Korean Causatives in Role and Reference Grammar

by

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I. Introduction

1. Scope and Purposes of this Study

The purpose of this paper is to present the Role and Reference Grammar [RRG] framework and to explore various theoretical issues raised in RRG by investigating Korean causative constructions. There has been much discussion of Korean causatives from different perspectives among grammarians: S. Song (1988) from the perspective of interpretive semantics; O'Grady (1991) from his own Categorial Grammar perspective; Gerdts (1990) and Cho (1987) from Relational Grammar (RelG) perspective; J. Song(1988) from Role and Reference Grammar (RRG) perspective; H. Lee (1985) from the perspective presented in Givon (1980) and Haiman (1983); K. Park (1988) from Marantz's theory; Y. Park (1991) and Ahn (1990) from Government and Binding approach. All of the approaches are directed towards how the case alternations in Korean causative constructions can be analyzed, and whether the "surface structures" have biclausal properties. Many approaches rely on some kind of abstract syntactic underlying form. RRG differs from other theories of syntax in terms of its technical features. RRG takes language to be a system of communicative social action, and accordingly, analyzing the communicative functions of grammatical structures plays a vital role in grammatical description and theory from this perspective. In this paper, I assume the view of language as a system of communicative social action.

In section II, I will classify the Korean lexical causatives in terms of the theory of Verb Classes proposed in RRG. I will argue that following language universals in verb classes, Korean lexical causatives should be classified as Accomplishment verbs, and that language-specifically, they do not involve the result implication observed in the Aktionsart. To reflect the language-specific property of Korean

lexical causatives, I will propose a modal operator '@' in the Logical Structure [LS] of Korean causatives with special reference to the result implication.

In section III, I will argue against Song (1988)'s claim that all the types of Korean periphrastic causatives involve core junctures.   The juncture-nexus types of Korean periphrastic causatives will also be presented.

In section IV,   I will deal with the issue of case alternations in Korean periphrastic causatives.   As pointed out in Patterson (1974), Korean causative sentences allow for a variety of case marked forms: *Nom-Nom* ,   *Nom-Dat* , and *Nom-Acc* .   Most approaches have relied on grammatical structures, such as "underlying and surface structures, mono- vs. bi-clausality".   The analyses have concentrated on the structural derivations of the case markings.   They do not show the correlation between form(the case markings) and function(their semantic and pragmatic functions).   To provide the reason what motivates the case alternations of the causees in (1),   I will argue that semantic and pragmatic motivations should be considered to account for the case alternations.

I will propose that the case alternations are due to the degree of *backgrounding* in the sense of Van Valin (1992).   That is, the *Nom-Nom* type involves the least backgrounding , while the Nom-Acc type involves the most.   It will also be argued that the difference in the degree of backgrounding results from the difference in juncture-nexus structures and macroroles in RRG.   It will be claimed that the causee of the Nom-Nom type is the Actor in core juncture, the causee of the Nom-Dat is the non-macrorole direct argument of nuclear juncture, and the causee of the Nom-Acc is the Undergoer in nuclear juncture.   We can take advantage of the correlation between 'form' and 'function' in terms of the RRG framework, given that the Actor involves the least backgrounding,   while the Undergoer involves the most.

Now, let us consider the following case alternations in Korean split intransitivity.

(1) Chelswu-nun   Swunhi-ka/eykey/lul   *solichi* -key   ha-ess-ta
        -Top   -Nom/Dat /Acc   cry-Com   do-Past-Dec[1]
    'Chelswu made Swunhi cry.'

(2) Chelswu-nun   Swunhi-*ka/*eykey/lul   *hwana* -key   ha-ess-ta
        -Top   -*Nom/*Dat/Acc   angry-Com   do-Past-Dec
    'Chelswu made Swunhi angry.'

Previous analyses do not account for why dative case marking is allowed in (1) but not in (2).   It will be argued that the case alternations of causees in embedded unaccusative verbs in Korean periphrastic causatives can be explained by the Actor-Undergoer parameter.   It will be argued that Undergoers in the embedded clause cannot receive nominative or dative case marking.

2. Types of Korean Causative Constructions

    Patterson (1974) divides Korean causatives into three classes: two explicit types that have surface manifestations of some sort to mark a causative construction and one implicit type without such an explicit marker. The first type is an explicit causative construction with the verb *ha* 'do, cause, make'; the complement sentence is marked with the complementizer *-key.*   The second type is the causative verb derived from suffixation of *-i* form on a non-causative predicate. The third type is an implicit construction involving verbs only semantically analyzable as causatives

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[1] The following abbreviations are used in this paper:
Nom: nominative	Acc: Acusative	Com: complementizer
Dec: declarative	Top: topic	Cau: causative
Dat: dative	Loc: locative	Dur: duration
Pre: present	PF: phonetic filler	Hon: honorific
Neg: negative	Pol: polite	Gen: genitive
Attri: attributive	Mod: modality	p.c: personal communication

Nom-Nom type: the periphrastic causative type which has the sequence Nom(causer)-Nom(causee)
Nom-Dat type: the periphrastic causative type which has the sequence Nom(causer)- Dat(causee)
Nom-Acc type: the periphrastic causative type which has the sequence Nom(causer)- Acc(causee)

but not involving any regular phonological relationship to non-causative verbs. Patterson (1974) refers to the first type as 'phrasal causatives', the second type as 'suffixal', and the third as 'lexical'[2]. S. Song(1988) claims that "because the existence of lexical causatives as Patterson defines them is highly suspect, I will dismiss her finer distinction altogether and claim that Korean causatives, whether periphrastic or lexical, are clearly marked either syntactically or morphologically." Following S. Song, I will combine Patterson's suffixal and lexical causatives together and call them lexical causatives, because in RRG both kinds of causatives do not involve juncture and nexus. I will refer to the two types of causatives as *periphrastic* and *lexical* , following S. Song. H. Lee (1985) posits the existence of another Korean causative type named *compound* causatives. According to him, compound causatives are made from compound verbs, which consist of an incorporated NP and a general verb *-ha* 'to do'. Causatives of these verbs are made by replacing *-ha* with a causative verb *-sikhita..* H. Lee (1985) gives the following examples.

(3)

    ku-nun   N.Y.-ey   ka-nun   kes-ul
    he-Top   N.Y-Loc   go-Attr   Com-Acc

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[2] Patterson (1974) gives the following examples for each type of Korean cuasative construction:

    i) phrsal causative construction
    Chelswu-ka   Yenghi-lul   us-key ha-ess-ta
           -Nom-Acc   laugh-Com   do-Past-Dec
    'Chelsu caused Yenghi to laugh.'   (Patterson's (1974) (13))
    ii) suffixal causative construction
    emeni-ka   Yenghi-eykey say-os-ul   ip-hi-ess-ta
    mother-Nom   -Dat   nwe-clothes-Acc   wear-Cau-Past-Dec
    'Mother caused Yenghi to wear the new clothes.' (Patterson's (1974) (14))
    iii) lexical causative construction
    emeni-ka   Yenghi-lul   ponay-ess-ta
    mother-Nom   -Acc   send-Past-Dec
    'Mother sent Yenghi.' (Patterson's (1974) (22))

tannyem   -ha   -ess   -ta
abandonment   do   Past   Dec
'He abandoned his going to N.Y.'

(4)

John-un   ku-lul N.Y.-ey   ka-nun   kes-ul
     -Top   he-Acc   -Loc   go-Attr   Com-Acc

tannyem   -sikhi   -ess   -ta
abandonment   -Cau   -Past   -Dec
' John made him abandon his going to N.Y.'

I think that it is possible to classify H. Lee's compound causatives into my lexical causatives, because they also do not involve juncture and nexus types in RRG, and should be treated in the morphology. However, for ease of description I do not want to include this type into my classification. Different terms have been used for two Korean causative types by several grammarians. I summarize the different terminologies for Type 1 (periphrastic causatives) and Type 2 (lexical causatives).

(5)

User	Type 1	Type 2
S. Song (1988)	periphrastic causative	lexical causative

O'Grady (1991)	syntactic causative	lexical causative
K.Park (1986)	periphrastic causative	morphological causative
D. Yang (1975)	'long-form' causative	'short-form' causative
B. Park (1972)	-ha causative	-i causative
H. Lee (1985)	analytic causative	morphological causative
Shibatani (1973)	periphrastic causative	lexical causative

2.1 Periphrastic causatives

Periphrastic causatives are formed by a causative verb *ha*, which literally means 'to do', with its complement verb inflected with resultative *-ke* complementation.

(6)
a. Chelswu-ka   o-ess-ta
        -Nom   come-Past-Dec
    'Chelswu came'

b. nay-ka   Chelswu-lul   o-key   ha-ess-ta
   I-Nom   -Acc   come-Comp   do-Past-Dec
    'I made Chelswu come'

(7)
a. Chelswu-ka   say   os-ul   ip-ess-ta
        -Nom   new clothes-Acc wear-Past-Dec
       'Chelswu wore the new clothes'

b. nay-ka   Chelswu-ka   say   os-ul   ip-key   ha-ess-ta
    I-Nom   -Nom   new clothes-Acc wear-Com   do-Past-Dec
       'I made Chelswu wear the new clothes'

As suggested in H. Lee (1985), periphrastic causatives in Korean are productive in the sense that we can form this type of causative with any verb, even already causativized verbs, that is, lexical causative verbs.

(8)
a. John-un   Bill-eykey   Tom-ul   cwuk-i -ke   ha-ess-ta
      -Top   -Dat   -Acc die-Cau-Com do-Past-Dec
   'John commanded Bill to kill Tom' (H. Lee's (13))

b. John-un   Bill-eykey   congi-ul   tay-wu -ke   ha-ess-ta
      -Top   -Dat   paper- Acc   burn(vi)-Cau-Com do-Past-Dec
   'John caused Bill to burn the paper'

c. John-un   Bill-eykey   ttal-ul   kyelhon-sikhi-ke   ha-ess-ta
      -Top   -Dat   daughter- Acc marriage-Cau-Com do-Past-Dec
   'John advised Bill to marry his daughter' (H. Lee's (14))

According to H. Lee, this construction can express many other manipulative actions, such as command, order, permission, etc. D. Yang (1984) also has mentioned that periphrastic causatives have secondary functions such as directing, advising, and permitting while lexical causatives involve only direct causation.

2.2 Lexical Causatives

   The lexical causative construction is not so productive as the periphrastic causative one, even though many causative verbs are formed with the suffix *-i*. For example, *ka* 'go' does not have a lexical causative form. Examples of lexical causatives are given below.

(9)
a. Chelswu-ka   Yenghi-lul/*eykey   us-ki-ess-ta

      -Nom   -Acc/*Dat   laugh-Cau-Past-Dec
     'Chelswu caused Yenghi to laugh.'

   b. nay-ka   Chelswu-eykey/lul   say   os-ul   ip-hi-ess-ta
     I -Nom   -Dat/Acc   new   clothes-Acc wear-Cau-Past-Dec
     'I made Chelswu wear the new clothes'

According to Patterson (1974), some lexical causatives have two meanings. For example, a sentence such as (9b) is ambiguous, having another meaning of, 'I dressed Chelswu with the new clothes.' As can be seen in the above examples, Korean lexical causative constructions exhibit a case of valence-increase in the sense of Comrie (1975). That is, one-place predicates become two-place and two-place predicates three-place, respectively, in causative constructions.

(10)

verbs	basic non-causative verbs	causative verbs
intransitive	Arg 1	Arg1 -Arg 2
monotransitive	Arg1-Arg2	Arg1-Arg2-Arg3

A causative verb necessarily involves one additional argument in comparison with its corresponding non-causative verb, i.e. the causer NP argument, expressed in the following formula:

(11)
NON-CAUSATIVE: N ---------> CAUSATIVE: N+1
N= Number of Arguments

Since the causer should appear as the subject NP of the causative sentence, the causee NP cannot retain the subject relation it assumed in the non-causative sentence.   The Case Hierarchy proposed by Comrie (1976) attempts to predict the new grammatical relation of the causee NP argument, when the causative and non-causative elements are fused together to form a new derived verb.

(12)
Case Hierarchy
Subject > Direct Object > Indirect Object > Oblique

For example, when the causer NP argument takes up the subject relation, and the direct object NP of the non-causative verb retains its original grammatical relation, the causee NP argument will assume the next available position on the Case Hierarchy, i.e. Indirect Object.   Comrie calls a language that strictly conforms to the Case Hierarchy 'a paradigm case'.

The RRG linking algorithm also can explain the case phenomena in lexical causatives.   Let us examine the Actor-Undergoer Hierarchy in RRG.

(13) = Van Valin(1992)'s (25)

We can account for the case alternations in (9) in terms of the Actor-Undergoer Hierarchy.   The sentences in (9) take the following LS (these are simplified versions of LS for simplicity of presentation).

