The Light Verb Construction in Korean

by

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Abstract

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Light verb constructions have been treated as a relevant linguistic topic because they show unique characteristics that are not found in other verb constructions in Korean. Thus, previous studies are mainly focused on specific characteristics: (i) the relationship between light verbs and v and (ii) the affixation of accusative case particles. However, in this thesis, I examine more important issues related to light verb constructions in Korean: (i) how light verb constructions can work as predicates in clauses, (ii) the nature of the relationship between the complement and the light verb in light verb constructions, and (iii) where the complement and the light verb are present in the surface structure in Korean. Operating under the assumption that the light verb construction is a way of presenting a predicative type similar to lexical verbs or adjectives in Korean, I claim that (i) the lexical-semantic and syntactic information of all predicates, including light verb constructions, is determined in the “lexical conceptual structure” (e.g., Levin & Rappaport 1998), (ii) the conceptual categories in the lexical conceptual structure become the lexical items in the lexicon differently in light verb constructions than in lexical verb constructions, and (iii) the light verb construction is built by incorporation which is similar to semantic noun incorporation (e.g., Dayal 2010). In addition, in this thesis I will present new characteristics of light verb constructions in Korean: (i) the function of each component in the light verb construction such as the modifier and the modified item, (ii) the relationship between
components in the light verb construction (i.e., s-selection), (iii) the existence of a functional projection between two components (i.e., Event Phrase), and (iv) the generation of the negation particle *an* ‘not’ under the head of *vP.*
Acknowledgements

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<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>*</td>
<td>ungrammatical</td>
</tr>
<tr>
<td>ACC</td>
<td>accusative case particle</td>
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<tr>
<td>Aff</td>
<td>affix</td>
</tr>
<tr>
<td>COMP</td>
<td>complementizer</td>
</tr>
<tr>
<td>DEC</td>
<td>declarative sentence ending</td>
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<tr>
<td>EP</td>
<td>event phrase</td>
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<tr>
<td>Ev</td>
<td>event argument</td>
</tr>
<tr>
<td>INF</td>
<td>infinite</td>
</tr>
<tr>
<td>KP</td>
<td>case phrase</td>
</tr>
<tr>
<td>LVC</td>
<td>light verb construction</td>
</tr>
<tr>
<td>N⁰</td>
<td>nominal root/the head of NP</td>
</tr>
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<td>NOM</td>
<td>nominative case particle</td>
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<td>PAST</td>
<td>past tense suffix</td>
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<tr>
<td>PrP</td>
<td>predicate phrase</td>
</tr>
<tr>
<td>SBJ</td>
<td>subject</td>
</tr>
<tr>
<td>SR</td>
<td>surface representation</td>
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<tr>
<td>TrP</td>
<td>transitive phrase</td>
</tr>
<tr>
<td>V⁰</td>
<td>verbal root/the head of VP</td>
</tr>
<tr>
<td>X⁰</td>
<td>root expression/word expression</td>
</tr>
<tr>
<td>∅</td>
<td>zero-morpheme</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>constant (i.e., LCS)</td>
</tr>
<tr>
<td>&lt; &gt;</td>
<td>base-position (i.e., SR)</td>
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<tr>
<td>[ACC]</td>
<td>case feature</td>
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<td>CAUSE</td>
<td>causative suffix</td>
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<td>DAT</td>
<td>dative case particle</td>
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<td>e</td>
<td>empty</td>
</tr>
<tr>
<td>ERG</td>
<td>ergative</td>
</tr>
<tr>
<td>GEN</td>
<td>genitive case particle</td>
</tr>
<tr>
<td>LCS</td>
<td>lexical conceptual structure</td>
</tr>
<tr>
<td>LV</td>
<td>light verb</td>
</tr>
<tr>
<td>N</td>
<td>feature nominal/noun</td>
</tr>
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<td>NEG</td>
<td>negative particle</td>
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<td>OBJ</td>
<td>object</td>
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<td>PRES</td>
<td>present tense suffix</td>
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<td>Q</td>
<td>interrogative sentence ending</td>
</tr>
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<td>sc</td>
<td>small clause</td>
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<tr>
<td>TC</td>
<td>topic-contrast particle</td>
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<tr>
<td>V⁰</td>
<td>feature verbal/verb</td>
</tr>
<tr>
<td>VN</td>
<td>verbal noun</td>
</tr>
<tr>
<td>XP</td>
<td>phrase expression</td>
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1. Introduction

1.1 An Overview of Light Verb Constructions

This thesis examines the lexical-semantic, morphological, and syntactic properties of the light verb construction (hence after LVC) in Korean (i.e., the verb phrase containing light verbs (hence after LV)). In this thesis, I claim that Korean LVCs are composed by “incorporation” of the nominal expression and the LV, and the various characteristics of Korean LVCs that are regarded as unusual can be accounted for under a unified perspective. Examples of Korean LVCs are shown in (1.1). The LVC in Korean consists of two components; a nominal expression and a LV in this order as in (1.2).

(1.1) a. cekkwun-i tali-lul [LVC pakoy-(lul) ha/*toy]-ess-ta.
    enemy-NOM bridge-ACC destruction-(ACC) do/*become-PAST-DEC
    ‘The enemy destroyed the bridge.’

b. mwul-i [LVC cenghw *ha/toy]-ess-ta.
    water-NOM purification *do.be/become-PAST-DEC
    ‘The water purified itself.’

c. pang-i maywu [LVC kkaykkus ha/*toy]-ess-ta.
    room-NOM very cleanliness be/*become-PAST-DEC
    ‘The room is very clean.’

(1.2) Korean LVCs:

        [LVC complement + LV] ➔ a verb or an adjective

                           |                           |
        <nominal expression> <ha ‘do/be’ or toy ‘become’>

As can be seen in (1.1), it is noticeable that the surface form of the LVC resembles the VP
which is built by a transitive verb because, as with transitive verbs, the LV obligatorily
takes a nominal complement but it presents somewhat different properties from those found
in other normal verb constructions. First, it is clear that the LV does not belong to the class
of transitive verbs in Korean because (i) unlike a normal transitive verb, the LV does not
have the ability to assign a 0-role to its complement and (ii) the nominal complement of the
LV works as an essential part of the LVC (i.e., the semantic component). According to the
constituent test (e.g., Replacement test), the LV in (1.1) cannot be replaced by a transitive
verb in Korean. Consider (1.3).

(1.3) a. cekkwun-i tali-lul [LVC pakoy-(lul) ha/*mantul]-ess-ta.
     enemy-NOM bridge-ACC destruction-(ACC) do/*make-PAST-DEC
     ‘The enemy destroyed the bridge.’

b. pang-i maywu [LVC kkaykkus ha/*mantul]-ess-ta.
     room-NOM very cleanliness be/*make-PAST-DEC
     ‘The room is very clean.’

Second, the LVC in Korean looks like a VP because it consists of two separate
lexical items as in (1.2). However, the LVC always acts like a verb or an adjective (i.e., an
X0 expression) rather than a VP (i.e., an XP expression) in a clause. For instance, consider
the following gap test in (1.4), where it is easy to observe that the LVC in Korean is not
equivalent to a VP.

---

1 For instance, in the transitive verb construction such as [VP eat the rice], when the DP complement the rice
is replaced with other DPs such as bread, apples, etc., the meaning of the verb eat does not change because
the DP complement the rice does not involve in the semantic part of the verb eat. However, if the complement
is changed in the LVC, the meaning of the LVC also changes.
Third, morphologically, the LVC in Korean must be treated as an exceptional case. As in example (1.2), the LVC behaves like a verb after the two components combine and so it seems that the LVC is a morphologically complex word like a derived word or a compounded word. However, Korean LVCs cannot be placed in the category of morphologically complex words because their behaviour conflicts with the principles that hold for other morphologically complex words (e.g., “Lexical Integrity Principle” in Bresnan & Mchombo 1995). Let’s compare a V-V compounded verb to the LVC in

---

2 English adjectives and Korean adjectives are different. When used for a predicative purpose, an English adjective always needs the support of the verb be (e.g., That girl is [ADJ beautiful]). However, in the same case, a Korean adjective does not require the support of any verb or event LV. Therefore, the adjective in Korean is similar to the verb.

(e.g.) a. pang-i choh-ta. b. *pang-i choh-ha-ta.
room-NOM good-DEC room-NOM good-BE-DEC
‘The room is good.’ ‘The room is good.’

3 In English, the suffixes –ize, -fy, etc. are derivational morphemes and they convert nouns or adjectives into verbs (e.g., social ADJ ~ social-ize VERB). Similarly, one may assume that ha ‘do/be’ or toy ‘become’ in Korean functions like these suffixes which transform nouns into verbs.

4 According to Sohn (1999), the V+V constructions in Korean can be divided into three different types; (i) conjunction (argument sharing or resultative), (ii) complement, and (iii) compounded.
Korean.

(1.5) **V-V compounded word:**

a. Two verbal roots: \textit{kal-} ‘to change’ \textit{tha-} ‘to ride’

b. Compounded verb: \textit{kal-a-tha-} ‘to transfer’

c. \textit{Tom-i kicha-lul kal-a-tha-ss-ta.}
   \begin{tabular}{lll}
   T-NOM & train-ACC & change-INF-ride-PAST-DEC \\
   \end{tabular}
   ‘Tom transferred trains.’

d. \textit{*Tom-i kal-a kicha-lul tha-ss-ta.}
   \begin{tabular}{lll}
   T-NOM & change-INF & train-ACC & ride-PAST-DEC \\
   \end{tabular}
   ‘Tom transferred trains once.’

In (1.5b), the verb \textit{kal-a-tha-} ‘to transfer’ is a compounded verb in Korean, and is built by the unification of two verbal roots \textit{kal-} ‘to change’ and \textit{tha-} ‘to ride’. In terms of the lexical integrity principle in Bresnan & Mchombo (1995), after two roots build a compounded verb, these roots are lexically integrated and they are never separable in the clause. Thus, when two roots are separated in a clause as in (1.5d), the clause is ungrammatical. Now, look at the LVC in Korean in (1.6).

---

(i) **Conjunction:**
\textit{Tom-un koki-lul kwu-e mek-ess-ta.}
\begin{tabular}{lll}
T-TC & meat-ACC & broil-so eat-PAST-DEC. \\
\end{tabular}
‘Tom broiled the meat and ate it.’

(ii) **Complement:**
\textit{Tom-un koki-lul mek-e po-ass-ta.}
\begin{tabular}{lll}
T-TC & meat-ACC & eat-INF try.to-PAST-DEC. \\
\end{tabular}
‘Tom tried to eat the meat.’

(iii) **Compounded:**
\textit{Tom-un kanguy-lul tutie al-a tul-ess-ta.}
\begin{tabular}{lll}
T-TC & lecture-ACC & finally know-INF hear-PAST-DEC. \\
\end{tabular}
‘Tom finally understood the lecture.’ \textit{al-a-tul ‘know+hear (understand)’}
In (1.6b), the LVC is constructed by the combination of two morphemes like other morphologically complex words in Korean. However, unlike other morphologically complex words, in the LVC as in (1.6d), when the complement phakoy ‘destruction’ and the LV ha ‘do’ are separated, the sentence is still grammatical. This performance of the components in Korean LVCs in (1.6d) cannot be found in other morphologically complex words and it violates the lexical integrity principle. As a consequence, it is apparent that LVCs in Korean cannot be dealt with in the same way as other morphologically complex words.

In short, the noticeable properties of Korean LVCs which cannot be found in other verb constructions are as follows: (i) the LVC forms a VP (i.e., XP expression) but it is always interpreted as a single verb/adjective (i.e. $X^0$ expression) without exception, (ii) the LV takes the nominal expression as its complement but it is not a transitive verb, and (iii) the LVC is morphologically complex but it cannot be categorized as a compounded or derived word.

Even though the LVC behaves unlike other verb constructions in Korean, the LVC
is highly productive\textsuperscript{5} in everyday conversation and is regarded as an indispensible construction when the event noun derives to a verb (cf. verbalization in English). Thus, the LVC has been regarded as a highly relevant research topic for Korean grammarians for the last two decades (e.g., Ahn 1990, Jung 1993, Si 1994, Park 1995, Chae 1996, Kang 1997, Lee 1999, Han & Rambow 2000, Kim 2001, Ahn 2002, Choi & Wechsler 2002, Jung 2002, 2003, Ahn & Yang 2007, Lee 2007 and many others). However, in most instances, the discussion about Korean LVCs has focused on peripheral issues such as (i) why is the accusative case particle affixed to the nominal complement? Or (ii) what is the relationship between the LV ha ‘do/be’ and little v? It is obvious these issues are relevant but in this thesis, I will focus on the key issues related to LVCs in Korean as in (1.7) and account for these issues.

(1.7) a. How is the LVC built from two components?
    b. What authorizes the interpretation of the LVC as a verb or an adjective in a clause?
    c. What is the syntactic structure of the LVC?

In this section, as the first step of this research, I will look at the various characteristics of LVCs in Korean and other languages.

1.1.1 Global Characteristics of LVCs

\textsuperscript{5} Even non-native words need the aid of the LVC. For instance, a lot of Sino-Korean nouns (e.g., pakoy ‘destruction’ or chenghwa ‘purification’) or even newly imported words (e.g., khempyute ‘computer’ or tulaipu ‘to drive’ from English) can be implemented as a verb only after they are joined to an LV (e.g., pakoy-ha ‘to destroy’ or chenghwa-toy ‘to be purified’ from the Sino-Korean words’ nouns and khempyute-ha ‘to do computer’ or tulaipu-ha ‘to drive’ from English-words).
The term “light verb” was coined by Jesperson (1965) to signify a group of verbs that are distinguished from lexical verbs or auxiliaries in English (e.g., *take* in *take a walk, give* in *give a groan,* and *make* in *make an offer*). Since then, many researchers have reported on LVs in other languages and unearthed idiosyncratic characteristics of LVCs (e.g., English in Cattell (1984) and Kearns (1989), Japanese in Grimshaw & Mester (1988), Miyagawa (1989), Isoda (1991), Hoshi (1997), Miyamoto (1999), Saito & Hoshi (2000), and Sugimura (2008), Hindi in Mohanan (1995), Urdu in Butt (2005), and Inuktitut in Johns (2005)).

I present a sample of LVCs across languages in (1.8). In English, *do,* *make,* *take,* *have,* or *give-NP* constructions (e.g., *do the dishes* and *take a walk*) are assumed to be LVCs and the verbs *do,* *make,* *take,* *have,* and *give* are regarded as LVs by Jesperson (1965), Cattell (1984), and Kearns (1989). In Japanese, *NP-o suru* constructions are thought of as LVCs and *suru* is regarded as a typical LV in Japanese in Grimshaw & Mester (1988), Miyamoto (1999) and many others. In Urdu, *V-LV* constructions can be categorized as LVCs in Butt (2003, 2005). In Yiddish *NP(indefinite)-ton* ‘do’ constructions are treated as LVCs in Gold (1994) and Diesing (1998). In Persian, *NP-LV* constructions are considered LVCs by Gholeshi & Massam (1994), Folli, Harley, & Karimi (2003) and Karimi-Doosan (2005). In Inuktitut, *Root-LV* constructions are specified as LVCs by Johns (2005, 2007). Examples are as follows:

---

6 In this thesis, when distinguishing the verb from the LV, I use the term “the lexical verb” rather than the verb. For instance, the verb *take* in *take the book* is the lexical verb. On the other hand, the verb *take* in *take a walk* is a LV.
(1.8)  a. **English**: \[LVC LV+ NP\]

_Tom [\_LVC took a bath]._

b. **Japanese**: \[LVC NP-o+ sure (LV)]

_John-ga Bill-to [\_LVC hanashik-o \_shiteiru]._

J-NOM B-with talk-ACC suru

‘John is talking to Bill.’

(Grimshaw and Mester 1988:210)

c. **Urdu**: \[LVC V+ LV\]

_nadya=ne makan [\_LVC bana \_di-ya].\(^7\)

Naday.F=ERG house.M.NOM make give-Perf.M.SG

‘Naday built a house (completely).’

(Butt 2003:2)

d. **Yiddish**: \[LVC NP (indefinite) + LV\]

_Ikh vel [\_LVC a for ton]._

I will a travel do

‘I will travel a little bit.’

(Diesing 1998: 126)

e. **Persian**: \[LVC NP + LV\]

_Columbus \_amrika-ra [\_LVC kāsf \_kard].\(^8\)

Columbus America-SOM discovery do.PAST

‘Columbus discovered America.’

(Karimi-Doosan 2005:1738)

f. **Inuktitut**: \[LVC √root + LV\]\(^9\)

_Savi-qauq-tunga._

knife-have.a.lot-intr.part.1s

‘I have plenty of knives.’

(Johns 2005: 10)

In (1.8), the bold-faced words indicate the LVs in each language: _take_ in English, _shiteiru_ ‘do. Progressive’ in Japanese, _di_ ‘give’ in Urdu, _ton_ ‘do’ in Yiddish, _kard_ ‘do. PAST’ in

\(^7\) Abbreviation: F(feminine), Erg(ergative), M(masculine), Perf (Perfective), SG (singular)

\(^8\) SOM (specific object marker)

\(^9\) intr (intransitive), part (partitive), 1s (1\(^{st}\) person singular)
Persian and -qauq- ‘have.a.lot’ in Inuktitut. The phrases inside the square brackets indicate LVCs. As can be seen in (1.8), the surface forms of the LVCs are diverse across languages: (i) the order between the LV and its complement varies such as $[\text{LVC LV + complement}]$ or $[\text{LVC complement + LV}]$, (ii) the parts of speech of the complements are diverse (e.g., a noun or a verb), and (iii) the phrasal-structure levels of the complements can vary (e.g., root or NP). However, all LVCs have something in common that is not observed in other verb constructions. Some LVC characteristics are widespread and universal; hence are straightforwardly found cross-linguistically: in this case, I call these characteristics “global characteristics”. On the other hand, some characteristics of LVCs are less widespread and are language-specific; in order to distinguish them from the global characteristics, I call them “local characteristics”. In this sub-section, I will run through the global characteristics of LVCs.

Of the many shared characteristics, the most well-known characteristic is that the LVC is a “split construction”. This means that the properties of the predicate splits into two components; the semantic component and the morphological component in the LVC. Specifically, the complement conveys the semantic content of the predicate (i.e., the semantic component) and the LV has the job of being the verbal morphology (i.e., the morphological component). Let’s take a look at the semantic component. For instance, in the Urdu example in (1.8c), the whole meaning of the LVC $\text{bana di- ‘to build’}$ is dependent on the meaning of the complement $\text{bana ‘make’}$ rather than that of the LV $\text{di- ‘give’}$. Similarly, in the English example in (1.8a), the meaning of the LVC ‘to bathe’ unquestionably comes from the complement $\text{a bath}$. Cross-linguistically, the complement as
the semantic component delivers the semantic content to the LVC.

Next, look at the morphological component. In order for the LVC to work as a predicate in a clause, it is necessary for it to be marked with the required verbal inflectional morphemes (e.g., tense, aspect, mood, person, number, and agreement). On the whole, the LV, as the morphological component, bears the burden of the verbal morphology. In the Urdu example (1.8c), even though the LV takes a verb as its complement, only the LV di-‘give’ can be marked with the verbal inflectional morpheme -ya ‘Perf.M.SG’. As for the complement bana ‘make’, the inflectional morphemes such as the aspect, person, and number morphemes (i.e., -ya ‘Perf.M.SG’) are never found on it. Likewise, in English as in (1.8a), the tense morpheme is exclusively suffixed to the LV in the LVC. In summary, in the LVC, the core components of the predicate are split into the semantic component (i.e., the complement) and morphological component (i.e., the LV).

The second global characteristic, according to Butt (2003), is that the LVC always creates a mono-clause (i.e., monoclauisality). As in (1.8), the LVC may be classified as two sub-groups depending on the complement of the LV: the complement can be a nominal expression (i.e., N+LV type in English and Japanese) or it can be a verbal expression (i.e., V+LV type in Urdu). However, regardless of this classification, all LVCs produce a monoclause. “Split construction” and “monoclauisality” are the well-known characteristics of LVCs and so they are assumed to be found cross-linguistically without exception. In addition, there is no doubt that they work as the diagnostic criteria to differentiate LVCs from the verb construction that are yielded by the lexical verbs.¹⁰

¹⁰ In this thesis, I will not discuss the issues in the particle-verb construction or the serial verb construction.
In addition to these well-known characteristics of LVCs, some other characteristics of the LVC are commonly found in many languages but are not discussed seriously in previous studies. Thus, I intend to clarify them in this thesis. The first additional global characteristic concerns the restriction on the complement. When the complement forms the LVC with the LV, it is semantically, morphologically, or syntactically conditioned and so, it must take a specific form. For instance, in Korean LVCs, once the nominal expression becomes the complement of the LV, it must satisfy a lexical-semantic qualification. Complements in Korean LVCs must retain the feature “eventuality” (e.g., Activity or State). Thus, in most cases event nouns become complements. Consider the Korean examples in (1.9).

(1.9)  

a. *Tom-i [LVC wundong ha]-ess-ta.  
T-NOM exercise do-PAST-DEC  
‘Tom exercised.’  

b. *Tom-i [LVC chayk ha]-ess-ta.  
T-NOM book do-PAST-DEC  
‘Tom finished the book.’ (lit. ‘Tom did the book.’)

The sentence in (1.9a) is grammatical. The nominal expression wundong ‘exercise’ as the event noun can meet the lexical-semantic requirement of the complement in Korean LVCs. Conversely, the sentence in (1.9b) is ungrammatical. Compared to (1.9a), the nominal expression chayk ‘book’ cannot be categorized as an event noun and it does not contain an event feature. Thus, the nominal expression chayk ‘book’ cannot form a LVC in Korean. In fact, in many languages, the complement of the LV is morphologically or syntactically specified in various ways. For instance, in the Yiddish example in (1.8d), the nominal
complement must be marked with the indefinite article. In addition, in the English LVC *take a bath* in (1.8a), the nominal complement *bath* is marked with the indefinite article *a*\(^1\). If the DP *a bath* is replaced by some other DP e.g., *the bath*, reading the LVC as ‘to bathe’ is no longer legitimate. Cross-linguistically, the complement must satisfy lexical-semantic, morphological or syntactic conditions. This constraint on the condition of the complement is one of the global characteristics of LVCs.

The next global characteristic concerns the conceptual meaning of the LV. Across languages, not all verbs can be used as LVs and LVs are limited to several verbs that are assumed to hold conceptually primitive verbal meanings such as *do, take, make, be*, etc. According to Butt (2003), in some languages like English, a single verb form can be used as both an LV and a lexical verb. For instance, in English, the verb *take* can be used as an LV in the LVC *take a walk* as well as a lexical verb in the transitive verb construction *take the book*. However, even in English, not all verbs are allowed to be LVs. Instead, only verbs such as *take, give, do,* and *make* can be used as LVs and conceptually they have more primitive predicative meanings than the other verbs. In effect, these verbs are reminiscent of a conceptual category such as primitive predicates in Lexical Conceptual Structure (Levin & Rappaport 1998). In Korean, the LVs are also likely to be associated with primitive predicates such as *ha* ‘do/be’ and *toy* ‘become’. Therefore, across the board, LVs are associated with primitive meanings of predicates. I count this characteristic as another global characteristic of LVCs.

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\(^1\) In English, the forms of the complement are diverse. For instance, sometimes, the complement needs to be marked with the definite article (i.e., *do the dishes*) and sometimes, the complement is marked with the indefinite article (e.g., *take a walk*). The form of the complement is not constant but the LVC always needs a complement in English.
I have so far introduced four different global characteristics of LVCs which are found across languages. These characteristics are useful to diagnose LVs or LVCs when we come across ambiguous verb constructions. In this thesis I will keep these characteristics in mind when examining Korean LVCs. Before reviewing the local characteristics of LVCs, I summarize their global characteristics in (1.10).

(1.10) **The global characteristics of LVCs:**

**Structure of LVC:**

\[
\begin{array}{c|c}
\text{[LVC complement}} & \text{LV} \\
| & | \\
\text{semantic component} & \text{morphological component}
\end{array}
\]

a. LVCs are split constructions.
b. LVCs build a single clause structure.
c. The complement is semantically, morphologically, or syntactically restricted.
d. The LVs are limited to primitive predicates such as *do, become, etc.*

### 1.1.2 Local Characteristics of LVCs

In this sub-section, I discuss other characteristics of LVCs, which should be treated as language-specific characteristics since they are properties of LVCs in some languages but not in others. The first local characteristic, found in some languages, is that the LVC is involved in changing the aspectuality of the VP. For instance, according to Diesing (1998), in Yiddish LVCs, the noun complements in (1.11) such as *albet ‘work’* and *for ‘travel’* are ontologically associated with the aspect ‘non-iterative activities’. However, after these
nouns become a part of LVCs, the LVCs do not maintain the aspect ‘non-iterative activities’. Consider (1.11).

(1.11)  

\[a. \text{Ikh vel [LVC an albet ton].} \]
\[\text{I will a work do} \]
\[\text{‘I will work a little bit.’} \]
\[b. \text{Ikh vel [LVC a for ton].} \]
\[\text{I will a travel do} \]
\[\text{‘I will travel a little bit.’} \]

(Diesing 1998:126)

According to Diesing (1998), the LVCs in (1.11) should be interpreted as implementing the action ‘working’ or ‘travelling’ once or partially. She names the aspect denoted by the LVCs as “diminutivized event”. Thus, compared to the aspect of the nominal complements, the aspect of the LVCs is changed. Cross-linguistically, it is common that the LVC is related to the alternation of the aspectual properties but this characteristic is not universal. In particular, Korean LVCs do not involve the alternation of the aspect. Thus, I believe that this characteristic should be treated as a local characteristic of LVCs.

Another local characteristic of LVCs, found in some languages, is that the complement of the LV is marked with the accusative case particle (cf. Miyamoto 1999). In studies of Korean and Japanese LVCs, this characteristic has been dealt with critically. First, in Japanese, this characteristic seems to be the cause of some disagreement when defining the LVCs. Some researchers (e.g., Grimshaw & Mester 1988) define the LVC as only occurring when the complement of the LV *suru* ‘do’ is marked with the accusative case particle -o: [NP-o *suru*]. On the other hand, other researchers (e.g., Sugimura 2008) define
the LVC when the complement occurs with the LV suru ‘do’ regardless of the presence of the accusative case particle -o on the complement: [NP-(o) suru]. A similar dispute has continued in the Korean linguistic scholars’ circle because the accusative particle -ul/-lul can be optionally affixed to the complement of the LV ha ‘do’. Second, many scholars have tried to account for why the complement of the LV is optionally marked with the accusative particle in Korean and Japanese. In fact, there have been several suggestions to account for this. For example, the presence or absence of the case particle has alternatively been analyzed as the result of incorporation (e.g., Miyamoto 1999, Sugimura 2008), an alternation of aspectuality (e.g., Lee 2007), and the case checking in the syntactic operations (e.g., Park 1995, Kang 1997, Ahn 2002, and Lee 2003). Nonetheless, the presence of the accusative case particle on the complement is not a universal characteristic of LVC because not all languages have case particles. In this thesis, I treat this as another local characteristic of LVC. The two local characteristics are summarized as follows:

(1.12) **Local characteristics of LVCs:**

a. In some languages, LVCs may influence on the aspect or the aktionsart of event noun.
b. In some languages, the complement of the LV is optionally marked with the accusative particle.

1.2 An Overview of LVCs in Korean

So far, I have reviewed several characteristics of LVCs. Undoubtedly, the proposed global characteristics are well maintained in Korean LVCs. In this section, I look over the more specific characteristics of Korean LVCs in order to set up a research plan for the study of
Korean LVCs.

As the first characteristic of Korean LVCs, I will refer to the surface form of the LVC (i.e., the N+ LV). According to Butt (2003), LVCs can be broadly classified in two types depending on the lexical category of the complement; a nominal expression (i.e., the N+LV) or a verbal expression (i.e., the V+LV). Within these two types of LVC, Korean LVCs are restricted to the N+LV type.

Next, I point out that LVCs in Korean can be interpreted as various predicate types as in (1.13) (cf. Jung 2003).

(1.13)  a. Transitive verb:

\[ \text{cekkwun-i tali-lul [LVC phakoy-(*lul) ha/*toy]-ess-ta.} \]
\[ \text{enemy-NOM bridge-ACC destruction-(ACC) do/*become-PAST-DEC} \]
‘The enemy destroyed the bridge.’

b. Unergative verb:

\[ \text{Mary-ka [LVC cenhwa-(lul) ha/*toy]-ess-ta.} \]
\[ \text{M-NOM phone-(ACC) do/*become-PAST-DEC} \]
‘Mary phoned.’

c. Unaccusative verb:

\[ \text{kenmwul-i [LVC pwungkoy-(*lul) ha/*toy]-ess-ta.} \]
\[ \text{building-NOM collapse-(*ACC) be/become-PAST-DEC} \]
‘The building collapsed.’

d. Adjective:

\[ \text{Mary-ka [LVC kenkang-(*ul) ha/*toy]-ess-ta.}^\text{12} \]
\[ \text{M-NOM health-(ACC) be/*become-PAST-DEC} \]
‘Mary was healthy.’

In particular, the LVCs formed by LV ha ‘do/be’ are realized as four different types of

\[ ^\text{12} \text{In this dissertation, I follow the traditional part-of-speech in Korean grammar. Thus, when the N+LV in (1.13d) holds the feature [+state], I categorize it as an adjective. In fact, it is close to a stative verb.} \]
predicate as in (1.13): a transitive verb in (1.13a), an unergative verb in (1.13b), an unaccusative verb in (1.13c) and an adjective in (1.13d). Thus, depending on the predicate types, the interpretation of the LV ha may be different such that the LV ha is interpreted as ‘do’ when the LVC works as the transitive verb or the unergative verb, and the LV ha is read as ‘be’ when the LVC works as the unaccusative verb or the adjective. On the other hand, the LVC with the LV toy ‘become’ always acts as an unaccusative as in (1.13c). This is the second characteristic of Korean LVCs: They can be interpreted as various predicate types.

Now, I present the characteristics related to the nominal complement in Korean LVCs. In fact, these characteristics are relevant to unearth the unusual behaviour of Korean LVCs. First, as mentioned before in the global characteristics of LVCs, the nominal complements in Korean LVCs are restricted to event nouns or nouns with the feature “eventuality” as in (1.9).

Second, the nominal complement of the LV can be optionally marked with the accusative case particle -ul/-lul. However, the complement does not always allow affixation of this particle. As in (1.13), when the LVC acts like a transitive verb in (1.13a) or an unergative verb as in (1.13b), the complement can optionally be marked with an accusative case particle. On the other hand, when the LVC is an unaccusative verb as in (1.13c) or an adjective (1.13d), the complement is never suffixed by an accusative case particle. This is another relevant characteristic useful in an examination of Korean LVCs.

Third, according to Kim (2001), at the phrasal level of the nominal complement in Korean LVCs, it is recognized that the nominal complement can be realized as two different
levels; the $X^0$ complement (i.e., noun) or the XP complement (i.e., phrase). Consider (1.14) and (1.15).

(1.14) LVC ($X^0$+LV) in Korean:

a. pang-i $\text{[LVC [kkaykkus]-(*ul) ha-ess-ta]}$.  
   room-NOM cleanliness-(*ACC) be-PAST-DEC
   ‘The room was clean.’

b. *pang-i $\text{[LVC [sangdanghan kkaykkus]_{XP-(*ul)} ha-ess-ta]}$.  
   room-NOM considerable cleanliness-(*ACC) be-PAST-DEC
   ‘The room was very clean.’

(1.15) LVC (XP+LV) in Korean:

a. Tom-i $\text{[LVC [wundong]-ul ha-ess-ta]}$.  
   T-NOM exercise-ACC do-PAST-DEC
   ‘Tom exercised.’

b. Tom-i $\text{[LVC [sangdanghan wundong]_{XP-ul} ha-ess-ta]}$.  
   room-NOM considerable exercise-ACC do-PAST-DEC
   ‘Tom exercised a lot.’

In (1.14), the LVC behaves like an adjective and the LV ha may be read as ‘be’ rather than ‘do’. In this LVC, the LV can take only the $X^0$ complement. As in (1.14b), the nominal complement cannot be modified by the adjective sangdanghan ‘considerable’. Thus, $[\text{Adj N}^0]_{\text{NP}}$ is not allowed as the complement as in (1.14). This means that the nominal complement of the LV ha ‘be’ is restricted to be an $X^0$ expression (i.e., a noun) and not an XP expression (i.e., a NP). On the other hand, in (1.15b), the nominal complement of the LV ha ‘do’ can be modified by the adjective sangdanghan ‘considerable’. Unlike (1.14), we can see that the LV ha ‘do’ in (1.15) can take an NP complement such as $[\text{Adj N}^0]_{\text{NP}}$. This implies that the complement of the LV ha ‘do’ is at least larger than the $X^0$ expression.

Fourth, there exists a constraint between the nominal complement and the LV in
Korean LVCs (i.e., s(emantic)-selection). The nominal complement cannot combine with all LVs but rather it combines with only semantically related LVs. Consider (1.16).

(1.16)  

a. LV toy ‘become’ only:  

<table>
<thead>
<tr>
<th>Event noun</th>
<th>LVC</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>hocen</td>
<td>hocen-toy</td>
<td>‘improvement-become’</td>
</tr>
<tr>
<td></td>
<td>*hocen-ha</td>
<td>‘improvement-do/be’</td>
</tr>
</tbody>
</table>

b. LV ‘do’ only:  

<table>
<thead>
<tr>
<th>Event noun</th>
<th>LVC</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>amki</td>
<td>amki-ha</td>
<td>‘memorization-do’</td>
</tr>
<tr>
<td></td>
<td>*amki-toy</td>
<td>‘memorization-become’</td>
</tr>
</tbody>
</table>

c. Both LV toy ‘become’ and LV ha ‘be’:

<table>
<thead>
<tr>
<th>Event noun</th>
<th>LVC</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>paltal</td>
<td>paltal-toy</td>
<td>‘development-become’</td>
</tr>
<tr>
<td></td>
<td>paltal-ha</td>
<td>‘development-be’</td>
</tr>
</tbody>
</table>

(Ahn & Yang 2007: 335)

As in (1.16a) and (1.16b), the nominal complements exclusively combine with the LV toy ‘become’ or the LV ha ‘do’. In (1.16c), the nominal complement paltal ‘development’ can occur with both ha ‘be’ and toy ‘become’. Even though previous studies did not observe this constraint, we can assume how the constraint would be explained in previous studies. According to Ahn & Yang (2007), this constraint may be explained as a voice alternation. For instance, when the nominal complement joins with the LV toy ‘become’, the LVC may be interpreted as being in the passive voice\(^{13}\) as in (1.17a). On the other hand, when the

---

\(^{13}\) The verb toy ‘become’ originally functions as forming the inchoative construction in Korean.  
(e.g.,)  

\[
\begin{align*}
\text{mwul-i} & \quad \text{elum-i} & \quad \text{toy-ess-ta.} \\
\text{Water-NOM} & \quad \text{ice-NOM} & \quad \text{become-PAST-DEC} \\
\end{align*}
\]

‘Water changed to ice.’  
However, the LVC with the light verb toy ‘become’ is realized as an unaccusative in the active voice and mostly it is interpreted in the passive voice.
nominal complement combines with the LV *ha* ‘do’ as in (1.17b), it is interpreted in the active voice.

(1.17)  

a. *kkwum-i* [LVC *silhyen* toy]-ta.  

dream-NOM realization become-DEC  

‘The dream comes true.’

b. *Chelswu-ka kkwum-ul* [LVC *silhyen* ha]-ta.  

C-NOM dream-NOM realization do-DEC  

‘Chelswu makes his dream come true.’

At first glance, Ahn & Yang’s proposal (2007) seems to be reasonable because as in (1.17), the number of arguments changes depending on the LV. However, on second glance, this suggestion is questionable. If the occurrence of the LVs *toy* ‘become’ or *ha* ‘do’ is fully reliant on the voice alternation, all event nouns could combine with *toy* ‘become’ and *ha* ‘do’ without exception. However, except for the event noun in (1.16c), the event nouns in (1.16a) and (1.16b) do not allow the alternation between the LV *toy* ‘become’ and the LV *ha* ‘do’. In particular, the LVC in (1.16b) *amki-ha* ‘memorization-do’ is always interpreted as a transitive verb but the event noun in this LVC cannot combine with the LV *toy* ‘become’. Thus, I reject Ahn & Yang’s proposal (2007) and I strive to propose a better explanation about the selection of the LV by the complement (i.e., s-selection between the complement and the LV).

Before presenting the outline of this research, I summarize the relevant characteristics of Korean LVCs discussed in this section.

(1.18)  

**Characteristics of Korean LVCs:**

a. The LVC in Korean is restricted to the N+LV type.
b. The LVCs in Korean can be interpreted as one of four predicate types.
c. The nominal complement should be an event noun or hold the feature “eventuality”.
d. The nominal complement may be affixed with an accusative case particle when the LVC is interpreted as a transitive verb or an unergative verb.
e. The nominal complement is an XP expression (i.e., bigger than a noun) when occurring with the LV ha ‘do’ but it is an X0 expression (i.e., a noun) when occurring with the LV ha ‘be’.
f. The LV is selected by its nominal complement.

1.3 Outline of Thesis

During the examination of Korean LVCs in this thesis, I will discuss these characteristics directly but in addition, these characteristics will often be used as evidence to shed light on the lexical-semantic, morphological and syntactic properties of Korean LVCs. I will mainly discuss the following three issues related to Korean LVCs as in (1.19).

(1.19) a. How do the complement and the LV build the LVC in Korean?
    b. What authorizes the interpretation of the LVC as a verb or an adjective in a clause in Korean?
    c. What is the syntactic structure of the LVC in Korean?

In the body of this thesis, I examine each question in (1.19) in one of three chapters: (i) the composition of Korean LVCs, (ii) the interpretation of Korean LVCs, and (ii) the structure of the Korean LVCs.

In Chapter 2, I explore how the nominal complement and the LV are combined to build a predicate LVC in a clause. First, I review the discussions in the previous studies starting with the lexical approach (e.g., Williams 1997, 2007), then the argument transfer
approach (e.g., Grimshaw & Mester 1988) and finally the syntactic approach (e.g., Jung 2003). Then, I argue why these approaches cannot account for the composition of Korean LVCs. Finally, as an alternative solution, I argue that the nominal complement and the LV are combined by incorporation in Korean.

In Chapter 3, I investigate where and how Korean LVCs gain the complete lexical-semantic and syntactic role as a predicate in a clause. Adopting the studies of Levin & Rappaport (1995, 1998), I propose that LVCs as well as other predicates are expressed in “Lexical Conceptual Structure” (henceforth LCS). Consequently, all the lexical-semantic and syntactic information of the LVC as a predicate is determined by this representation in LCS before the composition between the complement and the LV takes place. Based on this proposal, in this chapter, I examine the structures of Korean LVCs using LCS.

In Chapter 4, I describe the syntactic structure of LVCs in Korean. Within the Minimalist Program (e.g., Chomsky 1995, Bowers 2002, 2003), there is a trend for LVs to be treated as little v. In the first part of this chapter, I will clarify the relationship between little v and LVs such as ha ‘do/be’ and toy ‘become’ in Korean. Next, considering the characteristics related to the nominal complement and the LV, I develop an analysis of the syntactic structures of Korean LVCs.

1.4 Closing Comment

The LVC in Korean shows many unique characteristics that are not found in typical VPs.

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14 Arad (1999) uses the term little v instead of light v. In this thesis, I will follow Arad’s definition in order to avoid confusion between v and LV.
As with LVCs in other languages, Korean LVCs show the global characteristics of LVCs as well. However, Korean LVCs also have language specific local characteristics, which are rarely found in other languages as in (1.18). Thus, in order to understand the unique characteristics of Korean LVCs, it is necessary to regard Korean LVCs considering both the global and local characteristics together. Previous studies on Korean LVCs (e.g., Ahn 2002, Jung 2003 and many others) have ignored some global characteristics and some local characteristics; so they fail to provide a unified account of the characteristics of Korean LVCs. Therefore, in this thesis, I suggest a unified analysis that can explain both the global and the local characteristics of Korean LVCs.
2. The Composition of Korean LVCs

2.1 The Scope of this Chapter

The main concern of this thesis is to shed light on how Korean LVCs can work as verbs or adjectives in a clause. In this chapter, as a first step, I will discuss where and how the complement and the LV build a semantically complete unit (i.e., the LVC): the composition of Korean LVCs. In particular, I will demonstrate that all LVCs in Korean are semantically composed by a special operation (i.e., incorporation) regardless of the presence or absence of the accusative particle on the complement, or the predicate type of the LVC.

(2.1)  

a. mwul-i [LVC cenghwa toy]-ess-ta.
   water-NOM purification become-PAST-DEC
   ‘The water is purified by itself.’

b. Composition of Korean LVC:

\[
\text{[LVC complement + LV]} \rightarrow \text{Semantic unit as a verb/an adjective}
\]

\[
\begin{array}{c}
\text{<purification>} \\
\text{< toy ‘become’>}
\end{array}
\]

Incorporation

My discussion begins with the following fact: (i) in terms of “split construction”, all LVCs are decomposed into the semantic component (i.e., the complement) and the morphological component (i.e., the LV) and (ii) all LVCs are built by the joining of these two components. From a lexical-semantic point of view (e.g., Cruse 1986), it is expected that these two components are stored as two separate lexical items in the lexicon because
their semantic contents and functions are different. In addition, with respect to the behaviour of the LVC as a predicate in a clause, it is obvious that the LVC is formed by the composition of these two lexical items (i.e., two components) as in (2.2).

(2.2) 

If the assumption in (2.2) is correct, our concern is to find the answers for the following questions: Where and how are two components composed together to form an LVC in Korean?

According to Pinâango, Mack, & Jackendoff (2006), the lexical approach and the compositional approach may offer the answers to these questions. In the lexical approach (e.g., Williams 1997, Butt 2003), the LVC is built by morphological composition. Thus, the LVC is treated the same as other normal compounded words or derived words. On the other hand, in the compositional approach (e.g., Harley 1998, Kim 1997, Kang 1998, Ahn 2002, Jung 2003), the LVC is formed by syntactic composition (i.e., merge) between a complement (i.e., a root) and a LV (i.e., a functional head). Thus, unlike the lexical approach, a complement and a LV are assumed to be realized as two separated syntactic objects in the surface structure. Additionally, the argument transfer hypothesis offers a well-known explanation for the composition in the LVC. According to Grimshaw & Mester (1988), a LVC is built at the interface level (i.e., argument structure) by a special operation such as “argument transfer”. Thus, in each approach, the place and the means of
composition between the complement and the LV are diverse and can be generalized as in (2.3).

