THE IMPERFECTIVE ASPECT IN KOREAN: A PANCHRONIC APPROACH

A DISSERTATION SUBMITTED TO THE GRADUATE DIVISION OF THE
UNIVERSITY OF HAWAIʻI AT MĀNOA IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

IN

EAST ASIAN LANGUAGES AND LITERATURES (KOREAN)

MAY 2014

BY

JIYOUNG KIM

DISSERTATION COMMITTEE:

HO-MIN SOHN, CHAIRPERSON
WILLIAM O'GRADY
MEE-JEONG PARK
SANG-YEE CHEON
EDWARD SCHULTZ

# ACKNOWLEDGEMENTS

I would like to express my sincere thanks to the many people who have offered their help and support throughout my seven years of graduate studies.

First of all, I am deeply grateful to the members of my dissertation committee: Prof. Ho-Min Sohn, Prof. William O'Grady, Prof. Mee-Jeong Park, Prof. Sang-Yee Cheon, and Prof. Edward Shultz. Thanks to their help and support, I have grown much as a researcher and teacher. I would especially like to express my sincere gratitude to my advisor, Professor Ho-min Sohn. He has served as a wonderful role model for me during the last seven years. I appreciate all of his encouragement and support as I explored my research interests and learned what it means to be a researcher and teacher. With insightful vision and timely advice, he has guided my intellectual growth. His work and his guidance have made possible my journey into the profound world of Korean linguistics.

I also would like to sincerely thank all my friends, in and outside of the University of Hawai'i, for sharing their precious time and friendship with me throughout my life here. I thank Bumyong Choi, Min-Koo Choi, Yeonhee Yoon, Eun-Ho Kim, Ok Sim Kim, Dongmin Kim, Hyun Sun Jung, Sorin Huh, Heeyeong Jung, Hye-Seung Lee, Seung Hye Lee, Hyunji Lee, Miyung Park, Jason Sung, Yoonhwa Choi, Cheol Rin Park, Soo Young Hwang, Kyaesung Park, Soo Jung Yoon, and many others who I know and love but have unintentionally left unmentioned. I also would like to thank the faculty of the Korean Language Flagship Center, Professor Dong-Kwan Kong (MA program coordinator), Professor Sang-Yee Cheon (BA program coordinator), Lydia Chung (Program officer), Sumi Chang, and Hee-Jeong Jeong.

Finally, I would like to thank my parents, my brother, and my sister-in-law for their devotion, patience, and unconditional support. Without their understanding and encouragement, I would not have been able to come this far. My parents' boundless love gave me the confidence and courage to motivate myself to develop and to pursue my goals, and it is to them I owe all my accomplishments and triumphs. I sincerely dedicate this doctoral dissertation to my beloved and respected parents, Jung Soo Kim and Jung Hee Han.

**ABSTRACT**

The Korean construction *-ko iss-* is traditionally referred to as a progressive aspect marker. However, due to the different aspectual classifications of verbs in Korean and the multiple uses of the *-ko iss-* construction, it is not easy to determine its grammatical properties. This study aims to provide a comprehensive understanding of the Korean *-ko iss-* construction and its different aspectual meanings in discourse. Claiming that consideration of discourse contexts is necessary to account for the semantic and grammatical nature of the *-ko iss-* construction, I attempted to address the different views and solve the ongoing disagreements on the aspectual classification of verbs in Korean and the grammatical category of the *-ko iss-* construction. Based on the results of the study analyzing naturally occurring discourse data, I suggest that the basic meaning of *-ko iss-* underlying all its current variant uses is "continuous status at reference time," which fits better with the continuous aspect than the progressive aspect. With the extended meaning of the habitual, the *-ko iss-* construction is categorized as a general imperfective.

The multiple uses of the *-ko iss-* construction can be accounted for by taking a diachronic perspective; in other words, the grammaticalization of *-ko iss-* and the context-dependent nature of this construction can explain its multiple uses in Modern Korean. I investigated the historical development of the *-ko iss-* construction in order to find the answer to the question of why the *-ko iss-* construction should have the general meaning that it does, along with its various context-dependent interpretations. Based on empirical evidence and grammaticalization theory, I confirmed that the grammaticalization of *-ko iss-* is the major factor responsible for its multiple uses in Modern Korean.

Finally, I empirically investigated how L2 learners acquire the Korean aspect marker *-ko iss-* with respect to verb type and analyzed L2 Korean textbooks used by the participants at the time of the study. Based on the results of the experimental study and the problems found in the L2 textbooks, I suggest more effective methods of teaching the aspectual meanings of *-ko iss-* in the L2 classroom.

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# CHAPTER 1
# INTRODUCTION

## 1.1 Aspectual System in Korean

The Korean construction *-ko iss-* is often referred to as a progressive aspect marker (Baek, 1986; Choi 1965; K.-d. Lee, 1993; Sohn, 1999). The progressive meaning, as in (1), is derived from the periphrastic auxiliary verb construction *-ko iss-*, which consists of the connective *-ko* 'and' and the existential verb *iss-* 'to exist'. Thus, the construction originally implied that a certain situation is in existence. Its semantics expanded first to mean that someone or something is in action or operation, and eventually to express a progressive event or action when *-ko iss-* occurs with action verbs or dynamic verbs, which include Activities and Accomplishments[1] (per Vendler's 1967 classification).

(1)  Henry-ka      cip-ey        ka-**ko**    **iss**-ta.
     Henry-NM[2]   home-at       go-and    exist-DC
     'Henry is going home.'

The most extraordinary feature of the aspectual system in Korean is that unlike many other languages, including English and Japanese, it makes a formal distinction between the so-called progressive aspect, which is marked with *-ko iss*, and the so-called resultative aspect, marked by *-e iss-*. Historically, the divergence between *-ko iss-* and *-e iss-* took place from the 15th to 17th centuries, and seems to be strongly influenced by transitivity (Jeong, 2002; Kim, 2003). In Modern Korean, all transitive and intransitive verbs may occur with the progressive *-ko iss-* as in (2a) and (2c), whereas the resultative *-e iss-* collocates only with a limited number of telic intransitive verbs as in (2b). Thus, the

---

[1] The *-ko iss-* construction can also denote the progressive meaning when occurring with Achievement verbs.

[2] Refer to Sohn (1999) for glosses used in this dissertation.

verb *mantul-* 'to cook' in (2c) does not co-occur with the *-e iss-* construction because it is a transitive verb.

(2) a. Kkoch-i      patak-ey   tteleci-**ko iss**-ta.

    flower-NM ground-on drop-**Prog**-DC

    'The flower is dropping on the floor.'


  b. Kkoch-i      patak-ey   ttelecy-**e iss**-ta.

    flower-NM ground-on drop-**Resl**-DC

    'The flower was dropped on the floor.'


  c. John-un    achim-ul          mantul-**ko iss/\*-e iss**-ta.

    John-TC   breakfast-AC      cook-**Prog/\*Resl**[3]-DC

    'John is cooking breakfast.'


However, defining *-ko iss-* as a progressive and *-e iss-* as a resultative has caused problems for researchers who have tried to determine their grammatical categories. I'll present three reasons why the simple divergence of the two aspectual markers is not sufficient to explain the Korean aspectual system. First, the progressive marking *-ko iss-* is not obligatory in Korean because simple present tense *-(n)un-* also expresses the progressive meaning as in (3) (Ahn, 1995; Lee, 1991; among others).

(3) Henry-ka     cip-ey         ka-**n**-ta.

  Henry-NM   home-at       go-Pres-DC

  'Henry is going home.'


Second, counter to the traditional view that *-e iss-* is the resultative marker in Korean, there are many cases in which the *-ko iss-* construction functions as a resultative

---

[3] Hereafter, *-ko iss-* is glossed as either Prog (progressive) or Resl (resultative) depending on the context. If its interpreted meaning is not determined, then it is glossed as *-ko iss-* until its aspectual meaning is defined in Chapter 3.

marker, although its interpretation may be ambiguous depending on the context. Two interpretations are possible for the sentences illustrated in (4).

(4) a. Con-i        pwulkun    os-ul          ip-**ko iss**-ta.

   John-NM    red            clothes-AC    wear-**ko iss**-DC

   'John is wearing red clothes.' or 'John is putting on red clothes now.'

  b. Con-i        sin-ul        sin-**ko iss**-ta.

   John-NM    shoes-AC    wear-**ko iss**-DC

   'John is wearing shoes.' or 'John is putting on shoes now.'

  c. Con-i        mwukewun    kapang-ul    tul-**ko iss**-ta

   John-NM    heavy            bag-AC        carry-**ko iss**-DC

   'John is carrying a heavy bag.' or 'John is lifting a heavy bag now.'

The verbs of "wearing and contact" such as *sin-* 'to wear (shoes)', *ip-* 'to wear (clothes)', and *tul-* 'to carry' in (4) are all action verbs. However, when these verbs are combined with *-ko iss-*, they can refer to the resultative meaning or the progressive meaning depending on the context. Thus, two English translations are possible as illustrated in (4).

Another notable characteristic of the Korean aspectual system is that *-ko iss-* can occur with the so-called stative verbs (States in Vendler's classification), such as *al-* 'to know', *mit-* 'to believe', *kaci-* 'to have', *salangha-* 'to love', and so forth, whereas English counterparts of these verbs are ungrammatical in a progressive construction, as illustrated in (5).

(5) a. Na-nun    ku    sasil-ul      al-**ko iss**-ta.

    I-TC      the  fact-AC      know-**ko iss**-DC

  *'I am knowing the fact.'

  b. Na-nun    ku salam-ul        salangha-**ko iss**-ta.

    I-TC        the-person-AC    love-**ko iss**-DC

  *'I am loving him.'

The aspectual meaning of *-ko iss-* when it is combined with stative verbs has long been a topic of discussion among Korean linguists. In view of the ungrammaticality of the English progressive marking with statives seen in (5), it is hard to conclude that *-ko iss-* occurring with these verbs denotes the progressive meaning.

Regarding the aspectual classification of verbs in Korean, the distinction between Activity and Accomplishment in Korean is unclear to the extent that a number of verbs display features of both verb types (Lee, 2011). That is, some verbs have one set of features [+dynamic, -punctual, +telicity] when they are used as Accomplishment verbs, while they have a different set of features [+dynamic, -punctual, -telicity] when they are used as Activity verbs. Let us consider the following example.

(6) Ku    salam-un    cip-ul        1 nyen **tongan/maney**    ci(s)-ess-ta.
    the  person-TC   house-AC  1 year      for/in              build-PST-DC
    'The person built a house *for/in one year.'

As observed in Example (6), the verb *cis-* 'to build' in Korean can co-occur with both time adverbials *tongan* 'for' and *maney* 'in'. In contrast, the verb *build* in English can only co-occur with 'in', but not with 'for', as the English translation indicates. A considerable number of verbs in Korean have the features of both Activity and Accomplishment: *mek-* 'to eat', *ilk-* 'to read', *ssu-* 'to write', *cis-* 'to build', *kuli-* 'to draw', and *mantul-* 'to make', among others (Lee, 2011).

Due to the different aspectual classifications of verbs in Korean and the multiple uses of the aspectual marker *-ko iss-*, it is not easy to determine the grammatical properties of *-ko iss-*. Therefore, the traditional definition of *-ko iss-* as a progressive marker should be reconsidered. The issues regarding the Korean aspectual system that have long been discussed can be summarized in three questions: (1) What grammatical category does the auxiliary *-ko iss-* construction belong to? (2) In what conditions does *-ko iss-* denote the resultative meaning? (3) What is the exact aspectual meaning of *-ko iss-* when it is combined with the so-called stative verbs? Focusing on these questions, the present study explores how the different aspectual meanings of *-ko iss-* are obtained

in discourse and how these meanings have developed along with syntactic reanalysis. Furthermore, the present study presents a unified account of the Korean aspectual system from a panchronic perspective.[4]

## 1.2 Lacunae in the Previous Studies

Traditionally, the view that the *-ko iss-* construction can be defined as a progressive aspect marker has been prevalent (Baek, 1986; Choi, 1965; K.-d. Lee, 1993; Sohn, 1999). However, recent works have brought fresh notions and concepts such as durativity, totality, and dynamicity into the discussion, which has helped to build a more comprehensive picture of the Korean aspectual system. S. H. Kim (1989, as cited in Ahn, 1995) abandoned the traditional aspectual notions of the perfective and imperfective, proposing to replace them with the terminous and durative aspects, respectively. Lee (1991) also presented a new system of Korean aspect with two dimensions: temporality and totality. Ahn (1995) proposed that the *-ko iss-* construction should be considered the general imperfective rather than the progressive.

There has been a longstanding dispute on the aspectual classification of verbs in Korean, especially in relation to the aspectual meaning of so-called stative verbs when they occur with *-ko iss-*. Regarding the category of stative verbs in Korean, broadly, there are two views: one is the traditional view that stative verbs are classified as States (in Vendler's 1967 classification) just like in other languages, and the other is the view that stative verbs in Korean should be classified as Achievements (in Vendler's classification). As a consequence, the latter view claims that the aspectual meaning of *-ko iss-* occurring with stative verbs is "resultative" (Ahn, 1995; Lee, 2006). However, this view is still controversial among Korean linguists.

The reason for the disagreements and different views on the aspectual system in Korean is that the *-ko iss-* construction has multiple uses. This explains the difficulty in determining the grammatical category of *-ko iss-* in Modern Korean. However, the previous studies of *-ko iss-*, although they help to demonstrate the multifunctional nature of this construction, are limited in several respects. First, previous scholars have used

---

[4] The panchronic approach looks into a linguistic matter at all stages of a language's development. In this dissertation, I examine the imperfective aspect in Korean synchronically and diachronically.

only a limited range of data. In most of the literature, only invented sentences without context have been considered for analysis. The importance of using naturally occurring conversations as research data has been ignored. Different researchers have considered different ranges of made-up examples for their analyses. They have not considered the overall distribution of the construction in actual discourse and thus have failed to cover all of its various uses. In such studies, the semantics of a construction is usually derived from a semantic interpretation obtained based on given examples rather than its grammatical meaning. One or more uses of the construction can be found in given contexts; however, a single grammatical meaning that encompasses the contextual uses of *-ko iss-* is yet to be identified. There is little recognition of the role of various contextual factors such as temporal adverbials, contextual information, pragmatic implicature, and the extent to which these factors contribute to the interpretation of the temporal/aspectual meaning of a given utterance.

Second, the two-component theory (Smith, 1997) asserts that aspectual meanings depend on the interaction between verb situation type (inherent lexical aspect) and the speaker's viewpoint (grammatical aspect). As a consequence, aspectual classification of verbs is very important because the inherent semantic features of verbs play a key role in determining the aspectual meanings. However, aspectual classification of verbs varies depending on languages. There are no clear criteria appropriate to classification of verbs in Korean. In the present study, presenting appropriate criteria for the classification of Korean verbs will help to find the answer to the question of how the multiple meanings of *-ko iss-* are obtained.

Third, the synchronic distribution of a grammatical morpheme is often closely related to its diachronic development over time (Bybee, Perkins, & Pagliuca, 1994). According to Bybee et al. (1994), the multiple uses of a grammatical morpheme can be traced to its path of grammaticalization. Previous studies, however, have failed to consider the historical development of the Korean aspectual system in their characterizations of the synchronic system. The developmental path of the imperfective *-ko iss-* can provide the answer to the question of why *-ko iss-* has multiple uses in discourse contexts. The historical development of the *-ko iss-* construction should be considered in characterizing the grammatical category of the construction in Modern

Korean. This study, therefore, explores the possibility that the grammaticalization of *-ko iss-* may be the major factor responsible for the multiple uses and the context-dependent nature of this construction in Modern Korean. In this dissertation, I will attempt to give a historical account of the aspectual system in Korean in order to resolve the disagreements and the different views on the *-ko iss-* construction.

Lee (1991) and Oh (2003) attempted to overcome the shortcomings of the previous studies on tense and aspect in Korean by taking a discourse-pragmatic approach to the temporal system in Korean as well as providing a diachronic account. They focused on investigating the grammatical nature of the anterior marker *-ess-*, but made no attempt to explain the *-ko iss-* construction. They argued for the need to consider the speaker's communicative goals and concerns, along with historical and crosslinguistic information, in order to characterize the semantic and grammatical nature of the suffix *-ess-*. These two studies provided valuable insights on the study of tense, aspect, and modality in Korean and laid the foundation for the present study. In line with Lee's (1991) and Oh's (2003) discourse-pragmatic approach and Oh's (2003) diachronic approach, the present study focuses on investigating how the multiple uses of the *-ko iss-* construction emerge in discourse and how the construction's meanings have developed diachronically.

## 1.3 Goals of the Study

This study aims at providing a comprehensive understanding of the Korean imperfective *-ko iss-* construction and its different aspectual meanings in discourse. The aspectual meanings are basically determined by the interaction between the inherent verb semantics and the grammatical marker. In a real situation, however, various contextual factors such as temporal adverbials, contextual information, pragmatic implicature, and speaker's interest or involvement play a crucial role in determining the temporal/aspectual meaning of the *-ko iss-* construction. By taking a discourse-pragmatic approach, I attempt to resolve the disagreements and different views on the aspectual classification of verbs in Korean and the grammatical category of the *-ko iss-* construction.

The multiple uses of the *-ko iss-* construction can be accounted for by taking a diachronic perspective; in other words, its various uses can be traced to its

grammaticalization path. Bybee et al. (1994) have described in detail how the synchronic distribution of a grammatical morpheme is closely tied to its development over time. I will investigate the historical development of *-ko iss-* based on empirical evidence from Middle Korean texts in conjunction with the grammaticalization theory. Based on this investigation, this study suggests that the grammaticalization of *-ko iss-* and the context-dependent nature of the construction are the major factors responsible for its multiple uses in Modern Korean.