(14)

9

a.[**do'** (x, [...])] CAUSE [**laugh'**(y)]
b. [**do'** (x, [...])] CAUSE [**put on'**(y,z)]

In (14a), x , the argument of the superordinate *do'*, is the effector which is also the Actor; this argument appears as the 'subject'.   Another argument automatically gets 'direct object' which is the Undergoer, because causatives should have two macroroles.   In (14b), x , the argument of the superordinate *do'* , is also the effector which is the Actor.   We are now left with the choice of the other core argument, the 'direct object', which is semantically the Undergoer.   The choice is between the two arguments of *put on* , the caused verb in (14b), and these two arguments are the effector and patient.   By the Actor-Undergoer Hierarchy the patient will be the Undergoer and hence the 'direct object', since it outranks the effector for Undergoer status.   With the two direct core arguments filled, the effector of *put on* , the causee, is normally assigned non-macrorole core argument status, that is, "Indirect object".[3]   As argued in Foley and Van Valin (1984), the Actor-Undergoer Hierarchy and Linking Algorithm in RRG provide the basis for a principled and independently motivated explanation for the pattern of causee demotion in monoclausal causative constructions characterized in the 'paradigm case' of Comrie (1976).

On the other hand, according to J. Song (1991), causative constructions are not unique at all in terms of NP density control;[4] they are, in fact, subject to the same

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[3] I have considered only the *Nom-Dative* structure in (9b), because only it corresponds to Comrie's 'paradigm case'.   The *Nom-Acc* structure in (9b) can be considered a marked case in terms of Comrie's Case Hierarchy.   In RRG, it is also a marked case assignment so it is considered the result of a marked assignment of Undergoer on the causee.   According to Van Valin (1992), dative shift constructions also involve either the marked occurrence of a core argument as Undergoer or the highly marked occurrence of a non-argument, usually a beneficiary, as Undergoer.   In the simplest case, a non-Undergoer core argument functions as Undergoer in what is a marked assignment in terms of the Actor-Undergoer Hierarchy (see Van Valin(1992) for details).
[4] The term 'causative' used in his paper must be understood to refer only to morphological causatives and quasi-morphological causatives such as in French. NP density control means that

case marking system that any ordinary simplex non-causative sentences are subject to.   According to Van Valin (p.c), Song's NP density control conforms to what RRG claims.   In RRG, the case marking rules (in the paradigm case) work exactly the same way as in a simple clause with a ditransitive verb.   That is, in both causative constructions and ordinary simplex non-causative constructions,   the highest ranking macrorole takes nominative case,   while the other macrorole argument takes accusative case.

II. Verb Classes and Logical Structure [LS]
   of Korean Lexical Causatives

1. Syntactic vs. Lexical Approach

    Falk (1991) suggests that there are two approaches to morphological (my lexical) causatives: lexical analysis and syntactic analysis.   Even though specific analyses differ as to the exact nature of the underlying main verb, as to whether or not the sentence is actually biclausal at any level of representation, and in other details, syntactic analysts consider lexical causativization syntactic phenomenon. Baker's (1988) Incorporation Theory and Marantz's (1984) Morphological Merger Theory are good examples of the syntactic approach.   In Baker's theory, for example, the processes changing grammatical functions such as causativization and passivization, are considered the automatic consequences of head (X_0)-movement. On the other hand, there are also lexical analyses of lexical causatives.   Y. Park (1991) suggests that in a lexical approach, the causative morpheme ought to attach to the verbal stem in the lexicon so that the resulting complex predicate acts as a single unit.   Falk (1991:57) comments regarding the analysis:

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both causative and non-causative constructions are subject to the same requirement that limits the number of core NPs per simplex sentence.

The alternative is a LEXICAL ANALYSIS, one in which the attachment of the causative morpheme is seen as a process which changes one lexical item into another one, whose properties are predictable on the basis of the base verb and the nature of the affix.

According to Y. Park (1991), accounts of the lexical approach vary depending upon how the causative morpheme is treated. For instance, Miyagawa (1980), following Aronoff's (1976) idea that affixes do not have to be listed independently in the lexicon, proposes a causative Word Formation Rule through which a causative morpheme is introduced. On the other hand, Farmer (1980) captures the bound property of causative morphemes in terms of the 'Morphological Subcategorization' of an affix. Alsina (1992: 552) argues against syntactic incorporation in treating Chichewa causative verbs:

> Theories that assume syntactic incorporation, such as those of Baker (1988) and Li (1990), claim to be especially well suited to explain the facts of causative constructions. However, not only do they fail to account for the generalizations that they assume, but they cannot account for the facts that reveal the thematically composite nature of the primary object of causatives. More importantly, the idea that causative constructions have a syntactic argument that bears one thematic relation to the causative predicate and another to the embedded predicate cannot be imported into the Incorporation theories (at least, given the basic architecture of the Government-Binding framework presupposed by these theories).

He argues for a lexicalist theory like Lexical-Functional Grammar, which prohibits relation-changing operations such as those found in passives and causatives from taking place in the syntax.

RRG employs a kind of LEXICAL ANALYSIS of lexical causatives. Van Valin (1992) argues that "lexical phenomena affect the LS of the predicate, its argument structure, and actor and undergoer assignment, whereas syntactic phenomena deal with the morphosyntactic realization of the macroroles and other core arguments."   This contrast in RRG can be represented as in the following diagram:

(15) = Van Valin(1992)'s Figure 21
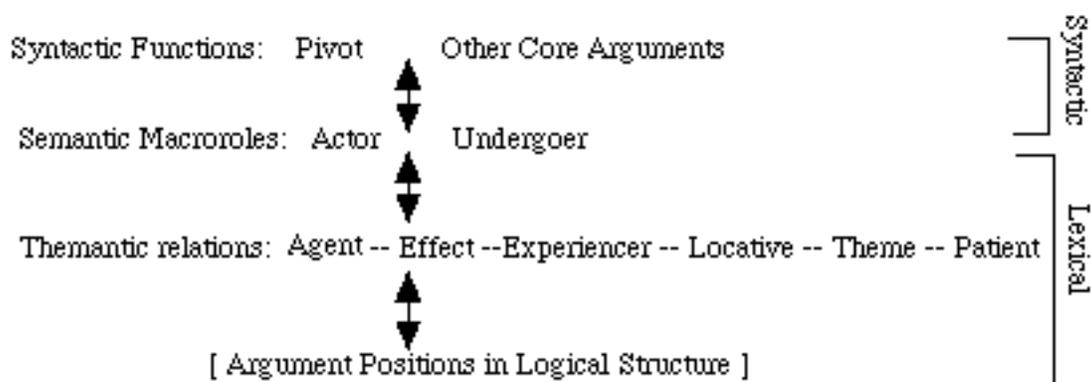
In RRG, lexical causatives are accounted for by verb classes, the LS, and argument structures.   That is, in RRG, the account of lexical causatives depends on lexical processes.   In the followings, I will discuss two lexical approaches to lexical causatives: Paradigmatic Structure analysis by Miyagawa(1989) and the theory of the Verb Classes and the LS in RRG.

2. Paradigmatic Structure: A Lexical Approach

   In this section,   Miyagawa's (1989) currently revised version of the lexical approach will be presented, wherein his Paradigmatic Structure is developed. It will be pointed out that the structure does not account for Korean lexical causatives.

    According to Miyagawa, the causative morpheme -*sase* in Japanese involves two functions as shown below.

(16)

a. Hanako-ka   Taroo-o   butai-ni   agar-ase-ta

      -Nom   -Acc stage-at   rise-Cau-Past

'Hanako caused Taro to rise onto the stage'

b. Hanako-ka   isu-o   ugok-sasi-ta

      -Nom   chair-Acc   move-Cau-Past

'Hanako moved the chair'

The sentence (16a) denotes a 'compositional' causative interpretation in the sense of Y. Park (1991). The causer makes the propositional causation occur rather indirectly. Miyagawa (1989) refers to this type of causative as 'analytical causative'. On the other hand, *V-sase* in (16b) gives rise to a direct causative interpretation, turning the intransitive verbal stem into its transitive counterpart. This direct causativization is sometimes called the 'lexical' causative. To explain the dual functions of *-sase*, Miyagawa (1989) proposes a Paradigmatic Structure (PDS), which is inspired by Aronoff's (1976) notion of 'blocking'. The PDS is a device in the lexicon by which verbs are organized according to their meaning and the number of arguments that they take. Assuming that all verbal stems occupy a relevant slot in the PDS, *V-sase* functions to fill the gap in the PDS depending on whether a certain intransitive verb has a simpler transitive counterpart. Therefore, it fills in the slot if and only if that slot is empty, that is, not occupied by an independent simple transitive counterpart of the verbal stem. On the other hand, it cannot fill in the slot if the slot is already occupied by an independent transitive, for each slot may take only one lexical item. Miyagawa (1989) calls the *V-sase* that can fill in the slot an *unblocked V-sase*, and the one that cannot fill in the slot a *blocked V-sase*. Here are the PDSs for the above sentences.

(17)
a.   INTRANSITIVE   TRANSITIVE   DITRANSTIVE
        ----
        agar 'rise'   age 'raise'
        ----
                                           agar-ase(blocked)

b.   INTRANSITIVE   TRANSITIVE   DITRANSTIVE
        ----
        ugok 'move'   ugok-sas 'move' (unblocked)

Let us consider the Korean data.   In general, Korean lexical causatives signal direct causation,   whereby the causer directly forces the causee to undergo the change of state.[5]   That is, the predicate (Verb+I morpheme; V-I) as a single unit takes the causee as its direct object, as in the followings.   In other words, it is a 'lexical causative' in the sense of Miyagawa (1989).

(18)
a. Chelswu-ka   kong-ul   kwul-i-ess-ta
        -Nom   ball-Acc   roll-Cau-Past-Dec
   'Chelswu rolled the ball'

b. Chelswu-ka   mwul-ul   kkul-i-ess-ta
        -Nom water-Acc   boil-Cau-Past-Dec
     'Chelswu boiled the water'

c.   emeni-ka   ku   ai-eykey   sosik-ul   al-li-ess-ta
      mother-Nom   that   child-Dat   news-Acc know-Cau-Past-Dec
       'The mother informed the child of the news.'

---

[5] S. Song(1988) attempts to differentiate two types of meanings involved in Korean morphological causative situations like the following:

Ordinary Causative: A causes B to do something
Obviative Causative: A causes something to be done to/on B or, by extension, A
        does something to/on B.

He argues that the 'obviative' reading describes what has often been called 'direct' or 'manipulative' causation, while the 'ordinary' causative reading approximates that of the periphrastic causative, with the important distinction that the speaker attributes control or responsibility to the causer.

d. John-i   Mary-uy   meli-lul   kam-ki-ess-ta
   -Nom   -Gen   hair-Acc   wash-Cau-Past-Dec
   'John washed Mary's hair.'

Yet, there is a small subset of verbs that denote only the compositional causative interpretation as in Japanese. Let us examine some examples.

(19)
a.   Chelswu-ka   atul-ul   kell-i-ess-ta
          -Nom son-Acc   walk-Cau-Past-Dec
      'Chelswu caused his son to walk'

b.   Chelswu-ka   atul-ul   wul-i-ess-ta
           -Nom   son-Acc   walk-Cau-Past-Dec
      'Chelswu caused his son to cry'

In (19), the verbs *kel-li* and *wul-i* have only the compositional interpretation. They are 'analytical' causatives in the sense of Miyagawa.

According to PDS, we can predict that verbs like *kkul* 'boil' should have an empty transitive slot and verbs like *wul* 'cry' should have the slot already filled with an independent transitive.   As argued in Y. Park (1991), however, such a prediction is not borne out, as the PDSs in the following show:

(20)
a.   INTRANSITIVE   TRANSITIVE   DITRANSITIVE
      ----
        kkul 'boil(vi)'
      ----
                                kkul-i 'boil(vt)'(unblocked)

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b.   INTRANSITIVE   TRANSITIVE   DITRANSITIVE
     ----
          wul 'cry'
     ----
                              wul-i(unblocked)

Both classes of verb have an empty transitive slot. Yet only verbs like *kkul* 'boil'
signal the 'lexical' causative, which is supposed to occupy the slot, while verbs like
wul 'cry' involve the compositional causative. The PDS cannot explain the contrast
between the two interpretations, for it wrongly predicts both classes of Korean verb
will fill the slot.

3   Verb Classes and LS: an Elaborate Example of the Lexical Approach

   In RRG, underlying any system of lexical representations for verbs and other
predicators, implicitly or explicitly, is a theory of verb classes. Following Vendler
(1957) and Dowty (1979), RRG categorizes verbals into four classes, viz., states,
activities, achievements, and accomplishments, according to the Aktionsart (the
inherent lexical aspect) of verbals.   Van Valin (1992) argues that these verb
distinctions are the universal basis of the organization of verbal systems in human
language.   Each verb class is given a formal representation called its LOGICAL
STRUCTURE(LS).   The formal representations for the four classes are the
following:

     (21)

Verb Class	LOGICAL STRUCTURE
STATE	**predicate'** (x) or (x,y)
ACHIEVEMENT	BECOME **predicate'** (x) or (x,y)
ACTIVITY (+/-Agentive)	(DO(x)) [**predicate'** (x) or (x,y)])

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ACCOMPLISHMENT	CAUSE , where is normally an activity predicate and an achievement predicate.

