   h   ae   a
                         s
                         ss   <u>Glides</u>: y   w
                    m   n   ng
                         l

Note: i) The symbols used here are based on phonemic
            analysis. The symbols <u>ey</u>, <u>ae</u>, and <u>e</u> are used
            instead of ㅔ, ㅐ and ㅓ for typing purposes.

       ii) The symbols <u>pp</u>, <u>tt</u>, <u>cc</u>, <u>kk</u>, <u>ph</u>, <u>th</u>, <u>ch</u>, <u>kh</u>, <u>ss</u>, <u>ng</u>
           in the above chart are unit sounds, not combination sounds.

As can be seen in (18), Korean has three series of stops: /p, t, c, k/, /pp, tt, cc, kk/ and /ph, th, ch, kh/. The pronunciation of each series is described as follows: (cf. Park, 1968: 13)

(19)	initially	medially	finally
p, t, c, k	slightly aspirated	sometimes voiced intervocalically	unreleased
pp, tt, cc, kk	unaspirated; tense	unaspirated; tense	unreleased
ph, th, ch, kh	heavily aspirated	heavily aspirated	unreleased

2.1.2 Syllable Structure

The Korean alphabet (<u>hankɨl</u>) is not a syllabary like Japanese <u>kana</u> but an alphabetic system of signs where each consonant and each vowel has its own symbol. These symbols are written together in groups, each group repre-

senting a syllable. Thus, the syllable in Korean is a phonetic entity predictable in terms of a sequence of phonemes: it consists of an initial, a medial, and a final: (cf. Martin, 1960: 31)

(20) a. Possible syllable initial sounds: /zero, p, pp, ph, t, tt, th, c, cc, ch, s, ss, h, m, n, ng, l/

b. Possible syllable medial sounds: /i, ey, ae, i, e, a, u, o, ya, ye, yo, yu, yey, yae, iy, oy, wi, wa, we, wey, wae/

c. Possible syllable final sounds: /p, t, k, m, n, ng, l/

Not all possible combinations of initial, medial, and final occur. There are many constraints on syllable structure. Examples:

i) Medials beginning with /y/ (i.e. /yey, yae, ye, ya, yu, yo/) do not occur after /s, ss, c, ch, t, th, tt/ except as abbreviations from /i/+vowel (i.e. /iey, iae, ie, ia, ii, io/) or in a few recent loanwords.

(21) <u>sya</u>ssi   'shirt'   <u>syo</u>khi   'shock'

ii) If a syllable with a zero initial is added to a syllable with a consonant final, the final shifts to become the initial of the second syllable.

(22) kili [ki-li]   'length'   salin [sa-lin] 'homicide'
    pam-ey [pa-mey] 'at night'   pul-in [pu-lin] 'as for fire'

iii) When the first syllable ends in /p, t, k/ and the second syllable begins with the same consonant, the first syllable loses its final and the initial of the second syllable doubles.

(23) sippun [si-ppun]   'ten minutes'   mekki [me-kki] 'eating'

iv) When a cluster of two consonants other than those which can start a syllable comes between vowels, the first consonant ends the first syllable, and the second begins the next one.

(24) wenki [wen-ki]   'energy'   mullon [mul-lon]   'of course'

The symbols used in later examples are based on a phonemic analysis. Although each word is based on a phonemic analysis, it is transcribed morphophonemically; that is, each word is always written with the same sequence of symbols, even though its pronunciation may be changed by what precedes or follows it. With inflected words (i.e., verbs), the stems are always written the same way, even if phonetic changes take place when certain endings or suffixes are added to them.

2.2 Basic Structure

Korean is an SOV language. The order of the words in a normal sentence is: subject, indirect object, direct object, predicate.

A Korean sentence is complete and clear with the predicate alone. If it is clear who or what is being spoken of, the subject is usually left out.

The most important part of a Korean sentence is the predicate, which occurs in final position. Korean verbs are inflected words: they consist of a stem with various suffixes affecting meaning. Korean nouns, on the other hand, are not inflected; they can be used with no endings attached to them, or particles are added to show their grammatical relation and semantic role.

In 2.2.1, I outline some verbal categories and in 2.2.2, I briefly discuss nominals and pronominals in Korean.

2.2.1 Verbals

The Korean finite verb complex consists of the following categories, in the order given: a verb stem, valence, voice, aspect, modality, negative, honorific (exalted), tense and mood/honorific (modest), as illustrated in the following:

(25) Totuk-i   Kyengkwan-eykey   cap-hi-e peli-eya ha-ess-ta
     thief-NOM   policeman-by   a   b   c   d   e   f
     'The thief should have been caught by the policeman.'

     a--Verb Stem   d--Modality (Deontic)

     b--Voice (Passive)   e--Tense (Past)

     c--Aspect (Perfective)   f--Mood (Indicative)

The verbal categories can be diagrammatically represented as in (26): [See (26) on page 13]

Tense, mood and honorific (modest) are inflectional categories in a modal expression and therefore all sentences exclusive of minor sentences obligatorily select from the categories of tense, mood and honorific.

2.2.1.1 Causative

Like many other languages, Korean has two types of causatives: syntactic and lexical causatives.

A. Syntactic Causatives

Syntactic causatives, which are morphologically regular and productive, are made by changing the sentence-final verb to an adverbial form by adding -key--the complimentizer; the auxiliary verb ha 'do' is the matrix verb in causatives.

Verbal Categories

(26)

Verb Stem	Valence (Causative) lexical	Valence (Causative) syntactic	Voice (Passive) lexical	Voice (Passive) syntactic	Aspect	Modality	Negative	Honorific (Exalted)
cap	i	key ha	i	e ci	ko iss	e ya(man) ha	ci anh	si
—	hi	key mantɨl	hi	toy	e peli	ki pala	ci mosha	
—	ki		ki		e ssah	lye(ko) ha		
—	li		li		le tɨn	l su		
	u				—	—		
	li				—	—		

Tense Present	Past	Future	Honorific (Polite)	Evidential	Mood Indicative	Interrogative	Imperative (Honorific Modest)
n	ass	keyss	ɨp	te	ta	nɨnya	la
nɨn	ess		sɨp		e	e	e
			cap		ney	nɨka	key
			—		nita	nikka	ɨsio

(27)   a.   Emeni-ka   ai-lɨl   <u>ca</u>-key   <u>ha</u>-yess-ta.
            mother-NOM   child-ACC   sleep-CMP   do-PST-IND
            'The mother made/let/had the child sleep.'

        b.   Emeni-ka   ai-eykɐv   uyu-lɨl   masi-<u>key</u>   <u>ha</u>-yess-ta
            mother-NOM   child-DAT   milk-ACC   drink-CMP   do-PST-IND
            'The mother made/lⁿᵗ/had the child drink milk.'

The adverbial forms with <u>-key</u> can also be embedded under the verb <u>mantɨl-</u> 'make' yielding a causative. Thus:

(28)   a.   Emeni-ka   ai-lɨl   ca-<u>key</u>   mantɨl-ess-ta.
            mother-NOM   child-ACC sleep-CMP make-PST-IND
            (the same as (27a))

        b.   Emeni-ka   ai-eykey   uyu-lɨl   masi-<u>key</u>   mantɨl-ess-ta.
            mother-NOM   child-DAT   milk-ACC   drink-CMP make-PST-IND
            (the same as (27b)}

In addition to these sorts of syntactic causatives, there are special derived causative forms. Verbal nouns (though not all) are often made causative by using the verb <u>sikhi-</u> 'order, cause' in place of <u>key ha-</u>. Thus, with verbal nouns, two kinds of causative formation are possible:

(29)   a.   Emeni-ka   ai-lɨl   kongpuha-<u>key</u> <u>ha</u>-yess-ta.
            mother-NOM   child-ACC study-CMP   do-PST-IND
            'The mother made/let/had the child study.'

        b.   Emeni-ka   ai-lɨl   kongpu-<u>sikhi</u>-ess-ta.
            mother-NOM   child-ACC study-cause-PST-IND
            (the same as (29a))

B. Lexical Causatives

Lexical causatives, which are morphologically irregular and nonproductive, are realized with the suffixation of derivational morphemes such as <u>i</u>, <u>hi</u>, <u>ki</u>, <u>li</u>, <u>u</u>, <u>chu</u>, etc. to the noncausative verb stem. For example:

(30)   a.   Emeni-ka   ai-lɨl   ul-<u>li</u>-ess-ta
            mother-NOM   child-ACC cry-CS-PST-IND
            'The mother made/let/had the child cry.'

        b.   Emeni-ka   ai-eykey   ttek-il   mek-<u>i</u>-ess-ta
            mother-NOM   child-DAT   rice cake-ACC   eat-CS-PST-IND
            'The mother made/let/had the child eat rice cake.'

The same type of derivational suffixes (other than <u>u</u>, <u>chu</u>) can be used to derive passive forms; this is exemplified in 2.2.1.2

2.2.1.2 Passive

Passive verbs in Korean may be classified into three types according to forms:

i) Passive verbs formed with the suffixation of derivational morphemes (i.e. i, hi, ki, li) to the verb stem.

(31) a. Ai-ka   chaek-il ilk-ess-ta.
        Child-NOM book-ACC read-PST-IND
        'The child read the book.'

     b. Chaek-i   ai-eykey/eyiyhae(se) ilk-hi-ess-ta.
        book-NOM   child-by   read-PAS-PST-IND
        'The book was read by the child.'

ii) Passive verbs formed with the substitution of toy- 'become' for ha- 'do' in ha-taking verbs.

(32) a. Kyengkwan-i   John-il cheyphoha-yess-ta.
        policeman-NOM J.-ACC   arrest-PST-IND
        'A policeman arrested John.'

     b. John-i kyengkwan-eykey/eyiyhae(se) chepho-toy-ess-ta.
        J.-NOM policeman-by   arrest-PAS-PST-IND
        'John was arrested by a policeman.'

iii) Passive verbs formed with the addition of the auxiliary verb ci- 'get, become' to the verb ending -e/a.

(33) a. Ai-ka   sensaengnim-il kili-ess-ta.
        child-NOM   teacher-ACC   draw-PST-IND
        'The child drew the teacher.'

     b. Sensaengnim-i ai-eykey/eyiyhae(se) kilie-ci-ess-ta.
        teacher-NOM   child-by   draw-PAS-PST-IND
        'The teacher was drawn by the child.'

Passive verbs which belong to the groups i) and ii) are morphological constructions and those which belong to the group iii) are syntactic constructions. The two types differ in meaning. In general, the former is used to express spontaneous process, natural phenomena, accidents, etc.; the latter is used to express the difficulty of process, the speaker's wish, unspecified agents, etc. The two also show a difference in distribution. Passive verbs formed with the auxiliary verb ci- are seldom used for idiomatic expressions and passive constructions which need a specifier or an object.

The suffixes i, hi, ki, li, etc. can take another auxiliary passive or causative form, regardless of whether they are used as passive or causative. (34) illustrates how the combination of the two forms is represented in the verb complex:

(34) a. Koki-ka   nakk-<u>i-eci</u>-n-ta. (Passive+<u>Passive</u>)⇒ <u>Passive</u>
       fish-NOM hook-PAS-PAS-PRES-IND
       'The fishes are hooked.'

     b. Mikki-ka   koki-lil nakk-<u>i-key</u>   <u>ha</u>-n-ta.(Pas+Caus)⇒Causative
       bait-NOM fish-DAT hook-PAS-CMP do-PRES-IND
       'The bait makes the fishes hooked.'

     c. John-i Mary-eykey elim-il nok-<u>i-key</u> <u>ha</u>-n-ta.(Caus+<u>Caus</u>)⇒Caus
       J.-NOM   M.-DAT   ice-ACC melt-CS-CMPdo-PRES-IND
       'John makes Mary melt the ice.'

     d. Elim-i   nok-<u>i-eci</u>-n-ta. (Causative+<u>Passive</u>)⇒Passive
       ice-NOM   melt-CS-PAS-PRES-IND
       'The ice is made to melt.'

2.2.1.3 Honorific

Korean has syntactic devices to express the speaker's deference towards the person referred to or being addressed.

To express his deference towards the person referred to, the speaker suffixes the honorific morpheme <u>si</u> (which becomes <u>isi</u> after consonants) to the verb stem. This can be seen in the contrast between (35a) and (35b), where (35a) has a plain verbal form and (35b) has an honorific one.

(35) a. Sensaengnim-i   us-ess-ta.
       teacher-NOM   smile-PST-IND
       'The teacher smiled.'

     b. Sensaengnim-i   us-<u>isi</u>-ess-ta.
       teacher-NOM   smile-HON-PST-IND
       (the same as (a))

To honor the person being addressed, the speaker also uses honorific forms which are simultaneoudly represented by the mood suffix occurring finally in the verb. Observe the following pair of sentences:

(36) a. Sensaengnim-i us-isi-ess-<u>ta</u>.
       teacher-NOM   smile-HON-PST-IND/HON (PLAIN)
       'The teacher smiled.'

     b. Sensaengnim-i us-isi-ess-<u>ipnita</u>.
       teacher-NOM   smile-HON-PST-IND/HON (FORMAL)
       (the same as (a))

(36a) is a plain style and (36b) is a formal syle. Honorifics which are represented by the mood suffix are very complicated because of various speech levels and mood distinctions.

In addition to the syntactic devices, the speaker uses honorific nouns, verbs, or particles to show his respect to the person spoken about or to. Examples:

i) Some nouns have honorific counterparts:

(37)   Neutral   Honorific

'house, home'   cip   taek

'(years of) age   nai   yensey

'person'   salam   pun·

'words, saying'   mal   malssim

ii) A few verbs also come in pairs: a neutral and an honorific one:

(38)   Neutral   Honorific

'sleep'   ca-   cumusi-

'eat'   mek-   capsusi-

'stay, exist'   iss-   kyeysi-

'get angry'   sengna-   nohasi-

iii) The particle <u>kkey</u> is honorific; it means the same thing as <u>eykey</u> and <u>hanthey</u> 'to (a person)' but is used only after nouns denoting a specially honored person:

(39) apenim-kkey   'to the father'   sensaengnim-kkey   'to the teacher'

The combination <u>kkeyse</u> is the honorific equivalent of <u>eykeyse</u> 'from (a person).' These phrases meaning 'from' have a special use as subject markers, either alone or followed by the topic marker <u>nin</u>:

(40) Apenim-<u>kkeyse</u>(nin) sae catongcha-lil sa-si-ess-ta.
      father-SM/HON(TOP) new   car-ACC   buy-HON-PST-IND/HON
                                             (PLAIN)

      'Father bought a new car.'

The honorific subject marker is used only for persons, and is thought to be more polite because it is less direct and abrupt.

2.2.1.4 Tense

Tense is one of the grammatical categories that relates the happening described by the verb to time in the past, present, or future. In Korean, tense is an inflectional category, and is represented by the suffixes which are infixed between honorific and mood in a modal expression. Although

opinions are divergent on it, tense in Korean may be divided into three forms: past, present and future, as shown in the following diagram:

(41) Time Division		Past			Pres.	Fut.
		Before-past	Simple Past	After-past		
Tense Forms	Verb	essess	ess	esskeyss	n	keyss
	Adjective/ Predicate Nominal	essess	ess	esskeyss	ϕ	keyss

A. Present Tense

The simple present designates an action or description which occurs at the present moment.

> (42) a. Ai-ka   u-n-ta
> child-NOM   cry-PRES-IND
> 'The child cries/is crying.'
>
> b. Nalssi-ka   mopsi   cha-ϕ-ta.
> weather-NOM   very   cold-PRES-IND
> 'The weather is very cold.'

B. Future Tense

The future tense denotes the speaker's intention or opinion for the future. When the verbal which includes keyss is a statement, it indicates the speaker's intention for the future; when the verbal which includes keyss is a question, the speaker asks the addressee about his future intention or opinion. If the subject or the topic of the sentence is other than the speaker or the addressee, the sentence which includes keyss denotes an opinion or presumption about the subject or the topic in the sentence. Examples:

> (43) a. Nae-ka   kekiey   ka-keyss-ta.
> I-NOM   there   go-FUT-IND
> 'I will go there.'
>
> b. Ney-ka   chinku-lil   manna-keyss-ninya?
> you-NOM   friend-ACC   meet-FUT-IND
> 'Are you going to meet a friend?'
>
> c. Aki-ka   ul-keyss-ta.
> baby-NOM   cry-FUT-IND
> '(I suppose) the baby must cry.'

C. Past Tense

As can be seen in (41), past tense may be divided into three forms: before-past (i.e., pluperfect), simple past and after-past. The simple past base ends with the past tense suffix ss. The before-past verb forms and the

after-past ones are made by attaching the tense suffix, i.e., <u>ess</u> for the before-past and <u>keyss</u> for the after-past, to the simple past base of verbs. This is illustrated in (44). Notice that in (44 b,c) vowel harmony takes place between the verb stem and the past tense suffix.

(44) <u>Base</u>   <u>Before-past</u>   <u>Simple Past</u>   <u>After-past</u>

a. ka- 'go'   ka<u>ssess</u>-   ka<u>ss</u>-   ka<u>ss</u>keyss-

b. ul- 'cry'   ul<u>essess</u>-   ul<u>ess</u>-   ul<u>ess</u>keyss-

c. cap- 'catch'   cap<u>assess</u>-   cap<u>ass</u>-   cap<u>ass</u>keyss-

The uses of past tense are exemplified in the following:

i) The simple past designates an action or description which has been finished before the speech takes place.

(45) Harry-ka   catongcha-lil   sa-<u>ss</u>-ta.
     H.-NOM   car-ACC   buy-PST-IND
     'Harry bought a car.'

ii) The before-past deontes an action or description which happened or ended a relatively long time ago.

(46) Harry-ka   catongcha-lil   sa-<u>ssess</u>-ta
     H.-NOM   car-ACC   buy-PST+PST-IND
     'Harry bought a car (a long time ago).'

The before-past also is used to indicate the more remote of two past actions or descriptions occurring in the same context.

(47) Caknyen-ey   yeki o-ki   ceney, Harry-ka   catongcha-
                                                      lil sa-<u>ssess</u>-ta.
     last year-in here come-NOMINALIZER before H.-NOM car-ACC buy-PST
                                                            +PST-IND
     'Before he came here last year, Harry bought a car.'

iii) The after-past denotes an action or description which the speaker presumes will have been finished before the speech takes place.

(48) Harry-ka   New York-ey   ka-<u>sskeyss</u>-ta
     H.-NOM   N.-to   go-PST+FUT-IND
     '(I presume) Harry will have gone to New York.'

2.2.1.5 Mood

Mood, together with tense and honorific, is one of the inflectional verbal categories in Korean. Mood occurs finally in the verb complex and carries no indication of tense or person/number. For example:

(49) a. Pemin-i   cap-hi-e peli-eya ha-ess-<u>ta</u>.
         criminal(3s)-NOM   catch-VOICE-ASP-MODALITY-PST-IND
         'The criminal should have been caught.'

     b. Uli-ka   sinmun-il   ilk-ko iss-nin che ha-n-<u>ta</u>.
         we(1p)-NOM   newspaper-ACC   read-ASP-MODALITY-PRES-IN<u>D</u>
         'We pretend that we are reading the newspaper.'

Besides, both mood and honorific are realized simultaneously by the suffix
that occurs finally on the verb.

(50) a. Palam-i   pul-ess-<u>ta</u>.
         wind-NOM   blow-PST-IND(DECLARATIVE)/HON(PLAIN)
         'The wind blew.'

     b. Palam-i   pul-keyss-<u>ipnikka</u>?
         Wind-NOM   blow-FUT-IND(INTERROGATIVE)/HON(FORMAL)
         '(Do you think) the wind will blow?'

     c. Palam-a,   pul-∅-<u>ela</u>.
         wind-VOC   blow-PRES-IMP(JUSSIVE)/HON(PLAIN)
         'Wind, blow!'

     d. Palam-i   pul-ess-<u>kumen</u>!
         wind-NOM   blow-PST-IND(EXCLAMATORY)/HON(INTIMATE)
         'The wind blew!'

Because of numerous endings and various speech levels, mood suffixes
show a wide variation in form and meaning. The following is to show inflec-
tion of mood according to the kinds of sentence and levels of speech. (<u>ka</u>-
'go')

(51) Levels of Speech	Declarative (Indicative- Statement)	Interrogative (Indicative- Question)	Jussive (Imperative- Command)	Exclamatory (Indicative- Exclamation)
Plain	kan<u>ta</u>	kan<u>in</u>ya	ka<u>la</u>	kan<u>in</u>kuna
Familiar	kan<u>ey</u>	kan<u>in</u>ka ka<u>na</u>	kak<u>ey</u>	kak<u>ulyo</u> kak<u>ulye</u>
Polite	ka<u>o</u> ka<u>yo</u>	ka<u>o</u> ka<u>yo</u>	ka<u>o</u> ka<u>yo</u>	kak<u>unyo</u>
Formal	ka<u>pnita</u> ka<u>seyyo</u>	ka<u>pnikka</u> ka<u>seyyo</u>	ka<u>sio</u> ka<u>seyyo</u>	ka<u>pnitakilye</u>
Intimate	ka<u>ci</u> ka(*<u>a</u>)	ka<u>ci</u> ka(*<u>a</u>)	ka(*<u>a</u>)	ka<u>kun</u>
Superpolite	ka<u>sipnita</u>	ka<u>sipnikka</u>	ka<u>sipsio</u>	ka<u>sipnitakilye</u>

As in many other languages, prosodic elements such as pitch, stress, juncture, etc. take precedence over mood suffixes in the expression of mood in the real-world context. Thus, as can be seen in (52), -(ɨ)o, -(ɨ)yo, -(ɨ)sio, -(ɨ)seyyo, etc. may be used to express various moods according to the intonation:

(52) Hae-ka   tot-∮-a.
     sun-NOM rise-TNS-MOOD

    a. |231| Hae-ka tot-∮-a. (Declarative)

    b. |233| Hae-ka tot-∮-a? (Interrogative

    c. |241| Hae-ka tot-∮-a! (Exclamatory)

2.2.2 Nominals

Korean nominals are not inflected; that is, they can be used with no endings attached to them. Instead, particles are added to show the relationship between the nominal and the rest of the sentence.