(2.3) 

<table>
<thead>
<tr>
<th>Approach</th>
<th>Mechanism</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Lexical approach</td>
<td>Morphological rule</td>
<td>Lexicon</td>
</tr>
<tr>
<td>b. Compositional approach</td>
<td>Syntactic composition</td>
<td>Syntax</td>
</tr>
<tr>
<td>c. Interface approach</td>
<td>Argument transfer</td>
<td>Argument structure</td>
</tr>
</tbody>
</table>

However, in trying to explicate the composition of Korean LVCs based on any one of the approaches in (2.3), we discover that all approaches conflict with the characteristics of Korean LVCs as introduced in Chapter 1. In this chapter, I will show why these approaches do not work when applied to Korean LVCs and I will seek an alternative account for the composition of Korean LVCs.

In Section 2, I will review the lexical approach based on Williams (1997) and argue against it. In Section 3, I will evaluate the “argument transfer hypothesis” in Grimshaw & Mester (1988). In Section 4, I will discuss the compositional approach and then, I will illustrate my own analysis for the composition of Korean LVCs based on the notion of noun incorporation in Massam (2001), Dayal (2003, 2007) and Johns (2005, 2007).

2.2 Lexical Approach

Adopting the lexical approach (e.g., Williams 1997, Butt 2003) to account for the composition between the complement and the LV in Korean, it is expected that (i) the LVC in Korean is formed by morphological composition, (ii) the complement and the LV are
lexically integrated as a V\(^0\) (i.e., a syntactic unit), and (iii) the LVC may be categorized with compounded words that are formed by the compounding as in (2.4a) or derived words that are yielded by the derivational morphology as in (2.4b).

(2.4) **Morphological composition in Korean LVCs:**

<table>
<thead>
<tr>
<th>LVC: phakoy-ha</th>
<th>‘destruction-do’</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Compounded word</td>
<td>b. Derived word</td>
</tr>
<tr>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Root</td>
<td>Root</td>
</tr>
<tr>
<td>phakoy</td>
<td>ha</td>
</tr>
<tr>
<td>‘destruction’</td>
<td>‘do’</td>
</tr>
<tr>
<td>Root</td>
<td>Aff</td>
</tr>
<tr>
<td>phakoy</td>
<td>ha</td>
</tr>
<tr>
<td>‘destruction’</td>
<td>‘do’</td>
</tr>
</tbody>
</table>

In this section, I will examine whether or not the lexical approach is suitable to analyze the composition of Korean LVCs.

**2.2.1 Outline of Lexical Integrity**

In order to understand the lexical approach, I review Williams’s study (1997) on the order of two predicates in the small clause construction in English.

(2.5)  

a. *John wiped [sc the table clean].*

b. *John wiped clean the table.*

(William 1997: 13)

In general, the sentence in (2.5a) is called a small clause construction in English. This sentence is assumed to be built by combining two clauses such as the main clause *John*...
wiped the table and a small clause \([sc \ the \ table \ clean]\). Thus, it is assumed that two predicates appear in the small clause construction; the verb wiped (i.e., primary predicate) in the main clause and the adjective clean (i.e., secondary predicate). In addition, the NP the table which is located between the two predicates works as the argument of both predicates; the direct object of the primary predicate and the subject of the secondary predicate\(^{15}\). Therefore, the ordering of the two predicates with their NP argument is relevant. According to Williams (1997), in general, the basic order between two predicates with their NP argument in the small clause construction is assumed to be as follows: \([(1) \ the \ primary \ predicate + (2) \ the \ NP \ argument + (3) \ the \ secondary \ predicate]\). He simplifies this order as \([V \ NP \ Predicate]\): V stands for the primary predicate, NP indicates the NP argument, and Predicate means the secondary predicate.

However, the basic order in (2.5a) such as \([V \ NP \ Predicate]\) is often changed to \([V \ Predicate \ NP]\) as in (2.5b). In other words, the secondary predicate is adjacent to the primary predicate. The question that follows from this is what allows this order alternation in the small clause construction. According to Williams (1997), in general, the small clause approach to the order change from \([V \ NP \ Predicate]\) to \([V \ Predicate \ NP]\) is the result of a syntactic operation such as “Heavy NP shift” in English. Consider the examples in (2.6).

(2.6)  

a. *John considers* \([sc \ the \ table \ clean]\).

b. *John considers clean* \([np \ any \ table \ with \ a \ reflectant \ surface]\).

(William 1997: 13)

\(^{15}\) The predicative relation between the NP and the secondary predicate will be discussed in more detail in Chapter 4.
c. Heavy NP shift:

\[ \text{John considers [SC clean [NP any table with a reflectant surface]]}. \]

In (2.6b), unlike the NP in (2.6a), the argument \textit{any table} is modified by the PP \textit{with a reflectant surface} and together they produce a large NP. This NP in (2.6b) is called the heavy NP in English. In the small clause construction, the heavy NP is assumed to move to the end of the clause and so, after the heavy NP shifts to the end of the clause, the order change \[V \text{ Predicate NP}\] is achieved as in (2.6c). However, according to Williams (1997), the sentence (2.5b) seems to go against this small clause approach. In (2.5b), the secondary predicate is adjacent to the primary predicate such as \[V \text{ Predicate NP}\], although the NP \textit{the table} is not a heavy NP. William (1997) proposes a new approach where the adjacency of the secondary predicate to the primary predicate such as \textit{wipe clean} in (2.5b) is not because of the result of the heavy NP shift but because of a morphological rule such as \(V \rightarrow V+A\) in English. Thus, the cluster of words \textit{wipe clean} in (2.5b) is lexically integrated. I will not pursue whether or not Williams’s study is appropriate for English, but offer his study as an illustration of the nature of a lexical approach.

In the lexical approach, according to Williams (2007), the relevant points are (i) the word which is lexically integrated, is governed by “word-system rules” (i.e., the morphological rules) rather than by “phrase-system rules” (i.e., the syntactic rules); (ii) These rules never overlap with each other because the syntax is blind to the internal constituency of a lexically integrated word. Williams (2007) labels these rules “information encapsulation” for the word-system rule and “delayed resolution” for the phrase-system rule. First, “information encapsulation” is defined as follows: the information inside the
internal constituent of the word is never affected by a syntactic operation. Consider (2.7).

(2.7)  

a. John re-washed the dishes on Tuesday. (not ambiguous)  
b. John again washed the dishes on Tuesday. (ambiguous)  

*Perhaps most of the information about the structure of a word as determined by the word system is “hidden” from the phrasal system, so we have “information encapsulation”.*  

(Williams 2007:353)

In (2.7), the meaning of the prefix re- is approximately the same as that of again. However, the semantic scope of the prefix re- is different from that of the adverb again. In (2.7a), the semantic scope of the prefix re- is limited to inside the adjacent verbal root wash. According to Williams (2007: 353), “the sentence in (2.7a) means that a dish washing precedes the event announced, but not necessarily a Tuesday dish washing”. Theoretically, the prefix re- occurs inside the derived word re-wash (i.e., the internal constituent of a word) and it should be governed by the word-system rule. This is the rule of “information encapsulation”. On the other hand, in contrast to the prefix re-, the semantic scope of the adverb again can extend to the end of the sentence. Thus, the sentence (2.7b) is ambiguous: (i) having the same meaning as (2.7a) or (ii) having the meaning that the action of washing happens again on Tuesday. The reason that the adverb again allows us to interpret the sentence in (2.7b) in the second way is because the adverb again is not governed by the word-system rule.

Unlike the word-system rule, a phrase-system rule such as “delayed resolution” cannot be applied to lexically integrated words, according to Williams (2007). Look at the English examples in (2.8):
The phrasal system has a property that I will call “delayed resolution” that is not found in the word system.

(Williams 2007:354)

In (2.8), both the prefix self- and the reflexive pronoun himself need to be bound to their antecedents in their governing domains. The prefix self- occurs inside of the derived word self-destruction (i.e., the internal constituent of a word) and it should be governed by the word-system rule but not by the phrase-system rule. Thus, the governing domain of the prefix self- is limited to the inside of the word self-destruction and it must be bound to the agent of the predicate destruction. In (2.8a), this prefix self- cannot be bound to the subject John because John is outside of its governing domain. On the other hand, the reflexive pronoun himself can take a near or a distant antecedent depending on its governing domain. In (2.8b), himself can be bound to the subject antecedent John. According to Williams (2007), the behaviour of the reflexive himself is called “delayed resolution” and is an example of the phrase-system rule. As a result, the prefix re- cannot be governed by this phrase-system rule because it is lexically integrated with the noun destruction.

Based on Williams’s claim (1997, 2007), the concept of lexical integrity is clear. If a cluster of words is lexically integrated, (i) it should be formed by a morphological rule, and (ii) it forms an X$^0$ expression.
2.2.2 Lexical Integrity Test

It is common to encounter morphologically complex expressions for which it is difficult to determine whether or not they are lexically integrated. The LVC in Korean is one such expression. According to Bresnan & Mchombo (1995), we can test whether or not the morphologically complex expression (e.g., a Korean LVC) is lexically integrated with five diagnostic tests: Extraction, Conjoinability, Gapping, Inbound Anaphoric, and Phrasal Recursivity. Of these five tests, I will concentrate on the first two tests of Extraction and Conjoinability because these are pertinent to Korean LVCs (cf. Yoon 2008). Examine how these two tests operate in the examples in (2.9).

(2.9) **Extraction test:**

a. They’ve been [American history teachers] for years.

b. *American history, which they have been ______teachers for years,...

c. *American history, which they have been it teachers for years,...

(Bresnan & Mchombo 1995: 187)

In the domain of the word (i.e., the \(X^0\) expression), no part of the constituent can be extracted by syntactic operations such as relativization, clefting or topicalization. This constraint is used as a test to check the lexical integrity of the word (i.e., the Extraction test). In (2.9a), a cluster of words *American history teachers* is morphologically complex but it is not certain whether or not this cluster is lexically integrated and forms an \(X^0\) expression. If any part inside this cluster can be extracted when undergoing a syntactic operation, it cannot have lexical integrity. If no part of the cluster can be extracted then it is lexically integrated. In the sentences (2.9b) and (2.9c), the sentences become ungrammatical when a
part of the cluster is extracted. Thus, we can determine that this cluster is lexically integrated, like an $X^0$ expression.

Conjoinability is another convincing test, which can tell us whether or not the morphological complex expression such as an $X^0$ expression is lexically integrated.

(2.10) Conjoinability:
   a. *Mary out-ran and out-swam Bill.
   b. Mary out-[ran and swam] Bill.

   (Bresnan & Mchombo 1995: 188)

In the domain of the word (i.e., the $X^0$ expression), no part of the constituent can be conjoined. This constraint can be used to decide whether or not the morphological complex constituent is lexically integrated (i.e., the Conjoinability test). In (2.10a), the clusters of the words such as *out-ran and out-swam are morphologically complex. According to Bresnan and Mchombo (1995), two words can conjoin as in (2.10a) but part of the word cannot be conjoined as in (2.10b). Thus, both *out-ran and *out-swam are lexically integrated.

2.2.3 Diagnostic Tests of Korean LVCs

As previously mentioned, the LVC in Korean is composed of two lexical items (i.e., the nominal complement and the LV) but in a clause it is always interpreted as an $X^0$ expression such as a verb or an adjective. Thus, it is important to determine whether or not a LVC is lexically integrated and if it is composed by a morphological rule. In fact, the lexical integrity between the nominal complement and the LV in Korean LVCs can be

If the Korean LVC as in (2.11) passes diagnostic tests such as Extraction and Conjoinability, it can be claimed that the nominal complement and the LV are lexically integrated and formed by one of two morphological compositions as in (2.12).

(2.11)  
\[ Tom-i \quad bakteyilia-lul \quad [LVC \ yenkwu-(lul) \ ha]-ess-ta. \]

Tom-NOM bacteria-ACC research-(ACC) do-PAST-DEC

‘Tom researched the bacteria.’

(2.12)  
**Morphological composition Korean LVCs:**

LVC: \( yenkwu-ha \)  

a. Compounded word  
b. Derived word

\[
\begin{array}{c}
\text{Root} \\
yenkwu
\end{array} \quad \begin{array}{c}
\text{Root} \\
ha
\end{array} \quad \begin{array}{c}
\text{Root} \\
yenkwu
\end{array} \quad \begin{array}{c}
\text{Aff} \\
ha
\end{array}
\]

‘destruction’ ‘do’ ‘destruction’ ‘do’

In (2.12a), the LVC is formed by compounding two roots such as the noun \( yenkwu \) ‘research’ and the LV \( ha \) ‘do’. In (2.12b), the noun \( yenkwu \) ‘research’ as a root is suffixed by the LV \( ha \) ‘do’ and then is derived into the verb \( yenkwu-ha \) ‘to research’. Specifically, in the derivation in (2.12b), the role of the LV \( ha \) ‘do’ reminds us of the derivational affixes in English such as \(-fy\), \(-ize\), and \(-en\). At this moment, I am not sure which approach is correct in (2.12) but if one of the morphological compositions in (2.12) is correct, a LVC may be formed by a morphological rule such as \( V \rightarrow N+LV \) and could be lexically integrated.

Let’s investigate the lexical integrity of the LVC. In order to conduct the test more effectively, recall the characteristics of Korean LVCs from Chapter 1. According to the characteristics of Korean LVCs, the LVCs can be classified into two groups in terms of the
affixation of the accusative case particle on the nominal complement. In fact, the affixation of the accusative case particle on the nominal complement is deeply associated with the phrase-level of the complement, the predicate type of the LVC and the s-selection between the complement and the LV in Korean LVCs. When Korean LVCs act like transitive verbs or unergative verbs in a clause as in (2.13a) and (2.13b), the nominal complement can be marked with the accusative case particle and it forms the LVC with the LV ha ‘do’ only. Furthermore, the nominal complement is treated as the NP expression. On the other hand, when Korean LVCs behave like unaccusative verbs or adjectives, the nominal complement cannot be marked with the accusative case particle and it forms the LVC with the LV ha ‘be’ or toy ‘become’. In addition, this nominal complement is closed to the N⁰ as in (2.13c) and (2.13d).

(2.13)  a. Transitive verb:

\[
\begin{array}{llllll}
\text{cekkwun-i} & \text{tali-lul} & [\text{LVC phakoy-(lul)}] & \text{ha]-ess-ta.} \\
\text{enemy-NOM} & \text{bridge-ACC} & \text{destruction-(ACC)} & \text{do-PAST-DEC}
\end{array}
\]

‘The enemy destroyed the bridge.’

b. Unergative verb:

\[
\begin{array}{llllll}
\text{Mary-ka} & [\text{LVC cenhwa-(lul)}] & \text{ha]-ess-ta.} \\
\text{M-NOM} & \text{phone-(ACC)} & \text{do-PAST-DEC}
\end{array}
\]

‘Mary phoned.’

c. Unaccusative verb:

\[
\begin{array}{llllll}
\text{kenmwul-i} & [\text{LVC pwungkoy-(*ul)}] & \text{ha]-ess-ta.} \\
\text{building-NOM} & \text{collapse-(*ACC)} & \text{be-PAST-DEC}
\end{array}
\]

‘The building collapsed.’

d. Adjective:

\[
\begin{array}{llllll}
\text{Mary-ka} & [\text{LVC kenkang-(*ul)}] & \text{ha]-ess-ta.} \\
\text{M-NOM} & \text{health-(ACC)} & \text{be-PAST-DEC}
\end{array}
\]

‘Mary was healthy.’
First, let’s scrutinize the lexical integrity of the LVC when it behaves like a transitive verb (2.13a) or an unergative verb (2.13b). If these LVCs are truly formed by morphological rules and they are lexically integrated, they should pass the Extraction and Conjoinability tests. Simply speaking, the nominal complement and the LV ha ‘do’ should not be able to be separated nor should it be allowed to conjoin with another complement. If this group of LVCs does not pass those tests, they are not lexically integrated by the morphological composition. Consider (2.14) and (2.15).

(2.14) **LVC as a transitive verb:**

a. **Extraction:**

\[ \text{phakoy-lul cekkwun-i tali-lul [LVC ______ ha]-ess-ta.} \]
\[ \text{destruction-ACC enemy-NOM bridge-ACC do-PAST-DEC} \]

‘The bridge, the enemy destroyed.’

b. **Conjoinability:**

\[ \text{Tom-i ssiga-lul [LVC swuip-ul kuliko panmay-lul ha]-ess-ta.} \]
\[ \text{T-NOM cigar-ACC import-ACC and sale-ACC do-PAST-DEC} \]

‘Tom imported cigar and sold them.’

(2.15) **LVCs as an unergative verb:**

a. **Extraction:**

\[ \text{cenhwa-lul Mary-ka [LVC ______ ha]-ess-ta.} \]
\[ \text{phone-ACC M-NOM do-PAST-DEC} \]

‘Mary phoned.’

b. **Conjoinability:**

\[ \text{Mary-ka [LVC cenhwa-lul kuliko imeyil-ul ha]-ess-ta} \]
\[ \text{M-NOM phone-ACC and e-mail-ACC do-PAST-DEC} \]

‘Mary phoned and e-mailed.’

In (2.14) and (2.15), Korean LVCs works as transitive or unergative verbs in a clause, respectively. In (2.14a) and (2.15a), the nominal complement can be extracted from the
base-position in the LVC and in (2.14b) and (2.15b), and a part of the LVC (i.e., the nominal complement) can be co-ordinated with another nominal complement. As a result, the LVCs in this group do not pass the two tests. Based on the test results in (2.14) and (2.15), in this group of the LVCs, the nominal complement and the LV are not lexically integrated. Therefore, it is legitimate to propose that LVCs are not formed by morphological composition in Korean\(^{16}\).

Next, I apply the same tests to the other groups of LVCs, which act like unaccusative verbs or adjectives in a clause. Consider (2.16) and (2.17).

\begin{align*}
\text{(2.16) } & \text{LVC as an unaccusative verb:} \\
\text{a. Extraction:} & \quad \text{\textit{pwungkoy-nun}} \quad \textit{kenmwul-i} \quad \text{\textit{LVC} \quad \text{\textit{ha}}} \quad \textit{-ess-ta}. \\
& \quad \text{collapse-TC} \quad \text{building-NOM} \quad \text{do-PAST-DEC} \\
& \quad \text{‘The building collapsed.’} \\
\text{b. Conjoinability:} & \quad \text{\textit{*?kenmwul-i}} \quad \text{\textit{LVC pwungkoy}} \quad \textit{kuliko somyel} \quad \textit{ha} \quad \textit{-ess-ta}. \\
& \quad \text{building-NOM} \quad \text{collapse} \quad \text{and extinct} \quad \text{do-PAST-DEC} \\
& \quad \text{‘The building collapsed and was ruined.’} \\
\end{align*}

\(^{16}\) According to Ahn (1990), in some Korean LVCs such as ceng-ha ‘decision-do’, pyen-ha ‘change-do’, and hwa-ha ‘change-do’, the complement of the light verb ceng, pyen, or hwa does not allow any syntactic operation. (e.g.,) a. \textit{Mary-ka} \quad \textit{kal} \quad \textit{kil-ul} \quad \text{\textit{LVC ceng-*(ul)}} \quad \textit{ha}-\textit{ess-ta}. \\
\text{M-NOM} \quad \text{go} \quad \text{road-ACC} \quad \text{decision-ACC} \quad \text{do-PAST-DEC} \\
\quad \text{‘Mary decided the road to go.’ (lit., Mary decided to the direction)} \\
b. \textit{*Mary-ka} \quad \textit{ceng-ul} \quad \textit{kuliko} \quad \textit{kal} \quad \textit{kil-ul} \quad \text{\textit{LVC} \quad \textit{ha}} \quad \textit{-ess-ta}. \\
\text{M-NOM} \quad \text{decision-ACC} \quad \text{go} \quad \text{road-ACC} \quad \text{\textit{LVC} \quad \textit{ha}} \quad \textit{-ess-ta}. \\
\quad \text{‘Mary decided the road to go.’ (lit., Mary decided the direction)} \\

In the above example, the complement cannot be extracted. Based on “Lexical Integrity”, this LVC may be classified as the expression of the word level. Comparing with other Korean LVCs, these LVCs have some unique properties: (i) this LVC consists of a one syllable complement and a light verb and (ii) this one syllable complement is a bound morpheme. As a result, these LVCs do not agree with my claim because they are the expression of the word level. But, based on the unique properties of these LVCs, the complement is a root rather than a phrase.
(2.17) **LVC as an adjective:**

a. **Extraction:**

| kenkang-un | Mary-ka | [LVC _____ ha]-ess-ta. |
| health-TC  | M-NOM   | do-PAST-DEC |

‘Mary was healthy.’

b. **Conjoinability:**

| *?thakca-ka | [LVC kkaykkus kuliko chengkyel ha]-ess-ta. |
| table-NOM   | clean and neat | do-PAST-DEC |

‘The table was clean and neat.’

In (2.16) and (2.17), Korean LVCs are interpreted as unaccusative verbs and adjectives. In (2.16a) and (2.17a), the nominal complement can be extracted because of the topic/contrastive particle -un/-nun and so the Extraction test fails for this group of the LVCs. On the other hand, in the Conjoinability test, this group of LVCs does not tolerate the conjunction of the nominal complement with another complement as in (2.16b) and (2.17b). Thus, these LVCs pass the Conjoinability test. The result of the Extraction test indicates that this group of LVCs may not be lexically integrated however; the results of the Conjoinability test suggest these LVCs are lexically integrated. I do not yet know why the results of the Conjoinability test in (2.16) and (2.17) differ from those in (2.14) and (2.15). However, I surmise that the different results for the Conjoinability test are due to the phrase-level difference of the nominal complement in the two groups (i.e., an NP in (2.14) and (2.15) and an N^0 in (2.16) and (2.17)). I will discuss the phrase-level difference of the nominal complement in Chapter 4.

However, disregarding for the result the Conjoinability test results for (2.16) and (2.17), there is no doubt that the test results enable us to conclude that not all LVCs are lexically integrated in Korean and Korean LVCs are not composed by morphological
composition. Based on these test results, we can say that the lexical approach is inappropriate for exploring the composition of Korean LVCs as well as the properties of Korean LVCs.

2.3 Argument Transfer Hypothesis

In previous studies (Jackendoff 1983, Baker 1988, Grimshaw 1990, Bresnan 2001 and many others), there have been many attempts to shed light on the lexical-semantic and syntactic relationship of the predicates. Argument structure, as the representation of the interface level, has been defined as the structure that exhibits the lexical-semantic and syntactic information of predicates such as valency, predicate types and the syntactic state of the argument (e.g., external vs. internal argument). Consider Bresnan’s comment (2001):

> Argument structure is an interface between the semantics and syntax of predicators (which we may take to be verbs in the general case). Argument structure encodes lexical information about the number of arguments, their syntactic types, and their hierarchical organization necessary for the mapping to syntactic structure.

(Bresnan 2001:304)

The argument transfer hypothesis in Grimshaw & Mester (1988) is fundamentally based on the idea of argument structure. According to Grimshaw & Mester (1988), in Japanese and Korean LVCs, an event noun can have its own argument structure. An LVC is formed when the argument structure of an event noun is transferred to that of the LV. They establish the “argument transfer hypothesis”. This hypothesis has been at the centre of the debates concerning the study of Korean LVCs. In this section, I will investigate whether or not this
hypothesis provides a convincing foundation to figure out the composition between a nominal complement and an LV in a Korean LVC.

2.3.1 Outline of the Argument Transfer Hypothesis

The lexical-semantic and syntactic relationship between a lexical verb (e.g., *destroy*) and its counterpart derived nominal\(^{17}\) (e.g., *destruction*) in English has drawn a lot of attention in the field of generative grammar (e.g., Chomsky 1970). Consider (2.18).

\[
\begin{align*}
(2.18) \quad & \text{a. Verb:} \quad \text{The enemy} \ \text{destroyed} \ \text{the city.} \\
& \text{b. Derived nominal:} \quad \text{the enemy's} \ \text{destruction of the city}
\end{align*}
\]

In the “lexicalist hypothesis”\(^{18}\) (Chomsky 1970) and subsequent studies (e.g., Grimshaw 1990, and Giorgi & Longobardi 1991), the nominal is not regarded as being transformed from the verb. Thus, the following question remains: What determines which category a verb (i.e., verb) or a noun (i.e., derived nominal) falls into?

As an answer to this question, the lexicalist hypothesis has been developed in two directions. On the one hand, Pesetsky (1995) and Marantz (1997) maintain that the lexicon

---

\(^{17}\) According to Alexiadou, Haegeman, and Stavrou (2007:477), “nouns are traditionally divided into two classes: relational and absolute nouns…Relational nouns comprise three prominent classes: derived nouns, kinship nouns, and nouns with inherent part-whole relations”. In particular, the derived noun which shares some basic semantic properties with its counterpart verb has been called various things in various studies. In English, these nouns are called derived nouns (e.g., permission). In Korean and Japanese, these nouns are called event nouns (e.g., Miyamoto 1999), predicate nouns, and verbal nouns (e.g., Ahn 1990). In this thesis, I call these nouns in Korean event nouns. If the nouns do not hold the verbal properties (e.g., concrete nouns), I will call them result nouns.

\(^{18}\) In Chomsky’s “Remarks on nominalization” (1970:215), he concludes as follows: “it seems that the transformationalist analysis is correct for the gerundive nominals, and the lexicalist hypothesis for the derived nominals”.


consists of a category-neutral root and a feature that can determine the category of the root. The category-neutral root has fixed selectional and sub-categorizational features but it lacks categorical features. Hence, after a root merges with a categorical feature (V or N), the merged phrase is specified as a verb or a nominal as in (2.19).

(2.19) **Lexicon**: \{√observe, V, N\}
   a. Verb: \(\sqrt{observe} + V\) = to observe
   b. Nominal: \(\sqrt{observe} + N\) = observation

On the other hand, Grimshaw (1990) argues that the already categorized verb and the suffix that builds the derived nominal are stored as two separated lexical items in the lexicon. Thus, after the verb is affixed with this suffix, it is derived into a derived nominal. In this argument, both the verb and the suffix have sub-categorizational features, categorical feature(s), and information about the participants and the event as in (2.20).

(2.20) **Lexicon**: \{observe V (x (y)), -(a)tion N (Ev)\}
   a. Verb: V ((x (y))) = to observe
   b. Derived nominal: N (Ev (x (y))) = observation
   
   (Grimshaw 1990: 66)

In (2.20), the suffix -(a)tion has its own argument structure in the lexicon and it takes an Event argument (Ev) as its external argument. When a verb is affixed with this suffix, it forms a derived nominal. Furthermore, the argument structures between the verb and the suffix become fused, making new argument structures as in (2.20b). Following (2.20), the argument structure of the verb and that of the derived nominal in English can be described as follows:
a. **Verb: permit**

*The king permitted the minister to leave.*

**Argument structure of the verb permit:**

\[
\begin{array}{l}
\text{permit} \quad V \quad (x \quad (y \quad (z))) \\
\text{Agent} \quad \text{Goal} \quad \text{Theme} \\
\text{King} \quad \text{Minister} \quad \text{to Leave}
\end{array}
\]

b. **Derived noun: permission**

\[\text{[NP \ relative's permission to the minister to leave]}\]

**Argument structure of the derived noun permission:**

\[
\begin{array}{l}
\text{permission} \quad N \quad (Ev (x \quad (y \quad (z)))) \\
\text{Agent} \quad \text{Goal} \quad \text{Theme} \\
\text{King} \quad \text{Minister} \quad \text{to Leave}
\end{array}
\]

So far, I have outlined two directions to explain how to build a derived nominal in English. Of these two directions, the argument transfer hypothesis is based on the second approach (i.e., Grimshaw 1990). In this hypothesis, the main claim, shown in (2.21b), is that the derived nominal, as well as the verb, has its own argument structure and so both of them are competent to θ-mark their arguments inside their maximal projections, the VP and the NP. Thus, in the same clause, the verb cannot interfere with the θ-marking system of the derived nominal, and vice versa, the derived nominal cannot θ-mark arguments that are located outside its maximal projection. Grimshaw & Mester (1988) generalize the θ-marking system in the VP and in the NP as in (2.22).

(2.22)  

a. \[
\begin{array}{c}
[ V \quad \text{NP}]_{\text{VP}} \\
\end{array}
\]

b. \[
\begin{array}{c}
[ V \quad [\ldots \text{NP} \ldots]\text{NP}]_{\text{VP}} \\
\end{array}
\]
An NP can be an argument of a verb, but it cannot contain an argument of a verb. As a result, the θ-marking in (22a) is possible, but that in (22b) is not: a verb cannot assign a θ-role into an NP. Moreover, the head of an NP does not assign a θ-role outside its maximal projection, with the result that the θ-marking in (22c) is not allowed. NP is generally opaque to θ-marking in both directions, presumably because it is opaque to government in both directions.

(Grimshaw & Mester 1988:206)

This θ-marking system in (2.22), for Grimshaw & Mester (1988), is understood as being universal and applicable to all languages.

Nevertheless, according Grimshaw & Mester (1988), in Japanese LVCs, the universal θ-marking system is no longer valid because the event noun (cf. the derived nominal in English) seems to θ-mark the arguments that are located outside of the NP domain. Look at the Japanese LVC in (2.23).

(2.23) **Japanese LVCs:**

a. *John-wa*  *Bill-to*  *AISEKI*  *shita.*
   John-TC  Bill-with  table.sharing  do.PAST
   ‘John shared a table with Bill.’

b. *John-wa*  *Bill-to*  *AISEKI-o*  *shita.*
   John-TC  Bill-with  table.sharing-ACC  do.PAST
   ‘John shared a table with Bill.’

(Grimshaw & Mester 1988: 206)

The predicates in the sentences in (2.23) are Japanese LVCs which are made up of an event noun (i.e., *AISEKI*) or an NP (i.e., *AISEKI-o*: an event noun + o ‘accusative case particle’)
and \textit{suru} ‘do’. According to Grimshaw \& Mester (1988), in (2.23a), the event noun and the LV \textit{suru} are incorporated and form a single verb. This incorporated verb can \(\theta\)-mark the NP arguments such as \textit{John} and \textit{Bill} in a clause. Thus, the LVC in (2.23a) obeys the universal \(\theta\)-marking system in (2.22). In (2.23b), the event noun is not incorporated with the LV \textit{suru} ‘do’ but instead, forms an NP with the accusative case particle \textit{o-}. Based on the universal \(\theta\)-marking system in (2.22), after the event noun \textit{AISEKI} ‘table.sharing’ in (2.23b) forms the NP, it should not be involved in the \(\theta\)-marking system outside of this NP domain. Nevertheless, considering the thematic roles of the arguments in the clause (2.23b), the \(\theta\)-roles of \textit{John} and \textit{Bill} seem to be assigned by the event noun \textit{AISEKI} ‘table.sharing’ rather than by the verb \textit{suru} ‘do’\(^{19}\). As a result, in line with the universal \(\theta\)-marking system in (2.22), the LVC in (2.23b) is controversial because it does not obey this universal \(\theta\)-marking system.

Considering the following Japanese examples in (2.24) and (2.25), the relationship between the event noun and the LVC can be seen more transparently. According to Grimshaw \& Mester (1988), comparing the argument structures of the event noun in (2.24) and those of the LVC in (2.25), it is obvious that the NP argument is \(\theta\)-marked by the event

\[\begin{array}{cccc}
\text{a.} & \text{John-wa} & \text{Mary-no} & \text{HANASHI-o} & \text{wasureta.} \\
& \text{John-TC} & \text{Mary-to-GEN} & \text{talk-ACC} & \text{forgot} \\
& \text{‘John forgot to talk to Mary.’} \\
\text{b.} & \text{*John-wa} & \text{Mary-ni} & \text{HANASHI-o} & \text{wasureta.} \\
& \text{John-TC} & \text{Mary-to} & \text{talk-ACC} & \text{forgot} \\
& \text{‘John forgot to talk to Mary.’} \\
\end{array}\]

\((\text{Grimshaw \& Mester 1988: 208})\)

As can see in the examples, \textit{Mary}, which is the argument of the event noun \textit{HANASHI} ‘talk’, cannot be attached by \textit{ni-} ‘to’ which is the structural case. This implies that the argument still occurs inside of the NP.

\(^{19}\) According to Grimshaw \& Mester (1988), the event noun can be classified in two ways: \(\theta\)-transparent and \(\theta\)-opaque depending on what kind of verb takes the event noun as its object. If the light verb \textit{suru} takes the event noun, this event noun can assign \(\theta\)-roles outside of its own maximal projection as in (25). They call this NP \(\theta\)-transparent. However, if the event noun becomes the object of a heavy verb (e.g., \textit{wasureru} ‘forget’), all arguments of the event noun must occur inside the NP domain. They call this NP \(\theta\)-opaque.
noun rather than *suru* ‘do’ in Japanese LVCs.

(2.24) a. [NP *John-no* *Mary-e-no* *HANASHI*]  
  John-GEN Mary-to-GEN talk  
  ‘John’s talk to Mary’

  b. [NP *John-no* murabito-e-no [ookami-ga kuru-to]-no *KEIKOKU*]  
  John-GEN villager-to-GEN wolf-NOM come-COMP-GEN warn  
  ‘John’s warning to the villagers that the wolf is coming’

(Grimshaw & Mester 1988: 207)

(2.25) a. *John-wa* *Mary-ni* [NP *HANASHI*-o] *shita.*  
  John-TC Mary-to talk-ACC do.PAST  
  ‘John talked to Mary.’

  b. *John-wa* murabito-ni ookami-ga kuru-to  
  John-TC villager-to wolf-NOM come-COMP  
  [NP *KEIKOKU*-o] *shita.*  
  warn-ACC do.PAST  
  ‘John warned the villagers that the wolf was coming.’

(Grimshaw & Mester 1988: 207)

In (2.24), without the aid of the LV *suru* ‘do’, the event nouns can θ-mark their arguments because the arguments are located inside the NPs. In (2.25), after these event nouns are marked with the accusative case particle and form the NPs, they yield LVCs with the LV *suru* ‘do’. In terms of the universal θ-marking system in (2.22), the event noun must not θ-mark the NP arguments that are located outside of the NPs but in (2.25), the event noun such as *HANASHI* ‘talk’ and *KEIKOKU* ‘warn’ that are located inside the NPs are still involved in θ-marking. In conclusion, it can be said that event nouns in Japanese LVCs goes against the universal θ-marking system.

To resolve this controversy, whereby the event noun located inside of the NP can
assign θ-roles of the arguments which are located outside of the NP as in (2.25), Grimshaw & Mester (1988) argue for the argument transfer hypothesis. This hypothesis is summarized in (2.26).

(2.26) **The argument transfer hypothesis framework:**

a. The LV suru ‘do’ cannot θ-mark its arguments in a clause but can license a case (i.e., accusative case particle -o) to its complement.

b. The event noun has its own argument structure.

c. All arguments of event nouns are transferred to the arguments of the LV suru ‘do’.

d. After the argument transfer is completed, the event noun is marked with the accusative case particle.

Based on the framework in (2.26), let’s explore how argument transfer actually works in Japanese LVCs. First, according to Grimshaw & Mester (1988), the argument structure of the LV suru ‘do’ can be depicted as follows:

(2.27) suru ‘do’, V; ( ) <acc>

We use parentheses to indicate the argument list of the Verb: empty in the case of light verb suru. The notation <acc> indicates that suru assigns accusative case, but not to an argument position.

(Grimshaw & Mester 1988:211)

In (2.27), the LV suru ‘do’ cannot take any NP argument in its own argument structure but it has the ability to assign case (i.e., the accusative case). Next, based on (2.26b), the event noun has its own argument structure as in (2.28b).
(2.28) a. \[\text{[NP } \text{John-no murabito-e-no ookami-ga kuru-to-no KEIKOKU}]\]
\[\text{John-GEN villager-to- GEN wolf-NOM come-COMP-GEN warn} \]
‘John’s warning to the villagers that the wolf is coming.’

b. Argument structure of the event noun:

\[\text{keikoku ‘warn’, N (Agent, Goal, Theme)}\]

In (2.28), the event noun \textit{keikoku} ‘warn’ has three arguments, namely Agent, Goal, and Theme and all of them are marked with the genitive case particle \textit{-no}. Grimshaw & Mester (1988) indicate that all arguments in (2.28a) which are marked with the genitive case particle are located inside the NP domain because unlike the nominative and accusative case particles (i.e., the clausal case particles), the genitive case particle functions to indicate the case feature of the arguments which are located inside the NP.

Finally, based on (2.26c) and (2.26d), the argument transfer is implemented. The arguments that are \(\theta\)-marked by the event noun are transferred to the arguments of the LV \textit{suru} ‘do’ as in (2.29c). After the transfer is complete, all arguments become the arguments of the LV \textit{suru} ‘do’ and the LVC is finally formed. This operation is called argument transfer\(^{20}\).

(2.29) Argument transfer in the Japanese LVC:

a. Argument structure of the LV: \[\text{suru ‘do’ ( ) <acc>}\]

b. Argument structure of the event noun: \[\text{keikoku ‘warn’ (Agent, Goal, Theme)}\]

c. Argument Transfer: \[\text{keikoku (Theme) + suru (Agent, Goal) <acc>}\]

\[\text{(Grimshaw & Mester 1988:212)}\]

\(^{20}\) Grimshaw & Mester (1988) propose contributions on the argument transfer: (i) At least one argument apart from the subject must be realized outside the NP constructed by the event noun and (ii) the subject argument must always be outside the NP constructed by the event noun.
In (2.30), after the argument transfer is complete, Agent and Goal arguments are no longer marked with the genitive case particle. Instead, the arguments are marked with the clausal case particles (e.g., the dative case particle -ni ‘to’). This implies that these arguments are located outside of the NP. Grimshaw & Mester (1988) believe that this case alternation of the argument between in the NP as in (2.28) and in the LVC as in (2.30) verifies that argument transfer is real in Japanese LVCs.

2.3.2 Argument Transfer Hypothesis in Korean LVCs

Since Grimshaw & Mester (1988) suggested the argument transfer hypothesis, it has been discussed in Korean linguistic circles (e.g., Ahn 1990), whether or not this hypothesis is also legitimate in Korean LVCs. This is because Korean LVCs are similar to Japanese LVCs in several ways: (i) the nominal complement in the LVC is mostly the event noun, (ii) the nominal complement can be optionally marked with the accusative case particle, and (iii) the function of the LV ha ‘do’ in Korean is the same as that of the LV suru ‘do’ in Japanese. Consider the argument structure in Korean of the event noun in (2.31) and that of the LVC in (2.32).
In (2.31), the event noun *phakoy* ‘destruction’ forms an NP and it θ-marks two arguments such as *cekkwun* ‘enemy’ and *tali* ‘bridge’ inside the NP. Each argument (i.e., Agent and Theme argument) is marked with a case particle such as the genitive case particle *-uy* and the postposition *-eytayha* ‘about’ which indicate that the arguments are located inside the NP. On the other hand, in (2.32), the event noun *phakoy* ‘destruction’ becomes the complement and forms an LVC with the LV *ha* ‘do’. Like Japanese LVCs, the argument structure of the LVC in Korean as in (2.32) is consistent with that of the event noun as in (2.31). So far there is no reason to deny that the LVC in (2.32) may be formed by argument transfer in Korean.

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21 To briefly summarize the internal structure of NP/DP in Korean, the subject argument should be marked with the genitive case marker *-uy*, while the direct object argument is optionally marked with the genitive case marker *-uy* or the postposition *(ey)tayhan* ‘about’. Thus, the postposition *(ey)tayhan* ‘about’ can only occur with the direct object argument.
Presuming that Korean LVCs are composed by argument transfer, Korean LVCs should be formed by the hypothesis of argument transfer as in (2.26): (i) the event noun must have its own argument structure, (ii) the LV ha ‘do’ would be semantically empty and it cannot θ-mark the NP arguments, (iii) the LV ha ‘do’ may license the accusative case particle, and (iv) the arguments of the event noun may transfer to the arguments of the LV ha ‘do’. Based on this hypothesis, the operation of argument transfer for Korean LVCs is demonstrated in (2.33).

(2.33) Argument transfer in Korean LVCs:
    a. Argument structure of the LV:  ha ‘do’ (       ) <acc>
    b. Argument structure of the event noun:  phakoy ‘destruction’ N (Agent, Theme)
    c. Argument Transfer:  phakoy (       ) + ha (Agent, Theme) <acc>

Furthermore, the case particles of the argument in the NP change to clausal case particles after the event noun forms the LVC in Korean, as in Japanese.

So far, I have reviewed the case for applying the argument transfer hypothesis to Korean LVCs. I believe that this hypothesis contributes to the composition of Japanese LVCs. However, as already mentioned by many linguists (e.g., Ahn 1990), this hypothesis does not seem to be appropriate when examining Korean LVCs.

2.3.3 Against Argument Transfer Hypothesis in Korean LVCs

As seen in the previous sub-section, it appears possible to apply the argument transfer hypothesis to account for the composition of Korean LVCs. However, in fact, Korean LVCs
cannot be composed by argument transfer hypothesis for several reasons which I will illustrate in this sub-section.

2.3.3.1 Derived Nouns and Event Nouns in Korean

According to Grimshaw (1990), derived nouns in English which come from verbs, may be classified into three sub-types: (i) “complex event nouns” (i.e., Class I: obligatorily taking internal argument), (ii) “result noun” (i.e., Class II: not taking internal argument), and (iii) “simple event nouns” (i.e., Class III). The simple event nouns are similar to result nouns in not taking the internal argument but unlike result nouns, they ontologically cling to the semantic content ‘event’ (e.g., event, race, and trip in English). This classification of derived nouns in English is exemplified in (2.34):

(2.34)  

a. **Class I (Complex event nouns):**  
*The examination was on the table.*  
*The examination of the patient took a long time.*

b. **Class II (Result nouns):**  
*The exam is on the table.*  
*The exam of the patient is impossible.*

c. **Class III (Simple event nouns):**  
*The event took a long time.*  
*The event of the patient took a long time.*

In Korean, needless to say, derived nouns do exist. However, unlike English, all derived nouns in Korean are Class II nouns (i.e., result nouns) under the criteria of Grimshaw’s classification because derived nouns in Korean cannot take any argument and do not have
the argument structures of their counterpart verbs (cf. Yoon & Park 2004). Consider (2.35) and (2.36).

(2.35) Derived nouns in Korean\(^{22}\):
   a. *mak-* ‘to stop’ (verb) \(\sim\) *mak-ay* ‘stopper’ (noun)
   b. *mwut-* ‘to bury’ (verb) \(\sim\) *mwut-em* ‘grave’ (noun)

(2.36) a. *Chelswu-ka kil-ul mak-ass-ta.* \(\leftarrow\) Verb
   Chelswu-NOM road-ACC block-PAST-DEC
   ‘Chelswu blocked the road.’
   b. *
     kil-uy/eytayhan mak+ay \(\leftarrow\) Derived nouns
     road-GEN/about stopper

However, even though derived nouns in Korean do not belong to Class I or Class III, this does not mean that Class I and Class III nouns do not exist in Korean. In fact, some nouns (not derived nouns) may be included as Class I or Class III nouns and they are event nouns in Korean. Event nouns are not derived from verbs but they meet the criteria from the classification of the derived nouns in English as in Grimshaw (1990). For instance, the event noun *cosa* ‘examination’ in (2.37a) can take an internal argument. Thus, this event noun can be specified as a Class I noun. In addition, the event noun *yehayng* ‘trip’ does not take an internal argument but ontologically holds the meaning “eventuality” as in (2.38). The behaviour of the event noun *yehayng* ‘trip’ is close to the Class III noun in Grimshaw (1990).