To see how Verb Classes and the LS work to account for Korean causatives, let's turn to the issue of 'real causative' which Han (1985) raises.   Han (1985) argues that all the morphological causative form (e.g. the Korean -*i* suffix form) are not 'real causatives'.   First of all, he defines the causative relation as a syntactic one which exists between two sentences, represented as follows:

(22) *N$_i$-ka   Vi <-----------> N-ka N$_i$-lul   Vtcau*

Let us consider the following examples.

(23) = Han's (1) and (7)
a. tungpwul-i   pang-ul   palk-hi-n-ta
   lamp-Nom   room-Acc   bright-Cau-Pre-Dec
    'The lamp lights the room.'

b. pang-i   palk-ta
    room-Nom   bright-Dec
    'The room is bright.'

c. Swuni-ka sinpwun-ul   palk-hi-n-ta
    Swuni-Nom   identity-Acc bright-Cau-Pre-Dec
    'Suni discloses her identity.'

d.   *sinpwun-i   palk-ta
     identity-Nom   bright-Dec
     '*The identity is bright.'

Han argues that the sentence (23c) is not 'real causative' by the definition of a causative relation mentioned above. He claims that complex parameters intervene in the determination of a causative verb and a causative construction. He attempts to show the methodological procedures needed to define a 'real causative' verb and 'real causative' construction. He claims that syntactic relations, or the distributional properties of each syntactic construction have to be considered in order to determine what is a 'real causative'. He posits several methodological procedures such as 'selectional restriction', 'the relative synonymy between transitive construction and its corresponding periphrastic construction', etc. Let us consider another set of examples.

(24) = Han's (22) and (23)
a. Swuni-ka wuyu-lul   kkulh-i-n-ta
   Swuni-Nom   milk-Acc   boil-Cau-Pre-Dec
   'Suni boils the milk.'

b. wuyu-ka   kkulh-nun-ta
    milk-Nom   boil-Pre-Dec
    'The milk boils.'

c. Swuni-ka   kuk-lul   kkulh-i-n-ta
   Swuni-Nom   soup-Acc   [boil-Cau](prepare)-Pre-Dec
   'Suni prepares the soup.'

d. kuk-i   kkulh-nun-ta
   soup-Nom   boil-Pre-Dec
   'The soup boils.'

He suggests that (24c) cannot be considered a 'real causative'. According to him, the relation between (24c) and (24d) is not the same as that between (24a) and (24b). More precisely, *kkulh-i* 'boil' is ambiguous: it means 'prepare something to eat (generally watery food)', or 'make boil.'   He claims that it is only in the latter meaning that *kkulh-i* 'boil' is regarded as causative.

Now, let us turn to the Lexical Representation in RRG, and examine whether and to what degree it serves to define a 'real causative' in the sense of Han (1985). As mentioned above, RRG   classifies verbals into four classes according to Aktionsart.   RRG classifies the two meanings of the Korean verb *kkulh-i* 'boil', for instance, into the same Aktionsart, that is, Accomplishment.   The only difference comes from the difference in its LS.

(25)
a. [**do'** (x)] CAUSE [BECOME **boil'** (y)]
b. [[**do'** (x)] CAUSE [BECOME **boil'** (y)]] CAUSE [BECOME
      prepared' (y)]

The LS (25a) corresponds to the meaning 'boil', while (25b) corresponds to the meaning 'cook'.   According to Han, (25a) is a 'real causative', but (25b) is not a causative.   However, the theory of Verb Classes and LS in RRG claims that the verb of (25b) is also a causative verb.   In terms of the RRG perspective,   Han's 'real causatives' follow the prototypical schemata for accomplishment Aktionsart without any additional supplements in the LS.   In this way, we can get the concept of 'real causative' in terms of the Lexical Representation in RRG without appealing to the methodological procedures based on syntactic relations. I think that the verb classification and LS in RRG correctly reflects the native speaker's intuitions about Korean.

Now let us turn to the question of implication in causatives. According to Karttunen (1971), implicative verbs, like factive verbs, involve presuppositions, although in a different way. An implicative verb carries a presupposition that it represents a necessary and sufficient condition for the truth of its complement sentence. Patterson (1974) argues that the periphrastic causatives are 'non-implicative' in Karttunen's sense of the term, while lexical causatives have many of implicative properties. Actually, all Korean lexical causative verbs do not necessarily imply the relevant result state. Thus, the accomplishment verbs in Korean appear to lack [BECOME **predicate´** (y,z)] in LS. Let's consider the following sentences.

(26)
a. Chelswu-nun   mwul-ul   el-li-ess-una,
        -Top   water-Acc   freeze-Cau-Past-but
     mwul-i   an   el-ess-ta
     water-Nom   Neg   freeze-Past-Dec
     'Chelswu froze the water, but the water did not freeze'

b. congi-lul   thay-wu-ess-una,
   paper-Acc   burn-Cau-Past-but,
    ku   congi-ka   an   tha-ess-ta
   the   paper-Nom   Neg   burn-Past-Dec
     'I burnt the paper, but the paper did not burn'

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c. emeni-ka   ai-eykey   pap-ul   mek-i-ess-una,
   mother-Nom   child-Dat   rice-Acc   eat-Cau-Past-but
   ai-nun   an   mek-ess-ta
   child-Top Neg   eat-Past-Dec
       'The mother fed the rice to the child, but the child did not eat'

d. na-nun   changmwun-ul   kkay-ess-una,
   I-Top   window-Acc   break-Past-but
   changmwun-i   an   kkayci-ess-ta
   window-Nom   Neg   broken-Past-Dec
       'I broke the window, but the window did not break'

As can be seen in the above examples, the verbs in the sentence (26a), (26b), (26c), and (26d) do not imply an achievement, such as would be represented for (26a) as [BECOME **frozen´** (water)] in LS.   As an explanation for this language-specific characteristic, it could be hypothesized that the Korean verb *el-li*   'freeze',   for example, has two kinds of Aktionsart: the accomplishment implies an achievement, while the activity does not.   This hypothesis can be given schematically as follows.

(27)
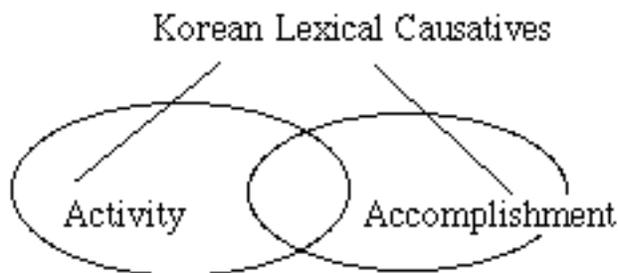
However, the hypothesis that the Korean lexical causative verbs have two kinds of Aktionsart does not seem to hold.   I do not have any definite evidence to say that they involve two kinds of Aktionsart.   Instead, I take the position that it is necessary to classify Korean lexical causatives as accomplishments.   Let us

apply the set of tests for verb class proposed by Dowty   to one of the verbs,
namely, *el-li* 'freeze' (see Van Valin (1992) for details).   Seven tests are given in
Van Valin (1992) [6].

(28)

Criterion	*el-li*
1. Occurs with Progressive	Yes
2. Occurs with adverbs like *vigorously,* etc.	Yes
3. Occurs with for *an hour, spend an hour ing*	Yes
4. Occurs with *in an hour, take an hour to .*	Yes
5. *for an hour* entails at all times in the hour.	No
6. x is *ing* entails x has *ed*.	No
7. Has inherent causative semantics	Yes

---

[6] I have also tested the verb with Yang(1992)'s tests for the Korean Aspectual Verb Classification.
These tests have yielded the same result.   In the below, I have provided some data for the criteria:

    a. ku-ka   mwul-ul   elli-nuncwung-i-ta
       he-Nom   water-Acc   freeze-Prog-Pre-Dec
          ' He is freezing the water.'   (Criterion 1)

    b. ku-ka   yelsimhi   mwul-ul   elli-ess-ta
       he-Nom   vigorously   water-Acc   freeze-Past-Dec
          ' He froze the water vigorously.'   (Criterion 2)

    c. ku-ka   han-sikan-tongan   mwul-ul   elli-ess-ta
       he-Nom   1-hour-for   water-Acc   freeze-Past-Dec
          ' He froze the water for an hour.'   (Criterion 3)

    d. ku-ka   han-sikan-nayey   mwul-ul   elli-ess-ta
       he-Nom   1-hour-in   water-Acc   freeze-Past-Dec
          ' He froze the water in an hour.'   (Criterion 4)

I rely on my intuition about Korean for the Criterion 5, 6, and 7.

The verb *el-li* 'freeze', for example, conforms to the accomplishment verb framework. The results of the test again contradict the previous hypothesis that the verb has two kinds of Aktionsart, because the Aktionsart tests conform only to accomplishment verb frame, not to the activity verb frame.   The verb classification tests suggest the following modification to the hypothesis: *Even though lexical causative verbs of Korean are accomplishments in the verb classification framework, the verbs do not necessarily imply the expected result state.*   At this point, we have a serious problem to solve.   According to the LS in RRG framework, all accomplishment verbs imply achievement, that is, [BECOME **predicate´** (y,z)].   My solution to the problem is to add a kind of modal operator to the LS, because the LS is argued to be universal in RRG. I have come to the following LS for Korean accomplishment verbs.[7]

(29)

   [**do´** (w)]   [@ CAUSE] [BECOME **predicate´** (y,z)]]

For the modal operator '@' of Korean accomplishment verbs, **[Expect]**   will be appropriate in the sense that achievement is not implied by default, but expected by inference.   I am also claiming that the nonsynonymy between the lexical and periphrastic causatives is partly due to differences in realization of the modal operator '@'.   Thus to signal that the result state does obtain in lexical causatives, we must add a verb like *noh* 'put'.

(30)
    a. * Chelswu-nun   mwul-ul   el-li-e-noh-ess-una,
               -Top water-Acc   freeze-Cau-PF-put-Past-but
      mwul-i   an   el-ess-ta

---

[7] I am indebted to Professor Van Valin and Professor Wilkins for suggesting this modal operator. Needless to say, neither of them are responsible for errors or misinterpretation I may have made.

water-Nom   Neg   freeze-Past-Dec
'Chelswu froze the water, but the water did not freeze'

b. * congi-lul   thay-wu-e-noh-ess-una,
  paper-Acc   burn-Cau-PF-put-Past-but,
   ku congi-ka   tha-ci an-ess-ta
  the paper-Nom burn-Com Neg-Past-Dec
  'I burnt the paper, but the paper did not burn'

In sentence (30a) and (30b), it is impossible to cancel the implication of achievement, because the verbs necessarily imply the expected result state due to the extra verb *noh* 'put'.   According to Talmy (1991), Tamil also uses a specific verb *vi* 'leave' to express confirmation of result state in lexical causatives.

(31)
a. Nan   avanai   konren.   Anal   avan   caka-villai.
   I   he-Acc   kill-Past-1sg but   he   die-Neg
   ' I killed him, but he did not die.

b. *Nan avanai   konru-(vi)-tten. Anal   avan   caka-villai.
   I   he-Acc   kill-leave-Past-1sg but   he   die-Neg
   ' I killed him, but he did not die.

As (31b) shows, it is impossible to cancel the implication of achievement, because the verbs necessarily imply the expected result state due to the extra verb *vi* 'leave'.

III. Layered Structure of the Clause [LSC] and Juncture-Nexus Types in Korean Causatives

1. Overview of LSC and Juncture-Nexus in RRG

To begin, let us look at the LSC in RRG. In Van Valin (1992:5)'s words,

The RRG notion of (non-relational) clause structure is called THE LAYERED STRUCTURE OF THE CLAUSE [LSC] and it is based on two fundamental contrasts: between the predicate and its arguments, on the one hand, and between arguments and non-arguments, on the other, i.e. between those NPs and adpositional phrases [AdPs] which are arguments of the predicate and those that are not. 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, the primary constituent units of the clause are the NUCLEUS, which contains the predicate (usually a verb), the CORE, which contains the nucleus and the arguments of the predicate, and the PERIPHERY, which an adjunct to the core and subsumes non-arguments of the predicate, e.g. setting locative and temporal phrases.