Particles are a class of uninflected words which occur within a sentence or at the end of a sentence. These words are never preceded by a pause; they are regularly pronounced as though they were part of the preceding word. Some particles have only one shape; others occur in either of two shapes determined by the final sound of the preceding word. Korean has various kinds of particles, such as case particles, syntactic particles, delinitative particles, etc.

A. Case Marking

Particles often have more than one meaning as illustrated below:

(53) a. Kispal-i   palam-ey   phelleki-ess-ta.
        flag-NOM   wind-INSTR/CAUS   wave-PST-IND
        'A flag waved in the wind.'

    b. Mary-ka pyeng-ɨlo   kyelsekha-yess-ta.
        M.-NOM   illness-INSTR/CAUS be absent from school-PST-IND
        'Mary was absent from school because of illness.'

(54) a. Mary-ka   hakkyo-ey   ka-ss-ta.
        M.-NOM   school-GOAL   go-PST-IND
        'Mary went to school.'

    b. Kenmul-i   phokphung-ey muneci-ess-ta.
        building-NOM   storm-INSTR   be destroyed-PST-IND
        'The building was destroyed by the storm.'

A partial list of case particles is given in (55):

(55) <u>Case</u> <u>Form</u> <u>Case</u> <u>Marker</u>

  Nominative ka/i

  Genitive   iy

  Accusative li/il

  Dative   eykey, hanthey, kkey (Honorific)

  Instrumental lo(se), lo(sse), ey,

  Locative   ey(se)

  Temporal   ey

  Comitative kwa/wa, hako

  Source   ey(key)se(puthe), loputhe

  Goal   ey, ey(key)kkaci, lo

  Path   lo

  Sometimes case particles are combined with delimitative particles to mark a case. Consider the following example, where the delimitative particle <u>nin</u> adds a contrastive meaning to the preceding word:

  (56) Harry-ka Mary-<u>wa</u>-<u>nin</u> iyakiha-n-ta.
     H.-NOM   M.-COM-TOP talk-PRES-IND
     'Harry talks with Mary (but he does not talk with the
     rest of the company).'

When combined with delimitative particles, case particles are placed before delimitative particles, for case relations are fundamental in the structure of a sentence.

B. Plural Marking

  Korean nominals do not reflect the singular/plural distinction. As a vocabulary, for example, <u>chaek</u> means 'book.' In sentences, however, it is translated variously: 'book, a book, books, etc.' This is another way of saying that Korean nominals may have a plural meaning without any plural marker. It is possible to make Korean nominals unambiguously plural, but it is not imperative to do so as it is with certain English nouns. If it is really necessary, or if he feels like it, a Korean speaker can make his nouns specifically plural. He does this by placing the suffix <u>til</u>, a word meaning something like 'group,' after them:

(57) a. Haksaeng-i   o-ass-ta.
         student-NOM   come-PST-IND
         'A student/The student/The students/Students, etc. came.'

    b.   Haksaeng-tɨl-i   o-ass-ta.
         student-PL-NOM   come-PST-IND
         'The students/Students came.'

2.2.3 Pronominals

In general, pronouns in Korean are divided into two large groups: personal and demonstrative pronouns. Demonstrative pronouns may also fall into various subgroups, depending on what the noun phrase they substitute for refers to. In the following, I briefly mention personal and reflexive pronouns in Korean.

A. Personal Prounouns

Personal pronouns are classified according to person and number, as shown in the following: (cf. Choi, 1961:227)

(58)	Singular	Plural
1st Person	na ce	uli, ulitɨl, uliney cehɨy, cehɨytɨl
2nd Person	ne caney tangsin kɨtae	nehɨy, nehɨytɨl, neneytɨl caneytɨl, caneyney tangsintɨl, tangsinney, tangsinneytɨl kɨtaetɨl
3rd Person	i, ii, ipun, iae kɨ, kɨi, kɨpun, kɨae ce, cei, cepun, ceae	itɨl, iitɨl, iiney, ipuntɨl, iaetɨl kɨtɨl, kɨitɨl, kɨiney, kɨpuntɨl, kɨaetɨl cetɨl, ceitɨl, ceiney, cepuntɨl, ceaetɨl

Note: i) Korean shows no gender distinction in the 3rd person singular pronoun. However, sometimes kɨ or kɨi 'he' and kɨnye 'she' are used to differentiate gender in the 3rd person singular pronoun.
        ii) The choice of personal pronouns is determined by the age or social status of the person spoken to and the distance (either physical or psychological) between the speaker and the person spoken about.
       iii) When tɨl is suffixed to the plural with hɨy or ney, tɨl is always placed after hɨy or ney.
        iv) When combined with the subject marker ka/i, the 1st singlular na and ce become nae and cey respectively.

B. Reflexive Pronouns

Reflexive personal pronouns in Korean include the following:

a. <u>caki</u> -- e.g.　John-i　<u>caki</u>-lil　piphanha-ess-ta.
　　　　　　　　　J.-NOM　self-ACC　criticize-PST-IND
　　　　　　　　　'John criticized himself.'

b. <u>casin</u>-- e.g.　Nae-ka　<u>casiniy</u>　calmos-il　nwiuchi-ess-ta
　　　　　　　　　I-NOM　self-GEN　fault-ACC　regret-PST-IND
　　　　　　　　　'I regretted my own fault.'

c. <u>cey</u>-- e.g.　John-i　Mary-eykey　<u>cey</u>　os-il　ip-hi-ess-ta.
　　　　　　　　　J-NOM　M.-DAT　self's clothes-ACC　put on-CS-PST-IND
　　　　　　　　　　　'John mande Mary put on his/her own clothes.'

d. <u>sisilo</u>-- e.g.　Haksaeng-til-i　<u>sisilo</u>-lil　tolikhyepo-ass-ta
　　　　　　　　　student-PL-NOM　self-ACC　reflect upon-PST-IND
　　　　　　　　　'The students reflected upon themselves.'

e. <u>sonsu</u>-- e.g.　Mary-ka　<u>sonsu</u> i　kes-il　mantil-ess-ta.
　　　　　　　　　M.-NOM　oneself this　thing-ACC　make-PST-IND
　　　　　　　　　'Mary made this herself.'

f. <u>momso</u>-- e.g.　John-i　<u>momso</u>　kekiey　ka-ss-ta.
　　　　　　　　　J.-NOM　oneself　there　go-PST-IND
　　　　　　　　　'John went there himself.'

g. <u>chinhi</u>-- e.g.　Sensaengnim-i　<u>chinhi</u>　Mary-lil　posalphi-si-ess-ta.
　　　　　　　　　teacher-NOM　oneself　M.-ACC　take care of-HON-PST-
　　　　　　　　　　　　　　　　　　　　　　　IND
　　　　　　　　　'The teacher took care of Mary himself.'

The salient characteristics of Korean reflexive personal pronouns can be summarized as follows:

i) Unlike personal pronouns, reflexive pronouns do not need to express number and person.

ii) The reflexive pronoun <u>caki</u> cannot refer back to the first person, even though it is used in a simplex sentence. Observe:

(59) Nae-ka　<u>casin</u>/*<u>caki</u>-iy　calmos-il　kkaetal-ass-ta.
　　　I-NOM　self-GEN　mistake-ACC　be aware of-PST-IND
　　　'I was aware of my own mistake.'

iii) The reflexive pronoun <u>cey</u> is used only as genitive case, and so it is always followed by a noun phrase.

iv) The reflexive pronouns <u>sonsu</u>, <u>momso</u> and <u>chinhi</u> (literally 'personally') have only an emphatic use; that is, they only reinforce the meaning of the noun phrase or pronoun.

3.　The Syntax of Korean Inversion Nominals

Thus far I have given a brief outline of the basic concepts of RG and

the basic structure of Korean needed to understand the analyses I present below.

The present section discusses the syntactic behavior of a nominal that is semantically an experiencer or cognizer but marked with the dative particle in Korean:

(60) <u>Mary-eykey</u> ton-i   philyoha-∅-ta.
     M.-DAT   money-NOM need-PRES-IND
     'Mary needs money.'

(61) <u>Sensaengnim-eykey</u> Mary-ka kilip-∅-ta.
     teacher-DAT   M.-NOM   miss-PRES-IND
     'The teacher misses Mary.'

These dative-marked subjects have been noted in a number of different languages including Georgian (Harris, 1976, 1983), Udi (Harris, 1978), Russian and Kannada (Perlmutter, 1978 b), Italian and Japanese (Perlmutter, 1979c) and Choctaw (Davies, 1981). Examples:

(62) Georgian (Harris, 1983)

     Turme   <u>rezós</u>   samajuri ucukebia   dedastvis.
     apparently Rezo-DAT bracelet he-gave-it-EV mother-for
     'Apparently Rexo gave a bracelet to Mother.'

(63) Italian (Perlmutter, 1979)

     <u>Gli</u>   piacciono le   sinfonie   di Beethoven.
     him-DAT like   the symphonies of
     'He likes Beethoven's symphonies.'

In both examples above, the nominal traditionally considered to be subject (i.e. <u>rezos</u> in (62) and <u>gli</u> in (63)) appears in the dative form. These nominals are called 'inversion nominals' in Perlmutter (1979 c) and clauses including these nominals 'inversion constructions.'

Inversion nominals head a 1-arc in one stratum and a 3-arc in the following stratum. Thus, inversion constructions involve demotion from 1 to 3. The RNs associated with inversion constructions like (62-63) involve subnetworks of the following form:

(64)
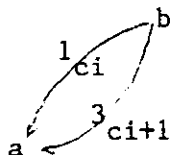
In this section, I argue that the dative-marked nominals in clauses like (60-61) are inversion nominals which head arcs in the subnetwork in (64). To show that these nominals head both an initial 1-arc and a final 3-arc in the clause, I present two arguments for their final 3hood in 3.1 and three arguments for their 1hood in 3.2. In 3.2, I also show that the notion 'working 1' is needed in the grammar of Korean and that the phenomena that must be stated in terms of this notion provide evidence for inversion in Korean.

The predicates which occur in the inversion construction include the following:[1]

(65) philyoha- 'need'   saengkakna- 'remember, be reminded of'

     mocala- 'lack'   kilip- 'miss'

     manh- 'many, much'   pulep- 'envious'

     cek- 'little'   tulyep- 'afraid'

     neknekha- 'sufficient'   coh- 'like, prefer'

     chungpunha- 'sufficient' mip- 'hateful'

     swip- 'easy'   cincelmelina- 'disgusted'

     elyep- 'difficult'   silhcingna- 'tired of'

3.1 The Final 3hood of Inversion Nominals

In this section, I argue for the final 3hood of inversion nominals. In 3.1.1, I point out that the presence of the dative case in inversion nominals provides evidence for their final 3hood, and in 3.1.2, I show that the inability of inversion nominals to launch floating quantifiers gives an argument for their final 3hood.

3.1.1 Dative Marking

Case is indicated by postpositional particles in Korean which assign a grammatical function to nominals.

The case marking rule for term relations can be stated informally as in (66).

(66) Final 1s are NOM(inative); final 2s, ACC(usative); final 3s, DAT(ive).

This is exemplified in the following active clauses and their passive counterparts:

(67) a. Mary-<u>ka</u>   keci-<u>eykey</u>   sakwa-<u>lɨl</u>   cu-ess-ta.
     M.-NOM   beggar-DAT   apple-ACC   give-PST-IND
     'Mary gave an apple to the beggar.'

   b. Sakwa-<u>ka</u>   Mary-eyɨyhae(se)   keci-<u>eykey</u>   cu-eci-ess-ta.
      apple-NOM   M.-by   beggar-DAT   give-PAS-PST-IND
      'An apple was given to the beggar by Mary.'

(68) a. Sensaengnim-<u>i</u>   Mary-<u>eykey</u>   hankɨl-<u>ɨl</u>   kalɨchi-ess-ta.
        teacher-NOM   M.-DAT   Korean-ACC   teach-PST-IND
        'The teacher taught Korean to Mary.'

   b. Hankɨl-<u>i</u>   sensaengnim-eyɨyhae(se)   Mary-<u>eykey</u>   kalɨchi-eci-
                                                                  ess-ta.

      Korean-NOM   teacher-by   M.-DAT   teach-PAS-
                                                           PST-IND

      'Korean was taught to Mary by the teacher.'

In the active clauses (67a-68a), the final 2s (i.e., <u>sakwa</u> in (67a) and
<u>hankɨl</u> in (68a))are marked with the accusative particle <u>lɨl/ɨl</u>, but in the
passive counterparts (67b-68b), since they are final 1s, they are marked
with the nominative particle <u>ka/i</u>.[2]

   As seen in the above examples, nominals heading 3-arcs in the final
stratum (i.e., <u>keci</u> in (67a,b) and <u>Mary</u> in (68a,b) are marked with the
dative particle <u>eykey</u>. Just as nominals heading final 3-arcs are assigned
dative case, so inversion nominals are assigned dative case. Consider again
the earlier examples given in (60-61):

(60) <u>Mary-eykey</u>   tcn-i   philyoha-∮-ta.
     M.-DAT   money-NOM   need-PRES-IND
     'Mary needs money.'

(61) <u>Sensaengnim-eykey</u>   Mary-ka   kɨlip-∮-ta.
     teacher-DAT   M.-NOM   miss-PRES-IND
     'The teacher misses Mary.'

The fact that inversion nominals are assigned dative case gives an argument
that they are final 3s. If inversion nominals are not final 3s, some other
device will have to be added to the grammar to account for the appearance of
the dative case in examples like (60-61). If inversion nominals are final
3s, however, no special device need be added to the grammar to account for
such instances, since the appearance of the dative case will be accounted
for by the same rule that accounts for the dative case in sentences like
(67-68).

3.1.2 Floating Quantifiers

   Quantifiers in Korean (more precisely, numerals in Korean rather than
universal quantifiers) can, under certain conditions, move to the right of
the nominals they modify. This phenomenon, which is generally known as .pa

'quantifier float,' gives an argument that inversion nominals are final 3s, not final 1s.

The condition on floating quantifiers in Korean can be formulated tentatively as follows:

(69) Acting 1s (except advancement chomeurs) and acting 2s can launch floating quantifiers.[4] (cf. Gerdts, 1983)

Under this condition, final 1s can launch floating quantifiers:

(70) a. <u>Tu</u> haksaeng-i   ecey   hakkyo-ey   o-ass-ta.[5]
     2   student-NOM   yesterday   school-to   come-PST-IND
    'Two students came to school yesterday.'

   b. Haksaeng-i   ecey   hakkyo-ey   <u>tul(-i)</u>   o-ass-ta.

(71) a. <u>Sey</u> ai-ka   ecey   pemin-eyiyhae(se)   salhae-toy-
                                                  ess-ta.
     3   child-NOM   yesterday   criminal-by   kill-PAS-PST
                                             IND
    'Three children were killed by the criminal yesterday.'

   b. Ai-ka   ecey   pemin-eyiyhae(se)   <u>seys(-i)</u>   salhae-toy-ess-ta.

Final 2s can also launch floating quantifiers:

(72) a. Mary-ka <u>tu</u> haksaeng-il   ecey   kongwen-eyse   manna-ss-ta.
    M.-NOM   2   student-ACC   yesterday   park-in   meet-PST-IND
    'Mary met two students in the park yesterday.'

   B. Mary-ka   haksaeng-il   ecey   kongwen-eyse   <u>tul(-il)</u> mann-ss-ta.

(73) a. Mary-ka <u>sey</u> ai-lil   ecey   sakwa-lil   cu-ess-ta.
    M.-NOM   3   child-ACC   yesterday   apple-ACC   give-PST-IND
    'Mary gave apples to the three children yesterday.'

   b. Mary-ka   ai-lil   ecey   <u>seys(-il)</u> sakwa-lil   cu-ess-ta.

However, quantifiers cannot float from final 3s:

(74) a. Mary-ka <u>tu</u> ai-eykey   ecey   sakwa-lil   cu-ess-ta.
    M.-NOM   2   child-DAT   yesterday   apple-ACC   give-PST-IND
    'Mary gave apples to the two children yesterday.'

   b. *Mary-ka   ai-eykey   ecey   sakwa-lil   <u>tul(eykey)</u>   cu-ess-ta.[6]

(75) a. Yenge-ka   <u>sey</u> ai-eykey   maeil   kalichi-eci-n-ta.
    English-NOM   3   child-DAT   every day   teach-PAS-PRES-IND
    'English is taught to the three children every day.'

   b. *Yenge-ka   ai-eykey   maeil   <u>seys(-eykey)</u>   kalichi-eci-n-ta.

Now consider the following clauses in which quantifiers have floated off inversion nominals:

(76) a. <u>Tu</u> haksaeng-eykey manhɨn ton-i philyoha-ǿ-ta.
     2   student-DAT   much   money-NOM need-PRES-IND
     'The two students need much money.'

    b. *Haksaeng-eykey manhɨn ton-i <u>tul(-eykey)</u> philyoha-ǿ-ta.

(77) a. <u>Sey</u> ai-eykey kɨtɨl-ɨy sensaengnim-i musep-ǿ-ta.
     3   child-DAT their-GENteacher-NOM   afraid-PRES-IND
     'The three children are afraid of their teacher.'

    b. *Ai-eykey kɨtɨl-ɨy sensaengnim-i <u>seys9-eykey)</u> musep-ǿ-ta.

As with final 3s, quantifiers cannot float from inversion nominals. This provides evidence that inversion nominals are final 3s. If inversion nominals are not final 3s, say, if they are final 1s or final 2s, some special device will have to be added to the grammar to account for the inability of inversion nominals to launch floating quantifiers. However, if inversion nominals are final 3s, no special device need be added to the grammar to account for the ungrammaticality of sentences like (76b-77b), for their ungrammaticality will be accounted for by the same rule that accounts for the ungrammaticality of sentences like (74b-75b).

3.2 The 1hood of Inversion Nominals

In this section, I present three arguments for the 1hood of inversion nominals by showing that inversion nominals behave like 1s with respect to reflexives, subject honorifics and the <u>-myense</u> construction. I also provide here evidence that the notion 'working 1' is needed in the grammar of Korean by pointing out that the latter two arguments involve the phenomena which must be stated in terms of this notion.

The notion 'working 1' was introduced in Perlmutter (1979 c) to provide evidence for the 1hood of inversion nominals and to state some phenomena in Italian syntax. The definition of 'working 1' is as follows:

(78) A nominal is a <u>working 1</u> of a clause <u>b</u> if and only if:
    i) it heads a <u>1</u>-arc with tail <u>b</u>, and
   ii) it heads a final-stratum term arc with tail <u>b</u>.

According to this definition, a nominal must satisfy two conditions to be a 'working 1' of a clause: it must be a 1 in some stratum and it must be a term in the final stratum. Thus, any nominal that heads a 1-arc and a final term arc qualifies as a 'working 1,' which covers the following cases:

(79) a.

b.

c.
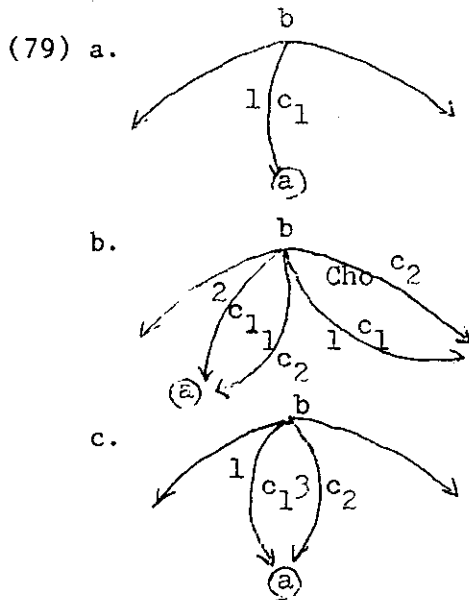
In (79a), a monostratal clause, a is both initial and final 1 and therefore a working 1. (79b) is a passive clause. In (79b), a is a working 1 since it heads a final 1-arc, but c is not a working 1 since it heads a final Cho arc. In (79c), a subnetwork of an inversion clause, a is a working 1 since it heads an initial 1-arc and a final 3-arc.