The specific objectives of this study on the imperfective *-ko iss-* construction are threefold: first, to explore the multiple uses of the imperfective *-ko iss-* by examining naturally occurring conversation; second, to explore how the different aspectual meanings are obtained in discourse by investigating the inherent lexical aspect of verbs (situation type) and its interaction with the imperfective *-ko iss-*; and third, to investigate the historical development of *-ko iss-* and how the multiple uses of *-ko iss-* in Modern Korean reflect its grammaticalization path. Based on the findings of these investigations, I will suggest a new description of the grammatical category of *-ko iss-* in the aspectual system of Korean.

## 1.4 Organization of the Dissertation

In Chapter 2, I will clarify the notion of aspect and review the relevant theoretical approaches to aspect. The two-component theory will be introduced as a theoretical framework, and I will show how the theory is applicable to the aspectual system in Korean. I will also present solutions to some problems that emerge in applying this theoretical framework to the Korean aspectual system.

In Chapter 3, I will explore the multiple uses of the *-ko iss-* construction by examining naturally occurring conversation. This chapter investigates the inherent lexical aspect of verbs (situation type) and its interaction with the aspectual marker *-ko iss-*, and analyzes how the multiple meanings of *-ko iss-* are acquired in discourse. Based on the notions of aspect and the theoretical background discussed in Chapter 2, I will determine the grammatical category of *-ko iss-* and suggest the general meaning of *-ko iss-* in Modern Korean.

In Chapter 4, I will investigate the historical development of the *-ko iss-* construction in order to answer the question of why the *-ko iss-* construction should have both a general meaning and various context-dependent interpretations. Bybee et al. (1994) claim that the synchronic distribution of a grammatical morpheme may be closely related to its diachronic development, and that understanding the path of a form's grammaticalization can help us understand its current uses. Thus, in Chapter 4, I will investigate the grammaticalization of the *-ko iss-* construction based on empirical evidence from Middle Korean in conjunction with grammaticalization theory.

In Chapter 5, I will discuss the pedagogical implications of this study. The *-ko iss-* construction expresses different aspectual meanings depending in part on verbs' inherent semantic types. The multiple uses of *-ko iss-* and its context-dependent nature add to L2 learners' difficulties with the aspectual system in Korean. In Chapter 5, I first present a study that empirically investigated how L2 learners acquire the Korean imperfective aspect *-ko iss-* in respect to verb semantic type. I then analyze the textbooks used by the participants of the study. Based on the results of the L2 acquisition study and the problems found in the textbooks, I will suggest more effective methods for teaching the imperfective *-ko iss-* in the L2-Korean classroom.

# CHAPTER 2
# THEORETICAL BACKGROUND


This chapter has three goals: (1) to clarify the notions of aspect and to review the relevant theoretical approaches to aspect; (2) to explain this study's theoretical framework and show how it applies to the aspectual system in Korean; and (3) to propose solutions to the problems involved in applying the chosen theoretical framework to the Korean aspectual system.

## 2.1 Introduction

In the previous chapter, I briefly explained the complex nature of the aspectual system in Korean and the multiple aspectual meanings denoted by the *-ko iss-* construction. The conditions under which the different aspectual meanings are obtained have been investigated by Korean linguists. However, because of the complex nature of the aspectual system in Korean, no consensus has been reached. In this chapter, I propose a theoretical account that resolves the issues that are subject to dispute. The account is essentially an application of Smith's (1997) two-component theory of aspect, which claims that the meaning of an aspect marker is determined by how the inherent verb semantics interact with the aspectual morpheme that denotes viewpoint aspect.

There has been a longstanding interest in the relation between the inherent aspect of verbs and the aspectual meanings of imperfective markers (Shirai, 2000; Smith, 1997). In recent years, aspect has often been discussed based on the two-component theory proposed by Smith (1997). According to the two-component theory, the aspectual meaning is determined by the interaction between the two components of "situation aspect" (inherent lexical aspect) and "viewpoint aspect" (grammatical aspect). Not all verbs have the same internal temporal constituency. For example, some verbs are telic verbs with an endpoint, while others are atelic. Some verbs are dynamic, while others are static. As such, the semantic type of an individual verb may or may not correspond to the aspectual meaning of the aspectual marker. The aspectual marker tends to denote the

progressive meaning when it is combined with Activity and Accomplishment verbs (in Vendler's 1967 classification) because of the internal temporal duration of the verbs. Conversely, it tends to denote the resultative meaning when it is combined with Achievement verbs (Vendler's classification) because this type of verb has no internal temporal duration (Shirai, 2000).

However, some problems arise in applying this theory to the aspectual system in Korean. According to Smith's theory, the progressive viewpoint does not generally correspond to stative verbs unless the meaning conveys vividness or the temporariness of a situation, which Smith (1997) called the "stative progressive." First of all, a number of stative verbs are actively combined with the *-ko iss-* construction without denoting the "stative progressive." Second, a syntactic phenomenon has an influence on the selection of the aspect markers: The *-ko iss-* construction combined with Achievement verbs like *drop* cannot express the resultative meaning if they are intransitive. In Korean, intransitive achievement verbs cannot occur with *-ko iss-* to denote the resultative meaning. Instead, another resultative marker, *-e iss-*, is used to denote the resultative meaning with intransitive verbs. This syntactic phenomenon indicates that it is necessary to consider the correlation between aspectual meanings and transitivity in addition to the two-component theory when it comes to the aspectual system in Korean. Third, the same verb situation type can denote different meanings such as iterative, habitual, progressive, resultative, and stative. Finally, in different languages, equivalent verbs combined with an aspectual marker can denote different aspectual meanings.

In this chapter, I first explain the two-component theory as the framework employed in this study. I then discuss how the theory is applicable to the aspectual system in Korean and address some problems with the theoretical framework. Finally, I propose how to resolve these problems.

## 2.2 The Two-Component Theory (Smith, 1997)

There is a tendency to choose different predicates depending on the aspectual meanings of an aspectual marker. In other words, aspectual meaning engenders some restrictions on the predicates with which a marker combines. This is due to the lexical aspect or aktionsart of a verb, which is part of the way in which a verb is structured in

relation to time. Not all verbs have the same internal temporal constituency. For example, some verbs are telic verbs with an endpoint, while others are atelic. Some verbs are dynamic, while others are static. As such, the semantic type of individual verbs may or may not correspond to the aspectual meaning of an aspectual marker. In this regard, Smith (1997) proposed the two-component theory, which asserts that the aspectual meaning is determined by the interaction between the two components of "situation aspect" (inherent lexical aspect) and "viewpoint aspect" (grammatical aspect). The lexical aspect "distinguishes between subclasses of events based on the temporal properties," while the grammatical aspect denotes "whether an event is viewed as finished, completed, or ongoing" (Mani et al., 2005, p. 3).

### 2.2.1 Definition of aspect

The term "aspect" refers to "the internal temporal structure of the events" expressed by verbs or verbal phrases, differing from "tense," which locates the event in time (Comrie, 1976; Chung & Timberlake, 1985). Aspect can be expressed by the inherent semantics of verbs and also by its interaction with argument structures or its interaction with grammatical morphology. The former is called the lexical aspect (aktionsart) or the situational aspect and the latter is called the grammatical aspect or viewpoint aspect (Smith, 1997). The interaction between situational aspect and viewpoint aspect will be discussed in detail along with Smith's two-component theory in Section 2.2.4. In Section 2.2.2 and 2.2.3, the focus is mostly on defining diverse types of aspect based on the definitions proposed by Comrie (1976), Bybee et al. (1994), and Dahl (1985).

### 2.2.2 Inherent lexical aspect (situation type)

Vendler (1967) and Smith (1997) classify verbs into four categories by semantic type: States, Activities, Accomplishments, and Achievements, as shown in Table 2.1.

State verbs denote a state of a subject rather than an action of the subject. States and Activities are distinguished from Accomplishments and Achievements in terms of telicity. State verbs and Activity verbs do not internally contain an endpoint, while Accomplishment verbs and Achievement verbs have an endpoint. States and Activities

are differentiated in terms of dynamicity, that is, State verbs are static, whereas Activity verbs are dynamic. Achievements and Accomplishments differ in terms of punctuality, that is, Achievement verbs change state instantly, whereas Accomplishment verbs approach an endpoint gradually through a process. The key point of the two-component theory is that these differences in verb semantics are the source of the different aspectual meanings of the aspect markers.

**Table 2.1**

*Feature Analyses of the Four Verb Types*

| Situation Aspect | Examples | Punctual | Telic | Dynamic |
|---|---|---|---|---|
| **State** | love, have, know | [–] | [–] | [–] |
| **Activity** | run, walk, enjoy | [–] | [–] | [+] |
| **Accomplishment** | build a bridge, walk to school | [–] | [+] | [+] |
| **Achievement**[5] | die, hit the target, win the game | [+] | [+] | [+] |

## 2.2.3 Grammatical aspect (viewpoint aspect): Imperfective

Grammatical aspect, on the other hand, refers to the aspect encoded in verbal inflectional morphology, such as perfective and imperfective grammatical morphemes. Literally, this aspect is a viewpoint or perspective through which a speaker sees a situation. The perfective is an external perspective that views the situation as a bounded whole without distinguishing various separate phases that make up the situation. In contrast, the imperfective focuses on the internal structure of a situation, excluding the beginning or endpoint of the situation (Comrie, 1976). Nevertheless, the term "imperfective" in this dissertation includes both the resultative state and the preliminary state of an event. According to Smith (1997) and Shirai (2000), imperfective aspect is not always limited to the sense of the internal view or the internal structure of a situation; rather, it can carry the sense of "internal to a particular interval which involves duration" (Shirai, p. 330).

---

[5] Smith (1997, p. 29) also included semelfactives (e.g., *cough*, *knock*), which are "single-stage events with no result or outcome," in this category.

### 2.2.3.1 Perfective vs. imperfective

The perfective is an external perspective that views a situation as a bounded whole without distinguishing various separate phases that make up the situation. In contrast, the imperfective focuses on the internal structure of a situation that excludes the beginning or endpoint of a situation (Comrie, 1976). As shown in Figure 2.1, the imperfective focuses on three different phases of a situation: the preliminary, ongoing, and resultant phases.

**Figure 2.1**

*Three Different Phases of the Imperfective Aspect*

```
        --------------I-----------------F---------------
                 I: Initial point      F: Final point
Phases:      (A)          (B)              (C)
```

(A) Preliminary phase (e.g., *He is winning the race. He is dying.*)

(B) Ongoing phase (e.g., *He is building a house. He is walking to school.*)

(C) Resultant phase (e.g., *The picture is hanging on the wall. He is sitting on a chair.*)

(Adapted from Smith, 1991, as cited in Kim, 2003)
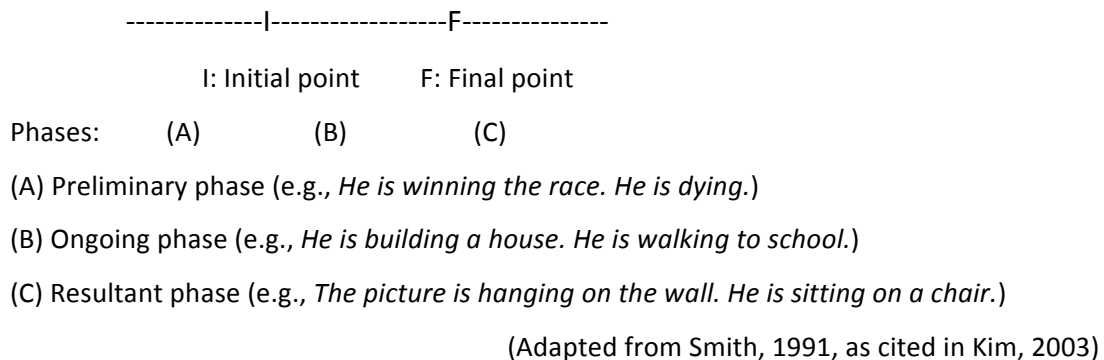
The contrast between the perfective and the imperfective is clearly illustrated in (7).

(7) a. John drew a picture. (Perfective)

    b. John was drawing a picture. (Imperfective)

The perfective in (7a) views the situation of drawing a picture as a single whole, while the imperfective in (7b) describes the ongoing phase of drawing a picture within the situation. In the next section, I will explain the imperfective in detail.

### 2.2.3.2 Imperfective

While many languages have a single category to express imperfectivity, there are other languages where imperfectivity is subdivided into a number of distinct categories (Comrie, 1976). Comrie's subdivisions of imperfectivity are illustrated in Figure 2.2.

**Figure 2.2**

*Classification of Aspectual Oppositions (Comrie, 1976)*

```
                        Imperfective
                             |
              ┌──────────────┴──────────────┐
           Habitual                      Continuous
                                             |
                                  ┌──────────┴──────────┐
                            Non-progressive          Progressive
```
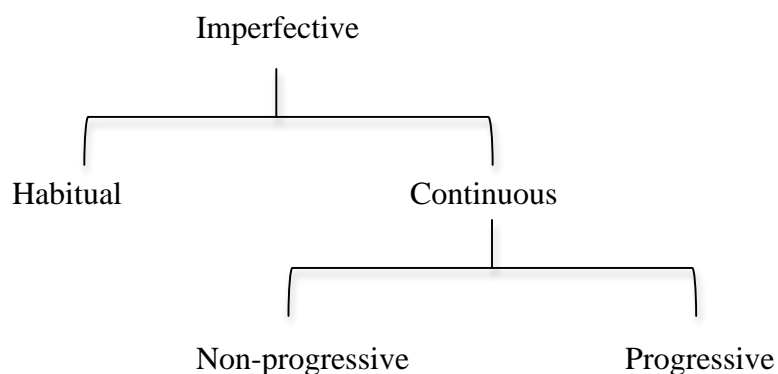
English has separate habitual (e.g., *Mary used to work here*) and progressive (e.g., *John was working*) aspects. In contrast, Spanish has a straight distinction between perfective and imperfective. The simple past expresses *Mary arrived*, while the imperfective expresses *Mary was arriving, Mary used to arrive.* In Korean, the *-ko iss-* construction entails habitual and progressive and thus can be considered as imperfective (Ahn, 1995).[6] Another definition of *-ko iss-* will be discussed in Chapter 3.

**2.2.4 Imperfective viewpoint and its interaction with situation aspect**

The meaning denoted by a progressive marker, which is a case of imperfective, can be predicted as a function of its interaction with the inherent aspect of the verb (situation type). In English, the progressive marking normally has the meanings in (8) when combined with different types of inherent aspect (Examples from Shirai, 2000, p. 331).

---

[6] The inflectional suffix *-(n)un-*/zero, known as the simple present tense in Korean, can also express habitual and progressive (Sohn, 1999). Lee (1991) views the suffix *-(n)un-*/zero as imperfective.

(8) Interaction of English progressive marking with verb situation type

| | |
|---|---|
| Activity: | ACTION IN PROGRESS |
| | (a) 1. He's running. |
| | 2. She's playing the guitar. |
| Accomplishment: | ACTION IN PROGRESS |
| | (b) 1. He's making a chair. |
| | 2. He's running a mile. |
| Achievement: | A. PROCESS LEADING UP TO AN ENDPOINT |
| | (c) 1. He's reaching the summit. |
| | 2. He's leaving. |
| | B. ITERATIVE ACTION-IN-PROGRESS |
| | (d) He's jumping. |
| | C. ANOMALOUS |
| | (e) 1. *I'm finding the book. |
| | 2. *I'm recognizing him. |
| State: | A. VIVIDNESS, TEMPORARINESS |
| | (f) 1. I'm liking it! |
| | 2. I'm thinking that he might be sick. |
| | B. ANOMALOUS |
| | (g) 1. *I'm owning a car. |
| | 2. *I'm knowing him. |

As a type of imperfective aspect, the progressive aspect imposes an internal view, thus the imperfective looks at a situation with a focus on its internal structure. In the internal view, the focus is on the fact that temporal duration is internally structured in a situation. Due to the fact that Activities and Accomplishments have an internal temporal duration, English progressive marking can denote the meaning of "action-in-progress" when combined with these types of verbs, as illustrated in (8a) and (8b). Achievements, however, do not have an internal temporal duration because this type of verb is instantaneous and non-durative. Therefore, its imperfective viewpoint does not imply the same progressive meaning as Activities and Accomplishments, causing the sentences illustrated in (8e) to be anomalous. Instead, it can express the process leading up to the

16

endpoint of Achievement verbs, as illustrated in (8c). Another imperfective viewpoint with Achievement verbs is the meaning of "iterative action-in-progress" because this type of verb cannot have duration without repetition, as illustrated in (8d). Finally, State verbs cannot have an "action-in-progress" meaning, because State verbs are non-dynamic, and do not constitute an "action," as illustrated in (8g). However, the English progressive marking is actually possible when the meaning is "state viewed as a dynamic event" in order to convey vividness or temporariness of the situation, which Smith calls "stative progressive," illustrated in (8f).

Smith's two-component theory has been applied to diverse and typologically distinct languages. Smith (1997) analyzed the tense-aspect systems of languages including English, French, Russian, Mandarin Chinese, and Navajo, based on the framework of the two-component theory. Shirai (1998) also used the same framework to compare Japanese, Korean, and English, all of which are thought to have significant commonalities in terms of their aspectual systems. Among these languages, the Japanese aspectual system is the most analogous to the Korean aspectual system in that the aspectual markers in the two languages basically denote both the progressive meaning and the resultative meaning. As such, it is beneficial to compare the Japanese aspectual marker *-te i-* with the Korean aspectual marker *-ko iss-* within the framework proposed by Smith.