Van Valin (1992) argues that each layer has its own set of operators which have scope over that layer. The operators are summarized in the followings:

(32) = Van Valin's(1992) Table 1

Nuclear operators: Aspect

           Directionals(only those modifying orientation of action or event without reference to participants)

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

Clausal Operators: Status(epistemic modals, external negation)

           Tense

           Evidentials

           Illocutionary Force [IF]

One of the major claims regarding operators is that the ordering of the morphemes expressing operators with respect to the verb indicates their relative scopes. That is, taking the nucleus (verb) as the reference point, the morphemes realizing nuclear operators should be closer to the nucleus than those expressing core operators, and those manifesting clausal operators should be outside of those signalling nuclear and core operators. Let us use the claim as the procedure for finding the relative scope of Korean operators. Consider the following sentence.

(33)
apeci-nun   kkay-e-iss-e-si-l-su-ups-ess-up-nita
father-Top   wake-PF-State-**Hon**-PF-Mod-Neg-Past-**Pol**-Dec
'The father could not be awake'

The Korean operators follow the relative ordering of the operators proposed in RRG. That is, Core operator *su* 'can', for example, is in the inside of Negation, Tense, Illocutionary operators, which are Core or Clausal operators. Interestingly enough, the honorific marker *si* precedes the Root Modal *ups* , which is a Core operator. Hence, the marker is predicted to be a Nuclear or Core operator. At the moment, I have no evidence to say either way whether this is true.

Now, let us turn briefly to the clause linkage theory. RRG distinguishes two important syntactic aspects in clause linkage: nexus relations, the syntactic relations between the units in a complex construction, and juncture, the nature of the units being linked. There are three nexus relations: coordination, subordination, and cosubordination. There are also three juncture types: nuclear juncture, core juncture, and clausal juncture. The nine juncture-nexus types, while purely syntactic, are used to express certain semantic relations between the units in the

juncture, e.g. causation, purpose, and temporal sequence. They are expressed in the
Interclausal Relations Hierarchy (see Van Valin (1992) for details).

(34) = Van Valin's (1992) Figure 29b

Strongest		Closest
Nuclear Cosubordination		Causative
Nuclear Subordination		Aspectual
Nuclear Coordination		Psych-Action
Core Cosubordination		Purposive
Core Subordination		Jussive
Core Coordination		Direct Perception
Clausal Cosubordination		Propositional Attitude
Clausal Subordination		Cognition
Clausal Coordination		Indirect Discourse
		Temporal Adverbial
Weakest		Conditionals
		Simultaneous Actions
Syntactic Relations		Sequential Actions: Overlapping
		Sequential Actions: Non-overlapping
		Action-Action: Unspecified
		Loosest
		Semantic Relations

28

Van Valin (1992: 111-12) suggests that in the Interclausal Relations Hierarchy the causality is syntactically realized in the tightest way.

> In particular, while there is often more than one syntactic realization of a particular semantic relation, e.g. causality, the tightest syntactic linkage realizing it should be tighter than the tightest syntactic linkage realizing looser semantic relations.

Foley and Van Valin (1984: 271) also state the following:

> There is one significant claim about the interaction of the two hierarchies inherent in the IRH. Given the inventory of syntactic clause-linkage categories in a language, it will always be the case that the strongest semantic relations will be expressed in the most tightly linked syntactic configurations found in the language, the weaker relations in the less tightly linked constructions ... If for example, causation can be expressed more than one way in a language, one of those ways must be in the most tightly linked construction found in the language.

Along related lines, Haiman (1985) argues that greater linguistic distance between cause and effect signals greater conceptual distance, that is, indirect causation, with the possibility that cause and effect occurred at different times and at different places.[8]

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[8] The linguistic distance between X and Y diminishes as we proceed downwards along the following scale:

   a. X # A # B # Y
   b. X # A # Y
   c. X + A # Y
   d. X # Y
   e. X + Y
   f. Z

According to Haiman, (d) represents analysis; (e) agglutination; and (f) synthesis of the morphemes X and Y into a single morph.

2. Juncture-Nexus Types in Korean Periphrastic Causatives

To determine the juncture-nexus types in Korean periphrastic causatives, let us examine J. Song's (1988) argumentation regarding the types of Korean periphrastic causatives.   First of all, he argues that there are nuclear juncture constructions in Korean, and that the constructions do not allow anything between the two composite verbs.

   (35) =J. Song's (1988) (16)
   emeni-ka   atul-ekey   cacangka-lul   pule-e-cwu-ess-ta
   mother-Nom son-Dat   lullaby-Acc   sing-PF-give-Past-Dec
   'The mother sang a lullaby for the son'

J. Song (1988) suggests that between *pule* 'sing'   and *cwu* 'give',   nothing except the phonological filler -*e* can appear, and that the primary function of the above nuclear juncture construction is 'a valence increaser'.   Besides the example given by J. Song (1988), Korean has a lot of serial verbs involving similar types of junctures.

   (36)
  a. ol-a   ka-ta
    ascend-PF   go-Dec
     'climb'

  b.   tul-e   o-ta
     enter-PF come-Dec
     'come into'

  c. seywu-e   not-ta

stop-PF   put-Dec
    'park' (verb)

The serial verbs in (36a, b, c) do not involve valence increasing, because they do not license one extra argument.   Rather, the first verbs add the *Path* meaning to the second verbs, that is, main verbs, in the sense of Talmy (1985).   The serial verbs in (36) do not allow anything to intervene between them except phonological fillers. From the examples, we are led to assume that Korean has the nuclear juncture construction.

    J. Song (1988) argues that periphrastic causatives (his periphrastic and complement causatives) involve core juncture, not the nuclear juncture which he claims is available in Korean.   His claim that causation in Korean is not expressed by nuclear juncture but by core juncture, a much weaker juncture type, is a contradiction to the IRH stipulation that causative relations be realized in the most tightly linked core junctures the language has.   I'd like to argue against J. Song's arguments, and show that the IRH in RRG is true of Korean causatives, too.   At the moment, I will follow J. Song's classification of the periphrastic causatives into two types, that is, *Nom-Nom* type on the one hand, *Nom-Acc* and *Nom-Dat* type on the other, for the ease of description.

    What makes J. Song (1988) think that periphrastic causatives cannot involve nuclear junctures comes from the observation that negative particles (core operator), modality particles (core operator), or aspect markers (nuclear operator) can intervene between the two verbs.   Let us consider the following sentences.

(37)
  a. emeni-ka   ai-ekey   yak-ul   mek-ko-iss-key
     mother-Nom child-Dat   medicine-Acc eat-Com-Dur-Com
     ha-ko-iss-ta
     do-Com-Dur-Dec

'The mother is causing(or persuading) the child to be taking the
medicine'   (J. Song's (1988) (18))

  b. emeni-ka   atul-ekey   nol-suiss-ke   ha-lsuiss-ta
    mother-Nom   son-Dat   play-able-Com do-able-Dec
      'The mother can cause (or allow) the son to be able to play.'

  c.   emeni-ka   ai-eykey   ka-key   an ha-ess-ta
    mother-Nom child-Dat   go-Com   Neg do-Past-Dec
      'The mother did not cause the child to go'

The aspect marker in (37a), the modality marker in (37b), and the negative marker in (37c) intervene between the 'lower' and 'higher' verbs.   That's why he believes that Korean periphrastic causatives do not involve nuclear junctures.   However, he does not distinguish the causative relation from the causative form.   What he is saying is that the sentences in (37) still take the causative form.   However, the syntactic causative form does not guarantee the causative relation in the Interclausal Semantic Relations Hierarchy.   The sentence (37a) does not entail a change of state after the mother's causing.   That is, the child has been taking the medicine before the mother's causing.   Hence, the primary function of the causative form in (37) is *persuading* or *allowing*.   The sentence (37b) implies that the child is given the permission to play, and that the mother has the ability to cause something.   The will of the causer may be overridden by that of the causee.   Nothing indicates the causative relation between two events.   To confirm the non-causative relation in (37c), let's consider the following English sentences.

  (38) a. John forced Mary to stay home.
        b. John didn't force Mary to stay home.

According to Karttunen (1971), in negative sentence (38b) there is no implication of the truth of "the complement clause", even in English. Karttunen argues that "whether the speaker is committed to the truth of the complement sentence thus depends on the composition of the main sentence, e.g. on the presence of negation and modals, as well as on the illocutionary force of the whole utterance." Korean periphrastic causatives with intervening negatives also do not involve causative relations, because negative counterparts are a sort of statement which describes the given situation. Therefore, it is necessary to distinguish between affirmative and negative sentences in Korean causatives. Those causative forms cannot be claimed to involve semantic causal relations. The intervening elements to the Korean periphrastic causatives give us the impression that 'secondary function' such as directing, advising, and persuading are more important than the causative meanings in those sentences. J. Song (1988) does not take these semantic distinctions into account. The following comes from my observation: *to maintain the causative reading, nothing can intervene between ke and ha* . In other words, the construction itself is compatable with either causative or jussive meanings, but if there are intervening elements, then only the jussive meaning is possible.

Now, let us consider the following pairs of sentences.

(39)
a. nay-ka   Chelswu-lul   o-key   ha-ess-ta
   I-Nom   -Acc   come-Comp   do-Past-Dec
    'I made Chelswu come'

b. nay-ka   Chelswu-lul   o-key   an   ha-ess-ta[9]

---

[9] To get an causative relation, the sentence should be like the following:
        nay-ka   Chelswu-lul   an   o-key   ha-ess-ta
        I-Nom   -Acc   Neg   come-Comp   do-Past-Dec
        'I did not tell (or make) Chelswu come'

I-Nom -Acc come-Comp Neg do-Past-Dec
'I did not tell (or make) Chelswu come'

(40)
a. nay-ka Chelswu-ka say os-ul ip-key ha-ess-ta
 I -Nom Chelsu-Nom new clothes-Acc wear-Com do-Past-Dec
  'I made Chelswu wear the new clothes'

b. nay-ka chelswu-ka say os-ul ip-key an ha-ess-ta
 I-Nom Chelsu-Nom new clothes-Acc wear-Com Neg do-Past-Dec
  'I did not tell(or make) Chelswu to wear the new clothes'

As can be seen from the glosses of the sentences (39) and (40), the interpretation seems to change from causative meaning to jussive meaning when intervening elements are added. Hence, I assume that the *-ke ha* construction involves nuclear juncture, because nothing can intervene between *ke* and *ha* to maintain its semantic causative relation. A question arises from my assumption: Do all types of periphrastic causatives involve nuclear juncture? *Nom-Nom* type does not seem to involve the nuclear juncture, because cross-linguistically, nominative case is the default case for indicating Actorhood so that it is hard to express the causative relation with two actors involved in the sentence; thus the *Nom-Nom* construction expresses the weak causative relation. Interestingly, the *Nom-Nom* type has nearly the same configuration as the purposive sentence type, which J. Song claims involves clausal subordination.

(41)
chelswu-ka yenghi-*ka* pathi-ey o-ke
Chelswu-ka Yenghi-*Nom* party-Loc come-Comp

kunye-uy cip-e   cenhwa-lul kel-ess-ta
she-Gen   home-Loc phone-Acc dial-Past-Dec

'Chelswu called Yenghi at home so that she could come to the party.'

The NP *Yenghi* in the purposive sentence (41) cannot appear in either accusative or dative case, as pointed out by J. Song (1988). Moreover, the lower verb *o* 'come' cannot have its own tense in the purposive sentence (41), just as in the periphrastic causatives. The only difference between them is due to the presence or absence of the *do* verb, which is assumed by many scholars to convey the causative meaning.

A difference between *Nom-Nom* structure and *Nom-Acc* structure is noted by Sohn (1973), who observes that the former structure does not allow scrambling. Let us consider the following examples .

(42) = O'Grady's (1991: 189) (4)
a. na-nun   ku   pwun-i   ttena-key   hay-ss-ta
   I-Top   that   one-Nom   leave-Com   do-Past-Dec
      'I made that one leave.'

b. *ku   pwun-i   na-nun   ttena-key   hay-ss-ta
    that   one-Nom   I-Top leave-Com   do-Past-Dec
     'I made that one leave.'

According to O'Grady (1991), the *Nom-Nom* structure does not allow scrambling. By contrast,   the scrambling in the *Nom-Acc*   and *Nom-Dat*   structures is permitted.[10]   That observation supports the claim that the *Nom-Nom* structure

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10   O'Grady (1991) gives the following examples:
       a. Unscrambled Form
              na-nun ku   pwun-ul   ttena-key   ha-ess-ta
              I-Top   that   one-Acc   leave-Com   do-Past-Dec
              'I made that one leave.'
       a. Scrambled Form
              ku   pwun-ul   na-nun ttena-key   ha-ess-ta
              that   one-Acc   I-Top   leave-Com   do-Past-Dec
              'I made that one leave.'

involves core juncture if it is assumed that in principle the scrambling is allowed within a core.   If the hypothesis is applied to *Nom-Acc* and *Nom-Dat* periphrastic causatives, chances are that the *Nom-Acc* and *Nom-Dat* involve nuclear junctures.