3.2.1 Reflexives

The fact that inversion nominals can antecede the reflexive casin provides an argument that they head 1-arcs in some stratum.

In monostratal clauses, only a 1 (i.e., both initial and final 1) can antecede the reflexive casin:

(80) John$_i$-i   Mary-$_j$lil   casin$_i$-iy   cip-eyse   salhaeha-yess-ta.
J.-NOM   M.-ACC   REFL-GEN   house-in   kill-PST-IND
'John killed Mary in his/*her own house.'

(81) John$_i$-i   Mary$_j$-eykey   casin$_i$-iy   sacin-il · cu-ess-ta.
J.-NOM   M.-DAT   REFL-GEN   picture-ACC give-PST-IND
'John gave a picture of himself/*herself to Mary.'

So, in monostratal clauses, the condition on antecedents of the reflexive casin can be formulated in terms of '1.'

In passive clauses, however a final 1 can antecede the reflexive casin. Consider the passive counterparts of (82a) and 83a):

(82) a. John$_i$-i   Mary$_j$-lil   casin$_i$-iy   pang-ey   katu-ess-ta.
J.-NOM   M.-ACC   REFL-GEN   room-in   lock up-PST-IND
'John locked Mary up in his/*her own room.'

b. Mary$_j$-ka   John$_i$-eyiyhaese   casin$_j$-iy   pang-ey   katu-eci-ess-ta.
M.-NOM   J.-by   REFL-GEN   room-in   lock up-PAS-PST-IND
'Mary was locked up by John in her/*his own room.'

(83) a. John$_i$-i   Mary$_j$-lil   casin$_i$-iy   kohyang-ilo   ponae-ss-ta.
J.-NOM   M.-ACC   REFL-GEN   hometown-to   send-PST-IND
'John sent Mary to his/*her own hometown.'

b. Mary$_j$-ka   John$_i$-eyiyhaese   casin$_j$-iy   kohyang-ilo   ponae-ci-ess-ta.
M.-NOM   J.-by   REFL-GEN   hometown-to   send-PAS-PST-IND
'Mary was sent to her/*his own hometown.'

Given only the data in (80-83), the condition on antecedents of the reflexive casin could be formulated either in terms of 'final 1' or 'working 1.'

Now turn to inversion clauses. Though final 3s, inversion nominals can serve as antecedents of the reflexive casin:

(84) Mary-eykey   ton-i   casin-iy   yesaeng-il wihaese   philyoha-φta.
M.-DAT   money-NOM   REFL-GEN   afterlife-for   need-PRES-IND
'Mary needs money for her own afterlife.'

(85) Sensaemgnim-eykey   casin-iy   yunyensicel-i   saengkakna-ss-ta.
teacher-DAT   REFL-GEN   childhood days-NOM   remember-PST-IND
'The teacher remembered his own childhood days.'

This shows that the condition on antecedents of the reflexive casincould be formulated only in terms of 'working 1.' However, in passive clauses, if the final subject is inanimate, a final 1-chômeur can serve as antecedent of the reflexive casin. Consider, for example, the passive counterparts of (86a-87a):

(86) a. Mary$_i$-ka   John$_j$-iy   chaek-il   casin$_i$-iy   secae-eyse   palkyenha-yess-ta.
M.-NOM   J.-GEN   book-ACC   REFL-GEN   study-in   find-PST-IND
'Mary found John's book in her/*his own study.'

b. John$_j$-iy   chaek-i   Mary$_i$-eyiyhaese   casin$_i$-iy   secae-eyse   palkyen-toy-ess-ta.
J.GEN   book-NOM   M.-by   REFL-GEN   study-in   find-PAS-PST-IND
'John's book was found by Mary in her/*his own study.'

(87) a. Mary$_i$-ka John$_j$-iy chosanghwa-lil <u>casin</u>$_i$-iy cip-eyse kili-
ess-ta.

M.-NOM   J.-GEN   portrait-ACC   REFL-GEN   house-in   paint-
PST-IND

'Mary pointed John's portrait in her/*his own house.'

b. John$_j$-iy chosanghwa-ka Mary$_i$-eyiyhae <u>casin</u>$_i$-iy cip-eyse
kili-eci-ess-ta.

J.-GEN   portrait-NOM   M.-by   REFL-GEN   house-in

paint-PST-IND

'John's portrait was painted by Mary in her/*his own house.'

These data tell that we cannot formulate the condition on antecedents of the reflexive <u>casin</u> in terms of 'working 1.'

All the aforecited cases considered, the condition on antecedents of the reflexive <u>casin</u> can be given informally as in (88).

(88) Any 1 (i.e. Metastratal 1) can antecede the reflexive <u>casin</u>.

This condition implies that if any nominal can antecede the reflexive <u>casin</u>, it heads a 1-arc in some stratum. Thus, the fact that inversion nominals can antecede the reflexive <u>casin</u> provides an argument that they head 1-arcs in some stratum, specifically in the initial stratum.

3.2.2 Subject Honorifics

As we mentioned in 2.2.1.3, Korean has a system of honorific verbal forms to express the speaker's deference towards the person referred to or being addressed. If the person referred to (i.e. subject) is a personage to be honored, the speaker expresses his deference by suffixing the honorific morpheme <u>si</u> to the stem of the predicate in the clause. If the addressee (i.e. listener) is a personage to be honored, the speaker does so by using honorific verbal endings which are simultaneously reprsented by the mood suffix occurring finally in the predicate. In addition to such syntactic devices, the speaker uses honorific nominals, predicates or particles (if plain forms have their honorific counterparts) to show his deference to the person spoken about or to. This can be seen in the contrast between (89a) and 89b):

(89) a. Ai-ka   pap-il   mek-ess-ta.
child-NOM   rice/meal   eat-PST-IND
'The child ate rice/The child took its meal.'

b. Halapeci-kkeyse   cinci-lil   capsu-si-ess-ipnita.
grandfather-HON   rice/meal-ACC   eat(HON)-SH-PST-IND(HON)
'Grandfather ate rice/Grandfather took his meal.'

In monostratal clauses, the nominal that is both initial and final 1 can trigger a subject honorific if it is a nominal designating a personage to be honored:

(90) a. Sensaengnim-i haksaeng-il manna-si-ess-ta.
teacher-NOM student-ACC meet-SH-PST-IND
'The teacher met the student.'

b. Haksaeng-i sensaengnim-il manna-(*si)-ess-ta.[8]
student-NOM teacher-ACC meet-SH-PST-IND
'The student met the teacher.'

(91) a. Sensaengnim-i haksaeng-eykey chaek-il ponae-si-ess-ta.
teacher-NOM student-DAT book-ACC send-SH-PST-IND
'The teacher sent a book to the student.'

b. Haksaeng-i sensaengnim-eykey chaek-il ponae-(*si)-ess-ta.
student-NOM teacher-DAT book-ACC send-SH-PST-IND
'The student sent a book to the teacher.'

In passive clauses, however, only a final 1 can trigger a subject honorific if it is a nominal designating a personage to be honored:

(92) a. Sensaengnim-i nosangkangto-eyiyhaese salhae-toy-si-ess-ta.
Teacher-NOM highwayman-by kill-PAS-SH-PST-IND
'The teacher was killed by the highwayman.'

b. Nosangkangto-ka sensaengnim-eyiyhaese salhae-toy-(*si)-ess-ta.
highwayman-NOM teacher-by kill-PAS-SH-PST-IND
'The highwayman was killed by the teacher.'

(93) a. Sensaengnim-i haksaeng-til-eyiyhaese kalomak-aci-si-ess-ta.
teacher-NOM student-PL-by interrupt-PAS-SH-IND
'The teacher was interrupted by the students.'

b. Haksaeng-til-i sensaengnim-eyiyhaese kalomak-aci-(*si)-ess-ta.
student-PL-NOM teacher-by interrupt-PAS-SH-PST-IND
'The students were interrupted by the teacher.'

As can be seen in (92-93), final 1-chômeurs (i.e. sensaengnim in (92b-93b)) cannot trigger subject honorifics. The inability of final 1-chômeurs to trigger honorifics shows up clearly in causative clauses like (94) below, where the downstairs 1 is not revalued. (cf. Gerdts 1983)

(94) a. Sensaengnim-i haksaeng-i ttena-key ha-si-ess-ta.
teacher-NOM student-NOM leave-CMP do-SH-PST-IND
'The teacher made the student leave.'

b. Haksaeng-i sensaengnim-i ttena-key ha-(*si)-ess-ta.
student-NOM teacher-NOM leave-CMP do-SH-PST-IND
'The student made the teacher leave.'

In (94a), sensaengnim is the upstairs 1, so that it can trigger a subject honorific, while in (94b), sensaengnim is a final 1-chômeur in the union stratum and therefore cannot trigger a subject honorific.[9]

Given only the above data, the condition on triggers of subject honorifics could be formulated either in terms of 'final 1' or 'working 1'.

To decide between the two formulations, let us turn to inversion nominals. Inversion nominals, though final 3s, can trigger subject honorifics:

(95) Sensaengnim-eykey ton-i   philyoha-si-∅-ta.
     teacher-dat   money-NOM   need-SH-PRES-IND
     'The teacher needs money.'

(96) Halmeni-eykey   ttal-i   kili-usi-∅-ta.
     grandmother-DAT   daughter-NOM   miss-SH-PRES-IND
     'Grandmother misses her daughter.'

Therefore, the condition can be given informally as follows:

(97) Only a working 1 can trigger a subject honorific.

Thus, the fact that inversion nominals can trigger subject honorifics provides evidence both for the formulation of the condition on triggers of subject honorifics in terms of 'working 1' and for the 1hood of inversion nominals in Korean.

3.2.3 The -myense Construction

The fact that inversion nominals can control the -myense construction also provides an argument for the need of the notion 'working 1' and for the 1hood of inversion nominals.

The form -myense is a conjunction which consists of two particles: (i) myen and se. The English equivalent for -myense is 'while', so whatever action is named in the clause following is done at the same time and by the same person as the -myense action. If the particle to is added to this construction, it contributes its usual meaning 'although' or 'even' to the original meaning, but -myense can mean 'although' without the particle to.

In monostratal clauses, the 1 of the main clause can control the -myense construction:

(98) Kongpuhamyense,   John-i imak-il   tit-ko iss-ess-ta.
     study+while   J.-NOM music-ACC listen-ASP-PST-IND
     'While (he was) studying, John was listening to the music.'

(99) Haksaengimyense,   John-i manhin ton-il   ssi-n-ta.
     student+be+though J.-NOM much   money-ACC   spend-PRES-IND
     'Though (he was) a student, John spends much money.'

In (98-99), John is the 1 of the -myense clause as well as the main clause. But John does not appear in the surface of the -myense clause, because John is an Equi victim controlled by the 1 of the main clause.

A 3 cannot control the -myense construction:

```
(100) Haksaengimyense,     John-eykey  ton-il      cu-ess-ta.
      student+be+though    J.-DAT      money-ACC   give-PST-IND
      'Though (he was ) a student, (he) gave money to John.'
```

```
(101) Haksaengimyense,     John-eykey  hyeppakcang-il          ponae-ss-ta.
      student+be+though    J.-DAT      threatening letter-ACC  sent-PST-IND
      'Though (he was) a student, (he) sent a threatening letter to John.'
```

In (100-101), the -myense construction is controlled by the 1 of the main clause (i.e. the unspecified subject of the main clause), not by John which is the 3 of the main clause.

A 2 cannot control the -myense construction either:

```
(102) Haksaengimyense,     John_i-i  Harry_j-lil  salhaeha-ess-ta.
      student+be+though    J.-NOM    H.-ACC       kill-PST-IND
      'Though (he_i was) a student, John_i killed Harry_j.'
```

```
(103) Haksaengimyense,     John_i-i  Harry_j-lil  yukoyha-ess-ta.
      student+be+though    J.-NOM    H.-ACC       kidnap-PST-IND
      'Though (he_i was) a student, John_i kidnapped Harry_j.'
```

(102-103) mean only that John was a student, not that Harry was.

In passive clauses, however, a passive 1 can control the -myense construction:

```
(104) Haksaengimyense,     Harry_i-ka  John_i-eyiyhaese  salhae-toy-ess-ta.
      student+be+though    H.-NOM      J.-by             killPAS-PST-IND
      'Though (he_j was) a student, Harry_j was killed by John_i.'
```

```
(105) Haksaengimyense,     Harry_i-ka  John_i-eyiyhaese  yukoy-toy-ess-ta.
      student+be=though    H.-NOM      J.-by             kidnap-PAS-PST-IND
      'Though (he_j was) a student, Harry_j was kidnapped by John_i.'
```

(104-105) are the passive counterparts of (102-103). Unlike (102-103), (104-105) mean only that Harry was a student, not that John was, which implies that only a final 1, not a final 1-chômeur, can control the -myense construction.

As with subject honorifics, given only the above data, the condition on controllers of the -myense construction could be formulated either in terms of 'final 1' or 'working 1.' However, turning to inversion nominals, we can find evidence that the condition must be formulated in terms of 'working 1' since inversion nominals, though final 3s, can control the -myense construction. Consider:

```
(106) Haksaengimyense,     John-eykey  manhin  ton-i       philyoha-ø-ta.
      student+be+though    J.-DAT      much    money-NOM   need-PRES-IND
      'Though (he was ) a student, John needs much money.'
```

(107) Pucaimyense,   John-eykey   paekmancangca-ka   pulep-∅-ta.
      rich person+be+though J.-DAT   millionaire-NOM   envious-PRES-IND
      'Though (he is) a rich person, John is envious of the millionaire.'

Thus, the fact that inversion nominals can control the -myense construction provides evidence that they must be 1s in some stratum and that the condition on controllers of the -myense construction must be formulated in terms of 'working 1.'

4. The Characterization of the Korean Inversion Construction

In the previous section, I have given arguments for the 3hood and 1hood of Korean inversion nominals by showing that inversion nominals behave like 3s with respect to certain grammatical phenomena and like 1s with respect to others. In this section, I argue that Korean has impersonal--not personal-- inversion by examining the syntactic behavior of the nominative-marked nominal of inversion clauses.

In order to account for inversion structures cross-linguistically, two different constructions have been proposed in RG: personal and impersonal inversion.[10] The structure of personal inversion is exemplified in (108).

(108) Italian (Perlmutter, 1983: 45)

    a. Molte sinfonie di Mozart <u>gli</u> piacciono.
        'He likes many of Mozart's symphonies.'

piacere   molte sinfonie
'like'   di Mozart
        gli   'many of Mozart's symphonies'
      'him'
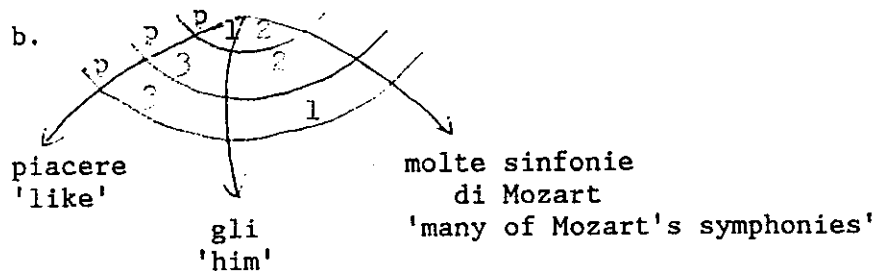
In personal inversionm, the initial 2 advances to 1 via unaccusative advancement.[11] The structure of personal inversion contrasts with that of impersonal inversion given in (109).

(109) Italian (Perlmutter, 1983: 45)

    a. <u>Gli</u> piacciono molte sinfonie di Mozart.
        'He likes many of Mozart's symphonies.'

b.

picere
piacere   gli   molte sinfonie
'like'   'him'   di Mozart
   'many of Mozart's symphonies'
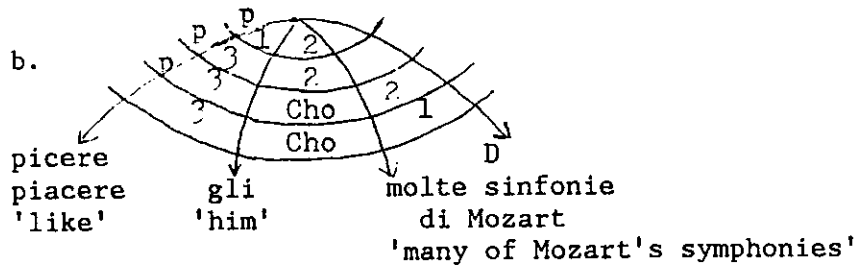
As can be observed in (109), in impersonal inversion, a dummy (invisible in Italian) is introduced as a 2, putting the initial 2 en chômage, and advanced by unaccusative advancement to head a final 1-arc. The two structures differ in two ways: the presence of absence of a dummy and the final grammatical relation of the initial 2.

In 4.1, I argue for the non-1hood of the nominative-marked nominal and given evidence from reflexives, subject honorifics and the -myense construc- tion, and in 4.2, I present two arguments based on floating quantifiers and possessor ascension to show that the nominative-marked nominal must head a 2- arc in some stratum. In 4.3, on the basis of the data discussed, I argue that Korean has impersonal inversion, and I show that Korean inversion clauses have brother-in-law case marking, thereby adding support to my argu- ment.

4.1 The Non-1hood of the Nominative-marked Nominal

The fact that the pivot nominal (i.e., the nominative-marked nominal) is assigned nominative case does not provide evidence that it is a final 1. Sometimes case marking in Korean may be a false clue to the elucidation of grammatical relations. For example, ascension and union 1-chômeurs are assigned nominative case.[12] According to the analysis adopted by Gerdts et. al. (1983) and Chun (1985), clauses like (110) involve both possessor ascen- sion (cf. 4.2.2) and passive:

(110) a. Mary-ka   John-eyiyhae(se) elkul-i   kili-eci-ess-ta.
          M.-NOM   J.-by   face-NOM   draw-PAS-PST-IND
          'Mary's face was drawn by John.'

b.

kili
'draw'
                John   Head   Pos   Mary
                          elkul
                         'face'
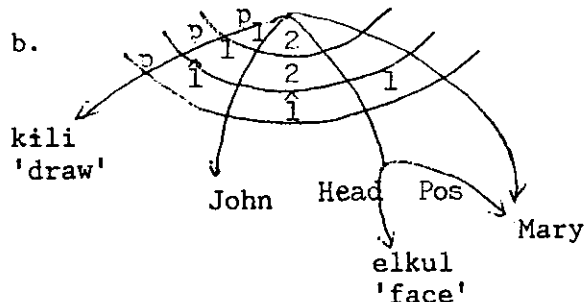
As can be seen in (110a), the 1-chômeur in such constructions is marked nominative.

In this section, I present three arguments for the non-1hood of the

nominative-marked nominal in inversion clauses.

4.1.1 Reflexives

The condition we formulated on antecedents of the reflexive <u>casin</u> (cf. 3.2.1) is that any 1 can antecede a reflexive. The effect of this condition is that all nominals which head 1-arcs in some stratum are potential antecedents of the reflexive <u>casin</u>. However, the nominative-marked nominal cannot antecede the reflexive <u>casin</u>:

(111) John$_i$-eykey Harry$_j$-ka <u>casin</u>$_{i/*j}$-iy sengkong-ilwihaese philyoha-ϕ-ta.

   J.-DAT   H.-NOM   REFL-GEN   success-for   need-PRES-IND

   'John$_i$ needs Harry$_j$ for his$_i$*/his$_j$ own success.'

(112) John$_i$-eykey Harry$_j$-ka <u>casin</u>$_{i/*j}$-iy calmos-ttaemuney tulyep-ϕ-ta.
   J.-DAT   H.-NOM   REFL-GEN   fault-because   afraid-PRES-IND
   'John$_i$ is afraid of Harry$_j$ because of his$_i$/*his$_j$ fault.'

The fact that the nominative-marked nominal of inversion clauses cannot antecede the reflexive <u>casin</u> provides evidence that it does not head a 1-arc in any stratum.

4.1.2 Subject Honorifics

The effect of the working 1 condition on triggers of subject honorifics (cf. 3.2.2) in Korean is that the nominals which head both an 1-arc and a final term arc can be triggers of subject honorifics if they are nominals designating a personage to be honored. The ungrammaticality of sentences like (113b-114b), however, shows that the nominative-marked nominal cannot trigger subject honorifics. Examples:

(113) a. <u>Sensaengnim</u>-eykey ki haksaeng-i philyoha-<u>si</u>-ϕ-ta.
        teacher-DAT   the student-NOM need-SH-PRES-IND
        'The teacher needs the student.'

   b. *Ki haksaeng-eykey <u>sensaengnim</u>-i philyoha-si-ϕ-ta.
        the student-DAT   teacher-NOM   need-SH-PRES-IND
        (The student needs the teacher)

(114) a. <u>Emeni</u>-eykey ttal-i   kili-<u>usi</u>-ϕ-ta.
        mother-DAT   daughter-NOM miss-SH-PRES-IND
        'The mother misses her daughter.'

   b. *Ttal-eykey   <u>emeni</u>-ka   kili-<u>usi</u>-ϕ-ta.
        daughter-DAT   mother-NOM   miss-SH-PRES-IND
        (The daughter misses her mother)

The inability of the nominative-marked nominal to trigger subject honorifics provides evidence that it is not a final 1.