Shirai (2000) suggested that the Japanese aspectual marker *-te i-* can denote both progressive and resultative aspectual meanings, depending on verb semantic types, as mentioned earlier. He provided an integrated definition of the Japanese *-te i-* as an imperfective durative marker that can focus on either the progressive or the resultative. Its realization as either a dynamic progressive or a static resultative is determined by its combination with the inherent aspect of the verb semantics. For example, *-te i-* denotes a progressive meaning when combined with Activity verbs and Accomplishment verbs, which contain an internal temporal duration, whereas it denotes a resultative meaning when combined with Achievement verbs, which do not have an internal temporal duration. In this way, the dual functions of the Japanese *-te i-* can be explained in the framework based on Smith's two-component theory.

Similarly, the Korean aspectual system can also be justified in the framework suggested by Smith (1997). The aspectual markers of the two languages are similar in that both consist of the same periphrastic construction of a connective ('and') and an existential verb to mark both the progressive and the resultative. The examples in (9) show the interaction of the Korean aspectual marker *-ko iss-* and the situation aspect of the verb types. Korean *-ko iss-* has the following meanings when combined with different verb types of inherent aspect:

(9) Interaction of Korean *-ko iss-* with verb situation type

Activity:              ACTION IN PROGRESS
                       (a) Swuci-nun  talli-**ko iss**-ta.
                           Suzie-TC    run-**Prog**-DC
                           'Suzie is running.'

Accomplishment:    A. ACTION IN PROGRESS
                       (b) Swuci-nun  os-ul       mantul-**ko iss-**ta.
                           Suzie-TC   clothes-AC  make-**Prog**-DC
                           'Suzie is making clothes.'

                       B. RESULTATIVE STATE
                       (c) Swuci-nun   tuleysu-lul   ip-**ko iss**-ta.
                           Suzie-TC    dress-AC     wear-**Resl**-DC
                           'Suzie is wearing a dress.'

Achievement:       A. ACTION IN PROGRESS
                       (d) Swuci-nun  yangmal-ul   sin-**ko iss**-ta.
                           Suzie-TC   socks-AC     put on-**Prog**-DC
                           'Suzie is putting on a pair of socks.'

                       B. PROCESS LEADING UP TO AN ENDPOINT
                       (e) Swuci-nun san       kkoktayki-ey ilu-**ko iss**-ta.
                           Suzie-TC   mountain top-at        reach-**Prog**-DC
                           'Suzie is reaching the top of the mountain.'

C. INTERATIVE ACTION IN PROGRESS

(f) Swuci-nun thaca-lul       chi-**ko iss**-ta.

   Suzie-TC   typing-AC       hit-**Prog**-DC

   'Suzie is typing.'

D. DYNAMIC RESULTATIVE STATE

(g) Swuci-nun nwun-ul   kam-**ko iss**-ta.

   Suzie-TC   eye-AC   close-**Resl**-DC

   'Suzie has her eyes closed.'

E. ANOMALOUS

(h) *Swuci-nun ku tongkwu-lul palkyenha-**ko iss**-ta.

    Suzie-TC   the cave-AC       discover-**Prog**-DC

    'Suzie is finding the cave.'

State:                    A. CONTINUING STATE

(i) Swuci-nun  ku salam-ul       al-**ko iss**-ta.

   Suzie-TC   that person-AC   know-**Stat**[7]-DC

    *'Suzie is knowing that person.'

→ 'Suzie is in a state of knowing that person.'

B. STATIVE PROGRESSIVE: vividness, temporariness

(j) Swuci-nun nolay-lul ttal-a       pwulu-mye mak   kippeha-**ko iss**-ta.

   Suzie-TC   song-AC  follow-INF sing-while wildly be delighted-**Prog**-DC

   'Suzie is singing along while being delighted.'


Basically, Activities and Accomplishments can denote the progressive meaning while Achievements and Accomplishments can denote the resultative meaning when occurring with *-ko iss-*. In Korean, *-ko iss-* can denote the progressive meaning when it is combined with Activities and Accomplishments because these types of verbs have internal temporal duration, while it can denote the resultative meaning when it is combined with Achievements and Accomplishments because these types of verbs have an endpoint, that is, telicity. Thus, the aspectual system in Korean can be explained in the framework of the two-component theory.

---

[7] The abbreviation "Stat" refers to "Stative." The stative use of *-ko iss-* will be discussed in detail in Chapter 3.

## 2.3 Two-Component Theory and Korean Aspect: Problems

However, in some respects, applying the framework of the two-component theory to the aspectual system in Korean is problematic. The point of Smith's (1997) two-way component theory on aspect is that Accomplishment and Activity (with internal duration) denote the progressive aspect, while Achievement, which is instantaneous and non-durative, denotes the resultative aspect. From her viewpoint, the progressive viewpoint does not generally correspond to State verbs unless the meaning conveys the vividness or temporariness of a situation. However, a number of stative verbs[8] are actively combined with *-ko iss-*, although this combination does not denote the "stative progressive" in Smith's (1997) sense, as illustrated in (9i).

The aspectual meaning of *-ko iss-* when it is combined with stative verbs has long been a topic of discussion among Korean linguists. In view of the ungrammaticality of the English progressive marking as seen in (9i), it is hard to conclude that *-ko iss-* occurring with stative verbs denotes the typical progressive meaning of action-in-progress. Some scholars (Ahn, 1995; Lee, 2006) have insisted that stative verbs in Korean should be classified as Achievement verbs because they contain the eventuality of changing a state. Accordingly, their aspectual meaning with *-ko iss-* is claimed to be resultative, which indicates the "inception in eventuality" description. In the present study, I assert that the aspectual meaning of stative verbs with *-ko iss-* is not the progressive meaning. Furthermore, I do not agree that stative verbs in Korean should be classified as Achievements with eventuality because Korean stative verbs and English stative verbs are not particularly different in their semantic content and, generally, psychological verbs indicating mental states usually contain the inchoative meaning of "entering into a state" (Zeitoun, 2000). In English, a verb that expresses a state can also express the entrance into a state. This is called inchoative aspect. The simple past is sometimes inchoative. For example, the present-tense verb in the sentence *He understands his friend* is stative, while the past-tense verb in the sentence *Suddenly he understood what she said* is inchoative, because it means that he began to understand.

---

[8] In this chapter, I use the term "stative verbs" for "State verbs." I clarify in a later section that the category of stative verbs in Korean is State in Vendler's classification.

Based on this assumption that stative verbs innately contain the inchoative aspect, I suggest that stative verbs in Korean should remain in the category of State, just like English stative verbs. Therefore, we should approach this problem of stative verbs occurring with *-ko iss-* in Korean from a different perspective; the aspectual meaning of *-ko iss-* with stative verbs must imply an aspectual meaning other than the progressive meaning. This is a unique phenomenon of the Korean aspectual system, and more detailed discussion about it will follow in the next section In Section 2.4, I will examine the classification of verbs in Korean and discuss how stative verbs in Korean should be classified and what kind of aspectual meaning is obtained when these verbs occur with *-ko iss-*.

Another problem of the two-component theory in regard to the classification of verbs is that the same verbs combined with an aspectual marker can denote different aspectual meanings depending on the language. For example, the Japanese verb meaning 'to go' combined with *-te i-* indicates resultative rather than progressive; thus, the verb meaning 'go' in Japanese is not classified as Activity but as Achievement. In Korean, however, the verb *ka-* 'to go' can combine with the progressive *-ko iss-*, denoting the meaning of action-in-progress. Because the aspectual classification of verbs may differ across languages, it is important to take into account the fact that different aspectual classifications of individual languages can affect the aspectual meaning of aspectual markers.

Moreover, transitivity has an influence on aspect marker choice in Korean. Unlike the Japanese *-te i-*, the Korean *-ko iss-* combined with Achievement verbs like *tteleci-* 'to drop' cannot express the resultative meaning because it is intransitive, and thus would take the resultative marker *-e iss-*. The Korean *-ko iss-* construction can denote the resultative meaning only when combined with transitive verbs like *kam-* 'to close', as illustrated in (9g). The correlation between aspectual meanings and transitivity in Korean must be considered in addition to the two-component theory to explain the Korean aspectual system.

Furthermore, the same verb type can denote different aspects including iterative, habitual, progressive, resultative, and stative. Let's consider the Korean examples in (10).

(10) a. Yenghuy-nun wuntongcang-eyse talli-**ko iss**-ta.

      Yenghuy-TC   sports field-on      run-**Prog**-DC

      'Yenghuy is running on the sports field.'


   b. Yenghuy-nun mayil     3 sikan-ssik   talli-**ko iss**-ta.

      Yenghuy-TC   everyday 3 hour-each  run-**Habit**-DC

      'Yenghuy runs for 3 hours a day.'


The verb *talli-* 'to run' is clearly classified as Activity. However, the aspectual meaning of *-ko iss-* in (10a) is the meaning of action-in-progress, whereas the aspectual meaning of *-ko iss-* in (10b) does not refer to the meaning of action-in progress but to the state of an action that continuously happens, which corresponds to Comrie's (1976) definition of the habitual. The only difference between the two sentences is the use of a temporal expression, *mayil 3 sikan-ssik* 'for 3 hours a day' in (10b). This problem of the same verb expressing different aspectual meanings may be solved by adopting Dowty's (1979) proposal that verb classification should be done at the VP level or the sentence level.

      Finally, the same situation type may denote different aspectual meanings depending on individual languages. As shown in Section 2.2.4, the English progressive and the Korean progressive can denote the meaning of process leading up to the endpoint when occurring with Achievement verbs, as in *The train is arriving at the station*, but the Japanese progressive cannot. This is because the degree of grammaticalization of the aspectual marker differs depending on the language. As the degree of its grammaticalization increases, the restrictions on combined predicates become freer. In this regard, I will consider grammaticalization theory and adopt the historical perspective in this study. I will discuss the grammaticalization of the Korean aspectual system in detail in Chapter 4.

      If the aforementioned problems of the Korean aspectual system in conjunction with the framework of the two-component theory are solved, then it can be concluded that this type of verb classification is universal in tense-aspect systems, with some crosslinguistic variations. In the next section, I will discuss in detail the problems of applying the two-component theory to the Korean aspectual system, and propose

solutions to these problems by drawing on Smith's (1997) notion of verb constellation, Lee's (1991) discourse-pragmatic approach, Oh's (2003) diachronic account, and Shirai's (2000) integrated approach.

## 2.4 Two-Component Theory and Korean Aspect: Solutions

### 2.4.1 Verb situation type: Basic level and derived level

The two-component theory (Smith, 1997) presents aspectual meanings as dependent on the interaction between the situation type and the speaker's viewpoint aspect. As a consequence, the aspectual classification of verbs is very important because the inherent semantic features of verbs play a key role in determining aspectual meanings. In this section, I discuss the problems of applying Vendler's (1967) verb classification (Table 2.1) to Korean verbs.

The criteria for Vendler's (1967) classification of English verbs are based on their compatibility with three temporal adverbials (*for*, *in*, *at*). First, the temporal adverbial *for* is used to check durativity; State verbs and Activity verbs are compatible with it, as illustrated in (11).

(11) a. I lived here for 10 years. (State)

    b. We played football for an hour. (Activity)

Second, the temporal adverbial *in* is used to check telicity; Accomplishment verbs and Achievement verbs are compatible with it, as illustrated in (12).

(12) a. I read a book in an hour. (Accomplishment)

    b. I reached the top in three hours. (Achievement)

Third, the temporal adverbial *at* is used to check punctuality; Achievement verbs are compatible with it, as illustrated in (13).

(13) I reached the top at 3 o'clock. (Achievement)

However, Vendler's criteria for the classification of verbs cause some confusion because some verbs may transfer from one type to another depending on their arguments. Dowty (1979) argued that if there is a definite article *the*, which modifies a noun, then the verb type turns from Activity into Accomplishment as in (14) and (15).

(14) a. John ate the bag of popcorn in an hour.

    b. *John ate popcorn in an hour.

    c. John ate popcorn for an hour.

(15) a. John built the house in a month.

    b. *John built houses in a month.

    c. John built houses for two years.           (Examples from Lee, 2011, p. 74)

A number of motion verbs classified under Activity shift to Accomplishment when combined with quantitative nouns or destinations as in (16).

(16) a. John walked to the park in an hour.

    b. John walked a mile.                (Examples from Lee, 2011, p. 26)

Hence, Dowty (1979) claimed that a number of verbs including motion verbs shift to Accomplishments from Activities depending on the context. Moreover, some verbs can indicate two types of temporal schema and take two temporal adverbials at the same time as in (17).

(17) a. John painted a picture for an hour. (Activity)

    b. John painted a picture in an hour. (Accomplishment)

(18) a. He read a book for an hour. (Activity)

    b. He read a book in an hour. (Accomplishment)     (Examples from Lee, 2011, p. 25)

Based on the phenomena above, Dowty (1979) suggested that verb classification should be done at the VP-level, not the word-level. In line with this suggestion, Smith

(1997) presented two different levels of situation type: the basic level and the derived level. The basic level is "always available for a verb constellation" (p. 18), while the derived level is a situation type in a real-world situation, in which contextual factors such as temporal adverbial, type of argument, and other contextual information may affect its type. In the two-component theory, Smith's notion of the distinction between the basic level and the derived level is important to determine the situation type of a verb constellation in a real discourse situation.

Shirai (2000, p. 341) supported Smith's notion of the two distinct levels of the situation type of a verb constellation by saying "the inherent aspect structure should be considered an interface between linguistic form and real-world situation." According to Shirai, the derived situation type should be representative of the situation type of a particular verb constellation. The motivation for his argument lies in the fact that a particular verb constellation can be construed differently in terms of the inherent aspect depending on the real-world situation it denotes. Observe the following examples that Shirai gives (p. 341):

| Form | Inherent aspect | Situation to be described |
|---|---|---|
| *open a box* | Achievement | OPEN by pushing a button |
| *open a box* | Accomplishment | OPEN a carefully wrapped box |
| *walk to the store* | Accomplishment | WALK to the store |

I share Smith's (1997) and Shirai's (2000) views on situation type, and thus the situation type at the derived level is considered to be the inherent aspect of the verb for the present study. In order to better understand real-world situations, the present study examines naturally occurring discourse contexts so that the various contextual factors affecting aspectual meanings of verbs can be fully considered.

Therefore, in regard to the aspectual meaning of stative verbs with *-ko iss-*, it is useful to consider Dowty's (1979), Smith's (1997), and Shirai's (2000) views on verb constellations, that is, that verb classifications shift from one type to another depending on contextual factors such as temporal adverbials and arguments. As Smith (1997) and Shirai (2000) suggested, a particular verb constellation can be differently categorized depending on the real-world situation it denotes, under the assumption that there is a

distinction between the basic and the derived level of categorization for the situation aspect. For instance, the verb *al-* 'to know' in Korean may shift from State type at the basic level to Achievement type at the derived level depending on the context. Let us look at the following conversation example.

(19) a. **State type**

      A: Ne   ce   salam  **al**-e?

        you  that  person  know-Q

        'Do you know that person?'

      B: Ung,  **al**-e.

        yes know-DC

        'Yes, I know (him/her).'

  b. **Shift to Achievement type**

      In context: Several students are solving a question in math class.

      Student 1: A,  tap     **al**-ass-e!

              ah answer know-PST-DC

              'I got the answer!'

In Example (19a), the verb *al-* 'to know' denotes the present state of knowing itself, that is, without any temporal/aspect suffix attached to it, and thus it is the State type, and its basic level and derived level in the real world are considered the same. In (19b), however, the verb *al-* 'to know' is interpreted not as referring to the present state of knowing, but rather to the dynamic event of entering-into-knowing. That is, the State verb indicating the present state of knowing at the basic level shifts to Achievement, indicating the dynamic event of entering-into-knowing at the derived level. By accepting the notion of Smith's verb constellation in which the same verb can be classified as a different situation type at the derived level, the controversial issue of classifying stative verbs in Korean as Achievements can be resolved. All the different views on the classification of stative verbs in Korean can be addressed by making the distinction between the basic level and the derived level depending on a real-world situation. Therefore, for the present

study, I will take the view that stative verbs in Korean are categorized as State type at the basic level, and yet they may shift to Achievement type at the derived level, and thus their aspectual meaning with *-ko iss-* may indicate the resultative,[9] depending on the real-world situation. At the basic level, the aspectual meaning of stative verbs with *-ko iss-* denotes the continuous stative meaning, which I will discuss in detail in the next section. In order to look into how real situations affect the derived level, it is necessary to consider discourse contexts, which will help to account for the semantic and grammatical characteristics of the aspectual marker *-ko iss-*.

## 2.4.2 Diverse types of aspectual meanings of the imperfective

As mentioned earlier, a problem in applying the two-component theory is that the same verb situation type can denote different meanings such as iterative, habitual, progressive, resultative, and stative. The Korean aspectual marker *-ko iss-* can express diverse types of aspectual meanings in addition to the resultative and the progressive meanings. In this section, I will first clarify the definitions of the various aspectual meanings of the imperfective presented by Comrie (1976), Bybee et al. (1994), and Dahl (1985), and then explore how the different meanings of *-ko iss-* are obtained by adopting Smith's (1997) and Shirai's (2000) views on verb constellations. First, let us examine various subtypes of the imperfective aspect.