The second difference between them has to do with the scope of time adverbials such as *achim-pwuthe* 'from morning'.   Let us examine the following examples.

(43) = O'Grady's(1991: 188) (1) and (2)
a. nay-ka   sikmo-ka   achim-pwuthe   ilha-key   hay-ss-ta
   I-Nom   maid-Nom morning-from   work-Com   do-Past-Dec
      'I made the maid [work starting this morning].'

b. nay-ka   sikmo-lul/eykey   achim-pwuthe   ilha-key   hay-ss-ta
   I-Nom   maid-Acc/Dat   morning-from   work-Com   do-Past-Dec
      'Starting this morning, I made the maid work.' or
      'I made the maid [work starting this morning].'

c. nay-ka   sikmo-lul/eykey   achim-pwuthe   ilha-key   an   hay-ss-ta
   I-Nom   maid-Acc/Dat   morning-from work-Com Neg do-Past-Dec
      '*Starting this morning, I did not allow the maid work.'
      'I did not allow the maid [work starting this morning].'

According to O'Grady (1991), the *Nom -Acc* structure (43b) is ambiguous but not in the corresponding *Nom-Nom* structure (43a).   The *Nom-Dat* structure follows the *Nom-Acc* type in the degree of ambiguity.   The contrast is expected if it is assumed that (43a) involves a core juncture since a time adverbial embedded in one core can generally not be taken to modify a verb in another core. As can be seen from the interpretations of the sentence (43b), the sentence is ambiguous between core and nuclear juncture.   When a NEG is added between

the 'lower' and 'higher' verbs as in (43c), then the sentence is no longer ambiguous, and the adverbial does not have scope over the whole clause. The sentence (43c) is considered as a core jucture with jussive meaning, since it only takes the second interpretation. On the other hand, the temporal phrase in *Nom-Acc* periphrastic causatives in (44) sometimes can only be the modifier of the event as a whole.

Now, let's consider the following example.

(44) = Ahn's (1990) (66)
caki-pise-wa-uy   sukayntul   hana-ka,   *il-nyen   naynay*
self-secretary-with-Gen scandal   one-Nom one-year all along
motun   hwupo-lul   koylop-ke   ha-ess-ta
all   candidate-Acc   annoyed-Com do-Past-Dec
'One scandal with his own secretary annoyed all the candidate all the year'

According to Ahn (1990), the temporal phrase *il-nyen naynay* is the modifier of the event as a whole, not that of event denoted by the complement.[11] The sentence (44) shows that in the *Nom-Acc* type causatives, the 'lower' and 'higher' verbs should act as a unit as for the temporal phrases. That is, the 'lower' and 'higher' verbs as a unit overtly restrict the scope of the temporal phrase in the *Nom-Acc* periphrastic causatives. That example supports the claim that *Nom-Acc* periphrastic causatives involve nuclear juncture.

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[11] I hypothesize for the moment that this might be due to the fact that 'angry' is a unaccusative verb, while 'work' in (44) is a unergative verb. The phenomenon will be dealt with in later section.

Having established the above observations, let us posit the juncture-nexus types of Korean periphrastic causatives. We can get the following correlation between the juncture-nexus types and semantic relations.

(45)

```
                              Nom-Acc
                              Nom-Dat
          Purposive Sentence  Nom-Nom  Nom-Dat   Nom-Acc
          ---------------------------------------------------------------->
          purposive           jussive  causative (relation)
          core juncture       core     nuclear (juncture)
```

Let us consider J. Song (1988)'s diachronic scenario for the development of causative relations.

(46)
CCP ---------> CCC ---------------> PCC[12]
(47)
Purposive sentence ------> Nom-Nom, Nom-Dat, Nom-Acc [Core juncture] --------> Nom-Dat or Nom-Acc [Nuclear juncture]

His scenario (46) nearly corresponds to my hypothesis (47). The only difference is whether at the second stage, there are *Nom-Acc*, *Nom-Dat* types or not. By positing all the three types at the second stage, we can provide the reason for why all types of periphrastic causatives have a secondary meaning such as advising, or allowing. When Curme (1912) discusses the development of English relative clauses, he argues that "in Early Old English the distinction between hypotaxis and parataxis lies in the thought, and there is no distinction in the form". I think that

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[12] CCP: Complex Construction with a subordinate Purposive Clause, CCC: Complement Causative Construction,   PCC: Periphrastic Causative Construction

the same is true of Korean periphrastic causatives. As argued by many scholars, it is difficult in Korean to distinguish causatives from other relations just by the syntactic form. From my scenario, it is predicted that the causative form will have both causative meaning and jussive meanings such as advising.

When J. Song (1988) argues that Korean periphrastic causatives involve core junctures, he actually means the jussive relation.   As mentioned in the above, nothing can intervene between two composite verbs and still maintain the causative relation.   H. Lee (1985) claims that variation in the case marking of the causee in the order accusative, dative, and nominative, correspondingly expresses the semantic scale enforcement > command > permission or arrangement.   He seems to consider the *Nom-Dat* causatives as a kind of causative but the *Nom-Nom* periphrastic causatives as representing a jussive relation.   The fact that in Korean lexical causatives which do not involve junctures,   the *Nom-Dat* and *Nom-Acc* causatives can be used implies that the two types of causatives are used for tighter juncture-nexus.   From the above observations, I conclude that Korean periphrastic causatives involve nuclear junctures, except for the *Nom-Nom* type.   Hence, contrary to J. Song (1988)'s claim,   Korean periphrastic causatives are not a counterexample to the IRH.

IV. Case Alternations in Korean Periphrastic Causatives

1. Previous Studies

There have been many approaches to the case alternations in Korean periphrastic causatives. Even in a single framework, there are different views on the problem. In RelG, for example, there are two different views on it. Gerdts

(1990) has argued for initial biclausality and final monoclausality, while Cho (1987) has argued for both initial and final biclausality. On the other hand, O'Grady (1991), who is a categorial grammarian, assumes that *Nom-Nom* and *Nom-Dat* constructions involve biclausal characteristics, while the *Nom-Acc* construction involves monoclausal ones. In GB, the Head Movement-type analysis and S' deletion analysis are controversial among GB analysts.

1.1 Relational Grammar [RelG] Analysis

1.1.1. Clause Union Analysis

Gerdts (1990) claims that periphrastic causatives involve Causative Clause Union. To motivate the account, she posits two aspects of the overall structure: initial biclausality and final monoclausality. According to Gerdts (1990:204), in causative clause union, the first stratum in which the downstairs elements bear grammatical relations in the upstairs clause is referred to as the *union stratum.* Gerdts (1990:204) cites a part of Perlmutter and Postal's (1974) claim regarding the grammatical relations borne in the union stratum by the downstairs elements.

(48)
The P(redicate) of the complement clause bears the U(nion) relation in
the union stratum.

In addition, Gerdts(1990:213) characterizes the concepts of *Revaluation* and *Inheritance* as follows.

(49)

a. *Revaluation*:: The downstairs final 1 is revalued as a 2 or 3.
   No Revaluation:: The downstairs final 1 is not revalued

b.*Inheritance*:: A nominal which is not revalued inherits its
   downstairs final relation in the union stratum.
   No Inheritance : A nominal is placed en chomage.

She argues that Korean causatives in which the causee is marked *Accusative* or *Dative* involve Clause Union with Revaluation.

(50)

a. Sensayngnim-i   na-lul   o-key   ha-ess-ta
   teacher-Nom   I-Acc   come-Com do-Past-Dec
   'Teacher made me come'
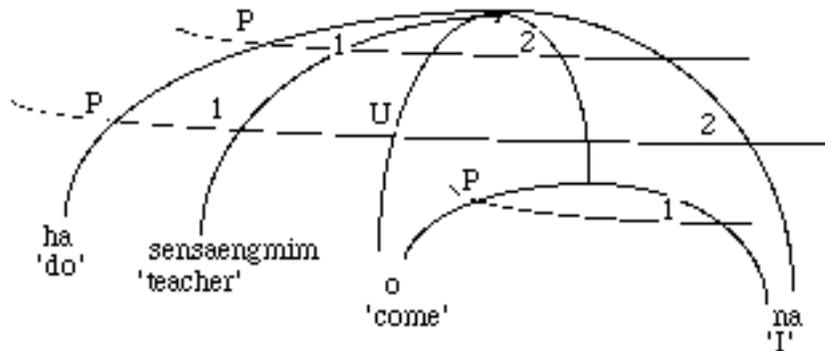
b. emeni-ka   na-eykey   pap-ul   mek-key   ha-ess-ta
   mother-Nom   I-Dat   rice-Acc eat-Com   do-Past-Dec
   'Mother made me eat rice'
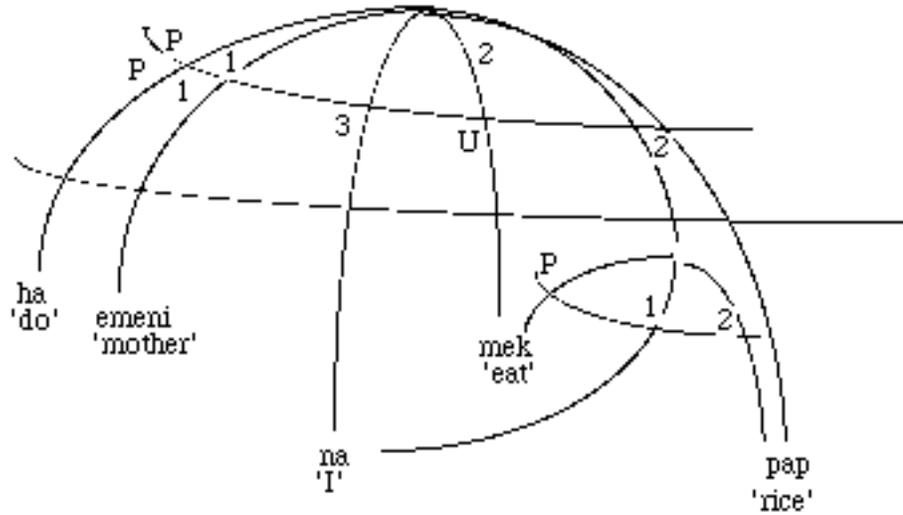
In (50a), the downstairs clause is finally intransitive and the pivot nominal is a union 2 according to (49), hence ACC. In (50b), the downstairs clause is finally transitive, and the pivot nominal is union 3 according to (49).

Gerdts (1990: 214) argues that the causatives with double nominative case marking involve Causative Clause Union without Revaluation. Here is an example from Gerdts (1990).

(51) = Gerdts's (1990) (45)
Changswu-ka   nay-ka   ttek-ul   mek-key   ha-ess-ta
        -Nom   I-Nom   rice cake-Acc   eat-Com   do-Past-Dec
 'Changswu made me eat the rice cake'
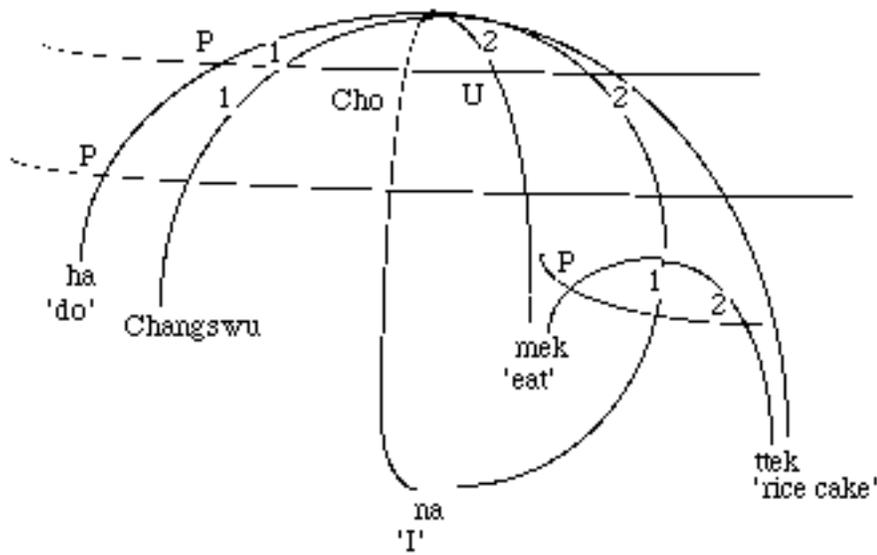
According to Gerdts (1990:214), the downstairs final 1 '*na* ' in (51) is not revalued, nor can it inherit, since there is an upstairs 1 '*Changswu.*'. Therefore '*na* ' is placed *en chomage*.

1.1.2   No Clause Union Analysis

Cho (1987) argues that in Korean causatives, the causee bearing the superficial indirect object is an initial indirect object in the matrix clause, and that the causee bearing the superficial direct object in the matrix clause bears an initial 1-relation in the embedded clause, heading the 2-relation in the final stratum of the matrix clause via Subject-to-Object Raising. Let's consider the following examples.