4.1.3 The -myense Construction

The working 1 condition on controllers of the -myense construction specifies that the nominals heading both a 1-arc and a final term arc of the main clause can control the -myense construction. However, the nominative-marked nominal cannot be a controller of the -myense construction:

(115) Mikukinimyense(to), Mary$_i$-eykey yengesensaeng$_j$-i philyoha-ϕ-ta.
American+be+though M.-DAT English teacher-NOM need/PRES-IND
'Though (she$_{i/*j}$ is) an American, Mary$_i$ needs an English teacher.'

(116) Pucaimyense(to), Mary$_i$-eykey paekmancangca-ka pulep-ϕ-ta.
rich person+be+though M.-DAT millionaire-NOM envious-PRES-IND
'Though (she$_{i/*j}$ is) a rich person, Mary$_i$ is envious of the mil-
lionaire.'

This also provides an argument that the nominative-marked nominal of inversion clauses is not a final 1.

4.2 The 2hood of the Nominative-marked Nominal

In the previous section, I argued that the nominative-marked nominal does not head a 1-arc in any stratum. In this section, I give two arguments for the 2hood of the nominative-marked nominal based on floating quantifiers and possessor ascension.

4.2.1 Floating Quantifiers

As mentioned in 3.1.2, acting 1s and acting 2s can launch floating quantifiers in Korean. Since it has already been concluded that the nomina-tive-marked nominal does not head a 1-arc in any stratum, it follows that it heads a 2-arc in some stratum if it can launch floating quantifiers. Consider:

(117) a. John-eykey sey chinku-ka philyoha-ϕ-ta.
J.-DAT 3 friend-NOM need-PRES-IND
'John needs three friends.'

b. John-eykey chinku-ka seys(-i) philyoha-ϕ-ta.

(118) a. Halmeni-eykey sey sonca-ka kili-usi-ϕ-ta.
grandmother 3 grandchild-NOM miss-SH-PRES-IND
'Grandmother misses three grandchildren.'

b. Halmeni-eykey sonca-ka seys(-i) kili-usi-ϕ-ta.

In (117b-118b), quantifiers have floated from the nominative-marked nominal. Thus, the fact that the nominative-marked nominal can launch floating quan-tifiers provides an argument for its 2hood.

4.2.2 Possessor Ascension

Chun (1985) argues that clauses like (119b) involve possessor ascension, as represented in (119c)

(119) a. John-i <u>Mary-iy</u> son-il   cap-ass-ta.
           J.-NOM M.-GEN   hand-ACC hold-PST-IND
           'John held Mary's hand.'

   b. John-i <u>Mary-lil</u> son-il   cap-ass-ta.
       J.-NOM M.-ACC   hand-ACC hold-PST-IND
       (the same as (a))

   c.
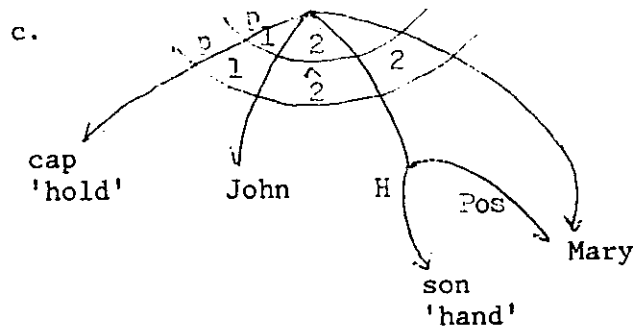
In (119b) the possessor has ascended and usurped the relation of the host nominal (i.e. the possessive phrase.) Chun shows that posssessor ascension in Korean is limited to cases where the host heads a 1-arc or a 2-arc in some stratum; nominals which are final 3s or oblique cannot host possessor ascension.

A possessor may also ascend from the nominative-marked nominal of inversion clauses:

(120) a. John-eykey <u>Mary-iy</u> elkul-i   saengkakna-n-ta.
           J.-DAT   M.-GEN   face-NOM remember-PRES-IND
           'John remembers Mary's face.'

   b. John-eykey <u>Mary-ka</u> elkul-i   saengkakna-n-ta.
       J.-DAT   M.-NOM   face-NOM rememberPRES--IND
       (the same as (a))

(121) a. Mary-eykey <u>emeni-iy</u>   elkul-i   kilip-∅-ta.
           M.-DAT   mother-GEN face-NOM miss-PRES-IND
           (lit. Mary misses her mother's face)

   b. Mary-eykey <u>emeni-ka</u>   elkul-i   kilip-∅-ta.
       M.-DAT   mother-NOM face-NOM miss-PRES-IND
   (the same as (a))

This shows that the nominative-marked nominal of inversion clauses must head a 2-arc in some stratum, since it has been shown that it does not head a 1-arc in any stratum.

4.3 The Structure of the Korean Inversion Construction

Thus far we have seen that inversion nominals head both initial 1-arcs and final 3-arcs in the clause and that the nominative-marked nominal of inversion clauses heads a 2-arc in some stratum. In this section, I argue on the basis of these data that Korean has impersonal inversion, and in order to support my argument, I show that Korean inversion clauses have brother-in-law case marking as proposed in RG.

4.3.1 Impersonal Inversion

The data considered so far are consistent with the structure given schematically in (122):

(122)
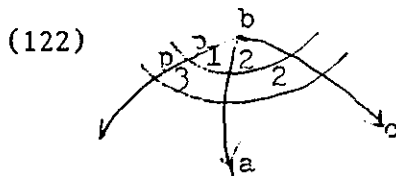
The structure in (122) can account for the properties of inversion nominals since nominal a heads both an initial 1-arc and a final 3-arc. It can also account for the properties of the nominative-marked nominal discussed in 4.1.2 since nominal c heads a 2-arc. Therefore, (122) could be posited as the proper structure of the Korean inversion construction. However, it violates the case marking rule (cf. 3.1.1). Since nominal c heads a final 2-arc, the case marking rule predicts that nominal c is assigned accusative case, but as we have seen in the previous examples, nominal c appears in the nominative case. Furthermore, (122) violates the Final 1 Law, a universal well-formedness condition proposed in RG, for the final stratum of (122) contains no 1-arc. So (122) must be discarded on theoretical grounds.

There can be a number of structures which conform to the Final 1 Law. One possibility is (123), for example, in which a dummy is introduced as a 1 after the demotion of the initial 1 to 3.

(123)
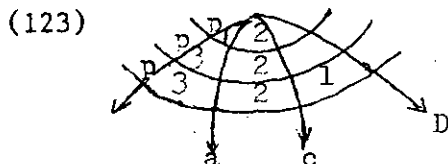
(123) conforms to the Final 1 Law, but it violates the Active Dummy Law (cf. Perlmutter, to appear a) as well as the case marking rule. The Active Dummy requires that a dummy must put some nominal en chômage. In (123), since the dummy is introduced as a 1, it does not put any nominal en chômage. Therefore, this structure violates the Active Dummy Law.

Although there are many possible structures other than (123), the only structure RG laws allow for the Korean inversion construction is the one in which a dummy--this dummy is silent in Korean[13]--is introduced as a 2, put-

ting the initial 2 en chômage, and advanced by unaccusative advancement to head a final-stratum 1-arc. Thus, I posit (124) as the proper structure of the Korean inversion construction.

(124)
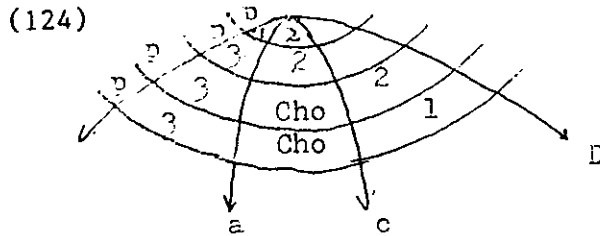
The structure in (124) is, as we have seen earlier, that of impersonal inversion which was proposed by Perlmutter (to appear d) to account for certain data in Italian. (124) not only satisfies the Final 1 Law but also can account for all of the data discussed thus far. The properties of inversion nominals are accounted for since nominal a heads both an initial 1-arc and a final 3-arc, and the inability of the nominative-marked nominal to antecede the reflexive casin and trigger subject honorifics is accounted for since nominal c does not head a 1-arc in any stratum. The fact that the nominative-marked nominal can launch floating quantifiers and host possessor ascension can also be accounted by virtue of the fact that nominal c heads a 2-arc in some stratum.

4.3.2 Brother-in-Law Case

The nominative case of nominal c, together with the fact that nominal c can launch floating quantifiers (cf. 3.1.2), provides further evidence that Korean has impersonal inversion.

On the basis of Italian data, Perlmutter (1983) argues that there are two distinct structures in which the nominative-case nominal determines verb agreement. In personal structures, the nominative-case nominal that determines verb agreement is the final subject, but in impersonal structures, it is the final chomeur, i.e., the nominal which the dummy puts en chomage in the first stratum in which the dummy heads an arc. Let us cite one of his English examples to serve as an illustration. Consider the following construction and its simplified structure:

(125) a. There are some bugs in the soup.

b.
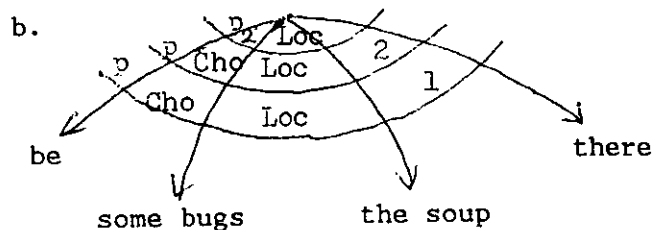
In the there construction in English, verb agreement is determined by the pivot nominal.[14] Thus in (125), the verb is plural in agreement with some bugs. The pivot nominal some bugs and the dummy there are referred to in RG

as 'brothers-in-law.' So in RG, the verb in (125) is said to agree with the dummy's brother-in-law. The brother-in-law relation holds between a dummy and some nominal it puts en chomage in the first stratum in which the dummy heads an arc.[15] This phenomenon of verb agreement which occurs in many languages has been treated in RG as 'brother-in-law agreement.'

(126) Brother-in-Law Agreement (Perlmutter, 1983)

Where the nominal referenced by an agreement rule is a dummy, agreement is determined by the dummy's brother-in-law.

Perlmutter argues that some languages make use of the brother-in-law relation for case marking. If a language has impersonal unaccusative clauses with the structure in (125b), the dummy and the pivot are brothers-in-law and the pivot's case can be accounted for as an instance of brother-in-law case marking. Brother-in-law case marking can be defined as follows:

(127) Brother-in-Law Case Marking (Perlmutter, 1983)

The dummy's brother-in-law agrees with the dummy in case.

According to this definition, the case of the brother-in-law is determined by the dummy. Now let us see how this brother-in-law case marking works in the Korean inversion construction.[16] Consider the following stratal diagram associated with (128):

(128) a. Mary-eykey   ton-i   philyoha-ø-ta.
          M.-DAT   money-NOM need-PRESS-IND
          'Mary needs money.'

   b.

philyoha
'need'

Mary   ton
             'money'
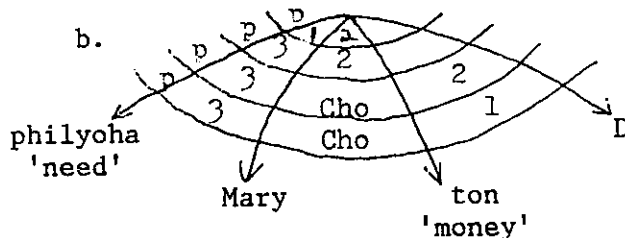
(128b) is the same structure as I am proposing for the Korean inversion construction in (124), where a dummy is introduced as a 2 and advanced by unaccusative advancement to head a final 1-arc. In Korean, as we have seen in 3.1.1, final 1s are marked with the nominative particle ka/i. However, though it is an initial 2 and a final chomeur, the pivot nominal ton is marked with the nominative particle. How can we account for the nominative case of the pivot nominal? If impersonal constructions have the structure in (128b), the pivot's case is accounted for as brother-in-law case marking. In (128b), the dummy and the pivot are brothers-in-law and the dummy is nominative since it is a final 1. The pivot agrees with the dummy in case and appears in the nominative case.

Thus, the nominative case of the pivot nominal provides further evidence that Korean has impersonal--not personal--inversion.

5. Conclusion

I have so far considered the inversion construction in Korean using the notion of grammatical relations and syntactic levels as proposed in RG.

After a brief introduction to RG and Korean morphology in the first two sections, I have argued in Section 3 that the dative-marked subjects in Korean are inversion nominals which head both an initial 1-arc and a final 3-arc in the clause. To give evidence for this, in 3.1.2, I have shown that the dative-marked subjects behave like final 3s with respect to case marking and floating quantifiers and like 1s with respect to reflexives, subject honorifics and the -myense construction. In 3.2, I have also shown that the notion 'working 1' is needed in the grammar of Korean since the latter two arguments (i.e. subject honorifics and the -myense construction) involve phenomena which must be stated in terms of this notion.

In Section 4, I have argued that Korean has impersonal--not personal--inversion by examining the grammatical relation of the nominative-marked nominal of inversion clauses. In 4.1, I have argued that the nominative-marked nominal does not head a 1-arc in any stratum and given evidence from reflexives, subject honorifics and the -myense construction, and in 4.2, I have argued that the nominative-marked nominal heads a 2-arc in some stratum by showing that they behave like 2s with respect to floating quantifiers and possessor ascension. On the basis of these data, in 4.3.1, I have analyzed the Korean inversion construction on theoretical grounds and argued that Korean has impersonal inversion. Finally, in 4.3.2, I have shown that Korean inversion clauses have brother-in-law case marking to provide further support for the impersonal inversion analysis.

Thus, I conclude that the Korean data support not only inversion as proposed in RG but also the conception of clause structure in terms of grammatical relations and syntactic levels, for only an analysis of this type can adequately account for the properties of the dative-marked nominal and the nominative-marked nominal of inversion clauses.

Footnotes

[1]B. Park (1974) claims that verbs like kilip- 'miss,' tulyep- 'afraid,' coh- 'like,' mip- 'hate,' etc. are "subjective verbs" which occur only in a "double subject sentence construction." However, I do not quite agree with his claim. They can occur not only in a double nominative construction but also in an inversion construction, which will be discussed here. He also claims that the first of the two subjects must be first person (singular) in sentences which contain a subjective verb, but this is incorrect, as seen in the following sentence:

```
I     ai-til-in      cencaeng-i   tulyep-ø-ipnita.
this  child-PL-TOP   war-NOM       afraid-PRES-IND
'These children are afraid of war.'
```

[2]ka occurs after a noun ending in a vowel and i after a noun ending in a consonant. The same is true of lil/il. lil occurs after a noun ending in a vowel and il after a noun ending in a consonant. A Korean sentence subject (N+ka/i) usually corresponds to an English sentence subject. So, often, does a Korean topic (N+nin/in). But they are by no means interchangeable. When a subject is first mentioned, the subject particle ka/i is attached to it. Thereafter in the same context, if the subject is repeated, it usually has the topic particle nin/in. nin occurs after a word ending in a vowel and in after a word ending in a consonant.

[3]kkey is the honorific form of eykey, but it cannot be used in this construction. If the speaker wants to express his deference towards the person referred to, he can use kkeyse--the honorific form of eykeyse 'from (a person)'--instead of kkey. Examples:

```
a.  Sensaengnim-eykey  Mary-ka kilip-ø-ta.
b.  *Sensaengnim-kkey  Mary-ka kilip-ø-ta.
c.  Sensaengnim-kkeyse Mary-ka kilip-ø-ta.
```

[4]According to the definition of an acting term, final 1s and final 1-chomeurs are grouped together as acting 1s and final 2s and final 2-chomeurs as acting 2s. An acting term is defined as follows:

A nominal is an acting term$_x$ of clause b if and only if:
i) it heads a term$_x$ arc, A, with tail b whose last coordinate is c_i, and
ii) it does not head an arc B with tail b and with a term R-sign distinct from term$_x$ and with coordinate c_j, where j>i.
     (Perlmutter, to appear, p.39 cited by Gerdts, 1981)

[5]Each of the Korean numerals from 1 to 4 (i.e., hana, tul, seys, neys) and 20 (simul) drops its last sound when it is used right before the word it is counting. Examples:

```
a.  hana  'one'   han salam  'one person'
b.  tul   'two'   tu salam   'two people'
```

When Koreans are counting, say, cows, they use both types of construction: tu so 'two cows' and so tu mali 'two heads of cattle,' but they often prefer the latter type (i.e. so tu mali). The word mali (and myeng in examples below) is a classifier. They can say (11a) in many different ways like below:

```
a.  Tu haksaeng-i hakkyo-ey o-ass-ta.
b.  Haksaeng tul-i hakkvo-ey o-as-ta.
c.  Haksaeng-i tul(-i) hakkyo-ey o-ass-ta.
d.  Tu myeng-iy haksaeng-i hakkyo-ey o-ass-ta.
e.  Haksaeng tu myeng-i hakkyo-ey o-ass-ta.
```

f. Haksaeng-i tu myeng(-i) hakkyo-ey o-ass-ta.

[6]In (74b), if the quantifier drops its case marker _eykey_, it is thought to have floated from the final 2, i.e. _sakwa_.

[7]Both _casin_ and _caki_ require no clausemate condition; that is, they can be construed with any nominal which precedes them even if the nominal (i.e. antecedent) is not in the same clause. This can be seen the following example, which allows for two interpretations:

> [John-i [Mary-ka _casin/caki_-il piphanha-yess-ta]-ko mit-ess-ta.]
> J.-NOM M.-NOM REFL-ACC criticize-PST-IND-CMP believe-PST-IND
> 'John believed that Mary criticized himself/herself.'

As mentioned in 2.2.3, however, the distribution of _casin_ is different from that of _caki_. The crucial differences between the two reflexives are: i) only _casin_ can refer back to the first person and ii) _casin_ is usually construed with the final subject in the clause, while _caki_ can be construed with the final subject or object. Examples:

> i) a. _Nae_-ka _casin_-il piphanha-yess-ta.
>   I-NOM REFL-ACC criticize-PST-IND
>   'I criticized myself.'
>
>   b. *_Nae_-ka _caki_-lil piphanha-yess-ta.
>   I-NOM REFL-ACC criticize-PST-IND
>   (I criticized myself)
>
> ii) a. Mary-ka John-eykey _casin_-iy chaek-il cu-ess-ta.
>   M.NOM J.-DAT REFL-GEN book-ACC give-PST-IND
>   'Mary gave her/*his book to John.'
>
>   b. Mary-ka John-eykey _caki_-iy chaek-il cu-ess-ta.
>   M.-NOM J.-DAT REFL-GEN book-ACC give-PST-IND
>   'Mary gave her/his book to John.'

[8](*X) indicates that the form is grammatical only if X is absent.

[9]Under the CCU-WR (causative clause union without revaluation) analysis, the downstairs 1 becomes a final 1-chomeur in the union stratum since a causative predicate invariably takes an initial 1 and that nominal heads a 1-arc in the union stratum.

[10]The distinction between the two structures is analogous to the distinction between personal and impersonal passives. In personal passives (cf. Perlmutter and Postal, 1977), no dummy element is introduced and the initial 2 advances to 1. In impersonal passives (cf. Perlmutter, 1978; Perlmutter and Postal, to appear a), however, a dummy is inserted as a 2 and then advanced to 1. The simplified structures of personal and impersonal passives are:
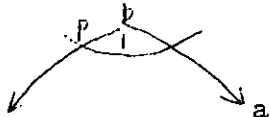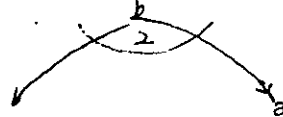
> a. Personal Passive   b. Impersonal Passive
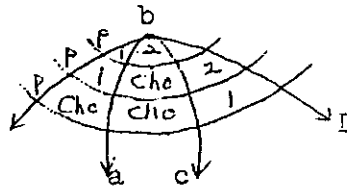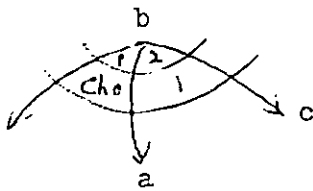
[11]Perlmutter (1978c) argues that initially intransitive clauses are of two types: initially unergative clauses whose initial stratum contains a 1-arc but no 2-arc and initially unaccusative ones whose initial stratum contains a 2-arc but no 1-arc:
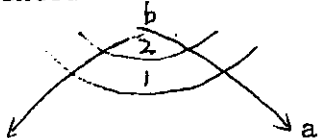
a. Unergative   b. Unaccusative

In connection with the Unaccusative Hypothesis, Perlmutter proposed that every clause with an unaccusative stratum involves an advancement to 1, as represented in the following:

This is referred to as unaccusative advancement. For further discussion, see Perlmutter (1978c).

[12]See Gerdts (1983) for further discussion.

[13]I propose here that the dummy in Korean is phonologically unrealized. The chômage of the initial 2 and brother-in-law case marking are the manifestations of the existence of the dummy element. Silent dummies have been proposed for impersonal passives in Welsh (Perlmutter and Postal, to appear a), Italian (Perlmutter, 1983), etc., and for impersonal inversion in Choctaw (Davies, 1981), Italian (Perlmutter, 1983), etc.