\(^{22}\) According to Sohn (1999:223-224), there are many suffixes which change verbs to nouns in Korean: -i ‘act, thing’, -ay ‘er’, -ki ‘act, thing’, -po ‘thing, person’, -(u)m/-em ‘fact, thing’. In particular, -(u)m and –ki are used as both derivational (cf. verb \(\rightarrow\) derived noun) and inflectional (cf. verb \(\rightarrow\) gerund nominal) suffixes. As inflectional suffixes, they occur with any verb or adjective without changing the original meaning of the stem. In addition, for some verbs, the output of the derivation and that of inflection are different: *el-um* ‘ice’ (derivation) vs. *e-m* ‘freezing’ (inflection), *cwuk-em* ‘corpse, death’ (derivation) vs. *cwuk-um* ‘dying’ (inflection), and *mut-em* ‘grave’ (derivation) vs. *mut-um* ‘burying’ (inflection).
a. Class I event nouns in Korean:
   N. *cosa* ‘examination’
   b. *[NP eyn cin-eytayhan cosa]*
      engine-about examination
      ‘the examination about the engine’

(2.38)  a. Class III nouns in Korean:
   N. *yehayng* ‘trip’
   b. *[NP kaynada-uy*/eytayhan yehayng]*
      Canada-GEN/about trip
      ‘trip to Canada’

As a result, in terms of the classification of the derived nouns in English as in Grimshaw (1990), event nouns in Korean can be categorized as Class I or Class III nouns. Interestingly, these event nouns are not derived from the verbs but instead, they can create their counterpart verbal expressions with the LVs (i.e., the LVC). Consider (2.39).

(2.39)   a. N. *cosa* ‘examination’  \(\rightarrow\) V. *cosa-ha* ‘examination-do’

\[
\begin{array}{ll}
\text{T-i} & \text{eyn cunul} & \text{[LVC cosa ha]-ess-ta.} \\
\text{T-NOM} & \text{engine-ACC} & \text{examination do-PAST-DEC}
\end{array}
\]

‘Tom examined the engine.’

b. N. *yehayng* ‘trip’  \(\rightarrow\) V. *yehayng-ha* ‘trip-do’

\[
\begin{array}{ll}
\text{T-i} & \text{kaynada-lul} & \text{[LVC yehayng ha]-ess-ta.} \\
\text{T-NOM} & \text{Canada-ACC} & \text{trip do-PAST-DEC}
\end{array}
\]

‘Tom traveled in Canada.’

Based on all these observations, in English the argument structure of the derived noun comes from that of the verb while in Korean/Japanese, the argument structure of the verbal expression (i.e., the LVC) is derived from that of the event noun.

Let’s clarify how to build the argument structure of the derived noun in English and
that of the LVC in Korean. According to Grimshaw (1990), the argument structure of the derived noun in English is constructed by the following procedure: (i) in the lexicon, the verb and the suffix are stored as lexical items, (ii) the derived noun is formed by the affixation between the verb and the suffix, and (iii) the θ-roles of the arguments in the derived noun are derived from those of the verb. Finally, the argument structure of the derived noun in English is accomplished as in (2.40b).

(2.40)  
\begin{enumerate}
  \item a. **Lexicon**: \{observe V (Agent, (Theme)), -ation N (Ev(x(y))) \}
  \item b. **Derived nominal**: observ-ation N, (Ev (Agent, (Theme)))
\end{enumerate}

On the other hand, according to Grimshaw & Mester (1988), in Korean/Japanese, the direction of the derivation is opposite to that in English: the verbal expression (i.e., LVC) is derived from the event noun. Thus, we can assume that (i) the event nouns and the LV may be stored as lexical items in the lexicon, (ii) the event nouns have their own argument structure, and (iii) verbal expressions such as LVCs are derived from these event nouns as in (2.41b).

(2.41)  
\begin{enumerate}
  \item a. **Lexicon**: \{phakoy ‘destruction’ N (Agent, (Theme)), ha ‘do’ ( ) <acc> \}
  \item b. LVC (Argument Transfer): phakoy ( ) + ha (Agent, Theme) <acc>
\end{enumerate}

In English, a Class I noun is derived from the verb as in (2.42a) while a Class I noun in Korean exists as a lexical item in the lexicon and the verbal expression (i.e., the LVC) is derived from this Class I noun as in (2.42b).

(2.42)  
\begin{enumerate}
  \item a. **Relationship between the verb and the derived noun in English**: \\
  V. observe (lexicon) \(\rightarrow\) N. observation
\end{enumerate}
b. Relationship between the event noun and the LVC in Korean:

N. *phakoy* ‘destruction’ (lexicon) \(\rightarrow\) V. *phakoy-ha* ‘destruction-do’

The discrepancy between English and Korean/Japanese is relevant to understand why the argument transfer hypothesis cannot account for the composition of Korean LVCs.

### 2.3.3.2 Counterargument

In English, it is often found that a derived noun is interpreted as falling into more than one class of derived nouns in Grimshaw (1990). Consider (2.43).

\[(2.43)\]

| a. The *destruction* of Rome in a day |
| \(\rightarrow\) *destruction*: Class I |
| \(\rightarrow\) Argument structure: *destruction* N (Ev (x (y))) |

| b. The *destruction* lasted for hours. |
| \(\rightarrow\) *destruction*: Class III |
| \(\rightarrow\) Argument structure: *destruction* N (Ev) |

Under Grimshaw’s proposal (1990), the derived noun *destruction* in (2.43a) and (2.43b) may be derived from the same verb *destroy* and the argument structure of the verb is assumed to be maintained in the derived nouns as in (2.40) (cf. UTAH in Baker 1988\(^{23}\)). In order for a derived noun *destruction* to be categorized into two different classes of derived nouns, it would be stored as two different lexical items in the lexicon: (i) as a Class I noun as in (2.43a) and (ii) as a Class III noun as in (2.43b). In addition, a suffix - *a)tion* should

\(^{23}\) Baker (1988:46) proposes UTAH: Identical thematic relationships between items are represented by identical structural relationships between those items at the level of D-Structure. This proposal caused a lot of controversy in later studies.
be saved as two different lexical items in the lexicon as in (2.43). However, recent studies (e.g., Fu, Roeper, & Borer 2001, and Borer 2001) argue against Grimshaw’s perspective (1990). In these studies, the class of the derived noun in English is not pre-determined by its counterpart verb or the suffix. Instead, the class is relatively determined in conjunction with the presence of arguments when the derived noun is saturated in the syntactic structure. Following this argument, there is no reason to assume that a verb form (e.g., *destroy* in (2.43)) or a suffix (e.g., *(a)tion* in (2.43)) is stored as two different lexical items in the lexicon.

Similar to the derived nouns in English, a single event noun in Korean can be categorized into various classes in Grimshaw (1990). Consider (2.44).

(2.44) a. \( [{\text{Sn}}\ loma-eytayhan\ phakoy] \)  
Rome-about destruction  
\( \rightarrow \) phakoy ‘destruction’: Class I  
\( \rightarrow \) Argument structure: phakoy N (Ev (x))

b. \( [{\text{Sn}}\ phakoy-nun\ ]\ kyeyesok-toy-ess-ta. \)  
destruction-TC continuation-become-PAST-DEC  
‘The destruction continued.’  
\( \rightarrow \) phakoy ‘destruction’: Class II

Following Grimshaw (1990) and Grimshaw & Mester (1988), the event noun *phakoy* ‘destruction’ in (2.44) may be stored as two separate lexical items; one for the Class I noun and another for the Class II noun. By rejecting Grimshaw’s proposal (1990) and adopting the more recent approach (e.g., Fu, Roeper, & Borer 2001, and Borer 2001), the behaviours of the event noun in (2.44) can be explained, as the class of the event noun is determined depending on the presence of the internal argument in the surface structure and so it is not
necessary to assume that a noun form *phakoy* ‘destruction’ is stored as two different lexical items.

2.3.3.3 Evidence

Between Grimshaw’s proposal (1990) and the more recent approach (e.g., Fu, Roeper, & Borer 2001, and Borer 2001), which one better accounts for the behaviour of event nouns in Korean? I adopt the more recent approach. According to the argument transfer hypothesis (Grimshaw & Mester 1988), all arguments of LVCs should be derived from those of the event nouns. In other words, the number of arguments cannot increase or decrease before or after the event noun forms the LVC. However, in the Korean examples, this main idea of the argument transfer hypothesis is challenged. First, according to the definition of Class III in Grimshaw (1990), this noun cannot take an internal argument and so when it forms the LVC, an internal argument could not occur in the LVC. However, this proposal is incorrect. Consider (2.45).

(2.45)  a. Class III nouns in Korean:
   N. *yehayng* ‘trip’

b. NP:
   \[\text{[SP} \text{kaynada-}^{*\text{uy/}}^{*\text{eytayhan}} \text{yehayng]}\]
   Canada-GEN/about trip
   ‘trip to Canada’

c. LVC:
   N. *yehayng* ‘trip’  \(\rightarrow\) V. *yehanyng-ha* ‘trip-do’
   \(\text{Tom-i} \quad ^{*\text{(kaynada)}}-\text{lul} \quad \text{[LVC yehayng ha]}-\text{ess-ta.}\)
   T-NOM Canada-ACC trip do-PAST-DEC
‘Tom traveled in Canada.’

In (2.45b), the event noun yehayng ‘trip’ ontologically holds the meaning “eventuality” but it cannot take an internal argument inside the NP. In terms of the classification of the event noun in Grimshaw (1990), yehayng ‘trip’ may be a Class III noun. Consequently, following the argument transfer hypothesis in Grimshaw & Mester (1988), it is expected that when this event noun yehayng ‘trip’ makes an LVC, the internal argument cannot appear in the LVC. However, when this event noun builds an LVC with the LV ha ‘do’ as in (2.45c), all of sudden, the internal argument kaynada ‘Canada’ appears obligatorily. Thus, the behaviour of the event noun yehayng ‘trip’ in the LVC goes against the argument transfer hypothesis.

Next, following the argument transfer hypothesis in Grimshaw & Mester (1988), non-event nouns cannot produce an LVC because they do not have their own argument structure. However, in Korean, non-event nouns can yield LVCs. Consider (2.46).

(2.46)  

a. Noun (non-event noun): khadu ‘card’  
b. NP:  
   Tom-uy khadu  
   T-GEN card  
   ‘Tom’s card’  
c. LVC: khadu-ha ‘to play cards’  
   Tom-i Mary-wa [LVC khadu ha]-ess-ta.  
   T-NOM M-with card do-PAST-DEC  
   ‘Tom played cards with Mary.’

In (2.46a), the noun khadu ‘card’ is not an event noun and it cannot take any arguments inside the NP. In fact, in (2.46a), Tom is the possessor of the noun khadu ‘card’ but it is not
the argument. According to Grimshaw & Mester (1988), the noun *khadu* ‘card’ should not construct an LVC. However, considering (2.47c), this noun *khadu* ‘card’ builds an LVC with the LV *ha* ‘do’ and the LVC can assign the θ-roles to its arguments in a clause. It is difficult to explain the behaviour of the non-event noun in (2.47) under the argument transfer hypothesis. I will deal with the details of how non-event nouns form LVCs in Korean in Chapter 4.

In this section, I reviewed the argument transfer hypothesis in Grimshaw & Mester (1988). Empirically, the behaviours of the event nouns and other nouns in Korean do not correspond with Grimshaw & Mester’s proposal (1988). Thus, I conclude that Korean LVCs are not composed by argument transfer.

2.4 Incorporation

In the two previous sections, I have given evidence supporting the claim that Korean LVCs are not composed by morphological rules in a lexical approach nor an argument transfer hypothesis. I claim that their explanations do not reflect the characteristics of Korean LVCs as predicates. In this section, I propose an alternative account for the composition of Korean LVCs, namely incorporation, which is consistent with the characteristics of Korean LVCs.

2.4.1 Review the Compositional Approach
When investigating the composition in Korean LVCs, the following characteristics given in (2.47) cannot be ignored.

(2.47) **Characteristics of Korean LVCs:**
   a. The semantic component (i.e., the nominal complement) and the morphological component (i.e., the LV) are stored as two separate lexical items in the lexicon.
   b. The LVC is not formed by the morphological composition of the nominal complement and the LV.
   c. The LVC forms an XP expression in the surface structure (i.e., a VP) but it behaves like an X⁰ expression (a verb or an adjective).²⁴
   d. The nominal complement selects a specific LV when it forms the LVC.

The characteristics in (2.47a) and (2.47b) imply that the two components are realized as two different lexical items. As a result, in the surface structure, the LVC is similar to the normal transitive verb construction in Korean. In fact, according to Park (1995), the LV is treated as a normal transitive verb as in (2.49) and the nominal complement is assumed to be the direct object as in (2.49). However, the characteristics in (2.47c) and (2.47d) suggest that the LVC in Korean cannot be a normal transitive verb construction. In order to see this discrepancy between the LVC and the transitive verb constructions in Korean, let’s compare them.

(2.48) a. **Transitive verb construction:**

   \[
   \text{Mary-ka} \quad [\text{vp} \ pap-ul \quad mek]-\text{ess-ta}.
   \]

   M-NOM \quad \text{rice-ACC} \quad \text{eat-PAST-DEC}

   ‘Mary ate the rice.’

²⁴ As mentioned in Chapter 1, according to the constituency test (e.g., Gap test or Replacement test), Korean LVCs are always equivalent to a lexical verb or an adjective rather than a VP.
In (2.48a), the transitive verb *mek* ‘eat’ acts as the predicate in a clause and it obligatorily takes the DP complement *pap* ‘rice’. The combination of the verb and its complement forms a VP in a clause. In (2.49a), the LVC acts like the predicate in a clause and functions as a transitive verb. Thus, as other transitive verbs do, this LVC takes the DP complement *tali* ‘bridge’ and it forms a VP with the DP complement. However, the LVC also forms an XP such that the LV *ha* ‘do’ acts like a verb and a NP/noun *phakoy* ‘destruction’ becomes the complement of the LV as in (2.48b).

How is it possible that an XP expression behaves like an X₀ expression (a lexical verb or an adjective) at the same time? In order to justify this complexity of Korean LVCs, the compositional approach in Jung (2002, 2003), which is derived from Pesetzky (1995)
and Marantz (1997), might be adopted. According to Jung (2002, 2003), all predicates including LVCs are syntactically complex because (i) the predicate is decomposed as a category-neutral root and a feature \( V \) and (ii) the category of this root is determined by the feature \( V \). In this aspect, the LV is regarded as the overt form that indicates the feature \( V \) and so it is expected that in the LVC, the overt form of the feature \( V \) is present while in the lexical verb, the covert form of the feature \( V \) appears. Thanks to the compositional approach, the syntactic structures in the transitive verb in (2.48b) and the LVC in (2.49b) can be modified as a unified syntactic structure as in (2.50) and (2.51).

(2.50)  

a. **Transitive verb construction:**

\[
\begin{align*}
\text{Mary-ka} & \quad [v \; \text{pap-ul} \quad [v \; \text{mek-}\emptyset]]-\text{ess-ta}. \\
\text{M-NOM} & \quad \text{rice-ACC} \quad \text{eat-do-PAST-DEC}
\end{align*}
\]

\text{‘Mary ate the rice.’}

b. 

\[
\begin{array}{c}
\text{VP} \\
\text{rice} \\
\text{complement}
\end{array}
\]

\[
\begin{array}{c}
\text{\{} \quad \text{\{} \\
\text{\}} \quad \text{\}} \\
\text{\}} \quad \text{\}} \\
\end{array}
\]

\[\sqrt{\text{eat}} \quad \emptyset \]

\text{predicate = transitive verb}

(2.51)  

a. **LVC (transitive verbs):**

\[
\begin{align*}
\text{cekkwun-i} & \quad [v \; \text{tali-lul} \quad [\text{LVC phakoy-(lul) ha}]]-\text{ess-ta}. \\
\text{enemy-NOM} & \quad \text{bridge-ACC} \quad \text{destruction-(ACC) do-PAST-DEC}
\end{align*}
\]

\text{‘The enemy destroyed the bridge.’}

b. 

\[
\begin{array}{c}
\text{VP} \\
\text{bridge} \\
\text{complement}
\end{array}
\]

\[
\begin{array}{c}
\text{\{} \quad \text{\{} \\
\text{\}} \quad \text{\}} \\
\text{\}} \quad \text{\}} \\
\end{array}
\]

\[\sqrt{\text{destruction}} \quad \text{LV} \quad \text{ha} \quad \text{do} \]

\text{predicate = transitive verb}
Pursuing the compositional approach as shown in (2.50) and (2.51), Korean LVCs as in (2.47c) need not be treated as exceptional because the LVC can be expressed in the same way as a lexical verb.

However, I am skeptical of this compositional approach in (2.50) and (2.51). First, in this approach, it is not defined when the root merges with the covert form of the feature V, and when instead it is the overt form feature V. Second, certain syntactic operations (e.g., extraction) are allowable in LVCs but are not possible in a lexical verb. If the LVC and the lexical verb are syntactically composed in the same manner as in (2.50) and (2.51), the same results would be expected when they undergo an identical syntactic operation. However, extraction is only allowed in the LVC and not in the case of a lexical verb. As mentioned in Section 2, the complement in the LVC is separable from the LV (cf. the Extraction test) but in the case of a lexical verb, the complement of the feature V cannot be separable. Consider (2.52).

(2.52)  

a. Transitive verb construction:

\[
\begin{array}{cccc}
\text{*Mary-} & \text{mek-} & \text{pap-} & \text{ess-} \\
\text{eat} & \text{ACC} & \text{rice} & \text{ACC} \quad \text{PAST-DEC}
\end{array}
\]

‘Mary ate the rice.’

b. LVC (transitive verbs):

\[
\begin{array}{cccc}
\text{enemy-} & \text{phakoy-} & \text{tali-} & \text{ess-} \\
\text{destruction-ACC} & \text{bridge-ACC} \quad \text{do-PAST-DEC}
\end{array}
\]

‘The enemy destroyed the bridge.’

In (2.52a), when the root mek ‘eat’ is extracted, the sentence is ungrammatical. However, in (2.52b), when the root phakoy ‘destruction’ is extracted from the base-position, the sentence is still grammatical.
Finally, another characteristic of Korean LVC in (2.47d) causes us to doubt the compositional approach. In (2.51), the event noun *phakoy* ‘destruction’ can join only with the LV *ha* ‘do’ and not the LV *toy* ‘become’ (i.e., the s-selection between the nominal complement and the LV). This implies that a constraint exists when combining an event noun and an LV. However, under the compositional approach, the constraint cannot be clearly explained. I will discuss this constraint further in Chapter 4.

Taking into consideration these three reasons, it is clear that the syntactic structure of a lexical verb and that of an LVC are not composed in the same manner in Korean. Therefore, the following question is still unsolved: How is it possible that an XP expression (i.e., LVC) can behave as an X0 expression (i.e., a verb or an adjective) at the same time? I point out that the answer to this question is that the LVC becomes a semantic unit through “incorporation” (cf. Sugimura 2008) and in the next sub-sections; I will explain and support this claim.

2.4.2 Incorporation in Previous Studies

Previously, many studies adopted the notion of incorporation as a way of explaining the composition of LVCs in Korean/Japanese (e.g., Ahn 1990, Gold 1994 and Sugimura 2008). For instance, the idea of incorporation is implemented when accounting for a specific LVC form in Telugu, Japanese, and Korean. In these languages, the nominal complement in the LVC is optionally marked with an accusative case particle. When the complement is not marked with an accusative case particle (i.e., \[\text{LVC complement + LV}\]), incorporation is
assumed to take place between the complement and the LV. In contrast, when the complement is marked with an accusative case particle (i.e., \([\text{LVC complement + ACC + LV}]\)), it is assumed that this form of the LVC is not incorporated. As an example, look at Ahn’s study (1990) of Korean. In his proposal, the LVC in Korean can be classified as the non-incorporated form as in (2.53b) and the incorporated form as in (2.53c).

(2.53) a. LVC:

\[
\text{cekkwun-i} \quad [\text{VP tali-lul} \quad [\text{LVC phakoy-(lul)}\quad \text{ha}]-\text{ess-ta}.]
\]

\begin{align*}
\text{enemy-NOM} & \quad \text{bridge-ACC} \\
\text{destruction-(ACC)} & \quad \text{do-PAST-DEC}
\end{align*}

‘The enemy destroyed the bridge.’

b. Non-incorporated (heavy verb \(\text{ha}\) ‘do’):

\[
\text{VP} \\
\quad \text{phakoy-lul} \quad \text{V}^0 \\
\quad \text{ha} \quad \text{‘do’}
\]

c. Incorporated (light verb \(\text{ha}\) ‘do’):

\[
\text{VP} \\
\quad t \quad \text{V}^0 \\
\quad \text{VN} \quad \text{LV} \quad \text{phakoy} \quad \text{ha} \quad \text{‘do’}
\]

According to Ahn (1990), the verb \(\text{ha}\) ‘do’ is specified as a heavy verb and as a light verb. When \(\text{ha}\) ‘do’ functions as a heavy verb as in (2.53b), it acts like a normal transitive verb in a clause: (i) this heavy verb \(\text{ha}\) takes a complement that is the direct object in a clause, (ii) this heavy verb \(\text{ha}\) assigns the \(\theta\)-role to the arguments and (iii) the complement as the direct object is marked with accusative case particle because of case checking [ACC]. On the
other hand, when *ha* ‘do’ acts like a light verb, it is not complete as a predicate. For this, the direct object must be incorporated with the light verb *ha* ‘do’ as in (2.53c). Based on Ahn’s study (1990), we can infer what incorporation means in Korean LVCs: (i) incorporation takes place only when the nominal complement is not marked with an accusative case particle, and (ii) incorporation in the LVC is similar to “syntactic noun incorporation”.

### 2.4.3 Noun Incorporation

It is obvious that in the previous studies (e.g., Ahn 1990), the notion of incorporation in LVC borrows from the general idea of noun incorporation. The term noun incorporation is actually used to describe a linguistic phenomenon where the noun stem compounds with a verb to yield a complex form that serves as a predicate in a clause (Mithun 1984). Mostly, it happens between the noun stem of the direct object and the transitive verb. Consider (2.54) and (2.55).

(2.54) **Nahuatl (Sapir 1911):**

a. *ni-c qua in nacatl.*  
   I-it:eat the flesh.  

b. *ni-naca-qua.*  
   I-flesh-eat.

(2.55) **Onondaga (H. Woodbury 1975):**

   tns-he:it-buy-asp.  
   nm.  
   it-tobacco-n.s.g.  
   ‘He bought the tobacco.’

   tns-he:it-tobacco-buy-asp.  
   ‘He bought (a kind of) tobacco.’

(Gerdts 2001:84)
The sentences in (2.54a) and (2.55a) are normal transitive verb constructions while in the sentences in (2.54b) and (2.55b), the noun stems are incorporated with the verbs. According to Gerdts (2001), in (2.54b) and (2.55b), the incorporated nominal appears between the agreement prefixes and the verb, and it is not expressed as a free-standing noun. Thus, an incorporated nominal shows different properties from a free-standing noun: (i) an incorporated nominal moves near the verb (i.e., the syntactic properties of noun incorporation) and (ii) an incorporated nominal is unmarked with morphemes (i.e., the morphological properties of noun incorporation). In Nahuatl (2.54), unlike a free-standing noun, an incorporated nominal cannot be marked with the absolute suffix -tl and in Onondaga (2.55), a nominal prefix -o is not affixed on an incorporated noun stem. In addition, in Nahuatl (2.54), an incorporated nominal is replaced with an object agreement prefix while in Onondaga (2.55), it moves to the place between the subject-object agreement prefix and the verb.

The phenomenon of noun incorporation has been analyzed in two ways. Some linguists (e.g., Baker 1988) understand noun incorporation as the result of a syntactic operation (i.e., “syntactic noun incorporation”) and so they concentrate on the syntactic and morphological properties of noun incorporation. According to Baker’s study (1988), noun incorporation takes place when the head of a direct object noun (i.e., a noun stem) is overtly moved to the head of a verb, creating a new verb. This syntactic operation is called “Head-movement”. Consider the noun incorporation in Mapudungun in (2.56).
In the non-incorporated construction in (2.56a), a free-standing noun is generated at the base-position of a direct object. When the stem of this object noun (i.e., $N^0$) is incorporated with a verb as in (2.56b), it is assumed that the head of the direct object moves next to the head of the verb as in (2.56c). Noun incorporation then is the result of a syntactic operation in Baker (2009) and an incorporated nominal is assumed to be morphologically unmarked because it is a head (i.e., a noun stem: $N^0$). The notion of incorporation in LVCs in previous studies (e.g., Ahn 1990) is similar to syntactic noun incorporation. In syntactic noun incorporation, an incorporated nominal is restricted as a noun stem such as $N^0$. Similarly, in

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25 According to Baker (2009), the abbreviation is as follows: PROG ‘progressive’, IND ‘indicative mood’, 3sS ‘third singular subject agreement’, COLL ‘collective’.
incorporation in an LVC as in (2.53), an incorporated complement is not marked by the accusative case particle and this form is close to the noun stem. As a result, in both the incorporated version of the LVC as in (2.53) and in syntactic noun incorporation, an incorporated nominal is always restricted as a noun stem (i.e., N$^0$).

Next, I present another direction of the research on noun incorporation. Some linguists (e.g., Van Geenhovan 1998, Dayal 2003, 2007, 2011, Cheung & Ladusaw 2005) focus on the semantic properties of noun incorporation as much as the morphological and syntactic properties. According to Dayal (2003, 2011), the semantic properties are as likely as the morphological and syntactic properties to be broadly found cross-linguistically. Thus, these semantic properties of noun incorporation are relevant when defining noun incorporation as much as the syntactic/morphological properties of noun incorporation. Commonly, this approach is called “semantic noun incorporation”. Among the many semantic properties of noun incorporation in Dayal (2003, 2011), I introduce three of them that are related to incorporation in Korean LVCs in (2.57).

(2.57) **Semantic characteristics of noun incorporation:**
   a. The incorporated nominal must be indefinite/non-specific.
   b. The incorporated nominal holds number neutrality.
   c. The incorporated nominal behaves like a modifier of the incorporated verb.

The semantic characteristics in (2.57a) and (2.57b) are general and they are frequently seen in examples of noun incorporation. Consider noun incorporation in Hindi as presented in (2.58).
In (2.58), the animate noun *bacca* ‘child/children’ can be optionally marked with the accusative case particle -*ko*. According to Dayal (2003, 2007, 2011), when the noun appears without the accusative case particle, this noun is incorporated with the verb. Comparing the incorporated nominal *bacca* ‘child’ (i.e., Bare NP) to the non-incorporated nominal *baceeko* ‘child-ACC’, it shows the following properties: (i) the incorporated nominal *bacca* ‘child/children’ must be read as being indefinite and non-specific, and (ii) this incorporated nominal can be interpreted as either singular or plural form as in (2.58), which Dayal refers to as number neutrality. Dayal (2003, 2007, 2011) does not directly mention the semantic properties of noun incorporation in Mapudungun as in (2.56) (i.e., Baker 2009) but we can see them even in noun incorporation in this language. In a non-incorporated construction such as (2.56a), the direct object *wake* ‘cow’ can occur with the definite article *ta chi* ‘the’ and the numeral morpheme *pu* ‘collective’. Hence, the direct object NP in (2.56a) is not indefinite and its numeral feature is not neutral. However, after the noun stem of the direct object *wake* ‘cow’ is incorporated as in (2.56b), the definite article and the numeral morpheme are no longer affixed because semantically, the incorporated nominal should be indefinite and its numeral feature is unspecified. Thus, the semantic properties of noun incorporation as shown in (2.57a) and (2.57b) can be observed even in (2.56b) and they help to delineate noun incorporation. The last semantic property of noun incorporation in (2.57c) is discussed with the incorporation of Korean LVCs in the next sub-section.
Cross-linguistically, we can find many examples that show the semantic properties of noun incorporation as in (2.57) even though they do not satisfy the condition of syntactic noun incorporation: the incorporated nominal should be a noun stem (i.e., \(N^0\)) because of head-movement. For instance, according to Massam (2001), in Niuean, an incorporated nominal is bigger than an \(N^0\). Consider (2.59).

(2.59) \[\text{V} \text{Ne} \text{ inu} \quad \text{[OBJ} \text{kofe} \quad \text{kon]} \quad \text{[SUBJ} \quad \text{Mele}\]

\[
PST \quad \text{drink} \quad \text{coffee} \quad \text{bitter} \quad \text{ABS} \quad \text{Mele}
\]

‘Mary drank bitter coffee.’

(Massam 2001:158)

According to Massam (2001), underlingly, the word order in Niuean is assumed to be SVO. In the surface structure, V fronting is obligatory and so, seemingly, the VSO order is accomplished as the basic word order. However, often, we can observe VOS word order in Niuean as in (2.59) and according to Massam (2001), this word order is the result of noun incorporation. In fact, in contrast to the direct object in VSO order, the object in VOS order \(\text{kofe kon} \) ‘coffee bitter’ as in (2.59) shows the semantic properties of noun incorporation such as (i) indefiniteness and (ii) number neutrality. It turns out that in (2.59), the direct object in the VOS word order in Niuean cannot occur with the following morphemes: a determiner, a relative clause modifier, and plurality. Nevertheless, the direct object in (2.59) does not fit in the condition of the syntactic property in noun incorporation because it is not a noun stem (i.e., the \(N^0\)) but an NP. As a result, in Niuean example in (2.59), except for the syntactic property, the direct object shows many properties of noun incorporation. Massam (2001) proposes a new approach to noun incorporation such that in some languages (e.g.,
Niuean), the incorporated nominal is not restricted as an $N^0$ (i.e., a noun stem) but an NP can be incorporated with a verb in the sense that it acts like part of the predicate rather than acting as a separate argument constituent. In particular, she defines this special noun incorporation as “pseudo-noun incorporation”.

Following Massam’s claim (2001), Dayal (2003, 2007) maintains the idea of pseudo-noun incorporation in Hindi. As with noun incorporation in Niuean, an incorporated nominal is not restricted as an $N^0$ in Hindi. Consider the following example of noun incorporation in Hindi in (2.60).

(2.60)  anu  [NP sirf puraanii kitaab] becegii.
      Anu only old book will-sell

‘Anu will only sell old book/books.’

(Dayal 2003:11)

In (2.60), the NP [NP sirf puraanii kitaab] ‘only old book’ seems to be incorporated with the verb because (i) the head noun kitaab ‘book’ of this NP is not marked with the accusative case particle and (ii) it shows the semantic properties of noun incorporation such as (i) indefiniteness and (ii) number neutrality as does the previous example in (2.58). Thus, as noun incorporation in Niuean, the nominal that is bigger than an $N^0$ can be incorporated with a verb in Hindi.

To sum up, there have been various attempts to explain noun incorporation phenomenon. Among these attempts, if noun incorporation is restricted to being the result of head movement, the examples in Niuean in (2.59) and Hindi in (2.60) cannot be classified as noun incorporation. However, considering the semantic properties of noun
incorporation, all of these examples can be classified as noun incorporation. Therefore, when defining noun incorporation, the syntactic and morphological properties of noun incorporation are stricter than the semantic properties of noun incorporation. In this thesis, in order to describe the strictness when defining noun incorporation, I borrow the notions of ‘sufficient condition’ and ‘necessary condition’ and I assume that the syntactic and morphological properties of noun incorporation are the sufficient conditions while the semantic properties of noun incorporation are regarded as the necessary conditions.

2.4.4 Incorporation in Korean LVCs

In the previous sub-sections, I have shown that noun incorporation can be defined by the sufficient condition or by the necessary condition. Within these two conditions, the incorporation of the LVC in previous studies mainly focuses on the sufficient condition. Thus, in Korean, the LVC in (2.61a) is assumed to be an incorporated version of the LVC (i.e., [LVC complement + LV]), while the LVC in (2.61b) is regarded as the non-incorporated version of the LVC (i.e., [LVC complement +ACC+LV]) (e.g., Ahn 1990).

(2.61)  a. Incorporated version of the LVC:

\[
\text{cekkwun-i} \quad [\_vp\text{ tali-lul}] \quad [\text{LVC phakoy} \text{ ha}]\text{-ess-ta}.
\]

enemy-NOM bridge-ACC destruction do-PAST-DEC

‘The enemy destroyed the bridge.’

b. Non-incorporated version of the LVC:

\[
\text{cekkwun-i} \quad [\_vp\text{ tali-lul}] \quad [\text{LVC phakoy-lul ha}]\text{-ess-ta}.
\]

enemy-NOM bridge-ACC destruction-ACC do-PAST-DEC

‘The enemy destroyed the bridge.’
It seems to be true that the semantic properties of noun incorporation as in (2.57) are easily found in the incorporated version of the LVC. However, I contend that previous studies (e.g., Ahn 1990, Sugimura 2008) miss a relevant point concerning the contrast between incorporated constructions and non-incorporated constructions. After noun incorporation takes place, the semantic meaning or the valency should change in contrast to a parallel non-incorporated construction. However, in (2.61), no significant semantic meaning or valency change is found between the incorporated version of the LVC and the non-incorporated version of the LVC. Hence, the notion of incorporation used in previous studies must be revised. There are two possibilities: (i) we abandon the notion of incorporation even for the so-called incorporated version of the LVC (2.61a) or (ii) we apply the notion of incorporation to all LVCs in Korean regardless of the absence of accusative case particles. In this thesis, I adopt the second possibility because the non-incorporated version of the LVC in (2.61b) can also satisfy the necessary condition of noun incorporation as the incorporated version of the LVC does in (2.61a). Consider (2.62).


   enemy-NOM bridge-ACC this destruction-ACC do-PAST-DEC

   ‘The enemy destroyed the bridge.’

b. cekkwun-i tali-lul [LVC yakkanuy phakoy-lul ha]-ess-ta.

   enemy-NOM bridge-ACC a little-GEN destruction-ACC do-PAST-DEC

   ‘The enemy destroyed the bridge a little.’

c. cekkwun-i tali-lul [LVC phakoy-lul ha]-ess-ta.

   enemy-NOM bridge-ACC destruction-ACC do-PAST-DEC

   ‘The enemy destroyed (one or more times) the bridge.’

Both the nominal complements in (2.62a) and in (2.62b) are marked with accusative case
particles and they are bigger than a $N^0$. However, only (2.62a) is ungrammatical. In (2.62a), the demonstrative $ku$ ‘this’ modifies the nominal complement and so, the nominal complement is definite and specific. On the other hand, in (2.62b), even though the possessor $yakkan-uy$ ‘a little-GEN’ modifies the nominal complement, it is not directly related to indicating definiteness in Korean. This means that the nominal that is bigger than a $N^0$ can be incorporated with the LV but when the nominal complement is definite, it cannot join with the LV. In other words, the nominal complement should be indefinite and non-specific in order for this complement to form an LVC in Korean. As a result, the first semantic property of noun incorporation as in (2.57a), is well maintained even in the non-incorporated version of Korean LVCs. In (2.62c), the second semantic property of noun incorporation (i.e., number neutrality) can be found in Korean LVCs. In (2.62c), we can interpret the action of destroying the bridge as happening once or more because the nominal complement can be interpreted in either singular or plural (i.e., number neutral). Therefore, it can be said that regardless of the absence of the accusative case particles, all Korean LVCs shows the necessary conditions, except for the syntactic property of noun incorporation.

In order to include Korean LVCs when the nominal complement is marked with the accusative case particle, I adopt the idea of pseudo-noun incorporation. Following this concept, there is no need to restrict the incorporated nominal as an $N^0$ (i.e., a noun stem) but instead, a nominal that is larger than a $N^0$ can also be incorporated with a verb. According to Massam (2009) and Dayal (2011), the constituent of the incorporated nominal.
is diverse across languages\textsuperscript{26} such that in Niuean, the object is merged as an NP including AdjP and in Hindi, the incorporated nominal can be extended to a NumP but not a KP. Here, I claim that in Korean LVCs, the incorporated nominal can be extended to a KP. Thus, regardless of the presence or absence of an accusative case particle, the complement can be treated as an incorporated nominal in Korean LVCs. However, in order for my claim to be convincing, the following must be explained: Why can’t the KP be incorporated with other lexical verbs in the same clause? Consider (2.63).

(2.63) a. Transitive verb construction:

\[\text{Tom-i} \quad [\text{VP} [\text{KP chayk-ul}] \quad \text{ilk]-ess-ta.}\]

M-NOM book-ACC read-PAST-DEC

‘Mary read the/a book.’

b. LVC:

\[\text{cekkwun-i} \quad \text{tali-lul} \quad [\text{LVC} [\text{KP phakoy-lul}] \quad \text{ha]-ess-ta.}\]

enemy-NOM bridge-ACC destruction-ACC do-PAST-DEC

‘The enemy destroyed the bridge.’

In (2.63a), the direct object \textit{chayk-ul} ‘book-ACC’ is a KP because it is marked with the accusative case particle, but this KP is never regarded as being incorporated with the transitive verb \textit{ilk} ‘to read’ in any previous study. If so, why are only complements of LVs with accusative case particles (i.e., KP) treated as being incorporated with the LV? My answer is (i) the case particle in (2.63a) is used with a different purpose from that in (2.63b)

\textsuperscript{26} Suh (2008:241) proposes “the existence of several layers in the full nominal projection. For instance, in English, nominal phrase can be separated into DPs, CardPs (cardinal number phrase), NumP (number phrase) and NPs. CardPs are headed by cardinal numbers such as \textit{two} and NumPs are headed by number marking –\textit{s}. In Korean, there are also KPs (case phrase), headed by the case particle.” Therefore, the nominal projection in Korean consists of several functional projections and the full nominal projection may be as follows: KP >> CardP >> NumP >> NP >> N\textsuperscript{0}.”
and (ii) the function of the complement of a transitive verb is different from that of the LV in Korean.

Firstly, according to Schütze (2001), the function of the case particles is not limited to indicating the case feature [ACC] but can be used as an indicator of the discourse state of the DP/NP in Korean. In the transitive verb construction as in (2.63a), the complement chayk ‘book’ is the argument of the transitive verb ilk ‘to read’. This argument is assumed to be assigned the case feature [ACC] from the verb which should be checked. In Korean, case checking is revealed by the affixation of the case particle and so, in (2.63a), after the case feature is checked, the argument chayk ‘book’ must be marked with the accusative case particle. Therefore, the KP in (2.63a) is the result of case checking. On the other hand, in Korean LVCs as in (2.63b), the nominal complement is not an argument of the LV but a part of the LVC. Thus, the LV cannot assign the case feature [ACC] to its nominal complement and so the affixation of the accusative case particle on the nominal complement in Korean is not because of checking the case feature of the complement. Here, following Schütze (2001), I assume that when the nominal complement is marked with the case particle in Korean LVCs, this case particle lets us know the discourse state of the nominal complement such that the complement is focused (i.e., Contrastive focus) in the discourse. Thus, the presence of the accusative case particle on the nominal complement in Korean LVC does not indicate the case feature but indicate the discourse state of the nominal complement such as Contrastive focus. As a result, even though the nominal complement of the LV is a KP when it is marked by the accusative case particle in Korean LVCs, this KP can be distinguished from other KPs that are formed after checking the case
feature of the argument. I will discuss the function of this accusative case particle in Korean LVCs in Chapter 4.

Secondly, the complement of the transitive verb in (2.63a) functions as the argument of the verb while the complement of the LV in (2.63b) works as the modifier. In order to look at the function of the nominal complement of the LV, my first step is to begin with a discussion of the last semantic property of noun incorporation in (2.57c): The incorporated nominal behaves like the modifier of the incorporated verb. For instance, compare the gerundive picking to the compounded word blueberry-picking in English. When the word blueberry is compounded with the gerundive picking, the gerundive blueberry-picking is restricted as a specific type of picking because the incorporated noun modifies the verb. A similar effect of the compounded word blueberry-picking in English can be found in noun incorporation in Hindi. Consider the example in Hindi in (2.64) and an observation from Dayal (2003).

(2.64) anu-ne kitaab paPhii.
Anu-ERG book read
‘Anu read a book/books.’

I take the property to be a sort of verb modifier. The idea, informally, is that the relation between read and book-read is akin to the difference between cook and boil (or any manner-of-cooking verb), for example. While every event of cooking involves some manner of cooking, a restricted manner-of-cooking verb suppresses the manner argument of the event: John cooked the potatoes by boiling them in water vs. *John boiled the potatoes by boiling them in water.

(Dayal 2003:17)

According to Dayal (2003), in (2.64), the noun kitaab ‘book’ is assumed to be incorporated
with the verb because (i) the noun is unmarked with an accusative case particle, (ii) it is also indefinite and (iii) it can be read as a singular or a plural. In addition, the last semantic property of noun incorporation is also observed. According to Dayal’s comment in (2.64), the incorporated nominal kitaab ‘book’ works as a restricted modifier of the verb paPhil ‘to read’. Thus, in contrast to the normal transitive verb, the incorporated verb book-read infers a manner/type of the transitive verb read.

This property is also well observed in Korean LVCs and indeed, helps us to comprehend the semantic relationship between the complement and the LV in Korean. Consider the Korean examples in (2.65).

(2.65)  
\( a. \) Transitive verb construction:  
\*Tom-i \( \text{[v \_chayk-ilk]-ess-ta}. \)  
T-NOM book-read-PAST-DEC  
‘Tom book-read.’  
\( b. \) LVC:  
cekkwun-i tali-lul \( \text{[LVC phakoy-(lul) ha]-ess-ta}. \)  
enemy-NOM bridge-ACC destruction-(ACC) do-PAST-DEC  
‘The enemy destruction-do the bridge.’

As can be seen in (2.65a), the concrete noun chayk ‘book’ cannot be incorporated with the verb ilk ‘to read’ because noun incorporation does not exist in Korean and so, the direct object cannot be incorporated with the transitive verb. Therefore, unlike noun incorporation in Hindi, the lexical verb ilk ‘to read’ does not create any sub-type of the verb such as chayk-ilk ‘to book-read’ in Korean as in (2.65a). Instead, the last semantic property of noun incorporation can be preserved in Korean LVCs in (2.65b). Conceptually, in (2.65a), the lexical verb ilk ‘to read’ means ‘doing the action of reading’ and so the meaning of the
predicate is complete. However, the LV *ha* ‘do’ in (2.65b) denotes just the meaning ‘doing’ and it is not related to any specific action\(^{27}\). Thus, conceptually, the meaning of the LV is not yet complete. Here, I assume that in Korean LVCs, similar to incorporated verbs in Hindi, the complement works as a modifier of the LV in order to compensate for the conceptual incompleteness of the LV. For instance, in (2.65b), the meaning of the LV *ha* ‘do’ is not specified. In that, the LV is conceptually and semantically incomplete. After the nominal complement *phakoy* ‘destruction’ modifies the LV *ha* ‘do’ and forms the LVC *phakoy*-ha ‘destruction-doing’, the conceptual and semantic meaning of the LV becomes complete. A summary of the discussion above indicates that (i) the nominal complement of the LV is marked with the accusative case particle when it is focused, and (ii) the nominal complement of the LV is not an argument but a modifier of the LV, and the nominal complement marked with the accusative case particle can be incorporated with the LV.