(52)
a.   nay-ka   Swunhi-ka   pap-ul   mek-key   ha-ess-ta
     I-Nom   -Nom   rice-Acc eat-Com   do-Past-Dec
      'I made Swunhi eat the rice'

b.

nae-ka   Swunhi-eykey   ttek-ul   mek-key ha-ass-ta
I-Nom   Dat   rice cake-Acc   eat-Com do-Past-Dec
'I made Swunhi eat rice cake'
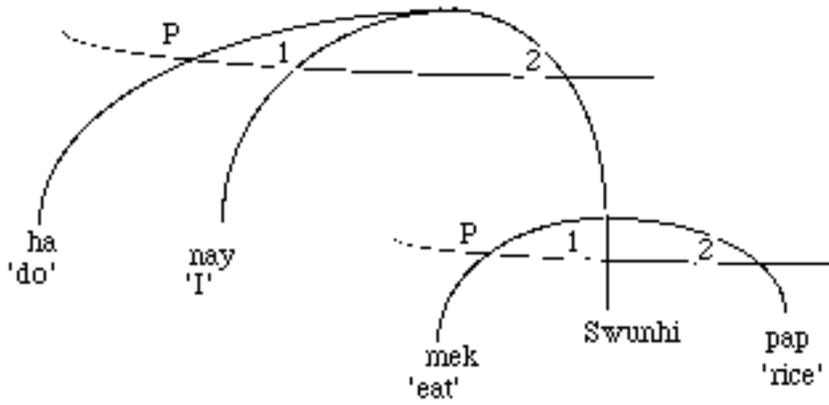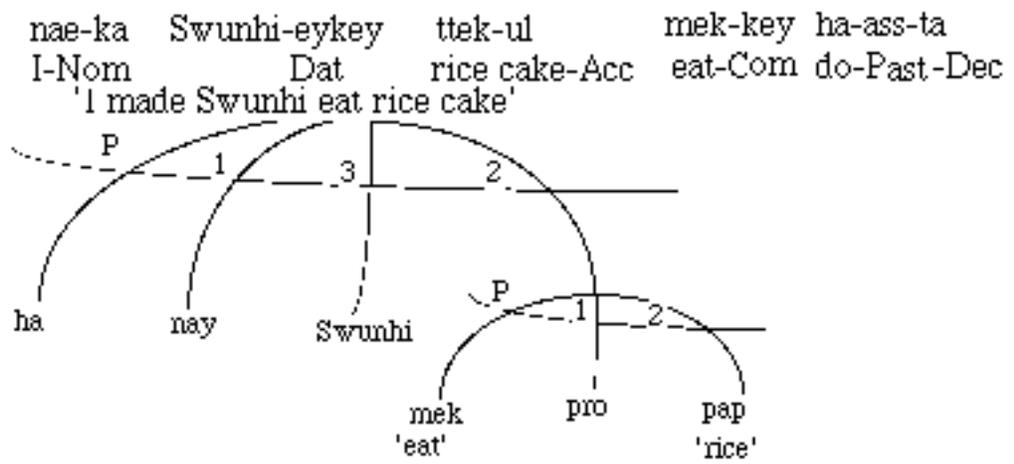
c.

```
nae-ka   Kim  swunkyeng-ul  totwuk-ul  cap-key  ha-ass-ta
I-Nom         policeman-Acc  thief-Acc  catch-Com  do-Fast-Dec
'I made Officer Kim arrest the thief'
```
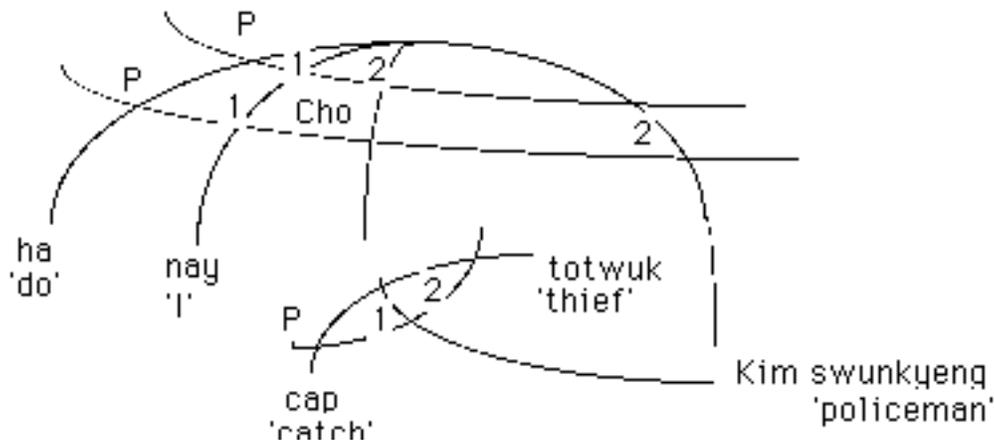

In sentence (52a), the causee 'Swunhi' that is in the nominative case bears a final (and an initial) subject relation in the complement clause.   In sentence (52b), the nominal *Swunhi* bearing the upstairs indirect object relation is licensed by the subcategorization property of the verb, *ha* 'do', not by one of the Union Law.[13] In sentence (52c), the causee *Kim swunkyeng* bearing the superficial direct object in the matrix sentence bears the 2-relation in the final stratum of the matrix clause via Subject-to-Object Raising.

1.2. Categorial Grammar [CG] Analysis

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[13] Cho claims that *ha* 'do' has the following subcategorization as its lexical entry:
      ha: V, ((Subject), (Indirect Object), (Direct Object))
Cho (1987) claims that further justification for the structure such as (52b) is given by the following sentence in which the embedded clause has a lexical subject:

```
na-nun    Inho-eykey   ku-ka     chayk-ul   sa-key    ha-ess-ta
I-Top     Inho-Dat     he-Nom    book-Acc   buy-Com   do-Past-Dec
'I caused Inho to buy the book.'   ( Cho's (1987) (6) )
```

According to Cho, if the superficial indirect object of *ha* 'do' in Korean causatives were derived from the complement clause as assumed under the Clause Union analysis, then the above sentence would be predicted to be ungrammatical under the view of the Clause Union analysis.

O'Grady (1991) argues that both the *Nom-Nom (Acc)* and the *Nom-Dat (Acc)* patterns involve biclausal characteristics, while *Nom-Acc (Acc)* pattern involves monoclausal ones. Let's consider the following examples.
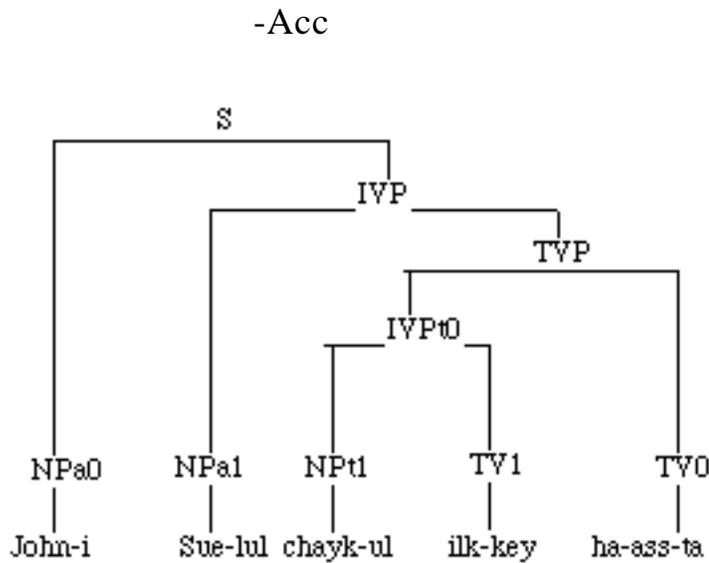
(53)
a. John-i   Sue-ka   chayk-ul   ilk-key   ha-ess-ta
     -Nom   -Nom book-Acc read-Com do-Past-Dec
   'John made Sue read the book'
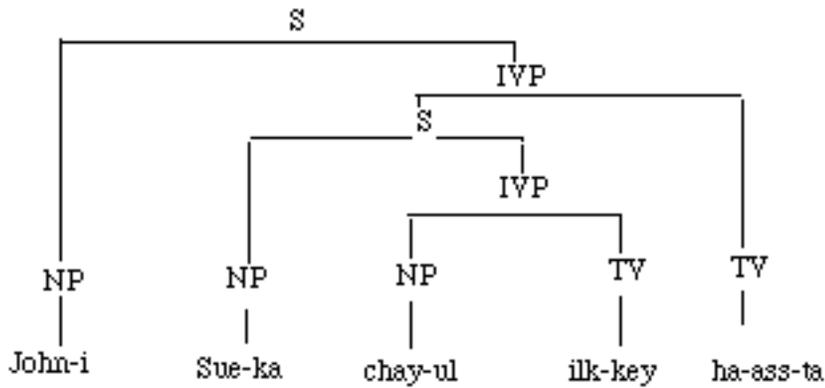
b. John-i   Sue-eykey   chayk-ul ilk-key   ha-ess-ta
   -Dat

c. John-i   Sue-lul   chayk-ul   ilk-key   ha-ess-ta

-Acc
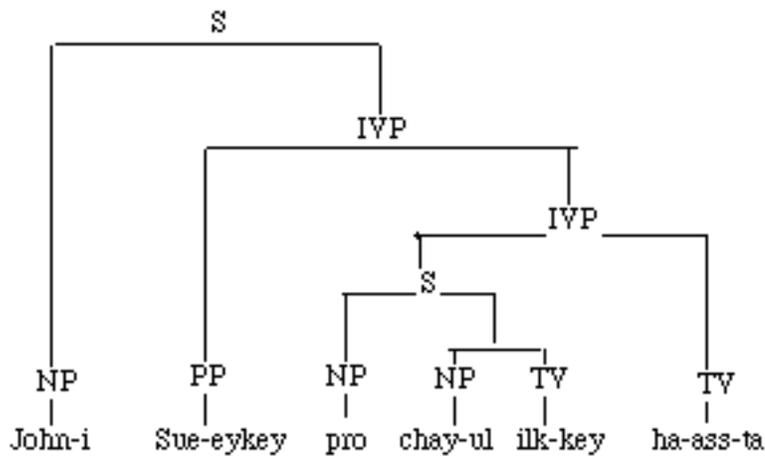
```
                    S
                    |_____
                    |               IVP
                    |           _____|_____
                    |           |               TVP
                    |           |          _____|_____
                    |           |      IVPt0              |
                    |           |    ____|____            |
                    |           |    |       |            |
                  NPa0        NPa1  NPt1    TV1          TV0
                    |           |    |       |            |
                  John-i    Sue-lul chayk-ul ilk-key   ha-ass-ta
```

In the *Nom-Dat (Acc)* pattern, he assumes the subject of the embedded clause to be an ordinarily null pronominal, as in Cho (1987). Unlike Cho, however, he proposes a monoclausal analysis for the *Nom-Acc (Acc)* pattern.

1.3. Government-Binding [GB] Analysis

1.3.1. Incorporation Analysis

Chang &Cho (1991) claims that in the periphrastic causatives, the embedded *C key* is optionally incorporated into the matrix *V ha* by Head Movement. If the movement does not occur, a *nominative* causee surfaces. The causee NP moves from the VP-internal subject position to Spec of IP for reasons of Case, and gets its nominative case by the Case-governing *C key*.

(54)
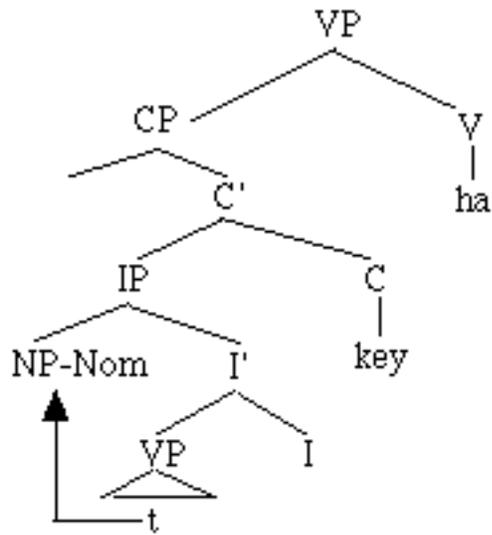
On the other hand, the causee NP gets *accusative* Case from the C-V complex, when the embedded C head-moves to the matrix V forming a C-V complex.

