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LIST OF ABBREVIATIONS

The following abbreviations have been used to label grammatical morphemes in the glosses in this dissertation.

ACC	accusative
ADJ	adjective
ADV	adverb
AFD	actual focus domain
ART	article
ASP	aspect
AUX	auxiliary
CAU	causative
CL	numeral classifier
CMPL	complementizer
CONJ	conjunction
CONN	connective
CTM	contrative topic marker
DAT	dative
DEC	declarative
DEF	definite
FRE	frequency
FOC	focus
FUT	future tense
GEN	genitive
HON	honorific
IF	illocutionary force
IMP	imperative
INFL	inflection
LOC	locative
MOD	modal, modality
NEG	negative
NOML	nominalizer
NOM	nominative
OBJ	object
PASS	passive
PL	plural
POSS	possessive
PP	prepositional phrase
PRED	predicate
PRE	present tense
PROG	progressive
PST	past tense
QUE	interrogative
REL	relative
HON	honorific
SmP	semantic pivot
S(BJ)	subject
TOP	topic
U	undergoer
VN	verbal noun

ACKNOWLEDGMENTS

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ABSTRACT

The main purpose of this thesis is to investigate how case marking is determined in Korean. My hypothesis is that the answer lies in the interaction between semantics and pragmatics. Many previous approaches rely on purely formal properties to account for Korean case marking. By assigning NOM/ACC marking a minimal functional load, the previous approaches fail to provide much insight into the question of why NOM/ACC case marking plays such an important semantic and pragmatic roles in Korean. In this thesis, I demonstrate that Role and Reference Grammar [RRG] provides the fundamental answers to the recurring problems of Korean case marking. It will be argued that the distinction between semantic case vs. pragmatic case is needed to account for Korean case marking.

The presentation of the research takes on the following organization. Chapter 1 describes the purpose and scope of this study. Chapter 2 describes the theoretical features of RRG. Three major aspects of RRG will be presented: the morphosyntactic structures, the theory of lexical representation and semantic roles, and information structure. Chapter 3 analyzes Korean 'grammatical relations' in RRG. I will propose that 'semantic' and 'pragmatic' relations themselves should be used for controlling case marking in Korean. It will be proposed that there are two syntactic pivots in Korean: semantic pivots controlling clause-internal processes like honorification and reflexivization and pragmatic pivots controlling cross-clausal grammatical processes. Chapter 4 describes the distinction between semantic case and pragmatic case, and provides the characteristics of pragmatic case. Chapter 5 investigates the interaction between information structure and case marking. Some double accusative constructions such as 'stative psych verb construction', 'locative NOM construction', 'alienable possessor ascension construction', and ''type' and 'class' construction' and some double nominative constructions such as 'causative verb construction' and '*cwu* 'give'-type construction' will be argued to involve pragmatic NOM case in them. Chapter 6 is devoted to the interaction between Aktionsart/transitivity and case marking. The ACC markers on the locative and frequency adverbial nominals and the 'verbal noun' in the HA construction will be argued to involve semantic case resulting from accomplishment semantics. Chapter 7 is devoted to the discussion of case marking in the clauses involving NP-level and clausal-level juncture-nexus. This chapter shows how juncture-nexus types and other factors interact with each other for case marking. Chapter 8 is an application of the semantic vs. pragmatic case distinction and other RRG notions to Korean first language acquisition data. The purpose of this chapter is to point out some problems with previous analysis of Korean case marking in Korean and to provide an

alternative analysis in terms of semantic case vs. pragmatic case and other RRG notions. Chapter 9 concludes this thesis by briefly summarizing the proposed analysis.

1. Introduction

1.1. The Purpose and Scope of This Thesis

The main purpose of this thesis is to investigate how case marking is determined in Korean. My hypothesis is that the answer lies in the interaction between semantics and pragmatics. Many previous approaches rely on purely formal properties to account for Korean case marking. In this thesis, I demonstrate that Role and Reference Grammar [RRG] provides the fundamental answers to the recurring problems of Korean case marking. It will be argued that the distinction between semantic case vs. pragmatic case is needed to account for Korean case marking.

Chapter 1 describes the purpose and scope of this study and provides a short overview of the previous studies of Korean case marking to give a better understanding of my analysis.

Chapter 2 describes the theoretical features of RRG. Three major aspects of RRG will be presented: in section 2.1. the morphosyntactic structures proposed in RRG will be described; section 2.2. brings in the theory of lexical representation and semantic roles; section 2.3. presents the notion of information structure.

Chapter 3 analyzes Korean 'grammatical relations' in RRG. I will propose that 'semantic' and 'pragmatic' relations themselves should be used for controlling case marking in Korean. I will also propose a revised Accessibility to Pivot Choice for Korean syntactic agreement constructions. It will be proposed that there are two syntactic pivots in Korean: semantic pivots controlling clause-internal processes like honorification and reflexivization and pragmatic pivots controlling cross-clausal grammatical processes.

Chapter 4 describes the distinction between semantic case and pragmatic case, and provides the characteristics of pragmatic case.

Chapter 5 investigates the interaction between information structure and case marking. Some double accusative constructions and some double nominative constructions will be argued to involve pragmatic NOM case in them.

Chapter 6 is devoted to the interaction between Aktionsart/transitivity and case marking. The ACC markers on the locative and frequency adverbial nominals and the 'verbal noun' in the HA construction will be argued to involve semantic case resulting from accomplishment semantics.

Chapter 7 is devoted to the discussion of case marking in the clauses involving NP-level and clausal-level juncture-nexus. The purpose of this chapter is to show how juncture-nexus types and other factors interact with each other for case marking.

Chapter 8 is an application of the semantic vs. pragmatic case distinction and other RRG notions to Korean first language acquisition data. The purpose of this chapter is to point out some problems with previous analysis of Korean case marking in Korean and to provide an alternative analysis in terms of RRG.

Chapter 9 concludes this thesis by briefly summarizing the proposed analysis.

1.2. A Short Overview of The Previous Studies on the Case Marking in Korean

With special reference to the issues of this thesis, we summarize the topics discussed in the previous studies as in (1.1).

(1.1) a. Is NOM assigned by semantic or structural principles or by default ?
b. Does ACC have some semantic basis ?
c. How do we account for case alternation and stacking ?

1.2.1. Nominative Marking

We can distinguish three major approaches: the first claims that NOM is structurally assigned, and the second claims that NOM is given by default to all non-case-marked NPs. The third claims that NOM depends on the grammatical relation borne by the NP to which NOM is assigned. The first approach is further divided between one which assumes that NOM is assigned by the category INFL, and another which does not.

(1.2) a. structural NOM: (i) no INFL
(ii) INFL
b. default
c. grammatical relations (final 1-hood)

O'Grady's (1991a) analysis, for example, belongs to (1.2ai). He proposes that NOM marks a term NP that combines with an IV(P) category, while an IV(P) is a function that applies to an NP to give an S. Y-S Lee (1990) and Heycock and Y-S Lee (1991) take the same position by saying that NOM marks the subject of a syntactic predication structure, whose minimal unit (i.e. a clause) is the saturated function of the lexical head.

The second approach given in (1.2aii) is taken by many GB grammarians (Y-J Yim (1985), H-S Han (1987), M-Y Kang (1988), Ahn and Yoon (1989), among others). According to them, INFL is an independent category separated from V and the honorific feature, for instance, constitutes the AGR element in INFL. To the contrary, Y-J Kim

(1990), K-S Hong (1991), and Y-S Kang (1986) argue that Korean does not have any INFL as an independent category and that NOM is given by default.

Gerdts (1988), C. Youn (1989), and Gerdts (1988, 1991) assume that NOM is assinged on the basis of the grammatical relation borne by the relevant NP: NOM is licensed by a final 1 (SUBJ). As the reader can see, there is no theory which systematically argues that NOM marking in Korean is semantically or pragmatically determined, even though some studies partially deal with some pragmatic aspects of NOM case marking in Korean.

1.2.2. Accusative Marking

There are two positions with respect to accusative marking in Korean: i) semantic basis hypothesis, ii) other principles (syntactic, etc.). The first position is to argue that there is a semantic basis for ACC marking. H-B Choi (1961) argues that an NP with ACC should be interpreted as under the CONTROL of some other force. On the other hand, Kang (1986) proposes that ACC marking is related to the STATIVITY of a predicate: an NP argument which is a sister of a [-stative] V is assigned ACC (Generalized Case Marking Rule (i)). Y-J Kim (1990) proposes the notion of AGENTIVITY. ACC is assigned by a [+agentive] predicate which has a DO or a CAUSE clause in its Lexical Conceptual Structure (Jackendoff (1989)). Her concept of agentive predicates is based on the three tests: (i) whether the relevant predicate can be in the imperative or propositive mood, (ii) whether it can be a predicate of an embedded clause when the matrix verb is a coercive or a manipulative predicate, (iii) whether it can be a predicate of an embedded clause when the matrix verb is an equi control predicate. K-S Hong (1991) depends on the concept of the Determinant and Determinee. The notion of a Determinant is intended to pick out the entity who has control over the situation and who is thereby responsible for it. According to K-S Hong (1991), 'it subsumes the causer of an event.' Accusative is associated only with a Determinee in the presence of a Determinant argument.

The second class of scholars argue that there is no semantic basis to ACC marking. O'Grady's (1991a) analysis, for instance, depends on structural definitions to account for ACC marking. According to him, ACC marks a term NP that combines with a TV category, while a TV is a function that applies to an NP to give an IV.[1] K-S Lee's (1992), C. Youn's (1989), and Y-S Choi's (1988) analyses, all Relational Grammar analyses, also

[1] However, O'Grady suggests that ACC may be associated with the 'delimiting' effect (1991a: 227). According to him, the ACC-marked 'complement phrase' serves to delimit the action denoted by the verb.

depend on the structures and grammatical relation. According to C. Youn (1989), ACC is licensed by a final 2 (OBJ).

1.2.3. Case Alternation and Stacking

We can distinguish three major approaches: (i) approaches which account for case alternation and stacking primarily in terms of NP structure (Gerdts and C. Youn (1988), Gerdts (1991), K-S Hong (1991), among others), (ii) approaches which account for them in terms of movement approach in which Chomsky's (1981) CHAIN CONDITION is differently interpreted (Yoon and Yoon (1991)), (iii) approaches which account for them in terms of conversion rules (O'Grady (1991a)).

Gerdts' (1991) account, for instance, is based on the distinction between S-Case and I-Case. The former is a grammatical case licensed in terms of final relational structure. The latter is selected on the basis of the semantic role of the nominal, and licensed in initial structure. The case stacking and alternation between NOM and DAT, for example, is explained as follows. If its final status is marked, NOM is licensed. But DAT is also licensed, because it is an Experiencer in the initial stratum. Furthermore, nothing prohibits both from being licensed at the same time. On the other hand, K-S Hong's (1991) account depends on two tiers equivalent of Gerdts and Youn's theory: Nonsemantic Case (NOM or ACC) and Semantic Case (Postpositions). The big difference from Gerdts' (1991) approach lies in that NOM and ACC are not sanctioned by grammatical relations, but by the semantic information.

Yoon and Yoon (1991) resort to A/NP movement within GB Theory to account for the phenomena. They propose that subjects move from a VP/AP-internal position to the SPEC of IP, where the nominals can be assigned NOM. They claim that the Chain *as a whole* can bear multiple Case, as long as each structural position is uniquely governed: but no single position in a Chain can be ambiguously Case-governed. Thus, in their theory, the constructions involving case alternations or case stacking is characterized as follows:

(1.3) a. They necessarily involve Movement (i.e., the Chain associated with the nominal is multi-membered).
b. Each structural position is uniquely Case-governed.

O'Grady (1991a) depends on conversion rules to account for case alternation and case stacking. To account for case alternation between DAT and NOM in double nominative constructions, for instance, he proposes a 'S-Conversion' rule.[2]

[2] According to O'Grady (1991a), S-Conversion is:

1.2.4. A Short Critique of the Previous Proposals

By assigning NOM marking a minimal functional load, the accounts of NOM marking fail to provide much insight into the question of why NOM/ACC case marking plays such an important semantic and pragmatic roles in Korean. When NOM or ACC marking is accounted for, the definition of notions like 'stativity', 'agentivity', and 'Determinant and Determinee' is sometimes arbitrary and circular. The concepts themselves are sometimes defined in terms of realized case markings. The weakness of the notion like 'stativity' or 'agentivity' is pointed out by Hong (1991). Let us consider the sentence in (1.4).

(1.4) a. ku kulus-eyse mwul-i say-n-ta
the bowl-from water-NOM leak-PRE-DEC
'Water leaks from the bowl.'

According to Hong, the theme argument mwul 'water' is assigned 'Determinant' so that it is assigned NOM. However, it is not clear why the argument should be a 'Determinant', which is defined as 'one who determines whether the event denoted by a predicate is brought about or not'.

I claim that both NOM and ACC case markings have semantic basis. The case stacking and case alternations are handled by NP structures allowing semantic case and pragmatic case. This will be argued in detail in the following chapters (see Chapter 4 for the details of the distinction between semantic case and pragmatic case).

S Conversion (Input: S's expressing judgments seen as mental properties)
S -----> IVP

Chapter 2. A Short Synopsis of RRG

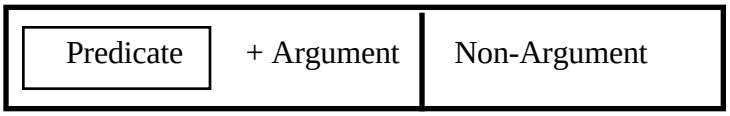
This chapter describes the theoretical features of RRG. The presentation of RRG will proceed as follows: in section 2.1. the morphosyntactic structures proposed in RRG will be described; section 2.2. brings in the theory of lexical representation and semantic roles; section 2.3. presents the notion of information structure.

2.1. Morphosyntactic Structure: the Layered Structure of the Clause [LSC], Juncture-Nexus Types, and Operators

2.1.1. RRG Theory of the LSC of the Simple Clause

The RRG notion of (non-relational) clause structure is called the layered structure of the clause [LSC]. The RRG notion of the LSC is a semantically-based theory of syntactic structure. (cf. Van Valin (1993a)) The fundamental units in the hierarchical organization of sentences and clauses are semantically motivated by the contrast between 'predicate' and 'argument', on the one hand, and between arguments and non-arguments, on the other (Van Valin (1993a:7)). These contrasts are schematized in (2.1).

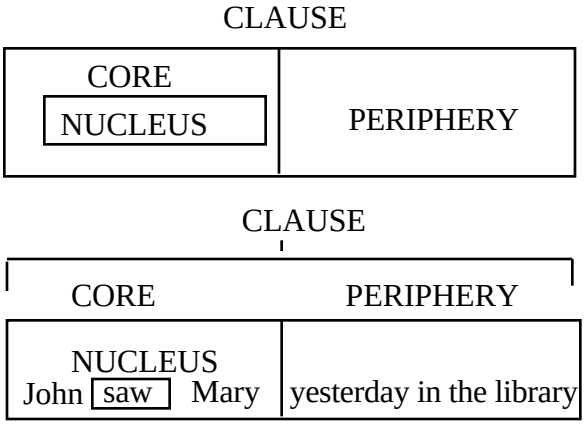
(2.1) Universal oppositions underlying clause structure



These contrasts are found in all languages, regardless of whether they are configurational or non-configurational, head-marking or dependent-marking, free-word-order or fixed-word-order. On this view, LSC is made up of the NUCLEUS, which contains the predicate(s), the CORE, which contains the nucleus and its arguments, and the PERIPHERY, which contains the adjunct temporal and locative modifiers of the core.[3] These units (NUC, CORE, and PERIPHERY) are syntactic units, while the units 'predicate' and 'argument' are semantic. Instead of taking the category of VP, which plays a central role in X-bar based syntax as in GB, RRG uses the notion CORE. These hierarchical units are different from X-bar based syntax in that these units are not dependent upon either immediate dominance or linear precedence relations as illustrated below (from Van Valin (1993a:5)).

[3] The term 'periphery' also means reason, purpose, and other kinds of adjuncts.

(2.2) LSC in RRG (Van Valin 1993a: Figure 1)

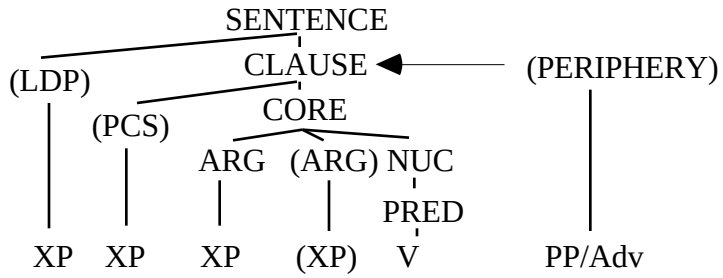


In a single-clause sentence, the LSC has two other elements; the core-external and clause-internal PRE-CORE SLOT [PCS]; and the clause-external, optional LEFT-DETACHED POSITION [LDP][4]. The PCS is the position in which question words appears when they do not occur in situ in languages like English, Italian, Zapotec. LDP is the position in which pre-clausal elements like topic and adverbials in left-dislocation constructions appear (ibid.: 6). These two positions for displaced elements are very important for distinguishing clause from sentence. The PCS is a clause-internal position, which is within the scope of the IF operator over the clause. The LDP is outside of the clause, and therefore is outside of the IF operator[5]. The universal LSC can be represented as in (2.3) and an English sentence containing all of these elements is presented in (2.4).

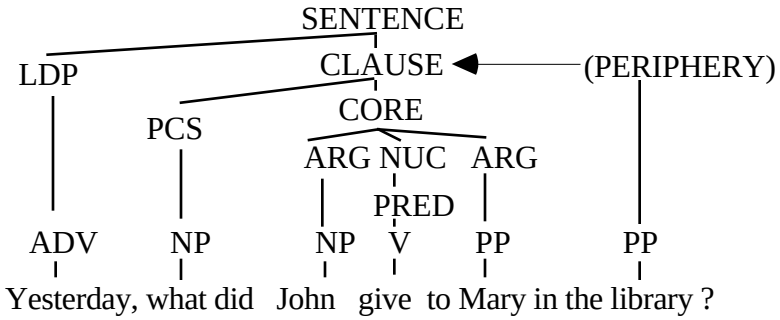
[4] Shimojo (1994) proposes the *post-core slot* [PCS] for a postposed core-external and clause-internal NP in Japanese. He also proposes the *right-detached position* [RDP] for a postposed clause-external NP. Following Shimojo, I will use the terms 'post-core slot [PCS]' and 'right-detached position [RDP]' when they are relevant.

[5]Evidence showing that the PCS is clause-internal while the LDP is not can be found in Icelandic. (Van Valin and Lapolla (in preparation: 13) and Van Valin (1990c)). B-S Yang (1994) also provides some Korean evidence for the claim.

(2.3) LSC for Simple Clause Sentences in RRG (from Van Valin 1993c: Figure 1).

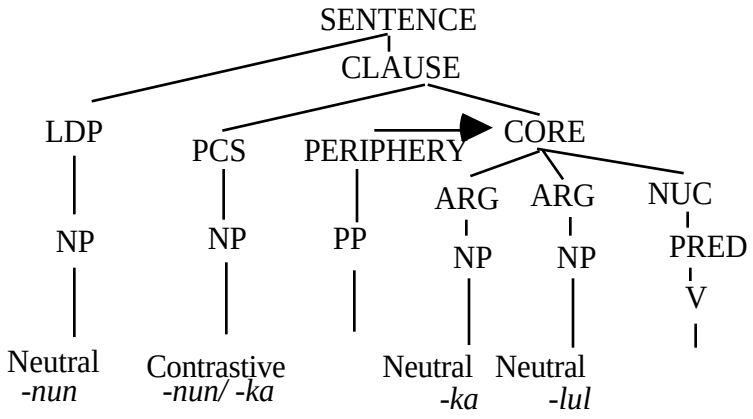


(2.4) LSC for an English Simple Sentence (from Van Valin 1993c: Figure 1).



On the other hand, B-S Yang (1994) suggests the following LSC for a Korean simple sentence.[6]

(2.5) LSC for a Korean Simple Sentence



As we will see, the LSC in (2.5) suggests an explanation for double topic and double nominative constructions as well as NP1-*nun* +NP2-*ka* constructions.

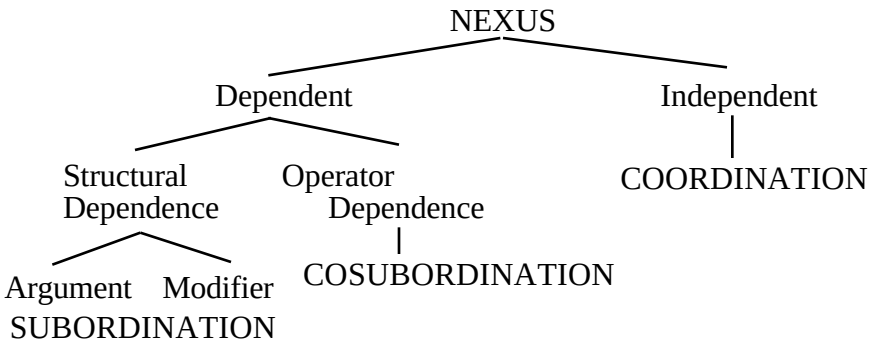
[6] The LSC of the Korean sentence is similar to the English one, despite radically different morphosyntactic structures.

2.1.2. RRG Theory of Juncture-Nexus for Complex Sentences

The taxonomy of clause linkage in RRG is based on two concepts, juncture and nexus (Foley and Van Valin (1984)). Linkage is possible at any layer of the clause. The juncture types are classified by the grammatical level of the linked units: clausal, core, and nuclear. RRG also posits three nexus relations between clauses in complex sentences – coordination, subordination, and cosubordination – rather than the traditional dichotomy – coordination and subordination (Foley and Van Valin (1984) and Van Valin (1993a)) .

The three nexus types are summarized as follows:

(2.6)



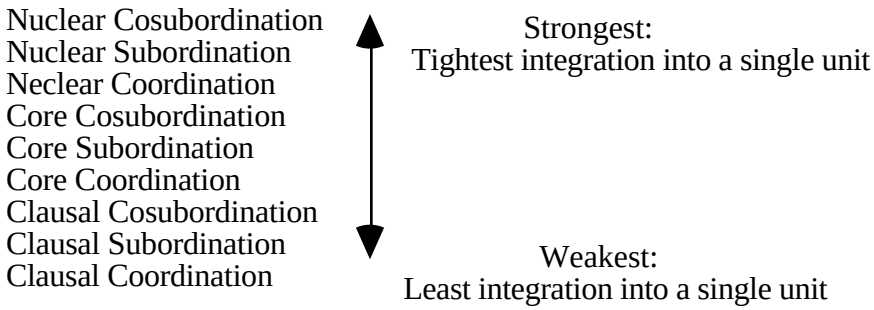
Nexus Types (= Van Valin and Lapolla (in preparation) Figure 2.32)

Van Valin and Lapolla (in preparation: 42) note that 'subordination subsumes two distinct construction types: units functioning as core arguments (e.g. subject and object complement clauses), on the one hand, and modifiers (e.g. relative clauses, adverbial clauses), on the other'.

The three possible levels of juncture (i.e. Clausal, Core, and Nuclear) and three possible nexus relations among the units (i.e. Coordination, Subordination, and Cosubordination) result in nine possible juncture-nexus types in universal grammar. These nine juncture-nexus types can be ranked in terms of the tightness of the syntactic bond involved in the linkage as represented in (2.7)

(2.7) The tightness of the syntactic in juncture-nexus linkage

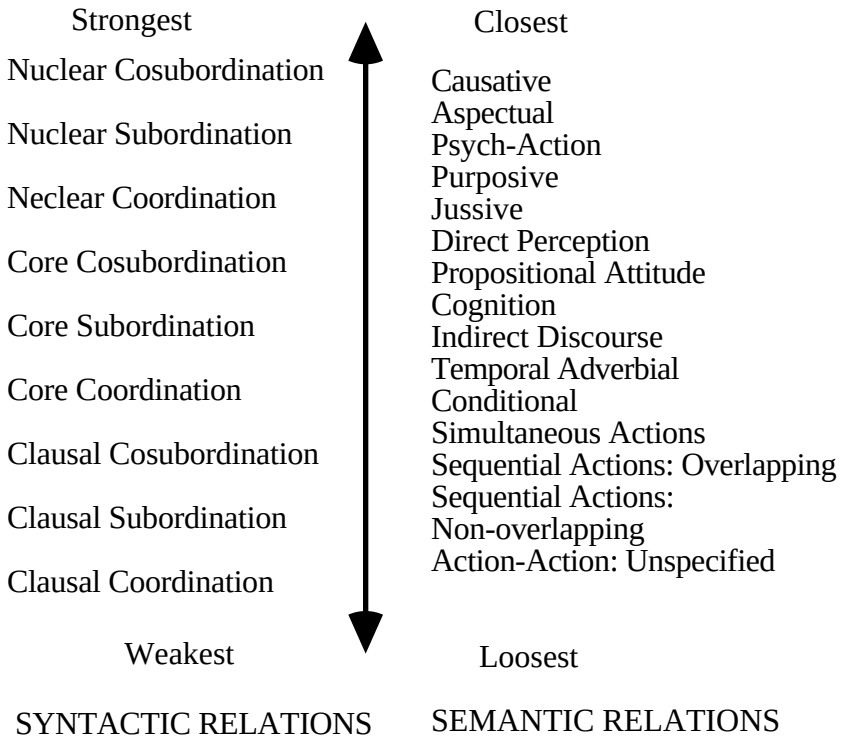
(Van Valin 1993a: Figure 29a)



It should be noted that languages do not have all nine linkage categories. These nine juncture-nexus types are the maximum possible number a language could have (Van Valin (1993a):111).

These nine purely syntactic juncture-nexus types express certain semantic relations such as causative, purposive, and sequential meaning. These semantic relations form a continuum expressing the degree of semantic cohesion between the linked units (Van Valin (1993a:111)). There are interrelationships between the syntactic linkage relations ranked hierarchically in terms of the strength of the syntactic bond between the units and semantic relations ranked in terms of how closely related the propositions in the linkage are. The relationship, called the 'Interclausal Relations Hierarchy (IRH),' is represented as in (2.8).

(2.8) The Interclausal Relations Hierarchy (Van Valin (1993a): Figure 29c)



In RRG, the nexus relations can apply not only at the clause level but also at the core and nuclear levels. We can define a sentence as a complex sentence if it contains more than one predicate. In Korean, between the linked verbal complexes or clauses, a verbal suffix called a 'connective' (B-S Yang (1994)) should occur. B-S Yang (1994) shows that each connective is very important for the classification of complex sentences. Based on the type of connectives, he presents the clause linkage types in Korean as in (2.9).

(2.9) Clause Linkage Types in Korean (from B-S Yang (1994))

JUNCTURE	NEXUS: Cosubordination	NEXUS: Subordination	NEXUS: Coordination
Nuclear	Direct Causative (NOM-ACC-(ACC))	Verb Stem + Aspect Verb Stem +Directional	Active Psych -Verb
Core	Manner-Action (*e*-verb serialization) Directive Causative (NOM-DAT-(ACC))	Purposive Causative (NOM-NOM-(ACC)) Nominalized Complement	Permissive Jussive (NOM-DAT-(ACC)) Simultaneous action (*ha*-verb serialization)
Clausal	Simultaneous, Sequential *ha*-construction Conditionals	Indicative quotative Complement Purposive Adverbials	Contrastive, Additive *ha*-construction

B-S Yang (1994) concludes that the IRH in Korean can account for complex verb constructions and the degree of causation among lexical, morphological, and phrasal causatives in Korean.[7]

2.1.3. Operators and Their Scope

In RRG, grammatical categories like aspect, tense, and modality are treated as operators modifying different layers of the clause. The operators consist of morphemes which are the realization of the grammatical categories,[8] while the constituents of the layered structure consist of the predicate, its arguments, and periphery. Operators from a variety of languages are summarized as in (2.10).

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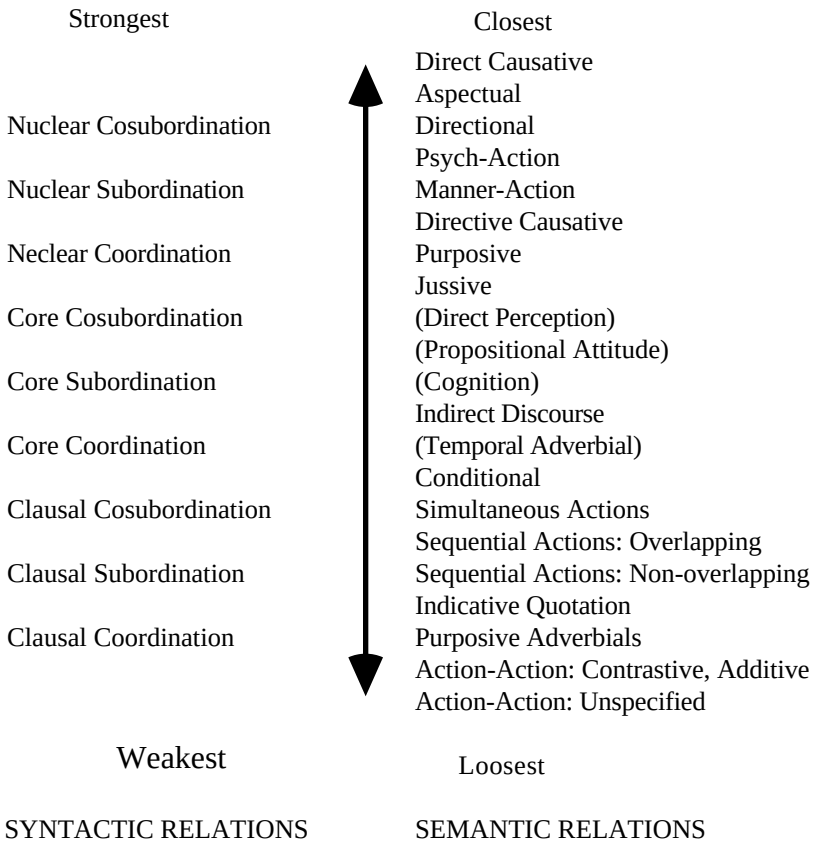
[7] B-S Yang proposes the following Korean IRH similar to the universal IRH in RRG.

The Interclausal Relations Hierarchy in Korean



[8] For some scholars, case or agreement markers are the realization of grammatical categories. However, they are not considered as operators in RRG.

(2.10) The relative order and scope of operators (Van Valin (1993a:8))

a. Nuclear operators:	Aspect
	Directionals (only those modifying orientation of action or event without reference to participants)
b. Core operators:	Directionals (only those expressing the orientation or motion of one participant with reference to another participant or to the speaker)
	Modality (root modals, e.g. ability, permission, obligation)
	Internal (narrow scope) negation
c. Clausal operators:	Status (epistemic modals, external negation)
	Tense
	Evidentials
	Illocutionary Force [IF]

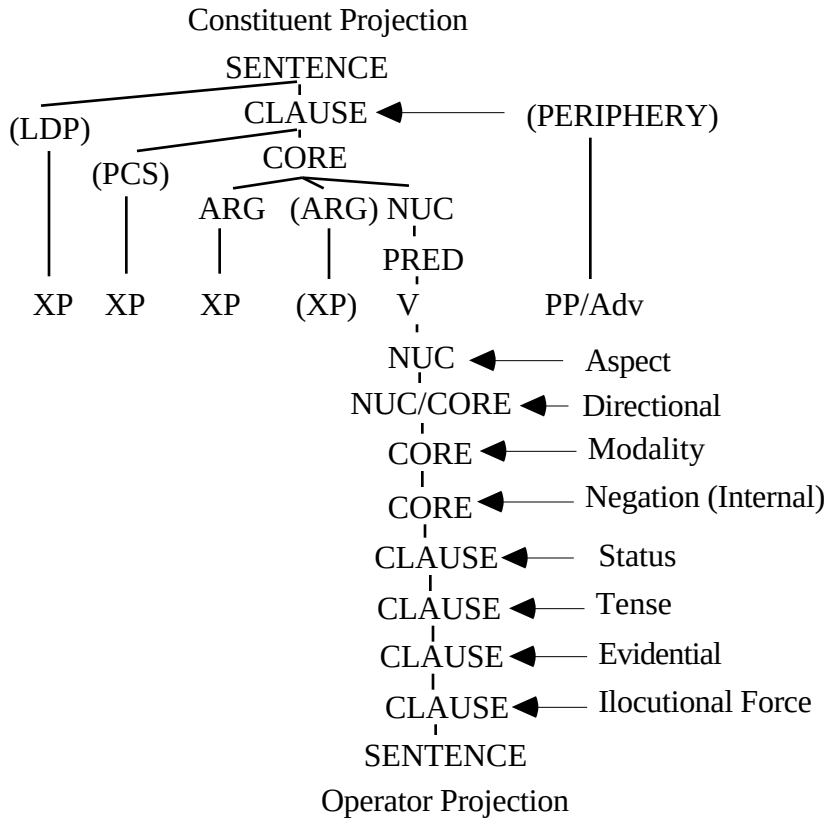
In (2.10), each operator has scope over its own level. The nuclear operators have scope over the nucleus; they modify the action, event or state itself without reference to the participants. Core operators modify the relations between a core argument and the action. Clausal operators modify the clause as a whole[9] (Van Valin 1993a: 9).

As pointed out by Foley and Van Valin (1984) and Van Valin (1993a), the central claim about operators is that there is a relative order among the morphemes with reference to the nucleus such that the ordering of operators indicates their relative scope. That is, morphemes realizing nuclear operators should be closer to the nucleus than those realizing core or clausal operators, and those expressing core operators should be between those realizing nuclear operators and clausal operators, while those manifesting clausal operators should be outside of those signaling nuclear and core operators.[10] Since these grammatical categories are treated as operators modifying different layers of the clause, RRG represents the operators separately from the Constituent Projection, which is the representation of the LSC. The representation of operators is referred to as the Operator Projection, as shown in the following figure in (2.11) for simple sentences.

[9]Clausal operators fall into two groups: one is tense and status, and the other is evidentials and IF. The latter is "sentential" in that evidentials and IF are modifiers of the sentence or utterance as a whole, rather than one of its constituent clauses (Van Valin 1993a: 9).

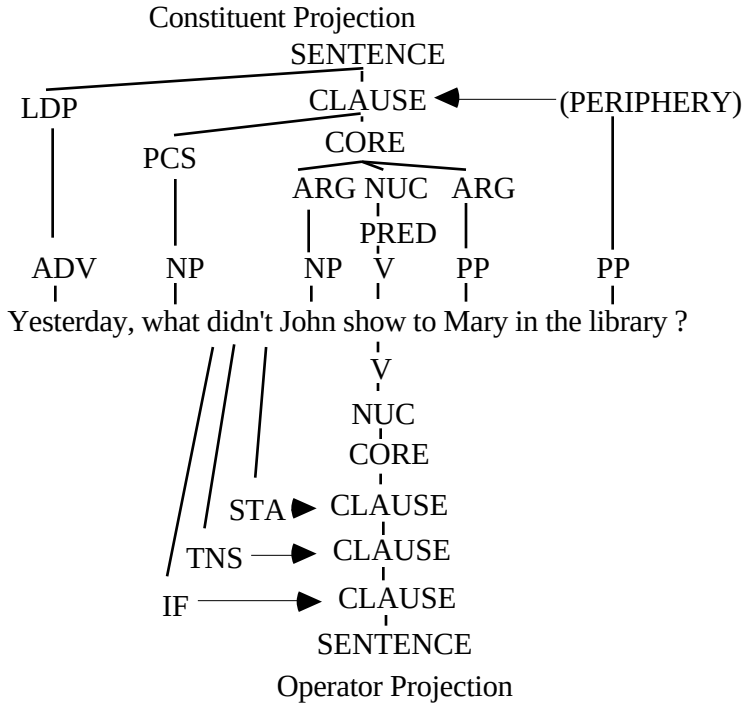
[10] Originally put forth in Foley and Van Valin (1984), this claim has been supported strongly by the results of a cross-linguistic study of morphology in Bybee (1985). The claim is also supported by children's acquisition of operators. Even though tense and aspect both have to do with the temporal properties of sentences, children's first temporal markings are always aspectual, regardless of how the markers are used in adult speech, and that true tense distinctions develop later. (cf. Van Valin (1991a) and Lifter & Hafitz (1980))

(2.11) LSC and Operator Projection in RRG (Van Valin and Lapolla (in preparation): Figure 2.14)



The English sentence 'Yesterday, what didn't John show to Mary in the library?' is given the following representation of projection. [Adapted from Van Valin (1993a: Figure 2)]

(2.12) Constituent and Operator Projection for an English Simple Sentence



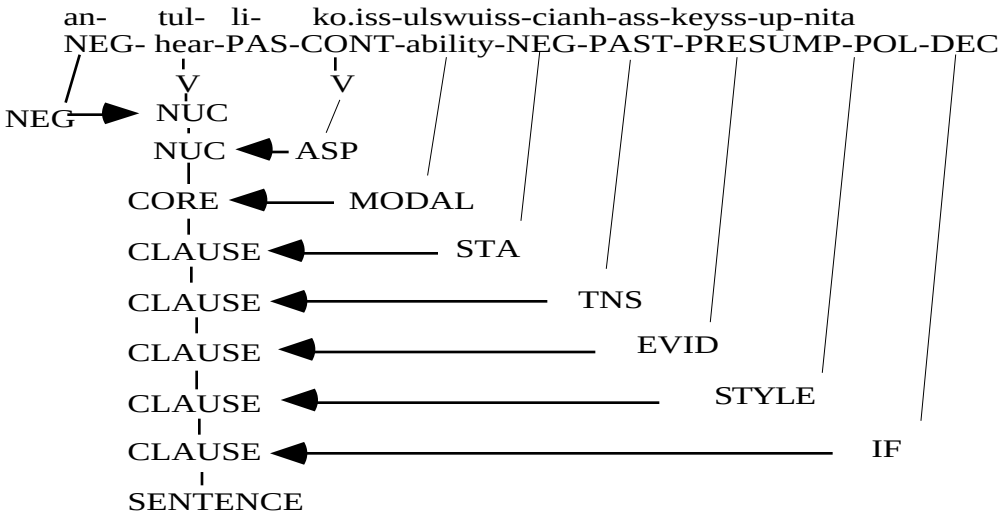
Based on Van Valin (1993a), B-S Yang (1994) proposes the Korean operator system as in (2.13).

(2.13) Korean Operators System

a. Nuclear Operator:	Negation	Pre-verbal negation *an-*
	Aspect	Continuous (*ko-iss*), Perfective (*e-iss*)
	Directionals	Toward speaker (-o-), Away from speaker (*-ka-*)
b. Core operators:	Modality (e.g. ability, permission, obligation)	*- (l)swu-iss-*, *-(l)swu-eps-*, *-ya-* (obligation)
	Internal (narrow scope) negation	*-ci-anh* (post-verbal)
c. Clausal operators:	Status (epistemic modals, external negation)	*-ci-anh* (post-verbal negation)
	Tense	present *-(u)n-* , past *-ess*, future *-keyss*,
	Evidentials	presumptive *-keyss*, retrospective *-te-*, hearsay *-tate-*
	Speech Style	plain, formal, informal, familiar, intimate, polite *-(u)p*, *-ni-*, *-e*,
	Illocutionary Force [IF];Imperatives, propositives, interrogatives, declaratives	

B-S Yang (1994) proposes the operator projection as in (2.14), for instance, for the sequence 'an-tul-il-ko.iss-ulswuiss-cianh-ass-keyss-up-nita', which means '(I) guess that (he) might not be heard'.[11]

(2.14) Korean Operator Projection (from B-S Yang (1994))



In this thesis, I follow B-S Yang's (1994) operator system in Korean where it is needed.

2.2. Lexical Representation: Verb Classes, Semantic Roles and Transitivity

2.2.1. Verb Classes and Lexical Representation

RRG has adopted and adapted the system of lexical decomposition proposed in Dowty (1979), which is based on Vendler's (1967) classification of verbs in terms of their inherent temporal or *Aktionsart* properties. There are four basic Aktionsart classes: states, achievements, accomplishments and activities, as illustrated in (2.15).

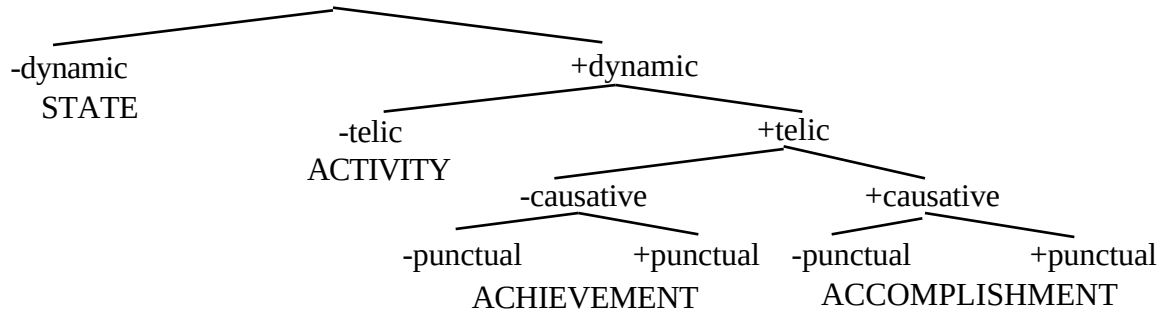
[11] According to B-S Yang (1994), RRG's operator projection has several advantages in explaining Korean verb inflectional morphemes. (see B-S Yang (1994) for details)

(2.15) English Verb Classes (Van Valin (1993c): 2)

STATES	ACHIEVEMENTS	ACCOMPLISHMENTS	ACTIVITIES
know	learn	teach	read
have	receive	give	shiver
be broken	break (INTR)	break (TR)	swim
be dead	die	kill	rain
believe	recognize	convince	think
like	arrive	please	talk

In the prototypical cases, achievements are change-of-state (inchoative) verbs, while accomplishments are verbs encoding caused changes of state. Van Valin (1993c) characterizes these classes in terms of a small set of semantic features: [±telic], [±dynamic], [±causative], and [±punctual].

(2.16) *Aktionsart* Features



A very significant aspect of this system of lexical representation is that there are syntactic and semantic tests which can be used to ascertain the class of a verb. B-S Yang (1994), for instance, proposes a number of syntactic and semantic tests for determining the aspectual class of a verb in Korean as shown in (2.17), which I follow in this thesis.

(2.17) Korean Aspectual Verb Classification

Criterion	States	Achievements	Accomplish	Activities
1. Occurs with progressive form *-(u)ncwungi-ta*	NO	D: YES/P: NO	YES	YES
2. The present tense *-(nu)n-* entails action in progress/ change of state (process verbs only)	NO	YES	YES	YES
3. Occurs with adverbs like *paklyekisskey* / *himchakey* /*hwaltongcekulo/ hwalpalhi* 'vigorously', *swutasulepkey* 'actively', etc.	NO	NO	YES	YES
4. Occurs with *hansikan-tongan* 'for an hour'	YES	D: YES/ P: NO	YES	YES
5. Occurs with *hansikan-maney* 'in an hour ' and implies that an event finished in the hour	NO	D: YES/ P: NO	YES	NO
6. Selection of perfective form *-e-iss-* (intransitives only)	NO	YES	YES	NO
7. 'for an hour' entails 'at all times in the hour'	YES	D: NO/P: d.n.a	NO	YES
8. Progressive form entails*x has Øed*	d.n.a.	D: NO/P: d.n.a.	NO	YES
9. has inherent causative semantics: a. occur with causative morpheme *-i* or *-key-hata* b. locative adverbial nominals with goal interpretation and duration/frequency adverbial nominals can get accusative case.	NO	NO	YES	NO

Dowty (1979) proposes a fomalization of these distinctions, based on the assumption that the predicates underlying state verbs are primitive and all other classes are derived from states by means of the addition of a small set of well-defined operators and connectives. Van Valin (1993c) proposes the RRG version of Dowty's scheme as follows.

(2.18) = Van Valin's (1993c) Table 2

Verb Class	Logical Structure
STATE	**predicate´** (x) or (x,y)
ACHIEVEMENT	BECOME **predicate´** (x) or (x,y)
ACTIVITY (±Agentive)	(DO(x)) **do´** (x, [**predicate´** (x) or (x,ı)])[12]
ACCOMPLISHMENT	Ø CAUSE ψ, where Ø is normally an activity predicate and ψ an achievement predicate.

BECOME is an operator indicating change over time (see Dowty (1979: 139-45)), DO is an operator signaling agentivity, **do'** is an operator indicating an activity predicate and CAUSE is a connective expressing a causal relationship between two events. These representations are called LOGICAL STRUCTURES [LS] and are the core of the lexical entries for verbs in RRG. Examples of some English verbs with their LS are given in (2.19). [Adopted from Van Valin (1993c:5)]

(2.19) a. States

Bob is a lawyer.	**be´** (Bob, [**lawyer´**])
The watch is broken.	**broken´** (the watch)
The magazine is on the desk.	**be-on´** (the desk, the magazine)
Max is at the office.	**be-at´** (office, Max)
Sam saw the painting.	**see´** (Sam, the painting)

b. Achievements

Bob became a lawyer.	BECOME **be´**(Bob, [**lawyer´**])
The watch broke.	BECOME **broken´**(the watch)
The magazine fell on the floor.	BECOME **be-on´** (the floor, the magazine)
Max arrived at the office.	BECOME **be-at´** (Office, Max)
Sam noticed the painting.	BECOME **see´** (Sam, the painting)

c. Activities

The children cried.	**do´** (the children, [**cry´** (the children)])
The ball rolled.	**do´** (the ball, [**roll´** (the ball)])
The door squeaks.	**do´** (the door, [**squeak´**(the door)])
Mary did something.	**do´** (Mary,)
Larry ate fish.	**do´** (Larry, [**eat´** (Larry, fish)])

[12]With activity verbs, agency is indicated by an abstract operator DO only when it is a necessary part of the meaning of the verb, following Holisky (1987) in Van Valin (1993a) (cf. Van Valin 1993a: 37). Thus, in Van Valin (1993c), the LS of activities is represented as (DO (x)) **do´** (x, [**predicate´** (x) or (x,ı)]). In this representation, the DO can stand for [+Agentive] of activities and the **do** represents the activities.

d. Accomplishments
Joan tossed the journal on the desk.
[**do**´ (Joan, [**toss**´ (Joan, the journal)])] CAUSE [BECOME **be-on**´ (the desk, the journal)]
The baby broke the watch [accidentally].
[**do**´(the baby,)] CAUSE [BECOME **broken**´ (the watch)]
Max ran to the office.
[**do**´ (Max, [**run**´ (Max)])] CAUSE [BECOME **be-at**´ (the office, Max)]
Louise showed the painting to Sam.
[**do**´ (Louise,)] CAUSE [BECOME **see**´ (Sam, the painting)]

A given verb may be used in more than one way, and it is important to distinguish the lexical meaning of the verb from its interpretation in different constructions. For instance, the verb *eat* in English has an non-iterative activity interpretation with a bare plural or mass noun object and an accomplishment interpretation with a specific object. (see Van Valin (1993c) for details) K-S Park (1993) also claims that many accomplishment verbs are usually ambiguous between activity interpretation and accomplishment interpretation.

2.2.2. Semantic Roles and Lexical Representation

In RRG, all semantic roles are defined in terms of argument positions in state and activity LSs so that it is necessary to look at the subclasses of these two types. States can be divided into two major classes, locational and non-locational, in which locational are the predicates of location and existence, and non-locational are the predicates of the other states. State or condition verbs (B1 in (2.20)) take one argument, whereas all the others take two arguments. The definition of roles in terms of argument positions in LSs is summarized in (2.20).