[14]Perlmutter (1983: 3) uses the term 'pivot' to refer to the nominal that is a final 1 in a personal structure and a final chômeur in the corresponding impersonal one.

[15]See Perlmutter (1983) for the formal definition of the brother-in-law relation.

[16]Korean has impersonal clauses with brother-in-law case marking but no brother-in-law verb agreement.

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List of Abbreviations

These are the abbreviations used in the glosses of the Korean data.

ACC	accusative case marker
ASP	aspect
CAUS	causal
CMP	complementizer
COM	comitative marker
CS	causative
DAT	dative case marker
FUT	future tense
GEN	genitive marker
HON	honorific (marker)
IMP	imperative
IND	indicative
INSTR	instrumental
NOM	nominative case marker
PAS	passive
PL	plural
PRES	present tense
PST	past tense
REFL	reflexive
SH	subject honorific marker
TOP	topic marker
TNS	tense

POSSESSOR ASCENSION IN KOREAN

Soon Ae Chun

Introduction

4. Conclusion

Introduction

     In this paper, I provide the syntactic analysis of Possessive constructions in terms of Relational Grammar (RG). In Korean, some possessors can be marked either in the Genitive case '+y' or in the Nominative/Accusative case 'i or ka'/'l+l' as seen in (1) and (2):

(1) a. Mary- +y elkul - i yeypp+- ta
      Mary-GEN face- NOM pretty- end

   b. Mary -ka   elkul-i   yeypp+-ta
      Mary-NOM   face -NOM pretty-end
      'Mary's face is pretty.'

(2) a. John -i Mary-+y   meli-l+l   cal-at-ta
      John-NOM Mary-GEN   hair-ACC cut-Pst-end

   b. John -i Mary-l+l   meli-l+l cal- at- ta
      John-NOM Mary-ACC hair-ACC cut-Pst-end
      'John cut Mary's hair.'

For possessive constructions like (1b) and (2b) above, I propose in section 1 and 3 an analysis involving Possessor Ascension: the Possessor takes over the grammatical relation of the entire possessive phrase (Host), i.e., subject and object in (1a) and (2a) respectively. More specifically, I propose Possessor Ascension to subject for the sentences like (1b) and Possessor Ascension to object for the sentences like (2b).

     Evidence for the Possessor Ascension construction is given in section 1 and 2 based on several rules of Korean such as Scrambling, Topicalization, a condition on 'myense-' construction, Quantifier Float, and a constraint on ci-Passive. The Possessor Ascension analysis is contrasted with some alternative analyses, for example, the 'Quirky Case' analysis, the Doubling analysis and the Base Generation analysis.

In section 3, I discuss the consequences of this study from the perspective of Universal Grammar. In RG, two types of Possessor Ascension are recognized: (i) those which obey the Relational Succession Law (RSL, discussed in section 4) which says that a Possessor assumes the same grammatical relation as its Host) and (ii) those which do not obey RSL. My analysis of Possessor Ascension in Korean gives further evidence for the existence of the Possessor Ascension construction in the description of language and justifies RSL as a Universal law. In the same section, I will also discuss language specific conditions on the Possessor Ascension construction: (i) the limitation to "inalienable possession" and (ii) the Host limitation to subject and object only.

1.   Possessor Ascension to 1

Korean has parallel sentences like (3-4) where Possessors 'the woman' in (3) and 'the tree' in (4) are marked with different cases[1]. In (3), the Possessor is marked in either Genitive case '-iy' or Nominative case '-ka', and the whole possessive phrase is marked in a Nominative case. In (4) the Possessor is marked in either Genitive case or Accusative case, and the whole possessive phrase is marked in an Accusative case.

(3) a.   Kɨ yeca- ɨy elkul - i   yeppɨ- ta
         the woman-GEN   face-NOM   pretty-end

   b. Kɨ   yeca- ka elkul- i   yeppɨ- ta
              -NOM   -NOM
      'The woman's face is pretty.'

(4) a. Mary-ka kɨ namu- ɨy kaci- lɨl   cal- at- ta
            -NOM the tree-GEN branch-ACC   cut-Pst-end

   b. Mary-ka kɨ namu- lɨl kaci- lɨl   cal- at -ta
                        -ACC   -ACC
      'Mary cut the branches of the tree.'

I posit that although (3b) and (4b) share the same initial level of structure with (3a) and (3a), respectively, they also involve Possessor Ascension.

Nominals marked in the Genitive case in (3a) and (4a) 'woman' and 'tree' bear initial 'Pos' relation. The possessive noun phrases 'woman's face' and 'tree's branches' called 'Host' are initial 1 in (3a) and initial 2 in (4a) to

each clause as seen in (5a) and (5b). The possessed nominals
like 'face' and 'branches' in the above examples which serve
the heads of the possessive noun phrases, Host, are bearing
initial 'Head' relation to the whole noun phrase, abbrevi-
ated to 'H' in RN.

(5)   a.   b.

woman face   tree branches
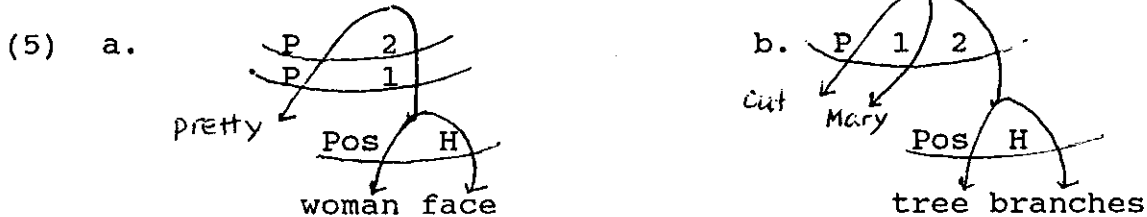
In Possessor Ascension construction for sentences like
(3b) and (4b), Pos ascends out of the noun phrase to assume
the grammatical relation of its Host, putting the grammati-
cal relation of the Host en chomage. Thus, the Pos in (3b)
is posited as the final 1, involving the Possessor Ascension
to 1, assuming the grammatical relation of its Host 'woman's
face' which is 1 of the clause initially. Similarly, the
Pos in (4b) 'tree' assumes the grammatical relation of its
Host 'tree's branches', initial 2, to bear final 2 of the
clause, putting the Host en chomage, that is, 2-Cho. Since
the Pos ascends to assume the grammatical relation of its
Host in the Possessor Ascension, we say that this type of
ascension obeys the universal law called the "Relational
Succession Law"[2] (Perlmutter 1982) which states that the
ascendee assumes the grammatical relation borne by the Head
out of which it ascends.

For sentences like (3b), I posit Possessor Ascension to
subject (1 in the diagram) out of the host bearing the 1
relation, as represented in the stratal diagram (6). I
assume that the Possessor Ascension in Korean obeys the
Relational Succession Law.

(6)

pretty H   Pos

face the woman
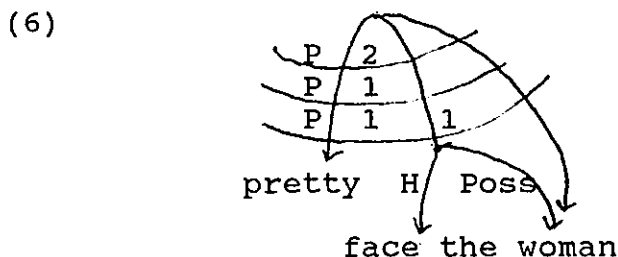
Sentence (4a) is posited to have no Possessor Ascension as

in (5b), while for sentences like (4b) where the Possessor is marked Accusative case, I posit Possessor Ascension to object (2) as presented in (7).

(7)

cut Mary branches tree
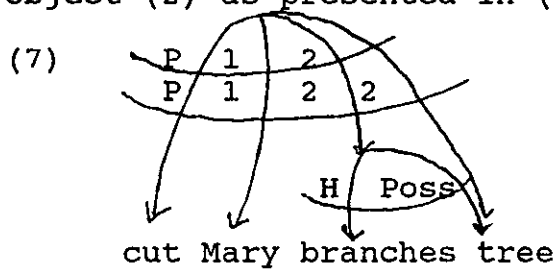
I contrast the Possessor Ascension construction analysis with other potential alternative explanations and justify the analyses represented in (6) and (7) by showing evidence that nominals with the initial possessor relation to a noun phrase are the subject of the clause in the case of Possessor Ascension to subject and the object of the clause in the case of Possessor Ascension to object. Further, I show the initial grammatical relation of the whole possessive phrase (final 1 in (6a) and final 2 in (7a)) bears the Chomeur relation in Possessor Ascension construction: 1 in the Possessor Ascension to 1 and 2 in the Possessor Ascension to 2.

Three alternative candidates could account for the parallel sentences like (3) and (4) as opposed to the Possessor Ascension analysis. These are:

(1)   The Quirky case analysis: Some Possessors are marked Genitive case or Nominative case as in (3), or Genitive case or Accusative case as in (4).

(2)   The Doubling analysis: Both the Possessors and the Heads in (3b) and (4b) have the same grammatical relations in the same stratum: 1s in (3b) and 2s in (4b). This analysis challenges the universal Stratal Uniqueness Law which prohibits doubling of subjects or objects.

(3)   The Base Generation Analysis: The Possessor in (3b) is base generated as final 1 and the Head as Chomeur. The Possessor in (4b) is claimed to be base generated as final 2 and the Head as 2-Chomeur.

I show arguments for the Possessor Ascension analysis and against these three alternative analyses for sentences like (3b) and (4b). The arguments are based on the rules and constraints in Korean grammar.

1.1. Possessor Ascension to 1

The followings are the set of data which is concerned with the present study:

(8) a. John- +y   him - i   sey- ta
       John-GEN strength-NOM strong-end

    b. John- i   him - i   sey- ta
       John-NOM strength-NOM strong-end
       'John's strength is strong. (= John is strong)'

(9) a. Mary-+y son-i   kasi- ey ccil- i - et-ta
       Mary-GEN hand-NOM thorn-LOC prick-PAS-Pst-end

    b. Mary-ka   son-i   kasi-ey ccil- i- et- ta
       Mar-NOM hand-NOM thorn-LOC prick-PAS-Pst-end
       'Mary's hand is pricked on the thorn.'

(10) a. i sangcem- +y cuin- i pakw- i- et- ta
        this shop-GEN   owner-NOM change-PAS-Pst-end

     b. i sangcem -i   cuin-i   pakw- i -et-ta
        this shop-NOM owner-NOM change-PAS-Pst-end
        'The owner of this shop has changed.'

(11) a. i violin- +y   cul- i   cal   kk+ne- ci- n- ta
        this violin-GEN string-NOM easily cut-PAS-Pres-end

     b. i violin- i cul- i   cal kk+ne- ci- n- ta
        this violin-NOM string-NOM easily cut-PAS-Pres-end
        'The strings of this violin are easily cut.'

(12) a. tak- +y   tel- i ppop- hi- et- ta
        chicken-GEN feather-NOM detach-PAS-Pst-end

     b. tak-i   tel- i   ppop- hi-et-ta
        chicken-NOM feather-NOM detach-PAS-Pst-end
        'the feathers of a chicken were pulled out.'

I claim that the (b) sentences above all involve Possessor Ascension: the Possessor assumes the grammatical relation of

the possessive phrase. The relation of the (a) and (b) sentences is that both have the same initial grammatical relations. The Nominative case marking for the Possessor in the (b) sentences is contrasted with the Genitive case marking for the same nominal in the (a) sentences. This can be one of the reason why I argue that the (b) sentences involve the Possessor Ascension. Other arguments also show that the Possessors in the (b) sentences behave differently from those in the (a) in terms of the grammatical relations: the Possessors in the (b) sentences behave like 1s as predicted by an analysis involving Possessor Ascension, while those in the (a) sentences do not. The support for Possessor Ascension is integrated in the arguments against each alternative analysis.

1.2. Arguments against the 'Quirky Case' analysis

The Quirky Case analysis says that the Possessors in the data (8-12) are marked either Genitive case as in the set of (a) sentences or the Nominative case as in (b) sentences, differently from other Possessors which do not allow the case alternations as in (13):

(13) a. Minho- +y chaek- i tteleci- et- ta
            -GEN   book -NOM fall   -Pst-end

    b. * Minho-ka   chaek- i tteleci- et-ta
                -NOM   -NOM
        'Minho's book fell down.'

In other words, the parallel between sentences (a) and (b) in (8-12) is due to the peculiarity of the case marking system for a certain kind of Possessor in Korean. However, an adequate analysis should also predict correctly the behaviour of the elements in the clause. There are some instances where the Quirky Case analysis needs extra mechanisms to explain certain phenomena thus complicating Korean grammar rather than simplifying it. By showing these instances where the Quirky Case analysis has trouble in explaining, I argue for the Possessor Ascension analysis over the Quirky Case analysis. These two analyses differ in the prediction of the behaviour of the Possessor nominal. According to the Possessor Ascension analysis, the Possessor behaves like the final 1 of the clause, whereas according to the Quirky Case analysis, it behaves like a Possessor of a possessive noun phrase. Thus the following arguments are to show whether the Possessor nominal is a final 1 or a

Possessor.

1.2.1. Scrambling

Korean has a relatively 'free' word order[3] because of Scrambling. I will not go into the details about Scrambling in general, but rather concentrate on the scrambling of final 1s and Possessors in a clause. The final 1 of the clause can be scrambled with other elements of the clause, while the Possessor can not as seen in the following examples.

(14) a. John-i   ecey   card -1+1 sa - t- ta
         John-NOM yesterday card -ACC buy -Pst-end

     b. ecey   John-i   card-1+1   sa- t-ta
         yesterday John-NOM   card-ACC buy-Pst-end

     c. ecey   card -1+1 John-i   sa- t- ta
         yesterday card-ACC   John-NOM buy-Pst-end
         'John bought a card yesterday.'

(15) a. John- +y sensaengnim-i ecey   Kim kun-+1   po- at-ta
         John-GEN   teacher-NOM   yesterday Mr.Kim-ACC see-Pst-end

     b.* sensaengnim-i ecey   John- +y Kim kun- +1 po-at-ta
         teacher-NOM   yester.   John-GEN Mr.Kim-ACC see-Pst-end
         'John's teacher saw Mr. Kim yesterday.'

The nominal 'John' in (14) is the final 1 of the clause and it can be located in various places in the clause to give different word orders, whereas 'John' in (15) bears the Possessor relation to the possessive phrase 'John's teacher' and it cannot be scrambled with other elements of the clause. The Possessor 'John' in (15) does not have the alternating Nominative case which means that (15) does not involve ascension.

Now let's turn our attention to the Possessor nominal under discussion. Under the Quirky Case analysis, the nominal bears the Possessor relation so that it should not be possible to scramble it as other Possessors like 'John' in (15), no matter what kind of case it is marked. However, the so-called 'Nominative case marked' Possessor can be scrambled as in the data (17), while the Genitive case marked Possessor behaves like other Possessors 'John' in (15) as in (16).

(16) a. Mary- +y   meli- ka   halucongil   ap-at-ta
          -GEN   head-NOM all day long sick-Pst-end

   b.* meli-ka halucongil Mary- +y   ap-at-ta
       head-NOM all day   -GEN   sick-Pst-end
       'Mary's head was sick all day.'
       (= Mary had a headache all day.)

(17) a. Mary-ka   meli-ka   halucongil   ap-at-ta
         -NOM   head-NOM   all day   sick
     b. meli-ka Mary-ka   halucongil ap-at-ta
     c.? meli-ka halucongil   Mary-ka   ap-at-ta
       'Mary had a headache all day long.'

The Quirky Case analysis, therefore, has to come up with
another explanation as to why the Nominative possessor
behaves differently from other possessors by adding into the
grammar the exceptional behaviour of the Nominative posses-
sor with respect to Scrambling. This complication and dif-
ficulty in explaining the Scrambling phenomenon is caused by
the assumption that the Nominative possessor bears a Posses-
sor relation rather than any other grammatical relation in a
clause. If we abandon this assumption, as we do in the Pos-
sessor Ascension analysis in which the Nominative possessor
is a final 1 rather than a final Possessor of the noun
phrase, Scrambling can be simply explained.

Above all, the reason why the whole possessive phrase
can scramble as seen in (14) but the Possessor alone can not
in (15) is that the whole phrase forms a constituent so that
scrambling the Possessor alone breaks a constituent to give
ungrammaticality as in (15b). However, the fact that the
Possessor in the Nominative case in (17b) can be scrambled
shows that it is a constituent independent of the whole pos-
sessive phrase. The different constituency for the Posses-
sor also is neatly shown in the Possessor Ascension
analysis: the Possessor in (15) marked with the Genitive
case is a Pos to the noun phrase showing that it is in the
constituent of the whole noun phrase, whereas the Possessor
in (17) marked with the Nominative case is a final 1
predicting that it can behave like any other 1s.

In the Possessor Ascension analysis, the Nominative
possessor is the final 1 hence it may scramble, whereas the
Genitive possessor is a final Pos hence it cannot scramble.
This difference in behaviour is predicted.

1.2.2. Quantifier Float

Quantifiers in Korean can optionally float away from the head nominal they modify and stand alone with or without the same case marker of the head nominal[4]. When the head nominal is a final 1 of the clause, the Quantifier can float (see (18b) and (18c)), but when the head bears a Possessor relation to the noun phrase, the Quantifier cannot float from its head (see (19b)).

(18) a. sey haksaeng-i Buffalo-ey   ecey tochakha-yet-ta
        three student-NOM   -LOC yester. arrive-Pst-end

     b. haksaeng-i Buffalo-ey set/ses-i ecey tochakha-yet-ta
                              three(NOM)

     c. haksaeng-i Buffalo-ey ecey set/seys-i tochakha-yet-ta
                                    three(NOM)
        'Three students arrived at Buffalo yesterday.'

(19) a. sey haksaeng- +y pumonim-i ecey yeki-ey o-at-ta
        three stud. -GEN parents-NOM yest. here come-Pst-end

     b. * haksaeng- +y pumonim-i ecey set/ses-+y yeki-ey o-at-ta
                                       three(GEN)
        'The parents of three students came here yesterday.'

Applying Quantifier Float to the possessor with two alter-nating case markers, the Quirky Case analysis predicts that the Nominative possessor as well as the Genitive one can not float their Quantifiers since both of them bear the Posses-sor relation in the clause. However, this prediction turns out to be incorrect, since the Nominative possessor actually can float its Quantifier (see (21b)) as opposed to the Geni-tive marked one (see (20b)).

(20) a. sey totuk-iy elkul-i baekci-chelem chanbaekha-yet-ta
        three thief-GEN face-NOM paper-like pale-Pst-end

     b.* totuk- +y elkul-i baekci-chelem set/ses- +y ....
                                         three(GEN)
        'The faces of three thieves were pale like a paper.'

(21) a. sey totuk-i elkul-i baekci-chelem changbaekha-yet-ta
            -NOM   -NOM

     b. totuk-i elkul-i baekci-chelem set/ses-i changbaekha-yet-ta

three(NOM)
'The faces of three thieves were pale like a sheet of paper.'

To accommodate this exceptional behaviour of the Nominative marked Possessor, the Quirky Case analysis needs an additional statement in the grammar.

In contrast, the Possessor Ascension analysis predicts different behaviour of the Nominative marked possessor from the Genitive marked one, since the former is a final 1 of the clause via Possessor Ascension, hence can float its Quantifier whereas the latter is a final Possessor, hence can not float its Quantifer. The asymmetry of Quantifier Float in (20) and (21) is automatically explained without complicating the rule of Quantifier Float.

1.2.3. Topicalization

The same kind of argument against the Quirky Case analysis holds for Topicalization[5]. The 1 of the clause can be topicalized; topics which are usually in the sentence initial position, have a Topic marker '+n/n+n' as in (22b).

(22) a. achim-ey John-i kokakola-1+1 masi- et- ta
        breakfast   -NOM coke-ACC   drink-Pst-end
        'At breakfast, John drank coke.'

     b. John- +n achim-ey kokakola-i+1 masi-et-ta
           -TOP breakfast coke-ACC   drink-Pst-end
        'As for John, he drank coke at breakfast.'

In contrast, Possessors cannot be topicalized as seen in (23b).

(23) a. on+1 Younhi- +y chinchek-i Seoul-ey   ka-t-ta
        today   -GEN relative-NOM Seoul-LOC go-Pst-end
        'Today Younghi's relative went to Seoul.'

     b.* Younghi-n+n on+1 chinchek-i Seoul-ey ka-t-ta
            -TOP today relative-NOM   -LOC go
        'As for Younghi, her relative went to Seoul today.'

If the possessor nominal bears the Pos-relation, regardless of whether it is in the Genitive case or Nominative case, as claimed in the Quirky Case analysis, the nominal should not be able to be topicalized. Contrary to this

prediction, some possessor nominals, those that show case alternations, can be topicalized, as seen in (24c).