Therefore, it is difficult to say that Korean LVCs are composed by noun incorporation directly because the complement of the LV is not an argument of the LV. However, the composition between the complement and the LV in Korean LVCs shows all semantic properties of noun incorporation as in (2.57) including the pseudo-noun incorporation. Thus, I keep using the term incorporation when describing the composition between the complement and the LV rather than noun incorporation. An example of incorporation in Korean LVCs is as follows:

\(^{27}\) According to Hallman (2004), LVCs in English (e.g., *take a walk*) can be conceptually decomposed as ‘do+something’ such as a LV *do* and *something* which is associated “eventuality”. The LV *do* itself does not denote any specific action.
The composition of Korean LVCs as in (2.66) illustrates why LVCs behave differently from transitive verbs in Korean. In the transitive verb, the nominal complement does not work as a modifier because noun incorporation does not exist in Korean. On the other hand, in an LVC, the complement functions as a modifier of the LV. In addition, my proposal can answer the unresolved characteristics of the LVC and questions which arose in previous studies. For instance, the following characteristic of Korean LVC in (2.48d) can be explained with my assumption in (2.66): The nominal complement selects the specified LV when it forms the LVC with the LV (cf. s-selection). For instance, the following English AdjP *[be tall quickly] is ungrammatical. Considering the relationship between the category of the modifier (i.e., adverb quickly) and that of the modified item (i.e., adjective tall) (cf. c-selection), it may not be a problem that the adverb quickly modifies the adjective tall. However, considering the semantic relationship, it is difficult to say that the adverb quickly is a good modifier of the adjective tall because between them, the relationship of s-selection is broken. Similarly, when the complement only functions as a modifier of the LVs, the modified item such as the LV is selected as a specific one that conceptually and semantically corresponds to the modifier in Korean. For instance, when the event noun wundong ‘exercise’ forms an LVC, it must occur with the LV ha ‘do’ but cannot occur with
the LV toy ‘become’ because the event noun wundong ‘exercise’ is related to ‘action’ rather than “state” and so, it can modify the LV ha ‘do’ which denotes the meaning “action”. This implies that the s-selection between the complement and the LV in Korean exists, and I claim that it arises because the complement works as the modifier and the LV is the modified item.

2.5 Closing Comment

To sum up, Korean LVCs are not built by morphological rules, argument transfer, or syntactic composition. Instead, the nominal complement and the LV in the Korean LVC are composed by the special operation incorporation and yield a predicate in a clause. The notion of incorporation is very close to the notion of noun incorporation. In fact, many properties of noun incorporation are found in Korean LVCs such as the semantic properties of (i) indefiniteness, and (ii) number neutrality. In addition, in reference to pseudo-noun incorporation in Massam (2001, 2009), I claimed that regardless of the absence of an accusative case particle, all types of nominal complements (i.e., the XP complement and the X₀ complement) can be incorporated with the LVs in Korean. However, the notion of incorporation cannot be treated as a phenomenon of noun incorporation because the incorporated nominal in noun incorporation must be an argument of the incorporated verb whereas the nominal complement of the LV is not an argument in Korean LVCs. Therefore, I use the term incorporation rather than noun incorporation in this thesis. Finally, referring to another property of noun incorporation, I was able to clarify that the nominal
complement in Korean LVCs plays the role of a modifier to restrict/specify the type of LV possible.
3. The Interpretation of Korean LVCs

3.1 The Scope of this Chapter

In this chapter I consider the interpretation of Korean LVCs as predicates in clauses and I examine how the LVC gains complete lexical-semantic and syntactic information as a predicate including predicate type and valency. In previous frameworks such as the lexical approach (e.g., Butt 2003), the compositional approach (e.g., Ahn 2002 and Jung 2003), and the argument transfer hypothesis (e.g., Grimshaw & Mester 1988), an LVC is assumed to acquire this information simultaneously after the composition of the nominal complement and the LV is completed. However, I claim that the lexical-semantic and syntactic information of an LVC as a predicate is determined in the “lexical conceptual structure” (hence after, LCS) (cf. Levin & Rappaport 1998) before composition takes place in Korean. The outline of my proposal is described in (3.1).

(3.1)  
\[ mwul-i \ [LVC \ cenghwa \ *ha/toy]-ess-ta. \]
\[ \text{water-NOM \ purification \ *do/be/become-PAST-DEC} \]
‘The water is purified by itself.’

a. LCS (the semantic & syntactic information):
   \[ \begin{align*}
   \text{Semantic meaning: ‘to be purified’} \\
   \text{Type of predicate: Unaccusative} \\
   \text{Valency: One argument}
   \end{align*} \]

b. Lexicon (two components):
   \[ \begin{align*}
   \text{cenghaw ‘purification’} \\
   \text{toy ‘become’}
   \end{align*} \]
According to Pinker (1989), Jackendoff (1990), and Cowper (1991), before considering the relationship between the arguments and the predicate in argument structure, the predicate can be expressed with its conceptual meanings at an interface level and they propose this is the LCS. In (3.1a), the lexical-semantic and syntactic information of the LVC as a predicate is determined in the LCS. Then, in (3.1b), the conceptual categories in the LCS become the lexical items (i.e., two components of the LVC). Finally, in (3.1c), these components are incorporated and form the LVC (i.e., the semantic unit). Thus, the main goal of this chapter is (i) to elucidate representations of Korean LVCs in the LCS and (ii) to examine how the conceptual categories of Korean LVCs in the LCS become lexical items.

My proposal in (3.1) is due to the characteristics of Korean LVCs mentioned in Chapters 1 and 2. In particular, the following characteristics seem to be relevant: (i) LVCs in Korean can be interpreted as one of various predicate types, (ii) the nominal complement must join with a specific LV (i.e., s-selection), and (iii) the complement and the LV are realized as two separate lexical items. Then, I assume that a full-fledged interpretation of

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28 There are a few attempts to describe the relationship between LCS and other representations. According to Mateu & Acedo-Matellan (2010), the syntax is prior to the argument structure or the event structure, and these structures have an influence on the LCS. A rough outline of their framework follows:

    Interface between the lexical semantics and the syntax:

    Interface level

    | Lexical | Lexical Conceptual | Argument/Event | Syntax |
    |---------|-------------------|----------------|--------|
    | Semantics | Structure | Structure | |

The main difference between their proposal and my proposal is the direction of the derivation. Thus, in my proposal, LCS is the starting point of the derivation while Mateu & Acedo-Matellan (2010) claim that the syntax determines the structure of LCS.
Korean LVCs as predicates is not solely determined by the nominal complement (cf. Grimshaw & Mester 1988) nor by the LV (cf. Marantz 1997) but instead, by considering them together. Consider the Korean LVCs in (3.2) and (3.3).

(3.2)  
a. cekkwun-i tali-lul [LVC phakoy-(lul)] ha/*toy]-ess-ta.  
enemy-NOM bridge-ACC destruction-(ACC) do/*become-PAST-DEC  
‘The enemy destroyed the bridge.’
b. Tom-i kongsik-ul [LVC amki-(lul)] ha/*toy]-ess-ta.  
T-NOM formula-ACC memorization-(ACC) do/*become-PAST-DEC  
‘Tom memorized the formula.’

LVCs in (3.2) show all the characteristics that are found in Korean LVCs. Both of Korean LVCs work as one of the predicate types (i.e., transitive verb) among various predicate types and their nominal complements combine with a specific LV: only the LV ha ‘do’ is possible. Here, we must ask how and where the LVC can obtain the entire lexical-semantic and syntactic information to be able to work as the predicate in a clause. Following the argument transfer hypothesis (Grimshaw & Mester 1988), it is expected that the lexical-semantic and syntactic information of the LVC is determined by the nominal complement. For instance, in (3.2) the event nouns phakoy ‘destruction’ and amki ‘memorization’ define the predicate type of the LVC as transitive verbs, valency, etc. because the argument structure of the event nouns transfers to the LVC in Korean. On the other hand, from the compositional approach (e.g., Jung 2003), it is also possible to say that the lexical-semantic and syntactic information of the LVC is controlled by the LV in (3.2) rather than the complement. For instance, in (3.2), the LVCs work as transitive verbs because the complements combine with the LV ha ‘do’ which always builds transitive verbs. At first
glance, these approaches look reasonable. However, after considering the examples of Korean LVCs presented in (3.3), they are challenged by this Korean data.

(3.3)  a. tali-ka [LVC phakoy *ha/toy]-ess-ta.  
       bridge-ACC  destruction *do/become-PAST-DEC  
       ‘The bridge was destroyed.’

b. kongsik-i [LVC amki *ha/*toy]-ess-ta.  
       formula-NOM  memorization *do/*become-PAST-DEC  
       ‘The formula was memorized.’

As shown in (3.2a) and (3.3a), the event noun phakoy ‘destruction’ combines with the LV ha ‘do’ as in (3.2a) and forms a transitive verb while in (3.3a), it occurs with the LV toy ‘become’ and builds an unaccusative verb. In Korean LVCs, it is common that an event noun (i.e., nominal complement) can join with more than one LV to create a variety of predicate types. However, not all event nouns are allowed to occur with both the LV ha ‘do’ and the LV toy ‘become’. For example, the event noun amki ‘memorization’ in (3.2b) cannot be joined with the LV toy ‘become’ as in (3.3b). Based on the behaviours of the event nouns and the LVs in (3.3), two assumptions in the argument transfer hypothesis and the compositional approach are problematic. First, if the lexical-semantic and syntactic information of the LVC were determined by the event noun (i.e., nominal complement), the complements phakoy ‘destruction’ and amki ‘memorization’ would have the same result when they build the LVCs with the LV toy ‘become’ in (3.3) but this is not the case. In addition, if this information about the LVC were decided by the LV, the LVs ha ‘do’ and toy ‘become’ in (3.2) and (3.3) should be able to combine with all event nouns without exception. Therefore, the lexical-semantic and syntactic information of the LVC is not
solely determined by the nominal complement or by the LV in Korean. The lexical-
semantic and syntactic information is decided either before or after the composition
between the nominal complement and the LV takes place. In this thesis, I claim that the
information of the LVC is defined before the composition takes place and I will show
evidence to prove it.

The sections of this chapter are outlined below. The Korean verb *ha* can be used
for various purposes including as an LV (i.e., polysemy). Thus, in Section 2, I distinguish
between the LV *ha* and the other functions of the verb *ha* and elucidate two different
interpretations of the LV *ha*. In Section 3, I review the idea of the LCS. In Section 4, I
discuss the representation of Korean LVCs in the LCS. First, I demonstrate that Korean
LVCs are semantically classified into the six different types and then, I describe these six
different types of Korean LVCs in the LCS. In Section 5, I discuss how to form the
syntactic construction from the representation of the LCS in the lexical verb and the LVC.

3.2 Various Functions of the Verb *ha* in Korean

The verb form *ha* is ambiguous in Korean because it is used for various purposes and as the
LVs *ha* ‘do/be’ (i.e., polysemy). In this section, I aim to clarify the various functions of the
verb *ha* and to explain how the LV *ha* should be divided into two different types namely *ha*
‘do’ and *ha* ‘be’ in Korean. Consider the following sentence in (3.4).
In (3.4), we see the verb *ha* three times. In fact, all three are used for different purposes. In order to indicate the different functions of the verb form *ha*, I capitalize the verb form *ha* (i.e., HA) and according to each function of the verb form *ha*, I number it: HA1 is the LV which means ‘do’, HA2 denotes the LV *ha* ‘be’, HA3 makes causative constructions, and HA4 is a dummy verb like dummy *do* in English, and is obligatory in long-form negation in Korean.

3.2.1 The LV *ha* ‘do/be’ in Korean

Unlike the LV *toy* ‘become’, when the verb form *ha* is used as an LV, it is necessary to classify it as ‘do’ (i.e., HA1) or ‘be’ (i.e., HA2). According to Ahn (1990) and Ahn (2002), the LV *ha* should be divided into the two depending on the feature [+/--state]. Ahn (2002) also presents several criteria to detect the feature [+/--state] in Korean LVCs. Let’s review Ahn’s discussion.

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29 Sohn (1999:320) treats the verbal suffix –ci as a nominalizer as the allomorph of the suffix –ki but traditionally, this suffix has been regarded as an adverb derivational suffix. Thus, the function of the morpheme –ci is still debated in Korean linguistic circles. In this thesis, I gloss this suffix as CI instead of as a nominalizer or as an adverb derivational suffix.

30 Syntactically, there are two different forms of ‘negation’ in Korean; short-form negation and long-form negation. Roughly speaking, in short-form negation, the negative particle is placed before the main verb while in long-form negation, the negative particle is placed after the main verb. I will discuss negation in more detail in Chapter 4.
As the first criterion, Ahn (2002) focuses on the affixation of the present progressive suffix -(nu)n- because in Korean, this suffix can only be affixed to a predicate that contains the feature [-state]. Thus, the suffix can co-occur with the verb but it cannot with adjectives because verbs contain the feature [-state] (e.g., o- ‘to come’ in (3.5a)) while adjectives have the feature [+state] (e.g., yeppu- ‘be.pretty’ in (3.5b)).

(3.5)   

a. LVC with [-state]:

\[
\begin{array}{ll}
Yenghi-ka & ceki \\
Y-NOM & \{o-, [LVC ipcang-ha]-n-ta. \\
& \text{Y-NOM over there come, enter-do -PRES-DEC} \\
& \text{‘Yenghi \{comes, enters\} over there.’}
\end{array}
\]

b. LVC with [+state]:

\[
\begin{array}{ll}
Yenghi-ka & \{yeppu-, [LVC chimchak-ha]-(*-n-)ta. \\
Y-NOM & \text{be.pretty, calm-be-PRES-DEC} \\
& \text{‘Yenghi is \{pretty, calm\}.’}
\end{array}
\]

(Ahn 2002:442)

The affixation of the present progressive suffix -(nu)n- is found in Korean LVCs. Following the characteristic of “split constructions”, verbal inflectional morphemes are always marked on the morphological complement (i.e., the LV) in an LVC. If the present progressive suffix can be affixed to the LVC, it may be marked on the LV. In (3.5a), this suffix is affixed to the LV and this result implies that the LV ha holds the feature [-state]. On the other hand, this affixation is not allowed on the LV ha in (3.5b) so, the LV ha in (3.5b) must have the feature [+state]. As a result, the LV ha should be classified as two different LVs.

As the second criterion, Ahn (2002) suggests that in the co-ordination construction, the complement of an LV can or cannot be omitted depending on the feature [+/-state] of the LV in Korean. In particular, when the LV ha is related to the feature [-state], the
complement can be omitted as in (3.6a) but when the LV ha indicates the feature [+state], under the same conditions, the complement cannot be omitted as in (3.6b).

(3.6)  

(a) Yenghi-nun yenge-lul [\text{\text{LVC} kongpwu-ha-ess-ciman}] Chelswu-nun
     Y-TC English-ACC study-do-PAST-but C-TC
     pwule-lul [\text{\text{LVC} ______ ha]-ess-ta]
     French-ACC do-PAST-DEC
     ‘Yenghi studied English, but Chelswu studied French.’

(b) *Yenghi-nun ecey [\text{\text{LVC} phikon-ha-ess-ciman}] Chelswu-nun
     Y-TC yesterday tired-be-PAST-but C-TC
     onul [\text{\text{LVC} ______ ha}-yess-ta]
     today be-PAST-DEC
     ‘Yenghi was tired yesterday, but Chelswu was tired today.’

(Ahn 2002:444)

This distinctive behaviour of the complement in (3.6) also implies that the corresponding LV ha in Korean should be categorized separately. Based on these two criteria, the LV ha should be interpreted in two ways with respect to the feature [+/-state]. In this thesis, I assume regarding the conceptual meaning of the LV ha that when the LV ha holds the feature [-state], it should be interpreted as ‘do’ (i.e., HA1) while it should be read as ‘be’ (i.e., HA2) when the LV ha is related to the feature [+state].

3.2.2 Other Functions of the Verb ha in Korean

When the predicate is a lexical verb or an adjective, HA1 and HA2 cannot occur because both of them are LVs in Korean. However, HA3 is necessary in the causative construction and HA4 obligatorily occurs in long-form negation. Consequently, in the lexical verb or
adjective construction, it is not a problem that HA3 and HA4 can occur together in the same clause because they are used for different purposes. Consider the following examples in (3.7).

(3.7)  
a. **Transitive verb construction:**

```
Tom-i   kong-ul   cha-ss-ta.
```

T-NOM ball-ACC kick-PAST-DEC

‘Tom kicked the ball.’

b. **Causative construction:**

```
Bill-i   Tom-eykey  kong-ul  cha-key  HA3 -ess-ta.
```

B-NOM T-DAT ball-ACC kick-COMP CAUSE-PAST-DEC

‘Bill ordered Tom to kick the ball.’

c. **Long-form Negation:**

```
Tom-i   kong-ul   cha-ci   ani   HA4-ess-ta.
```

Tom-NOM ball-ACC kick-CI NEG dummy-PAST-DEC

‘Tom did not kick the ball.’

d. **Causative construction and long-form negation:**

```
Bill-i   Tom-eykey  kong-ul  cha-key   HA3-ci
```

B-NOM T-DAT ball-ACC kick-COMP CAUSE-CI

ANI   HA4-ess-ta.

NEG dummy-PAST-DEC

‘Bill did not order Tom to kick the ball.’

In (3.7a), the verb *ha* does not appear because the predicate is the lexical verb *cha* ‘to kick’. When the lexical verb builds the causative construction, HA3 is necessarily added as in (3.7b). Moreover, in the long-form negation, HA4 is always present as in (3.7c). This HA4 functions similarly to the dummy auxiliary *do* in English and so it is inserted whenever affix hopping is blocked. Here, one may assume that HA3 and HA4 are the same one. This assumption is incorrect because when the causative construction and long-form negation
occur together in a clause as in (3.7d), both HA3 and HA4 must be present at the same time in a clause. This tells us that HA3 and HA4 are not in complementary distribution but they serve different purposes in a clause.

Next, let’s discuss how HA3 and HA4 are realized in Korean LVCs. First, I examine whether or not HA3 or HA4 is equivalent to the LV ha (i.e., HA1 or HA2). If HA3 or HA4 is used for the same purpose as HA1 or HA2 in a clause, they would be distributed complementarily: they cannot occur together in a clause. However, in the following examples, HA3 and HA4 occur with HA1 or HA2. Consider (3.8) and (3.9).

(3.8)  a. LVC with HA1 ‘do’:

\[
\begin{align*}
\text{Tom} & -i \quad \text{kongpwu-(lul)} \quad \text{HA1-ess-ta.} \\
\text{T-NOM} & \quad \text{study-(ACC)} \quad \text{do-PAST-DEC}
\end{align*}
\]

‘Tom studied.’

b. Causative construction:

\[
\begin{align*}
\text{Bill} & -i \quad \text{Tom-eykey} \quad \text{kongpwu-(lul)} \quad \text{HA1-key} \quad \text{HA3-ess-ta.} \\
\text{B-NOM} & \quad \text{T-DAT} \quad \text{study-ACC} \quad \text{do-COMP} \quad \text{CAUSE-PAST-DEC}
\end{align*}
\]

‘Bill ordered Tom to study.’

c. Long form negation:

\[
\begin{align*}
\text{Tom} & -i \quad \text{kongpwu-(lul)} \quad \text{HA1-ci ani} \quad \text{HA4-ess-ta.} \\
\text{Tom-NOM} & \quad \text{study-(ACC)} \quad \text{do-CI} \quad \text{NEG} \quad \text{dummy-PAST-DEC}
\end{align*}
\]

‘Tom did not study.’

d. Causative construction and long form negation:

\[
\begin{align*}
\text{Bill} & -i \quad \text{Tom-eykey} \quad \text{kongpwu-(lul)} \quad \text{HA1-key} \quad \text{HA3-ci ani} \quad \text{HA4-ess-ta.} \\
\text{B-NOM} & \quad \text{T-DAT} \quad \text{study-(ACC)} \quad \text{do-COMP} \quad \text{CAUSE-CI}
\end{align*}
\]

NEG dummy-PAST-DEC

‘Bill did not order Tom to study.’
(3.9)  a. LVC with HA2 ‘be’:

```
Bang-i  kKaykkus-*ul  HA2-ess-ta.
Room-NOM  cleanliness-*ACC  be-PAST-DEC
```

‘The room was clean.’

b. Causative construction:

```
Bill-i  bang-ul/i  kKaykkus-HA2-key  HA3-ess-ta.
B-NOM  room-ACC/NOM  cleanliness-be-COMP  CAUSE-PAST-DEC
```

‘Bill cleaned the room.’ (lit. Bill made the room clean.)

c. Long form negation:

```
Bang-i  kKaykkus-HA2-ci  ani  HA4-ess-ta.
Room-NOM  cleanliness-be-CI  NEG  dummy-PAST-DEC
```

‘The room was not clean.’

d. Causative construction and long form negation:

```
Bill-i  bang-ul/i  kKaykkus-HA2-key  HA3-ci
B-NOM  room-ACC/NOM  cleanliness-be-COMP  CAUSE-CI
ani  HA4-ess-ta.
NEG  dummy-PAST-DEC
```

‘Bill did not clean the room,’ (lit. ‘Bill didn’t make the room clean.’)

In (3.8a) and (3.9a), the LVs HA1 ‘do’ and HA2 ‘be’ respectively are required and form Korean LVCs. In these LVCs, HA1 and HA2 cannot occur together in the same clause because they are in complementary distribution. On the other hand, in the causative construction and long-form negation, HA3 and HA4 are needed in LVCs as in (3.8) and in (3.9). In addition, HA3 and HA4 never overlap with the LVs HA1 or HA2. As a result, even though the LVs HA1 and HA2 have the same phonological representation as HA3 and HA4, their purposes in the clause are not the same. According to Baker’s Mirror Principle (1988:13), “Morphological derivations must directly reflect syntactic derivation (and vice versa)”. Based on this principle, regarding the four different HAs in Korean, I claim that (i) each HA has a different function, (ii) the presence of HA results from morphological
derivations, and (iii) four different HAs are realized as four different syntactic positions.

In this section, I tried to clarify that (i) the LV ha can be classified as either the LV ha ‘do’ or the LV ha ‘be’, and (ii) the other functions of the verb ha are not related to LVs in Korean. Therefore, in Korean, LVs can be classified as the LV ha ‘do’, the LV ha ‘be’ and the LV toy ‘become’. This classification is relevant in the next section when investigating the relationship between LVs and the conceptual categories in the LCS.

3.3 Predicate Decomposition Hypothesis

In this section, I will evaluate the “predicate decomposition hypothesis” (hence after PDH) in Levin & Rappaport (1995, 1998), which describes the structure of the predicate in the LCS. The main reason to adopt this hypothesis in this thesis is that it can help describe the lexical-semantic and syntactic characteristics of Korean LVCs properly. In previous works (Jackendoff 1983, Baker 1988, Pinker 1989, Grimshaw 1990, Hale & Keyser 1993, Levin & Rappaport 1998, Bresnan 2001, Borer 2005), there have been various attempts to shed light on the lexico-semantic and syntactic information of the predicate. Argument structure has been assumed to be the best structure to describe all information of a predicate. However, as shown in Chapter 2, an approach based on argument structure (i.e., the argument transfer hypothesis in Grimshaw & Mester 1988) is not enough to account for the lexico-semantic and syntactic information of Korean LVCs. Therefore, in this section, I introduce an alternative account to describe the lexical-semantic and syntactic information of an LVC as a predicate (i.e., the PDH).
The LCS is regarded as another interface level between the lexical semantics and the syntax, like argument structure. As previously mentioned, according to Pinker (1989), Jackendoff (1990), and Cowper (1991), the predicate can be expressed with its conceptual meanings at an interface level and they propose this is the LCS. Thus, in the LCS, the conceptual meaning of a predicate can be decomposed with several conceptual categories such as “function” (basic verbs: GO, ACT, CAUSE, BECOME, BE, etc.), “event”, “state”, “thing”, “path”, and “place”. For instance, the verb *arrive* conceptually means *something goes to* and the verb *put* means *something goes to a place through the actions of someone*. These conceptual meanings of the verbs can be expressed as several categories: e.g., GO, PATH, THING, EVENT, etc. as in (3.10).

(3.10)  

a. *arrive* [EVENT GO (THING, PATH)]  

b. *put*  

```
... EVENT  
/ \  
GO | THING PATH  
/ |  
[ ] [ ] to PLACE  
```

(Cowper 1991:5)  

(Pinker 1989: 180)

Even though the formation of the LCS is diverse as in (3.10a) and (3.10b) depending on the author, cross-linguistically, it is understood that all predicates can be decomposed into these conceptual categories (cf. Pinker 1989). As a result, the representation in the LCS is universal and all verbs and other argument-taking items have representations in the LCS.
In this thesis, I adopt the “predicate decomposed hypothesis” in Levin & Rappaport (1995, 1998) from the various attempts to describe the representations of the LCS. In the predicate decomposed template in Levin & Rappaport (1995, 1998), not only the conceptual meaning of the predicate, but also the relationship with the argument and the predicate, can be described together with several conceptual categories: “constant”, “argument”, and “primitive predicates”. For instance, the conceptual meaning of the verb *to dry* in English may be expressed in the template as follows: *DRY* is a constant (i.e., the constant meaning of the predicate), *x* and *y* are the arguments of the verb *to dry* (i.e., the arguments) and *ACT*, *CAUSE*, and *BECOME* are the fixed primitive predicates (i.e., the conceptual meanings of the predicate) as in (3.11).

(3.11) \[\text{dry} \quad [[x \text{ACT}] \text{CAUSE} [y \text{BECOME} <\text{DRY}>]]\]

*The verb’s meaning (i.e., predicate) is represented using members of a fixed set of primitive predicates together with constants- typically chosen from a limited set of semantic types. The constants either fill argument positions associated with these predicates or act as modifiers to the predicates. A verb’s arguments are represented by the open argument positions associated with these predicates.*

(Levin & Rappaport 1998:251)

Based on the template in (3.11), we can describe the representations of all predicates including LVCs in the LCS. Before starting to examine the template of the LVC in Korean LVCs, let’s scrutinize how the actual predicate can be expressed in the template. Consider (3.12).
According to the predicate decomposition hypothesis, the representations of two verbs such as *to exercise* and *to phone* in the LCS can be expressed as the templates in (3.12). As can be seen in (3.12), except for the constants, the templates of these verbs are identical because (i) these verbs are the same predicate type, that is, unergative verbs and (ii) these verbs have something in common in their conceptual meanings. However, comparing the verb *to dry* in (3.11) to the verb *to exercise* in (3.12a), the predicate types of these verbs are different: the verb *to dry* (3.11) is close to a causative verb while the verb *to exercise* in (3.12a) is an unergative verb. Thus, the conceptual meanings of these verbs do not have anything in common. Consequently, in order to describe their conceptual meanings as in (3.11) and (3.12a), we need two separate templates. Based on these observations, the following questions arise: (i) how many different templates are needed to express the conceptual meaning of the predicate properly?; and, (ii) what main factor determines the template of the predicate? In effect, the answer for these questions can be found in Levin’s (2006) study. She argues that a template can be classified depending on the feature “eventuality” (i.e., [+/-eventive]).

According to Vendler (1967) and Tenny & Pustejovsky (2000), predicates can be categorized into several groups in terms of the feature “eventuality” (i.e., [+/-eventive]: State vs. Dynamic). When predicates contain the feature [-eventive], they denote “State”. When predicates have the feature [+eventive], they can be classified as more specified event types such as “Activity”, “Achievement”, or “Accomplishment”. Therefore, all

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(3.12) a. exercise</td>
<td>[x ACT &lt;EXERCISE&gt;]</td>
</tr>
<tr>
<td></td>
<td>b. phone</td>
</tr>
</tbody>
</table>
predicates fall into one of four different types as in (3.13).

(3.13) a. States have no internal structure or change during the span of time over which they are true (e.g., love as in *Boris loves Keiko*).

b. Activities are the ongoing events with internal change and duration, but no necessary temporal endpoint (e.g., walk as in *Boris walked along the river*).

c. Accomplishments are events with duration and an obligatory temporal endpoint (e.g., consume as in *Keiko consumed the pineapple*).

d. Achievements have an instantaneous culmination or endpoint and are without duration. (e.g., arrive as in *Keiko arrived in Pittsburgh*).

(Tenny & Pustejovsky 2000:5)

Levin & Rappaport (1998) and Levin (1999, 2006) support this conventional classification of predicates based on the feature “eventuality” in (3.13). They assume that the conceptual meanings of predicates are mainly expressed with four different templates depending on the feature [-/+eventive] such as (i) State, (ii) Activity, (iii) Achievement, and (iv) Accomplishment or Result-state. Additionally, Levin (2006) suggests that predicates that indicate State, Activity, or Achievement infer the simplex event structure while the predicates that denote Accomplishment or Result-state are achieved by the combination of two simplex event structures (i.e., the complex event structure). The four different templates in Levin (2006) are displayed in (3.14) and (3.15)

31 It is possible to describe predicates more specifically with conceptual categories. However, the templates in (3.14) and (3.15) are the most basic. Thus, I will use these templates when studying Korean LVCs.
(3.14) Simplex event structure:

a. Activity

Manner → [x ACT_<MANNER>] / [x ACT_<MANNER>]\(^{32}\)
(e.g., jog, run, creak, whistle,...) / (e.g., sweep)

Instrument → [x ACT_<INSTRUMENT>]
(e.g., brush, hammer, saw, shovel,...)

b. State:

[x <STATE>]
(e.g., bloom, blossom, decay, flower, rot, rust, sprout, ...)

c. Achievement:

[BECOME [x <STATE>]]

(3.15) Complex event structure:

Result-state (i.e., externally caused) or Accomplishment:

[[x ACT_<MANNER>] CAUSE [y BECOME <RES-STATE>]]
(e.g., break, crack, dry, harden, open, split...)

(Levin 2006:1&4)

In (3.14) and (3.15), it is easy to speculate on the lexical-semantic and syntactic information of the predicate as well as describe the conceptual meaning of the predicate. However, Levin & Rappaport’s studies mainly focus on describing the representations of the lexical verbs in the LCS but unfortunately they did not pay attention to LVCs. In the next section, I present representations of Korean LVCs in the LCS.

\(^{32}\) In the activity event, some verbs (e.g., run) are expressed with a participant but often, some verbs (e.g., sweep) obligatorily need two participants. According to Levin (1999), when verbs take two arguments in the activity event, it is difficult to handle the unification because in their templates, each variable (i.e., argument) is associated with each event. Therefore, two variables mean two arguments in their expressions. Thus, Levin (1999) leaves this as unresolved.
3.4 Korean LVCs in LCS

In this section, I will examine representations of Korean LVCs in the LCS under the PDH in Levin & Rappaport (1995, 1998). I explain that Korean LVCs are classified as six different types according to the distribution of the LV *ha* ‘do’, *ha* ‘be’, and *toy* ‘become’ and by the predicate types of the LVCs in a clause. Then, I will present the templates of the six different types of Korean LVCs in the LCS.

3.4.1 Warming Up

The PDH in Levin & Rappaport (1998), which can be applied to lexical verbs, can also be applied to LVCs as they can also be decomposed into several conceptual categories such as constants, arguments, and fixed primitive predicates. In fact, there have been a few attempts to describe event nouns but not the whole LVC in Japanese (e.g., Kageyama 1997, and Takeuchi, Kageura, & Koyama 2003). The study in Takeuchi, Kageura, & Koyama (2003) relies on the argument transfer hypothesis from Grimshaw & Mester (1988). In this hypothesis, as mentioned before, an event noun is supposed to take the argument structure and to provide all lexical-semantic and syntactic information for the LVC as the predicate without the aid of the LV. Thus, in Takeuchi, Kageura, & Koyama (2003), there is no need to consider the LV *suru* ‘do’ when describing the representation of the LVC in the LCS. In order to describe the representation of an event noun in the LCS, Takeuchi, Kageura, & Koyama (2003) classify event nouns in Japanese as twelve different types depending on the
conceptual meanings of the event nouns and they propose the twelve templates in (3.16).

(3.16)  

a. [x ACT ON y]  
  enzan ‘calculate’, sousa ‘operate’  

b. [x CONTROL [BECOME [y BE AT z]]]  
  kioku ‘memorize’, hon’yaku ‘translate’  

c. [x CONTROL [BECOME [y NOT BE AT z]]]  
  shahei ‘shield’, yokushi ‘deter’  

d. [x CONTROL [y MOVE TO z]]  
  densou ‘transmit’, dempan ‘propagate’  

e. [x=y CONTROL [BECOME [y BE AT z]]]  
  kaifuku ‘recover’, shuuryou ‘close’  

f. [BECOME [y BE AT z]]  
  houwa ‘become saturated’, bumpu ‘be distributed’  

g. [y MOVE TO z]  
  idou ‘move’, se ni ‘transmit’  

h. [x CONTROL [y BE AT z]]  
  iji ‘maintain’, hogo ‘protect’  

i. [x CONTROL [BECOME [y BE WITH z]]]  
  ninshiki ‘recognize’, yosoku ‘predict’  

j. [y BE AT z]  
  sonzai ‘exist’, ichi ‘locate’  

k. [x ACT]  
  kaigi ‘hold a meeting’, gyouretsu ‘queue’  

l. [x CONTROL [BECOME [[FILLED] y BE AT z]]]  
  shomei ‘sing’

(Takeuchi et al.2003: 182)

These templates of event nouns in Japanese (i.e., 3.16), seem to shed enough light on the lexical-semantic and syntactic information of the LVC in Japanese.

However, it is not clear that the study of Takeuchi, Kageura, & Koyama (2003) is
applicable to Korean LVCs. First, as shown in Chapter 2, the argument transfer hypothesis cannot explain composition in Korean LVCs. Second, as mentioned in the introduction in this chapter, neither the event noun (i.e., the complement) nor the LV can solely deliver the lexical-semantic and syntactic information for the LVC in Korean. Thus, unlike Japanese LVCs as in (3.17a), the event noun and the LV together are involved in the interpretation of the LVC in Korean as in (3.17b).

(3.17) a. Japanese LVC:

\[
\text{[LVC} \quad \text{Event Noun + suru ‘do’]} \\
\text{Lexical-semantic and syntactic information}
\]

b. Korean LVC:

\[
\text{[LVC} \quad \text{Event Noun + ha ‘do’/ toy ‘become’]} \\
\text{Lexical-semantic and syntactic information}
\]

3.4.2 Six Different Types of Korean LVCs

In order to create predicate decomposition templates of Korean LVCs, it is necessary to evaluate the relationship between the conceptual categories and the components in LVCs. As shown before, the predicate decomposition template in Levin (2006) consists of a constant (i.e., the constant meaning of the predicate), the arguments, and several fixed primitive predicates (i.e., the conceptual meanings of the predicate). On the other hand, an LVC is comprised of two components such as the semantic component (i.e., the nominal complement) and the morphological component (i.e., the LV). In particular, the nominal complement as an event noun conveys a constant semantic content to the LVC. Hence, I
assume that the nominal complement in the LVC is linked to the conceptual category “constant”\textsuperscript{33} in a predicate decomposition template. In addition, considering previous studies (e.g., Butt 2003), LVs are associated with the conceptual category “primitive predicates”. In fact, as a global characteristic of the LVC, LVs should be restricted to several verbs (e.g., make, give, take, do, etc.) which are close to the primitive predicates. Therefore, except for the conceptual category “arguments”, we can define the relationship between the conceptual categories in the predicate decomposition template in Levin & Rappaport (1995, 1998) and the components in LVCs as in (3.18).

\begin{equation}
\text{(3.18) Relationship between conceptual categories and components in LVCs:}
\begin{align*}
\text{Conceptual category:} & \quad \{\text{constant, primitive predicates, arguments}\} \\
\text{LVC:} & \quad \{\text{complement, LVs}\}
\end{align*}
\end{equation}

Furthermore, each LV in Korean (i.e., ha ‘do’, ha ‘be’ and toy ‘become’) is expected to have a more precise connection to the primitive predicates in Korean. The LV toy ‘become’ always denotes the conceptual meaning ‘become’ and so it is related to the primitive predicate BECOME. However, the LV ha can be interpreted as ‘do’ or ‘be’ and I assume that it denotes two different primitive predicates. When the LV ha is interpreted as ‘do’, it may be connected to the primitive predicate ACT, but when the LV ha read as ‘be’ might be associated with the primitive predicate BE. The relationship between the primitive predicates and the LVs in Korean can be formalized as in (3.19).

\textsuperscript{33} According to Harley (1999) and Levin (2006), the phrasal-level of the constant in LCS is regarded as the root. However, as shown in Chapter 1, the complement in a Korean LVC is not restricted to the root. I present further details on this in Chapter 4.
(3.19) **Relationship between primitive predicates and the LVs in Korean:**

<table>
<thead>
<tr>
<th>LVs</th>
<th>Primitive predicates</th>
</tr>
</thead>
<tbody>
<tr>
<td>ha ‘do’</td>
<td>ACT</td>
</tr>
<tr>
<td>ha ‘be’</td>
<td>BE</td>
</tr>
<tr>
<td>toy ‘become’</td>
<td>BECOME</td>
</tr>
</tbody>
</table>

Based on the relationship between the conceptual categories in the LCS and the components in the LVC, let’s examine how to categorize Korean LVCs before investigating the predicate decomposition templates of Korean LVCs. When analyzing the conceptual meanings of Korean LVCs, the following two characteristics of Korean LVCs should be considered: (i) Korean LVCs can be interpreted as one of various predicate types and (ii) the nominal complement (i.e., the event noun) should join with a specific LV. Therefore, it is necessary to clarify which event nouns can combine with which LVs and which event nouns form which predicate types. Previously, Ahn & Yang (2007) researched the relationship between event nouns and LVs in Korean focusing on two factors: (i) the selected LV when the event noun forms an LVC (i.e., ha ‘do/be’ and toy ‘become’) and (ii) the predicate type of the LVC in a clause (e.g., intransitive verbs, transitive verbs, and adjectives). However, Ahn & Yang’s study (2007) is not sufficient because (i) the LV ha can be specified as the LV ha ‘do’ and the LV ha ‘be’ and (ii) the 0-roles of the NP arguments in the LVC should be considered in order to discriminate whether the LVC works as an unergative verb or an accusative verb. In this thesis, I will take these factors into account.

Based on all these factors, Korean LVCs can be classified as six different types as in (3.20).
Six different types of Korean LVCs:

<table>
<thead>
<tr>
<th>Event nouns</th>
<th>ha ‘do’</th>
<th>ha ‘be’</th>
<th>toy ‘become’</th>
<th>Predicate Type</th>
<th>0-role</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type 1:</strong> cenhwa ‘phone’, wundong ‘exercise’,</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>Unergative</td>
<td>Agent</td>
</tr>
<tr>
<td>swukcex ‘assignment’, khempyute ‘computer’,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tulaipu ‘drive’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type 2:</strong> mapi ‘paralysis’, hocen ‘bellicosity’</td>
<td>X</td>
<td>X</td>
<td>O</td>
<td>Unaccusative</td>
<td>Patient</td>
</tr>
<tr>
<td>congsik ‘cessation’, kolip ‘isolation’,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kwayel ‘overheating’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type 3:</strong> kkaykkus ‘cleanliness’, mwullan</td>
<td>X</td>
<td>O</td>
<td>X</td>
<td>Adjective</td>
<td>Patient</td>
</tr>
<tr>
<td>‘disorder’</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type 4:</strong> kamthoy or kamso ‘diminution’,</td>
<td>X</td>
<td>O</td>
<td>O</td>
<td>Unaccusative</td>
<td>Patient</td>
</tr>
<tr>
<td>sansung ‘ascent’, pwugkoy ‘collapse’,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cengci ‘stop’, akhwa ‘deterioration’,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>twunhwa ‘slowdown’, pwusik ‘corrosion’</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type 5:</strong> yenkwu ‘research’, kyeysok</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>Transitive</td>
<td>Agent, Patient</td>
</tr>
<tr>
<td>‘continuation’, kiek ‘memory’, penyek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘translation’, hoybok ‘recovery’, nangpi</td>
<td></td>
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</tr>
<tr>
<td>‘wasting’, kyeysan ‘calculation’</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Type 6:</strong> pakay ‘destruction’, silhyen</td>
<td>O</td>
<td>X</td>
<td>X</td>
<td>Transitive</td>
<td>Agent, Patient</td>
</tr>
<tr>
<td>‘realization’, wanseng ‘completion’, yencang</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘extension’, wanhwla ‘migration’, ekcey</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘deter’, pokkuw ‘recovery’, somyel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘disappearance’, conglyo ‘end’,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>kadong ‘operate’, cakdong ‘operation’</td>
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</tr>
</tbody>
</table>

34 In the table (3.20), O means ‘accepting’ and X means ‘not accepting’.

35 The event nouns in this group can also be associated with the light verb toy ‘become’. However, the meaning of the sentence implies a passive rather than the normal intransitive construction.

(e.g.,) Tom-i Tokto-lul yenkwu-ha-ess-ta. Active T-NOM Tokto-ACC research-do-PAST-DEC
‘Tom researched Tokto island.’
Tokto-ka (Tom-eyuyhay) yenkwu-toy-ess-ta. Passive Tokto-NOM (Tom-by) research-become-PAST-DEC
‘Tokto island was researched (by Tom).’

Therefore, these event nouns cannot hold the sense of “unaccusativity”.
Now, let’s look at the examples that correspond with each type of LVCs in the table (3.20).

Consider (3.21).

(3.21) Type 1 (Unergative verb):

\[ \text{Tom-} \quad [LVC \text{ cenhwa-} \text{ha/*toy]}\text{-ess-}ta. \]
\[ \text{T-NOM} \quad \text{phone-do/*become-PAST-DEC} \]

‘Tom phoned.’

Type 2 (Unaccusative verb):

\[ \text{cencayng-} \quad [LVC \text{ congsik-} \text{*ha/toy]}\text{-ess-}ta. \]
\[ \text{war-NOM} \quad \text{cessation-*do/toy-PAST-DEC} \]

‘The war was over.’

Type 3 (Adjective):

\[ \text{pang-} \quad [LVC \text{ kkaykkus-} \text{ha/*toy]}\text{-ess-}ta. \]
\[ \text{room-NOM} \quad \text{cleanliness-be/* become-PAST-DEC} \]

‘The room was clean.’