(55)
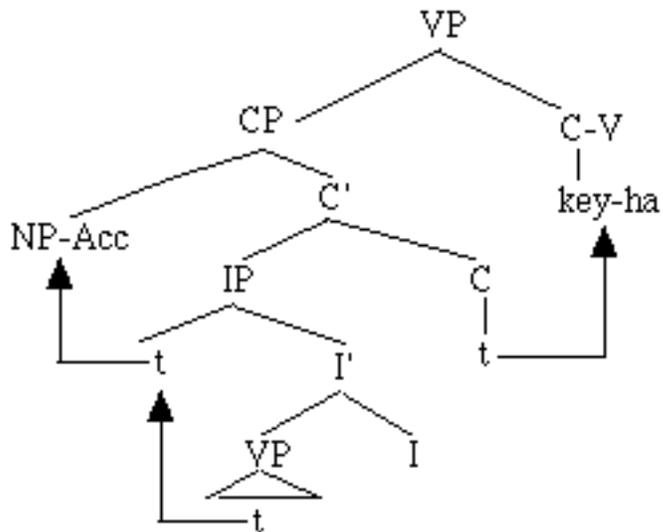
They claim that since the first moved NP cannot get case because of an empty CP head, it must move further up to the Spec of CP position where it is assigned

accusative case from the C-V complex.   Their explanation of the case alternations depends on whether or not there is Head Movement prior to case assignment. They argue that periphrastic causatives with a dative causee is a subcase of multiple causee causative construction where the indirect causee and the direct causee happen to be coreferential, just as in O'Grady (1991).

1.3.2. Exceptional Case Marking [ECM] Analysis

   Kim (1990) posits the following structure for causatives with dative-marked causee.

   (56)
   John-i   Mary-eykey   [s'[s PRO ka] -key]   ha-ess-ta
      -Nom   -Dat   go-Comp   do-Past-Dec
     'John caused Mary to go.'

For the causatives with ACC/Nom causatives, on the other hand, she posits the Exceptional Case Marking (ECM) structure, in which causees are subjects of the lower clause.   Kim assumes that S' deletion in Korean is optional, following Hong (1985); if S' deletion does take place, the subject of the complement S will be obligatorily assigned accusative case by the causative verb through ECM; if S' deletion does not take place, there will be no Case assigner for the complement subject position, and the subject of the complement will get nominative Case by default.

1.4. Critique of Previous Studies

As shown in the above discussions, most theories approach the problem with purely structural or relational notions by positing 'underlying and surface structures'.   I think that the previous studies have some weak points. First of all, they do not have

the mechanism to constrain the unacceptable causative sentences. Even though they offer an account for the case alternations in the acceptable sentences, they do not give an account of why a certain case alternation is not allowed in some cases. Consider the following sentence.

(57)

Chelswu-nun	mwul-*eykey /ul	*el* -key	ha-ess-ta
-Top	water-*Dat /Acc	frozen-Com	do-Pas-Dec

'I caused the water to be frozen'

They do not pay attention to the question why the dative case is not allowed in the above sentence. It will be argued that a semantic parameter in RRG should be considered to explain the contrast in the case alternation shown above. Second, the previous studies ignore an important linguistic question: What motivates the case alternations in Koran causatives? They do not show the correlation between form (the case markings) and function (their semantic and pragmatic functions).

I will propose that the case alternations are due to the degree of *backgrounding* in the sense of Van Valin (1992). That is, the *Nom-Nom* type involves the least backgrounding, while the *Nom-Acc* type involves the most. It will also be argued that the difference in the degree of backgrounding results from the difference in juncture-nexus structures and macroroles in RRG.

2. RRG Analysis

2.1. The Actor-Undergoer Parameter in Split Intransitivity

   of Korean Causatives

Since Perlmutter (1978) proposed the so-called *Unaccusative Hypothesis*
within the RelG framework,   there have been several approaches to *Split
Intransitivity* .   In RelG, unaccusative verbs are analyzed as having an initial 2
without any 1. On the other hand, the unergative verbs have an initial 1 without
any 2.   In GB, unaccusative verbs may be defined as verbs theta-marking its
complement but assigning no structural Case to it.   According to Ahn (1990), in
Burzio's (1986) system, unaccusative verbs are characterized as assigning no Case,
while in Belleti (1988), unaccusative verbs may assign the Partitive Case, which is an
abstract Inherent Case.   In this sense, unaccusative verbs occur in the D-structure
as in (58a), while other intransitive verbs appear in the D-structure as in (58b) (for
details, see Van Valin (1990)).

(58)
a. Unaccusative
   [s__ [vp V   NP]
b. Unergative
   [s NP [vp   V]

Tsujimura (1989) argues that "the focus of one of the most common disputes
regarding unaccusativity is the question of whether unaccusativity should have its
foundation in syntax or in semantics".   For example, Rosen (1990) defends the
purely syntactic encoding.   On the other hand, Van Valin (1990) argues that "split
intransitivity phenomena are better explained in semantic terms". RRG employs the

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term 'S$_A$' and 'S$_O$' instead of the RelG terms *unaccusative* and *unergative* (see Van Valin (1990) for details). Van Valin (1990: 222) defines the terms as follows:

> Class S$_A$ -- where S$_A$ means that the subject of the intransitive verbs ('S') receives the same morphosyntactic treatment as the subject of a transitive verb ('A')
>
> Class S$_O$ -- where S$_O$ means that the subject of the intransitive verb receives the same morphosyntactic treatment as the object of a transitive verb ('O')

Foley and Van Valin (1984: 95) comment on the inflections in split-intransitivity as follows:

> In 'split-S' marking, the single arguments of state and some activity verbs receive undergoer inflection (the same as that of *undergoers* with transitive verbs), while with other activity verbs their arguments take actor inflection (the same as that of the *actor* with transitive verbs). [the italics are mine]

Now, let us consider the following examples which seem to show the effects of the split intransitivity in Korean causatives.

(59)
a. Chelswu-nun   umsik-*eykey /lul/*i   *ssek* -key   ha-ess-ta
        -Top   food-*Dat /Acc/*Nom   be rotten-Com   do-Past-Dec
     ' Chelswu made food be rotten'

b. Chelswu-nun   Swunhi-*eykey/lul/*ka   *hwana* -key   ha-ess-ta
        -Top   *Dat/Acc/*Nom   angry-Com   do-Past-Dec
     'Chelswu made Swunhi angry'

c. Chelswu-nun   mwul-*eykey /ul/*i   *el* -key   ha-ess-ta

        -Top   water-*Dat /Acc/*Nom   frozen-Com do-Past-Dec
      'I caused the water to be frozen'

    d. na-nun   Chelswu-eykey /lul/ ka   *ket* -key   ha-ess-ta
       I-Top   -Dat /Acc/Nom   walk-Com   do-Past-Dec
      'I caused Chelswu to walk'

    e. na-nun   Chelswu-eykey /lul/ka   *solichi* -key   ha-ess-ta
       I-Top   -Dat /Acc/Nom   cry-Com   do-Past-Dec
       'I caused Chelswu to cry'

    f. na-nun   Chelswu-eykey /lul/ka   *wul* -key   ha-ess-ta
       I-Top   -Dat /Acc/Nom   weep-Com   do-Past-Dec
       'I caused Chelswu to weep'

The verbs in (59a) through (59c) are the ones which Yang (1991) considers *unaccusative* verbs(i.e. 'So' verbs), those in (59d) through (59f) *unergative* verbs (i.e. 'S$_A$' verbs).[14]   The causee in 'So' verbs in (59a) through (59c) is marked by accusative case, while that in 'S$_A$' verbs in (59d) through (59f) is marked by dative or accusative case, or even nominative case.   Shibatani (1976) claims that unaccusative verbs such as (59a) through (59c) does not allow for nominative case because the periphrastic causative does not involve volitional DO in the sense of Shibatani in the embedded structure.   It seems that here there is no possibility of the adverbial scope ambiguity that (44) shows.   That is, the peripheral adverbial must have scope over the whole clause.   Since no case alternation is possible with unaccusative verbs, and they are interpreted as causative and not jussive,   that

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[14]   At a first glance, animancy seems to be the only determining factor for the unaccusative/ unergative distinction.   However, it is not true, as evident from the following examples:
     John-un   Bill-*eykey/ul/*i   cwuk-key   ha-ess-ta
       -Top   *Dat/Acc/*Nom die-Com   do-Past-Dec
    'John caused Bill to die.'

means that they must be nuclear junctures.　　Let us examine the following diagram.

(60)
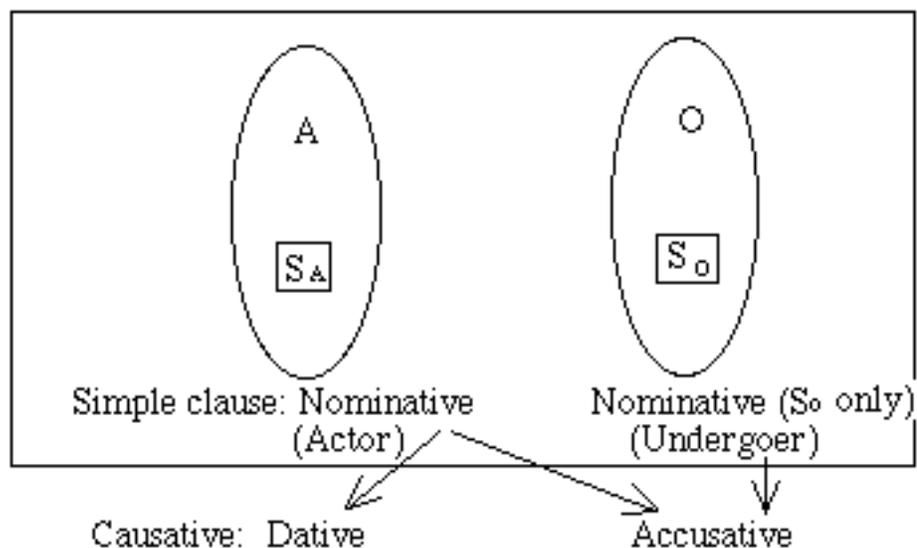
I think that the reason why only the accusative case is used in unaccusative constructions should be explained in terms of a semantic parameter, specifically, Actor-Undergoer in RRG.　　The case alternations of the unergative construction will be put aside for the moment and　will be discussed later.　　Among the four categories, that is, 'A', 'O', 'S$_A$', and 'S$_O$',　I am interested in the three categories, that is, A, S$_A$, and S$_O$, because they are coded as 'causees' in causative clauses. According to the diagram,　the Actor 'subject', that is, 'A' and 'S$_A$', of the simple clauses (type 1), which is in the nominative case, will realize its case as nominative, dative, or accusative case, the Undergoer 'subject' of the simple clauses (type 2) only as accusative.　　According to Shibatani (1976),　the nominative case is not acceptable for the causee in type 2, because the periphrastic causative does not involve two volitional DO's.　　The same pattern as in (59) applies to both types of lexical causatives, except that the nominative case is not allowed for the type 1.

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That is, the causees of the type 1 in lexical causatives are realized as dative, or accusative, those of the type 2 only as accusative. From the observations described above, we can deduce that the Undergoer 'subject' of simple active clauses should be realized as the Undergoer of the corresponding causative clauses.[15] The process of case realization in Korean unaccusative causative construction as mentioned above is considered a reflection of the tendency to preserve its original macrorole in the linking algorithm.[16] This analysis can account for why the following sentences are unacceptable.

(61)
  a. Chelswu-nun   umsik-*eykey   *ssek* -key   ha-ess-ta
          -Top   food-*Dat   be rotten-Com   do-Past-Dec
  ' Chelswu made food be rotten'

  b. Chelswu-nun   umsik-*eykey   *ssek* -hi-ess-ta
          -Top   food-*Dat   be rotten-Cau-Past-Dec
  ' Chelswu made food be rotten'

The dative case is not acceptable in these examples, because the Undergoer 'subject' of the simple clauses, that is, *umsik* 'food' should be realized as the Undergoer of the causative constructions. The above observations also comply with Kang (1984)'s claim that the *Nom-Dat* structure allows the 'causee' the option of refusing compliance with the causer, but the *Nom-Acc* structure does not.

2.2. Degree of 'Backgrounding' in Korean Causatives

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[15] I will justify this claim later.
[16] K Park(1992) has claimed that in Korean 'raising' constructions, the complement verbs should be unaccusative verbs and the 'raisee' should be an Undergoer of the 'lower' verb. This claim supports the assumption that Korean unaccusative constructions tend to preserve their original Macro-role in linking algorithms. In any case, this assumption needs further empirical evidence.