(24) a. kamki-taemuney John- +y ko-ka   makhi-et-ta
        cold-because   -GEN nose-NOM stuffy-Pst-end

    b. kamki-taemuney John-i   ko-ka   makhi-et-ta
                      -NOM   -NOM
       'Because of the cold, John's nose is stuffy.'
       (= John has a stuffy nose because of the cold)

    c. John- +n kamki-taemuney ko-ka   makhi-et-ta
            -TOP cold-because   nose-NOM stuffy-Pst-end
       'As for John, his nose is stuffy because of the cold.'

Is this possessor nominal an exception which allows the topicalization so as to be treated differently from other Possessors, or does this possessor nominal have different syntactic structures when it is in the Genitive case and when it is in the Nominative case ? If we assume that the possessor nominal 'John' in (24) bears different grammatical relations in the clause, that is, Pos-relation to the possessive noun phrase 'John's nose' when it is Genitive as in (24a) and final 1 of the clause when marked Nominative as in (24b) under the Possessor Ascension analysis, the ability of topicalization   as   in   (24c)   is   automatically explained:Topicalization of 'John' as in (24c) comes from (24b) in which 'John' is final 1, not from (24a) where 'John' bears a Pos-relation[6].

In summary, Topicalization shows that case alternations of the Possessor does not simply show that the nominal bearing the Pos-relation, Possessor, is either in the Genitive or in the Nominative, but show that the Possessor bears different grammatical relations as claimed in the Possessor Ascension analysis.

1.3. Arguments against the Doubling Analysis

The 'Doubling' analysis of sentences like (8-12) which have the possessor with the case alternation, either in the Nominative case or in the Genitive case, claims that when the possessor is Nominative as in (8b-12b), both the Possessor and the Head are final 1s; that is, such sentences are 'double subject' constructions. There are two versions of the Doubling analysis: one is a mono-stratal analysis without ascension as represented in (25a), and the other an

ascension analysis where the Possessor ascends to 1 without
putting the Head nominal en chomage as represented in (25b).

(25) Mary-ka   palmok-i   ppi- et-ta
        -NOM ankle-NOM sprained-Pst-end
     'Mary's ankle was sprained.'
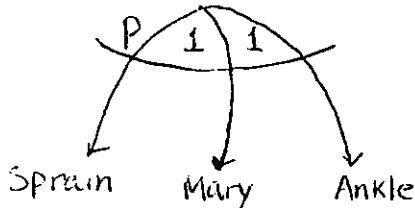
    a. [-ascension]   b. [+ascension]
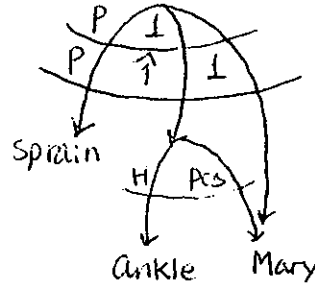
I will not discuss the difference between these two versions
of the Doubling analysis and not argue for one over the
other. The important issue is that both of the versions
claim multiple 1s in the final stratum. Therefore, the Dou-
bling analyses challenges the universal law called "Stratal
Uniqueness Law (SUL)" (Perlmutter 1980) which claims that no
more than one nominal can head an arc with a given term
relation in a given stratum. In the Doubling analysis, both
the Possessor and the Head, Mary and ankle, are final 1s in
the final stratum, violating the SUL.

     This Doubling analysis contrasts with the Possessor
Ascension analysis where the Possessor ascends to 1 of the
clause and puts the Head en chomage hence there is only one
final 1 (the ascended Possessor). As opposed to the Doubling
analysis, the Possessor Ascension analysis does not violate
the Stratal Uniqueness Law. I devote the following sections
to argue against the Doubling analysis and for the Possessor
Ascension analysis by giving evidence that the Head behaves
not like the 1 of the clause, but like a 1-chomeur. The
arguments are based on the constraints on '-myense' con-
struction, Topicalization and Scrambling.

1.3.1. Scrambling

     Another piece of evidence that the Head nominal does
not behave like final 1 of the clause comes from "Scram-
bling". (cf. 1.2.1) In the earlier section, I showed that 1s
can be freely scrambled, but Possessors cannot. In this

section, I show that the Head nominal actually behaves dif-
ferently from other 1s of the clause in terms of Scrambling.

The final 1s of the clause can be freely scrambled in
Korean:

(26) a. ecey John-i Mary-1+1 mann-at-ta
        yesterday -NOM   -ACC meet-Pst-end

    b. John-i ecey Mary-1+1 mann-at-ta
       'John met Mary yesterday.'

Accordingly, the Possessor in the Nominative case also can
be scrambled as freely as the 1s like 'John' in (26). How-
ever, the Head nominal can not be scrambled as in (27c).

(27) a. ecey   sikyey-ka cul-i   kk+neci-et-ta
        yesterday watch-NOM chain-NOM torn-Pst-end

    b. sikyey-ka ecey   cul-i kk+neci-et-ta
       watch-NOM yesterday chain-NOM torn-Pst-end

    c. *cul-i   ecey sikyey-ka   kk+neci-et-ta
       chain-NOM yest. watch-NOM   torn-Pst-end
       'Yesterday the chain of the watch was torn.'

This data also shows that the Head bears a different gram-
matical relation from that of Nominative Possessors. Under
the Doubling analysis, the Head should be able to scramble
as freely as other 1s, since it itself is a 1 of the clause.
However, data like (27c) shows that this analysis needs some
other device to explain why the Head (putatively a 1) should
behave differently from other 1s.   As opposed to this
analysis, the Possessor Ascension analysis provides an
explanation why the Head should behave differently from 1s;
the Head nominal is a 1-Cho rather than a 1 hence its
difference in terms of Scrambling.

1.3.2. Topicalization

The Topicalization of terms (1s, 2s and 3s) is dif-
ferent from that of non-terms, especially chomeurs, in the
degree of contrastivity. Chomeurs when topicalized tend to
have a strong contrastive listing meaning, whereas terms
when topicalized seem to have both a plain and contrastive
meaning.

(28) a. i   chaek- +n elini-ey+yhaese neli   il-hi-et-ta
        this book-TOP children-by   widely read-PAS-Pst-end
        'As for this book, it was read widely by children.'

    b. ? elini-ey+yhaese-n+n i   chaek-i neli il-hi-et-ta
        children-by- TOP   this book-NOM widely read-PAS
        'By the children, this book is widely read.'

    c. elini-ey+haese-n+n i chaek-i neli il-hi-et- +na
        children-by-TOP   this book-NOM widely read-PAS-Pst-but

        taehaksaeng-ey+yhase-n+n cenhye il-hi-cian-at-ta
        college students-by-TOP at all read-PAS-NEG-Pst-end
        'By children, this book is read widely, but
        by the college students, it is not read at all.'

The 'book' in (28a), the final 1 of the clause, does not
necessarily have to contrast with somthing else when topi-
calized. However, 'by the children' which is a 1-Cho
requires a contrastive clause when topicalized as in (28c);
otherwise, it is not natural or not acceptable as in (28b).

    There are also different readings when the Possessor is
topicalized and when the Head is topicalized in the sen-
tences where the Possessor and the Head are both Nominative.

(29) a. Mary-n+n elkul-i kaci-ey k+lhi-et-ta
               -TOP face-NOM branch-LOC scratched-Pst-end
     'As for Mary, her face was scratched by the branch.'

    b.?/* elkul- +n Mary-ka kaci-ey k+lhi-et-ta
     'As for face, Mary got scratched by the branch.'

    c. elkul- +n Mary-ka kaci-ey k+lhi-et-ko
       face-TOP   -NOM branch-LOC scratched-Pst-COM

       tali-n+n tol-ey keli- et-ta
       foot-TOP rock-LOC triped-Pst-end
       'As for the face, Mary was scratched by the branch,
       and as for the foot, she was tripped by the rock.'

When the Possessor is topicalized as in (29a), it has both
plain and contrastive readings, but when the Head is topi-
calized as in (29b) and (29c), it has a strong contrastive
listing reading; it seems abnormal without contrastivity as
in (29b). This again shows that the Head nominal does not
behave like a 1 whereas the Possessor behaves like other 1s

with respect to Topicalization. The Doubling analysis can not explain this difference, whereas the Possessor Ascension analysis correctly predicts that the Head will be different from other 1s since it is not a final 1.

1.3.3. Constraint on -myense Construction

The '-myense' construction in Korean parallels the English gerund construction. It does not have an overt subject, rather it is controlled by the subject of the main clause[7].

(30) pikonha-myense, John-i Mary-1+1 kal+chi-et-ta
     tired-though,   John-NOM   -ACC teach-Pst-end
     'Though he was tired, John taught Mary.'
     '* Though she was tired, John taught Mary.'

If the Head is final 1 of the clause as the Doubling analysis predicts, then it should also serve as the controller of the '-myense' clause. However, the Head can not be interpreted as a subject of the '-myense' clause in the Possessor Ascension analysis, since it is proposed as a 1-chomeur instead of a final 1.

(31) pissa-myense,   vaiolin-i cul-i   cal kk+eci-n-ta
 expensive-though, violin-NOM string-NOM easily torn-Pre-end
 '* Although the strings of the violin are expensive,
    they are easily torn.'

In the above example, the thing which is interpreted as a subject of being expensive is the Possessor 'violin', not the Head 'strings'. This shows that the Head does not behave as other final 1s do, so that the Doubling analysis predicts wrongly about it. However, the Possessor Ascension analysis predicts correctly that the Head can not do what other 1s can do such as serving as the subject of the '-myense' clause, since it bears final chomeur relation rather than 1.

1.4. Difficulties for Possessor Ascension

In the previous sections, I argued for the Possessor Ascension analysis over the Doubling analysis for the sentences with Possessors marked in the Nominative case . However, there exist some phenomena which apparently favor the Doubling analysis over the Possessor Ascension analysis. In this section, I show how these phenomena can be accommodated

within the Possessor Ascension analysis.

1.4.1. Case Marking

The Case Marking system in Korean (see Footnote 1) states that final 1s are marked in the Nominative case '-i/-ka'. We have seen in the sentences under study that the Possessor and the Head are both marked in the Nominative cases. Therefore, the Case Marking rule as it stands suggests that both of them must be final 1s of the clause. However, we have also given arguments that the Head nominal does not behave like 1 of the clause: it does not serve as the subject of the '-myense' construction as opposed to other 1s; when topicalized, it has strong contrative listing reading only whereas other 1s give both plain and contrastive reading; it is not freely scrambled unlike final 1s of the clause. Therefore, some part of the grammar of Korean should be revised. At this point, I decide to revise the Case Marking rule of Korean instead of abandoning the Possessor Ascension analysis since this analysis explains several phenomena discussed in earlier sections which other alternative analyses fail to explain.

Assuming that Possessor Ascension to 1 in Korean obeys the Relational Succession Law (cf. Footnote 2), the Head nominal is a 1-Cho. Therefore, the case marking rule for Korean should be complicated to state that the Nominative marks 1-Chos as well as 1s. In RG, this is captured by the notion "Acting terms"; for example: Acting 1 is the class of nominals which are either final 1 or 1-Chomeurs, Acting 2, either final 2 or 2-Chomeurs. Therefore, the Case Marking rule for the Nominative case can be accommodated with the notion of "Acting 1". Acting 1s in Korean are marked in the Nominative case '-i/-ka' under the Possessor Ascension analysis. Although beyond the limits of this discussion I should mention that other nominals argued to be 1-Cho appear in Nominative in Korean[8].

(32) emeni-ka Mary-ka os- +1 ip-key ha-yet-ta
     mother-NOM   -NOM clothes-ACC wear-CAU-Pst-end
     'Mother made Mary wear the clothes.'

(32) is proposed to involve the Causative Clause Union construction without revaluation (Gerdts 1983) where 'Mary' ascends to bear a 1-Cho relation in the upstairs clause in accordance with the Stratal Uniqueness Law ('mother' is 1 in the upstairs). Note that 'Mary' is in the Nominative

case[9].

Therefore, the analysis of Possessor Ascension to 1 not only explains the behaviour of the Head nominal not as 1 of the clause in terms of other syntactic rules, but also can simplify the Case Marking system as much as the Doubling analysis with the introduction of the notion of Acting terms.

1.4.2. Quantifier Float

When the Quantifier floats from the head nominal it modifies, it can optionally be marked with the same case marker as the head nominal. (see (18) in section 1.2.2) In the example (18), the head nominal bears the 1 of the clause so that the nominal which launches the quantifier seems to be only 1s of the clause. However, in the sentences for which I proposed the Possessor Ascension to 1, the Quantifier floats from the Head which is marked in the Nominative case '-i/-ka' so that it also can be marked in the Nominative case.

(33) a. k+ cikong-i sey   sonkalak-i kikyey-ey cali-et-ta
         the worker-NOM three finger-NOM machine-LOC cut-Pst-end

     b. k+ cikong-i sonkalak-i kikyey-ey set/ses-i cali-et-ta
         worker-NOM finger-NOM mach.-LOC three(NOM) cut
        'Three fingers of the worker were cut on the machine.'
        (also irrelevantly:
        'The fingers of three workers were cut on the machine')

The Head in the Possessor Ascension to 1 bears the 1-Cho relation so that the Quantifier Float rules seeems to be complicated in the Possessor Ascension analysis to include 1-Cho as well as 1 of the clause, whereas under the Doubling analysis the Head is proposed to bear 1 of the clause so that the rule of the Quantifier Float can be stated simply as 1 of the clause.

As argued in the previous section, the Doubling analysis might state the Case Marking rules in Korean more simply than the Possessor Ascension analysis, but it can not explain the behaviour of non 1-hood of the Head in terms of other syntactic rules such as the Scrambling, Topicalization and the condition of '-myense' construction. In addition, the Possessor Ascension analysis can make use of the notion of "Acting terms" to simplify the Case Marking rules in

Korean. Therefore, the Quantifier Float can refer to this notion of Acting terms to capture both 1 and 1-Cho, allowing nominals like the Head to launch the Quantifiers.

In conclusion, the apparent problems for the analysis of the Possessor Ascension to 1 such as Case Marking rules and Quantifier Float are accommodated with the introduction of the notions like "Acting 1s" so that we do not have to abandon the Possessor Ascension analysis in favor of the Doubling analysis.

1.5. The Base Generation analysis

The Base Generation analysis proposes two different constructions for sentences with the same meaning but with different case marking for the Possessor. The Possessor in the Genitive case as in (34a) is a Pos as represented in (35a), whereas the Possessor in the Nominative case as in (34b) is a 1 and the Head is a 1-Cho as represented in (35b).

(34) a. k+ pianist- +y sonkalak-i kil-ta
       the pianist-GEN finger-NOM long-end

     b. k+ pianist-ka sonkalak-i kil-ta
        the pianist-NOM finger-NOM long-end
        'The pianist's fingers are long.'
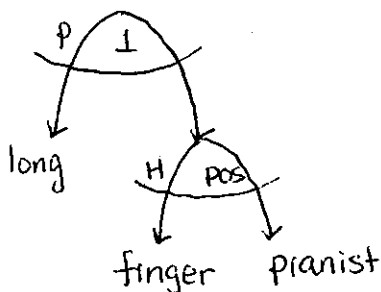
(35) a.   b.
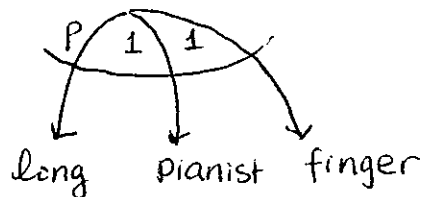
Note the Base Generation analysis claims that the Head is a 1-Cho in the clause as does the Possessor Ascension analysis. However, it differs from the Possessor Ascension analysis in the claim that no ascension is involved but rather the Head nominal bear the Cho-relation in the initial

level.

I devote this section to argue against the analysis of the Base Generation of 1-Chomeur for the Head for the sentences where the Possessor and the Head both are marked in the Nominative case as in (b) sentences of (8-12).

1.5.1. Motivated Chomage Law

The Motivated Chomage Law states that only the nominal which satisfies the following condition called Chomeur Condition (Perlmutter and Postal 1977) can bear the chomeur relation:

Chomeur Condition

If some nominal N(a) bears a given term relation in a given stratum S(i) and some other nominal N(b) bears the same term relation in a given stratum in the following stratum S(i+1), then N(a) bears the Chomeur relation in S(i+1).

According to the Motivated Chomage Law, then, the Chomeur relation exists only when a term relation is taken over by some other nominal in the successive stratum. For example, in Passives, the 2 of the initial stratum takes over the 1 of the initial subject, putting the initial subject en chomage. Therefore, the Motivated Chomage Law prevents a Cho-relation from existing in the initial stratum.

The Base Generation analysis, therefore, disobeys this Motivated Chomage Law by generating the Chomeur relation in the initial stratum, whereas the Possessor Ascension analysis obeys this Law: the 1-Chomeur of the Head is generated by the absorption of the initial 1 of the Head nominal by the Possessor, putting the Head nominal into 1-Chomeur. The Possessor Ascension analysis justifies the universal law called the Motivated Chomage Law in RG instead of disobeying it, whereas the Base Generation analysis does not. I prefer the analysis which is in accord with the universal claims of the theory of grammar to one which abandons the claims in the theory on the basis of the one specific language.

1.5.2. Semantic Evidence

Another advantage of the Possessor Ascension analysis is that it captures the semantic similarity between the sentences where the Possessor is in the Nominative case and the ones where the Possessor is in the Genitive case, for example, (34a) and (34b) above.

Since these two sentences have the same representational meaning, the Possessor Ascension analysis posits the same initial syntactic structures for both of the sentences; the difference between them lies in the fact that (34b) involves Possessor Ascension while (34a) does not. In contrast, a mono-stratal analysis like the Base Generation analysis does not capture the similarity in meanings since it posits two totally different syntactic structures for each sentence.

1.6. Summary

In this section, I proposed the Possessor Ascension to 1 for the sentences where the Possessor and the Head both are marked in the Nominative case as in (b) sentences of (8-12). I contrast the Possessor Ascension analysis with the competing alternative analyses:(i) 'Quirky Case' analysis, (ii) the Doubling analysis and (iii) the Base Generation analysis, and argued for the Possessor Ascension analysis over these alternatives.

The arguments show that (i)the Possessor is final 1 of the clause in contrast with the claim of the 'Quirky Case' analysis that it bears the Pos-relation and (ii)the Head is not behaving like 1 of the clause in contrast of the claim of the Doubling analysis where the Head is final 1 of the clause as well as the Possessor and (iii)the sentences with the Possessor in the Nominative case involve the multiple strata analysis as in the Possessor Ascension rather than the monostratal analysis like Base Generation analysis.

The arguments are based on the rules and the constraints on several different syntactic constructions such as rule of Topicalization, rule of Quantifier Float, Scrambling of word order etc.

2. Possessor Ascension to 2

In this section, I propose Possessor Ascension to 2 for the (b) sentences below:

(36) a. Ki-ka   namu- iy   kaci- lil   kkek- et- ta
         he-NOM tree-GEN branch-ACC   pick-Pst-end
     b. Ki-ka   namu-lil   kaci-lil   kkek- et- ta
                     -ACC
         'He picked the branches of a tree.'

(37) a. kae- ka   Mary-iy   tali- lil   mul- et-ta
         dog-NOM   -GEN leg-ACC   bite-Pst-end
     b. Kae- ka   Mary-lil   tali-lil   mul-et-ta
                     -ACC   -ACC
         'The dog bit Mary's leg.'

(38) a. acessi- ka   sikey- iy   cul- il   kochi-   et- ta
         uncle-NOM   watch-GEN chain-ACC repair-Pst-end
     b. acessi-ka   sikey-lil   cul-il   kochi- et- ta
                         -ACC   -ACC
         'Uncle repaired the chain of a watch.'

(39) a. Kongaci-ka   Soonhi-iy   kutu- lil   ccic- et- ta
         dog -NOM   -GEN shoe-ACC   tear-Pst-end
     b. Kangaci-ka   Soonhi-lil kutu-lil   ccic- et-ta
                         -ACC   -ACC
         'The dog tore Soonhi's shoes.'

(40) a. Halmeni-kkese   koyangi- iy   ting- il   ss+tat+m- et- ta
         grandma-NOM   cat-GEN   back-ACC caress-Pst-end
     b. halmeni-kkese koyangi-lil   ting-il ss+tat+m-et-ta
                         -ACC   -ACC
         'Grandmother caressed the back of a cat.'

Each pair of sentences in the above data has the same meaning with the difference in the case marker of the Possessor: in each sentence (a) the Possessor is marked in the Genitive case and the Head is marked in the Accusative case, whereas in each sentence (b) both the Possessor and the Head are marked in the Accusative case.