Type 4 (Unaccusative verb):

\[ \text{mwulka-ka} \quad [LVC \text{ sangsung-} \text{ha/toy]}\text{-ess-}ta. \]
\[ \text{living.cost-NOM} \quad \text{ascent-be/become-PAST-DEC} \]

‘The cost of living increased.’

Type 5 (Transitive verb):

\[ \text{Tom-} \quad \text{baktheylia-lul} \quad [LVC \text{ yenkwu-} \text{ha/*toy]}\text{-ess-}ta. \]
\[ \text{T-NOM} \quad \text{bacteria-ACC} \quad \text{research-do/*become-PAST-DEC} \]

‘Tom researched bacteria.’

Type 6 (Transitive verb/Unaccusative verb):

a. Transitive verb:

\[ \text{cekkwun-} \quad \text{tali-lul} \quad [LVC \text{ phakoy-} \text{ ha/*toy]}\text{-ess-}ta. \]
\[ \text{enemy-NOM} \quad \text{bridge-ACC} \quad \text{destruction-do-PAST-DEC} \]

‘The enemy destroyed the bridge.’

b. Unaccusative verb:

\[ \text{tali-ka} \quad [LVC \text{ phakoy-} \text{ *ha/toy]}\text{-ess-}ta. \]
\[ \text{bridge-NOM} \quad \text{destruction-*do/become-PAST-DEC} \]

‘The bridge was destroyed.’
As in (3.20) and (3.21), the six different types of LVCs are interpreted as various predicate types in a clause. In the next section, based on (3.20) and (3.21), I will describe the template of each type of Korean LVC based on the predicate decomposition hypothesis (Levin & Rapparport 1998 and Levin 2006).

3.4.3 Predicate Decomposition of Korean LVCs

When describing the predicate decomposition template of each type of Korean LVC, I will crucially refer to the templates in Levin (2006). Thus, I present them again from (3.14) and (3.15) to (3.22) and (3.23).

(3.22) **Simplex event structure:**

a. Activity

Manner $\rightarrow [x \text{ACT}_{MANNER} ]/ [x \text{ACT}_{MANNER} y]$

(e.g., jog, run, creak, whistle...)/ (e.g., sweep)

Instrument $\rightarrow [x \text{ACT}_{INSTRUMENT}]$

(e.g., brush, hammer, saw, shovel...)

b. State:

$[x \text{STATE}]$

(e.g., bloom, blossom, decay, flower, rot, rust, sprout...)

c. Achievement:

$[\text{BECOME} [x \text{STATE}]]$

(3.23) **Complex event structure:**

Result-state (i.e., externally caused) or Accomplishment:

$[[x \text{ACT}_{MANNER}] \text{CAUSE } [y \text{BECOME } \text{RES-STATE}]]$

(e.g., break, crack, dry, harden, open, split...)
3.4.3.1 Predicate Decomposition of Type 1 LVC in Korean

Type 1 LVC behaves like an unergative verb in a clause because a single argument is required and its \( \theta \)-role is limited as the agent in a clause. In this type, an event noun can unite only with the LV *ha* ‘do’ which is associated with the primitive predicate ACT. Semantically and conceptually, the LVC in this type indicates the event Activity (e.g., *phone*, *exercise*, and *drive*). Thus, I propose that Type 1 LVC is similar to the template in (3.22a) that denotes the event Activity. Type 1 LVC is decomposed into the conceptual categories as follows: the event noun is associated with the constant, the LV *ha* ‘do’ is linked to the primitive predicate ACT as in (3.24c).

(3.24)  
   a. Template denoting the event “Activity” in Levin (2006):
   \[
   \text{Manner} \rightarrow [x \ \text{ACT} \ <\text{MANNER}>] \\
   \]
   b. Type 1 LVC:
   \[
   \text{Tom-i } \ [\text{LVC cenhwa-ha/*toy]-ess-} \text{ta}. \\
   \text{T-NOM phone-do/*become-PAST-DEC} \\
   \text{‘Tom phoned.’} \\
   \]
   c. Template of Type 1 LVC in LCS:
   1. Conceptual categories: \( Tom=x, \ ha \ ‘do’ =\text{ACT}, \ cenhwa \ ‘phone’ =\text{constant} \)
   2. LCS: \[
   [x \ \text{ACT} \ <\text{Manner}>] \\
   | \ | \ | \\
   Tom \ ha \ phone \ \leftarrow \text{surface representation (hence after SR)} \\
   \]

3.4.3.2 Predicate Decomposition of Type 2 LVC in Korean

Type 2 LVC is an intransitive construction but unlike Type 1 LVC, it may be classified as
an unaccusative verb because the LVC takes an argument obligatorily and the θ-role of the required argument is patient/theme. Semantically and conceptually, this type of LVCs describes the change of the patient/theme argument’s state. Superficially, in Type 2 LVC, an event noun can only combine with the LV 'toy 'become’, instead of the LV 'ha 'do/be’ in Korean, which connects to the primitive predicate BECOME. Thus, following Levin (2006), Type 2 LVC may be expressed as the template in (3.22c) which denotes the event Achievement (e.g., paralyzing, ceasing, and isolating). The template of Type 2 LVC can be expressed as in (3.25c).

(3.25)  

a. **Template denoting the event “Achievement” in Levin (2006):**  

\[
 \begin{array}{c}
 \text{[BECOME } [x <\text{STATE}> ]] \\
 \end{array}
\]

b. **Type 2 LVC:**  

cencayng-'i \quad [\text{LVC congsik-*ha/toy]-ess-ta}  

war-NOM \quad \text{cessation-*do/become-PAST-DEC}  

‘The war ended.’

c. **Template of Type 2 LVC in LCS:**  

1. Conceptual categories: cencayng ‘war’=x, toy=BECOME,  

congsik ‘cessation’=constant  

2. LCS: [BECOME [ \begin{array}{c}
 x \\
<\text{STATE}> \\
\end{array}]  

\begin{array}{c}
\text{toy} \\
\text{war} \\
\text{cessation} \quad \leftrightarrow \text{SR}
\end{array}
\]

3.4.3.3 Predicate Decomposition of Type 3 LVC in Korean

Type 3 LVC behaves like an adjective in Korean and its main function is to describe the state of the patient or the theme argument in a clause. It appears that the template of the Type 3 LVC is close to the template in (3.22b) in Levin (2006), which describes a State
(e.g., clean, disordered, and quiet). In a Type 3 LVC, an event noun can occur only with the LV ha ‘be’ which is related to the feature [+state] (cf. Ahn 2002). In the template in (3.22b), there is no primitive predicate but I assume that in Korean LVCs, the primitive predicate BE is obligatory. Thus, the original template that denotes “State” in Levin (2006) is modified in Korean as in (3.26a). The template of Type 3 LVC is shown in (3.26c).

(3.26)  

a. **Template denoting “State” in Levin (2006):**

\[ [x \text{ <STATE> }] \rightarrow (\text{LCS template in Korean): } [x \text{ BE } \text{ <STATE> }] \]

b. **Type 3 LVC:**

\[
\begin{align*}
\text{pang-} & \quad [\text{LVC } \text{kkaykkus-ha/*toy}-\text{ess-ta}.] \\
\text{room-NOM} & \quad \text{cleanliness-be/* become-PAST-DEC}
\end{align*}
\]

‘The room was clean.’

c. **Representation of Type 3 LVC in LCS:**

1. Conceptual categories: pang ‘room’ =x, ha = BE,

\[ \text{kkaykkus ‘cleanliness’}=\text{constant} \]

2. LCS: \[ [x \text{ BE } <\text{STATE}> ] ]

\[
\begin{array}{c|c|c|c}
\text{room} & \text{ha} & \text{cleanliness} & \rightarrow \text{SR}
\end{array}
\]

3.4.3.4 Predicate Decomposition of Type 4 LVC in Korean

Unlike the other types of LVCs in simplex event constructions, a Type 4 LVC template in LCS is more complicated to describe because the event nouns in Type 4 LVCs can occur both with the LV toy ‘become’ as in (3.27a) or ha ‘be’ in Korean as in (3.27b).

(3.27)  

a. **mwulka-ka**

\[ [\text{LVC } \text{sangsung-toy}-\text{ess-ta}] \\
\text{living.cost-NOM} & \quad \text{ascent-become-PAST-DEC}
\]

‘The cost of living increased.’
In a Type 4 LVC, the LVC takes an obligatory argument and the θ-role of the required argument is patient/theme. Semantically and conceptually, a Type 4 LVC implies the event type Achievement (e.g., diminishing, collapsing, and stopping). In many ways, a Type 4 LVC as an unaccusative verb is similar to a Type 2 LVC. However, in terms of event nouns, a Type 4 LVC can also combine with the LV ha ‘be’ as in (3.27b), so the following question arises: What does the template of a Type 4 LVC look like?

In fact, it is observed that the meanings of the sentences (3.27a) and (3.27b) are slightly different. The sentence in (3.27b) is interpreted as “the ascent of the cost of living is already completed or the cost of living arrives at an increased state”. As a result, in (3.27b), the result-state is emphasized more than the change. In order to elucidate the distribution of LVs such as toy ‘become’ and ha ‘be’ in a Type 4 LVC, I refer to Pustejovsky (1991), as in his study, we can appreciate the key concept of the event Achievement. Consider the following examples in English.

(3.28)  

a. State (adjective):

*The door is closed.*

b. Achievement (verb):

*The door closed.*

(Pustejovsky 1991:57)

In (3.28), the part-of-speech of the bold-faced word closed differs with an adjective in (3.28a) and a verb in (3.28b). Thus, the implication of each sentence in (3.28) is also
different. In (3.28a), the sentence describes the present situation of the door (i.e., the closed state). On the other hand, in (3.28b), the sentence refers to the change of the door’s position from the unclosed situation to the closed situation. According to Pustejovsky (1991), the event Achievement seems to be conceptually and logically related to both the specific situation (e.g., closed) and its opposite situation (i.e., non-closed) because this event describes the change from one situation to another situation. Returning back to the English example in (3.28), the adjective in (3.28a) describes the specific situation (i.e., State) while the verb in (3.28b) illustrates the change from its opposite situation to the specific situation (i.e., Achievement). Similar to the word closed in English, a Type 4 LVC indicates the event Achievement and can express both (i) the specific situation (i.e., State) and (ii) the change from its opposite situation to the specific situation (i.e., the changed state). However, I propose that unlike the word closed in English, in a Type 4 LVC, the primitive predicate changes depending on whether it is describing a State or an Achievement. If the speaker focuses on “changing process of the theme argument” (i.e., Achievement), in a Type 4 LVC, the event noun occurs with the LV toy ‘become’. Thus, the decomposition with the conceptual categories and the surface structure of Type 4 LVC are similar to those of a Type 2 LVC. On the other hand, when the speaker focuses on “the result state after the theme argument is changed” (i.e., State), in the surface structure, the event noun occurs with the LV ha ‘be’. As a matter of fact, in such a case a Type 4 LVC may be close to a Type 3 LVC. In order to express the alternation of two LVs in Type 4 LVC, I propose a new template which is similar to that of Type 2 LVCs and Type 3 LVCs but not identical. In particular, I assume that the primitive predicates BECOME and BE are present in a template in order to
describe the representation of a Type 4 LVC in the LCS. However, in the surface structure of a Type 4 LVC, just one of these two primitive predicates may be articulated depending on the speaker’s intention. Let us consider the new template in the LCS for a Type 4 LVC in (3.29).

(3.29)  

a. Template denoting “State” or “Achievement” in Levin (2006):

\[ \text{[BECOME } [x \text{ <STATE> }] \rightarrow (\text{LCS in Korean}) \text{[BECOME } [x \text{ BE <STATE> }] \text{]} \]

b. Type 4 LVC:

\[ \text{mwulka-ka [LVC } \text{sangsung-toy/ha-ess-} \text{ta} \]
\text{living.cost-NOM ascent-become/be-PAST-DEC}

‘The living cost increased.’

c. Representation of Type 4 LVC in LCS focusing on Achievement:

1. Conceptual categories: \text{mwulka ‘living.cost’=x, toy=BECOME,}
\text{sangsung ‘ascent’=constant}

2. LCS: \[ \text{[BECOME } [x \text{ BE <STATE> }]] \]

\[ \text{toy living.cost ascent} \leftrightarrow \text{SR} \]

d. Representation of Type 4 LVC in LCS focusing on State:

1. Conceptual categories: \text{mwulka ‘living.cost’=x, } \text{Ø=BECOME, ha= BE,}
\text{sangsung ‘ascent’=constant}

2. LCS: \[ \text{[BECOME } [x \text{ BE <STATE> }]] \]

\[ \text{living.cost ha ascent} \leftrightarrow \text{SR} \]

Even though the surface structure of Type 4 LVC is similar to that of a Type 2 LVC or that of a Type 3 LVC, underlyingly, they are different because in the template (3.29c) and (3.29d), both the primitive predicates BECOME and BE are necessarily present in the template of a Type 4 LVC. In the surface structure, when the event noun in a Type 4 LVC joins with the LV \text{toy ‘become’}, it is difficult to find the difference from a Type 2 LVC but
we can see the difference between a Type 4 LVC and a Type 3 LVC. According to Ahn (2002), the present progressive suffix -(nu)n- can be affixed to an LV when it holds the feature [-state] such as ha ‘do’ or toy ‘become’ in (3.30a). On the other hand, in a Type 3 LVC as in (3.30b), this suffix cannot be affixed to the LV ha ‘be’ because this LV is associated with the feature [+state]. Now, look at a Type 4 LVC when the event noun occurs with the LV ha ‘be’ in the surface structure as in (3.30c). Based on the behaviour of Type 3 LVCs, it is expected that the LV ha ‘be’ would not be marked with the present progressive suffix. However, in (3.30c), contrary to this expectation, the present progressive suffix can be affixed to the LV ha because underlyingly, a Type 4 LVC is always accompanied by the primitive predicate BECOME as well as the primitive predicate BE.

(3.30)  

a. Type 4 LVC (=Achievement):  

\[ \text{lvc sangsung-toy]-n-ta} \]  
\[ \text{living.cost-NOM ascent-become-PRES-DEC} \]  
‘The cost of living has started to increase.’

b. Type 3 LVC:  

\[ *\text{pang-i [lvc kkaykkus-ha]-n-ta.} \]  
\[ \text{room-NOM cleanliness-be-PRES-DEC} \]  
‘The room is being clean.

c. Type 4 LVC (= State):  

\[ \text{lvc sangsung-ha]-n-ta} \]  
\[ \text{living.cost-NOM ascent-be-PRES-DEC} \]  
‘The cost of living is increasing.’

3.4.3.5 Predicate Decomposition of Type 5 LVC in Korean

Type 5 LVCs behave like transitive verbs in a clause. This type of LVCs denotes the event
Activity and the event noun can only combine with the LV ha ‘do’ that is related to the primitive predicate ACT. Except for taking two arguments, conceptually, a Type 5 LVC is similar to a Type 1 LVC in many ways. However, in terms of the surface structure, it is true that a Type 5 LVC is similar to a Type 6 LVC because both of them can act like a transitive verb construction. Nevertheless, underlyingly, Type 5 LVCs and Type 6 LVCs are distinctive from each other. In addition, we can see the discrepancy between a Type 5 LVC and a Type 6 LVC.

First, the event nouns in a Type 5 LVC cannot make an intransitive verb but the event nouns in a Type 6 LVC can create an intransitive verb. Consider (3.31).

(3.31) a. Tom-i baktheylia-lul [LVC yenkwu-ha/*toy]-ess-ta.
    T-NOM bacteria-ACC research-do/*become-PAST-DEC
    ‘Tom researched bacteria.’

b. *Tom-i [LVC yenkwu-ha/*toy]-ess-ta.
    T-NOM research-do/*become-PAST-DEC
    ‘Tom researched.’

    bacteria-NOM research-become-PAST-DEC
    ‘The bacteria are researched.’

In (3.31a), the event noun yenkwu ‘research’ can make a transitive verb with the LV ha ‘do’ and so, the direct object baktheylia ‘bacteria’ is obligatory. Without the direct object, this LVC is ungrammatical as in (3.31b) and so, this event noun cannot create the unergative verb with ha ‘do’, unlike a Type 1 LVC. In addition, the event noun cannot build the unaccusative verb with toy ‘become’ as in (3.31c), unlike a Type 6 LVC.

Second, a Type 5 LVC as a simplex event structure does not hold the meaning
“causative” while a Type 6 LVC as a complex event structure always includes the meaning “causative”. When one considers the distribution of the verb sikhi ‘to let/make’ in a Type 5 LVC and in a Type 6 LVC, we can see why a Type 5 LVC is not related to a causative meaning and why it cannot be included in a complex event structure. The verb sikhi ‘to let/make’ creates a causative construction in Korean when occurring after a main verb or an LVC. Consider (3.32).

(3.32)  

a. Tom-i  
  pap-ul  
  mek-ess-ta.  
  T-NOM  
  rice-ACC  
  eat-PAST-DEC

‘Tom ate the rice.’

b. Mary-ka  
  Tom-*i/eykey  
  pap-ul  
  mek-kye  
  sikhi-ess-ta  
  M-NOM  
  T-*NOM/DAT  
  rice-ACC  
  eat-COMP  
  let-PAST-DEC

‘Mary made Tom eat the rice.’

c. *(Mary-ka)  
  Tom-i  
  pap-ul  
  mek-kye  
  sikhi-ess-ta  
  M-NOM  
  T-NOM  
  rice-ACC  
  eat-COMP  
  let-PAST-DEC

‘(Someone) made Tom eat the rice.’

The sentence in (3.32a) is a normal transitive verb construction in Korean. In (3.32a), Tom fills the agent theta-role and pap ‘rice’ plays a theme role. When the verb sikhi ‘to let/make’

36 In Korean, the causative constructions are built in three different ways. First, the verb sikhi ‘to let/make’ is added after the main verb as in (3.32c). Second, the causative morpheme such as -i-, -hi-, -li-, -ki-, -wu-, -chu- are suffixed to the verb stem. Third, the verb ha ‘causative’ is added after the main verb.

(i) Mary-ka  
  Tom-eykey  
  pap-ul  
  mek-i-ess-ta.  
  M-NOM  
  T-DAT  
  rice-ACC  
  eat-CAUSE-PAST-DEC

‘Mary caused Tom to eat the rice.’

(ii) Mary-ka  
  Tom-eykey  
  pap-ul  
  mek-key  
  ha-ess-ta.  
  M-NOM  
  T-DAT  
  rice-ACC  
  eat-COMP  
  PAST-DEC

‘Mary allowed Tom to eat the rice.’

In these three causative constructions, the meanings are slightly different depending on the strength of the effect of “causing” (i.e., sikhi >> causative morpheme >> ha). In particular, the causative ha is different from the LV ha ‘do/be’ in Korean. In order to avoid the confusion between these two has in this section, I display the causative constructions built by the verb sikhi ‘to let/make’. In the next chapter, I will discuss the difference between the LV ha ‘do/be’ and the causative ha in Korean.
is added after the main verb as in (3.32b), this verbal complex gains a causative meaning. After becoming a causative construction as in (3.32b), a new argument such as the causer (i.e., Mary) is obligatorily added. Thus, the agent of the transitive verb (i.e., Tom) is no longer marked with the nominative case particle but instead, it is marked with the dative case particle. If the causer is not present as in (3.32c), the sentence becomes ungrammatical. Even in the intransitive construction, after converting to a causative construction through the verb sikhi ‘to let/make’, the overt causer is necessarily added. Therefore, I claim that the verb sikhi ‘to let/make’ always creates a complex event structure in Korean. An attempt to describe the template of the verb sikhi ‘to let/make’ in the LCS, is as follows:

(3.33) The template of sikhi ‘to let/make’ in Korean:

\[
\begin{array}{c|c|c}
\text{causer} & \text{sikhi ‘to let’} & \Leftarrow \text{SR} \\
\end{array}
\]

| \text{x} & \text{CAUSE} & \text{[simple event structure]} |
| --- | --- | --- |

The verb sikhi ‘to let/make’ can be also added to the LVC in Korean and creates a causative construction. Thus, after forming a causative construction, the overt causer must be added. Consider (3.34).

(3.34) a. Tom-i baktheylia-lul [LVC yenkwu-ha]-ess-ta.
    T-NOM bacteria-ACC research-do-PAST-DEC
    ‘Tom researched bacteria.’

b. Mary-ka Tom-eykey baktheylia-lul [LVC yenkwu-ha]-key sikhi-ess-ta.
    M-NOM T-DAT bacteria-ACC research-do-COMP let-PAST-DEC
    ‘Mary made Tom research bacteria.’

c. *(Mary-ka) Tom-i baktheylia-lul [LVC yenkwu-ha]-key sikhi-ess-ta.
    M-NOM T-NOM bacteria-ACC research-do-COMP let-PAST-DEC
‘(Someone) made Tom research bacteria.’

In (3.34b), a Type 5 LVC can build a causative construction with the verb sikhi ‘to let/make’ as with lexical verbs as in (3.32). Thus, considering the distribution of the verb sikhi ‘to let/make’ in a Type 5 LVC, it is clear that the LV ha ‘do’ in a Type 5 LVC does not contain a causative meaning. However, in a Type 6 LVC, the verb sikhi ‘to let/make’ is distributed differently because a Type 6 LVC ontologically holds the causative meaning. I will postpone the examination of the distribution of the verb sikhi ‘to let/make’ in Type 6 LVCs for the next sub-section.

Based on the two observations above, it is clear that a Type 5 LVC is not the same as a Type 6 LVC in Korean. Let’s describe the template of a Type 5 LVC. According to Levin (2006), when a transitive verb denotes the event Activity, this transitive verb is categorized as a simplex event structure even though it takes two arguments. As mentioned before, a Type 5 LVC as a transitive verb also denotes the event Activity and so, the primitive predicate ACT is present which is related to the LV ha ‘do’. The template of a Type 5 LVC in the LCS is as follows:


\[
[x \text{ ACT}_{\text{MANNER}} y]
\]

b. Type 5 LVC:

\[
\begin{align*}
\text{Tom-} & \quad \text{baktheylia-lul} \quad [\text{LVC yenkwu-ha/*toy]}\text{-ess-ta}. \\
\text{T-NOM} & \quad \text{bacteria-ACC} \quad \text{research-do/*become-PAST-DEC}
\end{align*}
\]

‘Tom researched bacteria.’
c. Representation of a Type 5 LVC in LCS:

\[
\begin{bmatrix}
  x & \text{ACT} & \text{<MANNER>} & y \\
  & & & \\
  \text{Tom} & \text{ha} & \text{research} & \text{bacteria} \leftarrow \text{SR}
\end{bmatrix}
\]

In terms of the function of the verb sikhi ‘to let/make’, we can also consider the template in the LCS when a Type 5 LVC forms a causative construction, as in (3.34b). This causative construction, unlike a Type 5 LVC, may be realized as a complex event construction. The template is as follows:

(3.36)  a. Template of complex event structure in Levin (2006):

\[
[[x \text{ ACT} \text{<MANNER>}] \text{CAUSE } [y \text{ BECOME } <\text{RES-STATE}>]] \rightarrow
\]

(LCS template in Korean): \[
[x \text{ CAUSE } [y \text{ ACT } \text{<MANNER>} z]]
\]

b. Causative construction derived from a Type 5 LVC:

\[
\text{Mary-ka Tom-eykey baktheylia-lul [LVC yenkwu-ha]-key sikhi-ess-ta.}
\]

M-NOM T-DAT bacteria-ACC research-do-COMP let-PAST-DEC

‘Mary made Tom research bacteria.’

c. Representation of the causative construction derived from a Type 5 LVC:

\[
\begin{bmatrix}
  x & \text{CAUSE} & y & \text{ACT} & \text{<MANNER>} & z \\
  & & & & & \\
  \text{Mary} & \text{sikhi} & \text{Tom} & \text{do} & \text{research} & \text{bacteria} \leftarrow \text{SR}
\end{bmatrix}
\]

3.4.3.6 Predicate Decomposition of Type 6 LVC in Korean

As mentioned before, in contrast to Type 5 LVCs, Type 6 LVCs show entirely different behaviours. Consider the Type 6 LVC in (3.37):
Type 6 LVC:

a. Transitive:

\[ \text{cekkwun-} \quad \text{tali-lul} \quad [\text{LVC phakoy-} \ ha/^{	ext{toy}}]-\text{ess-ta}. \]

enemy-NOM bridge-ACC destruction-do/^{become}-PAST-DEC

‘The enemy destroyed the bridge.’

b. Intransitive:

\[ \text{tali-} \quad [\text{LVC phakoy-} \ *_{ha/toy}]-\text{ess-ta}. \]

bridge-NOM destruction-*do/become-PAST-DEC

‘The bridge is destroyed.’

First, the event nouns in a Type 5 LVC always build a transitive verb with the LV \textit{ha} ‘do’ but the event nouns in Type 6 LVCs become transitive verbs with the LV \textit{ha} ‘do’ as in (3.37a) or they can be realized as unaccusative verbs with the LV \textit{toy} ‘become’ as in (3.37b).

Second, when a Type 6 LVC works as a transitive verb, it is interpreted as a complex event structure containing the meaning “causative” while a Type 5 LCV forms simplex event structures. Thus, the distribution of the verb \textit{sikhi} ‘to let/make’ shows the discrepancy between Type 6 LVCs and Type 5 LVCs. Consider (3.38).

(3.38)  

a. \textit{cangkwun-i} \quad \textit{tali-lul} \quad [\textit{LVC phakoy-} \ ha]-\text{ess-ta}.

\begin{align*}
general-NOM & \quad bridge-ACC & \quad destruction-do-PAST-DEC \\
‘The general destroyed the bridge.’
\end{align*}

b. \textit{wang-i} \quad \textit{cangkwun-eykey} \quad \textit{tali-lul} \quad [\textit{LVC phakoy-ha}]-\text{key} \quad \textit{sikhi-ess-ta}.

\begin{align*}
\text{king-NOM} & \quad \text{general-DAT} & \quad bridge-ACC & \quad \text{destruction-do-COMP} & \quad \text{let-PAST-DEC} \\
‘The king made the general destroy the bridge.’
\end{align*}

c. \textit{cangkwun-i} \quad \textit{tali-lul} \quad [\textit{LVC phakoy-sikhi}]-\text{ess-ta}.

\begin{align*}
general-NOM & \quad bridge-ACC & \quad destruction-\textit{sikhi}-\text{ess-ta} \\
‘The general destroyed the bridge.’
\end{align*}

In (3.38a), the Type 6 LVC behaves like a transitive construction as with a Type 5 LVC in
the surface structure. When the verb sikhi ‘to let/make’ is added after the Type 6 LVC in (3.38b), the overt causer wang ‘king’ is added. So far, the behaviour of a Type 6 LVC seems to be identical to that of a Type 5 LVC and other lexical verbs. However, in (3.38c), we can see a distinctive behaviour of the verb sikhi ‘to let/make’ in a Type 6 LVC, which cannot be found in a Type 5 LVC or other lexical verbs. The verb sikhi ‘to let/make’ can replace the LV ha ‘do’ as in (3.38c). In Type 5 LVCs, this replacement is not allowed as in (3.39).

(3.39)  Tom-i  baktheylia-lul  [LVC yenkwu-ha/*sikhi]-ess-ta.
       T-NOM  bacteria-ACC  research-do/let-PAST-DEC
       ‘Tom researched bacteria.’

Here, I assume that in Type 6 LVCs, this replacement between the LV ha ‘do’ and the verb sikhi ‘to let/make’ is possible because a Type 6 LVC ontologically contains the meaning “causative” and the agent argument can be also interpreted as the causer. In (3.38b), a new argument wang ‘king’ is added as the new cause because the agent and the causer are different. On the other hand, in (3.38c), the argument cangkwun ‘general’ works as the agent and the causer at the same time and so there is no need to add a new causer. Regarding my assumption, a Type 6 LVC without the support of the verb sikhi ‘to let/make’ ontologically contains the meaning “causative” and so it should be interpreted as a complex event structure.

Now consider the template of Type 6 LVCs. As mentioned before, event nouns in a Type 6 LVC can form both a transitive verb and an intransitive verb. In particular, when event nouns in Type 6 LVC become unaccusative verbs, they occur with the LV toy ‘become’ the same as Type 2 LVCs. This implies an important fact: Type 6 LVCs are
related to changing the state of the theme/patient argument. Thus, when the event noun in a Type 6 LVC forms an unaccusative verb with the LV *toy* ‘become’, the LVC denotes the event Achievement as with a Type 2 LVC. On the other hand, when event nouns in Type 6 LVCs make transitive verbs with the LV *ha* ‘do’, the LVC denotes the meaning “causative” and it is related to the event Accomplishment that is described as a complex event structure in Levin (2006). In order to describe a Type 6 LVC in Korean, I will modify the template of the original complex event structure in Levin (2006) in (3.40a) to the template in (3.40b).

(3.40)  a. **Template of complex event structure in Levin (2006):**

\[
[x \text{ ACT } \text{<MANNER>}] \text{ CAUSE } [y \text{ BECOME } \text{<RES-STATE>}]\
\]

b. **Modifying the template (a) for Korean:**

\[
[x \text{ CAUSE } [y \text{ ACT } [z \text{ BECOME } \text{<RES-STATE>}]])
\]

Now, I display the template of a Type 6 LVC. First, when a Type 6 LVC works as an unaccusative verb, it is represented the same as a Type 2 LVC that is included in a simplex event structure and denotes the event Achievement.

(3.41)  a. **Template denoting “Achievement” in Type 2 LVCs:**

\[
\text{BECOME } [x \text{ <STATE> }]]
\]

b. **Type 6 LVC (= Achievement):**

\[
tali-ka \quad \text{[LVC phakoy- *ha/toy]-ess-ta.}\
\]

bridge-NOM destruction-*do/become-PAST-DEC

‘The bridge is destroyed.’

c. **Representation of a Type 6 LVC in LCS:**

\[
tali ‘bridge’=x, \quad toy=\text{BECOME, phakoy ‘destruction’}=\text{constant}\
\]

\[
\text{BECOME } [x \quad <\text{STATE}> ]
\]

\[
| \quad | \quad |
\]

\[
toy \quad bridge \quad destruction \quad \leftrightarrow \text{ SR}
\]
Next, I describe the template of a Type 6 LVC when it functions as a transitive verb in a clause. In this case, three primitive predicates are necessarily present such as CAUSE, ACT and BECOME. A Type 6 LVC is underlyingly a complex event structure but when the speaker focuses on the event Activity, the primitive predicate ACT is overtly present as the LV ha ‘do’ rather than the primitive predicate CAUSE sikhi ‘to let/make’. Thus, a Type 6 LVC in this case can be expressed as the template in (3.42c).

(3.42)  
\begin{enumerate}
  \item Template denoting “Accomplishment” in Korean:
    \[[x \text{CAUSE} [y \text{ACT} [z \text{BECOME } \langle \text{RES-STATE} \rangle ]]]\]
  \item Type 6 LVC:
    \begin{align*}
    \text{cekkwun-i} & \quad \text{tali-lul} & \quad [\text{LVC phakoy ha}-\text{ess-ta}.] \\
    \text{enemy-NOM} & \quad \text{bridge-ACC} & \quad \text{destruction-do-PAST-DEC}
    \end{align*}
    ‘The enemy destroyed the bridge.’
  \item Representation of a Type 6 LVC in LCS:
    \begin{align*}
    \text{cekkwun} & \quad \text{‘enemy’} = x \text{ and } y, \text{ ha} = \text{ACT, tali} \text{ ‘bridge’} = z, \\
    \text{phakoy} & \quad \text{‘destruction’} = \text{constant}
    \end{align*}
    \[\begin{align*}
    & \quad x \quad \text{CAUSE} [ \quad y \quad \text{ACT} \quad [ \quad z \quad \text{BECOME } \langle \text{RES-STATE} \rangle ]] \\
    \end{align*}\]
    \begin{tikzpicture}
    \node (one) at (0,0) {enemy};
    \node (two) at (2,0) {ha};
    \node (three) at (4,0) {bridge};
    \node (four) at (6,0) {destruction};
    \draw (one) -- (two);
    \draw (two) -- (three);
    \draw (three) -- (four);
    \draw (one) -- (four);
    \end{tikzpicture}
\end{enumerate}

In (3.42b), the LV ha ‘do’ can be replaced by the verb sikhi ‘to let/make’. In this case, I assume that the speaker focuses on the event Accomplishment and the primitive predicate ACT and BECOME is covertly present as the LV while the primitive predicate CAUSE is overtly present as the verb sikhi ‘to let/make’ in the surface structure as in (3.43). Thus, a Type 6 LVC in this case can be expressed as in (3.43c).

(3.43)  
\begin{enumerate}
  \item Template denoting “Accomplishment” in Korean:
    \[[x \text{CAUSE} [y \text{ACT} [z \text{BECOME } \langle \text{RES-STATE} \rangle ]]]\]
\end{enumerate}
b. Type 6 LVC:

\[ cekkwun-i \quad tali-lul \quad phakoy- \text{sikhi-ess-ta.} \]

enemy-NOM bridge-ACC destruction-CAUSE-PAST-DEC

‘The enemy destroyed the bridge.’

c. Representation of a Type 6 LVC in LCS:

\[ cekkwun \ 'enemy’=x \text{ and } y, \text{ sikhi}=\text{CAUSE}, \text{ tali ‘bridge’}=z, \]

\[ phakoy \ ‘\text{destruction’}=\text{constant} \]

\[ [x \text{ CAUSE} [ y \text{ ACT} [ z \text{ BECOME <RES-STATE>}}]] \]

As the closing comment of this section, all LVCs in Korean can be expressed as predicate decomposition templates in Levin & Rappaport (1998) and Levin (2006). Thus, like other predicates, a LVC can be decomposed with several conceptual categories that show the lexical-semantic and syntactic information of the predicate. Consequently, now it is clear that a LVC gains the lexico-semantic and syntactic information as the predicate from the representations in the LCS. Thus, this information is determined in the LCS before the two components of the LVC are realized as lexical items in the lexicon and the composition in the LVC takes place.

3.5 From LCS to Structure

In the previous section, I illustrated the templates of Korean LVCs in the LCS following Levin & Rappaport (1998) and Levin (2006). Of course, other types of predicates such as lexical verbs and adjectives in Korean can also be expressed with these templates as can Korean LVCs. Based on my proposal mentioned earlier in this chapter as in (3.44), it is
necessary to clarify the relationship between the lexical conceptual structure and the lexicon, and between the lexicon and the syntax.

(3.44) Lexical conceptual $\Rightarrow$ Lexicon $\Rightarrow$ Syntax

In particular, when the LVC and the lexical verb or the adjective indicates the same event, underlyingly, they could be decomposed as the identical template in the LCS. There could be other explanations as to why they are differently present in the surface structure or in the lexicon. For instance, the lexical verb *top- ‘to help’ and the LVC *kemsa-ha ‘to examine’ work as transitive verbs and denote event Activities. Therefore, their templates in the LCS would be undistinguishable from each other as in (3.45).

(3.45) a. LCS of *top- ‘to help’:

\[ \text{[x ACT } \langle \text{TOP} \rangle \text{ y]} \]

\[ \rightarrow \text{Lexical verb: } *\text{top- ‘to help’} \]
\[ \rightarrow \text{LVC : *top-ha ‘to help’} \]

b. LCS of *kemsa-ha ‘to examine’:

\[ \text{[x ACT } \langle \text{KEMSA} \rangle \text{ y]} \]

\[ \rightarrow \text{Lexical verb: *kemsa- ‘to examine’} \]
\[ \rightarrow \text{LVC : kemsa-ha ‘to examine’} \]

Nonetheless, the surface representations of the lexical verb *top- ‘to help’ and the LVC *kemsa-ha ‘to examine’ are quite different as in (3.45). In (3.45a), the lexical verb cannot occur with the LV while the LV is necessary in the LVC in (3.45b). Under the assumption that primitive predicates are exposed as the LVs in the surface structure, simply speaking, we can say that primitive predicates should be covertly present in the lexical verb while
they should be overtly present in LVCs as the LV likely as in (3.45). Therefore, in this section, I intend to evaluate how conceptual categories can be realized as lexical items in a lexical verb or in an LVC.

3.5.1 Syntactic Approach

The issue above can be explored in two directions. As the first direction, in this sub-section, I investigate the syntactic approach. Adopting the claims of Hale & Keyser (1993), Harley (1999), Jung (2003), Borer (2005) and Ramchand (2008), it is assumed that all primitive predicates in a template should be realized as lexical items without the distinction of an overt or covert form. Thus, the discrepancy between the lexical verb and the LVC in (3.45) can be understood as follows:

(3.46) a. Lexical verb *top* ‘to help’:

\[
\begin{align*}
\text{LCS} & \quad \text{Lexicon} \\
[ x \text{ ACT } < \text{TOP} > y ] & \quad \begin{cases} 
\text{Constant: TOP,} \\
\text{Primitive predicate ACT: } \emptyset
\end{cases}
\end{align*}
\]

b. LVC *kemsa-ha* ‘to examine’:

\[
\begin{align*}
\text{LCS} & \quad \text{Lexicon} \\
[ x \text{ ACT } < \text{KEMSA} > y ] & \quad \begin{cases} 
\text{Constant: KEMSA,} \\
\text{Primitive predicate ACT: ha}
\end{cases}
\end{align*}
\]

Consequently, each primitive predicate becomes a lexical item without a distinction between the covert form and the overt form, and it is assumed to be present under the corresponding functional head in the syntactic structure (cf. “event structure” or “\(l\)-syntax”).
In this thesis, I call this the “syntactic approach”.

Since Hale & Keyser (1993, 1998) proposed “l-syntax”, many studies (e.g., Marantz 1997, Harley 1999, Borer 2005, and Ramchand 2008) have developed their seminal work. In effect, these studies based on “l-syntax” are useful when accounting for the polysemy of verbs in English as in (3.47):

(3.47) a. The leaves turned red.
    b. The cold turned leaves red.

(Hale & Keyser 1998:78)

In (3.47), the bold-faced verb turn builds two different types of verbs in English. In (3.47a), the verb turned takes an adjective as its complement and builds an inchoative construction. On the other hand, in (3.47b), the same verb turn takes an NP or a small clause as its complement and constructs a causative construction. The grammatical relation of the argument leaves in (3.47) is dissimilar: in (3.47a), it works as the subject but it is understood as the direct object in (3.47b). How can a single verb form be used as two different types of verbs?

Let’s follow the study in Hale and Keyser (1998) of the polysemy of the verb turn in English. First, they propose the lexical-semantic and syntactic information of the predicate can be expressed with a structure that is called “l-syntax”. When the verb turn builds the inchoative construction as in (3.47a), the structure of the inchoative verb turn in the l-syntax is as follows:
In (3.48), the structure of the inchoative verb *turn* reflects the following facts: (i) the verb *turn* occurs under the head of V and it takes the AP complement, and (ii) [Spec, V] is the base-position of the external argument and the DP argument *the leaves* in (3.47) appears in [Spec, V]. Next, look at how the verb *turn* yields the causative construction in (3.46b) according to Hale & Keyser (1998). This causative verb *turn* as a complex verb construction is derived from the inchoative verb *turn*. Thus, the structure of the causative construction is as in (3.49).

According to the structure in (3.49), the causative verb *turned* is made via two operations:
(i) adding another verb projection (i.e., V1 projection) to the inchoative construction and (ii) the movement of the verb *turn* from its base-position to the functional head that contains the causative meaning. According to Hale & Keyser (1998) and Ramchand (2008), the head of V1 as a functional head is related to the event CAUSE. Thus, after the verb *turn* moves to the head of V1, the verb *turn* gains the causative meaning such as [*turn+CAUSE*]. Consequently, the new argument (i.e., causer) can be placed at [Spec, V1] and superficially, the grammatical relation of this added argument functions as the subject. After the verb *turn* moves, the grammatical relation of the argument *leaves* changes into the object in the causative construction. Based on this finding, it can be understood why a single verb form *turn* can become two different types of verb in English (i.e., polysemy).

Recent studies (e.g., Folli, Harley, and Karimi 2003, and Jung 2003) are inclined to treat even lexical verbs as formed by merging with a functional head. In fact, they assume that all predicates are decomposed as a root (cf. constant) and a functional head (cf. primitive predicate). Thus, the root and the functional head are realized as the lexical items and they occur under two separate heads in the syntax as in (3.50).

(3.50) *The potato dried.*

```
V
  /\  
Root V
  /\      
\DRY   BECOME
```

As a result, in these studies of I-syntax or event structure, primitive predicates are understood as being realized as functional heads which build the VP. In addition, these functional heads are always present in the syntactic structure.
Adopting the syntactic approach (e.g., Jung 2003), we can explain why the lexical verb and the LVC present differently in the surface structure even though they are expressed as the same template in the LCS. In this syntactic approach, the following common ground is assumed: (i) all primitive predicates in the template (e.g., CAUSE, ACT, BE, BECOME, etc.) are realized as lexical items, (ii) they are realized as functional heads in the syntactic structure, and (iii) these functional heads contain the semantic information of the predicate such as determining the event type of the predicate and denoting the argument’s state (i.e., external argument vs. internal argument) in a clause. Consider (3.51).

(3.51)  

<table>
<thead>
<tr>
<th></th>
<th>a. LCS of <em>top</em>- ‘to help’:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[x ACT &lt;TOP&gt; y ]</td>
</tr>
<tr>
<td></td>
<td>→ Lexical verb: √top-∅ (ACT) ‘to help’</td>
</tr>
<tr>
<td></td>
<td>→ LVC : *√top-ha(ACT) ‘to help’</td>
</tr>
</tbody>
</table>

b. LCS of kemsa-ha ‘to examine’:

<table>
<thead>
<tr>
<th></th>
<th>[x ACT &lt;KEMSA&gt; y ]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>→ Lexical verb: *√kemsa-∅ (ACT) ‘to examine’</td>
</tr>
<tr>
<td></td>
<td>→ LVC : √kemsa-ha (ACT) ‘to examine’</td>
</tr>
</tbody>
</table>

In (3.51), the lexical verb and the LVC are decomposed as the same template with the primitive predicate ACT. In the syntactic approach, this primitive predicate is always present in the lexical item. Thus, it is understood as follows: the lexical verb *top* ‘to help’ in (3.51a) can be understood as being formed by the constant TOP ‘help’ and the covert form of the primitive predicate (i.e., ∅). On the other hand, the LVC kemsa-ha ‘to examine’ in (3.51b) is accomplished by combining KEMSA ‘examination’ and the overt form of the primitive predicate (i.e., LV ha ‘do’).

At this point, the syntactic approach seems to be meaningful but it has weak points
when explaining how a single template can create a lexical verb and an LVC. In the last sub-section, I will argue that this syntactic approach is inaccurate for the study of Korean.