(2.20) = Van Valin's (1993c) Table 3

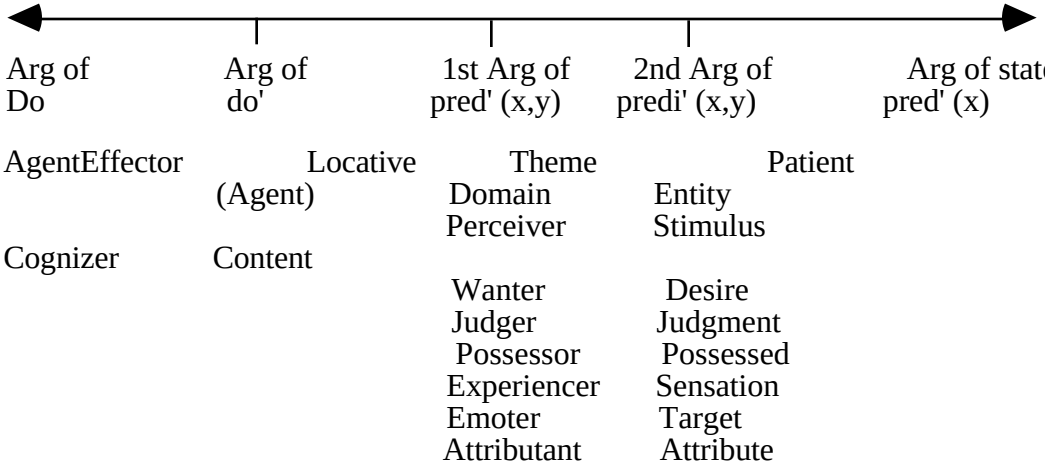
I. State Verbs		
A. Locational		
1. Pure location	**be-at'** (x,y)	x=locative, y=theme
2. Existence	**exist'** (x,y)	x=domain, y=entity
B. Non-Locational		
1. State or condition	**broken'** (x)	x=patient
2. Perception	**hear'** (x,y)	x=perceiver, y=stimulus
3. Cognition	**know'** (x,y)	x=cognizer, y=content
4. Desire	**want'** (x,y)	x=wanter, y=desire
5. Propositional Attitude	**consider'** (x,y)	x=judger, y=judgment
6. Possession	**have'** (x,y)	x=possessor, y=possessed
7. Internal Experience	**feel'** (x,y)	x=experiencer, y=sensation
8. Emotion	**love'** (x,y)	x=emoter, y=target
9. Attrib/Identificational	**be'** (x,y)	x=attributant, y=attribute
II. ACTIVITY VERBS		

A. Uncontrolled
a. Non-motion **do**' (x, [**eat**' (x,ɪ)] x=effector,ɪ=inherent argument
do' (x, [**cry**' (x)] x=effector
b. Motion **do**' (x, [**run**' (x)] x=effector (& theme)
B. Controlled DO (x, [do' (x, ...)]) x=agent (& effector)

The primary contrast with respect to activity verbs is between those which take a volitional argument and those that do not. All activity verbs have an EFFECTOR argument; this is the participant that brings something about, but there is no implication of its being volitional or the original instigator. It is formally defined as the first argument of **do'**. Agents are also effectors, but they have the additional semantic features of volition and control. Agent is formally defined as the first argument of DO. As pointed out by Holisky (1987: 118), agentive interpretations are usually conveyed pragmatically and not semantically. That is, most agents arise through implicature and are not a lexical property of the verbs (cf. Van Valin (1993a), Van Valin and Wilkins (in press))

As argued by Van Valin (1993c), the determination of semantic roles in terms of verb class has an important consequence: because the roles associated with a verb are a function of its LS and its LS is determined by the syntactic and semantic tests as in (2.20) which make no reference to semantic roles, the association of roles with verbs is *independently motivated* in RRG. No other theory can make such a claim. If we take all of the distinct role-defining positions in LSs in (2.20), it turns out that there are at most *five* positions. We can see this clearly if we set up a cline with agent at one end-point and patient at the other, with the other positions placed in terms of how agent-like their arguments are. The result is given as follows.

(2.21) = Van Valin's (1993c) Figure 2

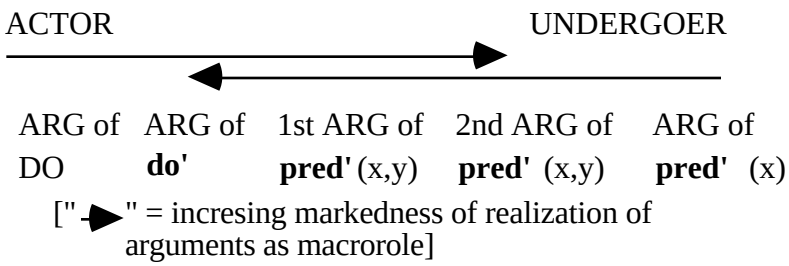


Semantic Role Continnum

In RRG, semantic roles play no direct role in lexical representation; the relevant semantic properties of the verbs are expressed by the decompositional LS representations, not by lists of semantic roles. Thus role labels like 'agent', 'cognizer', 'theme' and 'patient' are merely *mnemonics for argument positions in LS* (Van Valin (1993c: 11).

Macroroles, the second type of semantic role, however, play a crucial role in RRG. Semantic roles in the broad sense are termed SEMANTIC MACROROLES in RRG, and there are only two of them, ACTOR and UNDERGOER. Macroroles do not constitute a distinct level of representation; rather, they are a status that the arguments in the LS can have and that grammatical rules and principles refer to. We have seen that there are at most five role-defining positions. The relationship between specific semantic roles and macroroles is captured in the following Actor-Undergoer Hierarchy.

(2.22) Actor-Undergoer Hierarchy = Van Valin's (1993c) (34)



This says simply that in the unmarked or default case,[13] given a LS, the argument type leftmost on the hierarchy will be actor and the argument type rightmost will be undergoer.

2.2.3. Transitivity and the Content of Lexical Entries for Verbs

Transitivity is traditionally defined in terms of the number of arguments a verb takes overtly in the syntax, but in RRG it is characterized in terms of the number of macroroles that a verb takes, as in (2.23).

(2.23) Transitivity in RRG (Van Valin's (1993c) (37))
a. Transitive verb: 2 macroroles
b. Intransitive verb: 1 macroroles
c. Atransitive verb: 0 macroroles

[13] In a marked case, for example, the 1st ARG of pred' (x,y) becomes an undergoer in the presence of 2nd ARGs of pred' (x,y).

Given the LS of a verb, its transitivity can be predicted by the Default Macrorole Assignment Principles in (2.24).

(2.24) Default Macrorole Assignment Principles = Van Valin's (1993c) (37)
a. Number: the number of macroroles a verb takes is less than or equal to the number of arguments in its Logical Structure [LS]:
1. If a verb has two or more arguments in its LS, it will take two macroroles.
2. If a verb has one argument in its LS, it will take one macrorole.
b. Nature: for verbs which take one macrorole:
1. If the verb has an activity predicate in its LS, the macrorole is actor.
2. If the verb has no activity predicate in its LS, the macrorole is undergoer.

The LS for Korean verb *cwui* 'kill', for instance, would be [**do**' (x,Ø)] CAUSE [BECOME **dead'** (y)], and from (2.24) it follows that it will have two macroroles and therefore be transitive. On the other hand, the LS for Korean verb *cwuk* 'die' would be BECOME **dead'** (x) and the LS for Korean verb *wul* 'cry' would be **do**' (x, [**cry'** (x)], and according to (2.24a) they should both be intransitive verbs. Moreover, following (2.24b) the single macrorole with *cwuk* 'die' should be an undergoer, since it lacks an activity predicate in its LS, whereas the single macrorole with *wul* 'cry' should be actor, since it has an activity predicate in its LS. None of this information would have to be listed in the lexical entries for any of these verbs, since it all follows from the LS plus (2.24).

2.3. Information Structures

2.3.1. An Outline of Information Structure

In RRG, the issue of the distribution of information in clauses and sentences is extensively discussed in Van Valin (1993a) and Van Valin and Lapolla (in preparation). Research on this topic goes back at least to the work of Prague School linguists such as Mathesius in the 1920's, and more recent work in this area has included Halliday (1967, 1984), Horn (1986), Jackendoff (1972), Kuno (1972a, b, 1975), Chafe (1976), Prince (1981), Vallduvi (1990), among others.

The approach taken by RRG builds upon Kempson's (1975) reformulations of Grice's conversational maxims and Lambrecht's (1986, 1987, 1988, 1994) theory of information structure. As pointed out by Lambrecht (1994), the difficulties encountered in the analysis of the information-structure component of grammar are reflected in certain problems of terminology. Among the labels which have been used by 20th century linguists are FUNCTIONAL SENTENCE PERSPECTIVE, used by scholars of the Prague School of linguistics, INFORMATIONAL STRUCTURE or THEME (Halliday

(1967)), INFORMATION PACKAGING (Chafe (1976)), DISCOURSE PRAGMATICS, and recently INFORMATICS (Vallduvi (1990b)). Lambrecht (1987, 1988, 1994) adopts Halliday's term 'information structure', because his special emphasis is placed on the STRUCTURAL implications of discourse-pragmatic analysis. Lambrecht (1994) and RRG take information structure to be a component of GRAMMAR, more specifically of SENTENCE GRAMMAR. That is, they take it to be a determining factor in the formal structuring of sentences. Lambrecht suggests that information structure be NOT concerned with psychological phenomena which do not have correlates in grammatical form. He propose the following definition of 'information structure' (p. 5).

(2.25) INFORMATION STRUCTURE: That component of sentence grammar in which propositions as conceptual representations of states of affairs are paired with lexicogrammatical structures in accordance with the mental states of interlocutors who use and interpret these structures as units of information in given discourse contexts.

According to him, the information structure of a sentence is the formal expression of the pragmatic structuring of a proposition in a discourse. The categories of the information-structure component are of two basic types. The first type involves the mental representations of entities in a discourse. Two most important notions are: (i) PRESUPPOSITION and ASSERTION, which have to do with the structuring of propositions into portions which a speaker assumes an addressee already knows or does not yet know; (ii) IDENTIFIABILITY and ACTIVATION, which have to do with a speaker's assumptions about the statuses of the mental representations of discourse referents in the addressee's mind at the time of an utterance. The second type of information-structure category involves pragmatically construed relations between denotata and propositions. There are two kinds of pragmatic relation between denotata and propositions: the topic relation and focus relation.

2.3.1.1. The Mental Representations of Discourse Referents

Roughly speaking, Lambrecht (1994) refers to the 'old information' contained in, or evoked by, a sentence as the PRAGMATIC PRESUPPOSITION, and refers to the 'new information' expressed or conveyed by the sentence as the PRAGMATIC

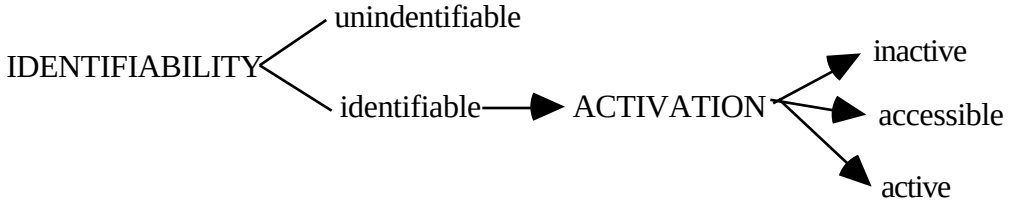
ASSERTION. Lambrecht (1994: 52) defines pragmatic presupposition and assertion as follows:

(2.26) PRAGMATIC PRESUPPOSITION: The set of propositions lexicogrammatically evoked in a sentence which the speaker assumes the hearer already knows or is ready to take for granted at the time the sentence is uttered.
PRAGMATIC ASSERTION: The proposition expressed by a sentence which the hearer is expected to know or take for granted as a result of hearing the sentence uttered.

He suggests that the pragmatic presuppositions evoked in an utterance must be linguistically represented by some verbal or other predicating expression in the sentence. Hence, his 'presupposition' is understood as a specifically LINGUISTIC concept. According to Dryer (1994), Lambrecht employs the expression 'pragmatic presupposition' in a systematically ambiguous way, sometimes apparently using it to denote only those propositions which are beliefs, at other times apparently using it to denote any propositions that are mentally represented. On the other hand, his use of 'assertion' does not coincide with the common usage in which 'asserting' a proposition contrasts with denying or questioning it. Nor does it coincide with the usage in which 'assertion' is synonymous with 'statement', i.e., in which the term refers to a kind of speech act, expressed in DECLARATIVE as opposed to INTERROGATIVE, IMPERATIVE, OR EXCLAMATIVE sentences.

According to Lambrecht, to ACTIVATE a referent is not simply to conjure up a representation of it in the mind of the addressee but to ESTABLISH A RELATION between it and a proposition. Referent activation is then not only a psychological but also a properly linguistic fact. An entity of which a hearer is assumed to have a mental representation is called identifiable. Lambrecht (1994) summarizes the system of identifiability and activation in the diagram as in (2.27):

(2.27) = abbreviated diagram of Lambrecht's (3.25)



2.3.1.2. Pragmatic Relations: TOPIC and FOCUS

Now, let us turn to the TOPIC/FOCUS distinction. Lambrecht (1994: 131) proposes the following definitions of the pragmatic category 'topic' and the grammatical category 'topic expression'.

(2.28) TOPIC: A referent is interpreted as the topic of a proposition if in a given situation the proposition is construed as being about this referent, i.e. as expressing information which is relevant to and which increases the addressee's knowledge of this referent.
TOPIC EXPRESSION: A constituent is a topic expression if the proposition expressed by the clause with which it is associated is pragmatically construed as being about the referent of this constituent.

His topic notion is restricted to SENTENCE TOPICS or CLAUSE TOPICS, which I will follow in this thesis. To designate topic NPs which are grammatically marked as such by their position or their form and which cannot be identified with the grammatical relations subject or object, he uses the category labels TOP (for left-detached topic constituents) and A-TOP ('antitopic', for right-detached topic constituents).

Let us look at the definition of focus. The notion of focus is implicit in much previous work on focus and related phenomena. Halliday (1967: 204), for example, defines focus as follow: 'Information focus is one kind of emphasis, that whereby the speaker marks out a part (which may be the whole) of a message block as that which he wishes to be interpreted as informative.' Halliday thus defines focus as the element of information in a sentence whereby shared and not-yet-shared knowledge differ from each other. In a similar way, Jackendoff (1972: 230) defines the 'focus of a sentence' as 'the information in the sentence that is assumed by the speaker not to be shared by him and the hearer'. Selkirk (1984: 206) suggests that 'a focused constituent [i.e. a constituent to which a pitch accent is assigned] contributes 'new information' to the discourse'. On the other hand, Lambrecht suggests that if a sentence evokes no presupposition, focus and assertion coincide. Lambrecht (1994: 213) gives the following definition of 'focus'.

(2.29) FOCUS: The semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition.

His 'focus' notion is defined at the semantic level of the (syntactically structured) proposition, not at the grammatical level of the (syntactically structured) sentence.

The conventional association of a focus meaning with a sentence form is termed the FOCUS STRUCTURE by Lambrecht (1994). A major component of his theory of focus structure is a taxonomy of focus types. He distinguishes three different types of focus

structure types: predicate-focus structure, argument-focus structure, sentence-focus structure.[14] He gives the following definition.

(2.30) **Predicate focus structure**: The unmarked subject-predicate (topic-comment) sentence type, in which the predicate is the focus and in which the subject (plus any other topical elements) is in the presupposition
Argument [narrow] focus structure: The identificational type, in which the focus identifies the missing argument in a presupposed open proposition
Sentence focus structure: The event-reporting or presentational sentence type, in which the focus extends over both the subject and the predicate (minus any topical non-subject elements)

Let us consider the following examples for each focus structure type.

(2.31) Predicate focus structure
What happened to your car ?
a. My car/ It broke down. (English)
b. (Kuruma wa) KOSHOO-shi-ta (Japanese)
c. (cha-nun) kocangna-ess-ta (Korean)

(2.32) Argument [narrow] focus structure
I heard that your motorcycle broke down.
a. My CAR broke down. (English)
b. KURUMA ga koshoo-shi-ta.(Japanese)
c. CHA-ka kocangna-ess-ta (Korean)

(2.33) Sentence focus structure
What happened ?
a. My CAR broke down. (English)
b. KURUMA ga KOSHOO-shi-ta (Japanese)
c. CHA-ka KOCANGNA-ess-ta (Korean)

Each focus structure has the following schematic representation.

(2.34) Predicate focus structure (Lambrecht (1994): 5.10')
Sentence: My car broke DOWN.
Presupposition: 'speaker's car is a topic for comment x'
Assertion: 'x= broke down'
Focus: 'broke down'
Focus domain:VP

(2.35) Argument [narrow] focus structure (Lambrecht (1994): 5.11')
Sentence: My CAR broke down.
Presupposition: 'speaker's x broke down'
Assertion: 'x= car'
Focus: 'car'
Focus domain:NP

(2.36) Sentence focus structure (Lambrecht (1994): 5.12')

[14] Following Van Valin (1993), I will use the term 'narrow focus' instead of 'argument focus' in this thesis.

Sentence: My car broke DOWN.
Presupposition: ---
Assertion: 'speaker's car broke down'
Focus: 'speaker's car broke down'
Focus domain:S

According to Lambrecht (1994), the distinction between focus and sentence accent is particularly important since sentence accentuation is not a focus-marking device per se but a general device for the marking of semantic portions within pragmatically structured propositions, whether focal or not. The pragmatic relation between a denotatum and a proposition is called FOCUS RELATION. Let us look at example (2.37).

(2.37) Q : Where did you go last night ?
A: I went to the MOVIES.

In the reply in (2.37) 'focus' is the establishment of such a focus relation between the denotatum the *movies* and the rest of the proposition that creates the new state of information in the addressee's mind. According to Lambrecht, the function of FOCUS MARKING is then not to mark a constituent as new but to signal a focus relation between an element of a proposition and the proposition as a whole. The syntactic domain in a sentence which expresses the focus component of the pragmatically structured proposition is called the FOCUS DOMAIN. For example, in (2.37) the focus domains are the noun phrase *the movies* .[15] To account for the difference between the broad and narrow reading of an unmarked focus structure, Van Valin (1993a) proposes the concepts of Potential Focus Domain [PFD] from Actual Focus Domain [AFD]. The PFD must fall within the scope of Illcutionary Force [IF] operator. It may be coextensive with it in simple clauses, as in English, or it may be a subset of it, as in Italian and Setswana.

Lambrecht's (1994) research conforms to RRG theory by locating his research somewhere in between the 'formal' and the 'functional' approaches to syntax. In other words, Lambrecht (1994) is based on the assumption that there are aspects of grammatical form which require pragmatic explanations.

2.3.2. Pragmatic Case in Korean and Focus Structure

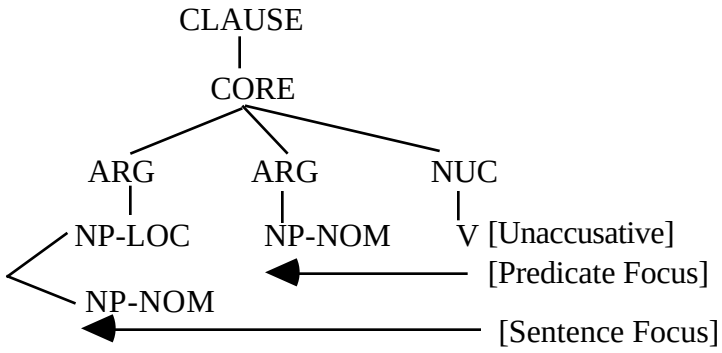
[15] He argues that the focus domain is the entire predicate phrase *went to the movies* rather than the NP *the movies* alone, and that the interpretation of the denotatum of this NP as the only focal element is merely due to contextual inference.

In this section, I preview and summarize what I am going to argue. In the later chapters of this thesis, I will show that pragmatic case in Korean is motivated by focus structure. As I have mentioned earlier, the grammatical system which serves to indicate the scope of the assertion in an utterance in contrast to the pragmatic presupposition is termed the *focus structure* by Lambrecht. As pointed out by Lambrecht (1994), focus structure is formally manifested in aspects of prosody, in special grammatical markers, in the form of syntactic (in particular nominal) constituents, in the position and ordering of such constituents in the sentence, in the form of complex grammatical constructions, and in certain choices between related lexical items. Van Valin (1993a) suggests that Japanese, for example, use primarily morphological means, the well-known particles *wa* and *ga*, to signal the different focus types. According to Kuno (1973), (unstressed) *wa* is a topic marker, which accounts for its use in predicate focus constructions, and further that there are in fact two *ga* particles, neutral description *ga* (unstressed) and exhaustive listing *ga* (stressed).

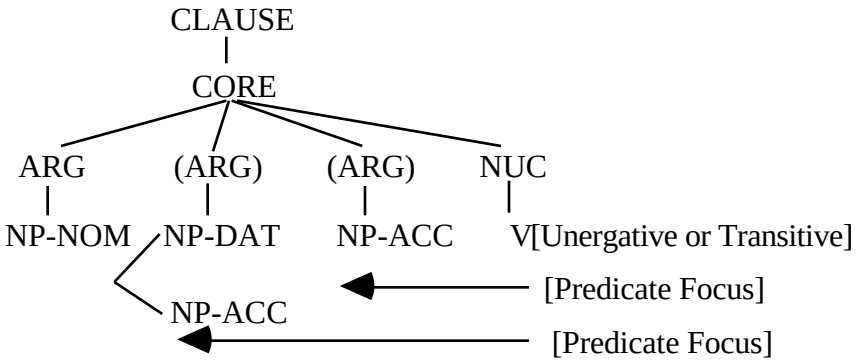
In the remaining chapters of this thesis, I will argue that the focus structure difference in Japanese *wa/ga* marking (Kuno (1973) and Van Valin (1993a)) is mostly true of *nun* and *ka* markings in Korean, which correspond to *wa* and *ga* in Japanese, respectively. The (unstressed) topic marker *nun* accounts for its use in predicate focus construction. The normal 'subject' directly linked from argument structure seems to roughly correspond to neutral description *ka* . The neutral description *ka* is used in sentence focus or predicate focus constructions, depending on the characteristics of the verbs.[16] On the other hand, the exhaustive listing *ka* is used in narrow focus constructions. I will argue in the later chapters that the double nominative construction with unaccusative verbs in which both nominatives are in a core extends the actual focus domain to include the oblique core arguments. On the other hand, if the first nominative in the double nominative construction with unaccusative verbs is in PCS, the double nominative construction is considered as a narrow (or argument) focus construction. In a similar way, the role of double accusative construction in Korean is to extend the actual focus domain to include the oblique core arguments which receive accusative marking. Given that the indirect objects normally have dative marking in Korean, the accusative marking on the arguments will serve to include the arguments into the actual focus domain. Adverbial nominals with accusative marking should also be included in the Actual Focus Domain in focus structure. The following figures in (2.38) summarizes the crucial parts of what I have suggested.

[16] Even though B-S Yang (1994) claims that the neutral *-ka* is used only in sentence focus constructions, I will argue later that it is used in both sentence and predicate focus constructions.

(2.38) a.



b.



Foley and Van Valin (1984) outline four basic systems for signaling co-reference relations among NP arguments in discourse: switch-function, switch reference, gender, and the inference system. In Korean, which B-S Yang (1994) classifies as an inference system language, zero anaphora can be used when the content of the zero anaphor can be inferred from the discourse context. Zero anaphora or a null argument is possible only in the case that the arguments are already assumed or informed in the discourse. If the argument is new and asserted information in the discourse, it cannot be replaced with a zero-anaphor and it is obligatory. Thus, Korean focus structure is signaled by not only particles and stress (cf. Kuno (1976)), but also zero anaphora and pronouns (cf. B-S Yang (1994)).

Chapter 3. Grammatical Relations in Korean

Previous approaches to case marking in Korean heavily rely on the notion of grammatical relations. Hence it is necessary to clarify how to deal with Korean grammatical relations in Role and Reference Grammar. As argued in Van Valin (1994), RRG is concerned with 'functional relations' rather than 'grammatical relations' themselves. Functional relations fall into three basic categories: semantic, pragmatic, and syntactic (i.e. grammatical). As pointed out by Van Valin (1994), in RRG, syntactic (grammatical) relations are analyzed as being grammaticalizations of semantic and pragmatic relations. Hence, they are not an autonomous type of relation. In this thesis, I follow the RRG position on grammatical relations.

3.1. Overview: Grammatical Relations

It is grammatical behavior that leads those grammarians who argue for grammatical relations to posit relations such as 'subject' and 'object'. In a given language, the 'subject' or 'object' may be marked explicitly by such devices as word order, case inflection, or 'agreement' registered on the verb or elsewhere. Moreover, the 'subject' can usually be distinguished by its exclusive or preferential participation in certain grammatical constructions (for example, see Keenan's (1976) Accessibility Hierarchy). The 'subject' is also usually a pivot in clause linkage phenomena (particularly in English, see Foley and Van Valin (1984) and Van Valin (1993a) for details). Or a clause may contain a special marker to indicate whether or not its 'subject' is the same as in the previous clause (Reference-tracking devices, see Van Valin (1987b) for details). In addition to that, grammatical relations are generally postulated as intermediary 'abstract' entities whose primary function is to relate semantic roles like agent, patient, experiencer, etc. with their formal representations like case markers or distinct positions in the sentence. Such intermediary entities may be considered to be necessary because the linkage between semantic roles and their case marking has been found to be too complex to state otherwise in most of the familiar languages. Therefore, grammatical relations such as 'subject' and 'direct object' seem to be of prime importance to the description of clause structure.

However, there is no consensus regarding even the most basic issues. For example, Foley and Van Valin (1984) and Van Valin (1993a) argue that 'subject' and 'object' do not represent universal categories. Even those who accept such categories as 'subject' and 'object' do not agree on whether they should be characterized in terms of meaning, grammar, discourse function, or some combination thereof. Theorists who view these

relations as purely grammatical disagree as to whether they are primitive, as claimed in Relational Grammar, or definable with reference to more basic constructs, such as phrase-structure configuration (Chomsky (1981), (1986)). In Chomsky (1986), 'subject' can be defined as a position of Spec of IP, while 'object' as the internal argument of the verb.

In RRG, a grammatical relation is defined by a restricted neutralization of semantic relations for syntactic purposes. As an example, let us consider whether the restrictions on which argument can appear as the subject of *seem* in a raising construction in English are best described in terms of semantic or syntactic relations.

(3.1) = Van Valin (1993a) (38)
a. Jack seems to be running in the park.
b. Jack seems to be taller.
c. Jack seems to be eating a hot dog.
d. * Jack_i seems the panhandler to have accosted $\_\_\_\__i$?
e. Jack seems to have been accosted by a panhandler.

In (3.1) an argument of the dependent clause appears in the matrix clause. There are restrictions on which argument can so appear, as the ungrammaticality of (3.1d) shows, but the crucial question is whether the restriction is to be stated in syntactic or semantic terms. The raised argument is the actor of an intransitive verb in (3.1a) and the actor of a transitive verb in (3.1), and it is the undergoer of an intransitive verb in (3.1b) and the undergoer of a transitive verb in (3.1e). In (3.1d) the raised argument has the same macro-role as in the grammatical (3.1b) and (3.1e) examples; this is crucial evidence that the restriction cannot be stated in semantic terms. There is thus a restricted neutralization of semantic relations with respect to which argument of the dependent clause functions as the raised NP in (3.1), and this neutralization defines a grammatical relation, in this case the traditional subject in English. It is significant that the contrast between actor and undergoer is neutralized with both intransitive verbs (3.1a,b) and transitive verbs (3.1c,e).

It has generally been assumed that grammatical relations are a universal feature of human language and that they are basically the same in all languages. Serious doubt, however, can be raised with respect to the universality of grammatical relations. According to Van Valin (1994),[17] there are two senses in which grammatical relations could be considered universal, a strong sense and a weaker sense. The strong sense is that there are grammatical relations in every human language. Grammatical relations are not universal in the strong sense, then, if there is a single language which exhibits no restricted neutralizations in its grammar. Acehnese (Austronesian, Sumatra) is such a language, as

[17] Bhat (1991) also argues against the universality of grammatical relations.

argued in Durie (1987): there are no restricted neutralizations of semantic roles for syntactic purposes. The cross-linguistic variation in restricted neutralization of semantic roles, for instance, is illustrated in (3.2) (from Van Valin (1994: 1335)).

(3.2) *Cross-Linguistic Variation in Restricted Neutralization of Semantic Roles*

	Intransitive Vs	Transitive Vs	Grammatical Relations
Acehnese	NO	NO	NO
Zapotec/Warlpiri	YES	NO	YES
English/Dyirbal	YES	YES	YES

The weaker sense of universality is that in all of the languages that have grammatical relations, they play the same role (or 'value' in Saussurean sense). Even though grammatical relations can be motivated in both English and Warlpiri, the restricted neutralizations defining them are not the same (see the table in (3.2)): in English the neutralization applies to the arguments of both transitive and intransitive verbs, whereas in Warlpiri it is only with intransitive verbs. Thus subjects in Warlpiri cannot be considered to be exactly the same as subjects in English, and therefore the weaker sense of universality is also insupportable.

3.2. Grammatical Relations in Korean

Those who posit grammatical relations in Korean argue for the existence of a VP-node in Korean. H-R Choe (1985), and Y-S Kang (1985), among others, for instance, argue that the existence of a VP node is crucial to account for case assignment of 'subject' and 'object' NPs. The analysis of a sentence structure in Korean is still debated: one position may be a flat structure analysis which does not assume a VP node, while another position is a hierarchical structure analysis which assumes a VP node. A RRG analysis, which does not posit grammatical relations as a basic concept, would take the former position. The discussions on Korean 'grammatical relations' in this thesis will indirectly show that all of the current arguments do not provide crucial evidence for the existence of the VP node.

Bhat (1991) claims that arguments occurring in a sentence have to represent two main types of relations called 'semantic' relations and 'pragmatic' relations. The former relates arguments to the predicate; the latter relates arguments to the speech context. By 'semantic' relations he means the basic 'conceptual' meaning of a given sentence. Their number and type is determined by the kind of predicate that occurs in the sentence, or rather by the kind of event or state that the predicate denotes. Pragmatic relations, on the other hand, deal with an entirely different type of meaning: namely, the way in which these

arguments are related to other arguments that occur in the speech context and also with the participants of the speech act, such as the speaker and the addressee. This latter type of relation is regarded as dealing with the organization or 'packaging' of the arguments concerned (Foley and Van Valin (1985)). For example, a given argument may have to refer to an individual or object that is already being talked about in the speech context or to one that is being newly introduced into the conversation; it may have to refer to an individual that needs to be specifically emphasized or to one that may be left in the background; and so on.

In the similar way, Van Valin (1994) argues for the necessity of three kinds of functional relations: semantic, pragmatic, and syntactic (i.e. grammatical) relations. Van Valin (1994) suggests that syntactic (grammatical) relations are analyzed as being grammaticalizations of semantic and pragmatic relations. Semantic functional relations are one of the two major types of relation between a predicate and its arguments; the other type is syntactic relations. They are important because they capture the basic structure of events. They are a way of talking about who did what to whom. Almost every syntactic theory makes use of these notions in some way, either overtly or covertly. As mentioned in the previous chapter (see Chapter 2), semantic functional relations may be divided into two general types, which will be called 'specific thematic relations' and 'semantic macroroles'. Pragmatic functional relations are concerned with the distribution of information in utterances, in particular with respect to what is assumed by the speaker to be known to interlocutors and what is presented as new and informative.

In this thesis, I am taking Van Valin's (1994) notions of 'semantic' or 'pragmatic' relations. By 'semantic' relations I mean the 'thematic relations' and 'macroroles' of a given sentence. However, I do not confine them to the 'thematic relations' and 'macroroles'. The inherent lexical content of NPs like 'animacy' sometimes plays an important role in 'semantic' relations (see Silverstein (1976) for its role in the formation of case marking rules in many languages).[18] By 'pragmatic' relations, on the other hand, I mean the different types of meaning resulting from information structures. I propose that semantic and pragmatic relations control the various grammatical processes (case markings and syntactic agreements) that occur in Korean, depending on whether they are of semantic or pragmatic relevance respectively. I also claim that even if 'grammatical relations' alone might be able to account for Korean case markings in many instances, semantic and pragmatic relations are also needed, alongside syntactic relations.

In a similar way, O'Grady (1988, 1991a) suggests that despite appearances to the contrary, the rules of Korean grammar do not refer directly to grammatical relations.

[18] As pointed out by Koenig (p.c), notions like 'animacy' is not semantic relations. However, I will call 'animacy' a semantic relation in this paper only for convenience.

According to O'Grady (1988, 1991a), these rules are formulated in terms of the properties or features that define and distinguish among grammatical relations. Thus his case rules are formulated in terms of the properties 'first', 'last', 'argument', 'adjunct' and 'thematic dependent' rather than subject, direct object and so on. According to O'Grady (1991a), the contrast between subject and direct object, for instance, reflects the order in which NPs are incorporated into a sentence structure that is built from the bottom up. O'Grady (1988) claims that this permits a unified account of the dative case as the marker of adjunct thematic dependents of the verb - a class of NPs that includes not only recipients in transitive clauses, but actors/experiencers in causative structures, psych verb constructions and passives. He also argues that the rules for anaphor interpretation and honorific agreement must be formulated in terms of the notions 'last' and 'thematic dependent' rather than any specific grammatical relation. He suggests that if grammatical rules had to refer directly to grammatical relations, there would be no unified description of this class of NPs.

3.3. Pivot Choice in Korean

In the previous subsection, I have proposed that there is a strong need for establishing 'semantic' and 'pragmatic' relations to account for Korean case markings. RRG also posits a syntactic relation called the *pivot of a syntactic construction* . Some grammatical processes as well as case marking are often argued to relate to the concept. According to Van Valin (1993a), the NP bearing the syntactically-defined privileged syntagmatic function is the syntactic pivot of the construction.[19] In order for a syntactic pivot to exist, there must be a restricted neutralization of semantic roles associated with the privileged function in the construction; if there is no restricted neutralization, as in Acehnese, then there are no grounds for positing specific non-semantic relations like subject and direct objects. A syntactically accusative language such as Korean involves the following markedness hierarchy for accessibility to the primary syntactic pivot.

(3.3) Hierarchy of markedness of pivot choice: syntactically accusative languages
Actor > Undergoer > other (Van Valin (1993a: 59))

In the following, I show that the tests for 'subjecthood' which are based on syntactic (grammatical) relations are questionable, and that the notion of syntactic pivot together with semantic and pragmatic relations is a more appropriate basis for an account of

[19] Similarly, Foley and Van Valin (1985) defines the term as follows: "A pivot is any NP type to which a particular grammatical process is sensitive, either as controller or as target."

the 'behavioral properties' of some syntactic agreement phenomena in Korean.[20] According to K-S Hong (1991: 6), the following constructions have been claimed as relevant diagnostics for 'subjects' in various works: honorification, equi control, *caki* binding, plural marker copying, coordination, control in *-myense* 'although' adverbial clauses, subject-to-object raising, and quantifier float. Following Van Valin's (1991b) logic concerning the pivot choice hierarchy, B-S Yang (1994) generalizes the syntactic pivot for Honorification, Reflexivization, and *-myense* constructions as follows:

(3.4) *The Accessibility to Pivot Hierarchy for Korean Honorific Agreement, Reflexivization, and* -myense *construction:*
The highest ranking argument with respect to the Actor end of Actor-Undergoer Hierarchy, regardless of whether it is a macrorole or not, is the pivot for honorification, reflexivization, and *-myense* constructions.

In this thesis, Yang's generalization will be modified to comply with new data.

I will propose that there are two kinds of pivots in Korean: semantic pivots controlling clause-internal grammatical processes and pragmatic pivots controlling cross-clausal grammatical processes. As pointed out by Van Valin (1993a: 64), there are two very different situations regarding the selection of the argument to function as pivot in syntactic constructions in the world's languages. In some constructions in some languages, discourse pragmatic considerations influence this selection, while in the majority of languages there are no constructions in which they play a role. In markedness terms, it could be described as [±pragmatic influence], with [+pragmatic influence] the marked case and [-pragmatic influence] the unmarked case. The two types of syntactic pivot may be characterized as follows.

(3.5) a. Syntactic pivot [+pragmatic influence]: the selection of the argument to function as pivot of a transitive verb is not predictable from its semantic role and may be influenced by discourse-pragmatic considerations, in particular its topicality. Such a pivot will be called a *pragmatic pivot* [PrP].
b. Syntactic pivot [-pragmatic influence]: the selection of the argument to function as pivot of a transitive verb is predictable from its semantic role, which is determined by the lexical semantic properties of the verb. Such a pivot will be called a *semantic pivot* [SmP].
Van Valin (1993a) (46)

Whether a pivot is [+pragmatic influence] can only be determined by looking at clauses with transitive verbs, since there is no choice with respect to which argument will be pivot with an intransitive verb. According to Foley and Van Valin (1985), semantic and

[20] LaPolla (1993) argues that no evidence is found for a viable grammatical category of 'subject' in Chinese. According to him, there is no restricted neutralizations of semantic roles that would point to a grammatically viable category of either 'subject' or 'direct object' in Chinese.

pragmatic pivots are not mutually exclusive. There are languages such as Tagalog or Yidin which possess both types, each of them controlling or being the target of different grammatical processes. For instance, Tagalog (Schachter (1976)) is an good example of a language of this type. In Tagalog, the actor is the semantic pivot controlling a few clause-internal grammatical processes, like reflexivization, while what is referred to in Tagalog grammar as the topic, the NP marked by the preposition *ang* , is the pragmatic pivot, controlling most of the cross-clausal grammatical processes and the maintenance of discourse cohesion. I follow Foley and Van Valin's (1985) logic concerning Tagalog and argue that the two kinds of syntactic pivots are needed to explain syntactic agreement in Korean.

3.3.1. Semantic Pivot [for clause-internal grammatical processes]

3.3.1.1. Honorification

Many studies (C. Youn (1989), C-M Lee (1990), E-J Han (1990), K-S Hong (1990), among others) have claimed that the grammatical subject is responsible for *si* marking. Let us consider the following sentences.

(3.6) a. sensayngnim-i o-si -nta.
teacher-NOM come-HON-DEC
'The teacher comes.'

b. * Chelswu-ka sensayngnim-ul manna-si-ess-ta
C.-NOM teacher-ACC meet-HON-PST-DEC
'Chelswu met the teacher.'

c. * sensayngnim-uy sonca-ka crib-ey nwue iss-usi -ta
teacher-GEN grandson-NOM crib-in lie be-HON-DEC
'The teacher's grandson is lying in the crib.'

d. Chelswu-uy sensayngnim-i o-si-nta
C.-GEN teacher-NOM come-HON-DEC
'Chelswu's teacher comes.'

The above sentences show that the grammatical subject uncontroversially determines *si* marking. In (3.6a) where the subject denotes a person who is honorified, a verbal suffix *si* is obligatory. The 'object' does not trigger *si* marking as in (3.6b). The sentences in (3.6c) and (3.6d) show that the head noun rather than a genitive noun with the subject determines *si* marking. On the basis of the examples such as (3.6), Youn (1989) proposes the following rule governing honorific *si* .

(3.7) A final 1 controls Subject Honorification

With the above rule of honorific *si* , Youn attempts to show that the first nominative nominal is a (final) subject in inalienable possessor constructions.

In some cases where the head noun denotes an animate being, however, a genitive noun within the subject NP can trigger *si* marking, as noted by most works on Korean honorification.

(3.8) a. sensayngnim-uy son-i khu-si-ta
teacher-GEN hands-NOM be big-HON-DEC
'The teacher's hands are big.'
b. sensayngnim-uy caysan-i manh-usi-ta
teacher-GEN possessions-NOM be many-HON-DEC
'The teacher is rich.'

These examples seem to show that the honorification in Korean is not a suitable test of subjecthood. But, K-S Hong (1991) still justifies it as a test of subjecthood by applying to the notion of metonymic usage of language: something related to a person, e.g., body parts, can represent the person. She assumes that an NP denoting an animate being and its metonyms bear the same honorific feature. According to K-S Hong (1991), this metonymy interpretation totally depends on various semantic or pragmatic factors. For example, the metonymic interpretation is restricted to some semantic classes of nouns: (i) body parts (e.g., hands, feet, eyes), (ii) logophoric nouns (e.g., saying, mind, thought), (iii) significant properties (e.g., home, hometown, inheritance). Based on this facts, K-S Hong (1991) proposes the following description for the honorification test.

(3.9) Honorification Test
a. If an NP denoting an animate being which determines *si* marking is a verbal argument, then it is the subject.
b. If it is not a verbal argument, its most specific metonym is the subject.

As noted by K-S Hong (1991), the pivots in the genitive case which denote animate entities are peculiar in behavior in that the pivots have to constitute the whole-part relation (or 'metonymic relation') between the pivot and non-animate theme arguments. Hence it is not the case that every case holders which denote animate entities can be pivots. Consider the sentences in (3.10).

(3.10) = K-S Hong's (1991, exs. (38a) and (40a))
a. sensayngnim-uy elkwul-ey sangche-ka
teacher-GEN face-onmark-NOM
sayngki-si-ess-ta
appear-HON-PST-DEC

'A mark appeared on the teacher's face.'

b. sensayngnim-uy meli-eysay ttong-i
teacher-GEN face-onbird droppings-NOM
tteleci-*si-ess-ta
appear-*HON-PST-DEC
'Bird droppings fall down on the teacher's head.'

When we compare the theme NP of (3.10a) with that of (3.10b), the former (i.e., a mark) denotes a body part of the teacher, while the latter (i.e., bird droppings) does not. From these, we revise the hierarchy as follows:

(3.11) The Accessibility to Pivot Choice Hierarchy
i) The highest ranking animate case holder with respect to the Actor end of the Actor-Undergoer Hierarchy, regardless of whether it is a macrorole or not, is the pivot for clause-internal processes like honorification and reflexivization.
ii) if the animate pivot candidate is not a direct core argument, it should stand in a whole-part (or 'metonymic) relation with the direct core argument.
[semantic pivot]

I put an emphasis on the role of 'animacy' for semantic pivots, as many other studies do. I also employ K-S Hong's (1991) notion of 'metonymic' relation. Now let us consider the following sentence involving double nominative construction involving possessor ascension.

(3.12) a. emenim-i nwun-i khu-si-ta
mother-NOM eyes-NOM big-HON-DEC
'It is mother whose eyes are big.'

b. emenim-uy nwun-i khu-si-ta
mother-GEN eyes-NOM big-HON-DEC
'Mother's eyes are big.'

c. halapeci -ka sonca-ka kho-ka
grandfather-NOM grandson-NOM nose-NOM
khu-(*si)-ta
big–HON-DEC
'It is grandfather whose grandson has a big nose.'

d. halapeci -uy sonca-ka kho-ka
grandfather-GEN grandson-NOM nose-NOM
khu-(*si)-ta
big–HON-DEC
'The grandfather's grandson has a big nose.'

The pivot choice hierarchy in (3.11) correctly predicts that the pivot candidate *halapeci* 'grandfather' in (3.12c, d) should not be pivot, because it does not enter into a whole-part relation with its theme NP outside it. It is not clear, however, whether K-S Hong's (1991) test can explain the examples in (3.12a,b). Her test simply says that *nwun* 'eye' should

be the subject in (3.12a). It does not distinguish between the genitive construction as in (3.12b) and the possessor ascension construction as in (3.12a): C. Youn (1989), for instance, argues that *emenim* 'mother' be the subject in (3.12a). (see C. Youn (1989) for details) Hence, it is questionable that honorification is a diagnostic for subjecthood in Korean, because even though she argues the honorification test is a diagnostic for subjecthood, the properties of subject and honorification actually differ in many cases (see (E-Y Cho (1991) for details). Rather, the pivot notion which is different from 'subject' is more appropriate for the description of 'controller' of honorification. In conclusion, I have claimed that honorification is a questionable test for subjecthood, and that the notion of pivot together seems to be more appropriate for to account for the restrictions on honorification.

3.3.1.2. Reflexivization (*caki* 'self' binding)

Reflexive *caki* binding has sometimes been used as a test for subjecthood. However, some studies (O'Grady (1989), C-M Lee (1988), among others) observe that it is not a good diagnostic for subjecthood. Let us consider the following examples.

(3.13) a. Chelswu$_i$-ka Minswu$_j$-eyuyhay caki$_{i/j}$-uy hyeng-eykey
C.-NOM M.-by self-GEN brother-to
ponaye-ci-ess-ta
send-PASS-PST-DEC
'Chelsu$_i$ was sent to his$_i$ brother by Minsu.'

b. Swuni$_i$-uy chayk-icaki$_i$-uy chayksang uy-ey
S.-GEN book-NOM self-GEN desk top-on
iss-ta
be-DEC
'Swuni's book is on her desk.'
(K-S Hong (1991, ex. (21a))

c. caki$_i$-ka iki-n kes-i Yenghi$_i$-lul
self-NOM win-REL fact-NOM Y.-ACC
kippukey ha-ess-ta
please do-PST-DEC
'That she won pleased Yenghi.'

The above examples show that 'subjects' do not always antecede *caki*. The passive agent *Minswu* in (3.13a) can control *caki*. The possessor NP in (3.13b) can freely antecede *caki*. Even the object outside the minimal clause in (3.13c) is eligible to be controller. For this reason, K-S Hong (1991) and many others conclude that *caki* binding cannot be a diagnostic for 'subjecthood'. These data, however, should be accounted for by the semantic

pivot choice in (3.11). *Minswu* is the highest ranking animate case holder in (3.13a)[21], while *Swuni* is the only animate case holder in (3.13b). In (3.13c) *Yenghi* is the (only) highest animate direct core argument.

3.2.1.3. Passivization

Passivization in Korean has been often considered as a reliable objecthood test in Korean. Passivization is believed to be marked in that it reverses the markedness hierarchy for accessibility to the primary syntactic pivot as in (3.3). There are three major constructions which have been analyzed as passives in Korean. The first, the so-called syntactic passive, is formed by adding the auxiliary *ci-* 'become' to a verb infinitival form, as in (3.14). The agent is marked by *-eyuyhaye* 'by'. The second, which has been called the lexical passive, is formed by attaching an inflectional suffix (i/hi/li/ki) onto a verbal stem, as illustrated in (3.15). The passive agent is generally marked by *eykey* 'by', which is the dative postposition. The third consists of a noun and the light verb *tangha* - 'be affected', as in (3.16). The agent is generally marked *-eykey* 'by'.

(3.14) Syntactic Passive : Vinf + ci

a. John-ka Mary-lul anc-hi-ess-ta
J.-NOM M.-ACC sit-CAU-PST-DEC
'John seated Mary.'

b. John-ka Mary-eyuihaye anc-hi-e ci-ess-ta
J.-NOM M.-by sit-CAU-CONN[22] PASS-PST-DEC
'John was seated by Mary.'

(3.15) Lexical Passive: Vstem + i/hi/li/ki

a. John-ka Mary-lul cap-ess-ta
J.-NOM M.-ACC catch-PST-DEC

[21] I will not pursue the question of why the NP *Chelswu* can be a pivot. However, it might be argued that the 'subject' NP *Chelswu* also should be able to be a pivot, because there are two animate case holders and this animate NP is the highest ranking animate case holder of the verb 'be sent'. K-S Hong (1991) claims that in the following passive sentence only the passive agent is eligible to be the pivot. However, it is due to the fact that ''I' cannot be introduced to my brother' and that the 'subject' is not a third-person NP.

nay-ka Minswu$_i$-eyuyhay caki$_i$-uy hyeng-eykey
I-NOM M.-by self-GEN brother-to
sokay-toy-ess-ta
introduce-PASS-PAST-DEC
'I was introduced to his brother by Minsu.'
(K-S Hong (1991, ex. (20b))

[22] According to B-S Yang (1994), this is a nuclear juncture marker. (cf. Chapter 2)

'John caught Mary.'

b. John-ka Mary-eyuihaye/eykey cap-hi-ess-ta
J.-NOM M.-by catch-PASS-PST-DEC
'John was caught by Mary.'

(3.16) Adversity Passive: N + tangha
a. John-ka Mary-lul haykoha-ess-ta
J.-NOM M.-ACC fire-PST-DEC
'John fired Mary.'
b. John-ka Mary-eyuihaye hayko*tangha* -ess-ta
J.-NOM M.-by be fired-PST-DEC
'John was fired by Mary.'

According to K-S Hong (1991), only 'objects', but not 'obliques', are relevant to syntactic passives such as (3.14). For this reason, K-S Hong (1991) argues that only syntactic passives in Korean qualify as a necessary and sufficient objecthood test. The lexical passive behaves in a different way from syntactic passives. According to K-S Hong (1991), lexical passive sentences are not necessarily related to active sentences, as shown in (3.17).