Among other alternative explanatory analyses, I propose the Possessor Ascension analysis for each sentence (b) above which claims that the Possessor bearing Pos-relation to the possessive noun phrase in the initial stratum ascends to bear the grammatical relation of the Head which is 2,

putting the Head en chomage. RNs for each sentence (a) and (b) will be like the following (41a) and (41b), respectively:
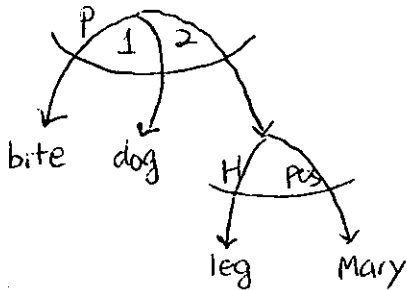
(41) a. [-Pos Ascension]   b. [+Pos Ascension]
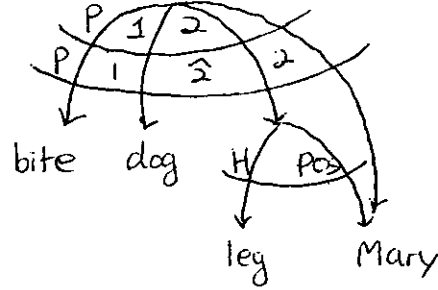
This analysis is contrasted with several alternatives: the Quirky case analysis, the Doubling analysis and the Base Generation analysis. I argue against each of these alternative analyses justifying instead Possessor Ascension to 2 for the (b) sentences in (36-40). I also discuss some difficulties for the Possessor Ascension analysis and how to overcome these problems in the analysis.

2.1. Arguments against Quirky Case analysis

As above, the 'Quirky' Case analysis claims that the Accusative case marking of the Possessor in the data concerned such as the (b) sentences in (36-40) is only an alternative case marking to the Genitive case for some Possessors as in (36-40) differently from other Possessors which is marked only the Genitive case. Therefore, there is no need to propose a different syntactic analysis for each of the (b) sentences in (36-40). They have exactly the same syntactic structure as the corresponding (a) sentences. The difference is proposed to lie in the 'quirky' Case marking system of Korean for some special Possessors as in (36-40). In the following sections, I give evidence that Possessors like those in the (b) sentences of (36-40) have different grammatical relations, specifically 2s of the clause, than the Possessors in the (a) sentences, which bear the Pos-relation.

2.1.1. Scrambling

The final 2s are freely scrambled with other elements of the clause (see (42)), whereas Possessors which do not

have case marking alternation are not (see (43)).

(42) a. Mary-ka ecey Pusan-eyse John- +l manna-t-ta
          -NOM yesterday -LOC   John-ACC meet-Pst-end

    b. John- +l Mary-ka ecey Pusan-eyse manna-t-ta
       John-Acc Mary-NOM yest. Pusan-LOC meet-Pst-end
       'Mary met John in Pusan yesterday.'

(43) a. Mary-ka pati-eyse John- +y chinku-l+l manna-t-ta
       Mary-NOM party-LOC John-GEN friend-ACC meet-Pst-end

    b. * John- +y Mary-ka pati-eyse chinku-l+l manna-t-ta
         John-GEN Mary-NOM party-LOC friend-ACC meet-Pst-end
         'Mary met John's friend in the party.'

The Possessors like those in (36-40) behave like other Pos-
sessors as in (43) when they are marked in the Genitive case
as in the (a) sentences of (36-40), while the Possessors in
the Nominative case can be freely scrambled like other 2s as
in (42).

(44) a. John-i ecey pati-eyse Jan- +y ppyam- +l ttaeli-et-ta
          -NOM yesterday party-LOC -GEN cheek-ACC slap-Pst-end

    b.* Jan- +y John-i ecey pati-eyse ppyam- +l ttaeli-et-ta
        -GEN   -NOM yesterday party-LOC cheek-ACC slap-Pst-end
       'John slapped Jan's cheek yesterday in the party.'

(45) a. John-i ecey pati-eyse Jan- +l ppyam- +l ttaeli-et-ta
          -NOM yesterday party-LOC -ACC cheek-ACC slap-Pst-end

    b. Jan- +l John-i ecey pati-eyse ppyam- +l ttaeli-et-ta
       -ACC   -NOM yester. party-LOC cheek-ACC slap-Pst-end
       'John slapped Jan's cheek yesterday in the party.'

As proposed in the Quirky Case analysis, if the Possessor in
the Nominative case is only an alternative case marking sys-
tem for the Possessor, then the different behaviour of the
Possessor in terms of the Scrambling as in (45) is hard to
explain or complicates the specification of the Scrambling
in Korean Grammar by treating the Possessor differently from
other Possessors like (43) and (44).

        However, if the Possessor like (45a) is considered as
final 2 of the clause differently from other Possessors as
in (43) or (44) as proposed in the Possessor Ascension to 2,

the possibility of Scrambling as opposed to other Possessor is automatically explained: it bears final 2 to the clause so that it should behave the same as other 2s as in (42) in terms of the Scrambling.

2.1.2. Passive

In the universal characterization of the Passive proposed by Perlmutter and Postal (1977), the 2 advances to 1 placing the previous 1 en chomage. Korean has such a Passive construction where the initial 2 ('mouse' in (46a)) advances to 1 and is marked Nominative; and the initial 1 ('cat' in (46a)) is a 1-Cho and is marked with 'by' phrase as in (46b); the verb in this Passive construction is marked with the suffix '-hi'[9]:

(46) a. koyangi-ka cyi-1+1 cap-at-ta
       cat-NOM   mouse-ACC catch-Pst-end
       'The cat caught a mouse.'

    b. cyi-ka   koyangi-ey+yhaese cap-hi-et-ta
       mouse-NOM cat-by   catch-PAS-Pst-end
       'A mouse was caught by the cat.'

Returning to Possessor Ascension constructions, note that constructions where the Possessor is marked in the Accusative case as in (47a) have Passive counterparts as in (47b), whereas constructions where the Possessor is marked Genitive (48a) does not have one as in (48b).

(47) a. ipalsa-ka   Mary-1+1 meli-1+1 cal-at-ta
       hairdresser-NOM   -ACC hair-ACC cut-Pst-end
       'The hairdresser cut Mary's hair.'

    b. Mary-ka ipalsa-ey+yhaese meli-1+1 cal-li-et-ta
           -NOM hairdresser-by hair-ACC cut-PAS-Pst-end
       'Mary is cut her hair by the hairdresser.'

(48) a. John-i Mary- +y ilki-1+1 il-et-ta
         -NOM   -GEN diary-ACC read-Pst-end
       'John read Mary's diary.'

    b.* Mary-ka John-ey+yhaese ilki-1+1 il-hi-et-ta
        Mary-NOM John-by   diary-ACC read-PAS-Pst-end
        'Mary's diary was read by John.'

Without assuming that the Possessor in (47) bears the 2

relation in the clause, it is hard to understand why it behaves differently from the Possessor in (48). More importantly, if the Possessor can also advance to 1 via passive, then the universal claim about the Passive construction (only 2s can advance to 1, putting the previous 1 en chomage) has to be revised to include Possessors like (47) in Korean. However, this will be a very ad hoc solution to the problem, since there seems to be no other language where the Possessor advances directly to 1 in Passives.

Alternatively, as the Possessor Ascension analysis claims, if we assume that the Possessor in (47) bears final 2 instead of Pos-relation, then the Passive is automatically explained without any ad hoc solution or without adding any other constraints in the grammar of Korean. Therefore, if we adopt the Possessor Ascension analysis for the sentences where the Possessor is marked in the Accusative case, the grammar of Korean can be simplified.

2.1.3. Quantifier Float

The quantifier can be separated from the nominal bearing the 2 of the clause that it modifies, but not from the nominal bearing the Pos-relation. (cf. 1.2.2)

(49) a. nae-ka sey kyosu-l+l   on+l pangmunha-yet-ta
        I -NOM three professor-ACC today visit-Pst-end

   b. nae-ka kyosu-l+l on+l set/seys-ACC pangmunha-yet-ta
      I-NOM professor-ACC today three(ACC) visit-Pst-end
      'I visit three professors today.'

(50) a. Mary-ka sey haksaeng- +y chaek- +l sumki-et-ta
        Mary-NOM three student-GEN book-ACC hide-Pst-end
        'Mary hid the books of three students.'

   b. Mary-ka haksaeng- +y chaek- +l set   sumki-et-ta
               student-GEN book-ACC   three   hide-Pst-end
                                       *sey- +y
                                       three-GEN
      'Mary hid three books of a student.'
      '* Mary hid the book ot three students.'

(49) shows that the quantifier can float from the 2 of the clause and (50) shows that the quantifier cannot float from the Pos. Note that (50b), while grammatical, does not have the desired meaning.

The Possessor in discussion, as in (b) sentences of (36-40), allows quantifiers to float from it, differently from the Possessors marked in the Genitive case as in (50b).

(51) a. kae-ka   sey   haksaeng- +l   tali-l+l   mul-et-ta
       dog-NOM three student-ACC   leg-ACC   bite-Pst-end
       'The dog bit the legs of three students.'

     b. kae-ka   haksaeng- +l tali-l+l   set/seys-+l mul-et-ta
        dog-NOM student-ACC leg-ACC three(ACC)   bite-Pst-end
        'The dog bit the legs of three students.'
        '! The dog bit three legs of the student.'

Thus, if the Possessors simply have different case markings rather than different grammatical relations as the Quirky Case analysis claims, then the rule of Quantifier Float has to have an extra device to include the exceptional cases of the nominal which bears the Pos relation, but nevertheless allow Quantifier Float.

Contrastively if Possessors in the Accusative case as in (51) are 2s while Possessors in the Genitive case are not, as claimed by the Possessor Ascension analysis. Quantifier Float can be handled without any extra device: 2s float Quantifiers but Possessors do not.

2.1.4. Topicalization

As mentioned before (see section 1), Possessors can not be topicalized, while final 1s can. Similarly final 2s can topicalized as seen below:

(52) a. John-i   Mary- +y chaek- +l   pili- et-ta
        -NOM   -GEN book-ACC   borrow-Pst-end

     b. Mary- +y chaek- +n   John-i   pili-et-ta
        -GEN book-TOP   -NOM borrow-Pst-end

     c. * Mary-n+n John-i   chaek- +l   pili-et-ta
          -TOP   -NOM book-ACC   borrow-Pst-end
        'John borrowed Mary's book.'

The 2 of the clause (52) (Mary's book) can be topicalized as in (52b), but the Possessor 'Mary' alone can not be topicalized as in (52c). However, Possessors which show the case alternation as in (36-40) are different from Possessors which do not as in (52), since they can be topicalized.

(53) a. John-i   Mary- +y   elkul- +l k+li-et-ta
        John-NOM Mary-GEN face-ACC draw-Pst-end

     b. Mary- +y elkul- +n   John-i   k+li-et-ta
           -GEN face-TOP   John-NOM draw-Pst-end

     c. Mary-n+n John-i   elkul- +l k+li-et-ta
        Mary-TOP John-NOM face-ACC draw-Pst-end
        'John drew Mary's face.'

The whole possessive phrase can be topicalized as in (53b)
or the Possessor alone can be topicalized as in (53c) con-
trasted to (52c). If the Possessor in (53c) bears the Pos
relation in the clause, then the Topicalization of the Pos-
sessors can be allowed in the cases like (53) but not
allowed in the cases (52). Thus, a stipulation for Topical-
ization under the Quirky case analysis would be impossible
to formulate since both nominals are Possessors.

    In contrast to the complexity of the Topicalization of
the Possessor nominals in the Quirky Case analysis, the Pos-
sessor Ascension analysis would have no difficulty; the Pos-
sessor in (53) ascends to 2 so that it can participate in
Topicalization as do other 2s, whereas (52c) does not
involve the Possessor Ascension to 2 and hence the Possessor
cannot topicalize.

2.2. Arguments against the Doubling Analysis

    The Doubling analysis claims that the Head as well as
the Possessor in the (b) sentences of (36-40) bears the 2
relation to the clause (whether or not Possessor Ascension
is involved). In the Possessor Ascension analysis, the Pos-
sessor ascends to 2, putting the initial 2, i.e. the Head,
en chomage so that the Head is a final Chomeur rather than
a final 2 in the clause. In this section, I present evi-
dence that the Head is in fact not a 2 of the clause but a
Chomeur so that the Possessor Ascension to 2 is the correct
analysis for the sentences where the Possessor is marked in
the Accusative case, for example, the (b) sentences in (36-
40).

2.2.1. Passive

    As discussed in section 2.1.2., some Possessors can
advance to 1 in (54b); this is correctly predicted by both
the Doubling and Possessor Ascension analyses, since both

claim that such Possessors are 2s.

(54) a. John- i   Kim yang- +1   son- +1 cap-at-ta
        John-NOM   Kim Miss-GEN hand-ACC hold-Pst-end
        'John held Ms. Kim's hand.'

     b. Kim yang-i   John-ey+yhaese son- +1 cap-hi-et-ta
        Kim Miss-NOM John-by   hand-ACC hold-PAS-Pst-end
        'Ms. Kim got her hand held by John.'

     c.* son-i   John-ey+yhaese Kim yang- +1 cap-hi-et-ta
        hand-NOM John-by   Kim Ms -ACC hold-PAS-Pst-end

The two analyses, however, make different predictions with
respect to the Head. In the Doubling analysis, the Head is
posited to be final 2 so that it is eligible to advance to 1
via Passive whereas in the Possessor ascension analysis the
Head is not a 2 so that it can not advance to 1. The Head
nominal 'hand' can not be passivized as seen in (54c) so
that the prediction of the Doubling analysis for the Head
nominal is not correct. The Possessor ascension analysis
correctly predicts the behaviour of the Head nominal: that
is, it is not 2 of the clause so that it can not be passiv-
ized. Therefore, Passive provides support for the Possessor
Ascension analysis against the Doubling analysis.

2.2.2. Topicalization

As discussed in section 1 above, Topicalization of
terms (i.e. 1s, 2s and 3s) has both plain reading and con-
trastive listing reading, while that of chomeurs has only
the contrastive listing reading. Therefore, Topicalization
can be a test as to whether a nominal bears a term relation
or it bears a chomeur relation. Observe Topicalization in
the following sentences:

(55) a. ?/* cul- +n nae-ka sikae-1+1 kochi-et-ta
            chain-TOP I-NOM watch-ACC repair-Pst-end
            'As for the chain of a watch, I repaired it.'

     b. elkul- +n   nae-ka   oppa-1+1 talm-at-ciman
        face-TOP   I-NOM   brother-ACC resemble-Pst-but

        sengkyek- +n   talm-cian-at- ta
        character-TOP resemble-NEG-Pst-end
        'As for the face, I resembled my brother, but as for
        the character, I did not.'

The Head nominals when topicalized can only have a contrastive listing interpretation as in (55b) rather than plain topicalization as in (55a). This is contrary to the Doubling analysis; since the Head is posited to be a 2, it should topicalize with a plain reading. In contrast, these data are in accord with the Possessor Ascension analysis; since the Head is a 2-Cho, it should not topicalize with a plain reading.

In this section, I showed some evidence that the Head nominal in the sentences where the Possessor is in the Accusative case as in (54a) bears Chomeur relation rather than the term relations so that it also favors the Possessor ascension analysis over the Doubling analysis. The Possessor ascension analysis makes correct predictions concerning the behaviour of the Head nominals.

2.3. Difficulties for Possessor Ascension

Even though there exists evidence that supports the Possessor ascension analysis over the Doubling analysis, there seems to be some other evidence that supports the Doubling analysis over the Possessor ascension analysis. In this section, I briefly discuss some problems for the Possessor Ascension analysis and the solutions these problems.

2.3.1. Case Marking

According to the case marking system in Korean (see Footnote 1), 2s are marked with the Accusative case marker '- +1/-1+1'. In the sentences where the Head as well as the Possessor is in the Accusative case, the case marker itself apparently shows that both the Head and the Possessor are 2s in the clause, these favoring the Doubling analysis.

However, the Head has been shown not to be a 2 on the basis of Passive and Topicalization. Therefore, the Doubling analysis can not be the correct analysis, either. Contrastively, the Possessor ascension analysis makes a correct prediction on the identity of the Head, proposing it as 2-Cho to account for the Passive and the Topicalization. If the Possessor Ascension analysis adopts the notion of "Acting terms" referring to the pairs of 1 and 1-Cho, 2 and 2-Cho, and 3 and 3-Cho and makes the reformulation of the case marking system in Korean saying that "Acting 2s" are marked in the Accusative case: that is, not only 2s but also 2-Chos are marked in the Accusative case, the case marking

of the Head, which is the Accusative case, can be easily stated without abandoning the Possessor ascension analysis.

Motivation for the 2 chomeur relation is given from other constructions such as the 3-2 Advancement. In Korean as well as many other languages like Tzotzil (Aissen 1982), the indirect object, 3, can advance to 2, putting the initial 2 en chomage.

(56) a. John-i   Mary-eykey   senmul- +l   cu-et-ta
         John-NOM Mary-DAT   present-ACC give-Pst-end
         'John gave a present to Mary.'

     b. John-i   Mary-l+l   senmul- +l   cu-et-ta
         John-NOM Mary-ACC   present-ACC give-Pst-end
         'John gave Mary a present.'

The initial 3 'Mary' advances to 2 and the initial 2 'present' is put en chomage as in (56b). The independent evidence that the 'present' is not final 2 but 2-chomeur can be provided on several argumentations such as Passive, etc. Since this is beyond the scope our discussion, I will not talk about this in details. The 2-chomeur in (56b) 'present' is also in the Accusative case marker, '-+l', so that the generalization of the case marking system of "Acting 2s" is not totally ad hoc. In fact, this shows that 2-Chomeurs as well as 2s are marked in the Accusative case in Korean. Therefore, nothing seems to be problematic in the case marking of the Head nominal as the Accusative case in the Possessor Ascension analysis with the revision of the case marking system for the Accusative case: instead of stating that only 2s are marked in the Accusative case, it should state that Acting 2s are marked in the Accusative case.

2.3.2. Quantifier Float

Quantifiers can float both from the Possessor (see (57b)) and the Head (see (58b)) in sentences where both the Head and the Possessor are marked in the Accusative case.

(57) a. Nae-ka sey haksaeng-+l   elkul- +l k+li-et-ta
         I-NOM three student-ACC face-ACC draw-Pst-end

     b. Nae-ka haksaeng-+l elkul- +l   set-(+l) k+li-et-ta
         I-NOM student-ACC face-ACC three(ACC) draw-Pst-end
         'I drew faces of three students.'

(58) a. +ysa-ka   aki- 1+1 han son- +1   caseyhi cinchalha-yet-ta
        doctor-NOM baby-ACC one hand-ACC closely examine-Pst-end

     b. +ysa-ka   aki-1+1 son- +1 caseyhi hana- 1+1 cinchalha-yet-ta
        doctor-NOM baby-ACC hand-ACC closely one-ACC examine-Pst-end
        'The doctor closely examined one hand of the baby.'

This fact apparently seems to favor the Doubling analysis,
since the Quantifier Float can be stated in a more unified
way; that is, only 2s can float quantifiers.

    This problem can also be accommodated in the Possessor
Ascension analysis, however, without much complication of
the Korean grammar: that is, if we introduce the notion of
"Acting 2s" in the Korean grammar, Quantifier Float can be
stated as simply as in the Doubling analysis.

2.4. The Base Generation analysis

    The Base Generation analysis proposes two different
constructions for sentences with the same meaning but with
different case marking for the Possessor. The Possessor in
the Genitive case as in (59a) is a Pos as represented in
(60a), whereas the Possessor in the Accusative case as in
(59b) is a 2 and the Head is a 2-Cho as represented in
(60b).

(59) a. masulsa-ka koyangi- +y kkoli-1+1 tangki-et-ta
        magician-NOM cat-GEN   tail-ACC pull-Pst-end

     b. masulsa-ka koyangi-1+1 kkoli-1+1 tangki-et-ta
        magician-NOM cat-ACC   tail-ACC pull-Pst-end
        'The magician pulled the cat's tail.'
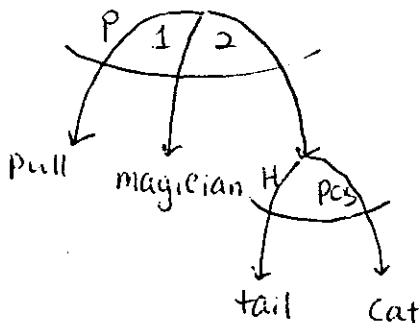
(60) a.   b.
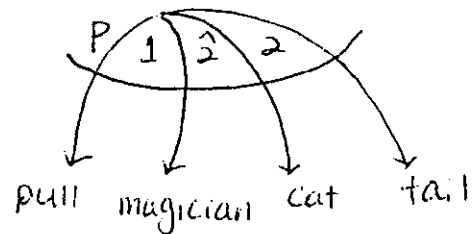
2.4.1. Motivated Chomage Law and Semantic Similarity

There are two problems with the Base Generation analysis. First, as discussed in section 1.5.1. above, the structure posited in (60b) violates the Motivated Chomage Law. In contrast, under the Possessor Ascension analysis, the 2-Cho is motivated since the Possessor ascends to take over the 2 relation.

Second, the Base Generation analysis fails to capture the similarity of the meaning in pair sentences like (59a) and (59b). In the Possessor Ascension analysis, the similarity of the meaning is captured by positing the same initial stratum for both sentences (59a) and (59b) and it also captures the difference in the case marking of the Possessor by positing the Possessor ascension for the sentences like (59b) differently frome the sentences like (59a).