### *2.4.2.1 Resultative aspect.*

According to Bybee et al. (1994, p. 54), the resultative "signals that a state exists as a result of a past action." In a similar definition, Nedjalkov and Jaxontov (1988, p. 3–8) defined the prototypical resultative as "a verb form or a more or less regular derivative from terminative verbs that expresses a state implying a previous event (action or process) it has resulted from." In other words, a resultative denotes a state that was caused by some action/event in the past. This is similar to the sense of anterior (or perfect), which indicates that a past action has relevance in the present. Furthermore, it is similar to the

---

[9] In Chapter 3, I will use the term "stative resultative" for resultatives derived from stative verbs in order to distinguish these from "resultatives" derived from dynamic verbs such as *ip-* 'to wear', *cap-* 'to seize', and *tul-* 'to carry'.

passive in the sense that the passive is often regarded as a "stative passive" because it describes a state rather than an action, as in *The door is closed* (Bybee et al., 1994, p. 63). The resultative is often similar to the passive in that it usually makes the patient the subject of the clause but differs in the sense that a resultative may apply to an intransitive verb, as in *He is gone*, without a change of subject. The resultative is also similar to the sense of an anterior—a past action with current relevance. The difference between resultative, passive, and anterior (or perfect) is that only the resultative consistently signals that the state persists at reference time. The examples in (20) and (21) clearly indicate the difference between them.

(20) He has gone and come back already.

   The door has opened and closed several times

(21) *He is gone and come back already.

    *The door is closed and opened several times.      (Examples from Bybee et al., 1994, p. 63)

The sentences in (20) are acceptable, while those in (21) are not, in the resultative sense. The second sentence in (21) is acceptable only with a passive reading, clearly proving that the critical point about the resultative is that the state endures at reference time.

### 2.4.2.2 Habitual aspect.

The notion of the habitual should be clarified in comparison to the iterative. Iterative describes an event that is repeated on a particular occasion. The notion of the iterative is particularly relevant to telic predicates such as Achievement and Accomplishment verbs, which are the same types that the progressive aspect can occur with, as observed in (22a).

(22) a. He kicked a ball for an hour yesterday.

   b. He walked to the hospital for a month.            (Examples from Shirai, 2000, p. 334)

Similar to the iterative aspect, the habitual aspect denotes an action as occurring usually, ordinarily, or habitually and describes a situation that is characteristic of an extended period of time, while the iterative is simply a cover term for repeated actions (Comrie, 1976, pp. 27–28). For Comrie, the sentence in (22a) is iterative, but not habitual. The sentence in (22b), on the other hand, is both iterative and habitual.

Bybee (1985) and Brinton (1988) viewed the iterative in a different way in that they restricted it to repetition on a single occasion. Brinton (1988, p. 54, as cited in Shirai, 2000, p. 334) argued that "the habitual may be distinguished from the iterative, because the habitual portrays actions repeated on different occasions, while the iterative portrays actions repeated on the same occasion." Based on this view of the iterative and the habitual, the sentence in (22a) is iterative, while the sentence in (22b) is not iterative but habitual.

Smith (1997) also mentioned the classification of iterative and claims that there should be a fifth category because the class of achievement may yield "iterative action in progress." Verbs like *jump*, *knock*, and *bang* can express an action in progress by repetition, and this kind of verb is called "semelfactive." Semelfactive verbs are punctual and atelic; they do not produce exact end results. Shirai (1991) and Shirai and Andersen (1995) found that English-speaking children's earliest progressive use was with Activity verbs and punctual verbs that denote iterative actions, whereas habitual actions were very late in development. This aspect of children's language acquisition clearly indicates that the iterative and the habitual aspects should be treated in different ways (Shirai, 2000).

### 2.4.2.3 Progressive aspect.

The progressive aspect is a grammatical aspect that expresses ongoing action at a specific time. Bybee et al. (1994, p. 126) defined progressive as "an action as ongoing at reference time." Comrie (1976) stated that it applies typically to dynamic predicates and not to stative ones, as found in English. Let us consider the following examples in English.

(23) a. Sara is reading.

   b.*Sara is knowing the answer.

In English, while the progressive aspect occurs with a dynamic predicate like *read* as in (23a), it does not extend to a stative predicate like *know* as in (23b).

In some languages, the distinction between progressive and non-progressive meaning is obligatorily made by progressive and non-progressive forms, while in other languages without an explicit progressive form, the same form can usually be used for habitual actions, ongoing states, and all other present occurrences (Comrie, 1976). English has the progressive marking, which is not replaced by non-progressive. In Spanish, on the other hand, it is normally possible to replace the progressive by other forms, but still imply progressive meaning as well as habitual meaning. For example, the Spanish counterpart of *John is singing* may be either *Juan está cantando* (progressive) or *Juan canta* (simple present).[10] Therefore, the non-progressive form in Spanish does not exclude the progressive meaning, that is, the progressive form is not obligatory.

Verbs that can appear in the progressive form are generally dynamic verbs, while those that cannot are stative verbs. In other words, the distinction between stative and non-stative verbs is made in terms of compatibility with progressive forms. However, this dichotomy is simply an ideal division, and in many languages we actually observe irregularities and exceptions. This is due to the fact that different languages have different rules for determining when explicitly progressive forms can be used. For instance, it is not normally acceptable to use a progressive form with verbs of inert perception as in *I am seeing you there under the table*, whereas in Portuguese, such forms are perfectly acceptable as in *Estou te vendo la embaixo da mesa voce nao esta ouvindo*.[11] According to Comrie (1976), it appears possible to view *seeing* either as a state or as a non-state. However, it is unclear whether the Portuguese verb meaning *see* can occur with the progressive form because it is non-stative, or if it is non-stative because it can occur with the progressive form. If exceptional cases of the progressive with stative verbs are examined, this may be elucidated.

In English, for instance, there are several uses of stative verbs occurring with the progressive that are treated sometimes as stative and sometimes as non-stative, depending

---

[10] The examples are from Comrie (1976, p. 33).

[11] This example is from Thomas (1969, pp. 200–201, as cited in Comrie, 1976).

on the particular meaning they have in a given sentence. Let us examine the examples in (24).

(24) a. Fred is silly. (stative)

    b. Fred is being silly. (non-stative).              (Examples from Comrie, 1976, p.36)

The verb *is* in (24a) is a typical stative verb, but that of (24b) is considered non-stative because the sentence in (24b) means that Fred is doing something silly at the moment. The same verb can be used differently either as stative or as non-stative, depending on the context.

      Another use of the progressive occurring with stative verbs in English is in sentences like *I'm understanding more about quantum mechanics as each day goes by.*[12] Generally, the verb *understand* is stative, but in this example, the progressive implies a change in the degree of understanding. Thus, the verb *understand* here refers not to a state, but to a developing process, whose individual phases are essentially different from one another. Hatcher (1951 p. 268, as cited in Bybee et al., 1994) also argued that the progressive is typically used with predicates that describe an overt activity or state that is "developing by degree" as in *I see it* vs. *I'm seeing it more clearly now*.

      In general, the non-progressive refers to a more or less permanent state of affairs, whereas the progressive refers to a more temporary state. As discussed earlier, this use is the same as "stative progressive," which Smith (1997) explained. Compare the progressive and the non-progressive in (25).

(25) a. I live at 6 Railway Cuttings.

    b. I'm living at 6 Railway Cuttings.             (Examples from Comrie, 1976, p. 37)

If the non-progressive is used, as in (25a), it implies that the address is the speaker's normal residence. In contrast, if the progressive is used, as in (25b), it implies that it is a temporary residence (perhaps, for example, because the speaker's apartment is being renovated).

---

[12] This example is from Comrie (1976, p. 36).

In addition, there are a number of other specific uses that do not seem to be congruous with the general definition of progressiveness. For example, the progressive with stative verbs is allowed in the imaginary as in (26).

(26) At last I'm **seeing** the Mona Lisa. I'm **hoping** and praying that he'll come. He thinks he's being **entertaining**, but he's only **boring** her to death.

(Examples from Bybee el al., 1994, p.134)

As for this use of the progressive, Bybee et al. (1994) suggested that the progressive implies a greater involvement of the subject in the activity, and thus the progressive changes the interpretation of the predicate to a dynamic one that involves an agent. The interpretation of the predicates in (26) is not dynamic, but the involvement of the subject is increased by the use of the progressive where the simple present is more normal. Similarly, Comrie (1976) also argued that the function of the progressive seems simply to add greater emotive effect than would be achieved by the simple present. Adding more emotive effect is comparable to what Bybee et al. (1994) described as increase in the involvement of the subject.

The uses of the English progressive with stative verbs indicate that the aspectual meaning of an aspectual marker depends on various contextual factors such as context information, pragmatic implicature, involvement of a subject or speaker, and temporal/aspectual meaning of a given utterance. Comrie (1976, p. 38) also argued that the basic meaning of the English progressive is to indicate a contingent situation. In order to look into the genuine uses of the progressive forms in languages, the various contextual factors should be taken into consideration. This dissertation examines the uses of the Korean progressive from a discourse-pragmatic approach, taking the position that the consideration of discourse contexts can best account for the semantic and grammatical nature of the aspectual marker.

Furthermore, the various uses of the English progressive including exceptional cases with stative verbs might suggest the direction in which the English progressive is developing diachronically. As Comrie (1976, p. 38) speculated, "It may well be that English is developing from a restricted use of the progressive, always with progressive

meaning, to this more extended meaning range, the present anomalies representing a midway state between the progressive aspect and the imperfective." As for the Korean progressive *-ko iss-*, assuming that its multiple uses are a result of the grammaticalization of the construction, investigating its grammaticalization path based on historical evidence will clarify the reasons for its multiple uses synchronically. Therefore, this dissertation examines *-ko iss-* synchronically and diachronically.

### *2.4.2.4 Continuous aspect.*

The continuous aspect is defined by Comrie (1976) as "more general than progressive because it can be used in progressive situations but in addition with stative predicates." Thus, continuous views the situation, whether it is dynamic or stative, as ongoing at reference time (Bybee et al. 1994, p. 127).

The progressive aspect expresses the dynamic quality of actions that are in progress while the continuous aspect expresses the state of the subject that is continuing the action. For example, *Tom is reading* can express dynamic activity—that is, Tom is reading a book right now (progressive aspect)—or Tom's current state—Tom is reading for a degree, as he is a student (continuous aspect). But the aspect can often be ambiguous; *Tom is reading Ulysses* may describe his current activity (the book is in his hand), or the state of having started, but not yet finished, the book (it's in his bag). Therefore, most languages treat continuous aspect and progressive aspect alike and use the two terms interchangeably, but there are languages that distinguish them.

Chinese is one family of languages that makes a distinction between the continuous and progressive aspects (Yip & Rimmington, 2004). Mandarin Chinese has two different aspectual markers to express the progressive aspect and the continuous aspect. *Zai* (正在) is typically used as a progressive marker, while *zhe* (著) is used as a continuous marker. Let us consider the following example.

(27) a. 我　正在　穿　衣服
　　　 I　Prog　wear　clothes
　　　 'I'm putting on clothes.'

b. 我 穿 著 衣服

  I  wear  Cont  clothes

  'I am wearing clothes.'

The example in (27a) denotes the progressive meaning of putting on clothes, while (27b) denotes the continuous meaning of wearing clothes. In Chinese, the progressive marker can also express the continuous aspect as well, depending on the context (so the example in (27a) could also mean "I'm wearing clothes" in addition to "I'm putting on clothes"), but in general, the progressive aspect is assumed. In order to emphasize the progressive aspect rather than the continuous, a phrase meaning "at here" can be used in front of verbs.

     As for Korean, the *-ko iss-* construction can be used to express both the progressive and the continuous depending on the context, as in (28).

(28) Os-ul       ip-**ko iss**-ta.

   clothes-AC wear-**ko iss**-DC

   'I'm putting on clothes' or 'I'm wearing clothes.'

Supporting evidence of the *-ko iss-* construction as the continuous aspect is that stative predicates can occur with *-ko iss-* and imply the meaning of "continuing state" as in (29).

(29) Na-nun ku salam-ul    salangha-**ko iss**-ta.

   I-TC    the person-AC love-**ko iss**-DC

   'I love him.'

The verb *love* is not dynamic but stative; thus the English progressive cannot occur with it. However, the Korean *-ko iss-* is perfectly acceptable co-occurring with the verb *salangha-* 'to love', as in (29). This suggests that the *-ko iss-* construction is not exclusively a progressive marker, and fits the definition of the continuous aspect as viewing the situation, whether it is dynamic or stative, as ongoing at reference time

(Bybee et al., 1994, p. 127). Therefore, I present an account of the *-ko iss-* construction as a continuous aspect marker in this dissertation.

### 2.4.3 Integrated approaches and the two-component theory

#### *2.4.3.1 Lee's (1991, 1993) discourse-pragmatic approach and Oh's (2003) diachronic account*

There has been much controversy over the semantic characteristics and grammatical nature of the suffix *-ess-* in Korean, whether it is a past tense marker, a perfective aspect marker, or a perfect marker. H. S. Lee (1991, 1993) and S.-Y. Oh (2003) investigated colloquial discourse in Korean and showed that it is the speaker's communicative goals and concerns that determine whether the suffix gives a past tense, perfective aspect, or perfect interpretation in a given discourse context. Based upon analyses of spontaneous conversational data, Lee and Oh showed that the temporal/aspectual meaning of utterances that contain *-ess-* relies heavily on various contextual factors such as temporal adverbials, contextual information, and pragmatic implicature, and the extent to which they contribute, in a greater or lesser degree, to the interpreted temporal/aspectual meaning of a given utterance. Consider the following example.

(30)

1      K: Ceki   khun-apeci-ney-ka      Yongsan sal-ass-e.

        there great-father-home-SM Yongsan live-OA-IE

        'So, my uncle lived in Yongsan.'

2        Wuli khun-apeci-ka   chelto   kotung-hakkyo kyokam-i-ya        ku ttay tangsi.

        our great-father-SM railroad high-school     assistant principal-be-IE at that time

        'My uncle was an assistant principal at the railroad high school at that time.'

3      O: E

        yes

        'I see.'

4      K: **Cikkum** tolaka-**ss**-ciman

        now die-OA-CONCESS

        'Now he is dead, but…'

| 5 | Kuntey keki ka-se yayki-l hay-po-lay |
| | but there go-PRECED talk-OM do:CONN-see-HEARSAY |
| | 'Anyway, I was told to go there and ask' |
| 6 | keki-se tani-keyss-takwu |
| | there-LOC attend-FUT-QUOT |
| | 'if I could stay there to go to school.' |
| 7 | O: E |
| | yes |
| | 'I see.' (Example from Oh, 2003, p. 1189) |

In line 4, the suffix *-ess-* appears, and the situation type of the verb constellation (*tolaka-* 'pass away') is Achievement with the temporal features [+dynamic, +instantaneous, +telic]. It is clear that the utterance in line 4 is interpreted as referring to the current state of affairs that has resulted from a previous event, that of the speaker's uncle dying. Thus, the interpreted meaning of *-ess-* in this line is the meaning of perfect of result, not referring to the past event of her uncle's dying, but the current state that resulted from the past event. What contributes most to the interpreted meaning of *-ess-* in line 4 is the temporal adverbial *cikum* 'now' preceding the verb, which explicitly signals that the situation described by the utterance is the present state of her uncle's being dead at the time of speaking. What this example attests to, then, is the significant role of temporal adverbials in determining the meaning associated with *-ess-* in a given discourse context. For the present study, I follow Lee's (1991, 1993) and Oh's (2003) discourse-pragmatic approach to examine the *-ko iss-* construction by analyzing naturally occurring discourse in Modern Korean and to determine its grammatical category. In addition, I draw on Oh's (2003) diachronic perspective and suggest that the multiple uses of the *-ko iss-* construction are the result of its grammaticalization.

### 2.4.3.2 Shirai's (2000) integrated approach

Shirai's (2000) and Smith's (1997) views on the aspectual classification of verbs and the discourse-pragmatic approach are employed in the present study to examine the aspectual system in Korean. Shirai's integrative approach is particularly relevant to the

aspectual system in Korean, in which two resultative markers (*-ko iss-* and *-e iss-*) are used depending on transitivity, as discussed earlier.

A longstanding controversy concerns the conditions under which the Japanese aspectual marker *-te i-* takes different meanings. The Japanese *-te i-* denotes a progressive aspectual meaning when combined with Activity verbs and Accomplishment verbs, which contain internal temporal duration, whereas it denotes a resultative aspectual meaning when combined with Achievement verbs, which do not have internal temporal duration. In this regard, Kindaichi (1950, as cited in Shirai, 2000) proposed punctuality of the verb as a trigger for resultative meaning and duration as a crucial determinant of the aspectual meaning that *-te- i-* takes. However, he also pointed out that the same verb situation type with the same duration can denote different aspectual meanings when occurring with *-te i-*.

(31) a. Kodomotati-wa     oni-o      kime-te  i-ru.

children-TOP      it-ACC    decide-ASP-NPST

'The children are deciding who's to be it.'

b. Oni-ga     kimat-te      i-ru.

it-NOM    be:decided-ASP-NPST

'It has been decided who's it.'

(Examples from Jacobsen, 1992, p. 176, as cited in Shirai, 2000)

In the examples in (31), the real-world duration involved is the same, but the transitivity of the verb used changes the meaning of *-te i-*. (31a) uses the transitive verb *kimeru* 'to decide', which yields a progressive sense, whereas (31b), with its intransitive counterpart *kimaru* 'to be decided', yields a resultative sense. In this regard, Okuda (1978, as cited in Shirai, 2000) suggested the alternative explanation that when *-te i-* is attached, a verb describes the situation of the subject; therefore, when the verb describes action of the subject, it denotes the progressive, and when the verb describes change in the subject, it denotes the resultative state. On the basis of this observation, Okuda discarded the durativity approach and suggested the syntactic approach.