(3.17) a. * sikan-i Chelswu-lul ccoc-ko iss-ta
time-NOM C.-ACC chase-CMPL be-DEC
'(lit.) Time is chasing Chelswu (things are hectic for Minswu)'
b. Chelswu-ka sikan-ey ccoc-ki-ko iss-ta
C.-NOM time-by chase-PASS-CMPL be-DEC
'(lit.) Time is chasing Chelswu (things are hectic for Minswu)'
(Klaiman (1988: 57))

As suggested by K-S Hong (1991), the actor in the active sentence should not be inert. Thus, the only way to express such a situation is by means of the lexical passive as in (3.17). Second, according to N-S Song (1987), not only objects but also some obliques of active sentences are realized as the subject of lexical passive sentences.

(3.18) a. John-i na-eykeyse/*lul chayk-ul ppayass-ess-ta
J.-NOM I-ABL/ACC book-ACC take away-PST-DEC
'John took away a book from me.'
b. nay-ka John-eyuyhay chayk-ul ppayass-ki-ess-ta
I-NOM J.-by book-ACC take away-PASS-PST-DEC
'I was taken away a book by John.'

Adversity passives work in the same way as lexical passives. According to K-S Hong (1991), not only the objects but also the obliques of active sentences may be realized as the

subject of adversity passive sentences. The source argument in (3.19), rather than the patient, is realized as the subject of passive sentences.

(3.19) a. John-i na-eykeyse/*lul chayk-ul kangthalha-ess-ta
J.-NOM I-ABL/ACC book-ACC take away-PST-DEC
'John took away a book from me.'
b. nay-ka John-eykey chayk-ul kangthal*tangha* -ess-ta
I-NOM J.-by book-ACC be taken away-PST-DEC
'I was taken away a book by John.'

I claim that the three kinds of passives in Korean do not constitute a reliable objecthood test, and that pivot choice in Korean passives is determined by the pivot choice hierarchy in Korean as in (3.11). In RRG, passive is formulated in terms of the hierarchy of pivot choice. Passive always involves a marked pivot choice, with the undergoer appearing as pivot, in the default situation. No notion of syntactic direct object is postulated. The universal formulation of the passive given in Foley and Van Valin (1984) is presented in (3.20).

(3.20) a. Foregrounding: ~ A = Pivot
b. Backgrounding: A = X

According to Van Valin (1993a), there are many languages in which only undergoers may appear as pivot in a passive construction; German, Italian and Indonesian are three examples. Icelandic, however, presents a very interesting situation in which pivot status in passives is not restricted to the undergoer argument of a transitive verb. It seems that the pivot status in Korean passives is not restricted only to the undergoer, as shown in (3.18) and (3.19). The sentences in (3.18) and (3.19) cannot be double-accusativized just as 'ablative-shift' is banned in English. In spite of these fact, (3.18) and (3.19) can be passivized. The observation leads to the conclusion that not only undergoers but also non-macrorole core arguments can be the pivot in Korean passives. Hence, the correct statement of the pivot choice in Korean passive construction cannot be 'U = pivot'; rather, it must be '~A = pivot'. The pivot choice in Korean passives follows exactly the pivot choice hierarchy in Korean as shown in (3.11) in that as argued by Klaiman (1991), animacy plays a crucial role in the pivot choice of passives sentences.[23] The locative NP which is not an

[23] Klaiman (1988) claims that the basis of diathesis alternation in Korean seems to be the concept of control: The selection of verbal voice in Korean seems to depend on which of two arguments is perceived as having control over the action, where control itself is a relative notion. According to her, animacy contributes to the determination of controller/ noncontroller status, even though in Korean, an inanimate can be analyzed as having as much control as an animate in certain situations.

undergoer is chosen as a pivot, because the NP *na* 'I' is the highest ranking **animate** argument among non-actor arguments in (3.18) and (3.19). The same is true of syntactic passives. Let us now consider the ACC marked whole and part NP construction.

(3.21) a. John-i Mary-uy/lul son-ul cap-ess-ta
J. -NOM M.-GEN/ACC hand-ACC catch-PST-DEC
'John caught Mary by the hand.'

b. Mary-ka John-eykey son-i/ul
M.-NOM J.-by hand-NOM/ACC
cap-hi-ess-ta
catch-PASS-PST-DEC
'Mary was caught by the hand by John.'

According to the pivot choice hierarchy, *Mary* has priority to be the pivot in the passive without regard to GEN or ACC case form which *Mary* has in its active sentence, because it is the higher ranking **animate** argument among the non-actor arguments, and it is metonymic with its part NP.

It should be noted, however, that 'no language excludes undergoers from pivothood in a passive, and therefore if a verb has multiple non-actor arguments, including an undergoer, and permits passivization, the undergoer must be a possible passive pivot' (Van Valin (1991: 170)). Van Valin's (1991) claim also seems to be correct for Korean. Hence, the following modified universal characterization of passive from Foley and Van Valin (1984) should be postulated as a feature of Korean passives.

(3.22) a. ~A = Pivot (a non-actor **[undergoer > other]** is linked to pivot)
[my emphasis]

b. A = X (the actor is linked to a peripheral status or is omitted)

Let us consider the sentences in (3.23).

(3.23) a. Chelswu-ka Swuni-eykey os-lul ip-hi-ess-ta
C.-NOM S.-DAT clothes-ACC wear-CAU-PST-DEC
'Chelswu dressed Swuni.'

b. Swuni-ka Chelswu-eyuyhay os-i
C.-NOM S.-by clothes-ACC
ip-hie-ci-ess-ta
wear-CAU-PST-DEC
'Swuni was dressed by Chelswu.'

c. os-i Chelswu-eyuyhay Swuni-eykey
clothes-NOM C.-by S.-DAT
ip-hie-ci-ess-ta
wear-CAU-PST-DEC

'Swuni was dressed by Chelswu.'

The passive sentence in (3.23b) also follow the pivot choice hierarchy in (3.11) in that the highest ranking animate NP is chosen as the pivot. The universal characerization of passives in (3.22a) does not seem to be enough to account for it, since an undergoer is not chosen as a pivot. Note that another passive as in (3.23c) is acceptable. The passive in (3.23c) follows the universal characterization of passives. Hence it would be concluded that the pivot choice in Korean passives is a cooperative interaction of both the pivot choice hierarchy in (3.11) and the universal characterization of passives in (3.22).

Consider, now, the following sentences.

(3.24) a. Swuni-ka ku cip-ey peyint-lul chilha-ess-ta
S.-NOM the house-LOC paint-ACC spray-PST-DEC
'Swuni sprayed the house with paint.'

b. ku cip-i Swuni-eyuyhay peyint-ka
the house-NOM S.-by paint-NOM
chilhaye-ci-ess-ta
spray-PASS-PST-DEC
'The house was sprayed the paint by Swuni.'

c. peyint-ka Swuni-eyuyhay ku cip-ey
paint-NOM S.-by the house-LOC
chilaye-ci-ess-ta
spray-PASS-PST-DEC
'The paint was sprayed at the house by Swuni.'

The sentence in (3.24b) follows the pivot choice hierarchy in (3.11), since the LOC argument *cip* 'house' is the highest ranking case holder among the non-actor arguments.[24] The sentence in (3.23b) clearly shows that the syntactic passives are not the necessary and sufficient objecthood test in Korean, since a LOC argument rather than a theme argument is taken as the target of passivization. Consider the passive sentence in (3.24c). The passive sentence exactly follows the universal characterization in (3.21).

3.3.2. Pragmatic Pivot [for cross-clausal grammatical processes]

3.3.2.1. Control in *-myense (to)* 'although' Adverbial Clauses

Youn (1989) claims that the lexically unrealized subject of the *-myense(to)* construction is always controlled by the subject of the matrix clause as in (3.25).

[24] It should be understood that when there are no animate case holders, then the highest ranking case holders should be chosen as pivots.

(3.25) a. [pappu-*myense(to)*] Minswu-nun Swuni-lul kaluchi-nta
be busy-although M.-TOP S.-ACC teach-DEC
'Although he is busy, Minswu teaches Swuni.'

b. [kenkangha-*myense(to)*] Minswu-nun cacwu
be healthy-although M.-TOP frequently
kamki-ey kelli-nta
cold-by catch-DEC
'Although he is healthy, Minswu frequently catches a cold.'

c. PROi/*j haksayng-i-myense, apeci$_j$-kkeyse
student-be-although father-NOM (HON)
Swuni$_j$-eykey ton-ul cwu-si-ess-ta
S.-DAT money-ACC give-HON-PST-DEC
'Though he is a student, father gave money to Swunhi.'

All the three examples in (3.25) all seem to follow Youn's claim. However, the following examples do not comply with Youn's (1989) claim.

(3.26) [puca$_i$-i-myense(to)] ku halapeci$_i$-ka cha-ka eps-ta
rich-be-although the grandfather-NOM car-NOM not.be-DEC
'Though the grandfather is rich, he does not have a car.'

(3.27) [puca$_i$-i-myense(to)] ku apeci$_i$-ka atul-i kananha-ta
rich-be-although the father-NOM son-NOM poor-DEC
'Though the father is rich, his son is poor.'

The above examples show that any generalization in terms of subject would not solve this control phenomenon, because in (3.26) and (3.27) the 'subject' of the matrix clause is obviously *cha* 'car and *atul* 'son', respectively. In (3.27), for instance, the only argument of the verb *kananha* 'be poor' is *atul* 'son' so that apeci 'father' cannot be a 'subject' in the sense of Li and Thompson (1976). An immediate question arises: do the sentences in (3.26) and (3.27) follow the semantic pivot choice hierarchy in (3.11). The answer is 'no'. Even though in sentences (3.26) and (3.27) whole-part relations do not hold between the two NPs in the matrix clauses, the non-core argument *halapeci* 'grandfather' in (3.26) and *apeci* 'father' in (3.27) serve as pivots. It seems that in (3.26) and (3.27) the controller should be a'center of attention' (or so-called thematic) NP. I am using the term 'center of attention' in the sense of Dryer (1994) to mean something like 'thematic'. The 'center of attention' do or do not bear focus. The following example in (3.28) clearly shows that in those constructions, the pivot should be a 'center of attention'.

(3.28) *[puca$_i$-i-myense(to)] ku halapeci$_i$-uy cha-ka eps-ta
rich-be-although the grandfather-GEN car-NOM not.be-DEC
'Though the grandfather is rich, there is no car for him.'

In (3.29) the center of attention NP is not *halapeci* 'grandfather', but *cha* 'car' so that the NP *halapeci* 'grandfather' cannot be the controller for *myense* -construction. K-S Hong (1991) claims that 'the *myense(to)* clause exhibits topic-orientedness.'[25] As seen in (3.26) and (3.27), however, the controller *halapeci* 'grandfather' is not a topic, but a 'center of attention'. As pointed out in Chapter 2 (also see B-S Yang (1994)), the first NOM-marked NP in double NOM construction cannot be a topic in Korean. The 'center of attnetion' NPs in (3.26) and (3.27) seem to bear focus (see Chapter 5 for the detailed discussion). We are led to posit the following pragmatic pivot choice hierarchy for the *myense* -construction.

(3.29) The Accessibility to Pivot Choice Hierarchy
The 'center of attention'[i.e., thematic] NP available is the pivot for cross-clausal grammatical processes like *myense* -construction control and subject-to-object raising. **[pragmatic pivot]**

3.3.2.2. Subject-to-Object Raising

I will use the term Subject-to-Object Raising ['raising'] to refer to a kind of control relationship, without implying the traditional idea of raising as movement. Note that the syntactic pivot of the embedded clause gets ACC case shown in (3.30b), instead of the normal NOM shown in (3.30a).

(3.30) a. Tom-un Swuni-ka chencay-la-ko mit-nun-ta
T.-TOP S.-NOM genius-DEC-CMPL believe-PRE-DEC
'Tom believes that Swuni is a genius.'
b. Tom-un Swuni-lul chencay-la-ko mit-nun-ta
T.-TOP S.-ACC genius-DEC-CMPL believe-PRE-DEC
'Tom believes Swuni to be a genius.'

In this way it resembles the English 'raising' construction. As pointed out by Wechsler and Lee (1995) and K-S Hong (1990), however, 'raising' in Korean is distinguished from 'raising' in English in two respects. First, unlike raising verbs in English, which take only infinitive clauses, *ko* complements in Korean are finite: tense or modality can be expressed. Second, the 'raisee' in the lower clause is not restricted to the 'subject'. Let us consider the following examples.

(3.31) na-nun L.A.-ka/lul hankwuksalam-i ceyil
I-TOP L.A. -NOM/ACC Koreans-NOM most

[25] I take the usual sense of 'topic', since K-S Hong (1991) does not define her use of 'topic'.

manhi sa-nta-ko mit-nun-ta
many live-DEC-CMPL believe-PRE-DEC
'I believe that L.A. has the largest Korean population.'

(3.32) John-i ecey-ka/lul nalssi-ka
J.-NOM yesterday-NOM/ACC weather-NOM
chwu-ess-ta-ko sayngkakha-ess-ta
cold-PST-DEC-CMPL think-PST-DEC
'John thinks that it was cold yesterday.' *K-S Hong (1990)*

In (3.31), the 'raisee' is the locative phrase selected by the predicate of the lower clause. (3.32) demonstrates that the 'raisee' does not have to be an argument: a time adverbial phrase may be related to the clause as a modifier, but it does not bear any direct semantic relationship (e.g., argumenthood).

The above observation raises the question of what should be the syntactic pivot for raising. I propose that the syntactic pivot for raising construction follows from the pragmatic pivot choice hierarchy in (3.29). The hierarchy (3.29) tells us to take the center of attention [thematic] NPs [i.e., pragmatic case holder] for cross-clausal grammatical processes. In (3.31) and (3.32), 'L.A.' and *ecey* 'yesterday' are the center of attention NPs in each clause, as shown by the fact that K-S Hong (1990) refers to the NPs as *discourse themes* . The lower clause in (3.31), for instance, tells that the city which has the largest Korean population is the center of our attention, and the city is L.A. Hence, they should be the pivots for the sentences in (3.31) and (3.32).

From the above discussion, it is argued that the syntactic pivot hierarchies in (3.11) and (3.29) are more useful to account for syntactic (agreement) phenomena than notions like 'subjecthood' or 'objecthood' which mostly rely on structural properties. We have looked at five constructions in Korean to see if there is any generalized restricted neutralization of semantic roles that would point to a grammatically viable category of 'subject' in Koran. We have found none. Rather we have found that a semantic factor 'animacy' and a pragmatic factor 'center of attention' are important in pivot choice. I argue that Korean uses both semantic and pragmatic pivots in syntactic (agreement) phenomena. The hierarchy in (3.33) summarizes 'The Accessibility to Pivot Choice Hierarchy in Korean'.

(3.33) The Accessibility to Pivot Choice Hierarchy
[semantic pivot]
i) The highest ranking animate case holder with respect to the Actor end of the Actor-Undergoer Hierarchy, regardless of whether it is a macrorole or not, is the pivot for clause-internal processes like honorification and reflexivization.
ii) if the animate pivot candidate is not a direct core argument, it should stand in a whole-part (or 'metonymic) relation with the direct core argument.

[pragmatic pivot]
The ‘center of attention’ (topic) NP available is the pivot for cross-clausal grammatical processes like *myense* -construction control and subject-to-object raising.

Chapter 4. Semantic case vs. Pragmatic case in Korean

As pointed out by K-A Song (1993), Korean postnominals are different from suffixes in European languages in that they are considered not as part of the words, but as bound particles to nouns. They carry out the functions which are fulfilled by case markers, prepositions and also in part by modal particles in European languages. For the reason, K-A Song (1993) suggests that it is tricky to define cases in Korean, since it is difficult to distinguish case postnominals from other ones. Depending on different viewpoints, the number of cases in Korean ranges from 2 to 18 (K-A Song (1993), K-S Nam (1987)). In this chapter, a preliminary classification of Korean case markings is presented in terms of semantic vs. pragmatic case, and the characteristics of the case markings are also described.

4.1. NP Structure in Korean and Semantic case vs. Pragmatic case

Linguistic theories in the modern era have generally regarded case markers as purely grammatical elements essentially devoid of semantic content. Among the reasons for this attitude have been the difficulty of finding any single meaning that would account directly for all uses of a given case, as well as the focus on cases that identify a nominal as subject or direct object. However, Zubin (1979), for instance, did a study of German case markers and argue that they have semantic and pragmatic content.

The semantic content of semantic case in Korean seems to be related to the semantic notion of Actor-Undergoer in RRG. As pointed out by Frawley (1992), semantically, the Actor / Undergoer Hierarchy in RRG provides a unified picture of the phenomenon of semantic involvement, or affectedness by the action. Fillmore (1977), Jeffries and Willis (1984), Foley and Van Valin (1984), and Van Valin (1993a) all note that sentences like (1a) and (1b) are characterized by a difference in the strength of the involvement of the participants in the predication:

(4.1) a. Tom sprayed the wall with the paint.
b. Tom sprayed the paint on the wall.

c.	Tom-i	peint-lo	pyek-ul	chilha-ess-ta (=1a)
	T.-NOM	paint-with	wall-ACC	spray-PST-DEC
d.	Tom-i	pyek -ey	peint-ul	chilha-ess-ta (=1b)
	T.-NOM	wall -on	paint-ACC	spray-PST-DEC

Example (4.1a, c) implies that the ‘wall’ is fully covered and totally affected. For (4.1b, d), the opposite interpretation appears: The ‘paint’ seems to be totally affected, and the ‘wall’ is less involved. One account of these differences holds that the involvement effects are

syntactic. In (4.1), the entity that is more affected is always the direct object: 'wall' in (4.1a, c) and 'paint' in (4.1b, d); the entity that is less affected is an oblique (object of preposition). According to Givon (1984), many languages have this productive direct object / oblique alternation, and one of the effects of this syntactic difference is a differential semantic involvement of the participants. In Foley and Van Valin (1984: 61), 'there is a clear correlation between the occurrence of an argument as an undergoer and a reading of total affectedness .... Affectedness is part of the ... semantics of undergoer.' Another aspect of the semantic meaning of the ACC as semantic case in Korean seems to be related to accomplishment semantics or telicity.[26] The locative goal arguments, for instance, can be assigned ACC, not because they involve affectedness which is associated with undergoerhood, but because they involve accomplishment semantics and telic aspect which Hopper and Thompson (1980) claim is associated with high degree of transitivity.

Shin (1991), among others, has done some work regarding the semantic and pragmatic content of Korean case markers, especially the accusative marker. She proposes that the accusative marker, for example, is not just a syntactic case marker, but an unit which conveys pragmatic meaning. Shin (1991) argues that accusative marker *-ul* is normally used when something is newly introduced into the domain of listeners, or contrast is needed, etc. Following Shin's observation, I propose a distinction in terms of **semantic case** and **pragmatic case** in Korean. By **semantic case**, I mean case which has semantic content. For example, typically, ACC marks undergoer, and 'affectedness is part of the semantics of undergoer.' As I mentioned earlier, ACC in Korean sometimes represents the accomplishment semantics and telic aspect. The semantic case marking rules are directly derived from semantic roles (i.e., macroroles) in RRG. I am following Yang's (1994) proposal for the case marking rules for Korean.

(4.2) Case Marking Rules for Korean (Semantic Case)
a. Highest ranking macrorole takes NOMINATIVE case.
b. The other macrorole argument takes ACCUSATIVE case.
c. Non-macrorole arguments take DATIVE as their default case.

The Case Marking Rules for Korean are similar to the Rules for Icelandic, which is described in Van Valin (1991). By **pragmatic case**, I mean the use of Nominative or Accusative case, which is not directly derived from the Case Marking Rules as described in the above, but determined by the pragmatic context. The semantic case is a morphological element which is associated with a specific semantic role (including macroroles), while the

[26] This proposal will be discussed and argued later (in the section on the case marking of adverbial nominals)

pragmatic case has essentially focus characteristics. The internal structure of NP in Korean may be analyzed as follows:

(4.3) [Stem - Semantic Case -Delimiters - Pragmatic Case]$_{Noun}$
Determined by [semantic roles] - [specific information]- [focus structure]

Generally, a stem is followed by semantic case. Any case markers like NOM, ACC, and DAT may fill the semantic case slot. A semantic case can be followed by a pragmatic case in some instances ('case stacking', widely used in Korean). What is interesting is that the semantic core cases, i.e., nominative or accusative, which signal a macrorole, cannot be followed by delimiters or pragmatic case. For example, the following morphological forms are not allowed; **John -ul [SemC] - to 'also'/ or man 'only'* or **John -ul [SemC] - to 'also'/ or man 'only' - ul [Prag C]* . Specific pragmatic information such as scope (e.g., *man* 'only', *to* 'also') are carried by delimiters. They generally come between a semantic case and a pragmatic case.[27] According to I-S Yang (1972), delimiters cannot function as case markers. In other words, if an NP occurs only with delimiter(s), the syntactic status of the NP is identical to an NP with no case marker. In both cases, case markers are deleted. The internal NP structure in (4.3) accounts for the NP like *John-eykey 'DAT'-man 'only'-ul 'ACC'* 'only to John'.

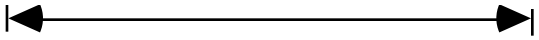
I propose that Korean case markers NOM and ACC hover around along the following semantic case-pragmatic case continuum.[28]

[27] I. Yang (1972) sub-categorizes delimiters as follows:
X-lim: *mace* 'even', *mata* 'each, every', *kkaci* 'even, including', *puthe* 'starting from'
Y-lim: *man* 'only', (pakke) 'nothing only (negative polarity item)'
Z-lim: *to* 'also', ya 'at least, of course', *na* 'rather', *lato* 'even as the last recourse'

According to I. Yang, the sub-categorization of delimiters into X-lim, Y-lim, and Z-lim is based on their distributional characteristics. On the surface, when an X-lim, a Y-lim, and a Z-lim co-occur within the same element, X-lim always precede Y-lim, and Y-lim always precedes Z-lim.

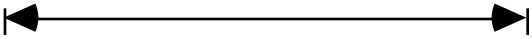
[28] It is very hard to find out the pragmatic difference between NOM and ACC in Korean. As mentioned earlier, the choice is determined by verbal aspects. In diagram (4.4) by 'focus' I mean roughly 'new information'. (see Lambrecht (1994))

(4.4)



semantic case	**pragmatic case**
1. affectedness (as undergoer)	1. 'focus'
2. accomplishment semantics	2. center of attention

Accusative Case



semantic case	**pragmatic case**
1. volition (as actor)	1. 'focus'
2. sole argumenthood	2. center of attention

Nominative case

On the other hand, case markers other than NOM or ACC (i.e., DAT) are fixed around the semantic case end of the continuum. There is no choice between semantic case and pragmatic case for DAT, because the case is always derived from semantic case marking rules.

A justification for the notion of pragmatic case comes from Miyagawa (1989), in which he describes the historical development of Japanese accusative case markers which are similar to Korean accusative markers in behavior:

> ... it is well-known that in the Japanese of the eighth and ninth centuries, which I call 'Old Japanese' (OJ), word order commonly marks the accusative case without any case particle. The particle *o* appears occasionally on direct objects, but its rare occurrence led traditional grammarians to claim that in OJ, *o* does not function as a true accusative particle, or, at best, this function is unstable. Its clearest usage is as an emphatic marker, which is thought by traditional grammarians to be the source of the accusative particle.

According to Miyagawa (1989), the case relation in OJ was implicit within the NP stem, but later the case marker *o* is established, replacing the original *o* -marker as an emphatic marker. Sugamoto (1982) also claims that the origin of the present accusative marker *o* in Japanese is related to postpositional *wo* , which served the general purpose of expressing wonder, emotion, or emphasis. The NP structure in (4.3) can explain how case stacking examples such as *John-eykey (DAT; to) -ul (ACC)* is made possible. Another justification for the notion of pragmatic comes from other grammarians' observations on case spreading in Korean, even though the details may be different. Gerdts and Youn (1988), for instance, propose two kinds of case in Korean; S-case and I-case. According to them, S-Case is a grammatical case licensed in terms of final structure while I-Case is selected on the basis of the semantic role of the nominal and licensed in initial structure.

(4.5) = Gerdts and Youn's (17)

a. S-Case

NOM is licensed by a final 1
ACC is licensed by a final 2

b. I-Case

DAT is licensed by a Goal, Exp, Loc, Ben, Temp, etc.
INSTR is licensed by an Instr, Path, etc.
COM is licensed by a Com(itative).

Gerdts and Youn's (1988) S-Case and I-Case cannot account for the case marking of adverbial nominals, because the accusative case in adverbial nominals cannot be assigned by S-Case. On the other hand, Hong (1991) divides Korean case into semantic case and non-semantic case. According to Hong, the former, which includes nominative and accusative, does not carry any information on thematic roles and appears as the last suffix in the NP form. In contrast, all the other case markers, which are attached to the noun stem, are semantic in the sense that they are associated with a specific thematic role. The distinction does not seem to be correct, because in most cases, nominative and accusative case markers are also determined by semantic roles and macroroles, given that the Korean Case Marking Rules in (4.2) are valid in most instances.[29]

In way similar to my distinction between semantic and pragmatic case, Rude (1988) proposes a distinction between semantic and pragmatic object to explain the case roles of objects in Klamath.[30] According to Rude, in monotransitive clauses pragmatically important object nouns suffix bear the *-'as/-s* , and pragmatically important adjectives suffix *-een's* . In bitransitive constructions, dative and benefactive objects (or pronouns) obligatorily bear the suffix *-'as/-s* on nouns and *-een's* on adjectives, while goal and genitive objects optionally take these suffixes. In intransitive 'dative object' constructions (with verbs such as 'be sick') a non-3rd person subject is treated as a pragmatic object (for details, see Rude (1988)).

Even though the details of his proposal are different from my notions, Givon (1984) proposes the *Functional dilemma in subjectivization*, which is a statement about the various types of coding of the same functional domain as alternative *solutions* to the same communicative task.[31] This means that in subjectivization, semantic case roles and

[29] She also states that she should call NOM and ACC Semantic Case 1 and others Semantic Case 2, that is, that NOM and ACC in fact have some semantic basis.

[30] Klamath is an American Indian language of southern Oregon which for two decades has garnered the special concern of phonologists. According to Rude, Klamath has an elaborate subject/object marking system with several strategies which sometimes distinguish different objects and sometimes conspire to mark a single object within a transitive clause.

[31] *Functional dilemma in subjectivization* : Givon (1984: 145)

pragmatic case roles should be simultaneously considered. He distinguishes 'subjects' as pragmatic case roles from those as semantic case roles.

J-Y Yoon (1989) identifies two uses of Nominative or Accusative in Korean: case markers (his *ka^* and *(l)ul^*) and secondary theta role markers which denote Focus or 'exhaustive listing' meaning (his *ka* and *(l)ul*). J. Yoon (1989:392) proposes the following secondary theta role (=Focus) 'ka' and '(l)ul' assignment:

> The secondary theta role (=Focus) 'ka' and '(l)ul' assignment: A secondary theta role is assigned to Y by X (=IP or VP) iff X F-governs Y.
>
> X F-governs Y iff i) $X=X^{max}$ (IP, VP), $Y=Y^{max}$, ii) X c-commands Y, iii) Y is not protected by a maximal projection, and, iv) X is a (non-defective) minimal maximal projection out of which Y is extracted.

Yoon claims that his *ka* and *lul* are structurally assigned to IP- or VP-adjoined [+ARGUMENT] XPs through Focalization, a syntactic movement. Furthermore, according to him, there is a meaning difference between the twokinds of *ka* and *lul*. The NP-ka and the NP-lul are focused, while the NP-ka^ and NP-lul^ are not focused.

4..2. The Characteristics of Pragmatic Case in Korean

What are the characteristics of pragmatic case ? One of them is illustrated by the 'recoverability' test. When the case marking is uniquely and directly recoverable by the case marking rules in (4.2), then the case is most likely a semantic case. If not, the available case markings which are not derived from case marking rules will be most likely pragmatic cases. Consider the following examples.

(4.6) a. Bill-i John-Ø chayk-ul cwu-ess-ta
B.-NOM J.-Ø book-ACC give-PST-DEC
'Bill gave the book to John.'

b. Bill-i John-eykey chayk-ul cwu-ess-ta
B.-NOM J. -DAT book-ACC give-PST-DEC
'Bill gave the book to John.'

c. Bill-i John-eykey-lul chayk-ul cwu-ess-ta
B.-NOM J.-DAT-ACC book-ACC give-PST-DEC
'Bill gave the book to John.'

d. Bill-i John-lul chayk-ul cwu-ess-ta
B.-NOM J. -ACC book-ACC give-PST-DEC
'Bill gave the book to John.'

"How to express simultaneously the semantic case-role of an argument and its pragmatic case-role as subject"

The sentence (4.6a) is not an everyday expression. An NP in Korean normally takes a particle or a case marker. The sentences in (4.6b)-(4.6d) are the possible case realizations or interpretations of (4.6a). The case marking *-eykey* in (4.6b) which is recoverable directly from the case marking rule (4.2c) will be a semantic case. On the other hand, the marker *-ul* in (4.6c, 4.6d) will be a pragmatic case: it is not licensed by the case marking rules itself, but is pragmatically motivated. The sentence (4.6b) has a normal interpretation that 'Bill gave a book to John'. However, the sentences in (4.6c, 4.6d) are biased towards saying that 'it is John that Bill gave the book'. In other words, the ACC markers in (4.6c, 4.6d) function as focus markers.

The second characteristic of pragmatic case is that it is not restricted to an argument, unlike semantic case. Naturally arguments are eligible for pragmatic case, since the notion of 'case' is primarily concerned with argument NPs. Consider the following examples.

(4.7) Bill-i John-ul chayk-ul cwu-ess-ta
B.-NOM J.-ACC book-ACC give-PST-DEC
'Bill gave the book to John.'

(4.8) na-nun Chelswu-lul pap-ul mek-i-ess-ta
I-TOP C.-ACC rice-ACC eat-CAU-PST-DEC
'I made Chelswu eat the cooked rice.'

(4.9) Swuni-ka emeni-ka kuli-wess-ta
S.-NOM mother-NOM miss-PST-DEC
'Swunhi missed her mother.'

The semantic cases are automatically determined by Actor-Undergoer Hierarchy in RRG. The accusative-marked arguments, *chayk* 'book' in (4.7) and *pap* 'the cooked rice' in (4.8) are expected to take semantic case *-ul* , because they are a theme or a patient so that they have the privilege to be an undergoer. The noun *emeni* 'mother' in (4.9) is also expected to take the semantic NOM case *-i* .

The nouns, *John* , *Chelswu* , and *Swuni* in (4.7)-(4.9), which are supposed to take the pragmatic case *-ul* or *ka,* are the arguments of the verbs. In (4.10), for instance, the goal NP is the target of 'passivization', which suggests that they are arguments

(4.10) John-i na-eyuyhay pap-ul mek-hi-ess-ta
J.-NOM I-by rice-ACC eat-PASS-PST-DEC
'John was caused to eat the rice by me.'

On the other hand, pragmatic case does not necessarily involve an argument. For instance, the non-argument *John* in (4.11) are supposed to take the NOM pragmatic case.

(4.11) John-i apeci-ka khi-ka ku-ta
J.-NOM father-NOM height-NOM big-DEC
'John's father is tall.'

The following simple focus markers on the adverbs and complementizers are also considered as pragmatic case following the second criterion that it is not restricted to an argument.

(4.12) = Jengsoo Suh's (1991) (10)
a. ku ay-ka kuphi-**lul** mek-ess-ta
the child-NOM quickly-ACC eat-PST-DEC
'The child ate quickly.'
b. na-nun mikwuk-ey ka-key-**lul** toy-ess-ta
I-TOP U.S.A-LOC go-CMPL-ACC become-PST-DEC
'I got a chance of going to the United States.'

The *ul/lul* marker in (4.12a, b) is not derived from the case marking rules, since it does not mark an argument of any kind. The ACC marker on the adverb *kuphi* 'quickly', for example, is an example of pragmatic case as a simple focus marker.

The third characteristic of pragmatic case is that a pragmatic case is permitted in the environments where case alternation or case stacking occurs (except for adverbials). It should be also noted that case spreading which results from focus interpretations involves pragmatic case, which will be discussed later. A pragmatic case is assigned after the semantic cases have been assigned. If the semantic case NOM or ACC is assigned on a NP, then there is no further assignment of a pragmatic case on it. If a semantic case other than NOM or ACC is assigned, then a pragmatic case can occur on the NP, resulting in case alternation or case stacking.

The fourth characteristic of pragmatic case is that the NP involving a pragmatic case tends to function as a pivot in syntactic agreement in cross-clausal grammatical processes like control in *myense* construction (see Chapter 2 on pivot choice).

Chapter 5. Information Structure and Case

5.1. Double (or Multiple) Nominative Construction

Double nominative constructions [DNCs]have been discussed by many scholars. Youn (1989), for instance, distinguishes ten types of double (or multiple) nominative constructions in Korean based on an analysis of the relational properties of the nominals involved.

(5.1) i) Possessor Ascension DNCs

Swunhi-ka	nwun-i	khu-ta
S.-NOM	eye-NOM	big-DEC

'Swunhi's eyes are big.'

ii) Focus DNCs

Chelswu-ka	tongsayng-i	cwuk-ess-ta
C.-NOM	brother-NOM	die-PST-DEC

'Chelswu's brother died.'

iii) Advancement to 1 DNCs

Semyukongcang-i	pul-i	na-ess-ta
textile factory-NOM	fire-NOM	break out-PST-DEC

'Fire broke out in the textile factory.'

iv) Psych DNCs

Swuni-ka	emeni-ka	kuli-wess-ta
S.-NOM	mother-NOM	miss-PST-DEC

'Swunhi missed her mother.'

v) Quantifier DNCs

Woykukin-tul-i	seys-i	hakkyo-ey	o-ess-ta
foreigner-PL-NOM	3-NOM	school-to	come-PST-DEC

'Three foreigers came to school.'

vi) Predicate Nominal DNCs

Chelswu-ka	uysa-ka	toy-ess-ta
C.-NOM	doctor-NOM	become-PST-DEC

'Chelswu became a doctor.'

vii) Base-generated Focus DNCs

Pihayngki-ka	747-i	khu-ta
airplane-NOM747-NOM		big-DEC

'Among airplanes, the 747 is big.'

viii) Passive DNCs

Chelswu-ka	senmwul-i	cue	ci-ess-ta
C.-NOM	present-NOM	give	PASS-PST-DEC

'Chelswu was given a present.'

ix) Causative DNCs

Chelswu-ka	Swuni-ka	ul-key	ha-ess-ta
C.-NOM	S.-NOM	cry-CMPL	do-PST-DEC

'Chelswu made Swuni cry.'

x) Tough Construction DNCs

Yeksasosel-i	ilk-ki-ka	swip-ta
historical novel-NOM	read-NOML-NOM	easy-DEC

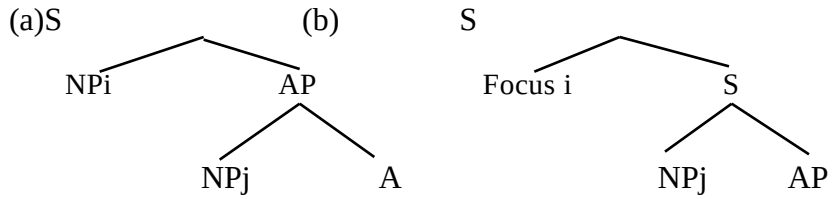
'It is easy to read historical novels.'

T-K Kim (1994), on the other hand, classifies the DNCs into three types: set-theoretic membership-related (or adjunct-related) construction (STC), possessive-related construction (PRC), and argument-related construction (ARC). In this chapter, I concentrates on Youn's first four types and type (5.1vii). The first two types correspond to T-K Kim's PRC, while the type (5.1iii) and (5.1vii) correspond to STC. On the other hand, type (5.1iv) corresponds to ARC. Types (5.1ix) and (5.1x) will be dealt with in Chapter 7. It should be noted that DNCs are a little awkward to Korean speakers. Hence the NOM-NOM combinations are 'marked' in use compared to DAT-NOM combinations. In this section, I am concerned with the function and nature of this 'markedness'.

5.1.1. Pragmatic Case

Scholars such as H-B Lee and M-K Kim (1988) provide some grounds for positing a pragmatic NOM case. According to them, there are two kinds of DNCs depending on which NP triggers Reflexive interpretation and Subject Honorification.

(5.2)



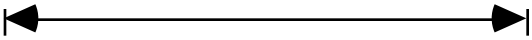
According to Lee and Kim (1988), the 'subject' of the adjective is NPi in (5.2a), while it is NPj in (5.2b). According to them, in (5.2b) the 'focus' constituent is not a direct argument of AP, but a focused adjunct. The 'focus' constituent may correspond to my pragmatic case notion in DNCs, since it involves 'focus' and is not a direct argument of AP. It should be noted, however, that NPj in (5.2b) does not always trigger syntactic agreement. For instance, the following sentence would have the structure in (5.2b), since *sensayngnim* 'teacher' is not a direct core argument, but a focused adjunct.

(5.3) sensayngnim-i caysan-i manhu-si-ta
teacher-NOM wealth-NOM big-HON-DEC
'The teacher is wealthy.'

However, the first NP, not the second NP, triggers syntactic agreement. Hence, their generalization simply fails.

When I say that the NOM concerned is a pragmatic NOM case, I do not mean that the case involves only the pragmatic case function. Sometimes it may involve semantic case characteristics. Remember that Korean case markers NOM and ACC are hovering around along the semantic case-pragmatic case continuum. For example, NOM falls along the following continuum.

(5.4) NOM continuum between semantic and pragmatic case



semantic case	**pragmatic case**
1. volition (as actor)	1. 'focus'
2. sole argumenthood	2. center of attention

The two properties, volition and sole argumenthood, prototypically express the semantic NOM marking rule which is described as 'highest ranking macrorole takes NOMINATIVE case'. When there are more than one arguments in a sentence, the NP involving more volition will take NOM. When there is only one argument, the sole argument will take NOM. When the NOM involves predominant pragmatic case characteristics along the continuum in (5.4), it will be called pragmatic case.

The DNCs in Korean are allowed only for a restricted set of verbs (i.e., state verbs in RRG, which include most unaccusative verbs). C-M Lee (1994), for example, notes that DNCs are possible 'only when the aspectual feature or category of the verb (or adjective) is stative/ unaccusative/ passive/ psych'. I also claim that the DNC with state verbs involve sentence focus. Hence, the function of the pragmatic case in the DNC is to change focus structure type, in other words, to establish a particular focus structure type. In other words, the function of the pragmatic case in the DNC is to change a predicate focus construction into a sentence focus structure.

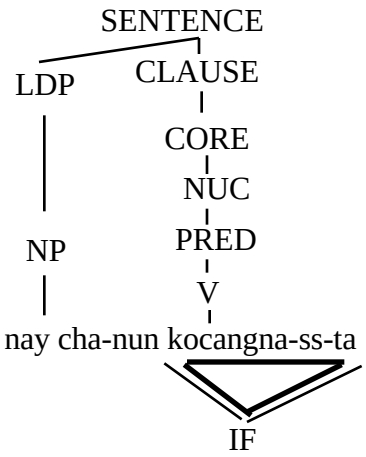
The interaction between NOM case and focus types in Korean is extensively discussed by B-S Yang (1994). B-S Yang (1994) notes the interaction between NOM marker and TOP marker in four focus types. He proposes that there is a neutral topic *(n)un* (unstressed) assigned under LDP and the contrastive topic *(n)un* (stressed) assigned under PCS. Likewise, there is the neutral description *ka* (unstressed) assigned under CORE argument and the contrastive focus *ka* (stressed) assigned under PCS. Even though he proposes that the neutral *ka* is used only in sentence focus constructions, it turns out that the NOM marker *ka* can be used in predicate focus construction. When previous contexts are not given, the natural way to say, for instance, 'Mary put a book on the table.' would be 'Mary-nun (TOP)/ka (NOM) ...' without any focus interpretation on the NP 'Mary'.

Thus, we should postulate a use of neutral *ka* which is inside the Potential Focus Domain [PFD] but is outside the Actual Focus Domain [AFD]. Neutral *ka* shares a characteristic with neutral *nun* in that both are usually outside of the AFD. Hence, there are five possibilities to express, for instance, 'my car broke down' according to differences in discourse context: neutral topic *(n)un*, contrastive topic *(n)un*, neutral descriptive *ka*, and contrastive focus -*ka*.. With the following constituent and focus constructions, the five types of expression can be distinguished depending on focus domains as in (5.5). In setting up Korean focus structures, I assume A. Kim's (1985) 'Preverbal Focus Universal Hypothesis'.[32]

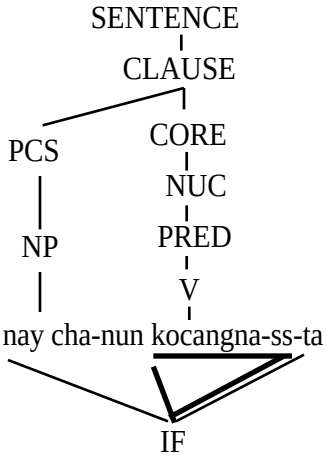
[32] A. Kim (1985) propose the following hypothesis:

> Preverbal Focus Universal Hypothesis (II)
> If a language is SOV in basic word order, and Postpositional, and has the properties that the adjective precedes the noun and the genitive precedes the noun, then the language has a Preverbal Focus mechanism in its grammar.

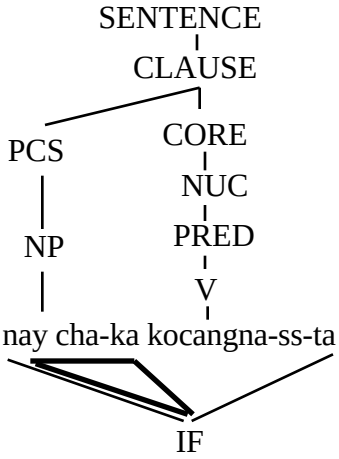
(5.5) a. Neutral topic *-(n)un*



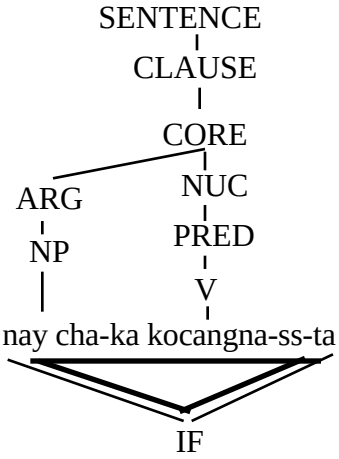
b. Contrastive topic *-nun*



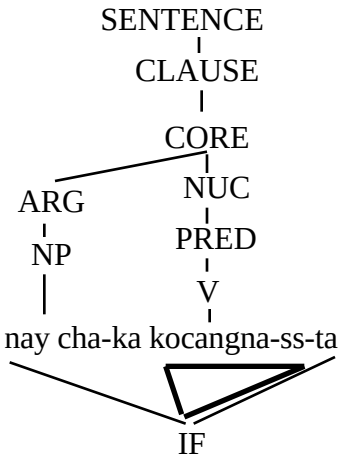
c. Contrastive focus *-ka*



d. Neutral descriptive *-ka* (sentence focus)



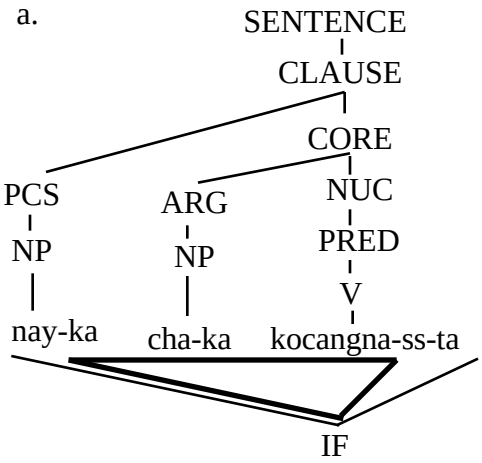
e. Neutral descriptive *-ka* (predicate focus)



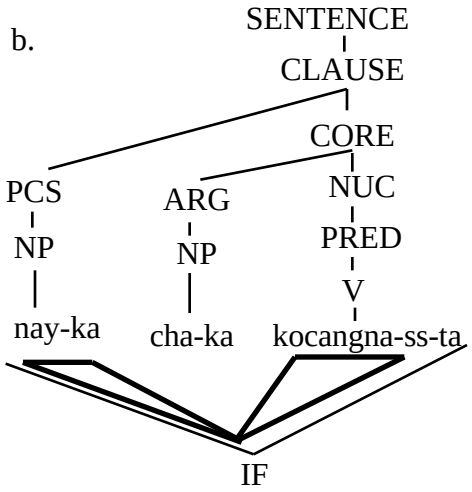
What I claim in this thesis is that DNCs with state predicates are a sort of combination of a pragmatic case holder as in (5.5c) and a semantic case holder as in (5.5d) or (5.5e). The

first NOM NP will be argued to involve pragmatic case with focus (cf. J.H. Yoon (1987)), which should be positioned at a PCS slot. On the other hand, the second NOM NP, which usually involves semantic case, has two options, which are shown in (5.5d) and (5.5e). If (5.5d) type is taken, then we have a typical sentence focus as in (5.6a). If (5.5e) is taken, then we have discontinuous sentence focus as shown in (5.6b).

(5.6) a.



b.



Suppose that the focus structure as in (5.6b) is taken at a real situation. It would not be easy for a speaker to have such an accentuation, because it is phonetically not natural to discontinue accentuation. Hence I assume without further discussion that DNCs in Korean involve the unmarked sentence focus type as shown in (5.6a).

My claim is supported by the following observations. First, my claim conforms to Lambrecht's (1987) and Kuno's (1976) observations about sentence focus constructions. Lambrecht (1987) comments on the verbs that typically occur in sentence focus constructions.

> Another argument in favor of the interpretation of SF [sentence focus] structures as presentational in a broad sense can be seen in the constraints imposed in many languages on the kinds of predicates which SF structures may contain ... [T]he predicates most commonly permitted in SF sentences involve 'presenting' verbs, i.e. intransitive verbs expressing appearance or disappearance of some referent in the internal or external discourse setting, or the beginning or end of some state involving the referent. (373)

The verbs which Lambrecht describes are the prototypical 'states (and unaccusatives)' verbs in Korean, and thus there is a fundamental relationship between verb type, on the one hand,

and sentence focus constructions, on the other hand, as discussed in the above. Kuno (1972) makes a similar argument.[33]

Second, my claim is indirectly supported by O'Grady's (1991a) claims about Korean case marking. O'Grady (1991a) differentiates 'a converted IVP from S' from an native IVP category to account for DNCs in Korean. O'Grady's (1991a) S-Conversion in simple DNCs seems to have to do with sentence focus. That is, the relation between a 'subject' NP and a native IVP seem to correspond to the traditional distinctions such as topic vs. comment, theme vs. rheme, or topic vs. focus. To the contrary, that of a 'subject' NP and 'a converted IVP from S' is not directly related to the distinction. Rather it seems that a 'subject' NP and 'a converted IVP from S' comprise a sentence focus which does not show the same sort of dichotomy. Here are the constructions which he claims involve S-Conversion in his system: stative psych verb construction, alienable possessor ascension construction, and 'type'/'class' construction, etc. What he calls 'focus constructions' which involves prototypical focus NPs, for instance, are argued by him to involve S-Conversion. According to my theory, all the constructions involve pragmatic case, which I claim is related to sentence focus. On the other hand, O'Grady (1991a) argues that inalienable possessor ascension constructions which I argue involve semantic case for the first NP do not involve 'a converted IVP', but a native IVP. O'Grady's (1991a) S-Conversion is the tool for the explanation of structural dependency, and so the function of S-Conversion cannot be specified. My theory can give explanatory power to his theory by saying that the function of S-Conversion is to mark sentence focus constructions.

Third, my claim is supported by J.H. Yoon (1987). He argues that the first NOM-marked NPs in DNCs are not 'subjects', but are focus NPs (with *-ka* marker) or topic NPs (with *-nun* marker). As I mentioned earlier, DNCs with pragmatic case do not show the clear-cut dichotomy between topic and focus. If it is the case, then the whole sentence should be in the focus domain in the environment where the first NPs are focused. In the following, I will show how individual DNCs are related to sentence focus, and the nature and the function of the NOM marker will be explored.