3.5.2 Lexicalization

In the second approach, following Levin & Rappaport (1998), it is expected that primitive predicates and the constant in the template form a lexical item before entering into the syntactic structure (cf. “lexicalization” in Levin & Rappaport 1998). Thus, a lexical verb is the result of all categories that are combined together. However, this is assumed to be only applicable to lexical verbs because LVCs consist of two different components and these components are realized as two separate lexical items. Thus, the assumption leads us to the following conclusion: in an LVC, the constant and the primitive predicates are realized as separate lexical items. The discrepancy between the lexical verb and the LVC in (3.52) can be understood as follows:

(3.52) a. Lexical verb top ‘to help’:

\[
\begin{align*}
\text{LCS} &: \quad [x \text{ ACT } <\text{TOP}> y ] \\
\text{Lexicon} &: \quad \{ \text{Constant + Primitive predicate ACT: } \\
& \quad \quad \quad \text{TOP} \}
\end{align*}
\]

b. LVC kemsa-ha ‘to examine’:

\[
\begin{align*}
\text{LCS} &: \quad [x \text{ ACT } <\text{KEMSA}> y ] \\
\text{Lexicon} &: \quad \{ \text{Constant: } \text{KEMSA, } \\
& \quad \quad \quad \text{Primitive predicate ACT: } ha \}
\end{align*}
\]

Therefore, the main concern in Levin & Rappaport (1998) is to explain how to combine the
primitive predicate and the constant in the template in order to form a lexical item (i.e., lexicalization in Levin & Rappaport 1998). In defining the method of lexicalization, Levin and Rappaport (1998: 251) state that “the constants either fill argument positions associated with these predicates or act as modifiers to the predicates.” Thus, a constant can combine with the primitive predicate and form a syntactic object in two ways: (i) filling the argument position of a primitive predicate or (ii) acting as the modifier to a primitive predicate. What does this mean?

Consider the case of “filling the argument position of the primitive predicate”. In order to describe the structure of the lexical verb *dry* in the LCS, the following two templates are necessary.

(3.53)  
\[a. \text{to dry (inchoative):} \]
\[\begin{align*}
  \text{[y BECOME <STATE>]} \\
  \text{[x ACT] CAUSE [y BECOME <RES-STATE>]}
\end{align*}\]

According to Levin & Rappaport (1995, 1998), in the template, the angle bracket (i.e., < >) defines the position of the constant. When these conceptual categories combine and form a lexical item, the position of the constant in (3.53) is filled by the constant *DRY* and then, this template is complete and is realized as the lexical verb *dry*.

(3.54)  
\[
\begin{align*}
  \text{LCS} & \quad \text{Lexicon} \\
  \text{[y BECOME <DRY>]} & \quad \text{dry (inchoative)} \\
  [[x ACT] \text{ CAUSE [y BECOME <DRY>]]} & \quad \text{dry (causative)}
\end{align*}\]

Next, look at the case of “acting as the modifier to the primitive predicate”. Levin
& Rapapport (1998) deal with the primitive predicate ACT differently. Unlike other primitive predicates, the primitive predicate ACT can be classified into several sub-types such as manner, instrument, etc. In order to describe the behaviour of the primitive predicate ACT, Levin & Rapapport (1998) propose that the constant is not directly filled at the position of the constant but instead, it modifies the primitive predicate ACT. Then, later, this template is realized as a lexical item such as the lexical verb walk in (3.55):

\[(3.55)\]  
\[
\text{LCS} \quad \text{Lexicon} \\
\text{ACT} <X> \quad \text{walk} \\
| \quad \text{(modification) } \\
\text{[WALK] MANNER} \\
\]  

(Levin & Rappaport 1998:253)

Here, I am not sure whether or not it is necessary to distinguish two methods of lexicalization in Korean. As shown before in the description of Japanese event nouns in LCS (Takeuchi, Kageura, & Koyama 2003), the sub-types of the primitive predicate ACT can be expressed as various different primitive predicates without using the modification in (3.55). In this thesis, I will apply these two methods of the lexicalization to Korean with a different purpose.

3.5.3 Lexicalization in Korean LVCs

In the previous sub-sections, I briefly explained how the conceptual categories in a template can be realized as lexical items in two potential approaches. In this sub-section, I will discuss the pros and cons of these two approaches when considering lexical verbs and
LVCs in Korean.

In order to handle the polysemy of verbs in English, the syntactic approach is better than the second approach (i.e., lexicalization) because it is easy to describe how and why the verb *turn* or *cry* in English can build two different predicate types such as an inchoative construction and a causative construction. I also agree that the syntactic approach is better when describing the causative construction or other complex predicate constructions in Korean. However, I do not agree with that the lexical verb and the LVC are built by the combination between a root and a functional head in Korean as in (3.56).

![Diagram](image)

In (3.56), the lexical verb and the LVC may be determined by a root that combines with an overt form or a covert form of the primitive predicate. However, I am skeptical that the covert form of a primitive predicate can be realized as a lexical item the same as the overt form of a primitive predicate in Korean.

In Korean, a verb or an adjective is not polysemous. Thus, one verb form cannot create two different verb types. Consider (3.57).
The sentences in Korean in (3.57) may convey the equivalent semantic content of the sentences in English in (3.47). In English, the verb form *turn* can be used as both an inchoative verb and a causative verb. However, in Korean, the verb form *mwultul* ‘to dye’ in (3.57) can produce only an inchoative construction. In order to create a causative construction based on the inchoative construction in (3.57a), the causative suffix *-i-* is obligatorily affixed to the verb as in (3.57b). Thus, we can see the difference in English and in Korean in (3.58).

\[(3.58)\]
\[
\begin{align*}
\text{a. English:} & \quad \text{Lexicon} \\
\text{Inchoative} & \rightarrow \text{turn} \\
\text{Causative} & \rightarrow \text{turn} + \emptyset \\
\text{b. Korean:} & \quad \text{Lexicon} \\
\text{Inchoative} & \rightarrow \text{mwultul} \quad \text{‘to dye’} \\
\text{Causative} & \rightarrow \text{mwultul} + \text{-i-} \quad \text{‘to cause to dye’}
\end{align*}
\]

Based on (3.58), in Korean, a change of the predicate type is always accompanied by an overt morphological change. Following the syntactic approach, the causative suffix *-i-* may be linked to a primitive predicate in the LCS. This primitive predicate may be realized as a lexical item in Korean and it is present under the functional head in the surface structure.
Thus, the template in the LCS of these two verbs mwultul ‘to dye’ and mwultul-i- ‘to cause to dye’ are as follows:

(3.59) a. mwultul ‘to dye’ (inchoative):

\[
\begin{array}{c}
[y \text{ BECOME } \text{ <STATE>}] \\
\hline
\Phi
\end{array}
\]

b. mwultul-i- ‘to cause to dye’ (causative):

\[
\begin{array}{ccc}
[x \text{ ACT} \text{ CAUSE } [y \text{ BECOME } \text{ <RES-STATE>}]] \\
\hline
\Phi & -i- & \Phi
\end{array}
\]

Here, one may propose that all primitive predicates in Korean are realized as lexical items like those in English, but the primitive predicate CAUSE is covertly realized as a lexical item in English (i.e., \(\Phi\)) while it is overtly present as a lexical item in Korean (i.e., the causative suffix -i-). However, this proposal raises a question: as in (3.59), why are other primitive predicates in Korean (aside from the primitive predicate CAUSE), not realized as overt lexical items? In order to answer this question, I claim that when the primitive predicate is realized as the lexical item in Korean, it must be overtly present, unlike English. Consequently, following Levin & Rappaport (1998), when the primitive predicate is not realized as the lexical item in Korean, it is combined with a constant. Thus, in Korean, it is unnecessary to consider whether or not a primitive predicate can be covertly realized as a lexical item.

Based on this discussion, the difference between a lexical verb and an LVC in Korean becomes manageable. It is hard to believe that a lexical verb and an LVC are decomposed as in (3.56) because the primitive predicate is not covertly realized as a lexical
item in Korean. Thus, I adopt lexicalization following Levin & Rappaport (1998) as in (3.60).

(3.60)  a. Lexical verb \textit{top} ‘to help’:

\[
\begin{align*}
\text{LCS} & \quad [x \text{ ACT } <\text{TOP}> \ y] \\
\text{Lexicon} & \quad \{ \text{Constant + Primitive predicate ACT: } \text{TOP} \}
\end{align*}
\]

b. LVC \textit{kemsa-ha} ‘to examine’:

\[
\begin{align*}
\text{LCS} & \quad [x \text{ ACT } <\text{KEMSA}> \ y] \\
\text{Lexicon} & \quad \begin{cases} 
\text{Constant: KEMSA,} \\
\text{Primitive predicate: ha}
\end{cases}
\end{align*}
\]

In (3.60), both the lexical verb \textit{top} ‘to help’ and the LVC \textit{kemsa-ha} ‘to examine’ can be expressed as the same predicate decomposition template but the primitive predicate is overtly present as a lexical item in the LVC but it is not in the lexical verb. Even though my assumption is correct, still a question remains: Why must a primitive predicate be overtly realized in an LVC?

To answer this, I modify the methods of lexicalization in Levin & Rappaport (1998) as follows: (i) the constant is directly filled at the argument position of the primitive predicate and (ii) the constant acts as a modifier to primitive predicates. In Levin & Rappopart (1988), the second method is designed to explain the lexicalization of the sub-types of the primitive predicates of ACT. In this thesis, I assume that lexical verbs and LVCs are lexicalized by two different methods as follows: (i) a lexical verb is formed when the constant is directly filled at the argument position of the primitive predicate as in (3.61) but (ii) an LVC results from the constant modifying the argument of the primitive predicate
as in (3.62). When the constant is filled in the argument position, there is no need to reveal the primitive predicate as an overt form. On the other hand, when the constant modifies the argument of the primitive predicate, the primitive predicate must be realized as an overt lexical item.

(3.61)  
\[\begin{array}{l}
\text{a. } \text{top-} \text{ ‘to help’ (filling in the argument)} \\
\text{b. LCS} \\
\text{Lexicon} \\
\text{ACT } <\text{TOP}> \\
\rightarrow \\
\text{top ‘to help’}
\end{array}\]

(3.62)  
\[\begin{array}{l}
\text{a. kemsa-ha ‘to examine’ (modification)} \\
\text{b. LCS} \\
\text{Lexicon} \\
\text{ACT } <X> \\
\rightarrow \\
\{\text{Constant: KEMSA} \} \\
\{\text{Primitive predicate: ha}\}
\end{array}\]

As demonstrated in Chapter 2, the LVC in Korean is built by incorporation of a nominal complement (i.e., the constant) and an LV (i.e., the primitive predicate). In the operation of incorporation, the main function of the nominal complement is to modify the LV. Thus, my proposal in (3.61) well corresponds with the composition of Korean LVCs.

3.6 Closing comment

In this chapter, I discussed the interpretation of Korean LVCs. After examining Korean LVCs, several important facts were revealed. First, all lexical-semantic and syntactic information of Korean LVCs is not solely derived from the event noun or the LV. Second, the lexical-semantic and syntactic information of the LVC and predicates are determined in
the LCS before the nominal complement and the LVC are composed. Third, in terms of the conceptual categories, Korean LVCs can be divided into six different sub-types and all of them can be expressed using the predicate decomposition templates in Levin & Rappaport (1998) and Levin (2006). Finally, the LV and the nominal complement are syntactic objects and are derived from the conceptual categories in the predicate decomposition templates.
4. The Structure of LVCs in Korean

4.1 The Scope of This Chapter

The main goal of this chapter is to describe the syntactic structures of Korean LVCs in accordance with (i) the unique characteristics of Korean LVCs as presented in Chapter 1 and (ii) the proposals in Chapter 2 and Chapter 3. In the previous two chapters, I argued that (i) the nominal complement and the LV form a semantic unit by incorporation and (ii) all lexical-semantic and syntactic information of an LVC as a predicate are determined in the LCS. This suggests an answer for the question: Why can Korean LVCs be used as X⁰ expressions such as verbs/adjectives even though they form XP expressions in the surface structure? The outline of my proposal in previous chapters is summarized in (4.1) and (4.2).

(4.1) Proposal in Chapter 2 and Chapter 3:
    a. The lexical-semantic and syntactic information of an LVC as a predicate is produced in the LCS.
    b. The conceptual categories in the LCS such as the primitive predicate (i.e., the LV) and the constant (i.e., the nominal complement) become lexical items.
    c. These lexical items are realized in the syntactic structure.
    d. The nominal complement and the LV are incorporated.

(4.2) mwul-i [LVC cenghwa *ha/toy]-ess-ta.
    water-NOM purification *do.be/become-PAST-DEC
    ‘The water is purified by itself.’
a. LCS (the semantic & syntactic information):
   Semantic meaning: ‘to be purified’
   Type of predicate: Unaccusative
   Valency: One argument

b. Lexicon (two components):
   cenghaw ‘purification’
   toy ‘become’

c. Composition (LVC):
   \[ \text{[LVC cenghaw ‘purification’ toy ‘become’]} \]
   incorporation

In this chapter, I examine the syntactic positions of the two components in Korean LVCs (i.e., the nominal complement and the LV) and try to relate several characteristics of Korean LVCs to the surface structure as in (4.3) while maintaining my proposal.

(4.3) Characteristics of Korean LVCs:
   a. LVCs in Korean can be interpreted as one of various predicate types.
   b. The nominal complement must be the event noun or hold the feature “eventuality”.
   c. The nominal complement may be affixed to an accusative case particle when the LVC is interpreted as a transitive verb or an unergative verb.
   d. The nominal complement is an XP complement when occurring with the LV ha ‘do’ but it is an \(X^0\) when occurring with the LV ha ‘be’.

I adopt the Minimalist Program (Chomsky 1995, 1998) as the main framework for this thesis. In this framework, LVs are commonly assumed to belong to the category of little \(v\) (Chomsky 1995, Marantz 1997, Harley 1999, and Arad 1999) but the LVs in Korean show somewhat different characteristics that are not consistent with the properties of little \(v\). Thus, in this thesis, I try to devise the best model to describe the syntactic structures of Korean LVCs. In Section 2, I will inspect the relationship between little \(v\) and Korean LVs and then I will prove that not all LVs are included in the category of little \(v\) in Korean. In
Section 3, in an advanced version of the main framework, I will introduce the “split vP hypothesis” from Bowers (2002, 2003). Then, relying on this study, I will demonstrate that typologically, LVs are generated under various positions and in particular, I will prove that LVs in Korean are placed under two different syntactic positions. In Section 4, I will discuss the syntactic issues related to the complement in Korean LVCs. I will begin this section with a discussion of the base-positions of various complements in Korean LVCs such as the XP complement and the X⁰ complement. I will then examine the affixation of an accusative case particle on the complement in Korean LVCs. In Section 5, as supporting evidence for my proposal, I will illustrate the exclusive (or unique) behaviours of Korean LVCs in short-form negation.

4.2 Little v and LVs

Before the discussion begins, it is necessary to clarify what the term syntax means in this thesis. According to Hale & Keyser (1993, 1998) and Travis (2010), syntax is classified as two types; “l-syntax” (Lexical syntax) and “s-syntax” (Syntactic syntax). l-syntax, like argument structure, focuses on expressing the interaction between verbs/adjectives and their arguments. Therefore, in l-syntax, the characteristics which are found in the surface structure (e.g., case checking) are not important themes. On the other hand, s-syntax is the surface syntax that has been discussed in traditional generative grammar (i.e., GB, and Minismalist Program). In this thesis, I define syntax as s-syntax because (i) the argument structure can be fully expressed in the LCS, and (ii) the important properties of Korean
LVCs are revealed only in the s-syntax (e.g., case-checking).

4.2.1 LVs in the Minimalist Program

As the framework of s-syntax, I accept (or adopt) the Minimalist Program (Chomsky 1995, 1998) and the subsequent principles (e.g., Case-checking, and VP-shell)\(^{37}\). The syntactic configuration in the Minimalist Program is efficient for examining the syntactic structure of Korean LVCs and it allows us to describe various syntactic features which are found in many languages with ease. Let’s consider a tree diagram in the Minimalist Program (Hornstein, Nunes, and Grohmann 2005), which describes the syntactic structure of a transitive verb in English as in (4.4) and several corresponding principles in this framework in (4.5).

\(^{37}\) Within the Minimalist Program, many detailed theories and principles are adopted. In this thesis, I will mainly focus on the following: (i) Theta system, (ii) Case system, (iii) VP-shell, and (iv) Functional projections. Thus, often I am not much concerned with ideas, such as “Merge”, “Bare Phrase Principle”, “Phase”, etc.
(4.4) Principles in the Minimalist Program:\(^\text{38}\):

- a. IP as a functional projection is separate from the verb phrase.
- b. The verb phrase is split into two projections such as VP and vP (i.e., a layered VP).
- c. Theta-positions and case-checking positions of arguments are separate.
- d. The external argument does not include the argument of VP.

Our concern is to find the base-positions of LVs and their complements in the syntactic structure of the framework in (4.4). Since Chomsky (1995), the transitive verb phrase as in (4.4) is constructed as a layered VP which is a combination of the VP (i.e., the lower head) and vP (i.e., the upper head). Chomsky (1995:315) names the upper head in the VP-shell “little v” and he assumes that LVs in English may fall into the category of little v. Since then, many studies have followed Chomsky’s proposal (e.g., Diesing 1998, Jung 2003, and

---

\(^{38}\) This principles come from VP-internal subject hypothesis (e.g., Kitagawa 1986, Koopman & Sportiche 1991), Burzio’s generalization (e.g., Burzio 1986), and Split VP-hypothesis (e.g., Larson 1988).
Hallman 2004, 2006) and they emphasize that the LV in an LVC is equivalent to little v. For instance, Diesing (1998) claims that the base-position of the LV in Yiddish LVCs is restricted to the upper head (i.e., v) and does not overlap that of the lexical verb (i.e., V) as illustrated in (4.6).

(4.6)

Thus, my task is to investigate whether or not the LV in Korean is included in the category of little v as is the LV in Yiddish and English. In order to advance this investigation, as a first step, I review the properties of little v as discussed in previous studies (Chomsky 1995, Harley 1998, Arad 1999, Ebmick & Noyer 2001, etc.) in the next sub-section.

4.2.2 On Little v

Since Chomsky (1995) outlined the roles of little v, many researchers have manipulated the concept of little v and described several of its properties (Kratzer 1996, Marantz 1997, Diesing (1998) used the term LV instead of little v but they are identical.
According to Arad (1999), the properties of little v can be summarized as in (4.7):

(4.7)  
   a. Little v as the transitivity head:  
      - External argument is licensed.  
      - Case feature of the internal argument such as [ACC] is checked.  
   b. Little v as the verbalizing head:  
      - The category of the root is determined by little v as the verb.  
   c. Little v comes in several flavors.

First, the property of little v as the transitivity head as in (4.7a) infers that little v has two jobs; (i) “introducing” an external argument and (ii) “checking” the case feature of the internal argument [ACC] when little v arises in a transitive verb construction (Chomsky 1995). Indeed, this property captures the well-known condition of the relation between the presence of the external argument and the case-checking of the internal argument (Burzio’s generalization 1986).

Second, the property of little v as the verbalizing head in (4.7b) reflects recent trends such as Distributive Morphology (hence after DM) (Halle & Marantz 1993, Pesetsky 1995, Marantz 1997, Arad 1999, and Embick & Noyer 2001). In terms of DM, the lexicon consists of two members such as a category-neutral root and the feature V or N. In the syntax, the root and the feature are unified together at the first “merge” and the category of the root is determined (e.g., “verb” or “noun”). In Arad (1993:3), “words are the output, rather than the input of the syntax, and are made of roots combined with features”. Thus, for the verbs and the nouns that are built by “conversion” in English as in (4.8), the
category of the root is determined by the features such as V or N. In particular, little $v$ is regarded as the feature V as in (4.8a).

$$
\begin{array}{c}
\text{(4.8)} \\
\text{a. } /\text{file/ (V)} & \text{b. } /\text{file/ (N)} \\
\begin{array}{c}
\begin{array}{c}
\begin{array}{c}
v \quad \sqrt{\text{file}} \\
\end{array}
\end{array}
\end{array}
\begin{array}{c}
\begin{array}{c}
\begin{array}{c}
n \quad \sqrt{\text{file}} \\
\end{array}
\end{array}
\end{array}
\end{array}

\text{Little } v \rightarrow
\end{array}
$$

(Arad 1999:3)

Third, according to Harley (1998) and Folli, Harley & Karimi (2003), when little $v$ works as a verbalizing head, it comes in several “flavors” such as $v_{\text{BECOME}}$, $v_{\text{CAUSE}}$, etc. This property of little $v$ effectively accounts for why a verb form can be used as various types in English (cf. polysemy) because as in (4.9), the category-neutral root $\sqrt{\text{open}}$ can merge with the different flavors of little $v$ such as $v_{\text{BECOME}}$ and $v_{\text{CAUSE}}$.

$$
\begin{array}{c}
\text{(4.9)} \\
\text{a. Inchoative:} \\
\text{The door opened.} \\
\sqrt{\text{open}} + v_{\text{BECOME}} = \text{“The door became open.”} \\
\text{b. Transitive:} \\
\text{John opened the door.} \\
\sqrt{\text{open}} + v_{\text{CAUSE}} = \text{“John caused the door open.”} \\
\end{array}
$$

(Folli, Harley & Karimi 2003:2)

As can be seen above, the properties of little $v$ in (4.7) are significant because they delimit the category of little $v$. Thus, if LVs in Korean LVCs correspond with the properties of little $v$ in (4.7), there is no problem in concluding that all LVs are included in the category of little $v$. In this sub-section, I will inspect how the properties of little $v$ in (4.7) are embodied in each LV of Korean (i.e., $ha$ ‘do’, $ha$ ‘be’, and $toy$ ‘become’). This inspection reveals that
in fact, not all LVs in Korean show these properties of little v.

4.2.3 The Properties of Little v in Korean LVs

First, let’s examine how the property of little v as a transitivity head is realized in LVs in Korean. As mentioned before, this property of little v implies two jobs: (i) “introducing” an external argument and (ii) “checking” the case feature of the internal argument [ACC]. Among these two jobs, particularly, I focus on the second job because it is related to the characteristics of the LV in Korean. In Korean, when the case feature of the internal argument [ACC] is checked at [Spec, vP], the internal argument is obligatorily affixed with the accusative case particle -ullul. Thus, once an NP is marked with an accusative case particle in the LVCs, this implies that (i) little v is present in the structure and (ii) the case feature [ACC] of the argument is checked. In Korean LVCs, the affixation of an accusative case particle is found in the following two situations: (i) when the LVC behaves like a transitive verb, the direct object is marked with an accusative case particle or (ii) the complement of the LV ha ‘do’ can optionally be marked with an accusative case particle. Thus, in this case, little v may appear in the structure. Consider the examples of these two situations in (4.10).

(4.10)  a. epwu-ka kolay-lul [LVC palkyen-(ul) ha]-ess-ta
       fisherman-NOM whale-ACC discovery-(ACC) do-PAST-DEC
       ‘The fisherman discovered the whale.’

       b. Mary-ka [LVC wundong-(ul) ha]-ess-ta
          M-NOM exercise-(ACC) do-PAST-DEC
In (4.10a), the LVC *palkyen-*ha ‘discovery-do’ acts like a transitive verb in the clause. Hence, the NP *kolay* ‘whale’ as the direct object can be marked with the accusative case particle -lul. This evidence allows us to presume that (i) little *v* is present in the structure and (ii) the case feature of the direct object [ACC] is checked at [Spec, vP]. In addition, in Korean LVCs as in (4.10), regardless of the predicate type of the LVC (i.e., a transitive verb in (4.10a) or an intransitive verb in (4.10b)), the nominal complement of the LV can optionally be marked with an accusative case particle (e.g., *palkyen-ul* ‘discovery-ACC’ in (4.10a) and *wundong-ul* ‘exercise-ACC’ in (4.10b)). This suggests that (i) little *v* appears in the structure and (ii) the case feature of the nominal complement [ACC] is checked at [Spec, vP]. In both examples, the LV *ha* ‘do’ is present. Thus, it is possible to say that the LV *ha* ‘do’ as little *v* is linked to the property of little *v* as the transitive head.

However, in Korean LVCs, not all complements can be marked with an accusative case particle. Unlike the LV *ha* ‘do’, when the nominal complement forms an LVC with the LV *ha* ‘be’ or *toy* ‘become’, this complement is never marked with an accusative case particle as shown in (4.11).

(4.11) a. *Tom*-i [LVC *sengsil-*ul ha]-ess-ta
    Tom-NOM sincere-*ACC be-PAST-DEC
    ‘Tom was sincere.’

    b. *cencayng*-i [LVC *congsik-*ul toy]-ess-ta
    war-NOM essation-*ACC toy-PAST-DEC

---

40 Since the double accusative constraint does not exist in Korean, when both the direct object and the complement in LVC are marked with accusative case particles as in (4.10a), the sentence is still grammatical. According to Saito & Hoshi (2000), the double accusative constraint is valid in Japanese but in LVCs, this constraint is no longer effective.
In (4.11), both LVCs *sengsil-ha* ‘sincere-be’ and *congsik-toy* ‘cessation-become’ are not transitive verbs. Therefore, the arguments *Tom* and *cencaymg ‘war’ are not direct objects and so they cannot be marked with accusative case particles. In addition, unlike the LV *ha* ‘do’, the complements of these LVs cannot be marked with an accusative case particle as in (4.11). This implies that the LV *ha* ‘be’ and *toy ‘become’ are not associated with the second property of little *v* in Korean LVCs. To sum up, not all LVs in Korean show the properties of little *v* as a transitive head.

Next, let’s inspect how the property of little *v* as the verbalizing head is related to LVs in Korean. This property of little *v* is founded on the following proposals: (i) little *v* has the feature V and (ii) little *v* merges with a category-neutral root and it builds a verb. In previous studies (e.g., Jung 2003), it is proposed that LVs in Korean are included in the category of little *v* and contain the feature V. However, as mentioned in Chapters 2 and 3, LVs in Korean LVCs cannot be treated as having the feature V in the lexical verb. In this chapter, I intend to add another reason why the LV cannot be treated as having the feature V in Korean. In terms of the proposal that the property of little *v* is a verbalizing head, the complement of the feature V must be the category-neutral root rather than a phrase. However, it is not always true in Korean or even in English.

Consider English LVCs first. Pursuing the property of little *v* as the verbalizing head, a lexical verb should be decomposed into a root and a feature V. For instance, the lexical verb *claim* in English is understood as being built by the conjoining of a category-neutral root (i.e., √*claim*) and the feature V (i.e., ∅) as in (4.12a). As shown in Chapter 1, in
English, the lexical verb (e.g., *to claim*) often has its counterpart LVC (e.g., *make a claim*). This LVC is also assumed to be formed by the merge of a category-neutral root (e.g., √claim) and the feature V (i.e., LV). Thus, the LVC *make a claim* can be expressed as in (4.12b).

(4.12)  

<table>
<thead>
<tr>
<th>a. Lexical verb: claim</th>
<th>b. LVC: make a claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>v</td>
<td>v</td>
</tr>
<tr>
<td>∅</td>
<td>make (LV)</td>
</tr>
<tr>
<td>√claim</td>
<td>√claim</td>
</tr>
</tbody>
</table>

In this proposal, the difference between the lexical verb in (4.12a) and its counterpart LVC in (4.12b) is the presence of a covert or an overt little v. At first glance, the LVC and the lexical verb seem well described in (4.12). However, the structure in (4.12b) is not correct because the particle *a* in the LVC is missing. A relevant characteristic of the LVC explained in Chapter 1 is that all complements of LVs are semantically, syntactically, and morphologically restricted to a specific form cross-linguistically. In the LVC *make a claim* in (4.12b), the nominal complement is always marked with the particle *a*. In addition, the particle *a* (i.e., D) lets us know that the complement of the LV in (4.12b) is an NP/DP rather than a root. Thus, the structure in (4.12b) should be modified as in (4.13).
In (4.13), the LV *make* does not take a root as its complement, therefore it does have the property of little *v* as a verbalizing head. Similarly, in Korean LVCs, not all LVs can take a root as their complements. Regarding the characteristics of Korean LVCs in Chapter 1, the LV *ha* ‘do’ takes an XP complement while the LV *ha* ‘be’ or *toy* ‘become’ take an $X^0$ complement (i.e., a noun). Thus, it is supposed that the property of little *v* as a verbalizing head is meaningful when the LVC is formed by the LV *ha* ‘be’ or *toy* ‘become’ but it is not valid when the LVC is formed by the LV *ha* ‘do’.

Finally, let’s deliberate on how the third property of little *v* in Korean LVCs: little *v* comes in several flavors is realized in LVs in Korean. Once we assume that the LV in Korean as little *v* shows this property as does Jung (2003), this property offers an answer to the following question: Why do various LVs exist in Korean (i.e., *ha* ‘do’, *ha* ‘be’ and *toy*

---

41 Recently, Marantz (2006) clarifies the first merge and the derivational morphology. In Marantz (2006:5), “Inner morphology attaches to roots or complex constituents below the first little x ($x=\{v,n,a\}$) node above the root. All morphology above the first x node is Outer morphology including all “category change” derivational morphology”
‘become’)? The answer is that each LV corresponds with a different flavor of little \( v \). Consider (4.14).

\[
\begin{align*}
(4.14) & \quad a. \text{mwulka-ka} & [\text{LVC}sangsung-ha/toy]-\text{ess}-\text{ta} \\
& & \text{living.cost-NOM} \quad \text{ascent-be /become-PAST-DEC} \\
& & \text{‘The cost of living increased.’} \\
& b. \text{sangsung-ha} = [\sqrt{sangsung}+v_{\text{BE}}] \\
& \text{sangsung-toy} = [\sqrt{sangsung}+v_{\text{BECOME}}]
\end{align*}
\]

According to Jung (2003), in (4.14), a nominal complement \textit{sangsung} ‘ascent’ can join with the two different LVs \textit{ha} ‘be’ and \textit{toy} ‘become’, because each LV as a little \( v \) indicates its flavor. For instance, little \( v_{\text{BE}} \) is realized as the LV \textit{ha} ‘be’ and little \( v_{\text{BECOME}} \) yields the LV \textit{toy} ‘become’.

However, Jung’s proposal (2003) is challenged for several reasons. First, if Jung’s proposal (2003) is right, as discussed in Chapter 3, we have to propose two different forms of little \( v \) such as a covert form for a lexical verb and an overt form for an LVC (i.e., LV) depending on the flavor. Consider (4.15).

\[
\begin{align*}
(4.15) & \quad a. \text{Lexical verb: } \textit{chi} \text- ‘to hit’ \Rightarrow \sqrt{\text{chi}}+v_{\text{DO}}: \\
& \quad \text{haksayng-i} \quad \text{namwu-lul} \quad \text{chi-*ha/Ø-ess}-\text{ta} \\
& \quad \text{student-NOM} \quad \text{tree-ACC} \quad \text{hit-*do/Ø-PAST-DEC} \\
& \quad \text{‘The student hit the tree.’} \\
& b. \text{LVC: } \textit{kongkyek-ha} \text- ‘to attack’ \Rightarrow \sqrt{\text{kongkyek}}+v_{\text{DO}}: \\
& \quad \text{akwun-i} \quad \text{cekwun-ul} \quad [\text{LVC } \textit{kongkyek} \quad \text{ha/*Ø}-\text{ess}-\text{ta} \\
& \quad \text{our soldier-NOM} \quad \text{enemy-ACC} \quad \text{attack} \quad \text{do/*Ø-PAST-DEC} \\
& \quad \text{‘Our soldiers attacked the enemy.’}
\end{align*}
\]

In (4.15), both roots \( \sqrt{\text{chi}} \text- ‘hit’ \) and \( \sqrt{\text{kongkyek}} \text- ‘attack’ \) should be merged with the same
flavor of little $v$ (i.e., $v_{DO}$) because (i) they each produce a transitive verb in a clause and (ii) they entail the event Activity in Korean. In the surface structure, little $v_{DO}$ should be realized as different forms: the covert form in the lexical verb (4.15a) and the overt form in the LVC as in (4.15b). Moreover, in Korean, the presence of a covert or overt little $v$ is not in free variation but is conditioned. Thus, in order for Jung’s proposal (2003) to be effective, the following question must be answered: What motivates the occurrence of an overt and a covert form of little $v$ in Korean? There is not yet a good answer to this question.

Second, it is also unclear what is the decisive factor in choosing the correct flavor among the many flavors of little $v$ in Korean. According to Jung (2003), the answer is that the semantic information of the root may be involved in selecting the correct one. Consider (4.16).

$$\text{(4.16)} \quad \text{toy-} : v_{\text{BECOME}}$$

\begin{align*}
\text{a. } & \text{tali-ka } [\text{LVC phakoy } \text{toy/ha}]-\text{ess-ta.} \\
& \text{bridge-NOM } \text{destruction } \text{become/do-PAST-DEC} \\
& \text{‘The bridge was destroyed’}
\end{align*}

\begin{align*}
\text{b. } & \text{akwun-i } [\text{LVC kolip } \text{toy/ha}]-\text{ess-ta.} \\
& \text{our soldier-NOM } \text{isolation } \text{become/do-PAST-DEC} \\
& \text{‘Our soldiers were isolated.’}
\end{align*}

According to Jung’s study (2003), in (4.16), the main reason that the two different roots √phakoy ‘destruction’ and √kolip ‘isolation’ select a little $v_{\text{BECOME}}$ (i.e., toy ‘become’) is because their semantic information are equally related to the event Achievement. Now, consider (4.17).
(4.17) \( ha:\text{-} v_{DO} \)

\[
\begin{align*}
a. & \quad \text{cekkwun-i} \quad \text{tali-lul} \quad [\text{LVC } \text{phakoy} \quad \text{ha}]-\text{ess-ta}.
& \quad \text{enemy-NOM} \quad \text{bridge-ACC} \quad \text{destruction} \quad \text{do-PAST-DEC}
& \quad \text{‘The enemy caused the bridge to be destroyed.’}
\end{align*}
\]

\[
\begin{align*}
b. & \quad \text{*cekkwun-i} \quad \text{akwun-ul} \quad [\text{LVC } \text{kolip} \quad \text{ha}]-\text{ess-ta}.
& \quad \text{enemy-NOM} \quad \text{our soldier-ACC} \quad \text{isolation} \quad \text{*do-PAST-DEC}
& \quad \text{‘The enemy caused our soldiers to be isolated.’}
\end{align*}
\]

Based on (4.16), we expect that the roots \( \sqrt{\text{phakoy}} \) ‘destruction’ and \( \sqrt{\text{kolip}} \) ‘isolation’ would show the same pattern when selecting the flavored little \( v \). However, in (4.17a), the root \( \sqrt{\text{phakoy}} \) ‘destruction’ can merged with little \( v_{DO} \) but the root \( \sqrt{\text{kolip}} \) ‘isolation’ cannot\(^{42}\).

Here, we can see a systematic gap. Thus, Jung’s proposal (2003) is not sufficient to explain the discrepancy between (4.17a) and (4.17b). As a result, I disagree with Jung’s proposal (2003) that the existence of various LVs in Korean results from the property of little \( v \).

### 4.2.4 New proposal

We found from the discussion in Section 4.2.3, that not all properties of little \( v \) are equally observed in Korean LVs. Thus, it is difficult to say that LVs in Korean simply fall into the category little \( v \) in the Minimalist Program (i.e., Chomsky 1995 and Diesing 1998). In this

\(^{42}\) As mentioned in Chapter 3, the event noun \( \text{phakoy} \) ‘destruction’ as a Type 6 LVC creates an LVC that is a complex event construction (i.e., Accomplishment). Thus, the LV \( \text{ha} \) and the verb \( \text{sikhi} \) ‘to let/make’ are both acceptable. The event noun \( \text{kolip} \) ‘isolation’ behaves similarly to the event noun \( \text{phakoy} \) ‘destruction’. Thus, it can join with the verb \( \text{sikhi} \) ‘to let/make’. However, it cannot co-occur with the LV \( \text{ha} \) ‘do’.

\( (e.g.) \)

\[
\begin{align*}
a. & \quad \text{cekkwun-i} \quad \text{tali-lul} \quad \text{pahkoy-sikhi-ess-ta}.
& \quad \text{enemy-NOM} \quad \text{bridge-ACC} \quad \text{destruction-make-PAST-DEC}
& \quad \text{‘The enemy caused the bridge to be destroyed.’}
\end{align*}
\]

\[
\begin{align*}
b. & \quad \text{cekkwun-i} \quad \text{akwun-ul} \quad \text{kolip-sikhi-ess-ta}.
& \quad \text{enemy-NOM} \quad \text{our soldier-ACC} \quad \text{isolation-make-PAST-DEC}
& \quad \text{‘The enemy caused our soldiers to be isolated.’}
\end{align*}
\]
sub-section, I present my proposal about a new relationship between LVs in Korean and little \( v \). First, I summarize the relationship between the properties of little \( v \) and LVs in Korean which I revealed in the previous sub-section as (4.18).

(4.18) **the properties of little \( v \) and LVs in Korean:**

<table>
<thead>
<tr>
<th>Property</th>
<th>LV</th>
<th>ha ‘do’</th>
<th>ha ‘be’ or toy ‘become’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitivity head</td>
<td>OK: Checking [ACC]</td>
<td>Not-OK: Checking [ACC]</td>
<td></td>
</tr>
<tr>
<td>Verbalizing head</td>
<td>Not OK (taking an XP complement)</td>
<td>OK (taking an X(^0) complement)</td>
<td></td>
</tr>
<tr>
<td>Flavors of little ( v )</td>
<td>Not OK (Various LVs do not result from the flavors of little ( v ).)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In (4.18), the property of little \( v \) as a transitivity head is exclusively found when an LVC is formed by the LV \( ha \) while the property of little \( v \) as a verbalizing head is only satisfied when an LVC is built by the LV \( ha \) ‘be’ or toy ‘become’ in Korean. As a result, each LV in Korean does not preserve all the properties of little \( v \).

In this thesis, in order to clarify the relationship between little \( v \) and LVs in Korean, I set up two major premises: (i) the presence of little \( v \) and the presence of LVs are not directly related to each other and (ii) little \( v \) is meaningful as a syntactic head when describing the upper head in the split VP construction while the LV as a lexical item works to convert a nominal to a verb in Korean. Thus, there is no reason for the base-position of an LV to be restricted under the head of \( vP \). Based on these premises, I propose several things about little \( v \) and LVs in Korean: (i) LVs in Korean are generated at various places such as the lower head or the upper head in split VP constructions, (ii) little \( v \) is the upper head in a split VP construction, and (iii) little \( v \) is phonologically null (i.e., \( \emptyset \)) if the LV is
not generated under the head of vP.

In order to evaluate my proposal, in the next chapter, I adopt the idea of a split vP construction and illustrate the base-positions of the LV and the complement which support my proposal.

4.3 Split vP Construction

4.3.1 Two Functional Projections in vP

Chomsky (2001) and Bowers (2002, 2003) propose that little v is accomplished by the unification of two different functions which are present as functional projections in the surface structure. Thus, vP can be split into two functional projections and each of them may appear for two different purposes: (i) “introducing” the external argument (i.e., subject) and (ii) “checking” the case feature [ACC] of the internal argument. In this thesis, I pursue Bowers’s work (2002, 2003) and try to find how vP can split into two different projections.

According to Bowers (2002, 2003), little v should be split into two projections. Each projection is independent of the other and so the presence of each projection is due to its own purpose. First, the projection that functions to introduce the external argument (i.e., subject) is called the “Predicate Projection” (i.e., PrP). In Bowers (2003), the PrP necessarily appears between the IP and VP and the existence of the PrP can be observed in “small clause constructions” in English. Consider (4.19).
(4.19)  
\begin{enumerate}
\item Mary saw \text{[NP John] [VP eat a sandwich]}. 
\item That made \text{[NP Bill] [AP very angry]}. 
\item I consider \text{[NP Fred] [NP a good fellow]}. 
\item We have \text{[NP someone] [PP in the living room]}. 
\end{enumerate}

(Bowers 2003:300)

In (4.19), the NPs in the first set of brackets and the phrases in the second set of brackets form a predicative relation. For instance, in (4.19b), the NP \text{Bill} works as the subject and the AP \text{very angry} plays the role of predicate. According to Bowers (2003), this predicative relation in the small clause construction is accomplished differently from that of the main clause. In the main clause, the TP (i.e., tense phrase) confirms the predicative relation between a subject and a predicate. However, in a small clause construction like (4.19), there is no TP between the NP subject and the following phrases. Nonetheless, the NP subject and the following phrases are in a predicative relation and so Bowers (2003) believes that another factor confirms the predicative relation between them instead of TP. Under the small clause hypothesis, the adjacency between the NP and the following phrase is widely regarded as the key factor that authorizes the predicative relation. However, upon considering the counterexamples against the small clause hypothesis, Bowers (2003) insists that adjacency is not effective in achieving the predicative relation between the NP and the following phrase. A counterexample is presented in (4.20).

(4.20) \quad \text{Fred painted [NP the model] [AP nude]}. 
\begin{enumerate}
\item the model is nude 
\item Fred is nude 
\end{enumerate}

(Bowers 2003:300)
In terms of the interpretation in (4.20a), the AP *nude* works as the predicate of the NP *the model*. So far, the small clause hypothesis is valid because the NP and the AP are adjacent to each other as in (4.20a). However, according to Bowers (2003), in the same construction, the AP *nude* can be understood as the predicate of the NP *Fred* as in (4.20b). In (4.20b), the NP *Fred* is not adjacent to the AP *nude*. Thus, under the small clause hypothesis, the predicative relation between the NP *Fred* and the AP *nude* is unexplained because they are not adjacent.

In order to elucidate the counterexample in (4.20b), Bowers (2003) proposes the following: (i) the PrP is located between the subject and the predicate (ii) the PrP is present all the time in a small clause and in a main clause and (iii) the PrP provides the predicative relation between the subject and the predicate. He comments that “(the functional category of) I is split up into two separate categories “T” and “Pr”…The category of T represents the deictic function of I (i.e., inflection), while Pr represents its predicational function.” (Bowers 2003:302). Thus, according to Bowers (2003), the predicative relation in small clause constructions can be described as follows:
In (4.21), without the presence of TP, the PrP confirms the predicative relation between the NP John and other phrases such as an AP/ NP/ PP in the small clause construction. Consequently, [Spec, PrP] is understood to be the position for the subject and the complement of Pr is always read as the predicate. Adopting Bowers’s assumption, the interpretation in (4.20b) is easily explained. In (4.20a), the NP model is the subject of the AP nude. However, in (4.20b), the NP Fred is the subject of this AP and they form a predicative relation. Following Bowers’s assumption (2003), the subject NP is generated at [Spec, PrP]. According to Bowers (2003), both the NP model and the NP Fred may be originally generated at [Spec, PrP]. Unlike the NP model, the NP Fred moves to another [Spec, PrP] that is the subject position of the verb painted. As a result, without the adjacent condition of the small clause hypothesis, all examples in (4.20) can be explained by Bowers’s proposal (2003). In this thesis, I adopt the idea of this functional projection (i.e., PrP).