Although Okuda's observation regarding the relationship between syntactic structure and the meaning of *-te i-* is essentially correct, Shirai (2000) insisted that durativity still plays an important role in determining the aspectual meaning and proposed taking an integrative approach by combining both the duration and syntactic approaches. Let us consider the following example.

(32) Naomi-wa     denki-o     kesi-te i-ru.
     Naomi-TOP   light-ACC   turn:off-ASP-NPST
   a.   'Naomi has the light turned off.'
   b.   'Naomi is turning off the lights.'                              (Example from Shirai, 2000, p. 347)

In this example, the interpreted meaning of *-te i-* is the resultative state that involves a change in the object, not a change in the subject. This contradicts Okuda's claim that it denotes a resultative state when the verb describes the change in the subject. Here, Shirai (2000) claims that this is because *denki-o kesu* 'turn off the light' is an Achievement, which does not involve duration. This indeed shows that duration is an important factor in the availability of a progressive reading. However, if it is a situation in which Naomi is pushing fifteen different buttons, then the example in (32b) has the progressive sense. In this case, the Achievement verb gains duration and may be considered an Accomplishment verb. In this respect, Shirai argued that aspectual classification of verbs should be based not on the verb alone; that is, the pragmatic context can sometimes be crucial in determining the inherent aspect. I follow Shirai's view on aspectual classification of verbs and take this discourse-pragmatic approach in the present study's examination of the aspectual system in Korean.

## 2.5 Summary

In this chapter, I have discussed how the two-component theory is applicable to the aspectual system in Korean, explained the problems associated with this theoretical framework, and presented solutions to these problems by adopting different approaches to complement the two-component theory. In Section 2.2, I clarified the notions of aspect focusing on two types of aspect: (1) inherent lexical aspect ("situation aspect" in Smith,

1997), and (2) grammatical aspect ("viewpoint aspect" in Smith, 1997). The two-component theory is based on this understanding of the two types of aspect, viewing aspectual meaning as determined by the interaction between situation aspect (inherent lexical aspect) and viewpoint aspect (grammatical aspect). I showed how the Korean aspect marker *-ko iss-* interacts with inherent lexical aspect in comparison with the Japanese *-te i-*.

In Section 2.3, I presented some problems in applying the framework of the two-component theory to the aspectual system in Korean. First of all, a number of stative verbs are actively combined with the *-ko iss-* construction. Second, transitivity has an influence on the selection of the aspect markers. Third, the same verb situation type can denote different meanings, including iterative, habitual, progressive, stative, and resultative. Finally, equivalent verbs in different languages combine with aspectual markers to denote different aspectual meanings.

In Section 2.4, I suggested solutions to these problems. In line with Smith's (1997) and Shirai's (2000) views on verb constellations, the present study draws on H. S. Lee's (1991, 1993) discourse-pragmatic approach and S.-Y. Oh's (2003) diachronic account. Shirai's (2000) integrated approach that includes both the syntactic and the duration approach also resolves problems of the two-component theory as it applies to the Korean aspectual system.

In the next chapter, I will explore the multiple uses of the *-ko iss-* construction by examining naturally occurring conversation. I will investigate the inherent lexical aspect of verbs (situation type) and its interaction with the aspectual marker *-ko iss-*. The study analyzes how the multiple meanings of *-ko iss-* are acquired in discourse. Based on the notions of aspect and the theoretical background discussed in this chapter, I will determine the grammatical category of *-ko iss-* and suggest the general meaning of *-ko iss-* in Modern Korean.

# CHAPTER 3

# MULTIPLE USES OF *-KO ISS-* IN MODERN KOREAN DISCOURSE

The goal of this chapter is to determine the grammatical category of *-ko iss-* and the general meaning of *-ko iss-* in Modern Korean. The construction's multiple uses are examined using corpus data of naturally occurring conversations. I also investigate the interaction between inherent lexical aspect of verbs (situation type) and the *-ko iss-*construction. The chapter employs the notions of aspect and the theoretical background that were introduced in Chapter 2, and provides an analysis of how the multiple meanings of *-ko iss-* are acquired in discourse contexts.

## 3.1 The Study

### 3.1.1 Data

The data for this study come from the Sejong Spoken Corpus (hereafter, Sejong Corpus), developed between 1999 and 2007 as part of the 21st Century Sejong Project. I selected 109 files of spoken data from the corpus. The files are all made up of authentic conversational discourse data, and were audio-recorded and transcribed by researchers. The dataset comprises 408,429 *ecels* and contains six different genres: daily conversation, telephone conversation, classroom discussion, lecture, monologue, and presentation, as shown in Table 3.1.

**Table 3.1**

*Data Genre and Size*

| Genre | Size (*ecel*) |
|---|---|
| Daily conversation | 175,568 |
| Telephone conversation | 2,998 |
| Monologue | 65,643 |
| Classroom discussion | 12,604 |
| Lecture | 107,964 |
| Presentation | 43,652 |
| **Total** | **408,429** |

## 3.1.2 Method of analysis

### 3.1.2.1 Identifying different uses/functions of -ko iss-

In order to determine the number of uses to code, three diagnostics used by Bybee et al. (1994) were applied:

1. Two uses are distinguished if they would be expressed by different grammatical morphemes in another language.
2. Two uses are distinguished if they are paraphrased in two different ways.
3. A separate (secondary) use is identified if the construction takes on a different sense when co-occurring with other grammatical morphemes or with a specific inherent semantic verb type.

Based on the results of these diagnostic tests, I distinguished four major uses of *-ko iss-* in Modern Korean: Progressive, Resultative, Stative, and Habitual. Each of these uses has subtypes. Progressive subuses are (1) action-in-progressive, (2) iterative progressive, (3) narrative present, and (4) stative progressive. Resultative subuses are (1) dynamic resultative, (2) stative resultative, and (3) perfect of result. Stative subuses are (1) continuing state, (2) permanent state, and (3) anterior continuing state. Finally, the subuse of Habitual is habitual.[13] Each token of *-ko iss-* in the data was coded according to its specific use.

---

[13] In this chapter, the four major uses are written with an uppercase initial letter as in "Progressive use," while subuses are written with a lowercase initial letter as in "iterative use."

*3.1.2.2 Criteria for inherent lexical aspect of Korean verb (situation type)*

       As I mentioned in Chapter 2, Vendler's (1967) criteria using temporal adverbials do not always work for classifying verbs in Korean. In order to classify the basic level of verbs, I mainly employed the tests used by Shirai and Andersen (1995) and Shirai (2000), in conjunction with other tests suggested by Brinton (1988), Comrie (1976), Dowty (1979), Mourelatos (1981), Robinson (1990), and Vendler (1967). In addition, I used a test developed by Lee (2011) specifically for the Korean language.

       First, the verbs are divided broadly into stative and dynamic verbs based on the test of asking the question "What are you doing now?" (Lee, 2011). If the answer to the question is not appropriate, it is a stative verb as in (33b) and (33c), while if the answer is appropriate, it is a dynamic verb as in (33a).

(33) Q: Cikum mwues-ul ha-**ko iss**-eyo?

       now   what-AC  do-**Prog**-Q

       'What are you doing now?'


   A: a. Kulim-ul     kuli-**ko iss**-eyo.

       picture-AC  draw-**Prog**-DC.

       'I am drawing a picture.'

     b. *Ku il-ul      huymangha-**ko iss**-eyo.

       the work-AC  hope-***Prog**-DC

       'I hope to work.'

     c. *Ku  salam-ul    al-**ko iss**-eyo.

       the person-AC  know-***Prog**-DC

       'I know the person.'


       In (33), based on the results of this test, the verb *kuli-* 'to draw' is considered a dynamic verb, while the verbs *huymangha-* 'to hope' and *al-* 'to know' are considered stative verbs. Some might think that the verb *al-* 'to know' in Korean could be considered a telic verb, when used, for example, to describe the moment of coming to know the

answer to a mathematical problem. In this case, the state of the result persists at reference time (i.e., after finding out something), and therefore it may yield the resultative interpretation at the derived level. At the basic level, however, the verb *al-* 'to know' is classified as a State type verb based on the test here. Furthermore, the other psychological verbs such as *huymangha-* 'to hope', *salangha-* 'to love', and *molu-* 'not to know' cannot be considered as telic verbs with an endpoint.

For problematic cases when the answer was unclear, Dowty's (1979) tests were employed. Dowty suggests some tests to decide whether an English verb is stative, which can be applied to stative verbs in Korean as follows:

1. Stative verbs cannot be complements of *force*:
(34) a. I forced John to run.
    b. *I forced John to know the answer.


(35) a. Na-nun con-eykey   talli-la-ko    kangyoha-yss-ta.
        I-TC    John-to      run-IM-QT  force-PST-DC
        'I forced John to run.'
    b. *Na-nun con-eykey  tap-ul       **al**-la-ko       kangyoha-yss-ta.
        I-TC    John-to     answer-AC **know**-IM-QT   force-PST-DC
        *'I forced John to know the answer.'


2. Stative verbs do not occur as imperatives.
(36) a. Run!
    b. *Know the answer!


(37) a. Tally-ela!
        run-IM
        'Run!'
    b. *Tap-ul        **al**-ala!
        answer-AC **know**-IM
        *'Know an answer!'

3. Stative verbs cannot appear in a pseudo-cleft construction:

(38) a. What John did was run.

    b. *What John did was know the answer.


(39) a. Con-i      ha-yss-ten      kes-un      talli-ki-yess-ta.

      John-NM   do-run-PST-RT   NOM-TC   run-NOM-PST-DC

      'What John did was run.'

    b. *Con-i      ha-yss-ten   kes-un     tap-ul     **a**-nun    kes-iess-ta.

      John-NM  do-PST-RT   NOM-TC  answer-AC   **know**-TC NOM-PST-DC

      *'What John did was know an answer.'


According to Dowty's tests, like Lee's, the Korean verb *al-* 'to know' is classified as a State verb at the basic level. Conducting more than one type of test for confusing verbs increases the reliability of the categorization.

      Second, dynamic verbs can be classified as Activity or non-Activity verbs. This can be done by entailment tests such as "Does *He is V-ing* entail *He V-ed*?"; these tests were used by Shirai and Andersen (1995) and Shirai (2000). This is a test of telicity, that is, of whether a verb includes the endpoint of the action as a necessary feature that it denotes. If yes, it is an Activity verb, which is atelic, and if no, it is telic. The same test can be employed for Korean. For example, *Chelswu-ka ket-ko iss-ta* 'Chelswu is walking' entails that *Chelswu-ka kel-ess-ta* 'Chelswu walked'. In contrast, *Chelswu-ka pap-ul cis-ko iss-ta* 'Chelswu is making rice' does not entail *Chelswu-ka pap-ul ci-ess-ta* 'Chelswu made rice'. Therefore, *ket-* 'walk' is classified as an Activity verb, and *pap-ul cis-* 'make rice' as a non-Activity verb.

      Third, non-Activity verbs can be distinguished as either Accomplishments or Achievements in terms of punctuality. This can be done by asking whether the verb has the same meaning when occurring with *after X minutes* and *in X minutes*. Because Achievement is punctual and has no duration, it yields the same meaning with both adverbials (e.g., *He will die in 30 minutes = He will die after 30 minutes*). Accomplishment, on the other hand, can have two different meanings. *He will make a chair in 30 minutes* and *He will make a chair after 30 minutes* can be different, as the

latter can refer to the beginning point of making a chair, while the former would normally refer to the endpoint of making a chair. The same test can be applied to Korean as in (40).

(40). a. Ku-nun 30-pwun-**maney** uyca-lul    mant-ul    kes-i-ta.

     he-TC   30-minute-**in**      chair-AC   make-PRS  NOM-be-DC

     'He will make a chair in 30 minutes.'


   b. Ku-nun  30-pwun-**hwuey**  uyca-lul   mant-ul      kes-i-ta.

     he-TC   30-minute-**after**   chair-AC   make-PRS  NOM-be-DC

     'He will make a chair after 30 minutes.'


(41) a. Kunun    30-pwun-**maney** cwuk-ul  kes-i-ta.

     he-TC   30-minute-**in**      die-PRS  NOM-be-DC

     'He will die in 30 minutes.'


   b. Ku-nun  30-pwun-**hwuey**  cwuk-ul  kes-i-ta.

     he-TC   30-minute-**after**  die-PRS  NOM-be-DC

     'He will die after 30 minutes.'


In (40), the example in (a) and the example in (b) have two different interpretations. The use of *maney* 'in' refers to the endpoint of him making a chair, while that of *hwuey* 'after' focuses on the beginning point of him making a chair. The two different interpretations result from the duration of the Accomplishment type verb, and therefore the verb of *uyca-lul mant-ul-ta* 'to make a chair' is classified as an Accomplishment type. In contrast, Achievement verbs do not show this kind of difference because the beginning point and the endpoint are the same: they lack duration. In (41a), the sentence with *maney* 'in' has the same meaning as the sentence with *hwuey* 'after' in (41b). Therefore, *cwuk-* 'die' in Korean is classified as an Achievement type verb.

     Finally, within Achievement verbs, semelfactives have to be identified. This class denotes iterative progressive when a progressive marker is attached (e.g., *He's jumping*). Korean also has verbs in this category, such as *twutuli-* 'knock', *chi-* 'hit', and so forth.

The steps to be taken to determine the inherent lexical aspect of verbs in Korean (situation type) are summarized in (42).

(42) Steps to determine situation type of verbs in Korean (modified from Shirai & Andersen, 1995, p. 749; also see Lee, 2011)

Step 1: State or non-State (Dynamic)

　　Q: *Cikum mwues-ul ha-ko iss-eyo*? 'What are you doing now?'

　　If appropriate → non-State (e.g., *Pap-ul mek-ko iss-eyo*. 'I am eating.')

　　　　　　→ Go to Step 2

　　If not → State (e.g., *Ku salam-ul mit-ko iss-eyo*. 'I trust the person.')

Step 2. Activity or non-Activity

　　Does 'X is V-ing' entail 'X has V-ed' without an iterative/habitual meaning? In other words, if you stop in the middle of V-ing, have you done the act of V?

　　If yes → Activity (e.g., *tali-* 'run')

　　If no → non-Activity (e.g., *pap-ul cis-* 'make rice') → Go to Step 3

Step 3. Accomplishment or Achievement

　　'X will VP in Y time (e.g., 10 minutes).' = 'X will VP after Y time.'

　　If no → Accomplishment

　　If yes → Achievement (e.g., *Ku-nun 30 pwun-maney cwuk-ul kes-ita.* 'He will die in 30 minutes.' = *Ku-nun 30 pwun-hwuey cwuk-ul kes-ita* 'He will die after 30 minutes.')

### 3.1.2.3 Basic-level situation type vs. derived-level situation type

As Smith (1997) and Shirai (2000) suggested, a particular verb constellation can be considered differently depending on the real-world situation it denotes, under the assumption that there is a distinction between the basic and the derived level of categorization for the situation aspect. Therefore, a verb can shift from one type to

another depending on the context. In the present study, the situation type of verb constellation is analyzed at these two different levels.

## 3.2 Results

### 3.2.1 Overall distribution of *-ko iss-* in discourse

#### *3.2.1.1 Distribution of the multiple uses of -ko iss- in discourse*

By analyzing naturally occurring conversational data, I found multiple uses of *-ko iss-* in discourse contexts, and I analyzed the frequency of each use. Table 3.2 and Figure 3.1 summarize the findings regarding the distribution of the use of *-ko iss-* in the data.

**Figure 3.1**

*Distribution of Uses of* **-ko iss-** *in Spoken Discourse*
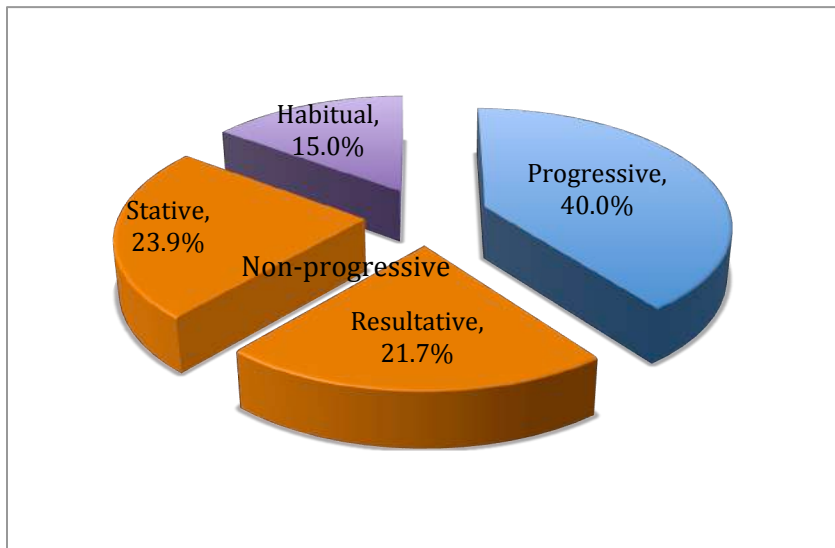
**Table 3.2**

*Distribution of Uses of* **-ko iss-** *in Spoken Discourse*

| Use of *-ko iss-* | | Subtype of use | Token frequency | Percentage (%) |
|---|---|---|---|---|
| **Use as Progressive** | | Action-in-progressive | 401 | 29.8 |
| | | Iterative progressive | 11 | 0.81 |
| | | Narrative present | 112 | 8.3 |
| | | Stative progressive | 6 | 0.45 |
| | | | **Subtotal: 530** | **40%** |
| **Non-Progressive** | **Use as Resultative** | Dynamic resultative | 269 | 20.0 |
| | | Stative resultative | 16 | 1.2 |
| | | Perfect of result | 6 | 0.45 |
| | | | Subtotal: 291 | 21.7% |
| | **Use as Stative** | Continuing state | 223 | 16.6 |
| | | Permanent state | 78 | 5.8 |
| | | Anterior cont. state | 20 | 1.48 |
| | | | Subtotal: 321 | 23.9% |
| | | **Subtotal (Non-Progressive): 592** | | **45%** |
| **Use as Habitual** | | Habitual | **Subtotal: 201** | **15%** |
| | | | **Total: 1,343** | 100% |

As shown in Table 3.2 and Figure 3.1, *-ko iss-* has multiple uses: action-in-progressive, iterative progressive, narrative present, stative progressive, dynamic resultative, stative resultative, permanent state, continuing state, anterior continuing state, habitual, and perfect of result. These eleven uses are divided into four major uses: (1) Progressive, (2) Resultative, (3) Stative, and (3) Habitual. There is no considerable difference in the frequency of the Progressive use (40%) and the non-Progressive use (45%), which includes the Resultative use (21.7%) and the Stative use (23.9%).[14] The Stative use of *-ko iss-* shows high frequency (23.9%), which indicates that stative verbs actively occur with *-ko iss-* to denote the meaning of "continuing state." Surprisingly, contrary to the traditional view that only a limited number of verbs of wearing and contact are combined with *-ko iss-* to express the resultative state, the Resultative use of *-ko iss-* shows high frequency (21.7%). Finally, the Habitual use of *-ko iss-* also shows relatively high frequency (15%). The results clearly show that *-ko iss-* is frequently used not only to

---

[14] The Stative use refers to Comrie's (1976) "non-progressive." Comrie's subdivisions of imperfectivity were described in Chapter 2.

express the progressive meaning but also to express the continuing stative meaning and the resultative meaning. This suggests that *-ko iss-*, which has been widely considered to mark the progressive aspect, should be reconsidered as expressing the general imperfective, encompassing the Habitual use and the non-Progressive use including the Resultative and the Stative uses.