I have mentioned that the Actor 'subject', that is, 'A' and 'S$_A$', of simple unergative clauses have the options of taking nominative, dative, or accusative case. Most theories have concentrated on the strutural generation of the case alternations. They do not pay attention to what motivates the choice of case in pragmatic situations. First of all, let us turn to the question of the motivations of the choice of case in the causative constructions. To resolve the issue, I employ the concept *backgrounding* in this paper. The notion of backgrounding has been discussed in various linguistic areas. For example, Talmy(in class lecture) discusses the notion in terms of cognitive linguistics. He uses the terms foregrounding and backgrounding to indicate attentional elevation and reduction in a norm-based organization. When Saksena (1982) deals with the Hindi causatives, she considers 'backgrounding' as *de-subjectivization*, which is a syntactic notion. When Foley and Van Valin (1984) establish the two facets of passive constructions, viz., 'backgrounding' and 'foregrounding' passives, they define the former passive as the omission of the actor or its appearance as an oblique element in the periphery, and the latter as the occurrence of a marked pivot choice. The universal formulation of the passive in RRG is presented as follows:

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

I will follow Van Valin (1992)'s notion of backgrounding. Even though RRG does not refer to the notion 'backgrounding' to account for the causatives, I argue that the Korean periphrastic causatives should rely on the notion to account for the case alternations. In the RRG linking algorithm, the 'subject' of the base transitive clause, that is the Actor of the embedded clause in LS, should be coded as a Non-actor in a causative construction. I will make two proposals regarding the

backgrounding in this section. First, Korean causatives involve a kind of 'backgrounding' , and yet unlike passives, 'backgrounding' in causatives involves the linking of *the actor to non-actor* coding, not the linking of the actor to an oblique or the omission of the actor as in passives. Second, the degree of backgrounding is realized as case markings of causee in Korean periphrastic causatives.

Saksena (1982) argues that like passive constructions, causatives may undergo the process of backgrounding.

> The passive and the causative (e.g., of transitives) are similar in
> at least one respect: they both background(i.e., de-subjectivize)
> the agent-1.

She employs the syntactic notion of backgrounding, that is, *demotion* , for the description of causatives. However, RRG employs the semantic or pragmatic pivot notion rather than *demotion* which is accompanied by multi-level structures. Consider the following Korean sentences.

(63)
a. John-i   Sue-eykey   chayk-ul   ilk-key   ha-ess-ta
      -Nom   -Dat   book-Acc   read-Com   do-Past-Dec
   'John made Sue read the book'

b. Sue-ka   chayk-ul   ilk-ess-ta
      -Nom   book-Acc   read-Past-Dec
   'Sue read the book'

In (63b), *Sue* is the 'subject' of the sentence, whereas it is lexically 'demoted' to the 'non-subject' in its corresponding causative sentence (63a) as can be deduced from

the case marking. As noted by Rosen(1990), it is cross-linguistically common for the syntactically 'demoted' causee to have the dative case. For example, Japanese and French have the dative case for the causee in the embedded transitive clause, whereas in Korean three different case markings are used for the causee.   As we have seen in the above, many theories depend on some kind of underlying-surface structure to account for the case alternations in Korean periphrastic causatives. Even though the theories provide structural accounts of how the case alternations can be derived, they ignore the question of what motivates the choice of the case alternations.   RRG is a monostratal theory that does not posit multi-level structures.   I think that the use of three different case markings for causees has to do with the degree of backgrounding in linking between LS and LSC.   Let us examine the following examples.

(64)
a. Chelswu-ka   Swunhi-*lul*   ot-ul   ip-keyha-ess-ta
        -Nom   -Acc   clothes-Acc   wear-Com   do-Past-Dec

b. Chelswu-ka   Swunhi-*eykey*   ot-ul   ip-keyha-ess-ta
        -Nom   -Dat   clothes-Acc   wear-Com   do-Past-Dec

c. Chelswu-ka   Swunhi-*ka*   ot-ul   ip-keyha-ess-ta
        -Nom   -Nom   clothes-Acc   wear-Com   do-Past-Dec
       'Chelswu made Sunhi put on the clothes.'

Cross-linguistically, nominative case is the default case for indicating Actorhood. Hence, the nominative case can be considered as the least backgrounding marker, because it is impossible to *background* the causee with the nominative case.   Note Kang's suggestion that the *Nom-Dat*   structure allows the 'causee' the option of refusing compliance with the causer, but the *Nom-Acc* structure does not.   I think

that what Kang implies is that the accusative case is the strongest backgrounding marker in my sense.   On the basis of these observations, I propose the following backgrounding hierarchy in Korean periphrastic causatives:

      (65) BACKGROUNDING HIERARCHY
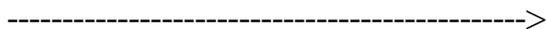   Nominative case > Dative case > Accusative case
         -->
                more backgrounding

    Now, we have to answer another question: Is the Backgrounding Hierarchy proposed above motivated by RRG theory ?   My answer is yes.   The answer comes from the Macro-roles of the causees.   According to Actor-Undergoer Hierarchy in RRG, Agent or Effector is the unmarked choice for Actor, while Theme or Patient is the choice for Undergoer.   Hence, the Actor is the most volitional, while the Undergoer is least volitional.   The non-macrorole direct core argument normally should be in the middle of the two extremes.   We can extend the Backgrounding Hierarchy in terms of Actor-Undergoer Hierarchy motivated in RRG theory.

      (66) BACKGROUNDING HIERARCHY(Revision 1)
      Nominative case > Dative case > Accusative case
      Actor   > Non-Macrorole direct core argument > Undergoer
         -->
                more backgrounding

    As claimed in the above, the causee with nominative case is the Actor in core juncture causatives.   On the other hand, those with accusatives are the Undergoer in nuclear juncture causatives.   Let us justify the Undergoerhood of the causees with accusatives.

(67) = O'Grady (1991: 191, 193)
a. sensayngnim-i   na-lul   chayk-ul   ilk-key   hay-ss-ta
   professor-Nom   me-Acc   book-Ac   read-Com   do-Past-Dec
       'The professor had me read the book.'

b. nay-ka   sensayngnim-eyuyhayse   chayk-ul ilk-key
   I-Nom   professor-by   book-Acc read-Com
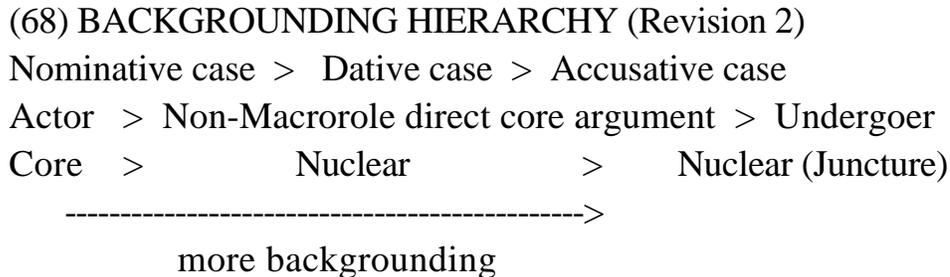   ha-ye-ci-ess-ta
   do-PF-Pass-Past-Dec
       'I was made to read the book by the professor.'

c. *chayk-i   sensayngnim-eyuyhayse   na-lul/eykey/kailk-key
    book-Nom   professor-by   I-Acc/Dat /Nom   read-Com
    ha-ye-ci-ess-ta
    do-PF-Pass-Past-Dec
       'The book was made me to read.'

When we assume that the Undergoer should be the pivot of Korean passive sentences just as in English, we can conclude from the above examples that the causee with the accusatives should be Undergoer of the causative construction. Those with datives are non-macrorole direct core arguments. O'Grady (1991) suggests that the dative-marked NP in the construction must have a referent that is potentially in control of the event in the complement clause. Hence, those with datives should be located in the middle of the hierarchy. This hierarchy provides an account for why lexical causatives cannot let the causee take nominative case. The reason comes from the fact that the causees in lexical causatives involve as much backgrounding as possible. The juncture-nexus types of the periphrastic causatives seem to support the Backgrounding Hierarchy. Since the constructions with nuclear juncture are coded as aspects of a single event, it can be assumed that

nuclear junctures code the most backgrounding.   Following this reasoning, we can combine the results of juncture types into the following hierarchy:

(68) BACKGROUNDING HIERARCHY (Revision 2)
Nominative case > Dative case > Accusative case
Actor > Non-Macrorole direct core argument > Undergoer
Core   >   Nuclear   >   Nuclear (Juncture)
     -->
              more backgrounding

The   hierarchy   can   be   related   to   Ono's   (1982)   classification   of   Japanese causatives.   Ono has attempted his own classification of Japanese causatives both in terms of semantics and syntax, primarily from the degree of 'control' by the matrix subject over the embedded subject as follows:

(69)
a. The matrix causee causative:
        (i) The coercive causative
        (ii) The manipulative causative

b. The embedded causee causative:
        (iii) The directive causative
        (iv) The permissive causative
        (v) The cause causative
        (vi) The experience causative

Given that Ono's classification is a kind of semantic criterion to the types of the causatives, the Korean periphrastic causative constructions with dative or accusative case marking on the causee seem to relate better to Ono's *matrix causee causative* , while those with the nominative relate better to *the embedded causee causative* .

Cole (1983) gives us similar observations about the grammatical relations of causees, which are realized by case markings. Cole argues that "the grammatical role of the complement subject in clause union causatives reflects the semantic role of the complement subject with respect to agentivity." He derives the following generalizations from his data: First, agentivity is not merely one of a number of semantic parameters affecting the derived grammatical role of the complement subject. It is the relevant semantic parameter. Second, although the specific grammatical roles associated with agentive and non-agentive complement subjects vary from language to language, the principle determining those roles does not vary. The semantic parameter will be affected by the pragmatic influences, or discourse contexts. The Backgrounding Hierarchy proposed above accounts not only for the case alternations of causees in embedded intransitive unergative clauses, as shown in (59d) through (59f), but also those in embedded transitive clauses, as in (64). That is, the hierarchy provides the motivation for why a specific case is used over other cases in a given context. The Japanese examples in (70) from Shibatani (1973) seem to follow the generalization.

(70)
a. Taroo-ga   Ziroo-o   ik-ase-ta
        -Nom   -Acc   go-Cau-Dec
b. Taroo-ga   Ziroo-ni   ik-ase-ta
        -Nom   -Dat   go-Cau-Dec
    'Taro caused Jiro to go.'

According to Foley and Van Valin (1984), the particle *o* in (70a) is normally used in Japanese to mark the Undergoer, while *ni* in (70b) occurs with goals and the agent of a passive construction. There is an important semantic difference between these two sentences. In (70a) with *o* the causee does not perform the action voluntarily and is being forced by the causer. In (70b) with *ni*, on the

other hand, the causee performs the action voluntarily at the suggestion or instruction of the causer.[17]   Comrie (1981) attempts to deal with variation of this kind by proposing a control hierarchy of instrumental > dative > accusative, where instrumental case-marked NPs coding causees are highest in control and accusative the lowest.   According to Foley and Van Valin (1984), this control hierarchy can be derived from the Actor-Undergoer Hierarchy, since instrumental case normally codes effectors, dative locative (-goal)s, and accusative patients or themes.   In this respect, Comrie's control hierarchy can be incorporated into the Backgrounding Hierarchy proposed above.

V. Conclusion

I have shown that the theoretical controversies in Korean causative constructions can be resolved well within the theoretical framework of RRG. First of all, I have argued that Korean lexical causatives should be classified as Accomplishment verbs, but that they do not involve the implication observed in the Aktionsart.   To reflect this marked property of Korean lexical causatives, I have proposed a modal operator '@' in the LS of Korean causatives with special reference to implication.   Second, the juncture-nexus types of Korean periphrastic causatives have been presented: *Nom-Nom* type involves core juncture, and *Nom-Acc* and *Nom-Dat* core (jussive) or nuclear juncture (causative).   I have also argued against J. Song (1988)'s claim that all the types of Korean periphrastic causatives involve core junctures.   Third, I have argued that the case alternations in Korean periphrastic causatives should be resolved with the RRG notions like

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[17] Foley and Van Valin (1984) argue that a number of languages exhibit the same sort of variation in the case marking of causees of transitive verbs.   In some languages, for example, German and Bolivian Quechua, the contrast is between accusative and instrumenal case marking, whereas in others it is between dative and instrumental marking, e.g. French and Kannada.

Actor-Undergoer parameter, or the Backgrounding parameter to provide the justifications for what motivates the case alternations in the periphrastic causatives. Nearly all the theories rely on multi-level structures like underlying and surface structures to account for the case alternations, while RRG accounts should rely on the monostratal structures. I have suggested that an Actor-Undergoer parameter gives an account for why dative case markers are not allowed for the causee of embedded unaccusative verbs. To determine what motivates the case alternations in base unaccusative and transitive clauses, I have relied on the RRG notion of Backgrounding, and have proposed that the case alternations are due to the degree of backgrounding. Finally, I have argued that the difference in the degree of backgrounding is due to the difference in structures. First, the three types of periphrastic causatives differ in juncture-nexus types. The *Nom-Nom* type involves core juncture, while the *Nom-Dat* and *Nom-Accusative* involve nuclear junctures. Second, I claim that they differ in macroroles: the nominative-marked causee is the Actor in core juncture causatives, the dative-marked one is the non-macrorole direct core argument, and the accusative-marked one is the Undergoer in nuclear juncture.

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