As well as a PrP, Bowers (2002) proposes another functional projection between
PrP and VP, which checks the case feature [ACC]. He calls this projection the “Transitive Projection” (i.e., TrP). He claims that “Tr may contain a probe with (object) φ-features and assign accusative Case. In contrast to Pr, Tr does not assign a 0-role in its specifier position. Hence, the functions of the traditional light verb category “v” are split between Pr and Tr” (Bowers 2002:186). Consider the following Russian example from Bowers (2002):

(4.22)  

(4.22)  

a. Sestru tošnilo ot ryby.

Sister-FEM.ACC nauseated-3P.SG.NEUT from fish-GEN

‘This fish made (my) sister feel nauseous.’

b. [TP T [PrP it] Pr [TrP Tr [VP sestru [v- tošnilo [PP ot ryby]]]]]

NOM ACC

(Bowers 2002: 187)

In (4.22a), the NP sestru ‘sister’ seems to be the subject in the sentence but unlike other normal NP subjects, this NP is marked with an accusative case particle rather than a nominative case particle. Why? According to Bowers (2002), underlingly, the NP sestru ‘sister’ is the direct object of the verb and contains the case feature [ACC]. The reason the NP sestru ‘sister’ is marked with the accusative case particle superficially is easily explained by the existence of TrP. According to Bowers (2002), in a structure as in (4.22b), the case feature of the NP sestru ‘sister’ [ACC] is checked at [Spec, TrP] and then, a silent expletive is generated under [Spec, PrP]. Therefore, in the surface structure, the NP sestru ‘sister’ is only marked with an accusative case particle. This Russian example implies that TrP is real in Russian and may exist between PrP and VP. I adopt the idea of this functional projection (i.e., TrP) as well as PrP.
Considering Bowers’s assumptions (2002, 2003), little \( v \) can be split into two functional projections such as PrP and TrP. Thus, \( vP \) can be re-articulated as in (4.23).

(4.23)

\[
\text{IP} \quad \text{I'} \quad \text{[NOM]} \quad \text{I}^0 \quad \text{PrP} \quad \text{Pr'} \quad \text{Pr}^0 \quad \text{TrP} \quad \text{Tr'} \quad \text{Tr}^0 \quad \text{VP} \quad \text{V}^0
\]

Following Bowers’s proposal in (4.23), a PrP is mandatorily present in a clause, because it always confirms the predicative relation between the subject and the predicate in a clause. On the other hand, TrP may be optionally present whenever it is needed in a clause because checking the case [ACC] is optional. Thus, various predicate types in Korean can be appropriately expressed. For instance, intransitive verbs in Korean (e.g., \( ca- \) ‘to sleep’) are assumed to occur under the head of VP and this VP becomes the complement of \( Pr^0 \) without TrP as in (4.24a). In addition, adjectives (e.g., \( eppu- \) ‘pretty’) may be placed at the head of AP and also become the complements of \( Pr^0 \) as in (4.24b).
In addition, I believe that Bowers’s assumption in (4.23) helps us find the base-positions of various LVs and their complements in Korean.

4.3.2 Base-Positions of LVs in Split vP Construction

After adopting the split vP construction from Bowers (2002, 2003), it is necessary to re-establish the base-position of LVs. Here, I assume that cross-linguistically, the LV can be
generated under different heads such as Pr\(^0\), Tr\(^0\) or even V\(^0\). For instance, the base-position of the LV *do* in English seems to be generated at Pr\(^0\) rather than Tr\(^0\) or V\(^0\). According to Stroik (2001) and Hallman (2004), in English, there are two *dos*, which syntactically crop up at two different spots such that one occupies the head of TP and the other engages with the head of vP\(^{43}\). The distinction between these two *dos* can be observed in (4.25).

\[(4.25)\]
\[\begin{align*}
\text{a. Max studied French and Mary did so, too.} \\
\text{b. Max studied French and Mary did, too.}
\end{align*}\]

“…*do in do so* is an overt reflex of a functional head…the head that Kratzer (1996) calls *voice* and Chomsky (1995) calls little v… the difference between *do in do so* and the English ‘dummy auxiliary *do’’”

(Hallman 2004: 101-102)

At the first glance, the bold-faced *did* in (4.25a) and (4.25b) seem to be used as the same purpose in a clause because both of them are replaced by the phrase *studied French* such as [TP [vP *study French*-ed]]. Nevertheless, Hallman (2004) insists that the *dids* in (4.25) are different. Firstly, Hallman (2004: 102) addresses the usage of the dummy auxiliary *do* as follows: “the dummy auxiliary *do* in English is inserted whenever affix hopping is blocked, namely in questions, constructions with *not*, and constructions where the VP has been deleted, stranding tense”. Thus, the dummy auxiliary *do* stands for the TP instead of the VP or the vP. In (4.26), the bold-faced *dids* are indications of the dummy auxiliary *do*.

\[(4.26)\]
\[\begin{align*}
\text{a. Did Max study French? [Interrogative]} \\
\text{b. Max did not study French. [Negation]}
\end{align*}\]

\(^{43}\) Stroik (2001) and Hallman (2004) do not adopt the split vP construction and so they use the term vP. Thus, I follow their ideas and I do not use the term PrP or TrP before I present my own proposals.
However, under the same conditions as in (4.26), according to Hallman (2004), the LV do in the do-so construction behaves differently as in (4.27). In particular, without so, the bold-faced do cannot stand alone as in (4.27c) and (4.27d) and hence, do in the do-so construction obligatorily takes so as its complement.

What does so in the do-so construction mean? Hallman (2004) assumes that so in the do-so construction is the complement of the LV do and it can stand for the VP. As evidence, he displays the behaviours of the do-so construction in the pseudo-cleft construction as in (4.28).

In contrast to (4.28a), when so appears in a clause as in (4.28b), the clause is ungrammatical because the operator what and the VP [study French] play the same role as so in the do-so construction and they are qualified to become the complement of the LV do in English. According to Hallman (2004), all these complements of the LV do contain the
feature [+eventive]. Consider (4.29).

\[
\begin{array}{c}
\text{vP} \\
\mid \\
\text{v'} \\
\text{v} \\
\text{XP} \\
\text{do} \\
\{\text{what, so, study French}\} \leftarrow [+\text{eventive}]
\end{array}
\]

(Hallman 2004:3)

Now, let’s try to find the base-position of the LV do in English in the split vP construction (i.e., Pr\textsuperscript{0} or Tr\textsuperscript{0}). Considering the VP complement [\text{VP study French}], two assumptions may be possible: (i) the LV do is generated under Pr\textsuperscript{0} and it takes TrP as its complement and (ii) the LV do is generated under Tr\textsuperscript{0} and it is involved in the case checking of the direct object French. However, within the two potential assumptions, the first one seems to be correct considering the examples in (4.30).

(4.30)  
\begin{enumerate}
\item a. What Max didn’t do was sleep.
\item b. *What Max didn’t do so was sleep.
\end{enumerate}

In (4.30), the VP complement [\text{VP sleep}] may be equivalent with the operator what or so in the do-so construction. Thus, this VP can work as the complement of the LV do in English. However, unlike the VP complement [\text{VP study English}] in (4.29), the VP complement [\text{VP sleep}] in (4.30) is the intransitive verb construction. Thus, TrP is not necessary in (4.30) because case checking never happens here. First, let’s check the initial hypothesis that the LV do is generated under Tr\textsuperscript{0}. If adopting the initial assumption, the LVCs in English such as [LVC do study English] and [LVC do sleep] may be expressed as in (4.31).
In this assumption, the structure in (4.31a) may be acceptable because it is expected that after the main verb study moves to the head of TrP the case feature of the direct object [ACC] is then checked at [Spec, TrP]. However, the structure in (4.31b) may not be acceptable because the case checking [ACC] does not happen at [Spec, TrP].

Next, I test the second assumption that the LV do is generated under Pr$^0$. If we assume that the base-position of the LV do in English is Pr$^0$, the two LVCs in English can be expressed as follows:

As mentioned before, PrP can optionally take TrP as its complement whenever it is necessary to in a clause. Thus, in (4.32a), a TrP occurs in order to check the case feature
[ACC] while in (4.32b), a TrP is not necessary and so does not appear in the structure. As a result, the two LVCs in English can be expressed without any conflict. Based on the observations in (4.31) and (4.32), we can claim that the LV *do* in English is generated under the head of PrP (i.e., Pr$^0$) rather than the head of TrP (i.e., Tr$^0$).

Now, inspect the base-positions of Korean LVs in terms of the split vP construction. If the LVs in Korean are generated under Tr$^0$ as the LV *do* does in English, Korean LVs are not able to take a VP complement or an AP complement. Consider (4.33).

(4.33) a. *John-i [LVC [vP thakca-lul chi]-ha]-ess-ta
  J-NOM table-ACC hit-do-PAST-DEC
  ‘John did hit the table.’

  b. *Mary-ka [LVC [AP eyppu]-ha]-ess-ta
  M-NOM pretty-be-PAST-DEC
  ‘Mary is pretty.’

In (4.33), this LV *ha* ‘do’ or *ha* ‘be’ cannot take the VP complement or the AP complement respectively. This means that unlike the LV *do* in English, the LV *ha* ‘do’ or *ha* ‘be’ is not generated under the head of PrP in Korean. Here, we learn that the base-position of the LV is not restricted to a single syntactic position cross-linguistically. Thus, I propose that the LVs are generated at various places such as Pr$^0$, Tr$^0$ and V$^0$.

4.3.3 Base-Positions of Korean LVs: Tr$^0$ or V$^0$

In this sub-section, I search for the base-positions of LVs in Korean with respect to the split vP construction. As mentioned above, in Korean the LV cannot appear under Pr$^0$ and thus,
the base-positions of Korean LVs may be limited to $\text{Tr}^0$ or $\text{V}^0$.

4.3.3.1 Base-Positions of LV ha ‘do/be’ in Korean

In Chapter 2, I showed that the LV ha should be classified as ha ‘do’ and ha ‘be’ with respect to the feature [+/-state]: the LV ha ‘do’ holds the feature [-state] while the LV ha ‘be’ is related to the feature [+state]. In addition, depending on the interpretation of the LV ha, the phrase level of the complement and the affixation of an accusative case particle on the complement are diverse. The characteristics of the LV ha ‘do’ and the LV ha ‘be’ are generalized as in (4.34).

(4.34) Characteristics of the LV ha ‘do/be’:

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>ha ‘be’</th>
<th>ha ‘do’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feature [+/-state]</td>
<td>[+state]</td>
<td>[-state]</td>
</tr>
<tr>
<td>Type of complement</td>
<td>$X^0$ complement (i.e., noun)</td>
<td>XP complement (i.e., bigger than noun)</td>
</tr>
<tr>
<td>Affixation of accusative case particle to complement</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

When considering the base-positions of the LV ha ‘do’ and the LV ha ‘be’ in Korean, there are two possibilities. First, the LV ha ‘do/be’ is generated under the same syntactic position (cf. Marantz 1996, Harley 1999, and Jung 2003). Second, the LV ha is generated at two different syntactic positions and the syntactic positions denote the feature [+state] and the feature [-state], respectively (cf. Borer 2005 and Ramchand 2008). The structures of these
two possibilities are as follows in (4.35):

(4.35)  a. 

LV

ha ‘do’ [-state] or ha ‘be’ [+state]

b. 

LV ha ‘be’ [+state]

LV ha ‘do’ [-state]

Of these two possibilities presented in (4.35), which one better depicts the base-positions of LVs in Korean? Both seem permissible but when considering other characteristics related to the complement of the LV ha ‘do/be’ in (4.34), the second one (i.e., 4.35b) is better.

When adopting the first possibilities as in (4.35a), we cannot help but think that the two different interpretations of the LV ha is the result of the flavors of little v. However, this supposition is challenged in terms of the characteristics of the complement in Korean. If we grant that the assumption in (4.35a) is correct, the type of the complement should be selected according to the feature [+/-state] of the LV (i.e., the flavors). That is, when the LV ha means ‘be’ (i.e., [+state]), it should always takes an X^0 complement while when the LV ha denotes ‘do’ (i.e., [-state]), the complement must be an XP. However, it is unclear how the feature [+/-state] can control the selection of the type of complement.

On the other hand, by adopting the second possibility as in (4.35b), we find the tools to explain why the type of the complement changes depending on the interpretation of ha. We assume that the LV ha ‘do’ and the LV ha ‘be’ are generated under two separate syntactic positions and then, a syntactic position denoting the feature [+state] takes an X^0 complement while the other syntactic position holding the feature [-state] takes an XP.
complement. Therefore, in this thesis, I adopt the second supposition as in (4.35b): the LV *ha* in Korean is generated at two different syntactic positions that are specified for the feature [+/-state]. After adopting the second supposition, we find that the LV *ha* ‘do’ and *ha* ‘be’ may be generated under two different syntactic positions. As mentioned before no LV in Korean can be generated under Pr⁰ (cf.4.33), Tr⁰ and V⁰ remain as the two possible positions.

The affixation of an accusative case particle on the complement in Korean LVCs can help us to figure out the base positions of the LV *ha* ‘do’ and the LV *ha* ‘be’ because this affixation is acceptable only when the complement forms an LVC with the LV *ha* ‘do’.

Following Bowers’s proposal (2003), the affixation of the accusative case particle on the complement in Korean LVCs implies that the complement of the LV *ha* ‘do’ moves from the position that is not in the domain of TrP to [Spec, TrP] and then the case feature [ACC] of the complement is checked. As a result, it is assumed that the complement of the LV *ha* ‘do’ is generated inside the VP and then it moves from its base-position to [Spec, TrP]. Based on this assumption, we can conjecture that the base-position of the LV *ha* ‘do’ is the head of VP. In this line of thinking, the base-position of the LV *ha* ‘be’ is assumed to be the head of TrP.

In fact, my assumption is supported by the so-called “Anti-locality hypothesis” in Abels (2003). According to Abels (2003), in the domain of the same projection, the complement cannot move to the specifier position because of “Anti-locality constraint”. Let’s look at the details of this constraint. Consider (4.36).
... movement is allowed only if there is a good reason for doing it – and the only thing that counts as a good reason is if you immediately establish a new feature satisfaction (or ‘checking’) relation... this categorically rules out movement of the complement of some head to the specifier of that very same head. The reason for this is that the Head-Complement Relations is the closest relation two things can be in in syntax. But if movement needs to give rise to some new feature satisfaction immediately, then there can never be any reason to move a phrase from the complement to the specifier position of the same head. This is really a corollary of Last Resort and some assumptions about what it means to ‘establish a feature satisfaction relation’, i.e. feature checking, but I call it the Anti-locality Constraints.

(ABELS 2003: 12)

Following the Anti-locality constraint in Abels (2003), the complement of the LV ha ‘do’ should be generated at a different projection from TrP because it should be able to move to [Spec, TrP]. Therefore, it is obvious that the head of the VP is the only place where the LV ha ‘do’ is generated. In addition, the Anti-locality constraint (Abels 2003) also explains why the complement of the LV ha ‘be’ cannot be marked with an accusative case particle. If we assume that the complement of the LV ha ‘be’ is generated in the domain of TrP, the complement cannot move to [Spec, TrP] as in (4.37) because of the Anti-locality constraint.

(4.37) a. Bang-i [LVE kKaykkus-*ul ha]-ess-ta.
Room-NOM cleanliness-*ACC be-PAST-DEC
‘The room was clean.’

b. Anti-locality constraint:

Now, it seems to be possible to describe the structure of Korean LVCs. Here, I modify Bowers’s proposal (2003). According to Bowers (2003), the presence of the TrP is optional. In this thesis, I claim that as well as a TrP, the presence of a VP is also optional in Korean. In particular, when the LV is generated under the head of TrP, it takes a nominal complement instead of a VP. Therefore, we can describe the structure of Korean LVCs when the LV ha is interpreted as ‘do’ in (4.38) and when the LV ha is read as ‘be’ as in (4.39).

(4.38) a. ha ‘do’:

\[
\begin{array}{c}
\text{Tom-i} \\
\text{T-NOM} \\
\text{study-(ACC)} \\
\text{do-PAST-DEC}
\end{array}
\]

‘Tom studied.’

b. TrP

\[
\begin{array}{c}
kongpwu-lul \\
\text{VP} \\
\text{XP}
\end{array}
\]

\[
\begin{array}{c}
\text{<kongpwu>} \\
\text{<ha ‘do’ [-state]>}
\end{array}
\]
4.3.3.2 Base-Position of LV *to* ‘become’

In this sub-section, I try to determine the base-position of the LV *to* ‘become’. As the base-positions of the LV *ha* ‘do’ and the LV *ha* ‘be’ are related to the feature [−/+ state], it is relevant to check the feature [−/+ state] of the LV *to* ‘become’ based on the criteria in Ahn (2001). The present progressive suffix -(nu)n- can be affixed to the LV *to* ‘become’ as in (4.40a). Thus, the LV *to* ‘become’ is assumed to be related to the feature [−state] as is the LV *ha* ‘do’. In the omission test of the complement in (4.40b), the complement of the LV *to* ‘become’ cannot to be omitted in the co-ordination construction. In this test, the LV *to* ‘become’ exhibits the feature [+state] as does the LV *ha* ‘be’.

(4.40)  a. *cencayng-i [LVC congsik toy]-n-ta  
War-NOM cessation become-PRES-DEC
   ‘The war is ending.’

b. *Ontalio hoswu-ka [LVC oyem toy]-ess-ko  
Ontario lake-NOM pollution become-PAST-and
“Lake Ontario is polluted and Lake Michigan, too”

Therefore, focusing on the data in (4.40), the LV \textit{toy} ‘become’ seems to have both the feature [-state] and the feature [+state] at the same time. This suggests that relying on the feature [+/state], does not allow us to depict the nature of the LV \textit{toy} ‘become’. If we consider the feature [+/eventive] together with the feature [+/state], we can describe all LVs with these features correctly: (i) the LV \textit{ha} ‘do’ may be related to the features [-state, +eventive], (ii) the LV \textit{ha} ‘be’ may indicate the features [+state, -eventive], and (iii) the LV \textit{toy} ‘become’ may contain the features [+state, +eventive]. However, we are still far away from figuring out the base-position of the LV \textit{toy} ‘become’.

Now, let’s consider the complement of the LV \textit{toy} ‘become’ in terms of the type and the affixation of an accusative case particle. The complement of the LV \textit{toy} ‘become’ has the same result as that of the LV \textit{ha} ‘be’. Thus, the LV \textit{toy} ‘become’ takes an X\textsuperscript{0} complement (i.e., an N\textsuperscript{0} complement) and its complement cannot be marked with an accusative case particle. As a result, except for the feature [+/eventive], the LV \textit{toy} ‘become’ and the LV \textit{ha} ‘be’ have something in common. Thus, I claim that the feature [-/+ state] affects the syntactic structure of the LVC while the feature [-/+ eventive] affects morphological suffixation. Consequently, the base-position of the LV \textit{toy} ‘become’ is the same as that of the LV \textit{ha} ‘be’ (i.e., Tr\textsuperscript{0}) and it is described in (4.41).

(4.41) a. \textit{toy} ‘become’:

\begin{verbatim}
  cencayng-i [LVC congsik \textit{toy}]-\textit{(n)}-\textit{ta}
  war-NOM cessation become-PRES-DEC
\end{verbatim}
The war is ending.

b.            PrP
  
  TrP
  
  X₀   Tr₀
  
  congsik   toy ‘become’ [+state]

4.3.4 Revised Structure of LVCs in Korean

Before moving to the next section, I summarize what we have learned about the base-position of the LVs in Korean in this section in (4.42).

(4.42)  Korean LVs in the syntactic structure:
  a. vP is split into two functional projections; PrP (i.e., introducing the external argument) and TrP (i.e., case-checking [ACC]).
  b. PrP is obligatory but TrP and VP are optionally present in the structure.
  c. LVs in Korean can be generated under Tr₀ or V₀.
     - When the LV is generated under Tr₀, this LV takes an X₀ complement and it is related to the feature [+state]. This LV shows the properties of little v.
     - When the LV is generated under V₀, this LV takes an XP complement and it is related to the feature [-state]. This LV does not show the properties of little v.
  d. Pr₀ takes various types of complements and Tr₀ can take a VP or N₀ as its complement.

Based on these generalizations in (4.42), the structures of LVCs in Korean are as follows:

(4.43)  a.  ᴽha ‘be’ or toy ‘become’;
  (i)   The LV is related to the feature [+state]
  (ii)  The LV is generated under Tr₀.
  (iii) The LV takes an X₀ complement (i.e., noun).
  (iv)  The LV shows the properties of little v.
b. *ha* ‘do’ and the complement with an accusative case particle:

(i) The LV is related to the feature [-state].
(ii) The LV is generated under V[^0].
(iii) The LV takes an XP complement.
(iv) Tr[^0] takes a VP complement.
(v) Tr[^0] checks the case feature of the internal argument of the LVC.
(vi) The LV does not show the properties of little v.

---

44 In the tree diagram, the angle brackets indicate the base-position of an item before it moves.
c. *ha* ‘do’ and the complement without an accusative case particle:

(i) The LV is related to the feature [-state].
(ii) The LV is generated under $V^0$.
(iii) The LV takes an XP complement.
(iv) TrP is not present in a clause.
(v) The LV does not show the properties of little $v$.

\[
\begin{array}{c}
\text{PrP} \\
\downarrow \text{Pr'} \\
\downarrow \text{VP} \\
\downarrow \text{Pr}^0 \\
\text{LVC} \\
\end{array}
\]

\[
\begin{array}{c}
\text{XP} \\
\downarrow \text{V}^0 \\
\text{LV} = V^0 \\
\end{array}
\]

4.4 Complements in Korean LVCs

In this section, I discuss how to form different types of complements in Korean LVCs such as an XP complement in the LVCs with the LV *ha* ‘do’ and an X$^0$ complement in the LVCs with the LV *ha* ‘be’ or *toy* ‘become’. Furthermore, I shed light on their base-positions.

4.4.1 Two Types of Complements of the LVs in Korean

4.4.1.1 Proposal

In Chapter 1 we found that in terms of the global characteristic of LVCs, not all nouns are
qualified to work as complements in LVCs. In Korean, regardless of the types of complements such as an XP complement or an $X^0$ complement, the complement should be an event noun as in (4.44a) and (4.44b). Thus, the non-event noun in (4.44c) cannot play the role of the complement.

(4.44)  

a. **XP complement:**

\[
\begin{align*}
\text{Tom-i} & \quad \text{tal-ul} & \quad [\text{LVC } \text{xp yenkwu-}(ul)] & \quad \text{ha]-ess-ta.} \\
\text{T-NOM} & \quad \text{moon-ACC} & \quad \text{research-(ACC)} & \quad \text{do-PAST-DEC} \\
\end{align*}
\]

‘Tom researched the moon.’

b. **$X^0$ complement:**

\[
\begin{align*}
\text{Bang-i} & \quad [\text{LVC } \text{x0 kKaykkus}] & \quad \text{ha]-ess-ta.} \\
\text{Room-NOM} & \quad \text{cleanliness} & \quad \text{be-PAST-DEC} \\
\end{align*}
\]

‘The room was clean.’

c. **Non-event noun complement:**

\[
\begin{align*}
*\text{Tom-i} & \quad [\text{LVC } \text{n chayk}] & \quad \text{ha]-ess-ta.} \\
\text{T-NOM} & \quad \text{book} & \quad \text{do/be-PAST-DEC} \\
\end{align*}
\]

We can assume that the non-event noun does not hold the feature “eventuality” while the event noun has the feature “eventuality” as in (4.45).

(4.45)  

a. Event noun: \quad [noun + eventuality] 

b. Non-event noun: \quad [noun]

In terms of the PDH in Levin & Rapaport (1998), the feature “eventuality” can be regarded as a conceptual category. Here, I assume that in an $X^0$ complement, the constant and the event form a lexical item, while in an XP complement, the constant and the event are realized as two separate lexical items as in (4.46).
In the next sub-section, I provide support for the proposal presented in (4.46).

4.4.1.2 The Relationship between the Lexicon and LCS

In Chapter 2, I assumed that the semantic and syntactic information of predicates is derived from the conceptual categories in the LCS, and the sources of the syntax (i.e., lexical item) come from the conceptual categories in the LCS. In Levin and Rappaport (1998), the specific template of a predicate is determined not only by the semantic meaning of the constant but also by the conceptual category “eventuality” such as State, Activity, Achievement, and Accomplishment. For instance, when the verb *dry* produces an inchoative construction, it is linked to the event Achievement. On the other hand, when the verb *dry* forms a causative construction, it is associated with the event Accomplishment. However, Levin & Rappaport (1998) assume that all categories in the template combine together and form a lexical item. Thus, the conceptual category “eventuality” is not realized as an independent lexical item as in (4.47).

(4.47)  

\[
\begin{align*}
\text{LCS} & \quad \text{Lexicon} \\
[y \ \text{BECOME} \ <\text{DRY}>] & \quad \rightarrow \quad \text{dry} \ (\text{inchoative}) \\
[[x \ \text{ACT}] \ \text{CAUSE} \ [y \ \text{BECOME} \ <\text{DRY}>]] & \quad \rightarrow \quad \text{dry} \ (\text{causative})
\end{align*}
\]
However, in Korean, the conceptual categories are realized as separate lexical items. For instance, as mentioned in Chapter 2, in Korean LVCs, the constant and the primitive predicate are realized as two separate lexical items. Here, I claim that the conceptual category “eventuality” can be realized as a single lexical item in some cases. Therefore, these conceptual categories in the template of the LCS form the lexical items three different ways in Korean as expressed in (4.48).

(4.48) From LCS to Lexicon:

<table>
<thead>
<tr>
<th>LCS</th>
<th>Lexicon</th>
<th>Verbal expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>constant, eventuality, primitive predicate</td>
<td>One lexical item: [constant+eventuality+primitive predicate]</td>
<td>Lexical verb</td>
</tr>
<tr>
<td></td>
<td>Two lexical items: [constant+eventuality][45]+[primitive predicate]</td>
<td>LVC with X⁰ complement</td>
</tr>
<tr>
<td></td>
<td>Three lexical items: [constant]+[eventuality]+[primitive predicate]</td>
<td>LVC with XP complement</td>
</tr>
</tbody>
</table>

Let’s look at the three cases case by case. In the first instance, all conceptual categories are assembled together and they are realized as a lexical item in the lexicon. This lexical item is a lexical verb or an adjective and in the surface structure, a primitive predicate (i.e., LV) cannot be overtly present (e.g., *top-*‘to help’, *top-ha* ‘to help-do’). In the second instance, the conceptual categories become two separate lexical items in the lexicon such that the constant and the event form an event noun and the primitive predicate is realized as the LV. In the surface structure, this event noun is regarded as an N⁰ complement and becomes the

[45] Here, for convenience, I continuously use the term “eventuality” but in fact, the event noun in this case always related to the feature [+state] and it is not linked to the event Activity.
complement of the LV ha ‘be’ or the LV toy ‘become’. In the final instance, all conceptual categories in the LCS are expressed as three different lexical items. Thus, the constant is realized as a noun, the event becomes a feature that is associated with the event Activity, and the primitive predicate is embodied as the LV. As a result, the feature “eventuality” also appears as a syntactic object as well as the constant and the LV in the surface structure. These three different ways of lexicalization in (4.48) are directly reflected in the surface structure and their surface structures are as follows:

(4.49) **Lexical verbs or Adjectives:**

a. *man* ‘to meet’: [constant +eventuality + primitive predicate]

```
meet Activity ACT
```


T-NOM M-ACC meet-PAST-DEC

‘Tom met Mary.’

c.

```
<Mary>
```

<man ‘to meet’>
(4.50) LVC ($N^0$ complement + LV):

a. oyem-toy ‘pollution-become’: [constant+eventuality]+[primitive predicate]

\[
\begin{array}{c|c|c}
\text{pollution} & \text{State} & \text{become} \\
\end{array}
\]

b. Ontalio hoswu-ka oyem-toy/*ha-ess-ta.
Ontario lake-NOM pollution-become/*be-PAST-DEC
‘Lake Ontario is polluted.’

c. 

(4.51) LVC (XP complement + LV):

a. wundong-ha ‘exercise-ha’: [constant]+[eventuality]+[primitive predicate]

\[
\begin{array}{c|c|c}
\text{exercise} & \text{Activity} & \text{ACT} \\
\end{array}
\]

b. Tom-i wundong-(ul) ha-ess-ta.
T-NOM exercise-(ACC) do-PAST-DEC
‘Tom exercised.’
As in (4.49), the lexical verb *man-* ‘to meet’ appears under $V^0$ in the surface structure. When the lexical verb is a transitive verb, it takes a DP as a complement. The example in (4.50) is a type of LVC. The LV appears under $Tr^0$ and takes an $X^0$ expression as its complement (i.e., a noun) in the surface structure. Finally, the example in (4.51) is another type of LVC in Korean. All lexical items occur under three different syntactic heads such as $N^0$, $X^0$, and $V^0$ in the surface structure. I assume that the LV is placed at the same position as the lexical verb but it takes an XP complement rather than an NP/DP complement. The lexical item (i.e., the feature) that is derived from the conceptual category “eventuality” is placed at the head of the XP. Based on my proposal in this sub-section, all verbal expressions including LVCs can be appropriately expressed as the surface structures. I will discuss the detail of this XP in the next sub-section.
4.4.2 On Event P

4.4.2.1 Proposal

In Korean, transitive verbs take DP complements as in (4.49) while the LVC in (4.51) does not take a DP complement. As mentioned in Chapter 1, unlike the normal transitive verb the LV *ha ‘do’* cannot assign any θ-role to its complement. Instead, as discussed in Chapter 2, the complement is not an argument of the LV but works as the modifier in Korean LVCs. So far, in order to distinguish the type of complement, I call the complement of the LV *ha ‘do’* an XP complement. From now on, I name this XP “EventP” (hence after EP). The EP complement consists of two lexical items which come from two conceptual categories such as constant and event. Thus, the XP in (4.51) can be replaced by an EP and we can summarize several characteristics of the EP as in (4.52). The goal of this sub-section is to verify that the EP is real in Korean and prove that my proposal is correct.

(4.52)
a. In Korean, when the conceptual category “eventuality” denotes Activity, it is realized as a lexical item in the lexicon.
b. The lexical item “Activity” is generated under the head of EP.
c. The head of EP takes an N⁰ complement and the EP becomes the complement of the LV ha ‘do’.
d. The head of EventP can produce its own argument.
e. The EP contains a nominal feature and a verbal feature together and its case can be optionally checked at [Spec, TrP].

4.4.2.2 First Point of Evidence in Favor of EventP

Nakajima’s study (2008) on Japanese verbal nouns (i.e., event nouns) provides a hint to diagnose the EP in Korean LVCs. In order to clarify the structure of LVCs in Japanese, he adopts the idea of DM: (i) a category-neutral root should merge with a feature such as N or V and (ii) the category of the root is determined by these features (cf. Pesetsky 1995, Kiparsky 1997). Thus, with respect to the initial view of DM, both the LVC and the event noun in Japanese are assumed to be derived from a root and the category of this root may be determined by the feature V (i.e., LV) or N as in (4.53).

\[
\begin{align*}
(4.53) & & a. V. \text{benkyoo}-suru ‘to study’ & & b. N. \text{benkyoo} ‘study’ \\
= LVC & & = \text{event noun} \\
\overset{V}{\text{\sqrt{benkyoo}}} & & \overset{n}{\text{\sqrt{benkyoo}}}

\text{suru ‘do’} & & \text{\emptyset}
\end{align*}
\]

However, Nakajima (2008) reports that sometimes, it is difficult to determine the category of the root in Japanese in terms of this initial aspect of DM. Consider (4.54).
According to Nakajima (2008), the bold-faced word *benkyoo* ‘study’ becomes a verb after it merges with the LV *shi-ta* ‘do-PAST fact’ in (4.54a). Thus, based on the proposal in (4.53a), it would be assumed that the root √*benkyoo* ‘study’ merges with the LV and then is categorized as a verb. However, in (4.54b), he points out that the category of the bold-faced word *dannen* ‘give.up’ is ambiguous because superficially, it is a noun (i.e., event noun) but in the clause, this noun acts like a verb without an LV. As a result, the behaviour of the event noun *dannen* ‘give.up’ in (4.54b) contradicts what is expected in the initial aspect of DM in (4.53). To account for this ambiguity, Nakajima (2008) adopts Kiparsky’s study.\(^{47}\)

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\(^{46}\) According to Nakajima (2008), this is typically observed in newspapers and magazines.

\(^{47}\) Here I summarize the background theory in Nakajima (2008) and how he develops the proposal. According to Nakajima (2008), Kiparsky (1997) assumes that in the zero-derivation between the noun and the verb in English, there are two different formations. He assumes that both the noun and the verb come from a category-neutral root but the root can be classified as “paddle” type denominal verbs and “tape” type denominal verbs.

(i) **“paddle” type denominal verbs**
   b. He hammered the nail with a rock.

(ii) **“tape” type denominal verbs**
   a. *She taped the picture to the wall with pushpins.
   b. *Jim buttoned up his pants with a zipper.

The ungrammaticality of “tape” type denominal verbs is that the verbs in the “paddle” type do not involve direct objects while the verbs in the “tape” types should mandatorily involve direct objects. Thus, Kiparsky (1997) proposes two different structures to account for the difference between these two types:
(1997) and modifies the initial aspect of DM. Nakajima (2008) assumes that LVCs and event nouns in Japanese are derived from roots similar to “tape” type denominal verbs in English and the derivation takes place twice when the root becomes an LVC as in (4.55a) and an event noun as in (4.55b).

\[(4.55) \begin{align*}
a. & \quad \sqrt{VN} \rightarrow [[[\sqrt{VN}]_N] \rightarrow [[[\sqrt{VN}]_N \text{ sur-} / \text{ha-}]_V]_N \quad \text{do (J/K)} \\
\text{b.} & \quad \sqrt{VN} \rightarrow [[[\sqrt{VN}]_V] \rightarrow [[[\sqrt{VN}]_V]_V]_N \\
\text{(Nakajima 2008:259)}
\end{align*}\]

As in (4.55), in the first derivation, the root derives to the noun or the verb by the affixation of the zero morpheme (i.e., \(\emptyset\)) and then the derived noun or verb further derives to the verb or the noun, respectively. For instance, the LVC in Japanese in (4.54a) is assumed to be produced by the two steps of the derivation as in (4.56).

(iii) The category of the verb and of the noun in “paddle” types:

\[
a. \quad \text{v} \quad \sqrt{\text{paddle}} \\
\text{b.} \quad \text{n} \quad \sqrt{\text{paddle}}
\]

(iv) The category of the verb and of the noun in “tape” types:

\[
a. \quad \text{n} \quad \sqrt{\text{tape}} \\
\text{b.} \quad \text{v} \quad \text{n}
\]

Nakajima (2008:262) claims that “the main difference between tape and paddle lies in the embedded structure in (iv.b) where V is formed from the already existing N…the semantic, phonological and categorical properties of roots are determined at once at the first derivation. It does not; however, preclude further alternations of the properties except for semantic interpretations.” Thus, “tape” type denominal verbs are first derived to nouns (iv.a) and then these derived nouns can further be derived to verbs as in (iv.b). Nakajima (2008) assumes that in English, the functional head of the verb is a zero-morpheme but in Japanese and Korean, this functional head is instantiated as the LV ‘do’.
In (4.56b), the root √benkyoo becomes a noun by the affixation of the zero morpheme in the first derivation and then this derived noun becomes a verb because of the LV sur- in Japanese or ha- in Korean in the second derivation. Thus, in Japanese, the reason that the root √benkyoo ‘study’ becomes a verb in a clause is because in the second derivation, the derived noun merges with the feature V (i.e., LV). Now, look at how Nakajima (2008) explore the ambiguous case (4.55b) where the event noun behaves like a verb without an LV. According to Nakajima (2008), this group of event nouns is also constructed by two steps of derivation as in (4.57).

(4.57)  

(a) Without the LV: dannen ‘give.up’  

First derivation:  √dannen ⇒ [ [√dannen][Ø] V  
Second derivation: [ [√dannen][Ø] V ⇒ [[[√dannen][Ø] V ]Ø ] N  

After the first derivation, the root √dannen ‘give.up’ derives a verb by the affixation of the zero-morpheme and then this derived verb becomes a noun after the second derivation with the affixation of another zero-morpheme. Thus, Nakajima (2008) proposes that the event noun is superficially a noun but it is derived from a verb. Thus, the event noun in Japanese can work as the verb in a clause without the aid of an LV.

Definitely, Nakajima’s assumption (2008) provides us with a new way to look at the LVCs and the event nouns in Korean. Yet it misses an important fact. Why does he
propose two steps of derivation in Japanese/Korean LVCs? I assume that Nakajima (2008) observes that the category-neutral root cannot directly merge with the LV suru/ha ‘do’ in Japanese and Korean. Thus, he intends to describe his observation by proposing an intermediate step between the root and the LV such as the affixation of a zero-morpheme. However, he misses the following fact: only an event noun that is related to the feature [-state] can be used as the verb without an LV in Korean. Consider (4.58) and (4.59).

\[(4.58)\text{ LVC or Event noun [-state]:}\]
\[
a. \text{Tom-i baktheylia-lul [LVC yenkwu-ha/*toy]-ess-ta.}
\text{T-NOM bacteria-ACC research-do/*become-PAST-DEC}
\text{‘Tom researched bacteria.’}
\b. \text{Tom-i baktheylia-lul yenkwu.}
\text{T-NOM bacteria-ACC research}
\text{‘Tom researched bacteria.’}
\]

\[(4.59)\text{ LVC or Event noun [+state]:}\]
\[
a. \text{Mary-ka [LVC kenkang ha]-ess-ta.}
\text{M-NOM health be-PAST-DEC}
\text{‘Mary was healthy.’}
\b. *\text{Mary-ka kenkang}
\text{M-NOM health}
\text{‘Mary was healthy.’}
\]

In (4.58a), the complement yenkwu ‘research’ forms an LVC with the LV ha ‘do’ which is related to the feature [-state] and denotes an event Activity in Korean. In (4.58b), this complement yenkwu ‘research’ can work as a verb without the LV ha ‘do’. On the other hand, in (4.59a), the complement kenkang ‘health’ forms an LVC with the LV ha ‘be’ which is associated the feature [+state] in Korean. Unlike the complement yenkwu ‘research’ in (4.58a), this complement kenkang ‘health’ cannot work as a verb if it occurs without an LV
in Korean. Thus, based on these examples, it is expected that (i) in Korean, not all complements in LVCs can work as verbs without the aid of LVs, and (ii) when the complement works as a verb without an LV in a clause, it should be related to the feature [-state]. As a result, Nakajima’s proposal (2008) is valid for Korean when the complement in Korean is connected with the feature [-state] that indicates an event Activity. In other words, when the complement is related to an event Activity and it forms an LVC with the LV *ha* ‘do’ in Korean, the complement is not a root but should be categorized as a noun in terms of Nakajima’s proposal (2008). However, as shown previously, the complement of the LV *ha* ‘do’ must be an EP while the complement of the LV *ha* ‘be’ must be an N⁰ in Korean. In this thesis, unlike Nakajima’s proposal, I assume that the EP complement is produced by the combination of two lexical items with one derived from the conceptual category “constant” and the other derived from the conceptual category “eventuality” (i.e., Activity in Korean). On the other hand, an N⁰ complement is treated as a lexical item which is formed by the combination of two conceptual categories such as “constant” and “eventuality” (i.e., State). Formulating two different types of complements in Korean LVCs would be as follows:

(4.60) **Formulate two different types of complements with the feature [-/+ state]:**

a. X⁰ complement:  
\[\text{[constant + [+state]]} \leftarrow \text{LCS}\]

b. XP complement:  
\[\text{[constant + [Activity]]} \leftarrow \text{LCS}\]
In adopting my proposal about the EP, the categorical ambiguity in (4.58b) can be easily explained without the affixation of a zero-morpheme. As discussed in Chapter 2, an event noun in Korean can be used as a result noun as suggested by Grimshaw (1990). For instance, the word kongpwu ‘study’ can be used as (i) a result noun, (ii) an event noun without an LV and (iii) a complement of an LV as in (4.61).

\[(4.61)\]

\[\text{a. Result noun:}\]
\[
\begin{array}{l}
\text{Tom-i} & \text{[NP elyewun kongpwu]-lul machi-ess-ta.} \\
\text{T-NOM} & \text{difficult study-ACC complete-PAST-DEC} \\
\end{array}
\]

‘Tom completed the difficult study.’

\[\text{b. Event noun without LV:}\]
\[
\begin{array}{l}
\text{Tom-i} & \text{swuhak-ul kongpwu} \\
\text{T-NOM} & \text{math-ACC study} \\
\end{array}
\]

‘Tom studies math.’

\[\text{c. Event noun with LV:}\]
\[
\begin{array}{l}
\text{Tom-i} & \text{swuhak-ul [LVC kongpwu ha]-ess-ta.} \\
\text{T-NOM} & \text{math-ACC study do-PAST-DEC} \\
\end{array}
\]

‘Tom studied the math.’

When the word kongpwu ‘study’ is simply realized as a result noun in (4.61a), the structure of this result noun is as in (4.62). I assume that this word cannot merge with the head of EP.

\[(4.62)\]

\[\text{Result noun:}\]
\[
\begin{array}{l}
\text{N^0} \\
| \\
kongpwu
\end{array}
\]

As in (4.61b), the noun kongpwu ‘study’ can be used as an event noun in Korean and it acts like a verb without the aid of the LV ha ‘do’. I assume that the noun kongpwu ‘study’
becomes an event noun when it merges with an EP. Thus, the structure of an event noun is as follows:

(4.63) **Event noun without LV**

\[
\begin{array}{c}
\text{EP} \\
\text{swuhak} & \text{E'} \\
\text{N}^0 & \text{E}^0 \\
\text{kongpwu} & \emptyset
\end{array}
\]

When this event noun *kongpwu* ‘study’ (i.e., the EP) acts like a complete predicate, it is necessary that it merges with the LV *ha* ‘do’. As mentioned before, the LV *ha* ‘do’ always infers the feature [-state] and so it should take an EP as its complement. Consider (4.64).

(4.64) **Event noun with LV:**

\[
\begin{array}{c}
\text{VP} \\
\text{EP} & \text{V}^0 \\
\text{swuhak} & \text{E'} & \text{ha} \text{ ‘do’} \\
\text{N}^0 & \text{E}^0 \\
\text{kongpwu} & \emptyset
\end{array}
\]

As a result, all noun forms related to the event noun in Korean can be easily described in terms of my proposal. In the next sub-section, I display more crucial evidence for the existence of an EP in Korean.
4.4.2.3 Second Point of Evidence in Favor of EventP

In this sub-section, I will present morphemes that are related to the EP in Korean. Let’s look at the examples in (4.65).