### 3.2.1.2 Distribution of situation type of -ko iss-

As shown in Table 3.3 and Figure 3.2, the data contain 1,343 tokens of the *-ko iss-* form.[15] I classified these 1,343 tokens into the four situation types (inherent verb semantics) based on the linguistic tests explained in Section 3.1.2.2. Verb constellations are determined both at the basic level and at the derived level. The results show that the number of Accomplishment verbs and State verbs increased on the derived level, while Achievement verbs decreased at the derived level, and there was little difference in the number of Activity verbs at the basic and derived levels.

**Table 3.3**

*Frequency of Situation Type at Basic and Derived Levels*

| Situation Type | Basic level | Derived level |
|---|---|---|
| State | 248 (18%) | 303 (23%) |
| Activity | 400 (30%) | 391 (29%) |
| Accomplishment | 260 (19%) | 318 (24%) |
| Achievement | 435 (32%) | 331 (25%) |
| Total | 1,343(100%) | 1,343 (100%) |

As seen in Table 3.3 and Figure 3.2, there is a difference in frequency between the basic level and the derived level. At the basic level, Achievement type shows the highest frequency; Activity, Accomplishment, and State types follow in descending order. At the derived level, Activity type shows the highest frequency, and Achievement, Accomplishment, and State types follow in descending order. The difference between the basic level and the derived level is due to the fact that the Accomplishment type

---

[15] I excluded tokens with the negative form *-ci anh-ko iss-* because it is often very difficult to determine the inherent aspect of the predicate.

considerably increases at the derived level. In particular, some of the Activity verbs and Achievement verbs shifted to Accomplishment type verbs at the derived level. The number of State verbs also increased at the derived level because Achievement verbs may shift to the State type depending on the verb arguments at the derived level. Overall, the four situation types are almost evenly distributed (23% vs. 29% vs. 24% vs. 25%) at the derived level, as seen in Table 3.3 and Figure 3.2. This result supports the observation that the *-ko iss-* construction is currently used with diverse functions when occurring with a variety of verb types in discourse.

**Figure 3.2**

*Distribution of* **-ko iss-** *by Situation Type*
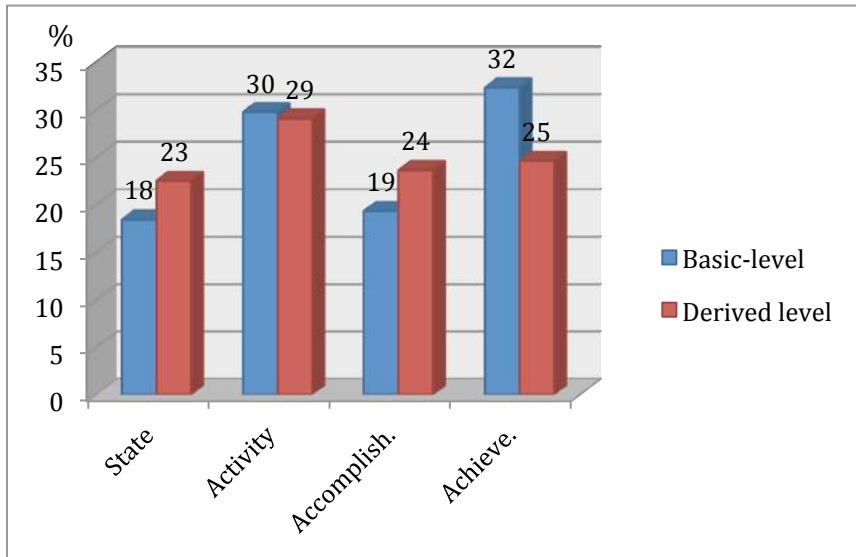


### 3.2.1.3 Interaction of situation type and the imperfective **-ko iss-**

Table 3.4 and Table 3.5 give the raw numbers and the percentages of the different uses of *-ko iss-* for verbs of each situation type at the basic and the derived level of categorization, respectively.

**Table 3.4**

*Distribution of Situation Type: Basic Level*

| | Non-Progressive | | | | | |
|---|---|---|---|---|---|---|
| | Use as Resultative | | | Use as Stative | | |
| | Dynamic Resultative | Stative Resultative | Perfect of result | Continuing state | Permanent state | Ant. cont. state[16] |
| **State** | 0 | 16 | 0 | 215 | 2 | 0 |
| **Activity** | 0 | 0 | 0 | 3 | 0 | 9 |
| **Accomp.** | 28 | 0 | 0 | 1 | 1 | 7 |
| **Achieve.** | 241 | 0 | 6 | 4 | 75 | 4 |
| **Total** | 269 | 16 | 6 | 223 | 78 | 20 |
| | Use as Habitual | Use as Progressive | | | | Total |
| | Habitual | Action-in-progress | Iterative progressive | Narrative present | Stative progressive | |
| **State** | 1 | 7 | 0 | 1 | 6 | **248** |
| **Activity** | 112 | 251 | 0 | 25 | 0 | **400** |
| **Accomp.** | 45 | 112 | 1 | 65 | 0 | **260** |
| **Achieve.** | 43 | 31 | 10 | 21 | 0 | **435** |
| **Total** | 201 | 401 | 11 | 112 | 6 | **1,343** |

---

[16] "Ant. cont. state" is an abbreviation of "anterior continuing state."

**Table 3.5**

*Distribution of Situation Type: Derived Level*

| | Non-Progressive | | | | | | Use as Habitual | Use as Progressive | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use as Resultative | | | Use as Stative | | | Habitual | Action-in-progress | Iterative progressive | Narrative present | Stative progressive | |
| | Dynamic Resultative | Stative Resultative | Perfect of result | Continuing state | Permanent state | Ant. cont. state | | | | | | |
| **State** | 0 | 0 | 0 | 223 | 78 | 0 | 1 | 0 | 0 | 1 | 0 | **303** |
| **Activity** | 0 | 0 | 0 | 0 | 0 | 11 | 120 | 227 | 5 | 22 | 6 | **391** |
| **Accomp.** | 31 | 0 | 0 | 0 | 0 | 7 | 54 | 157 | 1 | 68 | 0 | **318** |
| **Achieve.** | 238 | 16 | 6 | 0 | 0 | 2 | 26 | 17 | 5 | 21 | 0 | **331** |
| **Total** | 269 | 16 | 6 | 223 | 78 | 20 | 201 | 401 | 11 | 112 | 6 | **1,343** |

The following table summarizes the interaction between situation type and the *-ko iss-* construction. Table 3.5.1 gives the raw numbers and the percentages of the four major uses of *-ko iss-* for verbs of each situation type at the derived level.

**Table 3.5.1**

*Distribution of Situation Type by Four Major Uses: Derived Level*

| | Resultative | Stative | Progressive | Habitual | Total |
|---|---|---|---|---|---|
| **State** | 0 (0%) | 301 (99%) | 1 (0.3%) | 1 (0.3%) | 303 (100%) |
| **Activity** | 0 (0%) | 11 (2.8%) | 260 (67%) | 120 (31%) | 391 (100%) |
| **Accomp.** | 31 (9.7%) | 7 (2.2%) | 226 (71%) | 54 (17%) | 318 (100%) |
| **Achieve.** | 260 (78.5%) | 2 (0.6%) | 43 (13%) | 26 (7.8%) | 331 (100%) |

Figure 3.3 displays the distribution of the uses of *-ko iss-* in relation to the situation type of the verbs in Korean. The results show that there is a strong correlation between the inherent aspect of verbs (situation type) and the uses of *-ko iss-*. As can

easily be seen in Table 3.5-1 and Figure 3.3, *-ko iss-* tends to occur with Activity type (67%, 260 out of 391) and Accomplishment type (71%, 226 out of 318) to express the progressive meaning, while it tends to occur with Achievement type (79%, 262 out of 331) to express the resultative meaning and State type (99%, 301 out of 313) to express the stative meaning. In addition, *-ko iss-* occurring with verbs of Achievement and Accomplishment can express both the progressive and the continuous. This indicates that the uses of *-ko iss-* are closely related to the inherent verb semantic types. As for the habitual meaning, all four types of verb can occur with *-ko iss-* to express it, indicating that the habitual meaning depends mostly on contextual factors rather than the inherent verb semantics.

**Figure 3.3**

*Overall Distribution of the Use of* **-ko iss-** *by Situation Type*
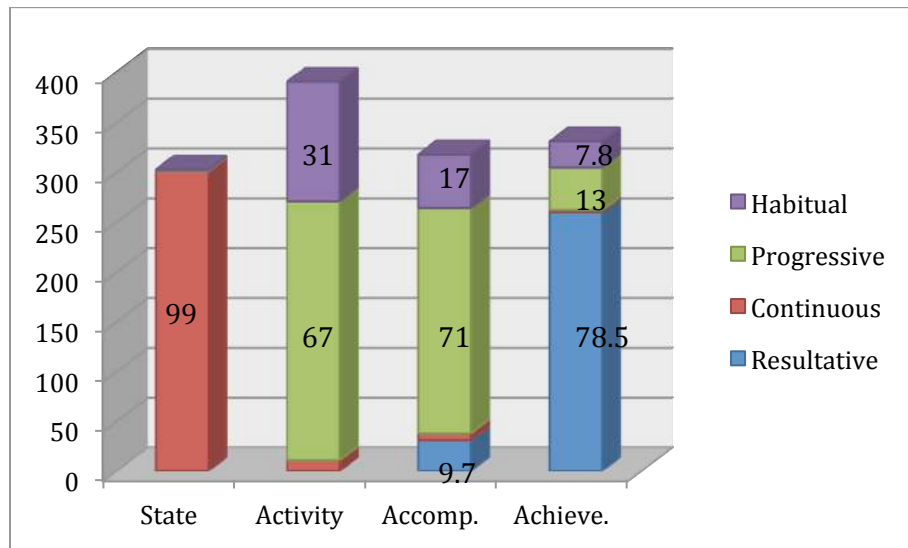


## 3.3 Multiple Uses in Discourse: How Are the Different Uses of *-ko iss-* Acquired?

### 3.3.1 Use as progressive

The Progressive use has four subuses: (1) action-in-progress, (2) iterative progressive, (3) stative progressive, and (4) narrative present.

### 3.3.1.1 Action-in-progress

The progressive aspect is a grammatical aspect that expresses ongoing action at a specific time. Bybee et al. (1994, p. 126) defined progressive as "an action ongoing at reference time," and Comrie (1976) stated that it applies typically to dynamic predicates and not to stative ones, as we find in English.

Among the four subtypes of the Progressive use of *-ko iss-*, the meaning of action-in-progress is the most frequent in the spoken discourse data. The *-ko iss-* construction was used to denote "action ongoing at reference time" in 401 out of 1,343 tokens (29.8%).[17] As seen in Tables 3.4 and 3.5 and Figure 3.3, the typical "action-in-progressive" meaning is obtained with Activity verbs (227 out of 401, 56.6%) and Accomplishment verbs (157 out of 401, 39.2%), as both have internal temporal duration. Consider Example (43).

(43)

1    P1: O-ki-lul          nwun ppaci-key    kitali-myense, mwe ha-yss-e?
        come-NOM-AC  eye    fall out-AD  wait-while      what do-PST-Q
        'What did you do while you were waiting for me to come?'

2    P2: Ne-man    kitali-**ko iss**-ess-e.
        you-only  wait-**Prog**-PST-DC
        'I was only waiting for you.'

3    P1: Chengchwiha-**ko iss**-ess-e kulayse?
         listen- **Prog**-PST-DC   so
        'So were you listening?'

4    P2: Chengchwi?
         listen
        'Listening?'

5    P3: Nokchwiha-**ko iss**-ess-e
         record-**Prog** -PST-DC
        'We were recording.'

---

[17] Hereafter, verb types in this chapter refer to the derived level because the analyses in the present study are made based on the discourse contexts.

6        P4: Wenlay  mithing-ul      ilehkey   ha-nun-kwuna.
                usually blind date-AC like this  do-Pres-ENDER
              'Usually people have a blind date like this.'


      In this example, the utterances in lines 2, 3, and 5 that contain *-ko iss-* imply the meaning of action-in-progress. In line 5, the situation type of the verb constellation (*chengchwiha-* 'to listen') is Activity with the temporal features of [+dynamic, +durative, -telic]. Considering that "recording a conversation" is a dynamic durative situation, which does not have a natural endpoint, we can expect that this event was going on for a certain time. In this utterance, P2 and P3 were waiting for P1 and they were recording the conversation while waiting for P1. Thus, the action-in-progressive meaning is acquired by combining Activity verbs with the *-ko iss-* construction in these utterances. This example indicates the most typical progressive meaning, which comes from Activity verbs, which express dynamic durative action without an endpoint.

      The *-ko iss-* construction occurring with Accomplishment verbs also denotes the action-in-progressive meaning. The only difference between Activity and Accomplishment verbs is whether or not the verb constellation contains an endpoint. As discussed in Chapter 2, many verbs in Korean display the two aspectual features of Activity and Accomplishment because Korean is an article-less language (Lee, 2011). Depending on whether a co-occurring noun is definite or not, verb types can shift. In the data, the shift from Activity to Accomplishment type is often found (43 out of 318 Accomplishment verbs, 13.5%).

      Next, let us talk about the action-in-progressive meaning of *-ko iss-* occurring with Achievement verbs in Korean. In general, Achievement verbs denote a resultative state when occurring with *-ko iss-* as in *nwun-ul kam-**ko iss**-ta* (eyes-AC close-**Resl**-DC 'My eyes are closed'). When denoting the action-in-progressive meaning, however, the Achievement verb type often shifts to the Accomplishment type (18 cases out of 318, 5.7%) because the action-in-progressive meaning does not fit with instantaneous action. Example (44) illustrates this point.

(44)

1  P1: E, onul yenghwa-lul pat-**ko iss**-nunteyyo,

     um, today movie-AC get-**Prog**-ENDER

     'Um, I am downloading a movie today,'

2    Waleycu-lul thonghayse yenghwa-lul pat-**ko iss**-nuntey.

     Waleycu-AC through  movie-AC get-**Prog**-ENDER

     'I am downloading a movie through Waleycu.'

The verb *pat-* 'to get, receive' in lines 1 and 2 is a typical Achievement verb that implies an instantaneous action with no temporal duration. So when it occurs with the *-ko iss-* construction, it normally denotes the iterative progressive or the habitual meaning with repetition as in *Emma-hanthey ton-ul pat-**ko iss**-ta* (mom-from money-AC get-**ko iss**-DC 'I get money from mom'). The interpreted meaning of *Emma-hanthey ton-ul pat-ko iss-ta* is the habitual in that the action of getting money is happening continuously for an extended time period. The meaning of *-ko iss-* as in (44), however, indicates a different aspectual time frame, which contains the temporal feature of [+durative] in the sense that getting a movie implies some time period. That is, the aspectual meaning of *-ko iss-* with Achievement becomes the action-in-progressive meaning, which is the same as that of an Accomplishment verb, after the type shift that takes place in a given discourse context.

    Interestingly, Achievement verbs can denote an aspectual meaning that is different from the typical action-in-progressive meaning. Achievement verbs do not inherently contain internal temporal duration, so they cannot denote the typical action-in-progressive meaning unless they shift to the Accomplishment type as explained above. Instead of expressing ongoing action-in-progress, some Achievement verbs, such as *tuleo-* 'to enter', *tuleka-* 'to enter', and *cepetu-* 'to reach', can indicate the preliminary stage leading up to an endpoint when they occur with the Progressive use of *-ko iss-*. Example (45) illustrates this kind of aspectual meaning of *-ko iss-*.