2.4.2. Constraint on ci-Passive

In the Base Generation analysis, the Possessor is an initial 2 while in the Possessor ascension analysis, it is not proposed to be an initial 2 but rather an initial Pos and a final 2. Above I discussed Passives with 'hi' morphology (2.1.2., 2.2.1). A constraint formulated on a second type of Passive, with ci-morphology, provides a test for initial 2-hood. The constraint on ci-Passive in Korean formulated by Gerdts, Choi, Chun and Youn (1983) states that Passives with ci-morphology is possible only if the 2 which advances to 1 is an initial 2. Because of the limitation of space, I will not discuss the justification for the constraint here.

In sentences where the Possessor is in the Accusative case, if the Possessor is the initial 2 as in the Base Generation analysis, then it can advance to 1 in Passives with ci-morphology. If the Possessor is not the initial 2 as proposed in the Possessor ascension analysis, then it should not be able to advance to 1 in such passives.

(61) a. Pikaso- ka yein- +l elkul- +l k+li-et-ta
       Picasso-NOM woman-ACC face-ACC draw-Pst-end
       'Picasso drew a woman's face.'

   b.* yein-i Pikaso-ey+yhaese elkul- +l k+lie-ci-et-ta
       woman-NOM Picasso-by   face-ACC draw-PAS-Pst-end
       'A woman's face was drawn by Picasso.'

    c. yein- +y   elkul- i Pikaso-ey+yhaese k+lie-ci-et-ta
       woman-GEN face-NOM Picasso-by   draw-PAS-Pst-end
       'The woman's face was drawn by Picasso.'

    d. yein-i   elkul-i Pikaso-ey+yhaese k+lie-ci-et-ta
       woman-NOM face-NOM Picasso-by   draw-PAS-Pst-end
       'The woman's face was drawn by Picasso.'

The ungrammaticality of the passive sentence (61b) shows
that the Possessors in (59b) and (60a) are not initial 2s as
proposed in the Base Generation analysis. Furthermore, the
entire possessive phrase can advance to 1 in ci-passive as
seen in (61c), giving evidence that it is an initial 2.
(61d) shows that Possessor Ascension to 1 is involved after
ci-Passive which obeys the constraint, since the whole
phrase, an initial 2, first advances to 1 for passive as in
(61c) and then Possessor Ascension to 1 is involved to give
double Nominative construction as in (61d).

2.5. Summary

     In this section, I argued for the Possessor Ascension
analysis and against other alternative analyses for the sen-
tences where both the Head and the Possessor are marked in
the Accusative case. By contrasting the Possessor Ascension
analysis with the Quirky Case analysis, I argued that the
Possessor in the Accusative case as in (61a) is not merely a
case alternation of the nominal bearing the Pos-relation but
it bears a different grammatical relation from that of the
Possessor in the Genitive case, namely, 2. By arguing
against the Doubling analysis, I also showed that the Head
nominal is not final 2 of the clause but rather 2 chomeur.
In the argument against the Base Generation analysis, I
showed that the Possessor is not bearing an initial 2.

     In addition to these, I also discussed the problems in
the Possessor Ascension analysis and accommodate these prob-
lems by the introduction of the notions like "Acting 2s" in
Korean grammar.

3. More about Possessor Ascension

     In the current section, I discuss the limitations and
the characteristics of the Possessor Ascension construction
in Korean. First of all, I show what kind of Possessors are
involved in the Possessor Ascension construction: as seen

previously, not all Possessors can ascend (not all have the case alternations, Genitive case and Nominative case, or Genitive case and Accusative case). Second, two laws concerning Ascension constructions are discussed in relation to the Possessor Ascension construction in Korean. These two laws are called the "Relational Succession Law" and the "Host Limitation Law". Third, multiple Possessor Ascension constructions is introduced.

3.1. Limits on Possessor Ascension

The Genitive case '+y' has different semantic functions: sometimes it designates the body part relation between the Possessor and the Head as in (62a) called "inalienable possession", sometimes it marks the possession of the possessor as in (62b), or it marks a kinship relation as in (62c), or it marks a part-whole relation as in (62d).

```
(62) a. John - +y  tali   'John's leg'
     b. John- +y kapang   'John's bag'
     c. John- +y emeni    'John's mother'
     d. sikye- +y cul     'the chain of a watch'
```

Among these varieties of relations between the Possessor and the Head, only the inalienable possession as in (62a) and the part-whole relation as in (62d) allow the case alternations and involve the Possessor Ascension construction, whereas the possession as in (64) and the kinship relation as in (65) do not allow the same kind of case alternation hence no Possessor Ascension[10]. (speaker differences)

```
(63) a. John-i  Mary-+y   son- +1  cap-at-ta
        John-NOM Mary-GEN hand-ACC hold-Pst-end

     b. John-i  Mary-1+1 son- +1  cap-at-ta
        John-NOM Mary-ACC hand-ACC hold-Pst-end
        'John held Mary's hand.'

(64) a. Nae-ka John- +y   kapang- +1 yel-et-ta
        I-NOM  John-GEN  bag-ACC    open-Pst-end

     b.* Nae-ka John- +1 kapang- +1 yel-et-ta
        I-NOM John-ACC bag-ACC    open-Pst-end
        'I opened John's bag.'

(65) a. Mary-ka  John-+y emeni-1+1 coaha-yet-ta
        Mary-NOM John-GEN mother-ACC like-Pst-end
```

b.* Mary-ka John- +l emeni-l+l coaha-yet-ta
    Mary-NOM John-ACC mother-ACC like-Pst-end
    'Mary like John's mother.'

(66) a. John-i sikye- +y cul- +l kochi-et-ta
        John-NOM watch-GEN chain-ACC repair-Pst-end

   b. John-i sikye-l+l cul- +l kochi-et-ta
      John-NOM watch-ACC chain-ACC repair-Pst-end
      'John repaired the chain of a watch.'

3.2. Laws Governing Ascension

In Perlmutter and Postal (1974), the following two
principles were proposed as laws of grammar pertaining to
the Ascension constructions.

(67) The Relational Succession Law (RSL)

   An NP promoted by an Ascension rule, the ascendee,
   assumes the grammatical relation borne by the host
   out of which it ascends.

(68) The Host Limitation Law (HLL)

   Only a nominal bearing a term (1, 2, or 3) relation
   can be the host of an Ascension.

The consequence of the RSL is that it rules out certain con-
structions that would otherwise be potential constructions
of human languages[11].

In Korean, Possessor Ascension obeys both of these
laws. The Possessor in the Possessor Ascension to 1 ascends
to 1 out of its Host whose prior grammatical relation is 1.
In the Possessor Ascension to 2, the Possessor ascends to 2
out of its Host which bears 2. Also as predicted by the
above laws, Obliques cannot serve as Host to Possessor
Ascension in Korean as seen in (69b). Furthermore, there is
a language specific constraint against 3s serving as Host to
Possessor Ascension in Korean. Note that 3s are usually
animate; it is hard to conceive inalienable possession or a
part-whole relation with an animate nominal.   In other
words, 3s are not suitable Hosts for Possessor Ascension in

Korean. In (69a), the grammatical relation of the Host
'Mary's hair' is Oblique, locative. The Possessor Ascension
out of the Host bearing OBL is not allowed no matter it
obeys the RSL or the HLL as in (69b).

(69) a. John-i Mary- +y meli-wiey kos- +l kkoc-at-ta
        John-NOM Mary-GEN hair-LOC flower-ACC put-Pst-end

    b.* John-i Mary-wiey meli-wiey kos- +l kkoc-at-ta[12]
        John-NOM mary-LOC hair-LOC
        'John put a flower on Mary's hair.'

In conclusion, Korean obeys the RSL and HLL and the Host is
limited to 1s and 2s for the Possessor Ascension construc-
tions.

3.3. Multiple Possessor Ascension

     The Host for Possessor Ascension in Korean is limited
to the 1s and 2s. For example, in (70a) the Host is 'John's
eye' which bears the 2 of the clause advances to 1 for the
Passive bearing 1 of the clause as in (70b). When the Pos-
sessor ascends to 1 as in (70c), the grammatical relation of
the Host is final 1 but not the initial 1.

(70) a. +ysa-ka   John- +y nun- +l chilyoha-yet-ta
        doctor-NOM John-GEN eye-ACC treat-Pst-end
        'The doctor treated John's eye.'

    b. John- +y nun-i +ysa-ey+yhaese chilyo-toi-et-ta
       John-GEN eye-NOM doctor-by   treat-PAS-Pst-end
       'John's eye was treated by the doctor.'

    c. John-i nun-i +ysa-ey+yhaese chilyo-toi-et-ta
       John-NOM eye-NOM doctor-by   treat-PAS-Pst-end
       'John's eye was treated by the doctor.'

Thus, it is easy to see that the Host is not restricted on
the particular level of the structure. It is limited to 1s
and 2s in any stratum. This fact that the Host is not lim-
ited to a certain level results in the multiple Possessor
Ascension constructions.

(71) a. i baiolin-+y cul-+y   soli-ka   isangha-ta
        this violin-GEN string-GEN sound-NOM strange-end

    b. i baiolin- +y cul-i   soli-ka   isangha-ta

this violin-GEN string-NOM sound-NOM strange-end

c. i baiolin-i cul-i   soli-ka   isangha-ta
   this violin-NOM string-NOM sound-NOM strange-end

The Host in (71a) is 'this violin's string's sound' which is
1 and the Head is 'sound' and the Possessor is 'this
violin's string's' so that this whole phrase ascends to 1
resulting in (71b). In (71b) the Possessor is 'violin' and
the Host is 'violin's string' which is 1, so that the Pos-
sessor ascends to 1 resulting in (71c). The Possessor on
the right hand side should be first ascends to 1 or 2 to
serve as the Host for the next Possessor ascension. In the
Possessor Ascension analysis, this right-to-left occurrence
of Nominative case marking is predicted by successive Pos-
sessor Ascension as in (72).

(72) a. Mary- +y kutu- +y patak-i kumeng-i ttuli-et-ta
        Mary-GEN shoe-GEN bottom-NOM hole-NOM made-Pst-end

     b. Mary- +y kutu-ka patak-i kumeng-i ttuli-et-ta
        Mary-GEN shoe-NOM bottom-NOM hole-NOm made-Pst-end

     c. Mary-ka kutu-ka patak-i kumeng-i ttuli-et-ta
        Mary-NOM shoe-NOM bottom-NOM hole-NOM made-Pst-end
        'The bottom of Mary's shoes was made a hole.'

In contrast, the Quirky Case analysis or the Doubling
analysis predicts a random order of Nominative case marking
in the cases like (71) allowing sentences like (73):

(73) a. */? i baiolin- i cul- +y soli-ka   isangha-ta
        this violin-NOM string-GEN sound-NOM strange-end
        'This violin's string's sound is strange.'

     b. * Mary-ka kutu- +y patak- +y kumeng-i ttuli-et-ta
        Mary-NOM shoe-GEN bottom-GEN hole-NOM made-Pst-end
        'The bottom of Mary's shoes was made a hole.'

In summary, Possessor Ascension in Korean obeys the RSL
and HLL and furthermore, the Host is limited to 1s and 2s.
Multiple Possessor Ascension is found in sentences where the
multiple Nominative or multiple Accusative case construction
is possible. The multiple Possessor Ascension construction
differently from other analyses prevent the sentences where
the right-to-left occurrence of Nominative case or Accusa-
tive case is violated as in (73).

4. Conclusion

In this paper, I talked about the Possessor Ascension construction in Korean for the sentences where the Possessor and the Head are marked in the same cases. For the sentences where the Possessor is marked in the Nominative case as well as the Head as in (74a) represented as in (75b), I proposed the Possessor Ascension to 1, and for the sentences where the Possessor is marked in the Accusative case as in (75a) represented as in (75b), I proposed the Possessor Ascension to 2.

(74) a. Monalica-ka nunsep-i ep-ta
       Monalisa-NOM eyebrow-NOM not exist-end
       'Monalisa's eyebrow does not exist.'

b.
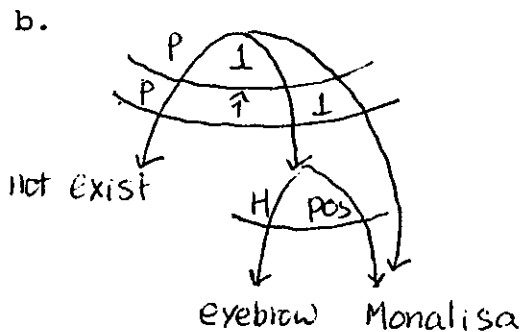
(75) a. John-i Mary-l+l pal- +l palp-at-ta
       John-NOM Mary-ACC foot-ACC tramp-Pst-end
       'John tramped on Mary's foot.'

b.
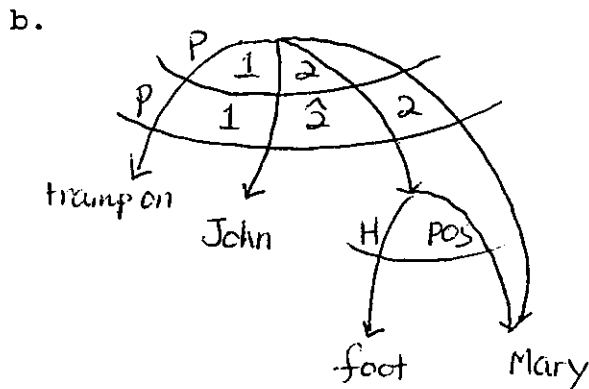
The Possessor Ascension analysis is compared with the competing alternative cases: (i) "Quirky Case" analysis where the case alternations of the Possessor is viewed as a exception to the case marking system for Possessor, not viewed as a change of the grammatical relations. (ii) "Doubling" analysis where the grammatical relation of the Possessor is viewed as the same as that of the Head in the final stratum, challenging the universal law called "Stratal Uniqueness Law". (iii) "Base Generation" analysis which claims that the grammatical relation of the Possessor is base generated as 1 or 2 rather than involving the Ascension and the grammatical relation of the Head, 2-Cho, is also initially generated rather than the consequences of the change of the grammatical relations, challenging "the Motivated Chomage Law".

I provided several arguments to support the Possessor Ascension analysis over the others, referring to conditions and constraints in Korean grammar such as conditions on Scrambling, -myense construction, Quantifier Float, ci-Passive constraint, and Topicalization and also referring to the universal characteristics of the Passive. I showed that the Possessor in the same case as the Head involves a change of the grammatical relation, putting the grammatical relation of the Head en chomage. I also showed that there involved that multi-stratal construction rather than a mono-stratal structure.

In the last section, I discussed the semantic limitations on the Possessor Ascension construction in Korean and also the two laws governing the Ascension construction, namely, the Relational Succession Law and the Host Limitation Law in connection with the Possessor Ascension in Korean. Lastly, I briefly talked about multiple case constructions and multiple Possessor Ascensions.

List of Abbreviations

These are the abbreviations used in the glosses of the Korean data

ACC	accusative case marker
CAU	causative
COM	complementizer
DAT	dative marker
end	indicative ending
FUT	future tense
GEN	genitive marker
HON	honorific marker
LOC	locative
NEG	negative
NOM	nominative case marker
PAS	passive
Pres	present tense
Pst	past tense
TOP	topic marker

Footnotes

1. The case marking system of Korean is like the below:

Grammatical Relations	Case Markers
Subject (1)	Nominative '-ka/-i'
Object (2)	Accusative '-l+l/- +l'
Indirect Object (3)	Dative '-eykey/-hante'
Possessor (Pos)	Genitive '- +y'

2. An ascendee (Joan in (1a)) ascends out of its host (downstairs clause in (1a)) to assume the grammatical relation of its host (object of the clause in (1a)), resulting in (1b). This is traditionally called a Subject-to-Object Raising rule.

(1) a. Harry believes that Joan is pregnant.
    b. Harry believes Joan to be pregnant.

Relational Succession Law is a principle of Universal Grammar to which all rules in human languages conform. (Perlmutter 1982).

3. Some possible word orders through Scrambling are as the following:

(S: subject; O:object; IO: indirect object; DO: direct object; V: verb)

```
S V              S O V
O S V            S IO DO V
S DO IO V        DO S IO V
IO S DO V        IO DO S V
DO IO S V
```

In addition to these, sometimes nominals are scrambled after verbs as if it is attatched to the clause as an 'after-thought'. This is considered important in pragmatics, but here these are not considered as a 'normal' scrambling of word order.

4. Depending on where it can stand, two kinds of Quantifier Float are posited: one which floats a quantifier right behind of its head nominal and before the case marker of the nominal is called 'Internal Quantifier Float' (see (2b)) and the other is called 'External Quantifier Float' in which a quantifier gores behind the case marker of its head nominal (possibly after a couple of nominals, if any) (see (2c)).

(2) a. sey haksaeng-i Mary-1+1 mann-at-ta
        three student-NOM Mary-ACC meet-Pst-end

    b. haksaeng-seys-i Mary-1+1 mann-at-ta
       student-three-NOM Mary-ACC meet-Pst-end

    c. haksaeng-i Mary-1+1 set-(i) mann-at-ta
       student-NOM Mary-ACC three(NOM) meet-Pst-end
       'Three students met Mary.'

5. There are two types of Topicalization: (1) plain topic (2) a contrastive listing topic. Topicalization rule in Korean can be posited as below:

    i) Final terms (1, 2, and 3) serve as plain topic.
   ii) Any nominal (terms and non-terms) can serve as a contrastive listing topic.

6. Another obvious evidence that the Topicalization in (22c) comes from the possessor in the nominative case is shown in the other kind of Topicalization. In Korean, when 3s are topicalized, it obligatorily keeps the Dative case marker and attach the Topic marker as in (3).

(3) a. Mary-ka John-eykey senmul- +1 cu-et-ta

```
        -NOM     -DAT   present-ACC give-Pst-end
     'Mary gave a present to John.'

  b. John-eykey-n+n   Mary-ka senmul- +l cu-et-ta
       -DAT-TOP          -NOM present-ACC give-Pst-end
     'To John, Mary gave him a present.'
```

If the topicalization of 'John' in (22c) comes from
the genitive case as in (22a) and it is like the
topicalization of dative nominals which keeps its
case along with the Topic marker, then the following
data should be grammatical:


```
(4) * John- +y-n+n kamki-taemuney ko-ka makhi-et-ta
           -GEN-TOP cold-because  nose-NOM stuffy-Pst-end
     'As for John, his nose is stuffy because of the cold.'
```

However, it is not. Therefore, it is safe to say
that the nominal It also supports for the Possessor
Ascension analysis over the Quirky Case analysis.

7. The Inversion nominal (Youn 1985) is also inter-
preted as the subject of the '-myense' construction:


```
(5) haksaeng-i-myense, John-eykey ton-i manhi pilyoha-ta
    student-be-though, John-DAT money-NOM much need-end
    'Though he is a student, John needs a lot of money.'
```

The nominal 'John' is proposed as a initial 1 and a
final 3. Thus, the subject of '-myense' construc-
tion is controlled by final 1s and Inversion nomi-
nals.

8. 1-Chomeur in Passive is different from other 1-
Chomeurs marked in the Nominative case. It is
marked with an instrument marker 'ey+yhaese' as in
(6) corresponding to 'by' in English. Other 1-
Chomeurs in Nominative are involving an ascension
construction, for example, Possessor Ascension or
Causative Union, whereas a 1-Chomeur in Passive in-
volves an Advancement.

(6) k+ chaek-i Mary-ey+yhaese cacu il-hi-et-ta
    the book-NOM Mary-by   often read-PAS-Pst-end
    'The book is read by Mary often.'

9. The Passive marker 'hi' takes the form -hi/-i/-
li/-ki depending upon the stem it is attached to.
For a bit of discussion of Passive formed with -ci,
see section 3.4.2.

10. Some speakers seem to allow Possessor Ascension
for the kinship relations as in (1):

(1) a. John- +y emeni-ka hakyo-ey o-si-et-ta
       John-GEN mother-NOM school-LOC come-HON-Pst-end

    b. John-i emeni-ka hakyo-ey o -si- et-ta
       John-NOM mother-NOM school-LOC come-HON-Pst-end
       'John's mother came to school.'

This shows that there exist speaker differences in
types of possession involving Possessor Ascension.

11. Possessor Ascension constructions in various
languages obey these laws- e.g. Chamorro (Crain
1979) and Korean. However, there are also cases of
Possessor Ascension that violate these laws such as
Georgian (Harris 1981) or Tzotzil (Aissen 1979),
etc. In some languages above, the Possessor also
ascends to 3 out of non-3 violating both of these
two laws.   Thus, the two laws are reformulated by
Perlmutter (1983) as follows:

(2) Relational Succession Law

    An ascendee assumes the grammatical relation
    borne by the Host out of which it ascends, un-
    less the ascendee is a Possessor in which case
    it may assume the 3-relation

    (3) Host Limitation Law

Only a term can be the host of an ascension other than Possessor Ascension

12. Korean does not allow Possessor Ascension ascension to 3 out of Oblique as seen in (2), which is allowed in some other languages with the revised Relational Succession Law (see Footnote 2).

(4).* John-i Mary- eykey meli-wiey kos- +l kkoc-at-ta
John-NOM Mary-DAT hair-LOC flower-ACC put-Pst-end
'John put a flower on Mary's hair.'

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