5.1.1.1. Stative Psych Verb Construction

[33] Kuno (1972) makes the following claim:

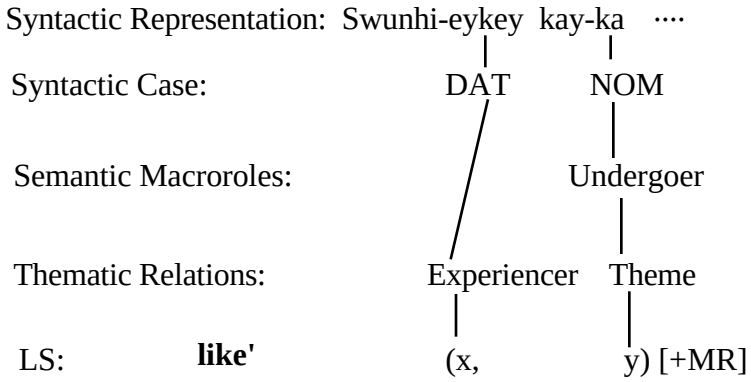
> The most natural way to introduce an entirely new event in conversations seems to be to talk about the existence, or coming into existence, of something. This seems to be why the most natural NP-ga sentences for neutral descriptions that appear, for example, at the beginning of conversations are those that represent existence or appearance.

First, consider the DNC involving 'stative psych verb constructions', which T-K Kim (1994) refers to as argument-related construction. Consider the following case alternation.

(5.7) a. Swunhi-eykey kay-ka coh-ta
S.-DAT dog-NOM like-DEC
b. Swunhi-ka kay-ka coh-ta
S.-NOM dog-NOM like-DEC
'Swunhi likes the dog.'

Following the case marking rules, the case marking mechanism in (5.7a) can be schematized as follows (cf. B-S Yang 1994: figure 2.114):

(5.8) Case marking of DAT-NOM stative psych-verb constructions

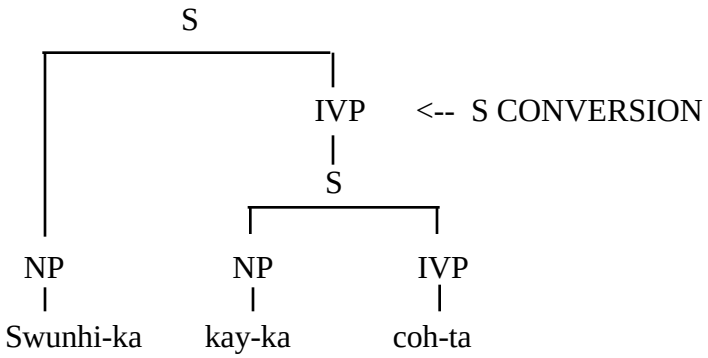


The theme argument is the only highest ranking macrorole so that it is assigned NOM. On the other hand, the experiencer which is the non-macrorole argument is assigned DAT.

By contrast, in (5.7b), I propose that the marked case pattern NOM-NOM in stative psych verb constructions should be explained in terms of pragmatic case. B-S Yang (1994) also suggests that the first NOM is not a semantically assigned case, but a contrastive focus marker pragmatically assigned. When I say that the NOM on the experiencer is a pragmatic NOM case, I do not mean that the case involves only the pragmatic case function. According to Dabrowska (1994), Polish, for instance, shows case alternation between nominative and dative for experiencer as in Korean. According to Dabrowska, the less 'prominent' the experiencer is, the more likely it is to be expressed by a dative nominal. Dative experiencers are 'passive or reactive' rather than active; they are not in control of the mental process; and their involvement in it is 'nonvolitional'. According to my informants, the same judgment seems to hold more or less for Korean

psych verb construction. O'Grady's (1991a) analysis for the DNC involving psych verb in Korean is one instance of an analysis which treats the first NOM NP as an instance of semantic case. A sentence such as (5.7b) above would be given the following analysis.

(5.9)



In (5.9), the IV *coh* 'like' combines with the NP *kay* 'dog' to give the S *kay-ka coh-ta* 'dogs are likeable'. As the expression of a judgment that can be seen as the mental property of an individual, this S is then converted into an IVP by S Conversion rule and predicated of the NP *Swunhi* . Assuming S Conversion, the NP *kay* 'dog' combines with an IVP (the 'converted' S) and it therefore takes the nominative case. According to him, the first NP triggers honorification and reflexivization. In other words, he treats the first NP as the 'subject' of the sentence. Even though he employs a structural analysis, his analysis in (5.9) implies that the experiencer NP is rather 'active' and 'volitional'. However, let us consider the following examples in (5.10).

(5.10) a. Swuni-eykey/?ka mwues-i coh-ni ?
S.-DAT/?NOM what-NOM likeable-QUE
'What does Swuni like ?'

b. Swuni-eykey/?ka kay-ka coh-ta
S.-DAT/?NOM dog-NOM likeable-DEC
'Swuni likes a dog.'

c. nwu(kwu)-eykey/ka kay-ka coh-ni ?
who-DAT/NOM dog-NOM likeable-QUE
'Who likes a dog ?'

d. Swuni-eykey/ka kay-ka coh-ta
S.-DAT/NOMdog-NOM likeable-DEC
'Swuni likes a dog.'

The unmarked DAT form for the experiencer NP is used in both focused and unfocused contexts. When DAT marked experiencer NPs are used for both question (5.10a) and (5.10b), the answers normally take the DAT form. When the DAT marked experiencer NP

is questioned, however, the double nominative form is also available for the answer and also the question (cf. (5.10c)). The above contrast in the NOM marking shows that the DNC is used in psych verb constructions when the first NOM marked NP is more focused than the second one.[34] In other words, the first NOM marked NP should be considered as a pragmatic case involving focus. Furthermore, the verb *coh* 'like' is a state (unaccusative) verb (see B-S Yang (1994) and Gerdts and Youn (1988)). Hence, one requirement for the sentence focus construction is met so that the experiencer NP also should be in the focus domain of the sentence. Hence, it may be concluded that even though the NOM-marked experiencer may have semantic case properties more or less, NOM here predominantly conveys pragmatic functions.

5.1.1.2. Locative NOM

Now, let us consider the following examples which involve locative NOM in (5.11).

(5.11) a. kongcang-eysepwul-i na-ess-ta
factory-LOC fire-NOM break out-PST-DEC
b. kongcang-i pwul-i na-ess-ta
factory-NOM fire-NOM break out-PST-DEC
'Fire broke out in the factory.'

The NP 'factory' is an adjunct in the periphery in (5.11). The unmarked linking from the LS to the LSC brings about the case pattern in (5.11a). However, the sentence in (5.11b) waits for an explanation for why the locative in (5.11b) takes the NOM. To account for it, let us consider the following question-answer pairs.[35]

(5.12) a. mwusenil-i ilena-ess-ni ?
what-NOM happen-PST-QUE
'What happened ?'
a'. thoyoil-i kongcang-i pwul-i na-ess-ta
Saturday-NOM factory-NOM fire-NOM break out-PST-DEC
'Fire broke out in the factory on Saturday.'

b. thoyoil-ey mwusenil-i ilena-ess-ni ?
Saturday-on what-NOM happen-PST-QUE
'What happened on Saturday ?'
b'. thoyoil-ey/??i kongcang-i pwul-i
Saturday-on/?NOM factory-NOM fire-NOM
na-ess-ta

[34] The notion of focus assumed by Lambrecht does not have degrees. For the convenience of argumentation, I use the degrees in focus.
[35] The grammaticality judgments are based on 6 Korean native speakers. The judgments are a little different from speaker to speaker. As a whole, they followed the judgments in (5.12).

break out-PST-DEC
'Fire broke out in the factory on Saturday.'

c. thoyoil-ey kongcang-eysemwusenil-i ilena-ess-ni ?
Saturday-on factory-LOC what-NOM happen-PST-QUE
'What happened at the factory on Saturday ?'

c'. thoyoil-ey/??i kongcang-eyse/??i pwul-i
Saturday-on/?NOM factory-LOC/??NOM fire-NOM
na-ess-ta
break out-PST-DEC
'Fire broke out in the factory on Saturday.'

The above observations tell us that the presupposed parts (for example, *thoyoil -ey* 'on Saturday' in (5.12b and 5.12b'), and *thoyoil-ey* and *kongcang-eyse* in (5.12c and 5.12c')) tend not to take the pragmatic case marking *-ka* . Let us consider the following examples.

(5.13) a. thoyoil-i kongcang-i pwul-i na-ess-ni ?
Saturday-NOM factory-NOM fire-NOM break out-PST-QUE
'Fire broke out in the factory on Saturday.'

b. ani. kumyoil-ey/i kongcang-ey/?i pwul-i
No. Friday-on/NOM factory-LOC/?NOM fire-NOM
na-ess-ta
break out-PST-DEC
'NO. Fire broke out in the factory on Friday.'

c. ani. thoyoil-ey/?i kakey-ey/i pwul-i
No. Saturday-on/?NOM store-LOC/NOM fire-NOM
na-ess-ta
break out-PST-DEC
'No. Fire broke out in the store on Saturday.'

As expected, the NP 'factory' in (5.13b) would get LOC *-ey* rather than NOM *-i* . On the other hand, the NP 'Saturday' in (5.13c) would get LOC *-ey* rather than NOM *-i* . These observations seem to show that case spreading is pragmatically motivated.

Consider, now, the following examples.

(5.14) = Youn's (1989) (8)-(10)

a. i uyca-ey /*ka Chelswu-ka anc-ess-ta
this chair-LOC/*NOM C.-NOM sit-PST-DEC
'Chelsoo sat on this chair.'

b. cinan ilyoil-ey/*ka Swuni-ka ttena-ess-ta
last Sunday-at/*NOM S. -NOM leave-PST-DEC
'Suni left last Sunday.'

c. i pang-eyse/*ka Yengswu-ka nao-ess-ta
this room-from Y. -NOM come out-PST-DEC
'Yengswu came out of this room.'

At first glance, the sentences in (5.14) resemble (5.11) in structure. As pointed out by Youn (1989), however, the sentences in (5.14) differ from (5.11) in that the verbs in (5.11)

are unaccusative, whereas those in (5.14) are unergative.[36] That is, DNC is allowed only for 'unaccusative' verbs. As noted above, the function of the pragmatic case in the DNC is to change focus structure types, in other words, to establish the particular focus structure types depending on contexts. The sentence in (5.11a) is basically a predicate focus construction, but in (5.11b) a sentence focus structure is established. On the other hand, the sentences in (5.14) cannot establish sentence focus structure due to the verb classes involved.

The DNC involving the locative phrase is not solely conditioned by the nature of the predicates. In (5.15a), the locative argument allows nominative case. However, nominative case on the same argument sounds awkward in (5.15b) with the same predicate.

(5.15) = K-S Hong (1992)

a. ku kulus-eyse/i mwul-i say-nta
the bowl-ABL/NOM water-NOM leak-DEC
'Water leaks from the bowl.'

b. ku kulus-eyse/??i nay-ka cokumceney neh-un
the bowl-ABL/NOM I-NOM right before put-REL
mwul-i say-nta
water-NOM leak-DEC
'The water which I put into the bowl right before leaks from the bowl.'

I contend that the difference between (5.15a) and (5.15b) should be explained in terms of the informational property of the NPs concerned. It may be that even though the predicate itself is unaccusative, it is not possible for the locative argument to get NOM marking when the intervening theme argument is so long to denote a definite NP. It would be difficult to interpret a definite NP as focus, unless there is contrastive focus. The use of the relative clause makes it more topical and less focal. The NOM marked locative phrase is hence is incompatible with the sentence focus pragmatics conveyed by the DNC.

5.1.1.3. Alienable Possessor Ascension Construction

Third, let us consider DNCs involving alienable possessor ascension. Alienable possessor ascension construction should be differentiated from inalienable possessor construction, because the two related constructions involve different pivots. Consider Youn's (1989: 104) example.

(5.16) a. Chelswu-uy tongsayng-i yeyppu-ta

[36] As pointed out by Koenig (p.c.), however, 'leave' passes many tests for unaccusativity in Romance.

		C.-GEN	sister-NOM	pretty-DEC
	b.	Chelswu-ka	tongsayng-i	yeyppu-ta
		C.-NOM	sister-NOM	pretty-DEC
		'Chelswu's sister is pretty.'		
(5.17)	a.	Kim sensayngnim-uy	kwutwu-ka	ccic-eci-ess-ta
		Kim teacher-GEN	shoes-NOM	tear-PASS-PST-DEC
	b.	Kim sensayngnim-i	kwutwu-ka	ccic-eci-ess-ta
		Kim teacher-NOM	shoes-NOM	tear-PASS-PST-DEC
		'Professor Kim's shoes have been torn.'		

Youn (1989) refers to these constructions as Focus Multiple Nominative Constructions and shows that the first nominative nominal is a focus and that the second nominative nominal is a final 'subject'.

(5.18)	a.	Lee sensayngnim$_i$-i	ttal-i	yeyppu-(*si$_i$)-ta
		Lee teacher-NOM	daughter-NOM	pretty-*HON-DEC
		'Professor Lee's daughter is pretty.'		
	b.	Lee sensayngnim$_i$-i	kapang-i	khu-(*si$_i$)-ta
		Lee teacher-NOM	briefcase-NOM	big-*HON-DEC
		'Professor Lee's briefcase is big.'		

It is clear in these constructions that the second, not the first nominal, is responsible for subject honorification. From the observation, it can be said that in these constructions, a macrorole (actor or undergoer) should be assigned to the second nominal so that the second nominal is assigned NOM by the case marking rules.

A question arises with respect to the first NP: how can we assign NOM to the first NP ? I suggest that the first NP should be explained via pragmatic case, not semantic case. Grimshaw (1990) calls a possessive as in (5.16a, 5.17a) an 'argument adjunct'. According to Grimshaw, possessives behave partially like arguments and adjuncts. In other words, they have an intermediate status.[37] If it is assumed that Grimshaw's claim concerning the intermediate status of possessives is true of Korean, it is expected that the possessives in (5.16a) and (5.17a) do not involve full focus, when we consider Selkirk's (1984) Phrasal Focus Rule.[38] The first *-ka* markings in (5.16b) and (5.17b) involve more focus on it than

[37] According to Grimshaw (1990), possessives resemble arguments in that argument structure licenses them, and they resemble adjuncts in that they fail to satisfy the requirements of arguments.

[38] Selkirk postulates a "Phrasal Focus Rule", according to which a phrasal constituent which contains a focused word may itself be a focus under certain conditions:

> Selkirk's Phrasal Focus Rule:
> A constituent may be a focus if (i) or (ii) (or both) is true:
> (i) The constituent that is its *head* is a focus.
> (ii) A constituent contained within it that is an *argument* of the head is a focus.
> (cited from Lambrecht (1987))

its corresponding possessive form. The following examples justify the focus characteristic of the first nominal.

(5.19) a. nwu-ka tonsayng-i yeyppu-ni ?
who-NOM sister-NOM pretty-QUE
'Whose sister is pretty ?'

a'. nwukwu-uy tonsayng-i yeyppu-ni ?
who-GEN sister-NOM pretty-QUE
'Whose sister is pretty ?'

b. * Chelswu-ka nwu-ka yeyppu-ni
C.-NOM who-NOM pretty-QUE
'(literally) Who of Chelswu's is pretty ?

b'. * Chelswu-uy nwu-ka yeyppu-ni
C.-GEN who-NOM pretty-QUE
'(literally) Who of Chelswu's is pretty ?

It seems that both genitive pattern and double nominative pattern assume the similar acceptability. However, it should be noted that the sentence (5.19a') is only used in the contexts where it is presupposed that someone's sister is pretty. Hence, it is hard to think of the wh-word in (5.19a') as full-fledged focus marker. Hence, it seems to be reasonable to say that the first nominative marked nominal as in (5.19a) is motivated by the pragmatic need, that is, the property of focus. Both sentences in (5.19b) and (5.19b') are unacceptable in that the second element Y cannot be questioned in the compound NP scheme XY in Korean.

5.1.1.4. 'Type' or 'Class' Type

Fourth, let us consider the so-called 'type' or 'class' DNC. I-S Yang (1972) proposes a macro-micro analysis for the DNC. According to him, the macro-micro relation refers to a relation where an NP is conceptually divided into the whole NP and a subpart of it. The NP which corresponds to the former is referred to as a macro-NP, while the one corresponding to the latter is referred to as a micro-NP. He subcategorizes the macro-micro relation into five types according to their semantic content:

(5.20) Types of Macro-Micro Relation (= I-S Yang (1972))
1. whole/part
2. class/member
3. type/token
4. total/quant
5. affected/affector

Among the 5 types, I am concerned with only two types (types 2 and 3) in this paper. That is, the 'type' and 'class' types of DNC will be argued to involve pragmatic case. Consider the following examples.

(5.21) = class/member (I-S Yang (1972))

a.	TV-nun	Zenith-ka	thunthunha-ta
	TV -TOP	Z.-NOM	strong-DEC
b.	TV-ka	Zenith-ka	thunthunha-ta
	-NOM	Z.-NOM	strong-DEC

'As for TV, Zenith is durable.'

(5.22) = type/token (I-S Yang (1972))

a.	hay-nun	ttenun	hay-ka mesiss-ta	
	sun -TOP	rising	sun-NOM	beautiful-DEC

'As for the sun, a rising sun is beautiful.'

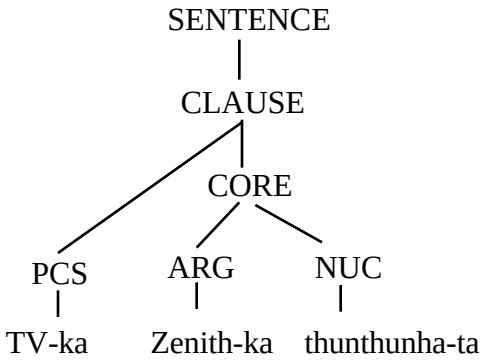
b.	hay-ka	ttenun	hay-ka mesiss-ta	
	sun -NOM	rising	sun-NOM	beautiful-DEC

'As for the sun, a rising sun is beautiful.'

The NOM-marked *TV* in (5.21b) should be treated as being in the Pre-Core Slot [PCS] involving narrow focus interpretation.[39] The same is true of (5.22b). The sentence in (5.21b) arguably has the following LSC.

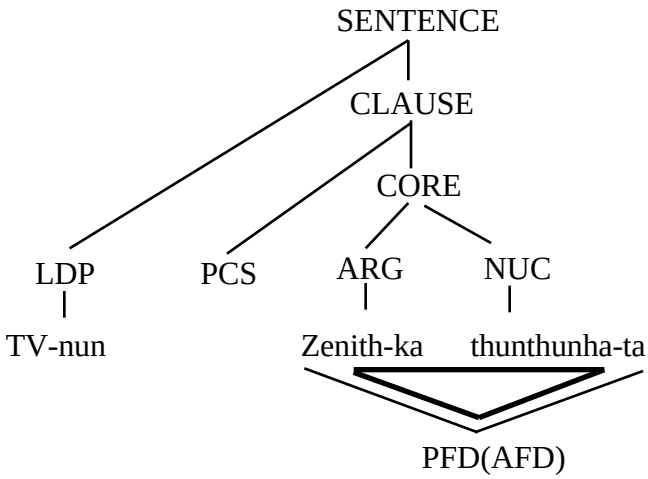
(5.23)

[39] B-S Yang (1994) also deals with the construction in a similar way.

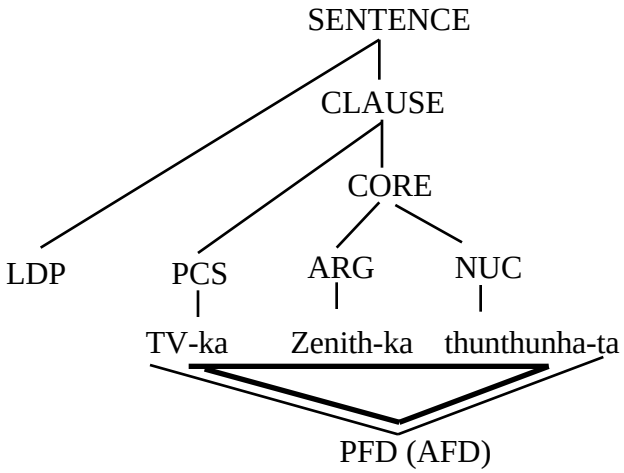


The *class* or *type* NPs in both (5.21a, 5.22a) and (5.21b, 5.22b) normally serve as 'canonical' topics which are not core elements in RRG, because the predicates require only one core argument, that is, the second NPs. The only difference between the two kinds of NP in RRG is that the first NPs in (5.21a, 5.22a) are in Left-Detached Position [LDP], while those in (5.21b, 5.22b) are in PCS, as the following figures in (5.24) show.

(5.24) a.



b.



From the above observation, it can be said that case changes should correlate with different focus structures. NOM spread seems to play a role in sentence focus construction and narrow focus construction[40]. The unmarked case for NOM spread will be sentence focus, while the marked case will be narrow focus. For instance, the NOM spread involving locative nominals assumes sentence focus domain in an unmarked situation.

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[40] The contrast between sentence focus and narrow focus in unaccusatives (and 'subject' in unergatives) can be tested with Korean lenis stop voicing (LSV) which Silva (1989, among others) think of as a device for testing a syntactic unit. Consider the following examples.

a. apeci-**k**a pang-ey tul-e ka-si-n-ta
father-NOM room-LOC enter-PFgo-HON-PRE-DEC
'Father is entering a room.' [Voicing of 'k' Sound]

b. apeci **k**apang-ey tul-e ka-si-n-ta
father bag-LOC enter-PFgo-HON-PRE-DEC
'Father is entering a bag.' [No Voicing of 'k' Sound]

He argues for a correspondence between phonological phrase and syntactic phrase with respect to LSV in Korean. If the first unvoiced sound in a certain phrase is in the same syntactic unit with the adjacent phrases, as in (a), LSV occurs. Consider the following examples.

c. i pang-i pwul-(i) **k**a-ess-ta [**Sentence Focus**]
this room-NOM light-(NOM) go out-PAST-DEC
'The light just went out in this room.'

d. John-(i) **k**a-ess-ta [**Predicate Focus**]
J.-(NOM) go-PAST-DEC
'John went.'

LSV seems to occur for the 'k' sound in (c), especially when the NOM marker is deleted. On the other hand, LSV does not seem to occur for 'ka' in (d). This observation follows Silva's hypothesis. The observation shows that the syntactic relation between *pwul* 'light' and *ka* 'go' is more tight than that between *John* and *ka* 'go'. However, more accurate phonetic experiments are needed to determine the LSV in the above examples.

5.1.2. Semantic Case

The possessor in the 'inalienable possessor ascension' construction in (5.25) will be argued to involve semantic case, not pragmatic case.

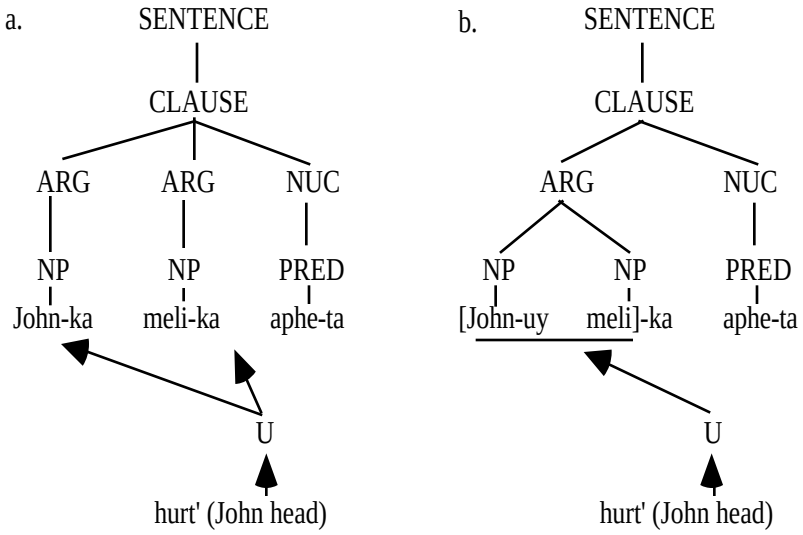
(5.25) = whole/part

a.	John-uy	meli-ka	aphe-ta
	J.-GEN	head-NOM	sick-DEC
b.	John-ka	meli-ka	aphe-ta
	J.-NOM	head-NOM	sick-DEC

'John has a headache.'

The first NOM in (5.25b) should be treated as a semantic case, just like in the double accusative constructions, because when *John's head* is sick, *John* is also affected. That is, both possessor and possessee in (5.25b) are simultaneously assigned NOM by the case marking rules.

(5.26)



As we have seen, the first NP should be the pivot in the inalienable possessor construction. The linking algorithm works as follows: both *John* and *head* is co-argument of the predicate *hurt* , but they are realized as different arguments in the LSC. The relationship between the first and the second NP is too close to be separated and they acts as a co-argument of the predicate, so that whole NP and part NP agree in case. Even if it is admitted that the first NP involves 'focus' meaning in it, the NP should be explained with semantic case. Both NPs are equally important in syntactic processes. The first NP is

associated with syntactic agreement like honorification so that C. Youn (1989) and O'Grady (1991a), for instance, argues that it is the 'subject' of the clause.

(5.27) a. sensaynim-i meli-kaaphe-si-ta
teacher-NOM head-NOM sick-HON-DEC
'The teacher has a headache.'
b. * sensaynim-i sonca-ka aphe-si-ta
teacher-NOM grandson-NOM sick-HON-DEC
'The teacher's grandson is sick.'

In inalienable possessor ascension construction as in (5.27a), the first NP triggers honorification, while in alienable possessor ascension construction as in (5.27b), the second NP does. In a similar way, Na (1986) observes that the possessee is what Langacker (1984) calls an 'active zone indicator', specifying the portion of an entity to which a particular property applies. K-A Song (1993), on the other hand, claims that the second NP must be the 'subject' of the clause on the ground that the second NP cannot be deleted in many instances. Consider the following.

(5.28) a. Mary-ka elkwul-i ppalkan-ta
M.-NOM face-NOM red-DEC
'Mary's face is red.'
b. * Mary-ka ppalkan-ta
M.-NOM red-DEC
'Mary is red.'
c. ku elkwul-i ppalkan-ta
the face-NOM red-DEC
'The face is red.'

According to K-A Song (1993), the grammaticality of (5.28c) and the ungrammaticality of (5.28b) show that the second NP should be obligatory. Accepting both sides of the coin, I claim that both NPs are equally important enough to be semantic case holders. Note, however, that in the DNC involving 'alienable possession' both honorification and 'direct argumenthood' of the NP as shown in (5.28) are associated with the second NP. Hence, the second NP is more 'important' in syntactic processes and semantics.

I do not mean that there is only semantic motivation for this type of DNC. There may be both semantic and pragmatic motivation for this DNC. According to O'Grady (1991a), the sentence-initial NP in inalienable possession constructions should be interpreted either as a theme or as a focused nominal. Consider the following examples.

(5.29) Mary-ka elkwul-i ppalkan-ta
M.-NOM face-NOM red-DEC
'Mary's face is red.'
'It is Mary whose face is pretty.'

The latter interpretation should be related to pragmatic case, so the sentence should be considered as sentence focus constructions, as implied by the fact that O'Grady (1991a) posits 'a converted IVP from S'. As claimed in the above, however, the semantic motivation seems to be predominant.

5.2. Double (or Multiple) ACC Constructions

Double (or multiple) ACC constructions [DACs] are much discussed by many authors (among them, O'Grady (1991a) and K-S Hong (1991)). These constructions include so called 'dative advancement' constructions, *ha* 'do' constructions, and 'possessor ascension' constructions, and so on. In this section, only the constructions involving lexical verbs will be discussed. It should be noted that DACs (especially 'dative advancement') are somewhat awkward to most Korean speakers, just as DNCs. C-M Lee (1994b: 345), for instance, claims that 'the multiple ACC construction is limited to inalienable-possession NPs'. Hence the DACs (ACC-ACC combinations) are 'marked' in use compared to DAT-ACC combinations. In this section, I am concerned with the nature of this 'markedness', and I will argue that it should not be accounted for by movement, or the different nature of predicates, or 'undergoerhood'. Rather it will be argued that ACC markers on the first NPs are pragmatic cases, whose function is to indicate the scope of predicate focus.

5.2.1. Pragmatic Case

As argued earlier, the semantic ACC case is assigned to a single argument which involves semantic undergoerhood or accomplishment semantics in a clause. I propose that the first ACC in so called 'dative advancement' constructions should be accounted for in terms of pragmatic ACC case. C-M Lee (1994b) gives us the ground for the pragmatic ACC in double ACC construction by saying that 'the ACC-marked NPs are focused except the last one [i.e. the NP which is most adjacent to a verb]'.

My claim made here is indirectly supported by O'Grady's (1991a) claims about Korean case markings. O'Grady (1991a) structurally differentiates an IVP from a TVP to account for double accusatives in 'dative advancement'. It seems that in O'Grady's

(1991a) system, the lower IVP category (the first IVP composed with a verb) is the domain of predicate focus, because as suggested by A. Kim (1985), a verb and adjacent preverbal elements are in the scope of predicate focus in Korean. The 'dative advancement' examples have the two ACC marked NPs in the domain of their lower IVP. On the other hand, the DAT-ACC counterparts do not have the DAT marked NP in the domain of their lower IVP. In this thesis, I will argue that the first ACC marked NPs in 'dative advancement' (in *cwu* 'give'-type verb and morphological causative verb) involve pragmatic case.

5.2.1.1. *Cwu* 'give'-type Predicates

Let us consider the following examples involving *cwu* 'give'.

(5.30) Bill-i John-eykey/-ulchayk-ul cwu-ess-ta
B.-NOM J.-DAT/ACC book-ACC give-PST-DEC
'Bill gave the book to John.'

The goal argument *John* as in (5.30) should be given dative case, following the case marking rules for Korean, since the argument is not a macrorole. However, it can be assigned ACC marking, as the example in (5.30) shows. There are two syntactic and semantic approaches to the assignment of ACC to the goal argument. One of them is to assign semantic ACC to the goal argument by a marked undergoer linking between the LS and the LSC. In other words, the goal argument *John* is marked ACC by being assigned marked undergoerhood. K-S Hong (1991) takes a similar position by saying that both goal and theme NPs involve 'Determinee' status (i.e., undergoer (or direct object)) due to accomplishment semantics. The other approach is to argue that an ACC-marked goal NP patterns like 'terms' (i.e., 'direct objects') and therefore its verb is a three-place predicate with application of Recipient Conversion.[41] (cf. O'Grady (1991a))

[41] Recipient Conversion is described as follows:

i)Recipient Conversion (Input: certain TVs)
Recipient --> term

Recipient Conversion applies to a category with the properties depicted in (iib) to give a category with the properties depicted in (iib).

(ii) a. Before Recipient Conversion: TV-NPa NPt [NPr-P]
b. After Recipient Conversion: TTV-NPa NPt NPr

First of all, there seems to be no difference in accomplishment semantics (i.e., end-point of the theme argument) between a goal marked with *eykey* and that marked with ACC.[42] Let us consider the following sentences.

(5.31) = K-S Hong (1991, ex. (66))

Minswu-ka	Swuni-eykey/lul	chayk-ul	cwu-ess-ciman,
M.-NOM	S.-DAT/ACC	book-ACC	give-PST-although
Swuni-nun	pat-ci	anh-ess-ta	
S.-TOP	receive-CMPL	NEG-PST-DEC	

'# Although Minswu gave a book to Swuni, she did not receive it.'

Even though *cwu* 'give' takes ACC for goal argument, it does not mean that something given should necessarily arrive at the endpoint. Hence there is no such accomplishment semantics so that a semantic ACC cannot be assigned to the goal NP. Second, to show that the ACC-marked goal arguments are 'terms' and therefore the verbs are triadic predicates, O'Grady (1991a) claims that floated quantifiers can be associated with the ACC-marked goal NPs as in the following sentence.

(5.32) = O'Grady (1991: 55)

nay-ka	ai-tul-ul$_i$	seys_i	chayk-ul	cwu-ess-ta
I-NOM	child-PL-ACC	three	book-ACC	give-PST-DEC

'I gave three children a book.'

As argued by K-S Hong (1991), however, the floated quantifier construction cannot be used as an object test. Hence, it is not clear whether the goal NPs should be considered as an 'object'.

In this thesis, I claim that the first ACC in this construction is not an instance of semantic case, but an instance of pragmatic case. As suggested earlier, the function of ACC for goal arguments is to extend the Actual Focus Domain [AFD] to include the goal arguments. That means that *Bill* in (5.30), for instance, does not assume the affectedness caused by undergoerhood nor accomplishment semantics, but rather is included in the pragmatic focus. Let us consider the following examples.

(5.33) a. ne-nun nwukwu-eykey/lul chayk-ul cwu-ess-ni ?
you-TOP who-DAT/ACC book-ACC give-PST-QUE
'To whom did you give the book ?'

b. ne-nun John-eykey/?ul mwuess-ul cwu-ess-ni ?
you-TOP J.-DAT/ACC what-ACC give-PST-QUE
'What did you give to John ?'

[42] Only a few informants say that there is an end-point difference between the two forms.

When the recipient (or goal) NP is questioned as in (5.33a), the NP can take DAT or ACC freely. When the theme is questioned as in (5.33b), however, the ACC marker on the recipient NP becomes a little awkward. If the theme is interpreted as 'something', not as 'what', as in 'Did you give *John* something ?', the ACC marker on it is more acceptable.

5.2.1.2. Causative Verb

Consider a DAC involving causative verbs as in (5.34).

(5.34) a. na-nun ai-tul-eykey pap-ul mek-i-ess-ta
I-TOP child-PL-DAT rice-ACC eat-CAU-PST-DEC
'I fed the cooked rice to the children.'
b na-nun ai-tul-ul pap-ul mek-i-ess-ta
I-TOP child-PL-ACC rice-ACC eat-CAU-PST-DEC
'I fed the cooked rice to the children.'
'I made the children eat the cooked rice.'

If *ai-tul-ul* in (5.34b) is considered a semantic case, we have to assign a marked undergoerhood to *ai-tul* 'children', not *pap* 'rice'. In that case, we have to explain why the undergoerhood should be markedly changed from *pap* to *ai-tul*. We also have to find out the mechanism to assign ACC to the noun *pap* 'rice'. Moreover, there is no difference in Accomplishment semantics (i.e., end-point of the theme argument) between the causee argument marked with DAT and that marked with ACC, which is parallel to 'give'-type construction as shown in (5.30). That is, the sentence in (5.34b) does not involve accomplishment semantics, either, as shown in the following sentence.

(5.35) na-nun ai-tul-ul pap-ul mek-i-ess-ciman
I-TOP child-PL-ACC rice-ACC eat-CAU-PST-DEC
ai-tul-i pap-ul mek-ci an-ess-ta
child-PL-NOM rice-ACC eat-CMPL NEG-PST-DEC
'Even though I made the children eat the cooked rice, the children did not eat.'

As seen in (5.35), the ACC is not directly related to accomplishment semantics. On the other hand, O'Grady (1991a) attributes the difference in case marking for the recipient NP to the difference in the verbal category of morphological causative verb: the ACC case frame takes TTV, while the DAT case frame takes TV. However, it is not easy to test empirically whether the morphological causative verbs have two verbal categories. Hence, his account seems to lack in explanatory adequacy.

I suggest that the primary determining element in the choice between DAT and ACC on the 'causee' is whether the NP such as *ai-tul* 'children' in (5.34) should be included in

the actual focus domain in the focus structures of the clauses. If yes, then we just have to put a proper pragmatic case (that is, NOM or ACC) on the NP depending on the Aktionsart of the verb.[43] As Van Valin (p.c.) has pointed out, we can test the actual focus domain by comparing several questions and answers. Let us consider the following sentences.

(5.36) a. John-un nwues-lul ha-ess-ni ?
J.-TOPwhat-ACC do-PST-QUE
'What did John do.'

b. John-un Mary-eykey/lul pap-ul mek-i-ess-ta
J.-TOPM.-DAT/ACC rice-ACC eat-CAU-PST-DEC
'John made Mary eat rice.'

(5.37) a. John-un Mary-eykey/?lul nwues-lul mek-i-ess-ni ?
J.-TOPM.-DAT/?ACC what-ACC eat-CAU-PST-QUE
'What did John make Mary eat.'

b. John-un Mary-eykey/?lul pap-ul mek-i-ess-ta
J.-TOPM.-DAT/?ACC rice-ACC eat-CAU-PST-DEC
'John made Mary eat rice.'

(5.38) a. John-un nwukwu-eykey/lul pap-lul mek-i-ess-ni ?
J.-TOPwho-DAT rice-ACC eat-CAU-PST-QUE
'Who did John make eat the rice ?'

b. John-un Mary-eykey/lul pap-ul mek-i-ess-ta
J.-TOPM.-DAT/ACC rice-ACC eat-CAU-PST-DEC
'John made Mary eat rice.'

The above examples show that when the 'causee' is pragmatically presupposed as in (5.37), the pragmatic case *lul* marker is not appropriately assigned. When the 'causee' is in the actual focus domain as in (5.36) and (5.38), it can take ACC marker more freely.[44] If we allow for pragmatic case, we can predict various actual realizations for the causee argument depending on contexts: *Mary-eykey*, *Mary-eykey-ul* , and *Mary-ul* .[45] What we have to determine is which one is most appropriate in the given context.

---

[43] As we have discussed in the previous section, the pragmatic case is constrained by the Aktionsart of the predicates. That is, when the predicates are states, the nominative case is taken as the pragmatic case where available. On the other hand, when the predicates are non-states, the accusative case is taken as pragmatic case where available.

[44] The form *Mary-eykey-lul* is used whenever the form *Mary-lul* is used. However, the latter is considered as more focused form than the former.

[45] The three forms all are possible in actual conversation. The form *Mary-eykey* is predicted by the case marking rules. On the other hand, the forms like *Mary-eykey-lul* and *Mary-ul* involve pragmatic case. Generally speaking, Korean speakers seem to prefer DAT-ACC pattern to double accusative constructions. What I want to do here is to find out the degree of acceptability of the accusative marked 'causee' argument in different situations to see whether accusative case spread is possible.

5.2.2. Semantic Case in Inalienable Possessor Construction

Let us consider double accusative examples involving 'inalienable possessor ascension' as in (5.39a). The examples in (5.39) are similar to inalienable possessor ascension in DNC, which was discussed earlier (in Chapter 5.1.).

(5.39) a. Chelswu-ka Yenghi-lul son-ul cap-ess-ta
C.-NOM Y.-ACC hand-ACC catch-PST-DEC
'Chelsoo caught Yenghi on the hand.'
b. Chelswu-ka Yenghi-uy son-ul cap-ess-ta
C.-NOM Y.-GEN hand-ACC catch-PST-DEC
'Chelsoo caught Yenghi's hand.'

Remember that the first NOM in DNC involving 'inalienable possessor ascension' should be treated as a semantic case. Similarly, I propose that the ACC in *Yenghi* should be treated as a semantic case, since in (5.39a), where 'Chelswu caught Yenghi on the hand', for instance, *Yenghi* is treated as equally affected as *son* 'hand'. We can assign ACC to both possessor and possessee by coassigning undergoerhood to the two NPs under case agreement, because both are affected and both fill the same argument position in LS. The following examples involving 'alienable possessor ascension' indirectly support my proposal.

(5.40) a. * Chelswu-ka Yenghi-lul tongsayng-ul po-ess-ta
C.-NOM Y.-ACC brother-ACC see-PST-DEC
'Chelsoo saw Yenghi's brother.'
b. Chelswu-ka Yenghi-uy tongsayng-ul po-ess-ta
C.-NOM Y.-GEN brother-ACC see-PST-DEC
'Chelsoo saw Yenghi's brother.'

The double accusativization of the so-called alienable possession construction is not permitted, as shown in (5.40a). If the ACC in *Yenghi* is also considered as a semantic case, then we can easily account for the unacceptability of (5.40a). We cannot co-assign undergoerhood to *Yenghi* in (5.40a), because *Yenghi* taking a semantic case in (5.40a) is not affected at all. Consider the following examples as in (5.41).

(5.41) a. Nay-kaku ai-lul ilum-ulpwul-ess-ta
I-NOM the child-ACC name-ACC call-PST-DEC
'I called the child by name.'
b. * Nay-kaku ai-lul ilum-ulsse-ess-ta
I-NOM the child-ACC name-ACC write-PST-DEC
'I wrote the child's name.'

c. Nay-kaku ai-lul somay-ul cap-ess-ta
I-NOM the child-ACC sleeve-ACC catch-PST-DEC
'I caught the child by the sleeve.'

The same 'inalienable' possessor results sometimes in an acceptable sentence, as in (5.41a), but may sometimes results in an unacceptable sentence, as in (5.41b). In (5.41c), on the other hand, the nominal 'sleeve' which seems not in the inalienable relation gives an acceptable sentence. These examples seem to support my assumption that the possessor ascension construction basically involves semantic case. Since the accusative as a semantic case is determined by the inherent semantic meaning of affectedness by undergoer, the semantic property seems to be more important in possessor ascension construction than inalienable/alienable distinction. In (5.41a) and (5.41c), the 'child' is affected directly or indirectly by being called or being held. On the other hand, in (5.41b), the 'child' is not affected at all.

The status of the whole- and part-NPs has been under controversy. There are two positions regarding it. The first position is that any one of the two NPs is an argument. Y-S Kang (1986) and O'Grady (1991a), for instance, argue that only the whole-NP is the 'object' of the verb and the part-NP resembles adverbial NPs in being relatively constrained. On the other hand, Maling and Kim (1992) argues that the part-NP is the only subcategorized argument of the verb. According to Y-S Kang (1986), only whole-NPs can be the target of passivization so that they are considered as the 'object' of the verb. According to Maling and Kim (1992), on the other hand, part-NP is the argument subcategorized for by the verb on the basis of examples like the following.

(5.42) a. John-i Mary-lul *(sonthop-ul) kkak-ess-ta
J.-NOM M.-ACC fingernail-ACC clip-PST-DEC
'John clipped Mary by the fingernail.'
b. John-i Mary-lul *(meli-ul) cal-ess-ta
J.-NOM M.-ACC hair-ACC cut-PST-DEC
'John cut Mary by the hair.'

(5.42a,b) are ungrammatical without the part-NPs. In other words, the whole-NPs *sonthop* 'fingernail', *meli* 'hair' must be present for verbs like *kkak-* 'clip', or *cal-* 'cut'. Hence they argue that the part-NP must be an argument of the verb. The second position is that both should be arguments of a verb. As pointed out earlier, I follow the second position. It seems that the whole- and part-NPs involve nearly equal status, depending on the kind of grammatical processes (subcategorization, 'passivization', etc).

Now let us turn to the account of the case marking of inalienable possession constructions. Contrary to my claim that the whole and part NPs share ACC under case

agreement, it has been argued in some studies that the whole- and part-NPs are treated as separate constituents with respect to case marking. In other words, it is argued that the case marking that each of the part-NP(s) and the whole -NP bears is in fact assigned *independently* by the verb. (cf. Direct Case Hypothesis by Maling and Kim (1992)).[46] First, let us consider the following passive sentences.

(5.43) = Maling and Kim's (1992) (23)

a. nay-ka ai-lul son-ul cap-ess-ta
I-NOM child-ACC hand-ACC hold-PST-DEC
'I held the child by the hand.'

b. ai-ka son-i/ul cap-hi-ess-ta
child-NOM hand-NOM/ACC hold-PASS-PST-DEC
'The child was held by the hand.'

If both whole and part NPs are semantic case under case agreement, then part-NP *son* 'hand' is expected to have only NOM case, and never ACC.[47] Interestingly enough, if *ai* 'child' becomes pivot as in (5.43b), the part NP can take ACC in a limited environment. J-S Lee (1992), for example, proposes that the part-NP which is argued by him to have semantic *partitivity* can receive partitive case from a passive verb and that the peculiar ACC on the part-NP is *partitive* case. Following Y-J Kim (1990), Klaiman (1991), Maling and Kim (1992), Kim and Maling (1993), J-W Park (1992), and so on, I suggest that the two versions of passive have different voices. That is, the sentence involving ACC-marked part-NP involve a voice (something like J-W Park's causative-passive) other than passive voice. When the whole NP agrees with the part NP in case, then the sentence is considered as a regular passive. When the case marking does not agree in a passive, then, the sentence is considered as something like J-W Park's (1992) 'causative-passive'.[48] The following sentences support my assumption.

---

[46] Direct Case Hypothesis is:

a. the part-NP is assigned case directly by V
b. the whole-NP is assigned case either by V or by Infl, depending on its surface form.

[47] If *son* 'hand' becomes pivot in passives, for instance, the possessor should be obligatory NOM.

[48] J-W Park (1992) argues that the causative marker *-i* is a polysemous marker of a group of related grammatical categories, a group centered on the causative function. He presents the following network of a semantic polysemy structure.

(5.44) a. Chelswu-ka namwu-lul kaci-lulcal-ess-ta
Chelswu-NOM tree-ACC branch-ACC cut-PST-DEC
'Chelswu trimmed the tree's branches.'

b. Namwu-ka (Chelswu-eyuyhay) kaci-ka/*lul
tree-NOM Chelswu-by branch-NOM/*ACC
cal-li-ess-ta
cut-PASS-PST-DEC
'The tree's branches were cut by Chelswu.'

As shown in (5.44b), all the 'part' NPs in lexical passives cannot involve a case mismatch with the 'whole' NPs. When the whole NP denotes an inert thing as in (5.44b), the part NP can only be marked NOM but not ACC in the corresponding lexical passive sentences. This means that when an inert pivot is chosen in passives, the whole-part NP as a whole is totally affected, deprived of the option to have something like causative-passive voice. In (5.44b), the case marking is automatically determined by the semantic case marking rules in Korean, since the whole and part NPs are co-assigned NOM under case agreement. More studies are needed to clarify these points. However, the full discussion on the kinds of voices in Korean is beyond our concern here.

The second possible counterevidence against my claim may be related to a ditransitive verb. Suppose we combine the inalienable possessor construction with a ditransitive verb whose goal argument can be either dative or accusative. This combination is illustrated in (5.45).

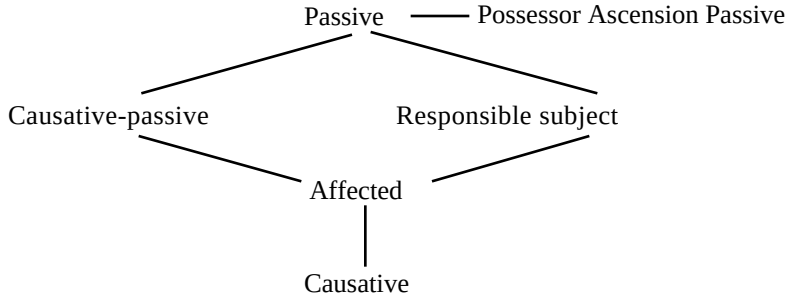
(5.45) = Maling and Kim's (1992) (13)

a. nay-ka Yumi-eykey phal-eycwusa-lul
I-NOM Y.-DAT arm-DAT shot-ACC
noh-ess-ta
give-PST-DEC
'I gave Yumi's arm a shot.'

b. nay-ka Yumi-lul phal-eycwusa-lul noh-ess-ta

c. nay-ka Yumi-lul phal-ul cwusa-lul noh-ess-ta

d. nay-ka Yumi-eykey phal-ul cwusa-lul noh-ess-ta



As can be seen in (5.45), the case on the whole and part-NPs can vary independently: it can be either dative or accusative. From this observation, Maling and Kim (1992) conclude that the fact is consistent with their claim that matrix verb can assign case directly to both part- and whole-NPs. The obvious problem they face is that they do not explain how the ACCs in either *Yumi* or *phal* 'arm' is assigned. I propose that the whole and part-NPs constitute a sort of NP-level cosubordination which is similar to tandem structure which Gerdts and Jhang (1995) propose.[49] (the details will be discussed in Chapter 7) The characteristic of the NP-level cosubordination is that both pragmatic and semantic case are independently to each NP, just as both S-case and I-case are assigned independently assigned to each NP in Gerdts and Jhang's (1995) framework. The proposal predicts that either DAT or ACC is assigned to each NP. (sometimes case stacking can happen in each NP)

[49] According to them, the tandem structures are the structures which are simultaneously coordinate and subordinate.