(45)

1  P1: Tayangseng-uy sitay-ta ilehkey yayki-lul hay-yo.

     variety-GN  era-PLN like this talk-AC say-POL

     'It is an era of diversity.'

2       Ilen sahoy-lul  twu-ko    po-l    ttay  ce-nun…

        this society-AC put-CMP see-RL time  I-TC

        'When it comes to this kind of society, I…'

3       a  wuli sahoy-ey  tayhayse icey khukey nukki-n ke-ka

        oh we   society-at about    now much   feel-RL thing-NM

        'what I feel about this society is that…'

4       a  acwumma    mwunhwa-ka        tuleo-**ko iss**-kwuna

        oh middle-aged women culture-NM  approach-**Prog**-ENDER

        'middle-aged women's culture is approaching.'

5    P4: Um

        'Well'

6    P1: Hanun ke-l      koyngcanghi khukey nukky-ess-eyo.

        QT    that-AC  very          much    feel-PST-POL

        'I felt that very much.'

7       Acwumma    sitay-ka        **o-n-ta**        acwumma          pwutay-ka

        middle-aged women era-NM come-Pres-DC  middle-aged women group-NM

        **o-n-ta**        mwe      ilen mal-to      iss-ko,

        come-Pres-DC  what like this saying-also exist-CNJ

        'There is a rumor that the era of middle-aged women will come.'

In line 4 in (45), the verb constellation of *tuleo-* 'to enter' is Achievement type with the temporal features of [+dynamic, +instantaneous, +telic]. In this example, the interpreted meaning of *tuleo-**ko iss**-ta* 'to be approaching' is that the culture of middle-aged women has not entered yet, and thus it indicates a preliminary stage leading up to an endpoint. In line 7, P1's use of the simple present verb *on-ta* 'to come' confirms that the culture has not come yet; it implies a near future event, one that will come soon.

Not all progressive markers in all languages can denote the meaning of a preliminary stage when occurring with Achievement verbs. For example, the Japanese progressive marker *-te i-* cannot be used in this way. In English, on the other hand, when occurring with Achievement verbs, the aspectual meaning of the progressive implies a preliminary stage as in *The train is arriving at the station*. Here, a question arises as to how wide a range of Achievement verbs can occur with the progressive marker to denote

this aspectual meaning. In English, it seems that only a limited number of verbs such as *reach*, *arrive*, and *leave* can occur with the progressive marker to denote the preliminary stage. In Korean, however, the results of the present study show that a wider variety of Achievement verbs can occur with the Progressive use of *-ko iss-* to denote a preliminary stage. Let us consider the following examples.

(46)

1      Tosekwan-ey ttak ka-ss-nuntey, kyay-tul-i   ponkwa        yaytul-i,

        library-at     just go-PST-CNJ that-PL-NM regular course people-NM

2      mak      ilehkey calyo     chac-**ko iss**-ess-ta.

      abruptly like this material find-**Prog**-PST-DC

    *'When I went to the library, the people from the regular course were finding

    materials.'


(47)    Ku   hyensang-ey tayhayse cokumssik    kkaytat-**ko iss**-ta.

      the phenomenon-about     little by little realize-**Prog**-DC

    *'(I) am realizing this phenomenon little by little.'


In (46), the verb constellation *chac-* 'to find' is Achievement; combined here with *-ko iss-*, the interpreted meaning implies the preliminary process leading up to finding the materials. Unlike English *find*, the verb *chac-* 'to find' can express the preliminary process by occurring with the progressive marker in Korean. Instead, in English, another verb *look for* is used to express the progressive meaning of the situation. The same rule applies to Example (47). The verb *kkaytat-* 'to realize' can express the preliminary process until the endpoint of realization when occurring with *-ko iss-*. Therefore, the Korean progressive *-ko iss-* occurs with a wider range of Achievement verbs than the English progressive marker does to express the meaning of a preliminary process.


### 3.3.1.2 Iterative progressive

Another subtype of the Progressive use of *-ko iss-* is iterative progressive (11 cases, 0.8%), which can be obtained by iteration of punctual verbs, that is, when the

Progressive *-ko iss-* is used with the subclass of Achievement verbs that Smith (1997) called semelfactives, such as *chi-* 'to hit', *phwu-* 'to scoop, ladle', and *calu-* 'to cut'. (48) shows some examples from the data.

(48) a. Emma appa cwukela   mwul phwu-**ko iss**-nuntey

   mom  dad   diligently water scoop-**Prog**-while

   yeph-eyse kkaywe-twu    ca-kwu iss-e.[18]

   side-at     wake-although sleep-Prog-DC.

   'While mom and dad were scooping water, the child next to them kept sleeping

   although he was being woken up.'


   b. Ni-ka     nemwu yelsimhi   i-ke-l         mak   ccalu-**ko iss**-killay.

   you-NM  very     diligently this-thing-AC wildly cut-**Prog**-because

   'Because you are cutting this thing very diligently.'


   c. Chaythingha-nulakwu caphan    chi-**kwu iss**-nuntey.

   chat-for                keyboard  hit- **Prog**-CNJ

   '(I) am typing for chatting.'


   Other Achievement verbs found in the data to denote the iterative progressive when occurring with *-ko iss-* are listed in (49).

(49) *manci-* 'to touch', *cwukopat-* 'to give and take', *pwulu-* 'to call', *ttayli-* 'to hit', *naka-* 'to exit', *hanswumswi-* 'to draw a sigh'

However, this kind of Achievement verb does not always denote the iterative progressive meaning; the arguments of such verbs play an influential role in giving the iterative progressive meaning. Consider the example in (50).

---

[18] *-kwu* is a colloquial form of *-ko*.

(50)

1       P1: Kuntey       ku-ke-l       kac-taka   kyeysok

        by the way that-thing-AC take-CNJ continuously

        panmal-lo       yaykiha-nun ke-yey-yo.

        talk down-by  talk-RL       NOM-be-ENDER

2       P2: Um

3       P1: Sinmwunsen wiwen-i       kyeysok.

        Sinmwunsen committee-NM continuously

        'By the way, the thing is that the committee member Sinmwunsen is

        continuously talking down.'

4        Ku-ke       po-myense-to  kulayto

        that-NOM see-while-even even though

        amwuli   caki-ka       senpay hwupayla-ciman cikum-un

        although himself-NM senior junior-although    now-TC

5       P2: Um.

6       P1: hwamyen-ulo    naka-**ko iss**-nuntey,

         screen-through come out-**Prog**-CNJ

         'Although he is a senior, it is broadcasting now…'

7       P2: Um.

8        Sichengca-tul-i po-ko iss-nuntey.

         viewer-PL-NM watch-Prog-CNJ

         'Viewers are watching.'


In line 6, the situation type of the verb constellation *naka-* 'to step out' is Achievement type with the temporal features of [+dynamic, +instantaneous, +telic]. However, *-ko iss-* with the verb *naka-* 'to step out' in this example does not indicate the sending out of a picture just one time, but the sending out of pictures constantly. Although the verb type is Achievement, its argument, *hwamyen-ulo* 'as a picture on the screen' in line 6 signals the meaning of iterative progressive in this example. It is clear that the utterance in line 6 is interpreted as referring to the repeated action in progress, not to an action going on for the moment, nor to a process leading up to the endpoint of the action. The adverbial *kyeysok* 'constantly' in line 3 also gives an indication of the constant iterative action in

progress. Therefore, what contributes most to the interpreted aspectual meaning of *-ko iss-* as the iterative progressive here is the arguments of the combined predicates and the adverbial. Without these arguments, *-ko iss-* cannot be interpreted in the same way. With different arguments, a different interpreted meaning would be given to the *-ko iss-* construction. Consider the example in (51).

(51)

1      Ku tamey iccok-eyseto    ttalo      hongcwu-lanun  ceyphwum-i naka-**ko iss**-ko,

        that next this-from-also separately Hongcwu-called product-NM come out-**habit**-CNJ

        'Next, the product named "Hongcwu" is separately on the market,'

2      Sansachwun-i nao-ko iss-supnita.

        Sansachwun-NM come out-ko iss-DC

        'and Sansachwun is on the market.'

3      Antong socwu ceyphwum-i koyngcanghi manhi nao-ko iss-supnita.

        Antong alcohol product-NM very many come out-ko iss-DC

        'The product Antong alcohol drink sells very much.'

4      Yokey senmwul-yong-ulo kacang kokupsulepkey cal naka-**ko iss**-supnita.

        here   present-purpose-for the best luxuriously well come out-**habit**-DC

        'Here as a present it sells the most luxuriously.'

5      Mwe kulenikka homsyophing ceyphwum-ulo cikum kacang manhi naka-**ko iss**-supnita

        well because home shopping product-for now the best many come out-**habit**-DC

        'Now as a product for home shopping, it sells the most.'

6      Cehuy-ka phocang-to hay-se ponaytuli-ko iss-supnita.

        I-NM wrap-also do-CNJ send-ko iss-DC

        'I also wrap the product and send it.'

In this example, a saleswoman in a department store is explaining to a customer which products are selling the most. In lines 1, 4, and 5, the verb *naka-* 'to come out, sell' occurs with the *-ko iss-* construction, and its interpreted meaning is the habitual meaning, not the iterative progressive meaning, due to its argument *ceyphwum* 'product'. Selling a product does not imply an instantaneous action at the moment, but a repeated action

happening for an extended time period (as in Comrie's 1976 definition of the Habitual). This utterance does not refer to the iterative progressive meaning because the action of selling a product cannot happen repeatedly on a particular occasion. In this example, what makes the *-ko iss-* construction be interpreted differently from the iterative example is the argument of the predicate, which plays a significant role in determining the interpreted meaning of *-ko iss-* in a given discourse context.

Oftentimes, an interpretation of the iterative progressive meaning of *-ko iss-* is made possible by the presence of contextual adverbials or temporal adverbials, which give an indication of continuousness or repeated times. The example in (52) illustrates this point.

(52)

1      P1: Mak sihemci   pat-camaca    mwucoken     allye      tal-lay-yo,

          just test sheet get-as soon as unconditionally be known give-say-ENDER

          '(He) said to unconditionally let him know as soon as I get the test sheet,'

2         kulem nay-ka ttak pat-ko,

          so     I-NM   just get-CNJ

3         **il-pen-ey**        **il-pen**,

          one-number-at one-number

4         **i-pen-ey**      **i-pen**,

          two-number-at two-number

5          **sam-pen-ey**     **sam-pen**,

          three-number-at three-number

6         ilehkey  pwulu-**ko iss-**nuntey sensayngnim-i na-l ttak     chyetapwa-ss-eyo,

          like this call-**Prog**-CNJ      teacher-NM    I-AC exactly look at-PST-ENDER

          'so I got the test sheet, and I was calling one at No. 1, two at No. 2, three at No. 3. While I was calling like this, the teacher suddenly looked at me,'

7      P2: (laughing)

8      P1: po-ko,       ya ne hacima

          look at- CNJ you   do-not

          'he looked at me, and said "don't do it".'

The context of the example is that P1 is talking about her experience of getting caught when telling her classmates the answers during a test. In this example, the verb occurring with *-ko iss-*, *pulu-ta* 'to call' in line 6, is Achievement with the features of [+dynamic, -durative, +telic]; someone usually calls just one time or several times, but not repeatedly with a regular time interval. In this example, the temporal adverbials *ilpen* 'number one', *ipen* 'number two', and *sampan* 'number three' in lines 3, 4, and 5 make the construction have the iterative progressive meaning. Without the temporal adverbials, the *-ko iss-* construction would denote a different aspectual meaning. Let's compare (52) with the following example, (53).

(53) Context: The player Lee is about to give a corner kick in a game, and this is a conversation between two commentators.

1       P1: Kongkyek-i eps-ci anh-supnikka?

           attack-NM not-INF not-Q

           'There is no attack, is there?'

2       P2: Ta an-ey tulew-a iss-ketun.

           all inside-at enter-E ISS-ENDER

           'Because everyone is inside.'

3       P1: Ca,   iyengphyo-lul   pwulu-**ko iss**-nun kamtok-uy moksoli-to tul-li-pnita.

           well Iyoungphyo-AC call-**Prog**-RL     coach-GN   voice-also listen-PAS-DC

           'Well, the coach's voice calling Lee Young Phyo is heard.'

4       P2: A!  ttwulh-ko tuleka-pnita.

            oh dig-and    enter-DC

            'Oh, rush to run.'

5       P1: E   neme-cy-ess-eyo!

            ah  fall down-PAS-PST-DC

            'Ah, (he) fell down!'

6       P2: Pakciseng!  Khulosu phaysu!

            Park Jiseng cross     pass

            'Park Jiseng! Cross pass!'

| 7 | A   mak-hi-pnita. |
|---|---|
| | ah block-CAS-DC |
| | 'Ah, it was blocked.' |
| 8 | Cikum kyeysok       hitingkhu kamtok-i Yengphyo! Yengphyo! Ha-**ko iss**-nun |
| | now   continuously Hidink     coach-NM Yengphyo Yengphyo say-**Prog**-RL |
| | mosup-i tul-li-nunteyyo. |
| | image-NM listen-PAS-ENDER |
| | 'It seems that the voice of Coach Hidink continuously calling |
| | "Youngphyo, Youngphyo" is being heard.' |

In this example, there are two *-ko iss-* constructions occurring with the same verb *pwulu-* 'to call'. The interpreted meaning of the *-ko iss-* construction in line 3 is ambiguous between the iterative progressive and the action-in-progressive because there is no explicit implication of calling repeatedly in this example. However, in line 8, P2 says the name twice, which hints at an iterative interpretation; also, his use of the adverbial *kyeysok* 'constantly' confirms that the interpreted meaning of *-ko iss-* is the iterative progressive in this given context. Therefore, in order to obtain the iterative meaning, not only are the Achievement type of verbs used with *-ko iss-,* but also contextual factors such as temporal adverbials can give an indication of the action being repeated.

### 3.3.1.3 Stative progressive

Normally, State verbs cannot have the action-in-progressive meaning, because State verbs are non-dynamic and do not constitute an action. This explains why the progressive viewpoint aspect (grammatical aspect) is generally anomalous with State verbs as in \**He is loving me*. However, when progressive marking is possible, the meaning obtained is "state viewed as dynamic event" (Smith, 1997) by dint of the dynamic meaning of the progressive marking. It often conveys vividness or temporariness of a situation (e.g., *He lives in Tokyo* vs. *He is living in Tokyo*).[19]

In Korean, State verbs can acquire the aspectual meaning of stative progressive by means of the dynamic meaning of the Progressive *-ko iss-*. In English, State verbs cannot

---

[19] The example is from Shirai (2000, p. 332).

normally have the action-in-progress meaning; however, in Korean, as defined in Chapter 2, the aspectual meaning of *-ko iss-* occurring with the so-called stative verbs denotes the meaning of continuing state, which is different from the stative progressive meaning that conveys the vividness or temporariness of a situation. Only the cases of *-ko iss-* denoting the meaning of stative progressive (six cases) will be discussed here. Let us look at the example in (54).

(54)

1  P1: **Mak** phayn-i-nikka **mak** nwun-i hwak tolaka-canha,

     **wildly** fan-be-because **wildly** eye-NM suddenly turn-ENDER

     'Because (they) are fans, their eyes are suddenly turning.'

2  P2: E

     Oh.

3  P1: Kulayse mak nolay-lul ttala pwull-e **mak** cohaha-**kwu iss**-e.

     So  wildly song-AC follow sing-Pres **wildly** like-**Prog**-DC

     'So (they) are wildly singing a song along, and wildly they are liking it.'

4  P2: (laughing)

In this example, P1 is describing vividly how the fans at a concert were excited, so he implies the stative progressive meaning with *cohaha-**kwu iss**-e* (like-**Prog**-DC 'to be liking') in line 3. What contributes most to the stative progressive meaning here is the sentential adverbial *mak* 'wildly, violently' in lines 1 and 3, which explicitly signals that the State verb *cohaha-* 'to like' is described as if it is a dynamic event. Actually, the State verb has shifted to the Activity type in this situation, so that it can take the progressive *-ko iss-* to convey the vividness of the situation.

In Korean, the progressive marking is not obligatory and the simple present verb tense can also express the progressive meaning. In this example, we can find both ways of expressing the progressive. In line 3, P1 uses the simple present form on the first predicate, *pwull-e* (sing-Pres 'to sing a song'), while the progressive marking is used on the second predicate, *cohaha-**kwu iss**-e* (like-**Prog**-DC 'to be liking'). The first predicate *pwulu-* 'to sing a song' is an Activity type verb, which internally entails a dynamic action,

65

and thus it is not necessary to mark the progressive. The second predicate *cohaha-* 'to like', on the other hand, is a State type verb, which does not internally denote a dynamic feature, and thus it is obligatory to mark the progressive in order to convey the vividness of the situation. This stative progressive heavily depends on the context or the way that the talk in interaction goes on. In this example, the sentential adverbial *mak* 'wildly, violently' gives a crucial signal of the vividness of the situation. This example demonstrates that in order to examine the aspectual meaning of a State verb occurring with the *-ko iss-* construction, it is essential to consider its situation or discourse context.

Although the meaning of stative progressive heavily depends on the context, the results of the present study show that all the cases of *-ko iss-* indicating the stative progressive meaning in the data are psychological verbs, and in particular, emotion verbs with meanings such as *frighten*, *please*, *bore*, *frustrate*, and so forth. Here, I suggest that this kind of psychological verb should be treated differently from other stative verbs. At the derived level in discourse, this kind of psychological verb often shifts from State type to event type (Activity) to express the vividness of a situation (i.e., stative progressive).