(4.65)  

a. LVC:  

\[
\begin{aligned}
&ku 
&yeca-ka \\
&[LVC *sebang-ha/sebangcil-ha]-ess-ta.
\end{aligned}
\]

that woman-NOM *husband-do/adultery-do-PAST-DEC

‘That woman committed adultery.’

b. Without the LV:  

\[
\begin{aligned}
&Tom-i \\
&*mwunca/mwunca-cil
\end{aligned}
\]

T-NOM character/character-behaviour

‘Tom is texting.’

In Korean, a non-event noun (e.g., concrete noun, result noun, etc.) cannot perform the role of the complement of the LV ha ‘do’ as in (4.65a). Thus, the noun sebang ‘husband’ cannot form an LVC with the LV ha ‘do’ and so the phrase sebang-ha ‘husband-do’ in (4.65) is ungrammatical. However, after a non-event noun is affixed with any of the following suffixes -cil ‘behaviour’, -nolus ‘role’, or -noli ‘game’ as in (4.65a), the derived noun sebang-cil ‘adultery’ takes on the role of the complement in the LVC. In addition, without the aid of the LV ha ‘do’, after these derivational suffix (e.g., -cil ‘behaviour’) are affixed, as in (4.65b), the derived noun mwunca-cil ‘to text’ behaves like an event noun and it can even work like a predicate without the LV ha ‘do’.

As a result, the behaviour of the derived nouns sebang-cil ‘adultery’ in (4.65a) and

\[\text{Im & Lee (2002:107) report a similar constraint of the complement which I found in Korean: “the verb ha ‘do’ takes an event type noun as its complement argument.”}\]
mwunca-cil ‘texting’ in (4.65b) remind us of the Japanese examples in Nakajima (2008). One may assume that the suffix -cil ‘behaviour’ in (4.65) is equivalent to the zero-morpheme in Nakajima’s study (2008), which converts a root to a noun or a verb in the derivation. If this assumption is on the right track, the zero-morphemes in the first derivation or the second derivation may be replaced by -cil ‘behaviour’ in Korean. Following Nakajima’s proposal (2008), the derived nouns in (4.65) may be expressed as in (4.66) or (4.67).

(4.66) a. LVC: sebang-cil-ha ‘husband-behaviour-do’

(4.67) a. Without the LV: mwunca-cil ‘character-behaviour’

The expression in (4.66b) infers that after the suffix -cil is affixed to the root, the category of the derived word such as [[√sebang]-cil] N is that of a noun. Thus, the morpheme -cil functions as the feature N in the first derivation. On the other hand, the expression in (4.67b) means that after the root is suffixed by the morpheme -cil, the derived word [[√mwunca]-cil] V acts like a verb and so the morpheme -cil works as the feature V. However, the assumption in (4.67b) is incorrect because in Korean, the category of words that are suffixed by the morpheme -cil ‘behaviour’ is always restricted to nouns. Therefore, after the first derivation takes place as in (4.67b), the derived word [[√mwunca]-cil] never falls into the category of verb. In addition, one may assume that after the root is suffixed by a zero-morpheme in the first derivation, the derived word [[√mwunca]-⌀] becomes a verb.
So, the suffix \(-cil\) is affixed to this derived verb in the second derivation and the derived word \([[\sqrt{mwunca}] \ -cil\)] becomes a noun as in (4.67c). However, this assumption is also incorrect because the suffix \(-cil\) ‘behaviour’ cannot be affixed to verb stems in Korean. Consider (4.68).

(4.68)  
a. V. ssawu- ‘to fight’  
b. *ssawu-cil ‘the behaviour of fighting’  
c. ssawu-m-cil ‘the behaviour of fighting’

In (4.68), the word ssawu- is the verb stem and so, as in (4.68b), the suffix \(-cil\) ‘behaviour’ cannot be affixed to it. Instead, after this verb stem is derived to a noun such as ssawum ‘fighting’, this derived noun can be affixed by the suffix \(-cil\) ‘behaviour’ as in (4.68c). As a result, the distribution of the suffix \(-cil\) ‘behaviour’ in (4.68) implies that it is not equivalent to the zero-morphemes in Nakajima’s proposal (2008).

On the other hand, if we assume that the suffix \(-cil\) ‘behaviour’ or \(-nolus\) ‘role’ is an overt form of a lexical item which is derived from the conceptual category “eventuality”, the function of the suffix \(-cil\) is clear. This suffix is basically the event Activity and it always occurs with the LV ha ‘do’. Thus, the EP (i.e., sebang-cil ‘adultery’) can occur without an LV because this EP already holds an event Activity and it can form its own argument structure. The structure of sebang-cil ‘adultery’ looks like (4.69a) when the EP acts like an event noun. In addition, the structure of the LVC that is produced by incorporation between the EP and the LV ha ‘do’ is presented in (4.69b).
As a result, in the syntax, even though the LV ha ‘do’ is generated under the head of VP and obligatorily takes a nominal complement, the LV ha ‘do’ is different from transitive verbs in Korean. A transitive verb takes a DP complement while the LV ha ‘do’ takes the EP (i.e., XP) as its complement.

4.4.3 Particles on Complements

As the last issue related to the complement in Korean LVCs, I will shed light on the reason why the EP complement can be optionally marked with the accusative case particle -ullullul in Korean. As mentioned before, the affixation of an accusative case particle is not applicable to all complements in Korean LVCs. When the complement forms an LVC with the LV ha ‘do’ (i.e., the EP), it can be optionally marked with an accusative case particle but when the complement (i.e., the N⁰ complement) produces an LVC with the LV ha ‘be’ or the LV toy ‘become, this affixation never happens. Consider (4.70).
(4.70) a. Transitive verb:

{\text{cekkwun-i}} \quad \text{tali-lul} \quad [\text{LVC phakoy-(lul)} \ ha/*toy]-ess-ta.

\begin{tabular}{llll}
\text{enemy-NOM} & \text{bridge-ACC} & \text{destruction-(ACC)} & \text{do/*become-PAST-DEC}
\end{tabular}

‘The enemy destroyed the bridge.’

b. Unergative verb:

\begin{tabular}{llll}
\text{Mary-ka} & [\text{LVC cenhwa-(lul)} \ ha/*toy]-ess-ta.
\end{tabular}

M-NOM \quad \text{phone-(ACC)} \quad \text{do/*become-PAST-DEC}

‘Mary phoned.’

c. Unaccusative verb:

\begin{tabular}{llll}
\text{kenmwul-i} & [\text{LVC pwungkoy-(*lul)} \ ha/toy]-ess-ta.
\end{tabular}

\begin{tabular}{llll}
\text{building-NOM} & \text{collapse-(*ACC)} & \text{be/become-PAST-DEC}
\end{tabular}

‘The building collapsed.’

d. Adjective:

\begin{tabular}{llll}
\text{Mary-ka} & [\text{LVC kenkang-(*ul)}] \ ha/*toy]-ess-ta.
\end{tabular}

\begin{tabular}{llll}
\text{M-NOM} & \text{health-(*ACC)} & \text{be/*become-PAST-DEC}
\end{tabular}

‘Mary was healthy.’

Our attention with respect to the affixation of the accusative case particle focuses on the following two issues: (i) why is the affixation of the accusative case particle restricted to the EP complement which occurs with the LV \textit{ha ‘do’?}; and (ii) why is this affixation optional rather than obligatory? I attempt to answer each question in the following subsection.

4.4.3.1 Affixation of the Particles in Korean LVCs

In previous studies (Miyamoto 1999, Ahn 2002, and many others), the affixation of a case particle has been treated as an important topic when examining the characteristics of Korean LVCs such as the evidence of incorporation (e.g., Ahn 1990) or the relationship
with aspectuality (e.g., Lee 2007). However, their discussions mainly focus on the affixation of the accusative case particle but no other particles in Korean. There are several reasons for this. Firstly, in previous studies about LVCs in other languages (e.g., Japanese or Telugu), the accusative case particle is mainly discussed and it is adopted as a relevant characteristic of Korean LVCs as well. Thus, research about Korean LVCs has paid attention only to the affixation of the accusative case particle. Secondly, the LV *ha* ‘do’ that is related to the affixation of the accusative case particle has been treated as the only LV in Korean but the LV *ha* ‘be’ and the LV *toy* ‘become’ have not been seriously treated as LVs in Korean. Yet, in Korean, an N⁰ complement as much as an EP complement can be marked with case or other particles. Consider (4.71).

(4.71)  
a. **Unaccusative verb:**

\[
\text{kenmwul-i} \quad [\text{LVC pwungkoy-ka/*lul \ \ toy]-ess-ta.} \\
\text{building-NOM \ \ collapse-NOM/*ACC \ \ become-PAST-DEC}
\]

‘The building collapsed.’

b. **Adjective:**

\[
\text{Mary-ka} \quad [\text{LVC kenkang-un/*lul \ \ ha/*toy]-ess-ta.} \\
\text{M-NOM \ health-TC/*ACC \ \ be/*become-PAST-DEC}
\]

‘Mary was healthy (but she was not good (but poor and ugly)).’

Therefore, the affixation of the particle is not restricted to the EP complement. Interestingly, this EP complement cannot be marked with a nominative case particle as an N⁰ complement.

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49 According to Sohn (1999:212), “particles are postpositional function words that either indicate the syntactic relation of the co-occurring element with other constituents of the sentence, delimiting the meaning of the element to which they are attached…” Thus, case particles mostly function to indicate the syntactic relation of the element (e.g., NP) such as the nominative case particle (*i/ka*), the accusative case particle (*ul/lul*), the dative particle (*eykey*), etc. In Korean, this case particle is called “Kyekcosa”. The other particles delimit the meaning of the element (e.g., NP) such as Topic/contrast particle (*un/nun*), Limitation (*man*), Inclusion (*to*), etc.
complement cannot be marked with an accusative case particle. Consider (4.72).

(4.72) Mary-ka LVC cenhwalul/*ka ha/*toy]-ess-ta.
M-NOM phone-ACC/*NOM do/*become-PAST-DEC
‘Mary phoned.’

These facts imply that (i) the affixation of a case particle is not restricted to the accusative case particle on the EP complement but all complements can be optionally marked with case particles, and (ii) the affixation of a case particle is complementarily distributed depending on the type of complement.

If we adopt Bower’s study (2003), it is easy to explain why the EP complement can be marked with an accusative case particle but not with a nominative case particle and why an N⁰ complement can be marked with a nominative case particle but not with an accusative case particle. As mentioned before, the LV ha ‘do’ is generated under the head of VP and so, the EP complement is generated inside the domain of the VP. On the other hand, the LV ha ‘be’ or toy ‘become’ is generated under the head of TrP. Thus, an N⁰ complement occurs inside of the domain of TrP. In terms of the Anti-locality constraint (Abels 2003), the case feature of the complement cannot be checked in the same projection. I assume that when the case feature of the complement needs to be checked, the complement should move to a case-checking position such as [Spec, TrP] for the case feature [ACC] and [Spec, IP] for the case feature [NOM]. In terms of Bower’s study (2002, 2003), the affixation of a case particle on a complement in a Korean LVC can be described as in (4.73) and as in (4.74).
(4.73) **EP complement with an accusative case particle:**


   T-NOM   exercise-ACC   do-PAST-DEC

   ‘Tom exercised.’

b. PrP

   \[\begin{array}{c}
   \text{Tom} \\
   \text{TrP} \\
   \text{VP} \\
   \text{EP}
   \end{array}\]

   \[\begin{array}{c}
   \text{Pr'} \\
   \text{Pr}_0 \\
   \text{Tr'} \\
   \text{Tr}_0
   \end{array}\]

   ‘exercise’

(4.74) **N}\text{ complement with a nominative case particle:**

a. *Ontalio hoswu-ka [LVC [oyem]_{N0-i} toy]-ess-ta.*

   Ontario lake-NOM污染-NOM become-PAST-DEC

   ‘Lake Ontario is polluted.’
Based on (4.73) and (4.74), all complements in the LVC can be affixed with a case particle. In the next sub-section, I will shed light on why case particles can optionally be affixed on complements in Korean LVCs.

4.4.3.2 Focus Phrase

Regarding the affixation of case particles on complements in Korean LVCs, it is important to note that this affixation is optional. This implies that a complement is not an argument of a predicate and the affixation of a case particle is not simply because of a case feature of a complement. When is an NP able to be marked with a case particle without normal case-checking in Korean?

According to Lambrecht (1994), the information status of the NP (i.e., Focus and Topic) in a clause is cross-linguistically marked by prosody or morpho-syntax. For instance,
‘pitch’ as a coding property, in English, can indicate that the discourse status of an NP is focused, or emphasized, in a clause; while in Korean, the particles (e.g., case particles or topic/contrastive particle) play the same role on the focused NP as ‘pitch’ does in English. Thus, here, I assume that the affixation of case particles on complements is related to indicating discourse status such as Focus or Topic in Korean LVCs.

In general (e.g., Vallduvi 1993 and many others), Topic is linked to activated or old information while Focus is linked to new information in the discourse. This difference between Topic and Focus is easily found in the wh-question and its answer because a Focus phrase is necessary in the answer.

(4.7) a. nwu(kwu)-ka Minswu-eykey chaey-ul tenci-ess-ni?
who-NOM M-DAT book-ACC throw-PAST-Q
‘Who threw a book to Minsu?’
b. [Suni-ka/nun]Focus θ θ tenci-ess-ta.
S-NOM/TC θ throw-PAST-DEC
‘Suni threw it.’
c. *θ Minsu-eykey chaek-ul tenci-ess-ta.
M-DAT book-ACC throw-PAST-DEC
‘(Someone) threw a book to Minsu.’

(Kim 2000: 177)

In (4.75), as the answer for the bold-faced wh-question, the new information is necessarily present (i.e., the focused phrase) while Topic phrases are optionally present in the answer. Thus, when the new information is omitted in the answer as in (4.75c), the sentence does not make any sense. In Korean, Topic phrase and Focus phrase are indicated in two ways: (i) scrambling (e.g., Hwang, Shafer & O’Grady 2007, Choi 1997) and (ii) affixing the
particle (e.g., Schütze 2001, Bak 2004). In this thesis, I will focus on the second one.

According to Schütze (2001), the nominative case particle -i/ka and the accusative case particle -ul/lul can work as indicators of Focus in Korean. For instance, the nominative case particle -i/ka can be stacked when the NP phrase is focused. Consider (4.76).

\[\begin{align*}
\text{(4.76) \ a. } & \text{nwukwu-} & \text{ton-i} & \text{kulekhey} & \text{manh-ni?} \\
& \text{who-DAT} & \text{money-NOM} & \text{so} & \text{has.much-Q} \\
& \text{‘Who has such a lot of money?’} \\
\text{b. } & \text{[Chelswu-eykey-ka]} & \text{ton-i} & \text{kulekhey} & \text{manh-ni.} \\
& \text{C-DAT-NOM} & \text{money-NOM} & \text{so} & \text{has.many-DEC} \\
& \text{‘Chelswu has such a lot of money.’} \\
& \text{(Schütze 2001:203)}
\end{align*}\]

In (4.76) there is a \textit{wh}-question and its answer. Focusing on the \textit{wh}-word in (4.76a), we expect that the NP \textit{Chelswu-eykey} in (4.76b) as new information is focused in the answer. In this answer, according to Schütze (2001), it is possible to affix the nominative case particle –i/ka to the focused NP. In terms of the case-feature, there is no reason to stack this nominative case particle and so he proposes that this stacked nominative case particle is an indicator of Focus in a clause. In addition, he regards the accusative case particle -ul/lul as an indicator of Focus in a clause, as well. As a result, Schütze assumes that there are two different positions to indicate Focus in Korean: one is associated with IP (i.e., a nominative case particle) and the other is with associated with VP (i.e., an accusative case particle) (Schütze 2001: 211).

However, Schütze (2001) does not specify a detailed meaning of Focus. Focus typically is distinguished as two different types: such as “Contrastive Focus” and
“Information Focus”. According to Kiss (1998) and Hwang, Shafer, & O’Grady (2007), Information Focus merely delivers new information while Contrastive Focus indicates new information but unlike Information Focus, it selects one entity from a presupposed reference set. For instance, according to Choi (1997), the topic/contrastive particle -nun is often used with a Focus phrase. When this particle is used as a Focus phrase, it is not related to Topic but it indicates a contrastive meaning (i.e., Contrastive Focus). For instance, in (4.75b), the focused NP can be marked with the topic/contrastive marker -nun. In this case, this topic/contrastive marker does not function as an indicator of Topic but it adds a contrastive meaning to the focused NP. Thus, the sentence in (4.75b) is interpreted as “Among many people, only Suni threw the book.”

So far, I here established that (i) case particles in Korean can function as indicators of Focus and (ii) two different types of Focus exist in Korean. Now, let’s analyze the affixation of case particles on complements in Korean. In order to find a focused phrase, first, examine the wh-question and answers in Korean. Consider (4.77).

(4.77)  

a. Mary-ka  
    M-NOM  
   ecey  
   what-ACC  
  mwues-ul  
   do-PAST-Q  
 ha-ess-ni?  
   ‘What did Mary do yesterday?’

b. Mary-ka  
   M-NOM  
   ecey  
   desk-ACC  
  [chayksang-ul  
   do-PAST-DEC  
 sa]_FOCUS-ess-ta.  
   ‘Mary bought a desk yesterday.’

c. Mary-ka  
   M-NOM  
   ecey  
   cooking-do-PAST-DEC  
  [LVC  
   yoli-ha]_FOCUS-ess-ta.  
   ‘Mary cooked yesterday.’

d. Mary-ka  
   M-NOM  
   ecey  
   cooking-ACC  
  [LVC  
   yoli-lul]_FOCUS  
  ha]-ess-ta.  
   ‘Mary cooked yesterday.’
‘Mary particularly cooked yesterday (among many acts).’

Considering the translation in English, the wh-question in (4.77a) in Korean is equivalent to “What did Mary do yesterday?” Thus, the answer to this question requires that a VP as new information be present. As a result, the VP is focused. In (4.77b), the VP chaysang-ul sa ‘to buy a desk’ functions as new information (i.e., a focused phrase) without a contrastive meaning. However, in Korean LVCs, two different answer forms are available. Depending on the speaker’s desire, he/she can answer and impart new information only without the contrastive meaning (i.e., Information Focus) or express new information with the contrastive meaning together (i.e., Contrastive Focus). When an LVC which has a complement without a case particle is expressed in answer as in (4.77c), the entire LVC can be understood as a focused phrase the same as a VP in a normal lexical verb construction. This focused phrase (i.e., the LVC) does not convey the contrastive meaning in the sentence (i.e., Information Focus). However, when an LVC which has a complement with a case particle appears in the answer as in (4.77d), the complement can be understood as the focused phrase. This focused phrase is obligatorily marked with a case particle such yoli-lul ‘cooking-ACC’ as in (4.77d) and it adds the contrastive meaning to the answer (i.e., Contrastive Focus). In fact, the sentence in (4.77d) can be read such as “Mary could do many things but particularly, she cooked yesterday.” This interpretation in (4.77d) seems to be linked to a contrastive meaning.

Based on (4.77), I claim that when the complement is focused (i.e., Contrastive Focus) in the discourse, it is optionally marked with a case particle in the LVC. This explains why the affixation of a case particle on a complement in a Korean LVC is optional.
If the complement is not focused in the discourse, it does not need to be marked with a case particle. Therefore, I conclude that case particles on the complements in Korean LVCs such as the nominal case particle and the accusative case particle are the indicators of Contrastive Focus and can be optionally present depending on the speaker’s desire.

4.5 Short-form Negation and Korean LVCs

In this section, I will introduce a construction which helps verify my proposal in the previous sections. This construction is “short-form negation” and when it occurs with Korean LVCs, we can see the apparent syntactic differences between the LV ha ‘do’ and the LV ha ‘be’ in Korean. In Korean, there are two different types of the negation; “short-form negation” and “long-form negation”. Consider (4.78).

(4.78)  a. Short-form negation $\rightarrow$ SBJ OBJ Neg-V  

\[
\begin{array}{lllll}
\text{Eunji-ga} & \text{pap-ul} & \text{an} & \text{mek-ess-ta}.
\end{array}
\]

E-NOM rice-ACC NEG eat-PAST-DEC

‘Eunji didn’t eat the rice.’

b. Long-form negation $\rightarrow$ SBJ OBJ V-ci Neg HA4\(^{50}\)

\[
\begin{array}{lllll}
\text{Eunji-ga} & \text{pap-ul} & \text{mek-ci} & \text{ani} & \text{HA4-ess-ta}.
\end{array}
\]

E-NOM rice-ACC eat-CI NEG dummy-PAST-DEC

‘Eunji didn’t eat the rice.’

(Loewen 2007:1)

\(^{50}\) As mentioned in Chapter 3, I specify the verb form ha in Korean as follows: (i) HA1 means the LV ha ‘do’, (ii) HA2 infers the LV ha ‘be’, (iii) HA3 is linked to the causative meaning, and (iv) HA4 is the dummy verb. In particular, HA4 is similar to the dummy verb do in English. As mentioned by Hallman (2005), HA4 is inserted whenever affixing hopping is blocked.
In the “short-form negation” (4.78a), the bold-faced negative particle an ‘not’ is placed before the verb. On the other hand, when building “long-form negation” as in (4.78b), three steps are necessary: (i) the morpheme -ci is suffixed to the verb stem, (ii) the bold-faced negative particle ani ‘not’ occurs after the verb and (iii) the dummy verb HA4 is added after the negative particle ani ‘not’. Comparing these two negations, we can perceive the syntactic difference but we cannot find any semantic difference.

4.5.1 Review of Previous Studies

There are two approaches to these two negation structures in Korean: (i) the negative particles an ‘not’ and ani ‘not’ are allomorphs and they are generated at the same base-position, and (ii) the two negative particles occur in two different syntactic positions. In the first approach, short-form negation and long-form negation are accomplished by a syntactic operation such as object-shift (e.g., Yoon 1991, Hagstrom 1996 and Han 2007). On the other hand, in the second approach, the negative particles are realized as two different syntactic positions. For instance, one is generated as the adjunct of VP and the other is the adjunct of vP (e.g., Kim 2002 and Loewen 2007). Let’s look at the first approach in (4.79).
According to Leowen (2007), Yoon’s assumption (1991) supports the main idea of the first approach. In (4.79), the two negative particles an or ani are generated at a single syntactic position in a clause. Long-form negation is the base-form of negation and short-form negation is derived from long-form negation when the main verbmek- ‘eat’ moves to the
head of TP as in (4.79a). Unlike Yoon’s assumption, Hagstrom (1996) suggest that short-form negation and long-form negation are determined by object movement rather than verb movement. It is true that the details differ in each study but in these studies based on the first approach, either of the negative particles an or ani ‘not’ is generated at a single syntactic position in Korean.

On the other hand, in the second approach (e.g., Kim 2002, Leowen 2007), the negative particles are generated at two different syntactic positions. For instance, Kim (2002) and Leowen (2007) assume that the negative particle an ‘not’ is the adjunct of VP while the negative particle ani ‘not’ is the adjunct of vP in Korea. The structures of two negation constructions are assumed as follows:

(4.80)  

\[\begin{array}{c}
\text{CP} \\
\text{TP} \\
Eunji \\
\text{vP} \\
\text{VP} \\
\text{Neg} \\
ap \langle \text{mek} \rangle \\
\text{Short-form negation} \\
\end{array}\]
Of these two approaches, which one better explains negation in Korean? The second approach seems better for accounting for the distribution of the two negative particles in Korean. The “double negation construction” verifies that the second approach is on the right track for Korean. Consider the double negation construction in (4.81).

(4.81) Double negation → SBJ OBJ Neg V-ci Neg HA4-

\[ Eunji-ga \ pap-ul \ an \ mek-ci \ pari \ HA4-ess-ta. \]

E-NOM  rice-ACC  NEG eat-CL  NEG  dummy-PAST-DEC
‘Eunji ate the rice.’ (lit. ‘Eunji didn’t not eat the rice.’)

In (4.81), both the negative particle \( an \) ‘not’ for short-form negation and \( pari \) ‘not’ for long-form negation are present in a clause. Thus, the double negation construction does not mean
(i) doubling the morpheme (e.g., negation in French) or (ii) emphasizing the negative meaning. Instead, in the double negation construction, the operation of the negation takes place twice (e.g., ~[~P]) and so, semantically, the final interpretation of the double negation construction always promises a positive meaning. Through the medium of the double negation construction, I assume that (i) the two negative particles have their own functions, and (ii) the two negative particles may be present at two different syntactic positions.

I agree with Leowen’s proposal (2007) that the negative particle an ‘not’ and the negative particle ani ‘not’ are placed at two different syntactic positions. However, I do not agree with her proposal for her treatment of the two negative particles as a category such as the adjunct in Korean. First, it is questionable why the negative particle ani ‘not’ in long-form negation obligatorily occurs with the dummy verb HA4 because of blocking “affix hopping” while the negative particle an ‘not’ in short-form negation cannot occur with this dummy verb. If two negative particles are included in the same category, they should show the identical behaviour in the structure. However, this is not the case. Second, the negative particle ani ‘not’ for long-form negation can phonologically contract with the dummy verb HA4 in Korean. In that, ani ‘not’ and ha ‘dummy’ becomes a contracted form anh- ‘not dummy’ as in (4.82). In Korean, this contracted form anh- ‘n’t’ acts like a single word form as does the contracted form n’t in English.

(4.82)  Eunji-ga  pap-ul  mek-ci  anh-ess-ta.
E-NOM   rice-ACC   eat-CI   don’t-PAST-DEC
‘Eunji didn’t eat the rice.’
However, the negative particle *an* ‘not’ for short-form negation cannot be contracted with the following verb. Third, unlike the negative particle *an* ‘not’ for short-form negation, the negative particle *ani* ‘not’ and the contraction form *anh*–‘n’t’ can occur with all predicates without exception in Korean. I will discuss the behaviour of the negative particle *an* ‘not’ in the next sub-section. Thus, the behaviour of the negative particle *ani* ‘not’ differs from that of the negative particle *an* ‘not’ and it is similar to the behaviour of the head of NegP in English (e.g., Chomsky 1995) rather than the adjunct of vP. In this thesis, I adopt the idea of NegP in English which is located between PrP and IP and I propose that the negative particle *ani* ‘not’ may be generated under the head of NegP.

4.5.2 Negative Particle *an* ‘not’ in Korean LVCs

As mentioned before, unlike long-form negation, not all predicates can create short-form negation in Korean. If the negative particle *an* ‘not’ for short-form negation is an adjunct of VP (Leowen 2007), it is expected that this particle should occur with all predicates without any exception. Consider (4.83).

    E-NOM exercise-ACC do- PAST-DEC
    ‘Eunji exercised.’

b. *Eunji-ga an [LVC wundong-ul HA1]-ess-ta.*
    E-NOM NEG exercise-ACC do- PAST-DEC
    ‘Eunji didn’t exercise.’

c. *Eunji-ga wundong-HA1-ci an HA4-ess-ta.*
    E-NOM exercise-do-CI NEG dummy-PAST-DEC
‘Eunji didn’t exercise.’

The predicate in (4.83a) is an LVC: (i) it behaves like an unergative verb, (ii) the complement is an EP, and (iii) the EP complement forms the LVC with the LV ha ‘do’. In (4.83b), short-form negation is not allowed in this LVC while long-form negation is acceptable as in (4.83c). As a result, it is difficult to categorize this negative particle an ‘not’ as the adjunct of VP because if it were the adjunct of VP in Korean, the LVC in (4.83a) could have produced short-form negation.

The ungrammaticality in (4.83b) may cause us to consider whether LVCs always permit short-form negation. However, except for LVCs that act like unergative verbs, short-form negation is possible when the LVC behaves like other types of predicate. Consider (4.84).

(4.84)  

a. **Unergative:**

\[
\ast \text{Tom-i an cenhwa-HA1-ess-ta.}
\]
T-NOM  NEG phone-do-PAST-DEC

‘Tom didn’t phone.’

b. **Transitive:**

\[
\text{Tom-i baktheylia-lul an yenkwu-HA1-ess-ta.}
\]
T-NOM  bacteria-ACC NEG research-do-PAST-DEC

‘Tom didn’t research bacteria.’

c. **Unaccusative:**

\[
\text{cencayng-i an congsik-toy-ess-ta}
\]
war-NOM  NEG cessation-toy-PAST-DEC

‘The war didn’t end.’

d. **Adjective:**

\[
\text{pang-i an kkaykkus-HA2-ess-ta.}
\]
room-NOM  NEG cleanliness-be-PAST-DEC
‘The room wasn’t clean.

Interestingly, even in the LVC that is interpreted as an unergative verb as in (4.84a), short-form negation is acceptable if its complement is marked with an accusative particle as in (4.85).

(4.85) \textit{Tom-i cenhwa-lul an HA1-ess-ta.}
\begin{tabular}{llll}
T-NOM & phone & -ACC & NEG do-PAST-DEC
\end{tabular}

‘Tom didn’t phone.’

One might claim that the negation construction in (4.85) is long-form negation. However, I am sure that the negation in (4.85) is not long-form negation. Considering the double negation construction of the LVC in (4.84a), another negative particle \textit{ani} ‘not’ for long-form negation should be able to be added after the negation construction in (4.85). Consider (4.86).

(4.86) \textit{Tom-i cenhwa-lul an HA1-ci ani HA4-ess-ta.}
\begin{tabular}{llllll}
T-NOM & phone & -ACC & NEG do-CI & NEG dummy-PAST-DEC
\end{tabular}

‘Tom phoned.’ (lit. ‘Tom didn’t not phone.’)

Based on the distribution of the negative particle \textit{an} ‘not’ in Korean LVCs, we can observe the following; except for the LVC in (4.84a) that is interpreted as an unergative verb with its complement unmarked with an accusative case particle, other LVCs can occur with the negative particle \textit{an} ‘not’ for short-form negation. Comparing the LVC in (4.84a) to other LVCs, we find that in this LVC, the TrP is not present but in other LVCs, the TrP always
occurs as (i) TrP appears to check the case feature [ACC] of the complement in (4.84d) and in (4.85) and (ii) the LV is generated under the head of TrP in (4.84c) and (4.84d).

The following question arises: Why is the presence of TrP related to the placement of the negative particle *an* ‘not’ for short-form negation? In order to find the answer, I turn to Johns’s study of LVCs in Inuktitut (Johns 2005). According to Johns (2005), in Inuktitut, LVs which are derived from roots become two different forms depending on positive and negative senses as in (4.87).

(4.87)  

(a. *savi-qauq-tunga*)  

knife-have.a.lot-intr.part.1s  

*I have plenty of knives.*  

(Mittimatalingmiutut)  

(b. *savi-kiksa-rama*)  

knife-not.have.enough-intr.caus.1s  

*I am short of knives.*  

(Mittimatalingmiutut)  

(Johns 2005: 15)

In (4.87), the bold-faced LVs are derived from the root ‘have.a.lot’. When this root combines with a positive meaning, the surface form -*qauq-* ‘have.a.lot’ is present as in (4.87a). On the other hand, when the root is related to a negative meaning, -*kiksa-* ‘not.have.enough’ appears as in (4.87b). Comparing these two LVs in (4.87), we find several things. First, there is no phonological similarity between them, and second, it is difficult to find which morpheme is related to the positive meaning and which one is linked to the negative meaning. In order to account for the presence of these two LV forms, Johns (2005) proposes that the LV is the “semantic operator” rather than the lexical item, and it indicates positive or negative meaning in Inuktitut. Thus, when the root ‘have.a.lot’ occurs
with the LV with the positive meaning, the surface form becomes -qauq- ‘have.a.lot’ as in (4.87a) while when it appears with the LV with the negative meaning, superficially, the word -kiksa- ‘not.have.enough’ is realized.

I adopt Johns’s claims (2005) to shed light on the behaviour of the negative particle an ‘not’ for short-form negation. I assume that unlike the other negative particle ani ‘not’, the negative particle an ‘not’ is a semantic operator which denotes the negative meaning of the verb at the head of TrP. When the predicate forms short-form negation in a sentence, a TrP is required in Korean.

Based on this assumption, let’s generalize short-form negation in Korean LVCs. At first, I will explain how the LVCs which are formed with the LV ha ‘be’ and the LV toy ‘become’ can produce short-form negation in Korean. As mentioned previously, the LV ha ‘be’ and the LV toy ‘become’ are generated under the head of TrP. These LVs can be specified as two groups depending on the positive and negative semantic operator. When the LVs occur with the positive semantic operator, LV ha ‘be’ or the LV toy ‘become’ may be present. On the other hand, when the LVs occur with the negative semantic operator, the LVs occur with the negative particle an ‘not’ in Korean such as an-ha ‘not be’ or an-toy ‘not become’. Therefore, when a LVC yields short-form negation, the LV may occur with the negative semantic operator such as an-ha ‘not be’ or an-toy ‘not become’ under the head of TrP as in (4.88).

(4.88)  a. pang-i an kkaykkus-ha-ess-ta.
        room-NOM NEG cleanliness-be-PAST-DEC
        ‘The room wasn’t clean.'
Next, I will consider LVCs that are formed by the LV *ha* ‘do’. When these LVCs work as transitive verbs in a clause, the TrP is obligatorily present. Thus, the negative semantic operator is placed under the head of TrP and this LVC can form short-form negation. However, when the LVC with the LV *ha* ‘do’ behaves as an unergative verb, it is complex. When the complement of the LV *ha* ‘do’ is not marked with an accusative case particle, the TrP cannot occur in the structure. Thus, the negative semantic operator cannot be present and short-form negation is not acceptable as in (4.89).

        T-NOM NEG phone-do-PAST-DEC
        ‘Tom didn’t phone.’

b.  

\[
\begin{array}{c}
\text{PrP}\varepsilon \\
\cap \\
\text{TrP}
\end{array}
\]

\[
\begin{array}{c}
\text{noun} \\
\text{kkaykkus} \\
\text{Tr}^0 \\
\text{an-ha}
\end{array}
\]

Based on the tree diagram in (4.88), the negative particle *an* ‘not’ is expected to be spelled out between the complement *kkaykkus* ‘cleanliness’ and the LV *ha* ‘be’. However, the negative particle *an* ‘not’ cannot be present between them (i.e., *kkaykkus an-ha*) in Korean. Here, I assume that when the complement is directly incorporated with the LV containing the negative semantic operator *an* ‘not’, the negative semantic operator *an* ‘not’ must be spelled out before the complement in PF as in (4.88).
On the other hand, when the complement is marked with an accusative case particle, it is assumed that the TrP is present in the structure. After the TrP is present, the negative semantic operator an ‘not’ can be placed under the head of TP. Finally, short-form negation can be achieved as in (4.90).

(4.90)  a. Tom-i  cenhwa-lul  an  ha-ess-ta.
        T-NOM  phone-ACC  NEG  do-PAST-DEC
        ‘Tom didn’t phone.’

b.  PrP
    TrP
    ___________
    cenhwa-lul  TrP’
    ___________
    VP  Tr\(^0\)
    ___________
    EP  V\(^0\)
    _______
    <cenhwa>  <ha>

To sum up, the distribution of short-form negation in Korean LVCs tells us where the LV ha ‘do’ should be generated and where the base-positions of the LV ha ‘be’ or the LV toy ‘become’ are in Korean.

4.6 Closing Comment

In this chapter, I described the syntactic structure of Korean LVCs. Based on Bowers’s study (2002, 2003), I illustrated that LVs can be placed at various places in the structure
such as \(Pr^0\), \(Tr^0\), and \(V^0\). In particular, in Korean, the LV ʼha ‘do’ is generated under the head of VP while the LV ʼha ‘be’ or the LV ʼtoy ‘become’ is generated under the head of TrP. Furthermore, I clarified that there are two different types of Korean LVs such that (i) the LV ʼha ‘do’ takes an EP complement and (ii) the LV ʼha ‘be’ or the LV ʼtoy ‘become’ take an \(N^0\) complement.
5. Conclusion

This thesis examined the lexical-semantic, morphological, syntactic properties of Korean LVCs. At first, I outlined (i) the characteristics of LVCs that distinguish them from other verb constructions in general in (5.1) and (ii) the characteristics of Korean LVCs that are not reported in previous studies in (5.2).

(5.1) **Characteristics of LVCs:**

*Structure of LVC:*

<table>
<thead>
<tr>
<th>[LVC complement]</th>
<th>LV</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Semantic component</td>
<td>morphological component</td>
<td></td>
</tr>
</tbody>
</table>

- a. LVCs are split constructions.
- b. LVCs build a single clause structure.
- c. The complement is semantically, morphologically, or syntactically restricted.
- d. The LVs are limited to primitive predicates such as *do, become,* etc.

(5.2) **Characteristics of Korean LVCs:**

- a. The LVC in Korean is restricted to the N (i.e., the nominal expression)+LV type.
- b. The LVCs in Korean can be interpreted as one of various predicate types.
- c. The nominal complement must be an event noun or hold the feature “eventuality”.
- d. The nominal complement may be affixed with an accusative case particle when the LVC is interpreted as a transitive verb or an unergative verb.
- e. The nominal complement is an XP expression when occurring with the LV *ha* ‘do’ but it is an X⁰ expression when occurring with the LV *ha* ‘be’.
- f. The LV is selected by a nominal complement.
Based on these characteristics, I argued in Chapter 2 that (i) LVCs in Korean looks like morphological complex words but they are not as they violate the lexical integrity test (Bresnan & Mchombo 1995), (ii) LVCs in Korean are not formed by “argument transfer” (Grimshaw & Mester 1988), and (iii) LVCs in Korean are not produced by syntactic composition (Ahn 1990, Park 1995). Finally, I demonstrated that LVCs in Korean are formed by incorporation. In fact, the nominal complement in Korean LVCs shows the relevant properties which are observed in noun incorporation constructions such as (i) indefiniteness of the incorporated nominal, (ii) number neutrality of the incorporated nominal, and (iii) the incorporated nominal role as the modifier of the incorporated verb. In particular, the last property of the incorporated nominal in noun incorporation shed light on the role of the nominal complement of the LV in Korean LVCs. Thus, unlike the DP complement of the transitive verb, the nominal complement of the LV plays a modifier’s role in Korean LVCs.

By adopting incorporation as the way of composing between the nominal complement and the LV in Korean LVCs in Chapter 2, I tried to account for how and where Korean LVCs can gain the lexical-semantic and syntactic information of predicates in Chapter 3. In the beginning of this chapter, I assume that this information of the LVC is determined in the LCS before the composition (i.e., incorporation) takes place between the nominal complement and the LV. Various predicates, including LVCs, can be expressed with various conceptual categories such as “constant”, “primitive predicates”, “arguments”, “eventuality”, etc. In order to illustrate the relationship between the components in LVCs and the conceptual categories, I verified that (i) there are many different LVs in Korean
such as *ha* ‘do’, *ha* ‘be’ and *toy* ‘become’, (ii) the conceptual category “constant” is associated with the nominal component, and (iii) the conceptual category “eventuality” determines the specific expression in the LCS. Based on this verification, I illustrated that (i) LVCs in Korean are conceptually classified as six different types, and (ii) all these types are expressed with the templates in the LCS. Finally, I examined how these conceptual categories in the LCS are realized as the lexical items in the lexicon. Unlike Marantz (1997), Arad (1999), and the initial DM perspective, I assumed that (i) the lexical items are derived from the conceptual categories in the LCS in Korean, and (ii) the category-natural root and the feature (N or V) are not members of the lexicon in Korean. I adopted a lexicalization framework following Levin & Rappaport (1998): (i) when all conceptual categories are realized as a lexical item such as a lexical verb or an adjective, the constant fills up the argument position of the primitive predicate in the template of the LCS while (ii) when the conceptual categories are realized as two separate lexical items, such as a nominal complement and a LV in the LVC, the constant modifies the argument position of the primitive predicate.

In Chapter 4, based on all these previous observations presented in Chapter 2 and Chapter 3 and the characteristics of Korean LVCs, I attempted to describe the structure of Korean LVCs with a framework such as the Minimalist Program (Chomsky 1995, 2001, and Bowers 2002, 2003). First, I proved that all LVs in Korean LVCs are not included in the category of little *v* because they partially show the properties of little *v*. To account for the relationship between little *v* and LVs in Korean, I followed two steps. First, I adopted the idea of “split *v*P construction” in Bowers (2002, 2003) such that *v*P can be divided as
PrP (i.e., Predicate Phrase: introducing the external argument) and TrP (i.e., Transitive Phrase: checking the case feature of the internal argument [ACC]) depending on two jobs of little $v$. Second, I adopted two major premises: (i) the presence of little $v$ and the presence of LVs are not directly related to each other and (ii) little $v$ is meaningful as a syntactic head when describing the upper head in the split VP construction while the LV as a lexical item works to convert a nominal to a verb in Korean. Based on these, I proposed that typologically, LVs can be generated under the head of PrP, the head of TrP, and the head of VP. As evidence, I demonstrated that the LV *do* in English is generated under the head of PrP (cf. Hallman 2004). However, the LVs in Korean are generated under two different positions such as the head of TrP and the head of VP. I focused on the function of TrP and the realization of this function of TrP in Korean such as the affixation of the accusative case particle. Thus, the complement and LV *ha* ‘do’ are regarded as generating inside of the VP because the complement can be affixed with the accusative case particle while the complement and the LVs such as *ha* ‘be’ and *toy* ‘become’ are assumed to generated inside of the TrP because the nominal complement cannot be marked with the accusative case particle (cf. Anti-locality constraint). I then discussed why the LV *ha* ‘do’ takes the XP complement (i.e., EventP) and why this EP can be optionally marked with the accusative case particle. In Korean, the affixation of the case particle not only functions to check case but also to indicate Focus. Thus, when the case particle is marked on the complement of the LV, particularly, the complement denotes Contrastive Focus in Korean. Finally, I reviewed short-form negation in Korean LVCs as evidence of what I proposed. Unlike the negative particle *ani* ‘not’ used in long-form negation, the negative particle *an*
‘not’ in short-form negation works as a semantic operator and it is placed at the head of TrP. This tells us that when the LVC occurs without TrP (i.e., an unergative verb without the affixation of the accusative case particle on the complement), this LVC cannot produce short-form negation in Korean. Furthermore, it is supposed that the LV ha ‘do’ is generated under the head of VP while the LV ha ‘be’ and the LV toy ‘become’ is placed under the head of TrP.

Overall, this thesis examined several properties of Korean LVCs. Furthermore, this work uncovered several new aspects of LVCs in general. The general analysis I propose is as follows: First, typologically, LVCs are composed by incorporation. Second, LVCs, like other predicates, gain their lexical-semantic and syntactic information from the LCS. Third, in the surface structure, LVs can be realized under various verbal heads across languages. Fourth, the complement of the LV is not restricted to the root. In Korean LVCs, the complement and the LV show these properties of LVCs in general. All my discussions focused on the N+LV type. In future research, the proposed perspective can be applied to the V+LV type.
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