Chapter 6. Accomplishment Semantics and Case

In this chapter, I am concerned with the case of locative adverbials, frequency adverbials, and HA constructions in Korean. In section 6.1., I provide an account of the case marking of the locative and frequency adverbial nominals. It will be argued that the sentences with locative adverbial nominals involve semantic case due to the fact that they involve accomplishment semantics. In section 6.2., I present an account of double accusative marking in HA constructions in Korean. The accusative marking on the verbal noun is considered as semantic case due to the fact that it involves accomplishment semantics, too.

6.1. The Case Marking of Locative and Frequency Adverbials

First, the case of adverbial nominals has attracted much attention recently. (cf. Kang (1986, 1991), Maling (1989), Gerdts (1991a, b)). Martin (1963) lists a number of patterns in which the apparent adverbial nominals can bear the ACC suffix. (examples from O'Grady (1991))

(6.1) goal or destination
a. encey Seoul-ul o-ess-ni ?
when Seoul-ACC come-PST-QUE
'When did you come to Seoul ?'
b. John-i New York-ul tanye-o-ess-ta
J.-NOM NY-ACC go-come-PST-DEC
'John has been to New York.'

(6.2) location
a. pihayngki-ka hanul-ul nal-ess-ta
airplane-NOMsky-ACC fly-PST-DEC
'An airplane flew in the sky.'
b. keli-lul ket-ta
street-ACC walk-DEC
'walk down the street'

(6.3) duration
a. sahul-ul o-ta
three day-ACCcome-DEC
'come for three days'
b. twu sikan-ul camca-ta
two hours-ACC sleep-DEC
'sleep for two hours'

(6.4) timing/ serialization
chesccay-lul ka-ta
first-ACC go-DEC
'go first'

(6.5) distance
chenli-lul ttwi-ta
1000 league-ACC leap-DEC
'leap a thousand league'

(6.6) boundaries / thresholds
a. John-i Seoul-ul ttena-ess-ta
J.-NOM Seoul-ACC leave-PST-DEC
'John left Seoul.'
b. John-i bus-ul nayli-ess-ta
J.-NOM bus-ACC get off-PST-DEC
'John got off the bus.'

Previous studies consistently recognize only the existence of structural or relational ACC case in Korean adverbials. The purpose of this chapter is to point out some problems with previous analyses and to provide an alternative analysis in terms of Role and Reference Grammar. In this chapter, it will be proposed that the ACC assigned to locative adverbials (type (6.1) and (6.2)) and 'frequency' adverbials among the adverbial nominals is an instance of semantic case, while case stacking in the adverbial nominals should be explained in terms of semantic and pragmatic case. It is suggested that the semantic case of the two kinds of adverbial nominals is related to accomplishment semantics.

6.1.1. Locative Adverbials: An Interaction Between Accomplishment Aktionsart and Transitivity

6.1.1.1. Some Critical Remarks on Previous Studies

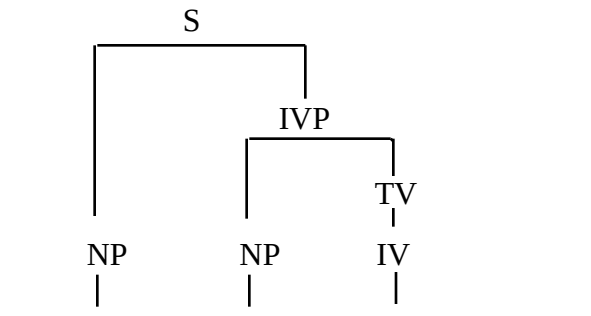
Before a RRG account is given, let me review previous studies. This phenomenon in Korean as well as in Japanese (cf. Dubinsky (1985)) has confused scholars. Two well-known studies on locative nominals in Korean (Y-S Kang (1991) and O'Grady (1991a)) employ syntactic approaches.

O'Grady (1991) takes the position that verbs with locative adverbials are transitive verbs when they occur with an ACC-marked complement, this being the only way to license the ACC marker in the case marking system that he has adopted. He suggests the operation of 'Locative Conversion' to represent the transitivizing process.

(6.7) = O'Grady's (11)
Locative Conversion (Input: IVs with spatial or temporal locatives)
Locative ---> term

He posits a structure such as (6.8) for sentences that undergo Locative Conversion.

(6.8)



John-NOM mountain-ACC climb-PST-DEC
"John climbed the mountain."

O'Grady (1991a) argues that ACC-marked locative NPs behave like direct object terms in at least two ways in addition to case marking. First, unlike their 'nonterm' counterparts, these NPs can be associated with a floated quantifier, which suggests that they have lost their status as PPs.

(6.9) = O'Grady's (15)

a. Floated quantifier associated with dative-marked locative
* Nay-ka san-ey$_i$ seys$_i$ olla-ess-ta
I-NOM mountain-DAT three climb-PST-DEC
'I climbed three mountains.'

b. Floated quantifier associated with ACC-marked locative
Nay-ka san-ul$_i$ seys$_i$ olla-ess-ta
I-NOM mountain-ACC three climb-PST-DEC
'I climbed three mountains.'

As argued by K-S Hong (1991), however, the quantifier floating in Korean cannot be a 'objecthood' test. Hence, this does not seem be a good argument. The second piece of evidence he presents comes from its interaction with Passivization. He claims that the TV formed by Locative Conversion can undergo Passivization.

(6.10) a. Sentence without Locative Conversion
manun salam-tul-i san-ey olla-ess-ta
many person-PL-NOM mountain-DAT climb-PST-DEC
'Many people climbed up the mountain.'
b. Sentence with Locative Conversion
manun salam-tul-i san-ul olla-ess-ta
many person-PL-NOM mountain-ACC climb-PST-DEC
'Many people climbed up the mountain.'
c. Passive Variant
san-i manun salam-tul-eyuyhay olla-ci-ess-ta
mountain-NOM manyperson-PL-by climb-PASS-PST-DEC
'This mountain was climbed by many people.'

But, if his 'actor term' is changed from non-specific *manun salam* 'many persons' to specific NP such as *John* , for instance, passivization is not available any longer. Moreover, most sentences with locative adverbials do not permit passivization, as shown in (6.11).

(6.11) = O'Grady's (1991a) (24)

a.	John-i	hakkyo-lul	ka-ess-ta
	J.-NOM	school-ACC	go-PST-DEC
	'John went to school.'		
b *	hakkyo-ka	John-eyuyhay	ka-ci-ess-ta
	school-NOM	J.-by	go-PASS-PST-DEC
	'John went to school.'		

When O'Grady (1991a) considers passivization as a diagnostic for direct objecthood in Korean, however, it is hard to see why the passivization is not possible in most cases. Moreover, as shown in (6.12), some locative nominals cannot take the ACC marker.

(6.12) = Hong's (1991) (84)

Swuni-ka	emma-eykey/*lul	ka-nta.
S.-NOM	mother-DAT/*ACC	go-DEC
'Swuni goes to Mother.'		

If the verbs like *ka* 'go' undergoes automatic transitivization process, why cannot the goal argument *emma* in sentence (6.12) take ACC marker ? Even though we admit that in a sense there is a transitivity in the verbs, full-fledged transitivity does seem to be a feature of the verbs.

Now, let us look at Y-S Kang's (1991) analysis. Here are the examples provided by Y-S Kang (1991).

(6.13) = Kang (1991)'s (1)

a.	{ pi-s-sok-ul / pi-s-kil-ul }	catongcha-ka	kwasok-ulo
	rain-inside-ACC / rain-road-ACC	car-NOM	overspeed-by
	talli-ess-ta		
	run-PST-DEC		
	'The car ran at overspeed in the rain / on the rainy road.'		
	(= 'The car oversped in the rain / on the rainy road.')		
b.*	{ pi-s-sok-i / pi-s-kil-i }	catongcha-ka	kwasok-ulo
	rain-inside-NOM / rain-road-NOM	car-NOM	overspeed-by
	talli-ess-ta		
	run-PST-DEC		
	'The rain / The rainy road, the car ran at overspeed.'		
c.	{ pi-s-sok-eyse / pi-s-kil-eyse }	catongcha-ka	kwasok-ulo

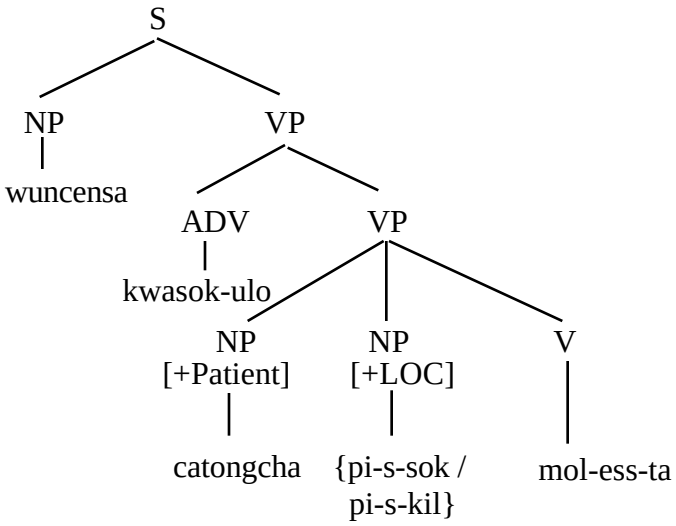
rain-inside-LOC / rain-road-LOC car-NOM overspeed-by talli-ess-ta
run-PST-DEC
'The car oversped in the rain / on the rainy road.'

In (6.13a), adverbial nominals are ACC-marked. To explain how the adverbial nominal in (6.13a) is ACC-marked, Y-S Kang (1991) employs the Generalized Case Marking Principle (GCMP) presented in Y-S Kang (1986):

(6.14) a. ACC case is assigned to NPs which are sisters of [-stative] V°.
b. NOM case is assigned to all non-case-marked NPs (default Case Marking)

Y-S Kang (1991) posits the following D-structure configuration for (14a):

(6.15)



Following his GCMP, both an object NP with the Th-role [+Patient] and an adverbial nominal with the Th-role [+Locative] are ACC-marked because they are sisters of [-stative] V°, *mol-* . After case marking and scrambling, the sentence (6.13a) is derived.

Unfortunately, however, his arguments are circular in a sense, since he provides no independent evidence for stativity other than inability to assign ACC case to a complement. While it seems to be clear that being a case-assigner is very strongly correlated with being non-stative in Korean (see K-H Lee (1988), among others), the correlation is not absolute, at least on any usual interpretation of stativity. (see e.g. Dowty (1979), Ch. 2) As Maling (1989) pointed out, the second problem for Kang's analysis is the fact that certain non-case-assigning predicates can occur with the progressive morpheme and/or an adverbial which implies an activity in the sense of Dowty/Vendler, and thus are presumably [-stative].

These are typically passive predicates, but can also be underlying DAT NOM predicates, as in (6.16). For example, the verb *na* 'to break out' is [-stative], as suggested by the fact that it can take the Progressive morpheme.

(6.16) a. i kongcang-ey/*-ul pwul-i na-ess-ta
this factory-DAT/*ACC fire-NOM break out - PST-DEC
'Fire broke out in this factory.'

b. i kongcang-ey pwul-i na-ko iss-ess-ta[50]
this factory-DAT fire-NOM break out -COMP be-PST-DEC
'Fire was breaking out in this factory.'

Maling (1989) concludes that there exist some [-stative] predicates which do not assign ACC to their complements. This indicates that being an ACC case-assigner is a lexical property of predicates, but not perfectly predictable on the basis of the semantic feature of stativity.

The third problem comes from the D-structures he posits. Y-S Kang (1991) considers the locative adverbial nominals as the arguments with the Th-role [+Locative]. The verb *ka* 'go', for instance, can take other ACC-marked nominals other than locative nominals.

(6.17) a. ku-nunsyoping-ul ka-ess-ta
he-TOP shopping-ACC go-PST-DEC
'He went shopping.'

b. ku-nunsanyang-ul ka-ess-ta
he-TOP hunting-ACC go-PST-DEC
'He went hunting.'

The ACC case-marked nominals in (6.17a) and (6.17b) are not locative nominals, but a kind of purposive nominals. It seems that Kang's model cannot account for the examples in (6.17). Let us consider another example in (6.12), repeated in (6.18).

(6.18) Swuni-ka emma-eykey/*lul ka-ess-ta
S.-NOM mother-DAT/*ACC go-PASS-DEC
'Swuni went to mother.'

Even though *emma* 'mother' is a locative nominal, it cannot take ACC case marking. That means that the nominal *emma* 'mother' should not be the internal argument of the verb in Y-S Kang's (1991) D-structure. There remains the following question: what is the

[50] B-S Yang (1994) argues that the progressive morpheme in Korean is *nun cwung* , not *ko iss*. However, the grammaticality judgment is the same.

independent motivation for treating adverbial nominals (including D/F adverbials) as the internal arguments of the verbs with Th-role [+Locative] and [+Duration]. Although the locative nominal, *i kot* 'this place' in (6.19) is considered as the internal argument of the verb *noh* 'put' in the following sentence, we cannot put ACC on the adverbial NP.

(6.19) Chelswu-nun ku chayk-ul i chayksang-ey/*ul
C.-TOP that book-ACC this desk-LOC/*ACC
noh-ess-ta
put-PST-DEC
'Chelswu put this book on the desk.'

What can be a verb sister should be determined on independent criteria. Furthermore, it is not clear why the D/F adverbs should be the sisters of the verbs. All these arguments show that mean that Y-S Kang's (1991) analysisis on the wrong track.

In sum, we have seen that even if there may be some grounds for their analyses, Y-S Kang's (1991) and O'Grady's (1991a) syntactic approaches are not on the right track. In the following section, I propose a semantic approach which is based on accomplishment semantics.

6.1.1.2. A RRG Account

Before an account concerning the ACC marking for locative adverbials in Korean is given, we have to raise and solve a preliminary question: why do only some Korean verbs assign ACC to adverbial nominals? As a first approximation, we can say that it is directional motion verbs which allow ACC marking for locative nominals. Consider the following sentences.

(6.20) a. keli-lul cilcwuha-nun chalyang-tul
street-ACC run-REL vehicle-PL
'vehicles which are running up the street'
b. Ai-tul-i wuntongcang-lul ttwi-n-ta
child-PL-NOM playground-ACC run-PRE-DEC
'Children are running up the playground.'
c. John-i New York-ul tanye-o-ess-ta
J.-NOM NY-ACC go&come-PST-DEC
'John went to New York and came back from there.'
d. Tom-i cip-ul naka-ess-ta
T.-NOM house-ACC go out-PST-DEC
' Tom went out of the house.' (= 'Tom ran away from home.')
e. Bill-i Boston-ul ttena-ess-ta
B.-NOM B.-ACC leave-PST-DEC
'Bill left Boston.'

On the other hand, other verbs do not permit the ACC case marking for the locational locative phrases. As an illustration, look at the examples in (6.21).[51]

(6.21) a. Chelswu-nun tosekwan-eyse / *-ul chayk-ul ilk-ess-ta
C.-TOP library-LOC/ *ACC book-ACC read-PST-DEC
'Chelsoo read a book at the library.'
b. Chelswu-nun canti-eyse / *-ul kong-ul cha-ess-ta
C.-TOP lawn-LOC/ *ACC ball-ACC kicked-PST-DEC
'Chelsoo kicked a ball on the lawn.'

Remember Y-S Kang's (1991) rule that 'ACC case is assigned to NPs which are sisters of [-stative] V˚.' Unfortunately, however, not all of [-stative] verbs permit the ACC case marking, as illustrated in (6.23). Y-S Kang's (1991) rule is thus an overgeneralization, because Kang's formulation means that all the [-stative] verbs have the possibility of being ACC-marked for the locative nominals. What class of verbs does allow the locative nominals to be marked ACC, then ?

I am claiming that the RRG theory of verb classes offers criteria for the possible verb classes. As pointed out by Maling (1989), we cannot figure out what the definition of [-stative] given by Y-S Kang (1991) looks like. If we adopt for Korean RRG theory of verb classes, we can provide the definition of [-stative] in terms of the Aktionsart classes proposed in RRG.

It is quite interesting that different kinds of adverbial nominals are correlated with the different aspectual Aktionsarts. First, the locative nominals with goal interpretation are limited to the Accomplishment verbs of motion, because it is entailed that the verbs entail an end-point to the motion. The following examples in (6.22) show that accomplishmenthood is the determining factor for the ACC of locative nominals with goal interpretation.

(6.22) a. Swuni-ka emma-eykey/*lul ka-ess-ta
S.-NOM mother-to/ACC go-PASS-DEC
'Swunhi went to mother.'
b. Swuni-ka siktang-ey /*lul cepkunha-ess-ta
S.-NOM restaurant-to/ACC approach-PASS-DEC
'Swunhi approached a restaurant.'

The goal arguments in the sentences in (6.22) cannot be marked ACC. As suggested by K-S Hong (1991), the sentence in (6.22a) cannot take a prototypical accomplishment LS; CAUSE [BECOME [**pred'** (x, y)]]]. *Swuni* cannot be **at** *emma* 'mother' in the LS,

[51] Kang could respond that these PPs are VP-external, since they are adjuncts. However, He does not provide the reason why the adverbial phrase in (6.13), for example, should be VP-internal.

since *emma* 'mother' is not a fixed location, and so *Swuni* cannot be in the domain of *emma* 'mother'. The same is true of (6.22b), because the verb itself in (6.22b) is an activity verb, not an accomplishment verb. Consider now the sentences in (6.23).[52]

(6.23) a. ku-nun syoping-ul ka-ess-ta
he-TOP shopping-ACC go-PST-DEC
'He went shopping.'
b. ku-nun sanyang-ul ka-ess-ta
he-TOP hunting-ACC go-PST-DEC
'He went hunting.'

The verbs in sentences (6.23) should be considered as an accomplishment, because (6.23a) entails the LS [**do´** (he, ø)] [CAUSE [BECOME **be-at´** (shop, he)]. When they take ACC marking, other locative nominals also seem to be restricted to accomplishments with the implication of end-points. Second, the locative nominals with 'location' interpretation seem to occur with non-states. However, it should be noted that when the nominals with 'location' interpretation take ACC markers, the verbs they complemet are accomplishment verbs. Consider the following examples with 'location' interpretation in (6.24).

(6.24) a. sicheng-kkaci keli-*eyse/lul ttwi-ta
City Hall-to street-*LOC/ACC run-DEC
'run to the City Hall in the street'
b. Seoul-eyse Pusan-kkaci pihayngki-ka
Seoul-from Pusan-to airplane-NOM
hanul-*eyse/ulnal-ess-ta
sky-*LOC/ACC fly-PST-DEC
'An airplane flew in the sky from Seoul to Pusan.'
c. han sikan-tongan ku keli-eyse/lul ket-ta
one hour-during the street-LOC/ACC walk-DEC
'walk down the street for an hour'
d. han sikan-maney ku keli-*eyse/lul ket-ta
one hour-inthe street-LOC/ACC walk-DEC
'walk down the street in an hour'

When the verb entails end-point, the locative nominals normally take the ACC case marker instead of a locative postposition. That means that in the case of locative nominals the ACC marker is closely related to the accomplishment Aktionsart. In the case of *ka* 'go' with a *goal* meaning, the LS will be roughly like the following: [**do´** (x, ø)] [CAUSE [BECOME **be-at´** (y,x)]. Hence locative nominals with goal interpretation are naturally restricted to accomplishment verbs with directional motion meaning.

[52] These sentences seem to be analogous to *verbal noun +-ul ha-* to form a verbal expression, which will be discussed in section 6.2.

Several Japanese scholars make similar observations about Japanese. Kuno (1973) summarizes this use of *o* as follows: '... (NP-*o*) indicates that the motion designated by the verb takes place covering the entire dimension (or the major portion thereof) of the NP continuously and unidirectionally' (PP. 96-97). Kuno suggests that in (6.25a), in which *miti* is marked by *o* , it is perceived as more total. The sentence in (6.25b) further corroborate this point.

(6.25) a. miti o aruku
street ACC walk-IMP
'I will walk down the street.'
b. umi *ni/*de/o oyogi-kiru
sea *to/*in/ACC swim- 'finish'
'swim the ocean' (Sugamoto's (1982) (38))

According to Sugamoto (1982), *kiru* in (6.25b) is a verbal auxiliary indicating 'completeness' or 'thoroughness' of the action denoted by a verb, similar in meaning to *out* and *up* in such English expressions as *be tired out* and *finish it up* . In a context in which the predicate has this auxiliary of completion, the NP may only be marked by *o*. Kuno's and Sugamoto's observations suggest that sentences with ACC-marked locatives convey a sense of completeness, that is, an end point. Sugamoto observes that such sentences have high transitivity in the sense of Hopper and Thompson (1980). That implies that the ACC marking is related to accomplishment semantics in RRG. (cf. (6.28))

As we have just seen, there are two kinds of locative adverbial nominals in Korean: locative nominals with goal interpretation, and locative nominals with location interpretation. Locative nominals with goal interpretation should more likely be object-like in behavior in that they are represented in the basic LS (see Chapter 2.1.1. for details).

(6.26) Degree of Objecthood[53]
Locative nominals with goal interpretation > Locative nominals with location interpretation[54]

[53] This hierarchy does not mean that the two kinds of adverbial nominals, especially locative nominals with goal interpretation, directly correspond to 'objects'. Rather, the accomplishment Aktionsart of the verbs allow the adverbials to sometimes behave like 'objects'.

[54] These all refer to the 'medium' in which an action occur, not pure locatives. The adverbial phrase in 'flying in the sky' in (6.2a), for instance, is different from that in 'reading in the library'.

The Degree of Objecthood is closely related to the transitivity of the verbs. Hopper and Thompson (1980) have identified the following parameters of transitivity, each of which suggests a scale according to which clauses can be ranked.

(6.27)

	High	**Low**
A. Participants	2 or more participants, A and O.	1 participant
B. Kinesis	action	non-action
C. Aspect	telic	atelic
D. Punctuality	punctual	non-punctual
E. Volitionality	volitional	non-volitional
F. Affirmation	affirmative	negative
G. Mode	realis	irrealis
H. Agency	A high in potency	A low in potency
I. Affectedness of O	O totally affected	O not affected
J. Individuation of O	O highly individuated	O non-individuated

The degree of objecthood seems to reflect the scales in Hopper and Thompson's parameters of transitivity.

As seen above, different scholars ascribe different degree of syntactic transitivity to the verbs in question depending on their own views of transitivity. RRG's notion of transitivity is directly related to macroroles. By 'transitive' RRG means that a predicate has two macroroles, that is, an actor and an undergoer. (for details, see Chapter 2) From a RRG perspective, however, verbs in sentences with locative adverbials are definitely intransitive, taking just one macrorole. Hence, it is quite natural that the locative (especially goal) phrase is realized as a non-macrorole argument, that is, as DAT.

As argued in Park (1993), Korean verbs are often ambiguous between activity and accomplishment. From the verb class perspective, most verbs in question seem to have the primary Aktionsart of activity, but they turn out to be accomplishment verbs in the sentences with ACC-marked locative nominals. Consider the contrast in acceptability between the sentences with ACC and LOC on the locative adverbials, when the phrase like *Seoul-kkaci* 'up to Seoul', for instance, intervenes between the adverbial nominals and verbs. (see the sentences in (6.24) for details) Because the phrase gives a sense of completion, that is, end point, sentences with LOC markers would be nearly unacceptable. Given that high syntactic transitivity in Hopper and Thompson corresponds to accomplishment Aktionsart in RRG,[55] the verbs in question seem to assume relatively high syntactic transitivity depending on context, as argued in O'Grady (1991).

[55] As Foley and Van Valin (1984: 378) pointed out, stative verbs rank lowest in transitivity, agentive accomplishment verbs the highest. Thus Dowty's verb classification can be interpreted

(6.28)

For this reason, O'Grady (1991) observes that the sentences with ACC marker on the locative adverbials involve transitive verbs. However, it should be noted that the transitivity is present only when the verbs involve accomplishment semantics. It thus turns out that there is at least one way to obtain accomplishmenthood in Korean: case marking. The other way would be through serial verb constructions.[56] My observation thus leads us to the conclusion that the case marker *ul/lul* in locative nominals is motivated by accomplishment semantics, which correlates with the Hopper/Thomson notion of transitivity.

Let us consider the following realizations of locative nominals. We have six options:

(6.29) a. Seoul-ey [LOC] ka-ess-ta [go-PST-DEC]
b. Seoul-ey [LOC]-man 'only' [DELIMITER]
c. Seoul-ey [LOC]-man [DELIMITER]-ul [ACC]
d. Seoul-ey [LOC]-lul [ACC]
e. Seoul-man [DELIMITER]-ul [ACC]
f. Seoul-ul [ACC]

As we have just seen, the NP structure in Korean and the semantic vs. pragmatic case distinction account for the various forms in (6.29). The DAT marker in (6.29a) is derived

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as providing the basis for a classification of verbs in terms of transitivity in Hopper and Thomson's sense.

[56] Korean verb *kwup* 'bake', for example, employs both serial verb construction and case marking to express accomplishment semantics in that the sentence in (c) which expresses accomplishment semantics employs the two devices. In (c), it is implied that 'a cake was actually baked and John received it'.

a. Mary-nun John-ul wuyhay ppang-ulkwu-ess-ta
M.-TOPJ.-for cake-ACC bake-PAST-DEC
'Mary baked a cake for John.'

b.* Mary-nun John-ul ppang-ulkwu-ess-ta
M.-TOPJ.-ACC cake-ACC bake-PAST-DEC
'Mary baked a cake for John.'

c. Mary-nun John-ul ppang-ul
M.-TOP J. -ACC cake-ACC
kwu-e cwu-ess-ta
bake-CONN give-PAST-DEC
'Mary baked John a cake.'

from case marking rules. I have claimed that the forms in (6.29f) are a semantic case related to the accomplishment semantics. On the other hand, the ACC markers in (6.29b) through (6.29e) should be accounted for by pragmatic case I propose.

6.1.2. Frequency Adverbials

6.1.2.1. The Determining Factor(s) of the Case Marking

As pointed out by Kim and Maling (1993), adverbial NPs expressing frequency or duration are typical instances of adjuncts, and as such, they are always an optional element of a sentence. In Korean, such adverbials occur most naturally without any case markers, as illustrated in (6.30).

(6.30) a. Chelswu-ka chayk-ul sey pen(-ul) ilk-ess-ta
C.-NOM book-ACC three times(-ACC) read-PST-DEC
'Chelsoo read books for three hours.'

b. Cheli-ka Mary-lul panci-lul twu pen(-ul)
C.-NOM M.-ACC ring-ACC two times(-ACC)
senmul-ul ha-ess-ta
gift-ACC do-PST-DEC
'Cheli presented Mary with a ring twice.'

However, when adverbials are to take case markers, the case they bear is either ACC or NOM rather than an oblique.

Contrary to the locative adverbials which only alternates between LOC and ACC, the frequency adverbials have three possibilities of case alternation: i) ø vs. NOM, ii) ø vs. ACC, iii) NOM vs. ACC. What determines each case alternation? One of the scholars who explore the question is Gerdts (1991a). Gerdts (1991a) argues that the case of the frequency adverb depends on the relational structure of the basic clause. If the clause is unergative or transitive, the frequency adverb is marked ACC (not NOM), as the following sentences in (6.31) and (6.32) show:

(6.31) = unergative (Gerdts (1991a)'s (35))

a. Chelswu-ka twupen-ul/*-i ka-ess-ta
C.-NOM 2 times-ACC/*NOM go-PST-DEC
'Chelsoo went two times.'

b. Chelswu-ka twu sikan tongan-ul/*-i ca-ess-ta
C.-NOM two hours for-ACC/*NOM sleep-PST-DEC
'Chelsoo slept for two hours.'

c. Chelswu-ka twupen-ul/*i oych-ess-ta
C.-NOM 2 times-ACC/*NOM yell-PST-DEC
'Chelsoo yelled two times.'

(6.32) = transitive (Gerdts' (1991a) (36))

a. Chelswu-ka chayk-ul twupen-ul/*i ilk-ess-ta
C.-NOM book-ACC 2 times-ACC/*NOM read-PST-DEC
'Chelsoo read the book two times.'

b. Chelswu-ka thophwul-ul hansigan-ul/*i po-ess-ta
C.-NOM TOEFL-ACC 1 hour-ACC/*NOM take-PST-DEC
'Chelsoo took the TOEFL for one hour.'

c. Chelswu-ka Naiakara phokpho-ul twupen-ul/*i
C.-NOM Niagara Falls-ACC 2 times-ACC/*NOM
kwukyeng-ha-ess-ta
sightsee-do-PST-DEC
'Chelsoo saw Niagara Falls two times.'

According to Gerdts (1991a), if the clause is unaccusative or passive, on the other hand, the frequency adverb can be marked NOM or (for some speakers) ACC, as the following sentences show.[57]

(6.33) = unaccusative (Gerdts' (1991a) (37))

a. cha-ka twupen-i/%ul memchu-ess-ta
car-NOM 2 times-NOM/%ACC stop-PST-DEC
'The car stalled two times.'

b. mwun-i twupen-i/%ul yelli-ess-ta
door-NOM 2 times-NOM/%ACC open (passive)-PST-DEC
'The door opened two times.'

(6.34) = passive (Gerdts' (1991a) (38))

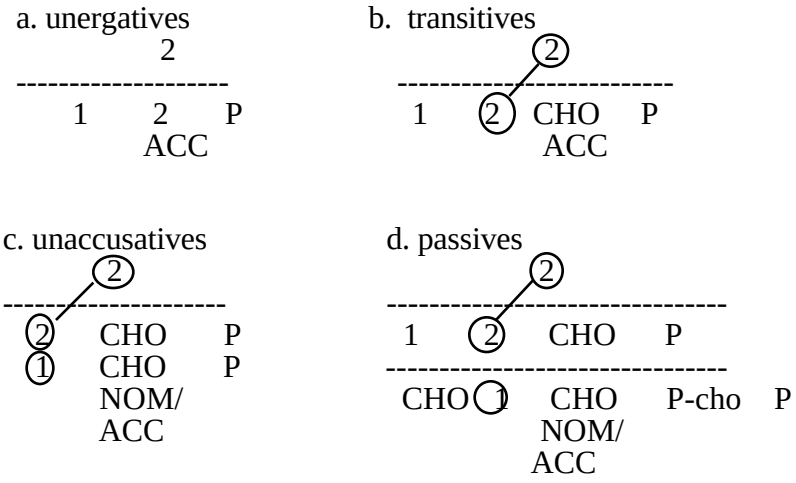
a. uyca-ka twupen-i/%ul pwuse-ci-ess-ta
chair-NOM 2 times-NOM/%ACC break-PASS-PST-DEC
'The chair was broken two times.'

b. ku chayk-itwupen-i/%ul ilk-hi-ess-ta
the book-NOM 2 times-NOM/%ACC read-PASS-PST-DEC
'The book was read two times.'

Gerdts (1991a) claims that 'case marked D/F adverbs in Korean are inner predicate nominals in multipredicate clauses.' The unaccusativity of the D/F adverbs, together with the universal principle of Inheritance derives the following generalization concerning D/F adverbs.

[57] The grammaticality judgments she uses are similar to Kang's, as Kang's examples show.

(6.35)



In unergative clause (6.35a), where no 2 is initialized by the P-2 predicate, the D/F adverb can 'fall through' to be a P-2 sector 2, but in transitive (6.35b), unaccusative (6.35c), and passive (6.35d) clauses, the P-2 predicate initializes a 2 of its own and thus the D/F adverb cannot inherit in the P-2 sector. The 'Revaluation and Inheritance' principle in RelG stipulates that in the latter case, the D/F adverb will be placed en chomage. In other words, in (6.31), the D/F adverb is a final 2 adverb and thus marked ACC. In (6.32), the D/F adverb, which is overrun by a nominal bearing a final 2 relation, is ACC via case spread. In (6.33) and (6.34), the D/F adverb is NOM via case spread, since the nominal which heads the overrun chain is a final 1. Furthermore, the D/F adverbs in (6.31)-(6.34) are claimed to be the final 2 in the inner P-sector. Gerdts' (1991a) study gives us a basic insight about the case marking by showing which class of verbs allow the ACC case marking to be assigned. However, she does not provide a mechanism to assign the NOM/ACC case marking to the frequency adverbial nominals.

Let us look now at the verb classes in RRG which allow the locative nominals to be marked ACC from a RRG perspective.

(6.36) a. Chelswu-nun twupen-ul chayk-ul ilk-ess-ta
C.-TOP two times-ACC book-ACC read-PST-DEC
'Chelswu read the book two times.'

b. Chelswu-nun twupen-ul po-i-ess-ta
C.-TOP two times-ACC see-CAU-PST-DEC
'Chelswu showed (it) two times.'

c. Chelswu-nun senmwul-ul twupen-ul pat-ess-ta
C.-TOP gift-ACC two times-ACC receive-PST-DEC
'Chelswu received a gift two times.'

d. ipen kyewul-un twupen-i/*-ul chwu-ess-ta
this winter-TOP two-times-NOM/*ACC be cold-PST-DEC
'This winter, it was cold two times.'

According to B-S Yang's verb classification, the verbs in (6.36a)-(6.36d) will be Activity, Accomplishment, Achievement, and States, respectively.[58] The sentences in (6.36a)-(6.36c) are acceptable, while the sentence (6.36d) is not. That is, the Activity, Achievement, and Accomplishment verbs allow the ACC marking for the adverbial nominals, while States do not. In other words, in the sense of Kang (1991), the verbs in (6.36a)-(6.36c) would correspond to the [-stative] verbs. Hence, Y-S Kang's [-stative] verbs will correspond to the Achievement, Accomplishment and Activity Aktionsart in the RRG framework. Even though apparently all the non-state verbs allow ACC on D/F adverbials, I argue that ACC is assigned due to Accomplishment semantics. According to Kim and Maling (1993), there are sentences in which frequency adverbials can be marked either NOM or ACC, resulting in case alternations. Let us consider the following sentence in (6.37).

(6.37) = Kim and Maling's (1993) (11)
tol-i entek alay-lo twupen-i/ul kwul-less-ta
stone-NOM hill bottom-LOC 2 times-NOM/ACC roll-PST-DEC
a. ACC adverbial: the (same) stone rolled down the hill twice.
b. NOM adverbial: it happened twice that a stone rolled down the hill.

The Korean verb *kwul* 'roll' is an activity verb, which does not imply an end point. As the gloss in (6.37a) shows, however, the interpretation of ACC adverbial implies that the same stone reach an end point twice, because it is impossible to imagine that the same stone rolled twice without an end point. At this point, another question arises with respect to the NOM marking in (6.37): Does the NOM involve accomplishment semantics, too. The answer is that it may or may not involve the accomplishment semantics, as shown in the glosses in (6.37). In other words, NOM marked frequency adverbials do not necessarily imply it. We are not sure whether the stone reaches an end point in (6.37b). Rather, the obvious difference between NOM and ACC is that the two differ in scope of quantification. (cf. Kim and Maling (1993)) The ambiguity in (6.37) is removed when the subject NP in (6.37) is replaced with a definite singular NP:

(6.38) = Kim and Maling's (1993: ex. (13b))
i tol-i entek alay-lo twupen-ul/?*-i

[58] The verb *ilk-* is usually used as an activity verb. However, the verb in (6.36a) with a frequency adverbs is in fact an accomplishment use of *ilk* - .

this stone-NOM hill bottom-LOC 2 times-ACC/?*NOM
kwul-less-ta
roll-PST-DEC
'This stone rolled down the hill two times.'

NOM is not possible for the frequency adverbial in (6.38), because it is obvious in (6.38) that the same stone rolled and reached an end point. Let us consider the following contrast in (6.39).

(6.39) a. Chelswu-ka wuli cip-ey twupen-ul/*i
C.-NOM my house-LOC 2 times-ACC/*NOM
o-ess-ta
come-PST-DEC
'Chelswu came to my house two times.'
[Kim and Maling (1993) (13a)]

b. phyence-ka wuli cip-ey twupen-i/*?ul
letter-NOM my house-LOC 2 times-NOM/*?ACC
o-ess-ta
come-PST-DEC
'Letters arrived at my house two times.'
[Kim and Maling (1993) (16)]

The example in (6.39a) exactly follows what I have suggested. The sentence involves accomplishment semantics and the verb is a non-state, so it takes ACC marking. According to Gerdts (1991a), in the sentence (6.39b) ACC would be unacceptable, since the verb is unaccusative. According to Kim and Maling (1993), on the other hand, (6.39b) is odd with ACC on the adverbial for semantic or pragmatic reasons: the same letter cannot arrive more than once. Gerdts' (1991a) and Kim and Maling's (1993) observations conform to my suggestion that the ACC on frequency adverbials is related to accomplishment semantics.

Let us now look at lexical passives. Note that passive verbs are treated as unaccusatives or states. Then, following Gerdts (1991a), we expect that the frequency adverbials take NOM. In a similar way, Kim and Maling (1993), make the following generalization: when the subject is an inanimate NP, frequency adverbials may not bear ACC; but when the subject is an animate NP, especially human, frequency adverbials must occur in the ACC. Relevant contrast is provided in (6.40).

(6.40) = Kim and Maling's (1993) (5a, 6a)
a. mwun-i cecello twupen-i/?*ul
door-NOM alone two times-NOM/?*ACC

yel-li-ess-ta
open-PASS-PST-DEC
'The door opened two times by itself.'

b. Swuni-ka sacang-eykey twupen-ul/?*i
S.-NOM boss-DAT two times-ACC/?*NOM
cha-i-ess-ta
kick-PASS-PST-DEC
'Swuni was kicked by the boss two times.'

There are however sentences in which frequency adverbials can be marked either NOM or ACC, resulting in case alternations. Consider the following examples in (6.41).

(6.41) = Kim and Maling's (1993) (12)
Totwuk-i twupen-i/ul cap-hi-ess-ta
thief-NOM two-times-NOM/ACC arrest-PASS-PST-DEC
a. ACC adverbial: the (same) thief was arrested twice.
b. NOM adverbial: two (different) thieves were arrested.

As claimed in the previous chapter (Chapter 5.2), lexical passive sentences involve two different voices. The 'causative-passive' passives still involve the accomplishment Aktionsart, which then assigns the ACC to the frequency adverbial. On the other hand, the passive involving NOM on the adverbial a state.

From the above observations, I conclude that ACC on frequency adverbials are assigned due to Accomplishment semantics, just as in locative adverbials. On the other hand, the NOM on the frequency adverbial in (6.41b) is attributed to the state Aktionsart. Like a delimiter like *ina* 'even', the NOM is just a pragmatic case indicating focus, since the NOM marker does not necessarily entail an end point.[59]

6.1.2.2. The Problem of the VP Category

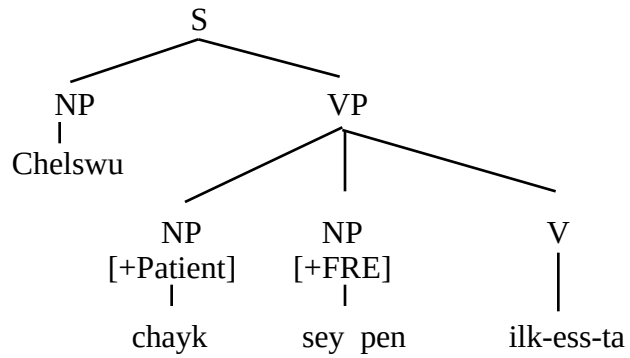
The next question is whether we need to postulate a VP category to explain NOM/ACC marking on frequency adverbials. Previous studies (Y-S Kang (1991) and (Kim and Maling (1993)) heavily rely on the VP category. First of all, let us look at Y-S Kang's (1991) analysis.

(6.42) Chelswu-ka chayk-ul sey pen-ul ilk-ess-ta
C.-NOM book-ACC 3 times-ACC read-PST-DEC
'Chelsoo read books for three hours.'

[59] As suggested by Van Valin (p.c.), it could also be a kind of agreement. When it modifies the event, it takes ACC. When it modifies the subject, it takes NOM. I hope more studies will clarify these points.

Kang (1991) assumes that (6.42) would have the following D-structure.[60]

(6.43)



Because the adverbial nominal *sey pen* with the Th-role [+FRE] is a sister of a [-stative] V˚, it is assigned ACC just as the complement *chayk* is assigned ACC by the nonstative verb *ilk-*. In a similar way, Kim and Maling (1993) claims that 'Korean provides compelling evidence that case spreading within VP can bring arguments and adjuncts together under the domain of structural case.' The syntactic structure in (6.43) does not distinguish a syntactic argument from a syntactic adjunct. Whaley (1993) divides adjuncts into three ways: basic adjuncts (which are basic semantic arguments), semi-adjuncts (which are semantic arguments subsumed by a LS), and full-adjuncts (which are superordinate semantic arguments). An example of each type is given in (6.44).

(6.44) = Whaley's (1993) (40)

a. basic adjuncts-- The teen emptied his glass **of beer**.
(x) (z) (y)
Logical Structure of 'empty':
[**do'**(x)] CAUSE [BECOME NOT **be-at'** (z,y)]

b. semi-adjunct-- The teen went to the store **for his mother**
(x) (y) (z)
Logical Structure of 'go' and Benefactive Adjunction:
[**do'**(x)] CAUSE [BECOME NOT **be-at'** (y, x)] & [do'(x)]
CAUSE[BECOME **be-at'** (y, x)] CAUSE [**benefit'** (z, **do'**(x))]

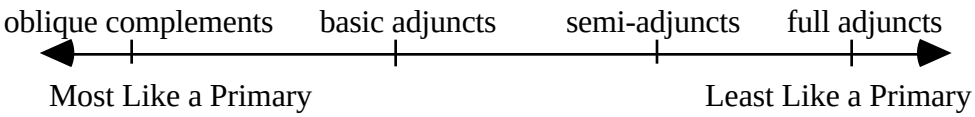
c. full-adjunct-- The teen went to the store **at midnight**
(x) (y) (z)
Logical Structure of 'go' and Temporal Adjunction:
[**do'**(x)] CAUSE [BECOME NOT **be-at'** (y, x)] &

[60] Following Y-S Kang (1991), I posit the D-Structure in (6.43). Y-S Kang (1991) provides D-structure for Duration adverbials, which is similar to (6.43).

be-at' (z, [do'(x)] CAUSE [BECOME **be-at'** (y, x)])

In addition to that, Whaley (1993) presents the continuum of obliques in (6.45). On one extreme, oblique complements are most similar to primaries (i.e., 'subjects' or 'objects') in that they are syntactic (and semantic) arguments of basic predicates. On the other extreme are full adjuncts which share no major properties with primaries.

(6.45) = Whaley's (1993) Figure 2



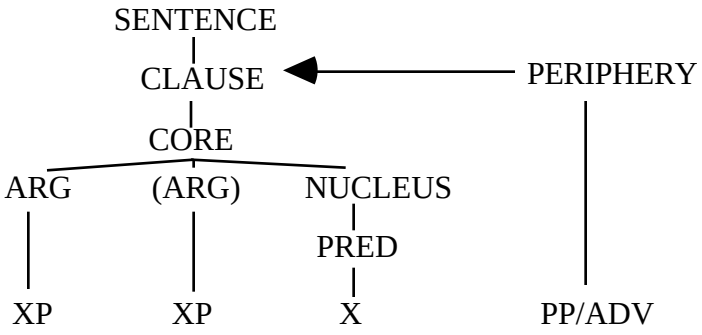
The Oblique Continuum

Frequency adverbials are obviously full adjuncts so that they are least like a primary (i.e., direct core arguments). Hence it does not seem to be correct to posit frequency adverbials as VP-sisters without any justification. Y-S Kang's (1991) and Kim and Maling's (1993) accounts of the case marking do not rely on an isomorphism between syntactic structures and semantic structures. Given that a syntactic structure is a reflection (or a mapping) of its corresponding semantic structure, however, their accounts which match superordinate semantic arguments which are not basic semantic arguments with syntactic arguments within the VP do not seem to be adequate.

I propose an account which does not rely on the notion of VP, but that of core arguments and peripheries in RRG. In RRG, the representation of arguments in the LS of a verb or predicate provides a strict definition of 'core argument'. All arguments which appear in the core of a simple clause must be linked to argument positions in the LS of the predicate in the nucleus, and in the default situation, all arguments in the LS of the predicate must appear in the core of the clause. However, it is not always the case that an argument in the LS occurs in the core; in a passive construction, for example, the agent or experiencer, if overt, will be realized as an oblique constituent in the periphery. Among core arguments a further distinction is made between direct and oblique core arguments. This contrast is based on the morphological coding of the arguments: direct core arguments are those that are morphologically unmarked or coded with a direct case, as in dependent-marking languages like English and Korean. In Korean, the direct core arguments are normally coded with ACC and NOM case markings. Oblique core arguments are those marked by an adposition or by an oblique case. In Korean, they are normally coded by

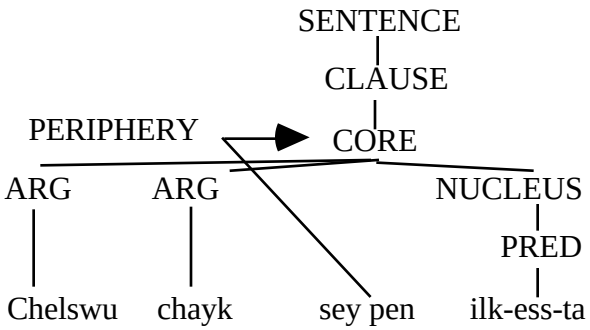
dative case marking-*ey (key)* , just as in English. Remember the abstract schema of the layered structure of the clause in RRG.

(6.46) = Van Valin and Lapolla (in preparation: Figure 2.6)



Notice that there is no VP in the tree, for it is not a concept that plays a direct role in this conception of clause structure. (cf. Van Valin and Lapolla (in preparation)) The periphery is represented on the margin, and it is an optional modifier of the core. Following Van Valin and Lapolla (in preparation), I propose the following LSC as in (6.47) for the sentence in (6.42).

(6.47)



In RRG, the LSC is a reflection of its LS (i.e., semantic structure). Hence the phrase *sey pen* 'three times' does not constitute a core argument of a predicate *ilk* 'read', since in its LS, it is not a basic semantic argument of a predicate. I propose that there is a need for the distinction of two kinds of periphery in Korean: the ones which have to do with verbal aspects (PERIPHERY 1) and the ones which do not (PERIPHERY 2). It seems that the peripheries which do not have to do with verbal aspects do not involve semantic ACC marking derived from accomplishment semantics. The accomplishment semantics derived from verbal aspect determines semantic ACC on frequency adverbials. It would be interesting to investigate how the distinction is cross-linguistically valid.

6.2. The Double ACC Marking in Korean HA construction

Let us consider the HA construction, which is well-known as a light verb construction. Below are some instances of such a construction:

(6.48) a. Swuni-ka yenge-lul kongpwu-lul ha-ess-ta
S.-NOM English-ACC study-ACC do-PST-DEC
'Swuni studied English.'

b. cekkwun-i tosi-lul phakoy-lul ha-ess-ta
enemy-NOM city-ACC destroy-ACC do-PST-DEC
'The enemy destroyed the city.'

c. Swuni-ka phiano-lul yencwu-lul ha-ess-ta
S.-NOM piano-ACC playing-ACC do-PST-DEC
'Swuni played the piano.'

The HA construction has been debated among Korean linguists from various perspectives. As pointed out by K-S Lee (1991), long standing problems are how to define the categorial and grammatical status of the second accusative marked constituents and how to analyze them. K-S Lee (1991) points out the surface characteristics of the HA construction as follows: i) the second accusative constituents are usually Sino-Korean action nouns which refer to events, not general nouns which refer to persons or things, ii) the main predicate is usually *ha* , and iii) the semantic relation between the second accusative constituent and its predicate *ha* is not like the relation between usual direct objects and their predicates even though the second constituents look like direct objects of the verb *ha* . Furthermore, the verb *ha* in (6.48) frequently combines with the preceding NP without an accusative marker:

(6.49) a. Swuni-ka yenge-lul kongpwu-ha-ess-ta
S.-NOM English-ACC study-do-PST-DEC
'Swuni studied English.'

b. cekkwun-i tosi-lul phakoy-ha-ess-ta
enemy-NOM city-ACC destruction-do-PST-DEC
'The enemy destroyed the city.'

c. Swuni-ka phiano-lul yencwu-ha-ess-ta
S.-NOM piano-ACC play-do-PST-DEC
'Swuni played the piano.'

A question immediately arises: Given that RRG posits only one undergoer in a sentence, which one should be undergoer ? I claim that the first accusative constituent is the undergoer, because only the first can undergo passivization, scrambling, relativization,

etc., which may be assumed to be the tests for argumenthood or macrorole. Consider how the two accusatives behave with respect to pronominalization and clefting.

(6.50) a. Swuni-ka kuket-lul kongpwu-lul ha-ess-ta
S.-NOM it-ACC study-ACC do-PST-DEC
'Swuni studied it.'

b. Swuni-ka kongpwu-lul ha-n kes-un
S.-NOM study-ACC do-REL thing-TOP
yenge-i-ta
English-be-DEC
'What Swuni studied is English.'

c. * Swuni-ka yenge-lul kuket-lul ha-ess-ta
S.-NOM it-ACC it-ACC do-PST-DEC
'Swuni did it (to) English.'

d. * Swuni-ka yenge-lul ha-n kes-un
S.-NOM study-ACC do-REL thing-TOP
kongpwu-i-ta
study-be-DEC
'What Swuni did to English was study it.'

The above data in (6.50) show that the first accusative NPs behave like true macroroles (i.e., particularly undergoers). Let us see how both accusative NPs behave regarding relativization.

(6.51) a. Swuni-ka kongpwu-lul ha-n yenge
S.-NOM study-ACC do-REL English
'English which Swuni studied'

b. * Swuni-ka yenge-lul ha-n kongpwu
S.-NOM English-ACC do-REL study
'study which Swuni did of English'

The above examples show that only the first accusative NP can be relativized. Note that the 'subject' and 'object' in Korean normally can be a target of relativization. As noted by O'Grady (1991a), it is impossible to scramble the nominal immediately preceding *ha* 'do'.

(6.52) a. yenge-lul Swuni-ka kongpwu-lul ha-ess-ta
English-ACC S.-NOM study-ACC do-PST-DEC
'Swuni studied English.'

b. * kongpwu-lul Swuni-ka yenge-lul ha-ess-ta
study-ACC S.-NOM English-ACC do-PST-DEC
'Swuni studied English.'

Remember that normal 'objects' in Korean can scramble freely. For these reasons, the first ACC marked NP should be considered an undergoer.

The tests above show that the first ACC marked NP assumes undergoerhood, so that the NP is assigned ACC by the Korean semantic case marking rules. Another question

remains: given that the first ACC marked NP is a true undergoer (or 'object'), how can we assign accusative case marking to the second accusative nominals ? I propose that the sentences with and without ACC marker on the verbal noun involve different LSCs. The sentences without the ACC marker would involve a LSC with nuclear cosubordination, whereas those with the ACC marker would involve the one with nuclear coordination. First of all, the following support the hypothesis that the two elements involve nuclear juncture; i) the verbal noun must be adjacent to the verb *do* , ii) an adverb cannot occur between the verbal noun and the verb. At this point we are left with a question: can a noun combine with a predicate to make a nucleus ? It seems that there are languages where this would seem to the case, e.g. Basque. (Van Valin: p.c.) Hence there is no problem in principle. Note that the noun *kongpwu* is not a normal noun, but a verbal noun.[61] Moreover, K-S Lee (1991) argues that the second accusative constituent is not a noun but a **verb**, which is the predicate of the embedded clause.[62] For those reasons, I propose that the verbal noun in Korean participate in nuclear juncture.

According to Van Valin and Lapolla (in preparation: 44), the following pair of sentences from Barai, a Papuan language (Olson (1991)) show nuclear cosubordination and nuclear coordination, respectively.

(6.53) = Van Valin and Lapolla (in preparation) (2.46)

a. Fu kai fu-one kume-file va.
3Sg friend 3sg-POSS call-listen continue
'He continued calling and listening for his friend.'

b. Fu vazai ufu furi numu akoe.
3sg grass cut finish pile throw.away
'He finished cutting, piled and threw away the grass.'

In RRG, operators play a crucial role in the analysis of complex sentences. In (6.53) both verbs, *kume* 'call' and *file* 'listen' are in the scope of the progressive aspect marker, the verb *va* 'continue', and therefore both nuclei are under the scope of a single nuclear operator. Hence (6.53a) is an example of nuclear cosubordination. In (6.53b), on the other hand, *furi* 'finish', the perfective aspect marker, modifies only *ufu* 'cut' and not *numu* 'pile' and *akoe* 'throw away'; the aspect operator has scope only over one of the nuclei in the juncture but not all of them. Hence (6.53b) is an example of nuclear coordination. It should be noted that in Korean it is not easy to test the scope of operators since the first nucleus is a verbal

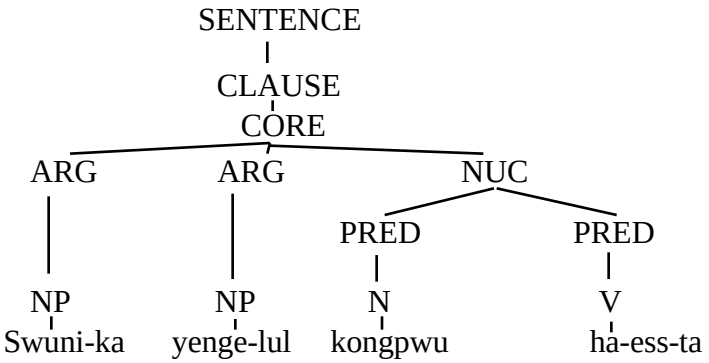
[61] Jeon Lee (1993), for instance, claims that the verbal noun *kongpwu* 'study' is not a NP, but a N.

[62] K-S Lee (1991) uses the evidences from modifier insertion, restriction of negation words, parallel construction with pure Korean verbs, etc. However, B-S Park (1981), for instance, argues against the claim. Hence it would be reasonable to say that the second accusative constituent has both nominal and verbal properties.

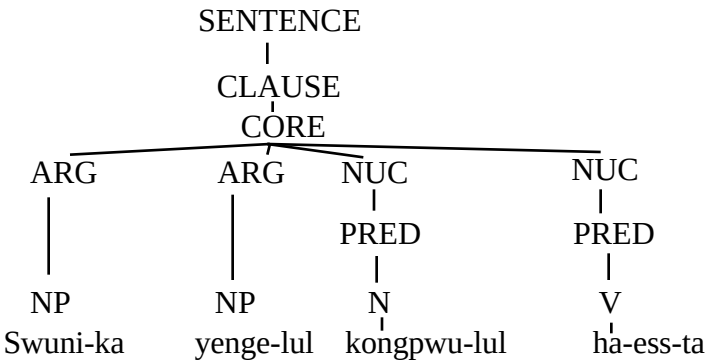
noun. Considering one of the function of ACC marker on the NP adjacent to a predicate is to make the sentence more or less resultative, however, it is implied that the NP with the marker involves telicity. The aspect is concerned only with the verbal noun so that it may be that the aspect has scope over one of the nuclei in the juncture. Based on the above observations, I propose the following LSCs for the sentences with or without a ACC marker. The sentence without the ACC marker as in (6.54a) would involve nuclear cosubordination, whereas those with the marker as in (6.54b) would involve nuclear coordination.

(6.54)

a.



b.



Now let us go back to the question of how the verbal noun gets ACC. It is interesting to note that contrary to nuclear coordination in Barai, the nuclear coordination in Korean HA construction takes different theme arguments for each nucleus. In Barai, the verbs 'cut', 'pile', and 'throw away' share one theme argument, whereas in Korean HA construction the predicate *ha* 'do' takes the theme argument *kongpwu* 'study' and the predicate *konpwu* 'study' takes the other theme NP *yenge* 'English' in (6.54b). I suggest that the ACC is a semantic case which is assigned by the predicate *ha* 'do' and involves accomplishment semantics. For instance, consider the following examples.[63]

[63] To some speakers, the acceptability difference between (6.55a) and (6.55b) may be a matter of degree. However, it is evident that the sentence in (6.55a) is less acceptable than (6.55b).

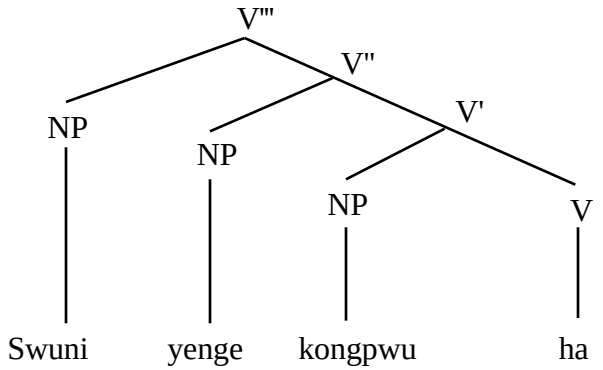
(6.55) a. ?* cekkwun-i ku tosi-lul phakoy-**lul** ha-ess-una
enemy-NOM the city-ACC destruction-ACC do-PST-but
ku tosi-ka phakoy-toy-ci anh-ess-ta
the city-NOM destroy-PASS-CMPL NEG-PST-DEC
'The enemy destroyed the city, but the city was not destroyed.'

b. cekkwun-i ku tosi-lul phakoy-ha-ess-una
enemy-NOM the city-ACC destruction-do-PST-but
ku tosi-ka phakoy-toy-ci anh-ess-ta
the city-NOM destroy-PASS-CMPL NEG-PST-DEC
'The enemy destroyed the city, but the city was not destroyed.'

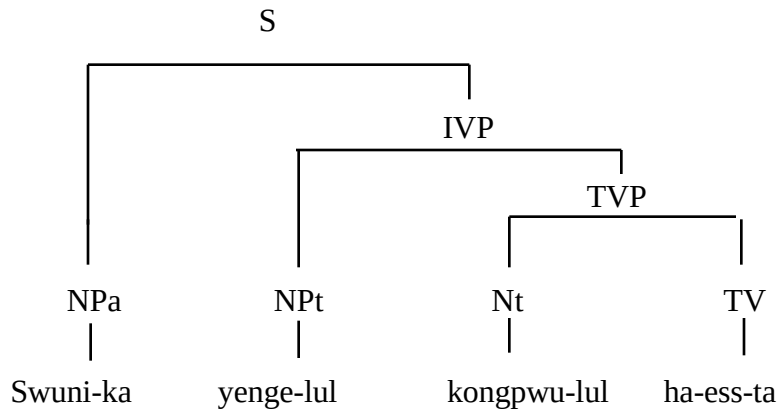
In the example in (6.55a) which take ACC on the verbal noun, for instance, 'destroying something' itself cannot be denied. When the verbal noun does not take ACC as in (6.55b), on the other hand, we can deny the accomplishment of the activities.

My claim does not deviate from previous studies. B-S Park (1981) among others claims that *kongpwu* 'study' is tightly bound to *ha* 'do' as a 'direct object', while *yenge* 'English' is only indirectly bound to *ha* 'do' in the sense that it serves as a direct object only after the combination of *kongpwu* 'study' and *ha* 'do' is understood as a verb. Thus, B-S Park (1981: 99) proposes the structure (6.56) to represent the sentence (6.48a):

(5.56)



His claim goes as follows: The NP dominated by V''' is a 'subject', the NP dominated by V'' is a 'direct object', and the NP dominated by V' is also a 'direct object'. The first NP is the 'direct object' of V' and the second NP is the 'direct object' of V. In a similar way, O'Grady (1991) presents the combinational operations in (6.57) to get (6.48a).
(6.57)



Both B-S Park (1981) and O'Grady's (1991a) analyses depend on hierarchical structures to account for double accusatives in HA construction. However, their accounts do not capture the difference in syntactic behaviour between the first and the second ACC marked NP as shown in (6.50) through (6.52). To the contrary, my account does not say that the first and the second ACC marked NPs are hierarchically different. Rather the verbal noun participates in a nuclear juncture so that it is expected that the verbal noun is restricted in syntactic behaviour. My account provides the reason why an adverb, for instance, cannot intervene between the verbal noun and *ha* 'do' predicate. Note that not every verbal noun participates in the juncture. My theory predicts that the verbal nouns which form nuclear junctures with *ha* 'do' predicates which is an activity verb would be preferably activities as shown in Barai examples in (6.53b), since an element in a coordination structure would prefer parallel characteristics with the other.

According to Miyagawa (1989), for instance, ungrammatical sentences with *suru* 'do' occur in Japanese if they contain an unincorporated unaccusative nominal. The combination between verbal noun and *suru* 'do' is grammatical if the nominal is incorporated into the *suru* verb, but it is ungrammatical if the nominal is not incorporated.

(6.58) = Miyagawa's (1989) (27)
- a. TANZYOO 'birth'
  TANZYOO-suru / ?* TANZYOO o suru
- b. TOOTYAKU 'arrival'
  TOOTYAKU-suru / ?* TOOTYAKU o suru
- c. ZYOOHATU 'evaporation'
  ZYOOHATU-suru / ?* ZYOOHATU o suru

Nominals such as 'birth', arrival, or 'evaporation' are unaccusative nominals. Even though the effect which Miyagawa (1989) mentions is not clear-cut in Korean, a limited set of predicates show such effect. Let us consider the following examples.

(6.59) = Jean Lee (1993: ex. ((16a))

a.	ku-ka	ecey	phikon-ha-ess-ta	
	he-NOM	yesterday	tiredness-do-PST-DEC	
b. *	ku-ka	ecey	phikon-ul	ha-ess-ta
	he-NOM	yesterday	tiredness-ACC	do-PST-DEC

'John was tired yesterday.'

A certain state verbal nominal such as *phikon* 'tiredness' cannot assume the ACC markers as shown in (6.59). My theory is able to predict the fact that unaccusatives or some states in Japanese and Korean, respectively, sometimes cannot participate in a nuclear coordination juncture, because they cannot be involved in an accomplishment semantics.

Chapter 7. Juncture-Nexus and Case

The purpose of this chapter is to show that the case marking in the clauses which involve juncture-nexus is predictable from their juncture-nexus types and the LS of the verb involved. One type of NP-level juncture-nexus and two types of clause-level juncture will be dealt with in this chapter.

7.1. Case Matches and Mismatches in Phrasal Comparative Construction: A NP-level Juncture-Nexus Contrast

Jhang (1994) points out that there are two types of comparative constructions in Korean: phrasal NP-comparatives and clausal NP-comparatives. According to Jhang (1994), the salient property of each construction is as follows:

(7.1) = Jhang's (1994) (3)
a. Plain NP-comparatives [i.e., phrasal NP comparatives] consist of one nominal, sometimes case-marked, followed by *pota* .
b. Clausal NP-comparatives have a full sentential structure and NPs within them take case. The verb is repeated or, in a limited number of cases, an anaphoric verb *ha* 'do' is used.

This thesis is concerned only with phrasal NP-comparatives (Jhang's (1994) plain NP-comparatives).

Most of Korean phrasal comparatives as in (7.2b) as well as *(k)wa* conjunction construction as in (7.2a) show case parallelism between a target NP and its antecedent.

(7.2) = Jhang's (1994) (64)
a. sensayngnim-i Mary-(**eykey**)-wa John-**eykey** phyenci-lul
teacher-NOM M.-(DAT)-CONJ J.-DAT letter-ACC
ssu-key ha-si-ess-ta
writer-COMP do-HON-PST-DEC
'The teacher made Mary (DAT) and John (DAT) write letters.'
b. sensayngnim-i Mary-(**eykey**)-pota John-**eykey** (te)
teacher-NOM M.-(DAT)-than J.-DAT more
manhun phyenci-lul ssu-key ha-si-ess-ta
many letter-ACC writer-COMP do-HON-PST-DEC
'The teacher made John (DAT) write more letters than Mary (DAT).'

In (7.2b), the target *Mary* is marked DAT, and thus receives the same case as the compared element, DAT-marked *John* . Hence case parallelism seems to be required between the target and the compared element in Korean.

According to Jhang (1994) and Gerdts and Jhang (1995), however, phrasal NP-comparatives in Korean sometimes allow case mismatches. For example, the case on the compared element need not match the case on the target in (7.3)-(7.5).

(7.3) = Jhang's (1994) (66)
John-i Mary-(eykey)-pota Sue-eykey/lul (te) manhun
J.-NOM M.-(DAT)-than S.-DAT/ACC more many
sakwa-lul cwu-ess-ta
apple-ACC give-PST-DEC
'John gave more apples to Sue (DAT/ACC) than Mary (DAT/*ACC).'

(7.4) = Jhang's (1994) (67)
Mary-(eykey)-pota John-eykey/i (te) manhun ton-i
M.-(DAT)-than J.-DAT/NOM more many money-NOM
philyoha-ta
need-DEC
'John (DAT/NOM) needs more money than Mary (DAT/*ACC).'

(7.5) = Jhang's (1994) (68)
na-nun Seoul-(ey)-pota Pusan-ey/lul (te) cacwu
I-TOP S.-(LOC)-than P.-LOC/ACC more often
ka-ess-ta
go-PST-DEC
'I went to Pusan (LOC/ACC) more often than Seoul (LOC/(*) ??ACC).'

Phrasal NP-comparatives are not the only construction which shows case mismatches. As pointed out by Gerdts and Jhang (1995), such 'paratactic' constructions as quantifier + classifier constructions and whole-part constructions are other examples.[64] However, only case mismatches in phrasal NP-comparatives are dealt with in this section, since they involve clear-cut juncture-nexus. The purpose of this section is as follows: i) to provide an analysis of complex NPs in terms of juncture-nexus in RRG, which is not discussed extensively in Korean grammar, ii) to provide an account of case patterns (including case

[64] Here are the examples which Gerdts and Jhang (1995) provide:

a. quantifier + classifier construction
John-i haksayng-tul-eykey/lul twu-myeng-eykey/-ul
J.-NOM student-PL-DAT/-ACC two-CL-DAT/-ACC
chayk-ulcwu-ess-ta
book-ACC give-PST-DEC
'John gave books to two students.'

b. whole-part construction
nay-ka Yumi-eykey/-lul phal-ey/-ul cwusa-lul
I-NOM Y.-DAT/-ACC arm-DAT/-ACC shot-ACC
noh-ess-ta
give-PST-DEC
'I gave Yumi a shot in the arm.'

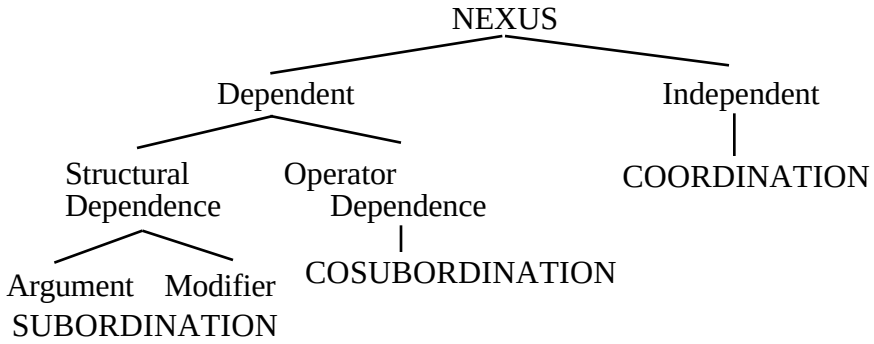
If a quantifier+classifier takes a different case marker from that of a head noun, for instance, then case mismatches occur.

matching and case mismatching) in phrasal comparative construction as well as *(k)wa* conjunction construction.[65]

7.1.1. The Juncture-Nexus Types in Korean Phrasal Comparatives

According to Van Valin and Lapolla (in preparation), the NP level is the analog to the clause level of juncture, and there are three distinct linkage types at the NP level which correspond to nexus differences in complex sentences. As mentioned in Chapter 2, there are three nexus types in RRG: coordination, cosubordination, and subordination.

(7.6)

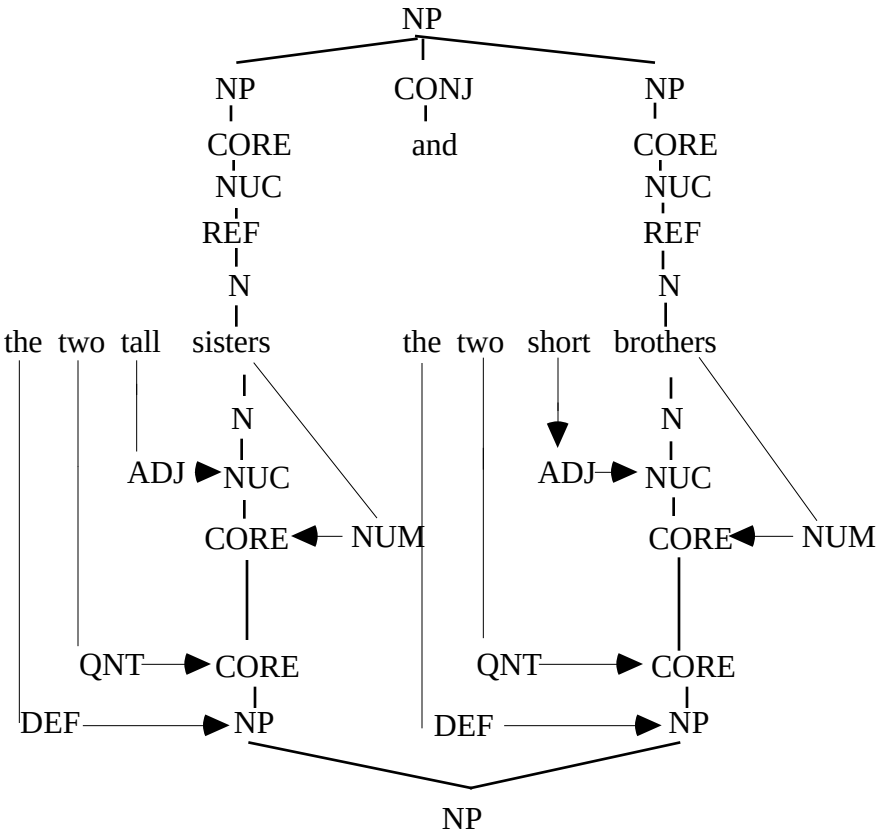


Nexus Types (= Van Valin and Lapolla (in preparation) Figure 2.32)

The simplest example of an NP-level linkage in English would be conjoined NPs as in *the two tall sisters and the two short brothers* . Each constituent can have the full rage of operators and arguments. Accordingly, they refer to this as NP coordination. The structure of this type of linkage is presented as follows.

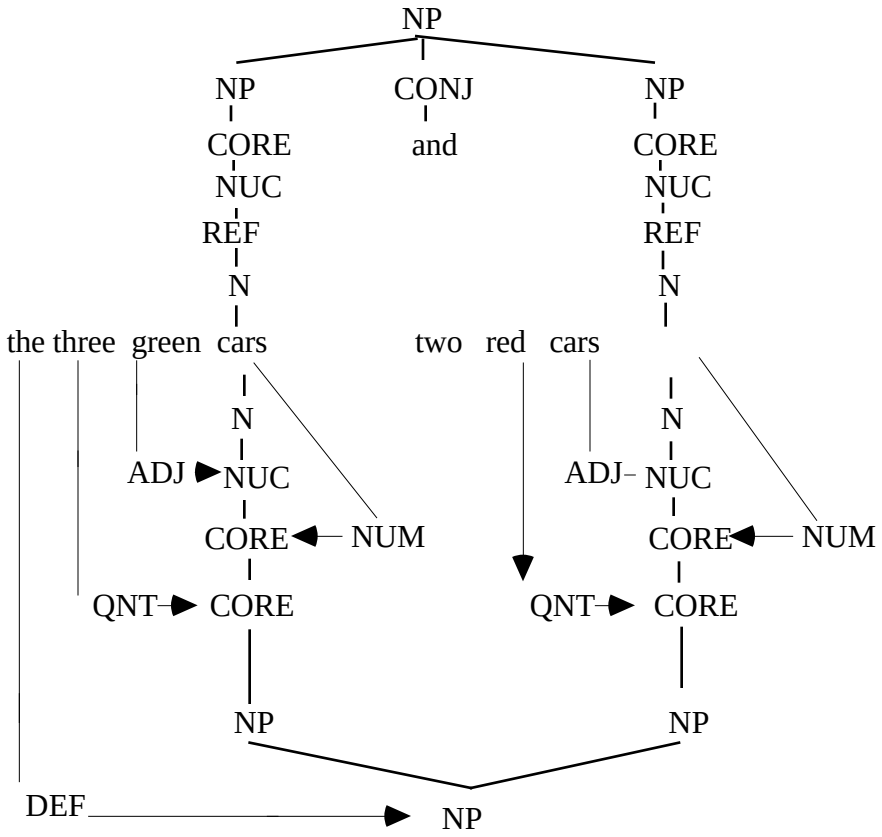
[65] I exclude genitive complex NPs like *John-uy chinkwu* 'John's friend' from my discussion.

(7.7) abbreviated from Van Valin and Lapolla's (in preparation) Figure 2.44



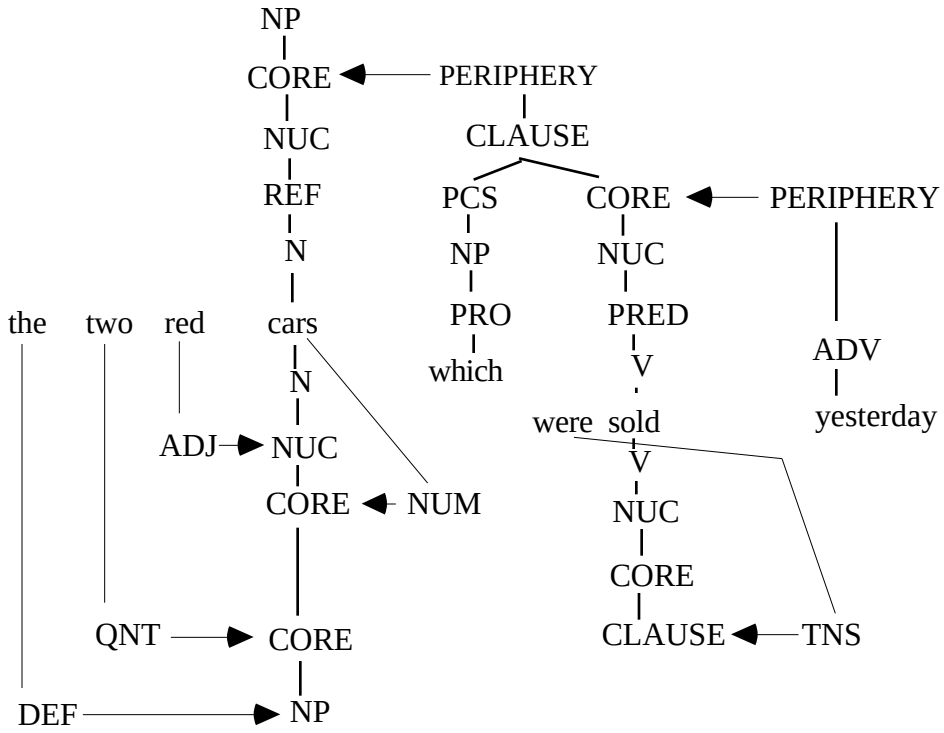
It is also possible to link two NPs which share a determiner, an NP-level operator, but have all other operators independently, e.g. *The three green cars and two red cars were sold in an hour* . They refer to this as an example of NP cosubordination.

(7.8) Van Valin and Lapolla's (in preparation) Figure 2.45



Finally, it is possible to have a subordinate modifier at the NP level, a restrictive relative clause, e.g. *the two red cars which were sold yesterday* . Its relationship to the NP is analogous to that of an adverbial subordinate clause to the clause it modifies. The linkage type of NPs containing restrictive relative clauses is referred to as NP subordination.

(7.9) Van Valin and Lapolla's (in preparation) Figure 2.49



Jhang (1994) claims that phrasal comparatives in Korean behave simultaneously like coordinate and subordinate structures. Similarly, Gerdts and Jhang (1995) claim that they are tandem structures. Contrary to their claims, I propose that phrasal comparatives involve subordination. On the other hand, a complex NP involving a conjunct marker *wa/kwa* in Korean involves phrasal coordination. Even though Jhang (1994) and Gerdts and Jhang (1995) provide some evidence that Korean comparatives involve subordination, they do not give convincing evidence that comparatives involve coordination.

Note the following contrast in (7.10) between phrasal comparatives and coordinated sentences containing *(k)wa* .

(7.10) = Jhang's (1994) (77)

a. John-pota (-nun) pwunmyenghi Mary-ka (te)
John-and (-TOP) certainly Mary-NOM more
pwucilenha-ta
diligent-DEC
'Than John, certainly Mary is more diligent.'

b. * John-kwa (-nun) pwunmyenghi Mary-ka
John-and (-TOP) certainly Mary-NOM
pwucilenha-ta
diligent-DEC
'*And John, certainly Mary are diligent.'

According to Jhang, phrasal NP-comparatives in Korean can usually be preposed, which is impossible for *(k)wa* conjunction. He claims that 'the fact that topicalization/scrambling [i.e., preposing] is possible in comparatives suggests that the particle *pota* should be regarded as a PP [i.e., subordinator].' Moreover, there is a structural dependency between the first NP and the second NP. On the other hand, *(k)wa* conjunction involves coordination, which maintains independence between the two NPs.

It is interesting to note that the coordination or subordination in Korean which I have mentioned does not stick to a fixed nexus type. Sometimes, the two NPs in a complex NP share a single DEF operator so they sometimes involve cosubordination, just as in English. (see (7.8) for English example) Even though Korean does not develop such a rich system of DEF operator, there are some equivalents: *ce* 'that', *i* 'this', and so on. With this in mind, let us look at the relationship between the scope of the DEF operator and the case marking pattern in phrasal comparatives in Korean.

(7.11) a. ce namca-pota yeca-eykey (te) manhun
the man-than woman-DAT more many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the woman more books than the man.'

b. ce namca-pota ce yeca-eykey (te) manhun
the man-than the woman-DAT more many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the woman more books than the man.'

c. ce namca-eykey-pota yeca-eykey (te) manhun
the man-DAT-than woman-DAT more many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the woman more books than the man.'
'*(Someone) gave a woman more books than the man.'

d. ce namca-eykey-pota ce yeca-eykey (te)
the man-DAT-than the woman-DAT more
manhun chayk-ul cwu-ess-ta
many book-ACC give-PST-DEC
'(Someone) gave the woman more books than the man.'

In (7.11a) and (7.11c), the NPs *namca* 'man' and *yeca* 'woman' share the same DEF operator which is the NP operator, while in (7.11b) and (7.11d) they take different DEF operators. The sentence in (7.11a) and (7.11c) is argued to involve cosubordination, because the two NPs share one DEF operator. On the other hand, the complex NPs in (7.11b) and (7.11d) do not share the DEF operator, but hold their own operators so that

they involve subordination. The same is true of Korean conjuct :*(k)wa* . Consider the following.

(7.12) a. ce namca-wa yeca-eykey manhun
the man-CONJ woman-DAT many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the man and the woman many books.'

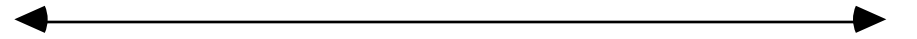
b. ce namca-wa ce yeca-eykey manhun
the man-CONJ the woman-DAT many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the man and the woman many books.'

c. ce namca-eykey-wa yeca-eykey manhun
the man-DAT-CONJ woman-DAT many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the man and the woman many books.'
'*(Someone) gave the man and woman many books.'

d. ce namca-eykey-wa ce yeca-eykey manhun
the man-DAT-CONJ the woman-DAT many
chayk-ul cwu-ess-ta
book-ACC give-PST-DEC
'(Someone) gave the woman and the man many books.'

In (7.12a) and (7.12c), the NPs *namca* 'man' and *yeca* 'woman' share the same DEF operator, while in (7.12b) and (7.12d) they take different DEF operators. Hence, the complex NPs in (7.12a) and (7.12c) cannot be seen as coordination, but as cosubordination. Hence, I suggest that there is a continuum between subordination/ coordination and cosubordination. On the one extreme, there is the case-marked (on the first NP) *(k)wa* complex NP, which is absolutely like coordination. On the other extreme, there is the *pota* complex NP construction with two definite NPs, which involves subordination. In the middle, there are two constructions which are specified in (7.13).

(7.13)



(*pota* construction which shares DEF operator)

(*kwa* construction which shares DEF operator)

Case marking also seems to correlate with the continuum between subordination/ coordination and cosubordination. When the first NPs do not take case markers, the nexus is more like cosubordination. Consider, for instance, the interaction between quantification and case marking on the first NP in *(k)wa* complex NPs.

(7.14) a. John-i Yumi-wa Mary-eykey han-kwon-uy
John-NOM Yumi--CONJ Mary-DAT one-CL-GEN
chayk-lul cwu-ess-ta
book-ACC give-PST-DEC
'John gave a book to Yumi and Mary.'

b. John-i Yumi-eykey-wa Mary-eykey han-kwon-uy
John-NOM Yumi-DAT-CONJ Mary-DAT one-CL-GEN
chayk-lul cwu-ess-ta
book-ACC give-PST-DEC
'John gave a book to Yumi and Mary.'

In (7.14), there is no DEF operator sharing between the first NP and the second NP in a complex NP, since the NPs are proper nouns. In (7.14a), there is two possible interpretations: one book is shared by Yumi and Mary, or different books are given to Yumi and Mary. In (7.14b), however, there is only one interpretation: one book cannot be shared by Yumi and Mary. The interpretation in (7.14b) exactly correspond to that predicted if the nexus type is a coordination. The 'shared book' interpretation in (7.14a), on the other hand, correspond to cosubordination in semantics. Hence it can be claimed that the sentence in (7.14a) which does not take a case marker on the first NP is more like cosubordination.

7.1.2. Case Matches and Mismatches

Jhang (1994) suggests that phrasal comparatives are similar to coordination structures with a conjunct marker *-wa/kwa* with respect to case marking pattern. Compare the examples in (7.15) and (7.16) with the examples in (7.17) and (7.18).

(7.15) a. Mary-(*ka)-pota John-i (te) hyenmyengha-ta
Mary-*NOM-than John-NOM more smart-DEC
'John is smarter than Mary.'

b. John-i sakwa-(*lul)-pota kamca-lul (te) manhi
John-i apple-(*ACC)-than potato-ACC more many
mek-ess-ta
eat-PST-DEC
'John ate more potatoes than apples.'

(7.16) a. John-i Yumi-(eykey)-pota Mary-eykey senmwul-ul
John-NOM Yumi-(DAT)-than Mary-DAT gift-ACC
(te) manhi cwu-ess-ta
more many give-PST-DEC
'John gave more gifts to Mary than (to) Yumi.'

b. Wuli-nun tapang-(eyse)-pota swulcip-eyse (te)
we-TOP coffee shop-(LOC)-than bar-LOC more
cacwu manna-ess-ta
often meet-PST-DEC
'We met in the bar more often than in the coffee shop.'

(7.17) a. John-(*i)-kwa Mary-ka hakkyo-ey ka-ess-ta
John-(*NOM)-CONJMary-NOM school-LOC go-PST-DEC
'John and Mary went to school.'

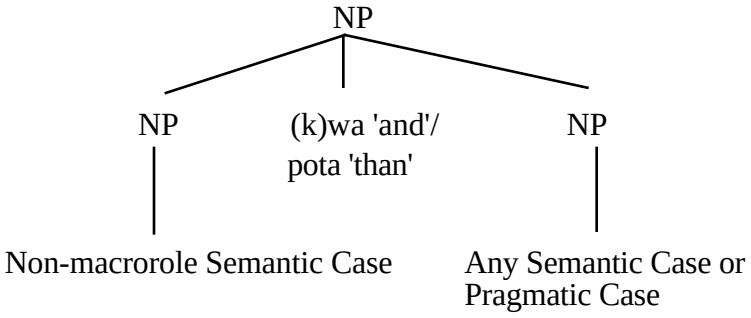
b. John-i Yumi-(*lul)-wa Mary-lul cohaha-n-ta
John-NOM Yumi-(*ACC)-CONJ Mary-ACC like-PRE-DEC
'John likes Yumi and Mary.'

(7.18) a. John-i Yumi-(eykey)-wa Mary-eykey senmwul-lul
John-NOM Yumi-(DAT)-CONJ Mary-DAT gift-ACC
cwu-ess-ta
give-PST-DEC
'John gave a gift to Yumi and Mary.'

b. wuli-nun tapang-(eyse)-wa swulcip-eyse-man
we-TOP coffee shop-(LOC)-CONJ bar-LOC-only
manna-ess-ta
meet-PST-DEC
'We met only in the coffee shop and in the bar.'

In all the examples in (7.15) through (7.18), the first NPs in complex NPs which involve juncture-nexus cannot be marked with the NOM or ACC marker. On the other hand, DAT can attach to the first NP. This similarity can be expressed in terms of the semantic case vs. pragmatic case distinction we have developed.[66]

(7.19)



[66] Jhang (1994) explains the similarity in terms of Gerdts' (1991) S-Case and I-Case. That is, the targets of comparison and conjunction cannot be marked with S-Case such as NOM and ACC, whereas they can be optionally marked with I-Case such as DAT and LOC.

From these, it is expected that irrespective of whether a complex NP involves coordination or subordination, all the first NP in constructions involving NP-level juncture-nexus should be marked with non-macrorole semantic case. It should be noted that 'paratactic' structures like quantifier + classifier construction and whole-part construction do not obey the rule in (7.19) in that the first NPs are freely marked with pragmatic NOM/ACC case. Hence it does not seem to be adequate to treat phrasal comparatives as well as quantifier + classifier and whole-part constructions as the same kind of tandem structures, since phrasal comparatives are different from the other two constructions with respect to case pattern.

Which NP is the head in these constructions ? As we have seen, either NOM or ACC marker cannot be attached to the first NP. Even though DAT marker can attach to the first NP, it is optional and preferably absent.[67] If there is only one case assignment, then the case is assigned to the second NP. From these, it is concluded that the second noun should be the head for case assignment.

Given that the 'head' NP should be the second NP, the case matching examples follow from the semantic case marking rules and NP structures in Korean. In other words, only one semantic case is assigned either to the second NP, or simultaneously to both the A-element and B-element. The second NP in a complex NP, which is a 'head' NP, has the option of bearing any semantic and/or pragmatic case, while the first one takes only non-macrorole semantic case. Only the heads in complex NPs carry pragmatic case.

Note that the *(k)wa* conjunction construction does not allow case mismatches, while phrasal comparatives allow them. In the *(k)wa* conjunction construction, for instance, the following sentence which contains a case mismatch is unacceptable.

(7.20) *John-i Yumi-eykey-wa Mary-lul senmwul-ul
John-NOM Yumi-(DAT)-CONJ Mary-DAT gift-ACC
cwu-ess-ta
give-PST-DEC
'John gave the gift to Mary and Yumi.'

I propose that the difference should be explained by the difference between coordination and subordination. The only construction which does not allow case mismatches seems to be coordination structures. As we have seen, *(k)wa* conjunction constructions are like coordination, while phrasal comparative constructions are like subordination. It would be abnormal to mismatch case in coordination structures, since the two sub-NPs in a complex NP assume equal status, as the notion implies. If we assume that non-coordination NP-level structures allow case mismatches in Korean, then we can account for the fact that all

[67] My informants prefer only one case assignment to the assignment of case to both NPs within a complex NP.

NP-level structures including the 'paratactic' NP structures allow case mismatches except for *(k)wa* conjunction.

7.2. The Case Marking in 'Raising' and Two Related Constructions: A Clause-level Juncture-Nexus Contrast

This section is concerned with the case marking in the *believe* -type 'raising' construction and two related constructions (the periphrastic causative construction and the *persuade* -type 'control' construction), in which one element of each construction seems to act simultaneously like the 'object' of the higher clause and the 'subject' of the lower clause.

As pointed out by Y-S Choi (1988), there are some differences between Korean 'raising' construction and Korean 'control' construction. From the RRG point of view, 'raising' constructions are basically different from 'control' constructions in terms of argument sharing in linking: the former involves no argument sharing between the LSs in the linking algorithm, while there is such argument sharing between the LSs in the latter. Hence, the linking patterns in the two constructions are different. Moreover, the raising construction differs from the control and periphrastic causative constructions with respect to the following: i) case marking, ii) restriction on verb classes (one place state predicates), iii) the allowance of a set of adverbial nominals as 'raisee' (see K-S Hong (1991) for details). Let us illustrate the differences with examples. First, cognition verbs in the *believe* -type 'raising' construction have different case frames from speech act verbs and causative verbs in the 'control' construction and the periphrastic causative construction: the former has a NOM/ACC case frame while the latter has a NOM/DAT/ACC case frame, as shown in (7.21).

(7.21) a. nay-ka Swuni-**ka/eykey/lul** ka-key ha-ess-ta
I-NOM S.-NOM/DAT/ACC go-CMPL do-PST-DEC
'I made Sooni leave.'

b. nay-ka Swuni-**ka/eykey/lul** ka-talok
I-NOM S.-NOM/DAT/ACC go-CMPL
seltukha-ess-ta
persuade-PST-DEC
'I persuaded Sooni to leave.'

c. nay-ka Swuni-**ka/*eykey/lul** yeppu-ta-ko
I-NOM S.-NOM/*DAT/ACC pretty-be-CMPL
mit-ess-ta
believe-PST-DEC
'John believed that Sooni was pretty.'

Second, there are more severe restrictions on verb classes and macrorole choice for the 'raising' construction than the control and periphrastic causative constructions in Korean. As pointed out by K-S Park (1994), for instance, the former should involve a one-place state predicate and a restricted set of transitive predicates in its complement, while there are no such restrictions. Third, the 'raising' construction can raise a set of adverbial nominals, while the others do not. However, it should be remembered that 'control' constructions are different from periphrastic causative constructions in that the former involves argument sharing in the linking algorithm, while there is no such argument sharing in the latter. Hence, it may be that the three constructions are different from each other. There are three things involved here: (i) the LSC representation for the sentence, (ii) the LSs of the verbs and their complements, (iii) the linking pattern between LS and LSC. What I will argue in the following is: i) that there is a single syntactic structure common to the three constructions in terms of nexus types, but the three constructions have different LSs, hence different linking patterns.[68] What is important is that the three constructions involve different juncture types depending on the kinds of complementizers used.

I have mentioned that the 'raising' construction and the two others are different in some respects. But the three constructions have the following common characteristics: i) there are syntactic agreements (for instance, 'subject honorification) between 'controller' and 'controllee', ii) they involve direct core argumenthood, iii) there is semantic dependency between 'controller' and 'controllee', iv) the three complementizers are different from others with respect to case morphology. Consider the following examples.

(7.22) a. na-nun sensayngnim-**lul/eykey** ka-si-key ha-ess-ta
I-TOP teacher-ACC/DAT go-HON-CMPL do-PST-DEC
'I made the teacher leave.'

b. na-nun sensayngnim-**lul/eykey** ka-si-talok
I-TOP teacher-ACC/DAT go-HON-CMPL
seltukha-ess-ta
persuade-PST-DEC
'I persuaded the teacher to leave.'

c. John-i sensayngnim-**lul** yeppu-si-ta-ko
J.-NOM teacher-ACC pretty-HON-DEC-CMPL
mit-ess-ta
believe-PST-DEC
'John believed that the teacher was pretty.'

The above examples show that there is syntactic agreement between 'controller' and 'controllee' in the three constructions. It was pointed out by most scholars that there is no

[68] In English, 'raising' constructions and 'control' constructions both involve core junctures. For a detailed discussion, refer to Van Valin (1993a).

apparent tense in the embedded core of the three constructions. O'Grady (1991a) argues for the direct core argumenthood of the 'controller' in the 'raising' and causative construction, and Y-S Choi (1988) does so in the 'control' construction.

The three complementizers are different from other complementizers with respect to case morphology. The complementizer *ko* is typically selected by verbs like *mit* 'believe', *sayngkakha* 'think', and so on. Complementizer *key* is typically selected by causative verbs. Even though complementizer *tolok* is sometimes used in a causative construction, it is typically used in purpose clauses and *persuade* -type 'control' construction. These three complementizers cannot bear case morphology, while others can, as shown in (7.23).

(7.23) Two types of complementizers (D-H Chung (1993))(cf. H-J Yoon (1990, 1992))
a. [-case]: -ko, -key, -tolok, etc.
b. [+case]: -ki, -kes, -(nu)nci, -(u)m, etc.

The complementizers in (7.23a) do not bear case morphology, while those in (7.23b) do. Moreover, complementizers in (7.23b) does not allow the ACC case frame we are concerned with. (These examples are from D-H Chung (1993: 288))

(7.24) ki

nwukwuna	caki	atul-*i/*ul*	ttokttokha-ki-(lul)	pala-nta
everyone	self	son-NOM/*ACC	smart-CMPL-(ACC)	want-DEC

'Everyone wants his son to be smart.'

(7.25) kes

Tom-i	Sam-*i/*-ul*	ttokttokha-n-kes-ul
T.-NOM	S.-NOM/*ACC	smart-REL-CMPL-ACC

molu-ess-ta
not;know-PST-DEC
'Tom did not know that Sam was smart.'

(7.26) (u)m

Tom-i	Sam-*i/*-ul*	pemin-i-m-ul
T.-NOM	S.-NOM/*ACC	criminal-be-CMPL-ACC

plakhienay-ess-ta
prove-PST-DEC
'Tom proved that Sam was the criminal.'

In the lower clauses only nominative 'subjects' are required. The sentences in (7.24)-(7.26) do not allow nuclear or core junctures, but only clausal juncture in that their lower clauses carry tenses and do not allow scrambling across the clause boundary. Hence, the three constructions in (7.21) are similar in that they share many properties. I try to account for the case marking among the three Korean constructions involving the complementizers in (7.23a) in terms of the LSC and the LS in RRG.

7.2.1. Semantic Case

Let us account for the case marking in the three constructions mentioned above. I use the distinction between transitive and intransitive predicates, and also the distinction between unaccusatives and unergatives. My first observation about the dative or accusative case marking in the three constructions is that the case marking of the 'controller' NP in matrix core or clause is predictable. First, when the verbs are causative and speech act verbs, the lower verbs tend to be unergative or transitive verbs (sometimes unaccusative predicates in periphrastic causatives). Otherwise the lower verbs tend to be unaccusatives. Second, when unergative or transitive predicates occur in the embedded core, the 'controller' NP can take either DAT or ACC. When only unaccusative predicates can occur, on the other hand, they should be marked only with ACC.

(7.27) Case Templates of Each Construction

a) 'Control' Construction:

NP	*NP (DAT or ACC)*	[*V(unergatives)*]	V (speech act verb)
NP	*NP (DAT or ACC)*	[NP *V(transitive)*]	V (speech act verb)

b) Periphrastic Causative Construction:

NP	*NP (DAT or ACC)*	[*V(unergatives))*]	V (causative verb)
NP	*NP (DAT or ACC)*	[*V(transitive)*]V	(causative verb)
NP	*NP (ACC only)*	[*V(unaccusatives)*]	V (causative verb)

c) 'Raising' Construction:

NP	*NP (ACC only)*	[V*(unaccusatives)* [69]]	V (cognition verb)

According to this generalization, the causative verbs and speech act verbs as in (7.27a) and (7.27b) are supposed to take unergative lower verbs. Note that the 'controller' in (7.27c) cannot be marked with DAT. The matrix verb *mit* 'believe' requires the lower verbs to be unaccusatives, because it is not a causative or a speech act verb. If the verbs in the lower clauses are unaccusatives, the controller can only be marked with ACC, while if they are unergatives, the controller can be marked either with ACC or with DAT.

Two related questions arise regarding the case templates: i) Are the case templates in (7.27) accounted for by the RRG framework, ii) Are the case markers *eykey* and *ul* all semantic cases or is either of them a pragmatic case ? I propose that the case templates in (7.27) are expected from the different interplays between the LS and the LSC in RRG and

[69] It is very hard to define the characteristics of the predicate in the embedded clause of 'raising' construction. Roughly speaking, they should be one-place state predicates. (see K-S Park (1994)) As pointed out by O'Grady (1991a), however, some transitive predicates are also allowed provided that it names a 'habitual' action. In a similar way, with the same examples as in O'Grady (1991a), Wechsler and Lee (1995) claim that the embedded predicate must be generic or lexically stative, i.e., i-level predicate rather than s-level predicate in the sense of Kratzer (1989)). The characterization of these verbs is beyond the scope of this discussion.

that both DAT and ACC are semantic cases in those constructions. The case frame of the 'control' construction, for instance, implies the actor *saying* something to the referent of the 'controller' who is 'potentially in control of the action described in the embedded clause', since the verbs are speech act verbs. (O'Grady (1991a: 178)) On the other hand, there is no such *saying* in the case frame of periphrastic causative construction. Based on the LSs of the constructions in English which are proposed by Foley and Van Valin (1984) and Van Valin (1993a), the LSs of the three constructions would be represented respectively as follows:

(7.28) the LS for DAT/ACC Case Frames

a. Control construction
[**say'** (x, y)] CAUSE [BECOME **want'** (y, **do'** (y, [**go'** (y)])]
b. Causative construction
[**do'** (x, Ø)] CAUSE [BECOME **do'** (y, [**go'** (y)])]
c. Raising construction
believe' (x, [**pretty'** (y)])

7.2.1.1. ACC Case Marking

First of all, let us consider 'control' constructions. 'Control' constructions in Korean seem to involve core junctures in that the 'lower' predicates do not involve tense (hence it is not a clausal juncture) and sometimes time adverbials like *ece* 'yesterday' can intervene between the 'lower' predicates and the matrix predicates (hence it is not a nuclear juncture). Let us now consider the nexus type of the construction. I claim that the constructions involve subordination. Let us consider the following example in (7.29).

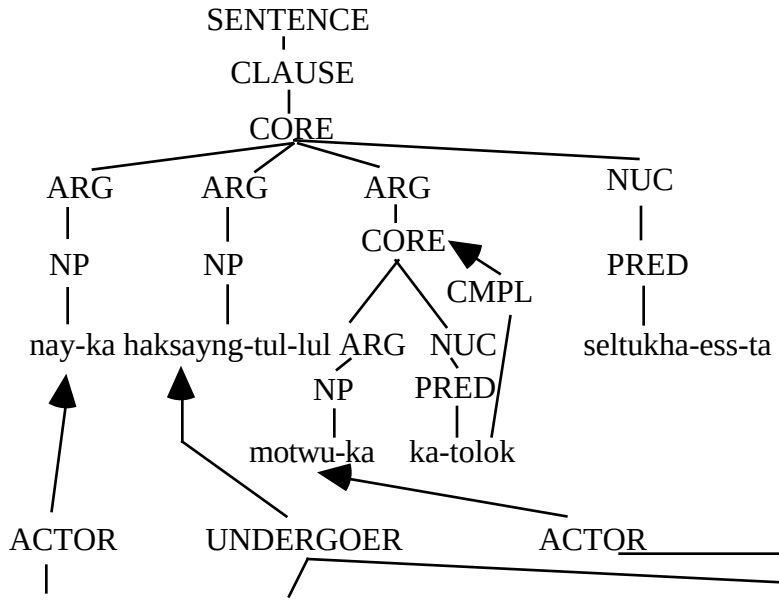
(7.29) a. sensayngnim-i haksayngtul-ulmotwu-ka ka-tolok
teacher-NOM students-ACC all-NOM go-CMPL
seltukha-ess-ta
persuade-PST-DEC
'The teacher persuaded all the students to go.'

b. sensayngnim-i haksayngtul-ulchayk-ul ilk-tolok
teacher-NOM students-ACC book-ACC read-CMPL
seltukha-ess-ta
persuade-PST-DEC
'The teacher persuaded the students to read the book.'

The ACC marked NPs, *haksayngtul* 'students' in (7.29a, b) are the core arguments of the matrix predicates, while the NOM-marked quantifier NP in (7.29a) and ACC-marked theme NP *chayk* 'book' in (7.29b) are obviously the core arguments of the 'lower' predicates. If it is assumed that the matrix predicate *seltukha* 'persuade' and the predicates like *ka* 'go'

and *ilk* 'read' are in different cores, what kind of nexus type do the two clauses involve? The two 'lower' cores in (7.29) should involve subordinate nexus, since the 'lower' cores have their own core arguments and the 'lower' cores which is a property of persuasion function as arguments in the three way relation involving persuader, a proposition, and the one who is to be persuaded. If the 'lower' cores in (7.29) are non-subordinate, then it is not easy to find a way to explain the case pattern. Another argument for subordinate nexus comes from the status of the complementizer *tolok* . J-I Kwon (1985), for instance, analyses the complementizer as 'subordinator'. Based on the above observations and claims, I propose the linking in (7.30) for the sentence in (7.29a). This is the same linking pattern with argument sharing as in English control construction (cf. Van Valin (1993: 126)).

(7.30) ACC 'control' construction



[**say'** (sensayngnim, haksayngtul motwu)] CAUSE [BECOME **want'** (h, m, [**do'** (h, m [..])]

The head N *haksayngtul* 'students' is linked as undergoer in the matrix core, while the quantifier *motwu* 'all' is linked as actor in the embedded core.

Let us now consider the ACC periphrastic causative construction. It is frequently observed (e.g. Patterson (1974), S-J Song (1988), O'Grady (1991a)) that the ACC periphrastic causative construction exhibits a higher degree of structural and semantic 'cohesion' than its corresponding DAT and/or NOM constructions. O'Grady (1991a), for instance, argues that the ACC periphrastic causatives differ from the NOM or DAT

ones in being monoclausal.[70] Even though B-S Yang (1994) claims that this periphrastic causative involve nuclear cosubordination, he does not provide any convincing evidence for the nuclear juncture.[71] If it involves nuclear cosubordination, the case pattern in the following sentences in (7.31) cannot be accounted for.

(7.31) a. sensayngnim-i haksayngtul-ulmotwu-ka ka-key
teacher-NOM students-ACC all-NOM go-CMPL
ha-ess-ta
do-PST-DEC
'The teacher made all the students go.'

b. sensayngnim-i haksayngtul-ulchayk-lul ilk-key
teacher-NOM students-ACC book-ACC read-CMPL
ha-ess-ta
do-PST-DEC
'The teacher made the students read the book.'

The sentences in (7.31) cannot involve nuclear junctures, since the 'lower' predicates take their own core argument, *motwu* 'all' in (7.31a) and *chayk* 'book' in (7.31b). The sentences in (7.31) involve core junctures, since the two cores in each sentence have their own core arguments. Let us now consider nexus type. As pointed out J-J Song (1988), the 'lower' and matrix predicates have their own deontic modality. Hence, it should be coordination or subordination. I claim that the nexus type should be subordination in that the 'lower' cores function as arguments of the causative verb *ha* 'do' in the three-way relation of causer, causee, and a proposition. However, it should be noted that chances are that ACC periphrastic causatives involve two different juncture-nexus depending on the Aktionsart of the 'lower' predicates. When the predicates are transitive or unergative

[70] O'Grady (1991) argues that one such difference has to do with the scope of time adverbials. If the 'controller' is in the NOM, a time adverbial embedded within one clause can generally not be taken to modify a verb in a higher clause. Thus, the sentence is uncontroversially unambiguous. On the other hand, if the 'controller' is in the ACC, the sentence is ambiguous since there are two verbal categories in the same clause as the adverb. A second difference is that the ACC structure allows scrambling , while the NOM one does not allow it.

[71] B-S Yang (1994) argues that the DAT-marked NP in DAT periphrastic causatives can intervene between the two nuclei and the whole core can be scrambled in the DAT periphrastic causatives, while such behaviors are not possible in accusative framed periphrastic causatives. However, his grammaticality judgment seems to be dubious. Most of time, ACC-framed, DAT-framed, and NOM-framed periphrastic causatives have similar behaviour with respect to insertability and scrambling. For instance, E-Y Cho (1988: 192) claims that the 'negative adverb' *mos* 'unable' can intervene between *key* and *ha* , irrespective of the case marking on the 'controller'.

nay-ka Inho-ka/eykey/lulo-key mos ha-ess-ta
I-NOM I.-NOM/DAT/ACC come-CMPL unable do-PST-DEC
'I couldn't cause Inho to come.'

On the other hand, Gerdts (1986: 132ff) notes that in all types of periphrastic causatives adverbs do not intervene between two nuclei.

predicates as in (7.31), the juncture-nexus type should be core subordination. When the predicates are unaccusatives, however, the type may be nuclear subordination in that the action described by the 'lower' predicates is much more likely to be actually carried out and that the 'causee' has less control of the the situation. According to the Interclausal Relations Hierarchy [IRH], the kind of semantic relation should be typically expressed in terms of nuclear junctures. Let us consider the following sentences.

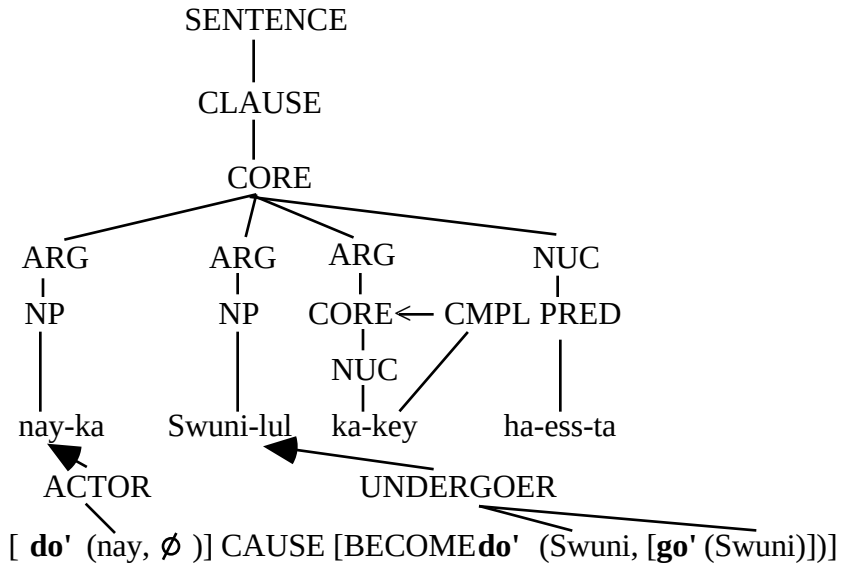
(7.32) = O'Grady's (1991a) (7)

a. * John-un Mary-eykey kicelha-key ha-ess-ta
J.-TOPM.-DAT faint-CMPL do-PST-DEC
'John made Mary faint.'

b. John-un Mary-lul kicelha-key ha-ess-ta
J.-TOPM.-ACC faint-CMPL do-PST-DEC
'John made Mary faint.'

O'Grady suggests that since fainting is not something over which one can normally have control, DAT marking on the 'causee' is not available in (7.32). Hence, there is no case alternation between ACC and DAT on the 'causee' (i.e. it should be marked only with ACC) with 'lower' unaccusatives. However, I will not pursue the possibility any more in this thesis, since we are mainly concerned with case marking and in any case, the 'causees' are assigned ACC by virtue of being undergoers. Based on the above observations, I propose the following LSC and linking for the sentence in (7.22a) which are basically the same as in (7.31a).

(7.33) <u>ACC periphrastic causative construction</u>



Let us now look at ACC 'raising' construction. Unlike English, the embedded clauses in ACC 'raising' construction in Korean involve the overt tense markers. As seen in Chapter 2, *tense* is the clausal operator, which modify the clause as a whole. The 'raising' construction in Korean involves clausal juncture, because the embedded core is argued by many scholars to have overt tense.

The 'raisee' in 'raising' construction should be also treated as a core argument of the matrix predicate *mit* 'believe', not that of the predicate *yeppu* 'be pretty'. This is confirmed by idiom chunks. For instance, the NOM and ACC versions of *believe* -type construction behave differently with respect to idiomatic expressions. Let us consider the 'raising' sentences.

(7.34) = Lee's (1991) (5)

a. hankwuksalam-tul-un cakun kochwu-ka mayp-ta-ko
Korean-PL-TOP small pepper-NOM hot-DEC-CMPL
mit-nun-ta
believe-PRE-DEC (= (7.31a,7.31b))

b. hankwuksalam-tul-un cakun kochwu-lul mayp-ta-ko
Korean-PL-TOP small pepper-ACC hot-DEC-CMPL
mit-nun-ta
believe-PRE-DEC (= (7.31b))

(7.35) = Lee's (1991) (6)

a. Koreans believe that small men are stronger. (idiomatic)
b. Koreans believe that small pepper is hotter. (literal)

The 'raising' sentence in (7.34b) cannot have an idiomatic meaning any longer. If it is assumed that in order to be an idiomatic expression, a single predicate (not a complex predicate) and an argument should be in the same core unit, the contrast in interpretation between (7.34a) and (7.34b) is naturally explained, since in (7.34b) the argument *cakun kochwu* 'small pepper' and the predicate *mayp* 'be hot' are in different cores, and therefore the sentence does not convey an idiomatic sense any longer.

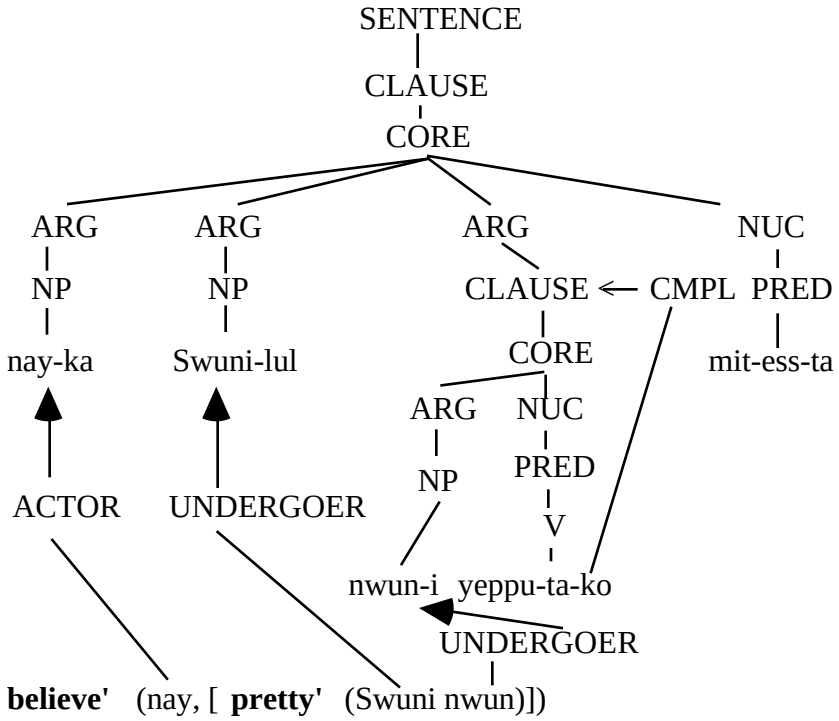
At this point, there arises a question: if it is assumed that the matrix predicate *mit* 'believe' and the predicate like *mayp* 'be hot' are in different core or clauses, what kind of nexus type do the two clauses involve? I propose that the two clauses in (7.34b) should involve subordinate nexus. The first argument for the proposal comes from the status of the complementizer *ko* . The two clauses are connected with the so-called 'sentential complementizer' *ko* (cf. I-S Yang (1972), I-H Lee (1980), and H-J Yoon (1991)) The complementizer usually function as subordinator in Korean when it is used in so called 'quotative constructions'. (cf. J-I Kwon (1985)) Second, consider the following examples involving both ACC and NOM marked NPs.

(7.36) a. sensayngnim-i haksayngtul-ul [motwu-ka cengcikha-ta-ko]
teacher-NOM students-ACC all-NOM honest-DEC-CMPL
mit-ess-ta
believe-PST-DEC
'The teacher believed the students to be all honest.'

b. John-i Mary-lul [nwun-i yeppu-ta-ko]
J.-NOM M.-ACC eyes-NOM pretty-DEC-CMPL
mit-nun-ta
believe-PRE-DEC
'John believes that Mary's eyes are pretty.'

The ACC marked NPs are the core arguments of the matrix verbs, while the NOM-marked NPs, *motwu* 'all' and *nwun* 'eyes' are the core arguments of the lower predicates. Furthermore, the argument for the argumenthood of the lower clauses comes from O'Grady (1991a). He proposes that the verb *mit* 'believe' can take either an S or IVP as its theme term without respect to whether dependency is satisfied in the lower S (or IVP). From the semantic point of view, O'Grady (1991b) also proposes that 'whereas *mit* 'believe' in the ordinary sentential complement pattern involves a two-way relation between a cognizer and a proposition, the same verb in the ECM ['raising'] pattern enters into a three-way relation involving a property, and individual of whom that property is predicated and a cognizer.' O'Grady's observation suggests that the predicate *mit* 'believe' in 'raising' pattern involves three arguments. From these observations, the following LSC is proposed for (7.36b).

(7.37) ACC 'raising' construction

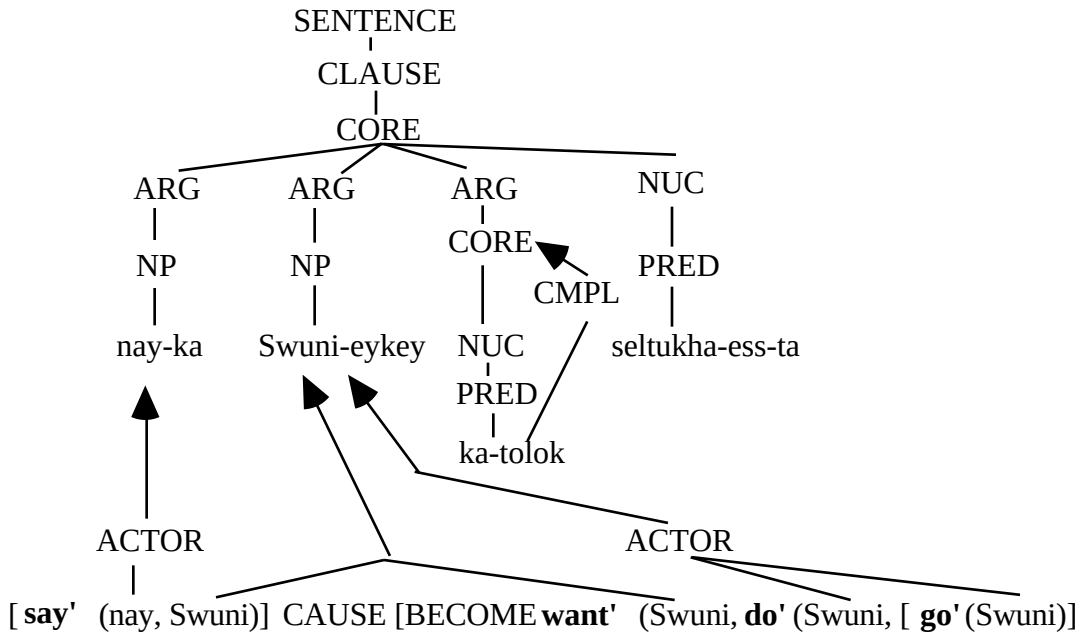


The *Y* argument (undergoer argument) in each ACC frame is expected to take an ACC marker, because they are normal undergoers in each LSC. O'Grady (1991a), for instance, argues for the 'objecthood' of the y arguments in causative and 'raising' constructions. On the other hand, Y-S Choi (1988) argues for the 'objecthood' of the arguments in 'control' constructions.

7.2.1.2. DAT Case Marking

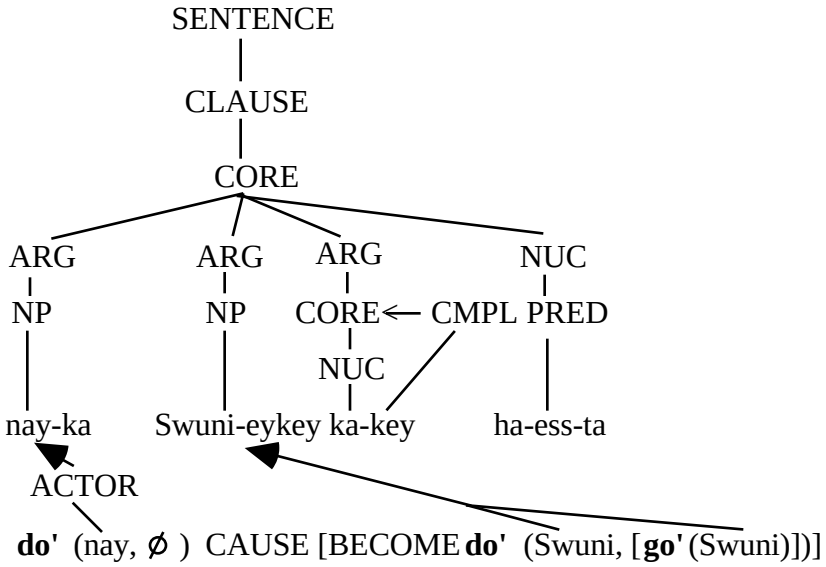
As in the ACC periphrastic causative construction, the DAT ones are also claimed to involve core subordination, since there is no significant difference in syntactic behavior between the two constructions. I propose the following linking for the DAT 'control' construction in (7.22).

(7.38) DAT 'control' construction



Let us now consider the DAT peripnrastic causative construction. B-S Yang (1994) seems to be on right track in claiming that DAT periphrastic causative construction in Korean involves core juncture, since as in the ACC sentences in (7.36) in which each has their own core arguments in their cores, the two cores in the DAT sentences can have their own core arguments. As for the ACC one, I claim that the DAT one involves core subordination in that as suggested above, there is no significant difference in syntactic behavior between the ACC sentences and the DAT sentences.

(7.39) DAT periphrastic causative construction



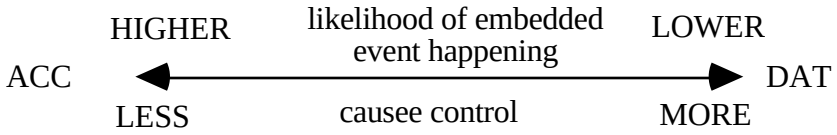
There seems to be one obvious problem in the linking between the LSC and the LS for the DAT constructions. Even though DAT-marked arguments also function as direct core arguments as in their ACC-marked counterparts, they are marked with DAT. We are left with the question of how to deal with the case marking difference in the similar LSCs. I propose that there be a difference in LS between the ACC and DAT case frame.

My proposed solution to the problem is to add a kind of modal operator to the LS as suggested in Park (1993). This operator means that the event need not necessarily be accomplished.

(7.40) a. [**say'** (x, y)] @ CAUSE [BECOME **want'** (y, **do'**[y, **go'** (y)])]
b. [**do'** (x, Ø)] @ CAUSE [BECOME **do'** [y, [**go'** (y)]]]

Park (1993) argues that for the modal operator '@' of Korean accomplishment verbs, **[Expect]** is appropriate in the sense that achievement is not implied, but expected by inference. As pointed out by Van Valin (p.c.), this modal operator is related to variable transitivity in RRG terms, which is motivated by both (i) the degree of control of the causee and (ii) whether the caused event happens or not.

(7.41)



[The more control the causee has,
the less likely the caused event is.]

This hierarchy is true when the embedded verb in LS is transitive or unergative, i.e. the causee is a potential actor. If the embedded verb is unaccusative, then the argument would be an undergoer and no alternation is possible.

If the causee has less control, then the argument is not construed as an undergoer, but as non-macrorole direct core argument, which would take DAT according to the semantic case marking rules. Let us consider the following sentences.

(7.42) a. na-nun sensayngnim-lul ka-si-key ha-ess-una
I-TOP teacher-ACC go-HON-CMPL do-PST-but
ka-si-ci an-ess-ta
go-HON-CMPL not-PST-DEC
'I made the teacher leave, but he did not.'

b. na-nun sensayngnim-lul ka-si-talok seltukha-ess-una
I-TOP teacher-ACC go-HON-CMPL persuade-PST-but
ka-si-ci an-ess-ta
go-HON-CMPL not-PST-DEC
'I persuaded the teacher to leave, but he did not.'

c. na-nun sensayngnim-eykey ka-si-key ha-ess-una
I-TOP teacher-DAT go-HON-CMPL do-PST-but
ka-si-ci an-ess-ta
go-HON-CMPL not-PST-DEC
'I made the teacher leave, but he did not.'

d. na-nun sensayngnim-eykey ka-si-talok
I-TOP teacher-DAT go-HON-CMPL
seltukha-ess-una ka-si-ci an-ess-ta
persuade-PST-but go-HON-CMPL not-PST-DEC
'I persuaded the teacher to leave, but he did not.'

All the four sentences in (7.42) are acceptable, but the DAT case frame is much more acceptable when the caused action is denied. This means that the achievement of the action is not implied with the dative case frame. Remember the case templates in (7.27b). When unaccusatives occur, the 'controller' should be marked only with ACC. The 'controller' with unaccusatives cannot be in control of the action so that they should be marked with ACC in that the ACC case frame expresses less option of denial. The notion of modal operator '@' is not an isolated one. It may be related to the notion of the degree of control, since the degree of control is closely related to the degree of expected achievement. The

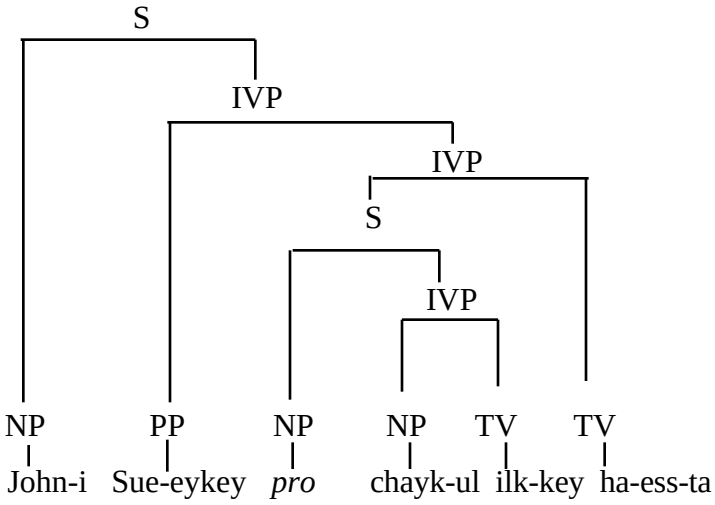
notion of control has been widely discussed in the typological-functional literature. According to Comrie (1981: 53-56, 164-167), control is a semantic parameter out of which the relations among semantic roles such as agent, instrument, patient, etc. can be (re)defined. For instance, in Kannada, the causee NP is marked with dative or instrument, depending on 'the degree of control retained in the causative macro-situation by the causee'. (Comrie (1981: 164)) Control, in Comrie's view, refers to the relationship between the causer and causee vis-a-vis the causative situation; what is relevant is the distribution of control over the whole causative situation denoted by the causative verb. Meyer (1992) also argues that the semantics of the relative degree of control of causer & causee provides a sufficient explanation of the workings of the Khmer periphrastic causatives.

O'Grady's (1991a) analysis seems to support my proposal of a modal operation '@' on the LS of the dative case frame of the Korean periphrastic causative construction. Consider the sentence in (7.43).

(7.43) John-i Sue-eykey chayk-ul ilk-key ha-ess-ta
J.-NOM S.-DAT book-ACC read-CMPL do-PST-DEC
'John made Sue read the book.'

O'Grady (1991a) assigns the structure in (7.44) to the dative causative case frame in (7.43).

(7.44) = O'Grady's (1991a: 178) (8)



In this structure, the TV *ilk* 'read' combines with its term *chayk* 'book' to give an IVP, which then combines with the hypothetical *pro* (its actor term) to give an S. The causative verb *ha* 'do' then combines with this S, yielding an IVP. The next element to be incorporated into syntactic structure is the NP *Sue* . According to his analysis, the dative

causative construction is 'biclausal', but differs from the nominative causative construction in that the matrix verb determines a recipient role and the sentential complement has a null subject. O'Grady's basic ideas about the dative causative frame seem to be on right track in suggesting that the controllers in the dative case frame are 'potentially in control of the action' so that they are given more option of denial than in the ACC case frame. However, his structural analysis has two weak points. The embedded clause is not 'clausal' in that for instance, it does not bear tense. His monostratal structure employs such an 'invisible entity as *pro* which multistratal theories like GB normally employ to account for derivational processes. The RRG structures in (7.39) seem to convey O'Grady's basic ideas, but does not bring about the kind of problems we have just mentioned.

7.2.1.3. NOM Case Marking

The NOM markings in the three constructions seem to be relatively easy to state. The 'control' and periphrastic constructions involve core junctures in that they do not carry tense in the embedded core. On the other hand, the 'raising' construction involves clausal juncture because the embedded clause is tensed. The three constructions are agreed by scholars to involve subordination. As pointed out by J-J Song (1988), one piece of good evidence for a subordination nexus of the three constructions comes from the fact that the preposing of NOM-marked embedded core arguments is impossible. B-S Yang (1994), O'Grady (1991a), and J-J Song (1988) all claim that the NOM periphrastic causatives involve subordination. Y-S Choi (1988) suggests that the NOM 'control' constructions involve subordination. As suggested by O'Grady (1991a), it is uncontroversial that the NOM 'raising' constructions involve subordination. This is confirmed by passivization, since the embedded core or clause can be the target of passivization.[72] Following the previous studies, I claim that the three constructions involve subordination. From these, I propose the LSCs and linking as in (7.45).

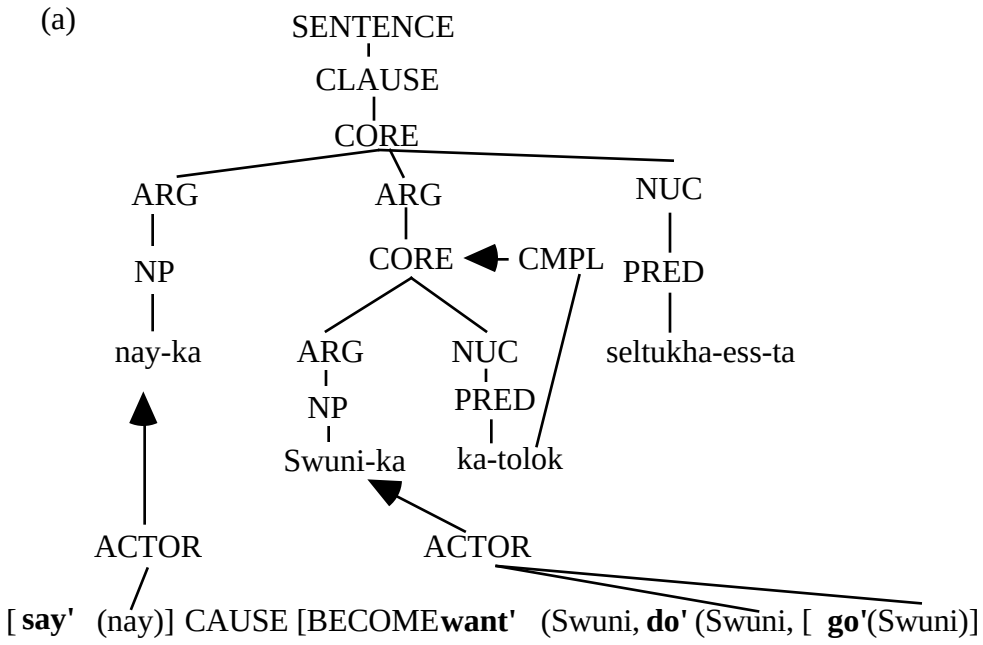
(7.45) Nominative Constructions

[72] For instance, the following passive sentence is fully acceptable.

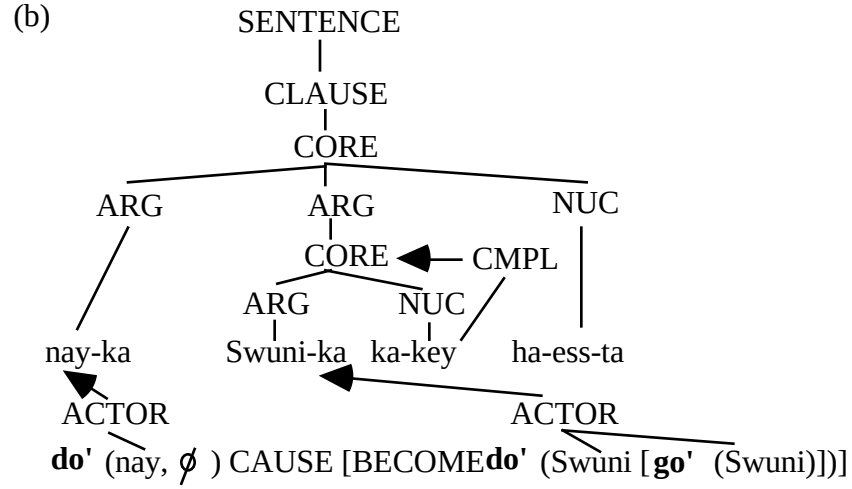
na-eyuyhay	Swuni-ka	yeppu-ta-ko	mite-ci-ess-ta
I-by	S.-NOM	pretty-DEC-CMPL	believe-PASS-PST-DEC

'Swuni is believed by me to be pretty.'

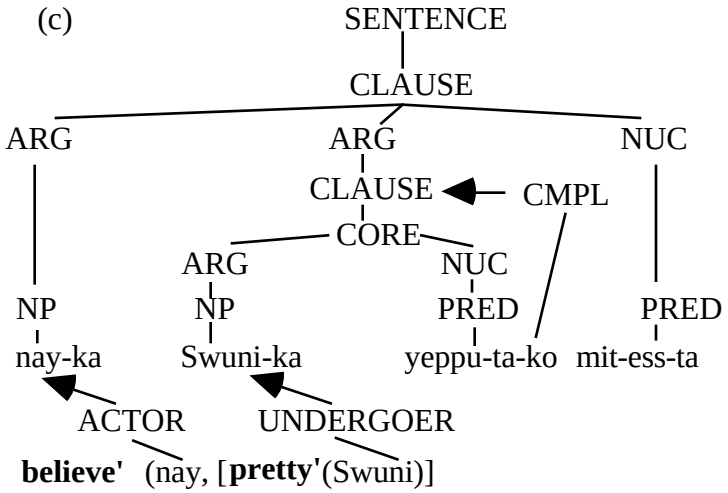
(a)


SENTENCE
CLAUSE
CORE
ARG
ARG
NUC
NP
CORE
CMPL
PRED
nay-ka
ARG
NUC
seltukha-ess-ta
NP
PRED
Swuni-ka
ka-tolok
ACTOR
ACTOR
[say' (nay)] CAUSE [BECOME want' (Swuni, do' (Swuni, [go'(Swuni)]

(b)


SENTENCE
CLAUSE
CORE
ARG
ARG
NUC
CORE
CMPL
ARG
NUC
nay-ka
Swuni-ka
ka-key
ha-ess-ta
ACTOR
ACTOR
do' (nay, ∅) CAUSE [BECOME do' (Swuni [go' (Swuni)])]

(c)


SENTENCE
CLAUSE
ARG
ARG
NUC
CLAUSE
CMPL
CORE
ARG
NUC
NP
NP
PRED
PRED
nay-ka
Swuni-ka
yeppu-ta-ko
mit-ess-ta
ACTOR
UNDERGOER
believe' (nay, [pretty'(Swuni)]

The NOM case marking is also semantically assigned due to the fact that its argument has the highest macrorole in the embedded linked core or clause.

7.2.2. Pragmatic Case

Now, let us consider the following examples in (7.46) and (7.47). As pointed out by K-S Hong (1990), the NP *L.A.* or *ecey* 'yesterday' can be a 'raisee', even though it is not a pivot ('subject') of the lower clause.

(7.46) na-nun L.A.-ka/lul hankwuksalam-i ceyil
I-TOP L.A. -NOM/ACC Koreans-NOM most
manhi sa-nta-ko mit-nun-ta
many live-DEC-CMPL believe-PRE-DEC
'I believe that L.A. has the largest Korean population.'

(7.47) John-i ecey-ka/lul nalssi-ka
J.-NOM yesterday-NOM/ACC weather-NOM
chwu-ess-ta-ko sayngkakha-ess-ta
cold-PST-DEC-CMPL think-PST-DEC
'John thinks that it was cold yesterday.' *K-S Hong (1990)*

It should be noted that in (7.46) and (7.47), the adverbial adjuncts in ADV-NOM ordering are in lower clause, while those in ADV-ACC ordering are in higher clauses. The sentences in (7.46) and (7.47) bring about a problem to the analyses in which only 'subject' can be 'raised'. (cf. Y-S Choi (1988) and C. Youn (1989)) It seems that the distinction between semantic and pragmatic case seems to be needed for describing the phenomenon. I propose that semantic vs. pragmatic case distinction accounts for the fact that some non-argument NPs can be 'raisee' in Korean. When both semantic and pragmatic NOM case holders are available in an unmarked case template, the pragmatic case holder has the priority to be a 'raisee'. Hence, the following generalization describes the 'raisee' accessibility: PRAGMATIC NOM is more accessible to 'raisee' than SEMANTIC NOM.

It is interesting to note that scope ambiguity occurs when an adverb does not carry any case marker. In (7.47), for instance, the bare form *ecey* 'yesterday' is construed as modifying either the lower predicate or the matrix predicate. On the other hand, the form with NOM or ACC marker has a scope only over the lower predicate. In other words, the NOM or ACC marker is construed as a marker of predication with the lower clause with added function of pragmatic focus.

The claim that the pragmatic cases in (7.46) and (7.47) involve pragmatic focus is evidenced by phrasal comparatives with contrastive focus. When pragmatic case is

involved, the phrasal comparative with contrastive focus in (7.48) is much more acceptable than the form in (7.47).

(7.48) John-i kucey-pota ecey-ka/lul
J.-NOM the day before yesterday-than yesterday-NOM/ACC
nalssi-ka chwu-ess-ta-ko sayngkakha-ess-ta
weather-NOM cold-PST-DEC-CMPL think-PST-DEC
'John thought that it was colder yesterday than the day before yesterday.'

The NOM or ACC in (7.48) obviously conveys contrastive focus, because the markers are more widely used in the contrastive focus environment. Hence it can be said that pragmatic NOM inherits its pragmatic case property in 'raising' construction so that it becomes pragmatic ACC.

In sum, I have proposed that the case markings in 'control' and causative constructions as well as 'raising' construction are expected from the different interplays between the LS and the LSC in RRG and the hypothesis that both DAT and ACC are semantic cases in those constructions. However, the pragmatic ACC in the 'raising' construction is also allowed for an adjunct 'raisee' involving pragmatic NOM.

7.3. Case Alternation between NOM and ACC in Korean *siph* 'want' Construction and Tough Construction: Another Clause-level Juncture-Nexus Contrast

In an approach expressed in terms of NOM by default, the prediction is that NOM and ACC may not alternate, since NOM is formulated to be given by default when ACC is not eligible. However, this prediction is not always borne out, which remains as the biggest problem for those analyses. Let us consider the following two examples which show a case alternation between NOM and ACC.

(7.49) a. Minswu-ka pap-**i/ul** mek-ko siph-ta
M.-NOM rice-NOM/ACC eat-CMPL want-DEC
'Minswu wants to eat steamed rice.'
b. nay-ka yenge-**ka/lul** paywu-ki-ka
I-NOM English-NOM/ACC learn-CMPL-NOM
elyep-ta
difficult-DEC
'It is difficult for me to learn English.'

In (7.49a) and (7.49b), the theme NPs alternate either with NOM or with ACC, which is contrary to the 'NOM by default' hypothesis. In this section, I will argue that in (7.49a)

and (7.49b) the NOM is not assigned by default, but by the case marking rules and juncture-nexus relation.

7.3.1. *siph* 'want' type predicates

When the predicate consists of 'Vstem + *siph* 'want'', the theme argument can be marked either NOM or ACC, as in (7.50).

(7.50) a. Minswu-ka pap-i mek-ko siph-ess-ta
M.-NOM rice-NOM eat-CMPL want-PST-DEC
'Minswu wanted to eat steamed rice.'
b. Minswu-ka pap-ul mek-ko siph-ess-ta
M.-NOM rice-ACC eat-CMPL want-PST-DEC
'Minswu wanted to eat steamed rice.'

Kang (1986) claims that *siph* 'want' is optionally stative so that it optionally select for a syntactic 'object'. His analysis captures an important intuition about the predicate, but it totally depends on the predicate itself so that it does not make clear the interaction between the two predicates. On the other hand, Y-K No (1990) claims that the predicate optionally involves biclausal structure so that ACC may be sanctioned by the predicate in the embedded clause.

(7.51) a. [Minswu-ka pap-i mek-ko siph-ess-ta]$_S$
b. [Minswu-ka [pap-ulmek-ko]$_S$ siph-ess-ta]$_S$

According to this analysis, *pap-i mek-ko* 'to eat rice (NOM)' does not make one constituent, whereas the same phrase with ACC marking does.

My analysis reflects Kang's (1986) idea. My point is that the Aktionsart of the predicate *siph* 'want' in (7.50a) and (7.50b) may be different as suggested by Y-S Kang (1986). The Aktionsart difference is manifested in these examples.

(7.52) a. ?* Minswu-ka pap-i mek-ko siph-e-ha-ess-ta
M.-NOM rice-NOM eat-CMPL want-CONN-do-PST-DEC
'Minswu wanted to eat steamed rice.'
b. Minswu-ka pap-ul mek-ko siph-e-ha-ess-ta
M.-NOM rice-ACC eat-CMPL want-CONN-do-PST-DEC
'Minswu wanted to eat steamed rice.'

In the NOM version as in (7.52a), the *siph-e-ha* 'want' form, an activity form,[73] is not allowed, whereas in ACC version as in (7.52b), it is allowed. That implies that the predicate inherently has two Aktionsart. Let us consider the following sentences involving the predicate *wuenha* 'want' which has the similar meaning as the predicate *siph* 'want'.

(7.53) a. * Minswu-ka pap-i mek-ki(-lul) wuenha-ess-ta
M.-NOM rice-NOM eat-CMPL want-PST-DEC
'Minswu wanted to eat steamed rice.'

b. Minswu-ka pap-ul mek-ki(-lul) wuenha-ess-ta
M.-NOM rice-ACC eat-NOML want-PST-DEC
'Minswu wanted to eat steamed rice.'

The verb *wuenha* 'want' does not alternate between a state and an activity Aktionsart. As seen in morphological form of the verb which is composed of *wuen* 'hope' (Sino-Korean noun) and *ha* 'do', the verb is an activity. The activity predicate does not allow the pattern in (7.50a), but only the pattern in (7.50b). Hence it seems to be obvious that the sentence in (7.50a) involves a state Aktionsart. Furthermore, the sentence in (7.53b) indirectly shows that the pattern as in (7.50a) involves core subordination, since the nominalized phrase with *-ki* + optional case marker usually functions as a core argument in Korean and so the core itself should be subordinate with respect to the predicate *wuenha* 'want'. (cf. J-I Kown (1985))

Having said that there is a Aktionsart difference in the two sentences in (7.50), I claim that the two sentences in (7.50) are different with respect to the juncture-nexus type, and that the difference in juncture-nexus results in the difference in the status of the experiencer NP. My claim is that the pattern in (7.50a) involves nuclear cosubordination, while that in (7.50b) involves core subordination. Moreover, I suggest that the experiencer NP is in PCS in (7.50a), whereas it is in the 'lower' core in (50b).

There seems to be evidence that the sentence in (7.50a) involves a nuclear juncture. In a nuclear juncture, two or more nuclei are linked to form a single, complex nucleus which takes a single set of core arguments. As pointed out by B-S Yang (1994), it is not easy to find nuclear operators expressed with inflectional morphemes in Korean, since most aspectual distinctions are expressed through nuclear junctures. The only nuclear operator which I can think of is a negation nuclear operator, *an* 'not'.[74] Let us first consider the following sentences in (7.54).

(7.54) a. Minswu-ka pap-i an mek-ko siph-ess-ta
M.-NOM rice-NOM NEG eat-CMPL want-PST-DEC

[73] Refer to B-S Yang (1994) for the argument that *siph-e-ha* 'want' is an activity.
[74] B-S Yang argues that the negation operator *an* 'not' is a nuclear operator (see Chapter 2).

'Minswu did not want to eat steamed rice.'

b. * Minswu-ka pap-i mek-ko an siph-ess-ta
M.-NOM rice-NOM eat-CMPL NEG want-PST-DEC
'Minswu did not want to eat steamed rice.'

c. Minswu-ka pap-ul an mek-ko siph-ess-ta
M.-NOM rice-ACC NEG eat-CMPL want-PST-DEC
'Minswu wanted to not eat steamed rice.'

d. * Minswu-ka pap-ul mek-ko an siph-ess-ta
M.-NOM rice-ACC eat-CMPL NEG want-PST-DEC
'Minswu wanted to not eat steamed rice.'

As seen in (7.54b, d), nothing can intervene between two nuclei without regard to case, unlike in Korean periphrastic causatives, which I argued involve core junctures. The only position in which a nuclear operator *an* 'not' can be located is right before the first nucleus, as seen in (7.54a, c). Hence, the two sentences in (7.50) may involve nuclear junctures. However, there is a difference in scope of negation between (7.54a) and (7.54c). In (7.54a), the two nuclei are linked (or coalesced) enough to form a single nucleus so that the sentence in (7.54a) means something like 'Minswu did not want to eat steamed rice. In (7.54c), on the other hand, the negation chiefly modifies the verb 'eat', not the linked nuclei, and therefore (7.54c) means something like 'Minswu wants to not eat steamed rice'. Hence, it may be concluded that the sentence in (7.50a) involves cosubordination in that the two nuclei are so tightly linked that they function together with a nuclear operator, *an* 'not'. On the other hand, the sentence in (7.50b) may involve subordination in that as in Korean periphrastic causatives, the negation scope is chiefly restricted to the 'lower' predicates. Note B-S Yang's (1994) observation that nuclear subordination in Korean has to do with 'auxiliary verbs' denoting aspects and directionals such as 'continuous', 'perfective', and 'completion'. Hence, it seems to be obvious that the sentence in (7.50b) cannot be a typical member of nuclear subordination in Korean. From these, it may be concluded that (7.50b) involves core cosubordination rather than nuclear subordination in that there is a shared argument and it is a 'control' construction, even though in (7.50b), the two nuclei has the characteristics of nuclear junctures.

Let us now look at the status of the experiencer NP. The claim that there is a difference in the status of the experiencer NP is supported by the sentences in (7.55).

(7.55) a. Minswu-eykey-(nun) pap-i mek-ko siph-ess-ta
M.-DAT-(TOP) rice-NOM eat-CMPL want-PST-DEC
'Minswu wanted to eat steamed rice.'

b. ?* Minswu-eykeypap-ul mek-ko siph-ess-ta
M.-DAT rice-ACC eat-CMPL want-PST-DEC
'Minswu wanted to eat steamed rice.'

In (7.55a) which I suggest is related to (7.50a), the case pattern exactly follows Korean case marking rules. The only macrorole argument *pap* 'rice' is marked with NOM, and non-macrorole argument *Minswu* is marked with DAT. In (7.55b) which is related to (7.50b), on the other hand, the NP *Minswu* cannot be marked with DAT, which suggests that it should be the direct core argument. Hence, in (7.50a) which has a state predicate, the theme *pap* 'rice' is the only macrorole argument in its core so that it is marked with NOM. On the other hand, the non-macrorole core-argument *Minswu* can be marked with DAT. In (7.50b), by contrast, the experiencer NP is assigned NOM, since it is an actor in its core. The theme NP is assigned ACC, since it is an undergoer in its core.

Given that in the sentence in (7.55a), DAT on the argument *Minswu* is derived from Korean semantic case marking rules, then there arises a question: what is the NOM on the argument in (7.50a) due to? I propose that the NOM is not a semantic case, but a pragmatic case with focus interpretation.[75] My claim that there is a PCS slot with focus interpretation for the *siph* construction is confirmed by the following sentence involving adjuncts.

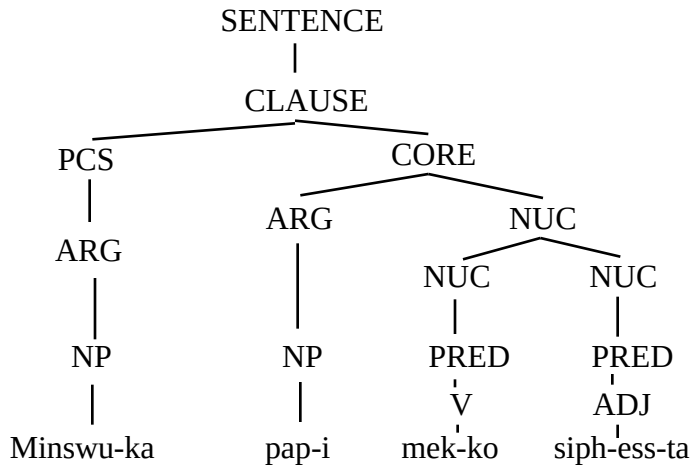
(7.56) ku siktang-i nay-ka ka-ko siph-ta
the restaurant-NOM I-NOM go-CMPL want-DEC
'I want to go to the restaurant.'

Even though the NP *ku siktang* 'the restaurant' in (7.56) is obviously a non-macrorole argument which denotes location, it is marked with NOM. The argument should obviously involve pragmatic case which marks focus and replaces the locative marker *-ey* . In (7.50b), to the contrary, the argument *Minswu* cannot be marked with DAT, but only by NOM. Hence, it may be argued that it should not be a non-macrorole argument, but an actor in its own core. Based on these observations, I propose the juncture-nexus types in (7.57).

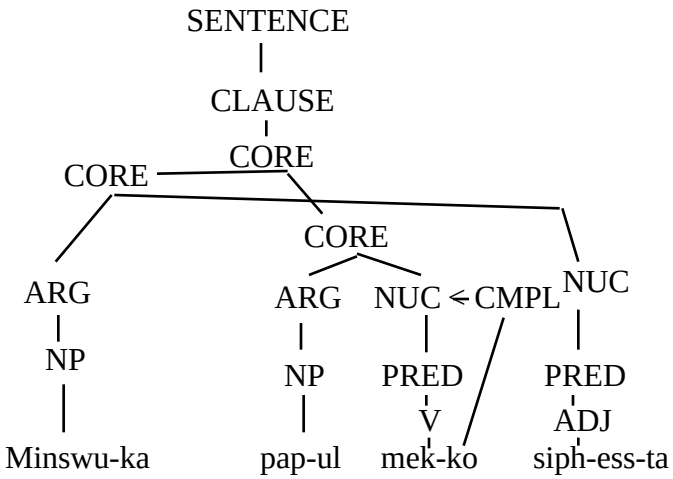
(7.57)

[75] The NOM on the argument *Minswu* has every characterisitic of pragmatic NOM: state predicates (*siph* 'want'), double nominatives, focus interpretation, and so on.

a.



b.



In (7.57a), *Minswu* is in PCS position, because even though it could have been realized as DAT in a core internal position, it involves NOM with pragmatic focus. The linked (with cosubordination) nuclei (an activity + a state) in (7.57a) is a state which expresses one's mental state so that the theme NP *pap* 'rice' assumes semantic NOM, because it is the single macrorole argument in its core. In (7.57b), on the other hand, the NP *Minswu* is ranked as an actor in its own core so it should be marked with semantic NOM case, while the NP *pap* 'rice' is ranked as an undergoer in its own core so it should be marked with semantic ACC case.

7.3.2. Tough Construction

Let us consider the example in (7.49b), repeated in (7.58). When the predicates like *elyep* 'difficult' occurs, the theme NP can be marked either NOM or ACC.

(7.58) a. nay-ka yenge-ka paywu-ki(-ka) elyep-ta
I-NOM English-NOM learn-NOML(-NOM) difficult-DEC
'It is difficult for me to learn English.'
b. nay-ka yenge-lul paywu-ki(-ka) elyep-ta
I-NOM English-ACC learn-NOML(-NOM) difficult-DEC
'It is difficult for me to learn English.'

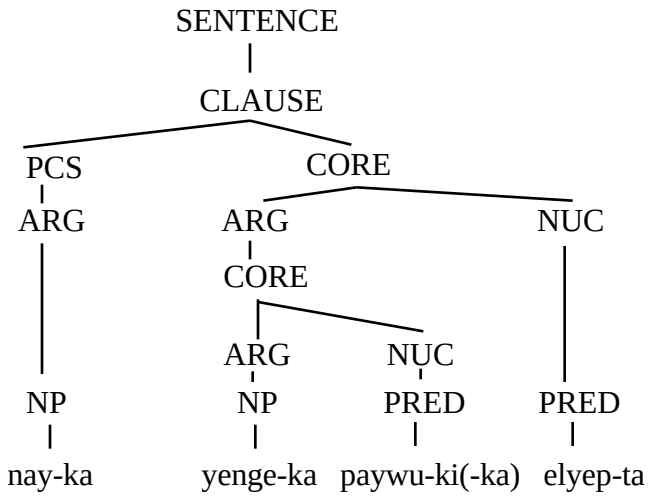
We have seen that the two sentences of *siph-* constructions as in (7.50) are different in juncture-nexus type. I will claim that the analysis of tough constructions in Korean is different from that of *siph-* constructions, and that the two sentences in (7.58) are not different with respect to juncture-nexus, but differ from each other in terms of LSCs. The following sentences in (7.59) show that the NP *nay* 'I' in (7.59a) may a non-macrorole argument.

(7.59) a. nay-eykey yenge-ka paywu-ki(-ka) elyep-ta
I-DAT English-NOM learn-NOML(-NOM) difficult-DEC
'It is difficult for me to learn English.'
b. * nay-eykey yenge-lul paywu-ki(-ka) elyep-ta
I-DAT English-ACC learn-NOML(-NOM) difficult-DEC
'It is difficult for me to learn English.'

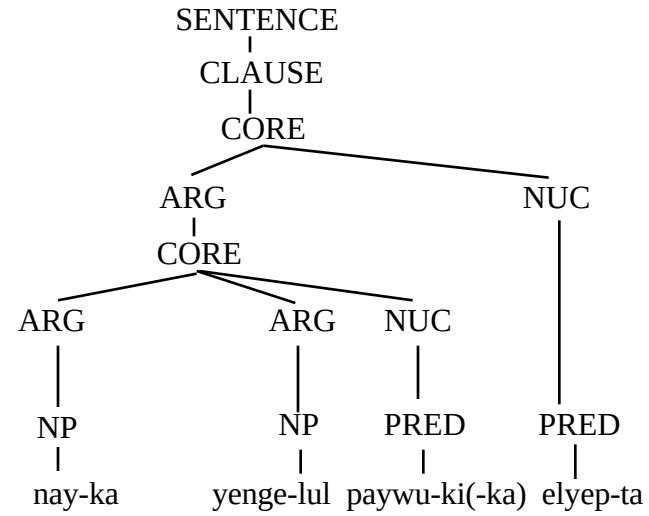
In (7.59a), the case pattern exactly follows Korean case marking rules. The only macrorole argument *pap* 'rice' is marked with NOM, and non-macrorole argument *Minswu* is marked with DAT. In (7.59b), on the other hand, the NP *Minswu* cannot be marked with DAT, which suggests that it is the direct core argument. Based on those observations, I propose the following LSCs in (7.60).

(7.60)

a.



b.



The case marking in (7.60b) seems to be naturally derived from semantic case marking rules in Korean. The NP *nay* 'I' takes NOM due to the highest ranking macrorole, while the NP *yenge* 'English' takes ACC due to the undergoer.

The sentence in (7.60a) seems to be a little more complicated. The NP *yenge* 'English' takes NOM, since it is the only macrorole NP in its own core, while the NP *nay* 'I' is supposed to take DAT due to the non-macrorole argument. As pointed by Gerdts and Youn (1987), the NP can freely take DAT case. Then, how can we explain the NOM on the experiencer in (7.58a)? I propose that as in *siph* 'want' construction in (7.50a), the NOM is not a semantic case, but a pragmatic case. To convey focus interpretation, the NP takes NOM. The structure in (7.60a) seems to be supported by the following example.

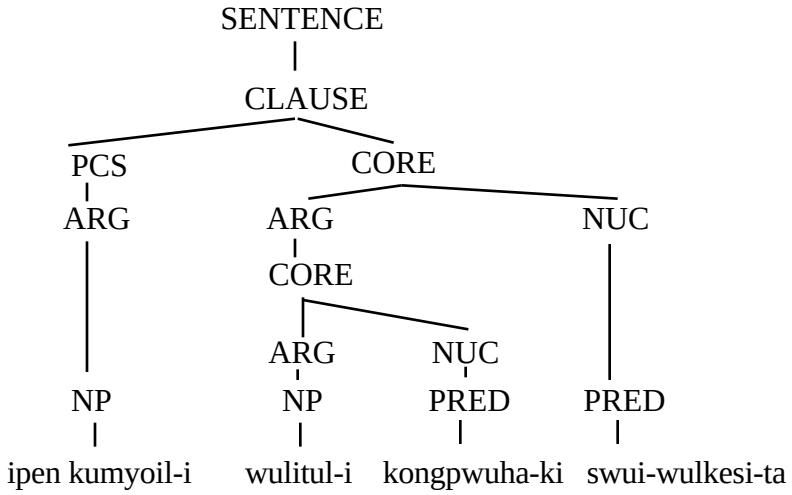
(7.61) = Muller-Gotama's (1994) (62)

yipen	kumyoil-i	wulitul-i	kongpwuha-ki(-ka)	swui-wulkesi-ta
this	Friday-NOM	we-NOM	study-CMPL	easy-FUT-DEC

'This Friday is easy for our studying.'

Such adjunct phrases as locative phrase *yipen kumyoil* 'this Friday' as in (7.61) can appear as the matrix 'subject'. The NOM-marked locative phrase corresponds exactly to the filler of a PCS position which involves focus, since the sentence in (7.61) could be uttered to focus on a specific Friday when the noise problem, for instance, won't occur. (see Chapter 5 for further discussion) The NP *wulitul* 'we' is the actor argument of the predicate *kongpwuha* 'study'. Hence, the NP should be with the predicate *kongpwuha* 'study' in its LSC. The observations lead us to posit the following LSC which is similar to the LSC in (7.60a).

(7.62)



The NP *ipen kumyoil* 'this Friday' is assigned pragmatic NOM case, because the matrix predicate is a state verb. On the other hand, the NP *wulitul* 'we' is assigned semantic NOM, since it is the only macrorole argument in its core.

The LSC in (7.60) has a couple of advantages. First, the nominalizer *-ki* clearly shows that the embedded cores in (7.60) involves an NP that functions as arguments. As pointed out B-S Yang (1994), there are English gerund-like constructions in Korean, which have been called 'nominal clauses' (H-B Lee (1989)), *ilum mati* 'nominalized clauses' (H-B Choi (1929)), and 'nominalized constructions'' (J-I Kwon (1985)). These nominalized clauses are non-final and are suffixed with one of the nominal clause endings, either *-(u)m* or *-ki* . Second, the LSC in (7.60) explains why the embedded cores take optional NOM case marker. The embedded cores function as arguments to the nucleus *swuip* 'be easy' so that the arguments are the only macrorole argument of the nucleus. For this reason, the

embedded cores take semantic NOM case. The reason why the NOM case is optional seem to result from the fact that it is combined with a complementizer. As shown in many other languages, it is common that the complementizers do not take case markers.

Now, let us consider the scope of time adverbials. The difference in the scope of adverbials in the two sentences in (7.63) seem to contradict what I suggest. [Examples from Y-S Lee (1995)]

(7.63) a. pamsay i chayk-iilk-ki elyew-ess-ta
all night long this book-NOM read-CMPL difficult-PST-DEC
'All night long, this book was difficult to read.'

b. pamsay i chayk-ul ilk-ki elyew-ess-ta
`all night long this book-ACC read-CMPL difficult-PST-DEC
'It was difficult to read this book all night.'

As shown in the glosses, the scope of adverbials are different depending on the case marker on the theme NP. In (7.63a) the scope should be the matrix clause, while in (7.63b) it should be the embedded core. These might mean that in (7.63a) the two verbal units, *ilk* 'read' and *elyep* 'be difficult', should act as a single unit (i.e., a nuclear juncture) with respect to the time adverb. On the other hand, in (7.63b) the two verbal units act as two different units with respect to the time adverb. However, it does not seem to be related to the juncture types, since the adverbial is sensitive to the status of the adjacent NP so that when the adjacent element is one of the elements of the matrix core, then it should be a matrix periphery. On the other hand, when it is one of the elements of the embedded core, then it should be an embedded periphery. When the adverbial is moved to the right before the predicate *eleyew* 'be difficult', then there is no difference in the scope of adverbials.

Chapter 8. Semantic Case and Pragmatic Case: Evidence from the Acquisition of Case Marking in Korean

The purpose of this chapter is to point out some problems with the previous analyses of the development of case marking in Korean children and to provide an alternative analysis of this development based on the following Role and Reference Grammar [RRG] assumptions: i) 'A syntax-semantics interface approach' rather than a syntactic or a semantic approach. ii) case marking rules which are not directly related to grammatical relations (or, structural dependencies), but are determined by macroroles and focus structures in RRG. I argue that the notions of semantic and pragmatic case are needed for the explanation of G-H Chung's (1994) data. I explore the question of how semantic and pragmatic cases emerge and are utilized.

8.1. RRG Assumptions about Language (and Case) Acquisition

8.1.1. Syntactic vs. Semantic Approaches to Language Acquisition

As pointed out by Braine (1992: 78), there is a long-standing conflict between theoretical approaches to language acquisition that assume that the child has innate syntactic knowledge, and approaches that assume that all primitives are semantic or cognitive. Braine (1992) refer to these, respectively, as syntactic and semantic theories. Braine (1992: 78) describes the syntactic position as follows: 'The syntactic position is that a substantial set of syntactic categories and relations is innate. Thus, the child does not 'acquire' syntactic categories; rather, he or she discovers instances of syntactic categories that they already possess in the input, and the first rules they acquire refer to these categories.' In contrast, the semantic approaches do not posit any innate syntactic categories; the child initially acquires rules that map elements of a semantic representation into positions in the surface structure . For instance, Schlesinger (1982) assumes that at some early point children have an agent-action sentence schema; he proposes that this schema is used to analyze novel NP-VP sequences even though these may not strictly be agent-action verbs.

RRG seems to be classified as a kind of syntax-semantics interface approach, because RRG exploits both the syntactic structure called the Layered Structure of the Clause [LSC] and the semantic structure called Logical Structures [LS]. According to Van Valin (1993a: 7), the RRG conception of the LSC is a semantically-based theory of non-relational syntactic structure; that is, the fundamental units in the hierarchical organization of sentences and clauses are semantically motivated by the contrast between predicate and argument, on the one hand, and that between argument-like entities which are

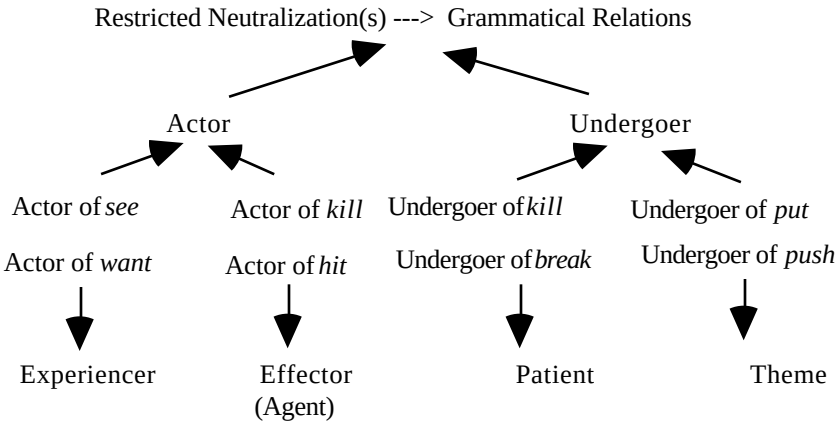
related to the predicate and those that are not, on the other. These units are syntactic units. However, syntax is not autonomous.

8.1.2. Grammatical Relations in Language Acquisition

According to Van Valin (1990d), the RRG theory of semantic relations and grammatical relations has a number of implications for language acquisition and the analysis of child language. It makes possible alternative developmental sequences for the acquisition of grammatical relations, as in Figure 1.

(8.1) Potential Developmental Sequences for Semantic Roles and Grammatical Relations
(Adapted from Van Valin (1990d)

(1) Thematic Relations ---> Semantic Bootstrapping ---> Grammatical Relations
(2) Thematic Relations---> Semantic Extension/Assimilation --> Grammatical Relations
(3) a. Macroroles ---> Grammatical Relations (via restricted neutralizations)
Macroroles ---> Thematic Relations (via generalization across classes of verbs)



b. Modified version of (2) above
Thematic Relations ---> Macroroles
Macroroles ---> Grammatical Relations (via restricted neutralizations)

The first two sequences assume that thematic relations are linked directly to grammatical relations. Sequence (1) in (8.1) is associated with Pinker (1984, 1987) and assumes grammatical relations to be a part of the child's innate endowment; this assumption is dubious, and this calls the bootstrapping scheme into question. Sequence (2) in (8.1) is proposed by Schlesinger (1982, 1988), and while it does not posit an innate set of grammatical relations, it does not seriously address the problems raised by the diversity of grammatical relation systems in human languages; in particular, there are numerous languages in which subject cannot be generalized from agent.

As pointed out by Van Valin (1990), the contrast between thematic relations and macroroles affords a new possibility which is presented in sequence (3a) in (8.1): the child's entry into the system is at the level of macroroles. This is the recognition of the basic contrast between doer of the action and non-doer of action, which, in the prototypical case, is affected by the action. In a similar vein, Braine and Hardy (1982) argue that there is no evidence for a grammatical relation 'subject' in early child language and that the relevant relation is not a specific thematic relation 'agent' but rather a more general semantic relation of 'actor', which is very close to the macrorole actor.

According to the assumptions of RRG, grammatical relations are established by the direct mapping of arguments into syntactic representations as defined by the actor-undergoer hierarchy. RRG assumes that grammatical relations cannot simply be taken as universal and innate; rather, given the variation in grammatical relations across languages, they must be learned, and the child must sort out the relative contributions of semantic relations and discourse-pragmatic factors to the constitution of grammatical relations in the language being learned. As pointed out by Rispoli (1991: 526), 'RRG recognizes not only semantic motivations for grammatical relations, but also pragmatic motivations.'

8.1.3. Case Marking and Acquisition

Case systems in RRG are sets of structures motivated by macrorole assignment, which are dependent upon lexical semantics (Foley and Van Valin (1984), Van Valin (1993a)). As Rispoli (1991: 526) points out, case systems come in three major varieties: nominative/accusative, ergative/absolutive, and active/stative. Case systems all have one characteristic in common. In multiple argument accomplishment predicates, actors and undergoers are treated as different roles. Nominative, ergative and active cases encode actors, while accusative, absolutive and stative cases encode undergoers. Each of the case systems orients single argument predicates differently; the implications of these different orientations are well-discussed in the language acquisition literature (e.g., Bowerman (1985)). Single arguments in nominative/accusative languages receive nominative case, and in ergative/absolutive languages they receive absolutive case.

I follow B-S Yang's (1994) case marking rules in Korean in (4.2), repeated in (8.2).

(8.2) Case Marking Rules for Korean (Semantic Case)
a. The highest ranking macrorole takes NOMINATIVE case.
b. The other macrorole argument takes ACCUSATIVE case.
c. Non-macrorole arguments take DATIVE as their default case.

In this chapter, I also employ a distinction between semantic vs. pragmatic case, which was proposed in Chapter 4.

8.2. Data and Discussion

8.2.1. Previous Studies and Their Problems

In this section I review previous approaches to the acquisition of Korean case marking. Previous approaches appeal to i) structural dependency and ii) word order and case tier. The former relies on structural dependencies such as syntactic categories (for example, IV, TV, etc.), while the latter does not.

8.2.1.1. O'Grady's (1991a) *Structural Dependency* Model

O'Grady (1991a) proposes a plausible scenario of the acquisition of Korean case markers, which is based on structural dependencies. The acquisition mechanism that he puts forward contains three subcomponents: a hypothesis-formation module, a propositional module, and a computational module. The hypothesis-formation module is responsible for the construction of the categories and principles that make up the grammar. Its operations consist of learning strategies that are independently manifested outside the linguistic domain. Foremost among these is classification (the assignment of entities to larger classes on the basis of shared properties) and generalization. He assumes that the major learning procedure underlying the acquisition of the Korean case marker conventions is generalization.[76] He assumes that hypothesis formation during language acquisition is constrained by the following principle.

(8.3) The Conservatism Law
The language acquisition mechanism makes use of the available grammatical notions to construct the most conservative hypothesis consistent with experience.

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[76] The conventions are as follows:

i) The nominative case marks an NP that combines with an IV category.
ii) The accusative case marks an NP that combines with a (T)TV category.
iii) The genitive case marks an NP that combines with an N category.
iv) The dative postposition marks a nonterm bearing a verb-determined thematic role.

A crucial property of these conventions is that they are 'structure-dependent' in the sense that they encode combinatorial relations rather than, say, linear order or semantic contrasts.

The second component of the acquisition mechanism O'Grady proposes, the propositional module, provides a means to represent propositions in an inborn 'language of thought' which he calls semantic form. He assumes that semantic form must be at least rich enough to represent relationships involving predicates. He depicts the semantic form (8.5) for the sentence (8.4).

(8.4) ai-ka chayk-ul ilk-ess-ta
child-NOM book-ACC read-PST-DEC
'The child read the book.'

(8.5)

PRED:	ilk 'read' (actor, theme)
TENSE:	past
actor	[PRED: ai 'child']
theme	[PRED: chayk 'book']

These representations contain no syntactic categories per se, but they do include the information needed to classify words into IV, TV, and NP categories. Although the semantic forms produced by the propositional module are not themselves syntactic representations and contain no syntactic categories, they provide the basis for the ontogeny of a number of crucial syntactic contrasts. According to O'Grady, knowledge of the categorial and thematic properties of words is not in itself sufficient for sentence formation. Two more principles are needed for the propositional module as in (8.6) and (8.7).

(8.6) The Completeness Requirement
All dependencies must be satisfied.

(8.7) The Dependency Requirement
Every combinatorial operation must satisfy a dependency.

The third component of the acquisition mechanism he proposes, the computational module, is concerned with the formation of structural representations. He proposes that the computational module have at least the following properties.

(8.8) binarity: its operations apply to pairs of elements

recursivity: its operations apply iteratively, so that there is no limit on the complexity or length of the structures they can form.

inheritance: operations that do not apply at one level are carried over until the next.

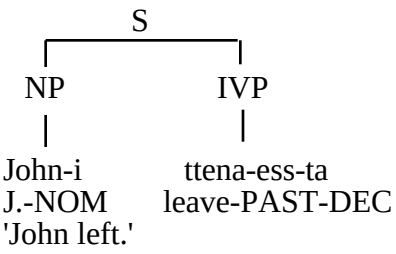
This said, O'Grady shows the manner in which the case conventions themselves emerge. First, let us look at the conventions for the nominative and accusative suffixes.

(8.9) John-i ttena-ess-ta
J.-NOM leave-PST-DEC
'John left.'

(8.10) John-i chayk-ul ilk-ess-ta
J.-NOM book-ACC read-PST-DEC
'John is reading the book.'

O'Grady (1991a) assumes that children will assign these utterances the structures in (8.11) under the assumption that they have acquired the rudimentary sentence-building system.

(8.11) a.



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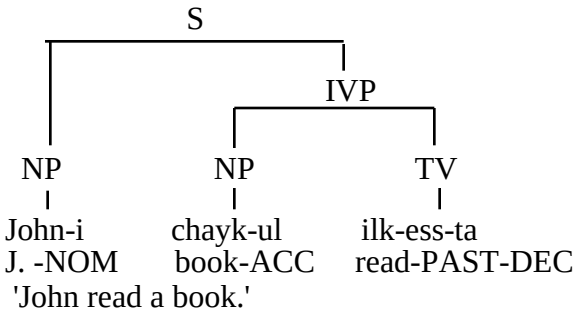

Assuming compliance with the Conservatism Law and exploitation of the notions NP, IV, TV and so on, children should formulate the following initial generalizations about the suffixes in (8.11a) and (8.11b).

(8.12) Nominative case marks a term NP that combines with an IV category.
Accusative case marks a term NP that combines with a TV category.

The table in (8.13) summarizes the modular acquisition device that he has been outlining.

(8.13) The Acquisition Device

MODULES	CONTENT / FUNCTION
Hypothesis formation	generalization, classification, Conservatism Law

Propositional	semantic form, distinction among predicates, arguments, and modifiers, the Completeness and Dependency Requirements
Computational	binary, recursivity, inheritance

O'Grady's (1991a) approach is an hypothesis which is not based on the empirical acquisition data so that empirical data are needed to support the hypothesis. Moreover, his account strictly depends on structural dependency. However, note Clancy's (1989) case study which focuses on the acquisition of one linguistic subsystem, wh-questions in Korean. Clancy (1989) analyzes the process of wh-question acquisition in two young Korean children and argues for a model of language socialization in which linguistic forms and functions serve as a vehicle for the transmission of social knowledge, and clarify the roles of culture, family, and child in this process. I suggest that the same kind of language socialization applies to the acquisition of case marking in Korean. My study here tries to provide both structural and functional accounts of Korean case markings which are based on empirical data.

8.2.1.2. Chung's (1994) observations

G-H Chung (1994) proposes that Korean cases are associated with the argument tier, which consists of EXT(ernal argument) and INT(ernal arguments), by revising the case-tier theory of Yip et al (1987). Cases are associated with the argument tier rather than the phrase-structure tier. (8.14) shows elements of the two tiers involved in case-marking in Korean.

(8.14) Two tiers in case-marking in Korean (G-H Chung (1994: 28))

Argument Tier:	EXT(ernal)	INT(ernal)
Case Tier:	NOM	ACC

The argument tier has two elements: EXT and INT. The element EXT has only one NP, while the element, INT, may contain more than one NP. This is shown in (8.15)

(8.15) EXT: {x}
INT: {y, z, ...}

According to Chung, the elements in the case tier, NOM and ACC, are associated with those in the argument tier: NOM is associated with the first available element in the argument tier, whether it is EXT or INT. The association between two tiers is one-to-one from left to

right without crossing lines. Let us consider the two types of psychological verbs in Korean.

(8.16) a. nay-ka ku nolay-ka coh-ta
I-NOM the song-NOM be likable-DEC
'I like the song.'
b. nay-ka ku nolay-lul coh-e-ha-n-ta
I-NOM the song-ACC be likable-CONN-do-PRE-DEC
'I like the song.'

She provides ad hoc and unmotivated analysis that the sentence in (8.16a) has no external argument. According to her, the sentence (8.16b) has external arguments. The two types of psych-verbs differ in the externality of the experiencer arguments. The arguments in (8.16a) receive cases as in (8.17)[77]:

(8.17) Argument tier: INT
|
Case tier: NOM ACC

On the other hand, the association of case with the argument tier of non-stative psych-verbs as in (8.16b) is shown in (8.18):

(8.18) Argument tier: EXT INT
| |
Case tier: NOM ACC

The experiencers of the non-stative psych-verbs are associated with nominative, since they are external arguments, and their themes with accusative, since they are internal.

Chung (1994: 56) presents the following developmental sequence for case-marking in Korean by examining the nature of errors in case marking in (8.19).

(8.19) Stage I: Nominative *ka* only is produced: two-word stage
Stage II: Nominative *ka* is overextended to all NPs
Stage III: Nominative *ka* is assigned to the first NP and accusative *lul* to the second NP in a sentence.
Stage IV: Adult-like case system is acquired with occasional errors.

According to Chung (1994: 162), the younger children (in Stage I and II) relied on a word order strategy, while the oldest children (in Stage IV) relied on case-marking in comprehension experiments. The middle group (in Stage III) used the word order strategy

[77] There is no one-to-one convention between the two tiers.

along with case-marking. Chung suggests the following acquisition sequence as in (8.20) in the comprehension strategies employed by Korean-speaking children as in (8.19):

(8.20) Three steps in the acquisition (Chung (1994: 163))

word order	--->	word order and case markers	---->	case markers
(Groups I and II)		(Group III)		(Group IV)

Based on the developmental sequence of case-marking and children's systematic errors in case-marking, Chung proposes a case tier account of these stages.

Chung's case tier account is problematic for the following reasons: (i) her definition of internal and external arguments, based on Williams (1981), is not clear; for example, internal arguments are defined as any arguments that are not external arguments. (ii) the notions of internal and external arguments are based on the X-bar schema, assuming a VP as in English. As Van Valin (1993a) has pointed out, the claim that a language has a VP node is not always justifiable, especially for non-configurational languages like Korean. (iii) As argued by O'Grady (1987), by assigning case a minimal functional load, this account fails to provide much insight into the question of why case plays such an important role in Korean and in many other languages.

8.2.2. Grammatical Relations and Case Markers

I propose that the acquisition of Korean case marking should not be explained by grammatical relations. It seems that clues of VP category or grammatical relations are **not** detected in any stage of acquisition. At Stage I, for instance, children **only** produced NOM marking and used NOM *ka* with much less frequency than did their caretakers. At Stage II, only NOM is produced and extended to all NPs. Chung (1994: 64) argues that the overt case-marking tendency at this stage seems to cause overextension of the NOM *ka* to 'non-subject' NPs: the children used the NOM *ka* instead of the ACC *lul* , dative *hanthey* , genitive *uy* , and comitative *hako* . Examples are given in (8.21) and (8.22).

(8.21) a. M: cwussumasi-ess-e ?
juice drink-PST-QS
'Did (you) drink juice ?'

b. C: cwussu-**ka** [lul] masi-ess-e
juice-NOM drink-PST-DC
'(I) drank juice.' (H, 1;9)

(8.22) a. A: i ke nwu-kasacwu-ess-e ?
this thing who-NOM buy-PST-QS
'Who bought this (for you) ?'

b. C: emma-ka
mommy-NOM

'Mommy'

c. A: emma-ka nwukwu-hanthey sacwu-ess-e ?
mommy-NOM who-DAT buy-PST-QS
'For whom did mommy buy (it) ?'

d. C: Minjae-**ka** [hanthey]
Minjae-NOM
'Minjae' (MJ, 2;3)

As shown in the examples in (8.21) and (8.22), the children overextended this NOM marker to all NPs regardless of grammatical relations. The NPs with which the children in (8.21) and (8.22) responded are all narrow focus NPs.

When we look at Stage III, the children are argued by Chung to still use positional strategy by attaching *ka* to the first NP and *lul* to the second NP. According to Chung (1994: 78), at this stage, the children seemed to produce the nominative-accusative markers as an ordered pair. That is, they used it with the object NP if and only if the object occurred at the second position in a sentence with an overt subject. The types of sentences in (8.23) are not observed at this stage:

(8.23) Not observed:

a. kong-ul Hyucki-ka tenci-e
ball-ACC Hyuck-NOM throw-DC
'Hyuck throws a ball.'

b. cwuss-lul masi-e
juice-ACC drink-DC
'(Somebody) is drinking juice.'

On occasion, when the object occurred at the beginning of a sentence for pragmatic reasons, the children did not produce *lul* , as in (8.24).

(8.24) a. C: i ke kicha-i-ya. kicha appa-ka
this thing train-be-DC train daddy-NOM
tha-ess-e
ride-PST-DC
'This is a train. The train daddy rode.' (H, 2;0)

b. C: cacenke emma-ka sacwu-ess-e
bicycle mommy-NOM buy-PST-DC
'Mommy bought (me) a bicycle.'

The children might front an object NP, which carries old information, to the beginning of a sentence. In this case, they did not mark the object with *lul* .

8.2.3. Case Templates in Stage I, II, and III

I have claimed that case markings are not determined by grammatical relations in each stage. We are left with the following question: How are the case markings determined in the first three stages of acquisition? One plausible description would be in terms of case templates based on word ordering. In Stage I or II, the case marking is still affected by the position of NPs, because the first element should be actor rather than undergoer. However, the difference between Stage I or II and III is that the former is dominated by the case template NOM-(NOM)-V, while the latter is dominated by the case template NOM-ACC-V.

A way to account for Stage I would be to claim that the data at the stage strictly follow the semantic case marking rules in Korean. Only one argument in a sentence is assigned NOM because it is the very highest ranking macrorole. As pointed out by Van Valin (p.c.), the problem with the account is that it can't account for Stage II: if children have the Actor-Undergoer Hierarchy and case marking rules at Stage I, then there is no reason for them to overgeneralize *ka* at Stage II. Hence, the hypothesis will not work. The other explanation is to assume that *ka* starts off as a focus marker, and Korean children follow the tendency to omit old information and to give only new information. The following advantage results from this assumption: the overextension of *ka* in Stage II follows naturally, when it is assumed that the marker *ka* is overextended to all focal NPs. The examples in (8.16) and (8.17) clearly show that the NPs marked with *ka* are all focal NPs. On the other hand, Chung (1994: 72) states the reason why the children overextended the NOM *ka* to all NPs as follows:

> One possibility is that they [children] know that an NP is usually followed by a particle and the NP and the particle make a unit, but they might not know which particle to use in the contexts of accusative, dative, genitive, and comitative. At this stage, the children had produced neither the accusative marker *lul* , the dative marker *hanthey* , the comitative marker *hako* , nor the genitive *uy* . Thus, they might overextend the nominative *ka* to the contexts of dative, accusative, genitive, etc. That is, they might use *ka* after any NP as a position-holder.

As Chung suggests, the children at this stage may be aware of NP structures consisting of an NP followed by a particle. (NOM marker or delimiter,[78] but not ACC, DAT, GEN etc.) Chung claims that the NOM is overextended to other NPs in the contexts of DAT, ACC, LOC, etc. because other particles are not acquired at this stage. To the contrary, Choi's (1993) study shows that the LOC, for instance, *ey* (for goal arguments) are acquired at a

[78] According to Kim (in press), the delimiting particle *to* 'also' emerges very early, too, at around the same time as the emergence of *ka* .

similar stage as the NOM *ka* .[79] Hence, it seems more plausible to say that the NP structure (NP + particle) serves to clarify the pragmatic function (i.e., focus) which NPs mark, while bare NPs are used when they are 'given'. Some more examples showing the focal NPs with *ka* marking at Stage II are in (8.25) and (8.26). (Chung (1994: 69-70))

(8.25) a. M: ne ilum-i nwue-ci ?
you name-NOM what-QS
'What is your name ?'
b. H: Hyucki.
c. M: emma ilum-un ?
mommy name-TOP
'(What is) your mom's name ?'
d. H: (murmuring)
e. M: Hyuckiemma-ya
Hyuck mommy-DC
'(It) is Hyuck's mommy.'
f. H: Hyucki-**ka** [Ø] emma-ci
Hyuck-NOM mommy-DC
'(It) is Hyuck's mommy.' (H, 1; 10)

(8.26) C: (Looking at two frogs in a book, one is big and the other is small)
appa keykwuli-ka hyengakeykwuli-**ka** [hako]
daddy frog-NOM brotherfrog-NOM
nonunke-ya
play-DC
'Daddy frog is playing with the little frog.' (MJ, 2;4)

At Stage III, the ACC starts to be used. In the previous section, I have mentioned that the ACC marker in Stage III might involve a pragmatic function indicating pragmatic focus. However, the template NOM-ACC-V in Stage III is accounted for by the semantic case marking rules in Korean. That is, at this stage, children can correctly assign NOM and ACC by the case marking rules, unless a sentence violates Actor-Undergoer ordering. However, it should be noted that the children (H and MJ) consistently omit the ACC markers when the NP carries old information (for example, when it is 'fronted'). It seems that at Stage III, the ACC marker comes in as a semantic case with pragmatic function, forcing a semantic interpretation of NOM. Semantic case is possible only when there is a semantic opposition to be signaled. So semantic NOM can only exist if there is semantic ACC. NOM markers in stage III are not merely used as pragmatic focus markers any longer. They signal a semantic opposition.

However, it should be noted that word order is very important in the assignment of case marking rules in Korean. The children at Stages I, II, and III rely much on the word

[79] For example, Choi's (1993) subjects, HS and WJ, produced the LOC *-ey(ta)* at the age of 1;11 and 1;9, respectively.

order. Children at Stage IV rely on case markers rather than word order. It should be also noted that the distinction between animacy and inanimacy is acquired early in the child's language development (cf. Choi (1993: 214)).[80]

8.2.4. Pragmatic Motivation and Its Realization

As suggested in the previous sections, pragmatic distinctions are signaled by case marking from the very early stages of Korean acquisition: the NOM, for example, realizes the NP which carries focus. With the acquisition of semantic case at Stage III or IV, children need to learn the adult way of marking pragmatic motivations by using pragmatic slot notions. Let us consider the tables in (8.27) and (8.28).

(8.27) Frequency of word order use by H (Adapted from G-H Chung (1994))

Word Order	Stage I (1;8)	Stage II (1;10)	Stage III (2;0)	Stage IV (2;4)
SOV	1 (1%)	10 (5%)	15 (7%)	24 (13%)
OSV		1 (0%)	1 (1%)	2 (1%)
OVS				
SVO				
VSO				
VOS				
SV[a]	12 (14%)	14 (7%)	8 (4%)	8 (4%)
OV	26 (30%)	78 (38%)	64 (31%)	42 (22%)
VS[a]				1 (1%)
VO				
SV(I)[a]	48 (55%)	104 (50%)	118 (57%)	110 (58%)
VS(I)[a]				2 (1%)

* [a] SV or VS indicates the instances where transitive verbs are used with objects omitted, and SV(I) or VS(I) denotes sentences where intransitive verbs are used.

(8.28) Frequency of word order use by MJ (Adapted from G-H Chung (1994))

Word Order	Stage I (1;8)	Stage II (1;10)	Stage III (2;0)	Stage IV (2;4)

[80] According to Choi (1993), the four locative forms are developed in the following sequence:

-EY (Goal, Location] > -EYTA (Goal) > EYSE (Source, Location], HANTHEY (Goal, Location, IO)

The two case markers for goal, -EY and -HANTHEY, for instance, make a distinction between animacy and inanimacy of the noun: -EY is used when the goal argument is an inanimate object, whereas -HANTHEY is used when it is an animate being. Choi's (1993) data show that the distinction is clearly grasped by children learning Korean from the beginning.

SOV		12 (11%)	20 (14%)	34 (20%)
OSV			2 (1%)	5 (3%)
OVS				1 (1%)
SVO			1 (1%)	
VSO				
VOS				
SV[a]		7 (7%)	11 (8%)	11 (6%)
OV	12 (30%)	13 (12%)	26 (18%)	21 (12%)
VS[a]				
VO				
SV(I)[a]	28 (70%)	72 (69%)	84 (58%)	101 (58%)
VS(I)[a]		1 (1%)		1 (1%)

The above tables show that in Stage I and II, children rarely deviate from the canonical word order, resulting in little scrambling. In Stage III, H deviates from the word order by 1%, while MJ deviates from it by 2%. (in Stage IV, H (3%), MJ (5%)). From this observation, it should be argued that at least in Stage IV, scrambling begins because of pragmatic needs. That is, these scrambling structures arise once the child has acquired the semantic case marking system and needs to find a new strategy for marking focus.

G-H Chung (1994) argues that two constructions are relevant in the acquisition of scrambling: 'topicalization' and 'postverbal emphatic repetition'. I suggest that scrambling phenomena ('preposing' and 'postposing') in Korean can be accounted for by the 'Layered Structure of Clause [LSC]' in RRG. 'Preposing' realizes the pragmatic slot 'Left-Detached Position [LDP]' in the LSC, while 'postposing' realizes the pragmatic slot 'Post-Core Slot [PCS]'. First, consider preposing. According to Kim (in press), the topic marker *-(n)un* emerges as much as several months later than the NOM marker (NOM: between 1;8- 2;0), and that ACC marker *-lul* was acquired even later. The topic marker and the preposing emerges during nearly the same time span of acquisition (around 2;0 or a little later). In the utterance in (8.29), the children fronted the 'object' NPs which are the 'old information', *kicha* 'train' and *cacenke* 'bicycle', before the 'subjects', without the topic marker.

(8.29) a. C: i ke kicha-ya. kicha appa-ka ta-ess-e
this thing train-DC train daddy-NOM ride-PST-DC
'This is a train. The train daddy rode.' (H, 2;0)

b. C: Minjae-to cacenke tha-ess-e.

Minjae-DEL bicycle ride-PST-DC
cacenke emma-ka sacwu-ess-e
bicycle mommy-NOM buy-PST-DC
'Minjae rode a bicycle, too. The bicycle, Mommy bought it (for me).' (MJ, 2;6)

Second, consider postposing. According to Chung, this is common in the mother's speech, as well as in the children's speech. The children frequently repeated preverbal elements after verbs, yielding SOVS and SOVO strings as in (8.30). The children repeated 'subject' or 'object' after the verb, seemingly to emphasize the NP.[81]

(8.30) = Chung's (35)

a. pi-ka o-ess-e pi-ka. (SVS)
rain-NOM come-PST-DC rain-NOM
'It rained.' (H, 2;4)

b. emma-ka caenke sao-ess-e emma-ka (SOVS)
mommy-NOM bicycle buy-PST-DC mother-NOM
'Mommy bought a bicycle.' (MJ, 2;7)

c. nwuna-ka kkos-ul tta-ko.iss-e (SOVO)
sister-NOM flower-ACC pick up-CONT-DC
kkos-ul
flower-ACC
'The girl is picking up a flower.' (H, 2;4)

d. chayk-ul po-a chayk-ul (OVO)
book-ACC see-DC book-ACC
'(He) is reading a book.' (H, 2;4)

These postverbal elements after the verb in the canonical word order S-O-V seem to correspond to PCS [Post-core Slot] elements, because they seem to be emphasized (i.e., focused).[82]

[81] As pointed out by Chung (1994), this postposing might play a role as a bridge in transferring from the canonical word order to the scrambled word order as follows.

	1		2		3
a.	SOV	------>	S1OVS2	--->	OVS2
b.	SOV	------>	SO1VO2	--->	SVO2

However, I do not have any definite suspect for the hypothesis.

[82] Fuji (1991) claims that the phenomenon of postposing in Japanese could be classified into three types as follows: (i) The speaker produces a pragmatically focused part before the non/less focused part; namely, the postposed element. (ii) The speaker places the postposed element to add necessary information which (s)he has mistakenly dropped and to rectify the ambiguity caused by the ellipsis. (iii) The speaker adds contextually redundant information by the postposed element in order to (a) confirm the already-known referent or (b) get the hearer's attention to the already-known referent. (cited from Shimojo (1994))

8.3. Concluding Remarks

From the above discussions, we get the following generalizations. First, the acquisition of Korean case marking need not be explained by grammatical relations. One way of describing Chung's Stage I, II or III would be in terms of case templates with word order involving semantic vs. pragmatic case distinction. The following RRG account can be given for the case templates with word order as follows: If we assume that *ka* starts off as a focus marker [i.e., as pragmatic case], and Korean children follow the tendency to omit 'old information' and to give only 'new information', then the overextension of *ka* in Stage II follows naturally. At Stage III, the ACC marker comes in as a semantic undergoer marker, forcing a semantic interpretation of NOM marker. In Stage IV the children have to reconcile the semantic function of *ka* and *ul* with their pragmatic uses. This leads them to vary the word order to express pragmatic contrasts.

Second, pragmatic motivations are marked with pragmatic case notions, but with the acquisition of adult-like case system (i.e., the acquisition of macrorole-based semantic case) the pragmatic motivations are also indicated by pragmatic slot notions such as 'preposing' or 'postposing'. Those pragmatic slots correspond to LDP and PCS in RRG.

Chapter 9. Conclusion

As stated at the introduction, the major objective of this thesis has been to investigate how case marking is determined in Korean. In this thesis, adult and child grammars in Korean have been described to achieve the objective. The suggestions I have made and defended in this thesis are the following: i) RRG provides the fundamental answers to the recurring problems of Korean case marking, ii) the distinction between semantic case vs. pragmatic case is needed to account for Korean case marking.

In Chapter 3, Korean 'grammatical relations' is analyzed. I have shown that 'semantic' and 'pragmatic' relations themselves should be used for controlling case marking in Korean. It has been proposed that there are two syntactic pivots in Korean: semantic pivots controlling clause-internal processes like honorification and reflexivization and pragmatic pivots controlling cross-clausal grammatical processes. The following pivot choice hierarchy in Korean has been proposed.

(9.1) The Accessibility to Pivot Choice Hierarchy
[semantic pivot]
i) The highest ranking animate case holder with respect to the Actor end of the Actor-Undergoer Hierarchy, regardless of whether it is a macrorole or not, is the pivot for clause-internal processes like honorification and reflexivization.
ii) if the animate pivot candidate is not a direct core argument, there must be a whole-part (or 'metonymic') relation between the candidate and the direct core argument.
[pragmatic pivot]
The NP representing the center of attention [i.e., thematic] is the pivot for cross-clausal grammatical processes like *myense* -construction control and subject-to-object raising.

In Chapter 4, I have described the distinction between semantic case and pragmatic case, and have provided the characteristics of pragmatic case. By semantic case, I have meant case which has semantic content. In this thesis, I have employed B-S Yang's (1994) semantic case marking rules in Korean.

(9.2) Case Marking Rules for Korean (Semantic Case)
a. Highest ranking macrorole takes NOMINATIVE case.
b. The other macrorole argument takes ACCUSATIVE case.
c. Non-macrorole arguments take DATIVE as their default case.

By pragmatic case, I have meant the use of Nominative or Accusative case, which is not directly derived from the Case Marking Rules, but determined by the pragmatic context. Pragmatic case in Korean has been argued to involve the following characteristics: i) it is not restricted to an argument, unlike semantic case, ii) a pragmatic case is permitted in the

environment where case alternation or case stacking occurs (except for adverbials), iii) the NP involving pragmatic case tends to function as a pivot in syntactic agreement in cross-clausal grammatical processes like control in *myense* construction, and so on.

In Chapter 5, I have investigated the interaction between information structure and case marking. Some double nominative constructions such as 'stative psych verb construction', 'locative NOM construction', 'alienable possessor ascension construction', and 'type' and 'class' construction has been argued to involve pragmatic NOM case in them. In addition to those constructions, some double accusative constructions such as 'causative verb' construction and *cwu* 'give'-type construction have been argued to involve pragmatic ACC case in them. On the other hand, double nominative (or accusative) 'inalienable possessor' constructionswere argued to only involve semantic case.

In Chapter 6, I have discussed the interaction between Aktionsart/transitivity and case marking. The ACC markers on the locative and frequency adverbial nominals and on the verbal noun in the HA construction have been argued to involve semantic case resulting from accomplishment semantics. In particular, I have claimed that the case marker *ul/lul* in the locative nominals correlates with the Hopper/Thomson notion of transitivity, and that the ACC marker on the verbal noun in the HA construction correlates with juncture-nexus type.

In Chapter 7, I have discussed the case marking pattern of clauses involving NP-level and clausal-level juncture-nexus. This chapter has shown how juncture-nexus types and other factors interact with each other with respect to case marking. In section 7.1., I have argued that in phrasal comparatives in Korean, the 'head' NP should be the second NP and that case matching examples follow from the semantic case marking rules and NP structures in Korean. In section 7.2., I have argued that the 'control' and periphrastic causative constructions involve core subordination without regard to case marking, while the 'raising' construction involves clausal subordination without regard to case marking. It has been suggested that NOM, DAT, or ACC case markings in the constructions should be explained in terms of semantic case which is predicted from their LSCs and LSs. In section 7.3., I have discussed NOM/ACC alternation in *siph* construction and tough construction in Korean. I have shown that the alternation is predicted from the difference in juncture-nexus and the LSC. The NOM version of the *siph* construction involves nuclear co(sub)ordination, while the ACC version involves core cosubordination. On the other hand, both the NOM and the ACC version of the tough construction in Korean involves core subordination, but the status of experiencer NPs in the two types of sentences is different in LSCs.

In Chapter 8, I have applied the semantic vs. pragmatic case distinction and other RRG notions to Korean first language acquisition data. I have suggested that the

acquisition of Korean case marking need not be explained by grammatical relations. I have also claimed that the case marking data should be explained in terms of case templates with word order involving the semantic vs. pragmatic case distinction. The following RRG account has been given for the case templates with word order: If we assume that *ka* starts off as a focus marker [i.e., as pragmatic case], and Korean children follow the tendency to omit 'old information' and to give only 'new information', then the overextension of *ka* in Stage II follows naturally. At Stage III, the ACC marker comes in as a semantic undergoer marker, forcing a semantic interpretation of the NOM marker. In Stage IV children have to reconcile the semantic function of *ka* and *ul* with their pragmatic uses. This leads them to vary the word order to express pragmatic contrasts.

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