Taking a crosslinguistic perspective, the Korean State verbs can be compared to those in Chinese, in which State type verbs are further divided into two subcategories: (1) mental state and (2) psychological state (Kuo & Hsieh, 1996). Mental state verbs are more like cognitive verbs such as *al-* 'to know' and *ihayha-* 'to understand', while psychological state verbs refer to emotion verbs such as *kippeha-* 'to be delighted', *culkeweha-* 'to be pleased', and *mwuseweha-* 'to be frightened'. Of the subtypes, only psychological state verbs (i.e., emotive verbs) can occur with the progressive *zai*.[20] This is very similar to English in that lexically stative verbs can be used non-statively and appear in the progressive, which refers to the stative progressive. On the other hand, mental state verbs (i.e., cognitive verbs) can be marked by the continuous marker *zhe* in Chinese. Mental state verbs are verbs that refer to cognitive states related to understanding, discovering, planning, or deciding such as *know*, *understand*, *recognize*, *notice*, and so forth. This distinction in Chinese accords with the difference observed in Korean, where the cognitive verbs *al-* 'to know' and *ihayha-* 'to understand' can denote

---

[20] As discussed in Section 2.4.2.1, in Mandarin Chinese, *zai* is used as a progressive marker as in *I am putting on clothes*, while *zhe* is a continuous marker as in *I'm wearing clothes*.

66

the resultative state because this kind of verb can shift from State type into event type (Achievement) at the derived level, as discussed in Chapter 2. This suggests that State verbs in Korean should be subdivided into more specific types depending on their aspectual meanings: (1) psychological verbs (emotion verbs) with the aspectual meaning of stative progressive and (2) mental state verbs (cognitive verbs) with the aspectual meaning of stative resultative.

### 3.3.1.4 Narrative present

Another subtype of the Progressive use of *-ko iss-* found in discourse is its use to denote a "narrative present." In linguistics, the narrative present refers to the employment of the present tense when narrating past events. Basically, there is discordance between the verbs' tense and the real reference time, because the present tense is used to refer to a past situation. The function of the narrative present in discourse is that it has the effect of making past events more vivid. According to Brinton (1992, p. 221), its use in conversation not only makes an event present, but also makes some segments of a narrative foregrounded events and marks a shift to evaluation.

This use of the narrative present precisely accords with the Progressive use of *-ko iss-* in Korean (112 out of 1,343 tokens, 8.3%). The aspectual meaning of *-ko iss-* in the narrative present use is distinct from the action-in-progressive meaning because the action of saying does not take place at reference time. At the same time, its meaning is closely related to the progressive meaning as well, in the sense that it gives the effect of making the event more vivid and lively, as if it is currently happening. In conversation, it is particularly common with verbs of communication such as *tell*, *write*, and *say*. The Korean verbs of communication found in the data include *seswulha-* 'to describe', *malha-* 'to say', *ssu-* 'to write', *haysekha-* 'to interpret', *cwucangha-* 'to insist', and *yaykiha-* 'to talk'. When *-ko iss-* is used with these verbs of communication, it has the effect of making past events even more lively and vivid, implying a greater involvement of the speaker in the narration. Let us consider the example in (55).

67

(55)

1        Olyu-la-n,    ene-uy       sengkongcek-i-ci mosha-n pwupwun-ul malha-pnita

            error-be-TC language-GN successful-be-INF not-RL   part-AC      say-ENDER

            'People say that an error is part of unsuccessful language'

2        kulikwu, olyupwunsek-ila-n,

            so,      error analysis-be-TC

3        sengkongcek-i-ci   mosha-n ene-uy       palsayng,

            successful-be-INF not-RL   language-GN idea

4        sengcil,        wenin, kyelkwa tung-ul  kyumyengha-nun kwaceng-ilako,

            characteristic  cause  effect    etc.-AC  specify-RL       process-QT

5        seswulha-**ko iss**-supnita.

            describe-**Prog**-ENDER

         'so, it describes that error analysis is the process of specifying ideas,

          characteristics, cause and effect of unsuccessful language.'

In this example, the speaker is making a presentation in a class regarding errors in using a language. Basically, he is summarizing a book chapter, and in this example he is giving the definition of errors and error analysis. In Line 5, the *-ko iss-* construction is used with the verb of communication *seswulha-* 'to describe'. The definition itself was made in the past, but the speaker is reporting it as if it is being made in the current situation. In order to give the effect of making the past event more lively and vivid, the speaker employs the *-ko iss-* construction in the example. In Korean, the simple present is also used in the same situation to give this narrative effect. However, native speakers of Korean prefer using the *-ko iss-* construction[21] in such a narrative situation. In a narrative situation where there are listeners or an audience, using *-ko iss-* increases the interpersonal effect more than using the simple present. This indicates that the Progressive *-ko iss-* implies a greater involvement of the speaker in the narrative than the simple present does.

---

[21] An experiment examining the usage pattern of the progressive *-ko iss-* by Korean native speakers is discussed in Chapter 5.

### 3.3.2 Use as habitual

The Habitual use of *-ko iss-* is found with all of the dynamic verbs types, including Activity, Achievement, and Accomplishment, that occur in the data (201 cases out of 1,343 tokens, 14.9%). In Korean, the habitual meaning can be expressed by either the simple present or the *-ko iss-* construction. A difference is made between these two forms when it is a generic statement (K.-d. Lee, 1993). Let us compare the two examples in (56).

(56) a. Hay-ka     tongccok-eyse tteolu-**n**-ta.

      sun-NM  east-at           rise-**Pres**-DC

      'The sun rises in the east.'


   b. Hay-ka    tongccok-eyse tteolu-**ko iss**-ta.

      sun-NM east-at           rise-**Prog**-DC

      'The sun is rising in the east.'

The sentence in (56a) is a generic statement that the sun rises in the east, while the sentence in (56b) illustrates the action-in-progressive interpretation, which is that the sun is now in the middle of rising in the east. The difference between these two sentences indicates that the simple present is more compatible than the *-ko iss-* construction with a generic situation. This is because *-ko iss-* implies temporariness for some extended time period so that a generic statement does not necessarily need to employ the *-ko iss-* construction, although the time period that the *-ko iss-* construction implies depends on the context.

The Habitual use of *-ko iss-* seems almost identical to the Progressive use. What distinguishes the two uses is determined solely by contextual factors such as temporal adverbials, contextual information, and pragmatic implicature. The typical habitual meaning of *-ko iss-* is acquired by the presence of temporal adverbials such as *mayil* 'everyday', *maytal* 'every month', and *hanpenssik* 'once a year', which can give the status of regularity, habituality, and repetition. An example from the data illustrates this point in (57).

(57)

    1      P1: Nay-ka kwaswuwen-cip atul ani-nya

               I-NM   orchard-house   son  not-Q

               'I am a son of the orchard, aren't I?'

    2      P2: (laughing)

    3      P3: O!

    4      P2: Kuleh-kwuna.

               so-ENDER

               'It is so.'

    5      P3: Kuntey       pyenpi-eynun    sakwa isangi  eps-ki      ttaymwuney

               by the way constipation-TC  apple  beyond not-NOM because

               achim-ey    kkok    sakwa-lul hanassik mek-**ko iss**-e     yosay.

               morning-in certainly apple-AC one        eat-**Habit**[22]-DC these days

               'By the way, I certainly eat an apple a day these days because there is no

                better solution to constipation than eating an apple.'

    6      P1: Na-nun wuli cipsalam-i kwail sao-nun ken mam-ey an tul-e      cwuk-keyss-e.

               I-TC    we  wife-NM   fruit   buy-RL NOM mind-in not like-INF die-Modal-DC

               'I really don't like my wife buying fruits.'

    7      P3: He! Cincca kuleh-kwuna.

               ha really so-ENDER

               'Ha! It is really so.'


In this example, a conversation between two people, the *-ko iss-* construction is
used with the verb *mek-* 'to eat', which is classified as Accomplishment. This is the same
condition under which the action-in-progressive meaning can be acquired; however,
adding the temporal adverbial *hanassik* 'once a day' completely changes the aspectual
meaning of *-ko iss-* to the Habitual.

Adding the temporal adverbial can even make a generic statement into a habitual
sentence. If *achim-mata* (morning-every 'every morning') is added to the example in
(56a), it is possible to denote the habitual interpretation, which implies that the sun rises

---

[22] Hereafter, the Habitual use of *-ko iss-* is glossed as "Habit" in the examples.

in the east every morning. Therefore, temporal adverbials play an essential role in *-ko iss-* acquiring the habitual meaning.

Nevertheless, the majority of the instances of the Habitual use found in the data (75%) do not emerge from the co-occurrence of explicit adverbials, but from the context of the talk. Let us consider Example (58).

(58) Context: A professor is making a presentation about the globalization of the Korean language, and talks about the case in Japan.

1 Hyencay talun  ku sapem-tayhak-ey kyosa cakyekcung-tul-i

  currently different the teacher-college-at teacher certificate-PL-NM

  tayhanminkwuk ku kyoyukpwu cangkwan-i inceng-ul   ha-myense

  Korea   the education minister-NM recognition-AC do-CNJ

  a i-kup  kyosa-cakyekcung-i  nao-**kwu iss**-nuntey

  ah two-level teacher-certificate-NM issue-**Habit**-CNJ

  'Currently, a teacher's certificate at teachers' college is recognized by the education

  minister in Korea.'

  [lines 2–6 omitted]

7 Kwungkukcekulon kulen ccok-ulo mokphyo-lul twu-**ko iss**-supnita.

  ultimately   this side-to purpose-AC put-**Habit**-ENDER

  'Ultimately, the purpose is put to this side.'

  [lines 8–10 omitted]

11 Kulayse ilpon kathun kyengwu-nun ikey haklyek pwulmwunulo

  so  Japan like case-TC  this education regardless of

  e kunyang  ungsi-lul ha-**ko iss**-supnita.

  uh just like that apply-AC do-**Habit**-ENDER

  'So in the case of Japan, (people) apply for that regardless of the educational

  background.'

  [lines 12–17 omitted]

18 E acwu ku sihem mwuncey kathun ke-l  koyngcanghi

  uh very the test questions like NOM-AC very

  acwu ku tayanghakey nay-**ko iss**-ko,

  very the diversely  make-**Habit**-CNJ

19      yelekaci kwangpemwiha-n ku mwuncey-lul nay-**ko iss**-supnita.

        various large-scaled-RL      the question-AC make-**Habit**-ENDER

        'They make various types of questions in a large range.'


In this example, utterances include *-ko iss-* in lines 1, 11, 18, and 19. The interpreted meaning of *-ko iss-* in these utterances is the Habitual use because the situations being described go on regularly in an extended time frame; they do not refer to one event/situation happening at a time. For instance, in line 11, the verb constellation of applying for the certificate (*ungsi-lul ha-* 'to apply for') is Achievement type, but it does not indicate an event at reference time; rather, it happens on a regular basis in an extended time frame. Therefore, the interpreted meaning of the *-ko iss-* construction is the Habitual. The other lines (1, 18, and 19) imply the same habitual interpretation of *-ko iss-*. Unlike the previous example in (57), there are no temporal adverbials in (58) to signal the habitual interpretation. The utterances in (58) demonstrate that the habitual meaning of *-ko iss-* can be obtained by a given discourse context, and not necessarily by the co-occurrence of temporal adverbials or the verb constellation.

Normally, using State verbs with the Habitual use of *-ko iss-* is difficult because State verbs do not internally contain the initial point nor the final point of states. It is hard for a certain psychological state or feeling to happen on a regular basis as in \**na-nun halwuey hanpen sin-i iss-tako mit-**ko iss**-ta* (I-TC a day once god-NM exist-CMP believe-**ko iss**-DC \*'I believe in God once a day'). In some ways, the Habitual use of *-ko iss-* is somewhat similar to the Stative use of *-ko iss-* in the sense that both uses focus on the status of an action, not on the action in progress itself. If you look at the example in (57), what the speaker wants to tell P2 is that he (P3) is in the state of eating an apple everyday. In this regard, the Habitual use is similar to the Stative use of *-ko iss-*. The difference is that the Habitual use refers to an action or an event happening on many different occasions for an extended time period, while the Stative use refers to continuation of a certain state without any regular recurrence or change.

However, some State verbs may occur with the Habitual use of *-ko iss-,* although only one example of the habitual use of *-ko iss-* occurring with State verbs is found in the data for the present study. Lee (2011) also discussed the case of the Habitual use of *-ko*

*iss-* occurring with State verbs. According to Lee, perception verbs such as *poi-* 'to be seen' and *tuli-* 'to be heard' can occur with the Habitual use of *-ko iss-*, as Example (59) shows.

(59) I-kos-eyse     achim-mata     olyukto-ka          po-i-**ko iss**-eyo.
     this-place-at morning-every Olyuk island-NM see-PAS-**Habit**-DC
     'Olyuk Island is seen here every morning.'

In this example, the interpreted meaning of *-ko iss-* would imply the continuing state without the temporal adverbial *achim-mata* 'every morning'. Thus, its habitual interpretation is made possible by the presence of the temporal adverbial, which adds the concept of habituality. Adding the temporal adverbial changes the State type into Activity so that the aspectual meaning of *-ko iss-* turns into the habitual meaning. Another reason that the verbs of perception possibly occur with the Habitual use of *-ko iss-* is that the initial and final point of such states can be explicitly expressed, which is unlike other psychological verbs.

### 3.3.3 Use as resultative

Subuses of Resultative are (1) dynamic resultative, (2) stative resultative, and (3) perfect of result.

### *3.3.3.1 Dynamic resultative*[23]

The dynamic resultative use (269 out of 1,343 tokens, 20.0%) is generally acquired when *-ko iss-* is combined with Achievement verbs (238 out of 269, 88.4%) and Accomplishment verbs (31 out of 269, 11.5%), which internally contain telicity. Typically, Achievement verbs can denote the resultative state with the *-ko iss-* construction because there is no internal temporal duration between the initial and the final point of this type of verb. Achievement verbs denoting resultative state are *kaci-* 'to

---

[23] The term "dynamic resultative" is used here to distinguish this use from "stative resultative." The "dynamic resultative" derives from dynamic verbs, while the "stative resultative" derives from stative verbs.

73

take', *cap-* 'to hold', *tul-* 'to carry', and *palp-* 'to step', among others. Example (60) illustrates the resultative use of *-ko iss-*.

(60) a. Il-cong     myenhe-lul kaci-**ko iss**-canha.
         first-class  license-AC take-**Resl**-ENDER
         '(I) have a first-class license.'


     b. Ku sen palp-**ko iss**-umyen…
        the line step-**Resl**-if
        'If you step on the line…'


In traditional Korean grammar, the *-ko iss-* construction is said to denote the resultative meaning when combined with any of a limited set of verbs of wearing (i.e., *Na-nun os-ul ip-**ko iss**-ta* [I-TC clothes-AC wear-**Resl**-DC 'I'm wearing clothes']) and verbs of contact (i.e., *Kapang-ul tul-**ko iss**-ta* [bag-AC carry-**Resl**-DC 'I'm carrying a bag']). On the contrary, the results of the present study show that only 10 cases out of 269 dynamic resultative uses of *-ko iss-* are combined with such verbs. In addition to Achievement verbs, 31 cases of Accomplishment verbs are combined with the *-ko iss-* construction to denote the resultative meaning. Let us consider the following example.

(61) Context: A professor is giving a lecture about art history at a college.
1        Kulayse, ilehkey ha-myense,
         so       like this do-CNJ
2        taykaksen kwuto-lul     ilwu-**ko iss**-ko
         diagonal   structure-AC form-**Resl**-and
         'So, a diagonal structure was formed,'
3        kyengmwul-i, alayccok-ulo ta      chiwuchi-ko,
         scenery-NM  down-toward every be biased-and
         'every scenery is biased downward and,'
4        i     celpan wiccok-un ta     thuyecy-**e iss**-eyo.
         this half    up-TC      every be opened-**Resl**-ENDER
         'half of the upper side is all opened.'

In this example, a professor is describing a piece of artwork and saying how it is composed. The situation type of the verb constellation (*ilwu-* 'to form, make') is Accomplishment type with the temporal features of [+durative, +telic]. As discussed earlier, Accomplishment verbs mostly denote the action-in-progressive meaning occurring with the *-ko iss-* construction because they entail temporal duration. However, in this example, the interpreted meaning of *-ko iss-* in line 2 is resultative state, indicating that the scenery has a diagonal composition. Generally, what contributes most to acquiring a resultative meaning is telicity. The verb *ilwu-* 'to form, make' in (61) is able to express the resultative state because of its telic feature. In line 4, another resultative marker *-e iss-* (*thuyecy-e iss-* 'to be opened') is used to express the resultative state as well. This confirms that the interpreted meaning of *-ko iss-* in line 2 implies the resultative state. Both *-ko iss-* and *-e iss-* can denote the resultative state in Korean, but they are distinguished depending on transitivity.

When *-ko iss-* occurs with Achievement type and Accomplishment type verbs in a real discourse context, its interpreted meaning is often ambiguous. The ambiguity of the meaning of *-ko iss-* is resolved by considering its context. Let us consider Example (62).

(62)

1    Po-myen ene-nun    sayngkak-ul tulena-nun  swutan-i-l    ppwun anila
     see-if    language-TC thought-AC express-TC  means-be-RL only    not
     sayngkak-ul  hyengsengha-nun wenchen-ita-lako yayki-lul hay-yo.
     thought-AC   form-RL            source-be-QT    say-AC  do-ENDER
     'People say that a language is not only a means of expressing one's thoughts, but also a source of forming one's thoughts.'


2    Ca etten  salam-i    meli-sokey   mwel       tteolli-**ko iss**-nya ha-myen-yo,
     ok some  person-NM mind-inside something come up-**Resl**-CMP do-ENDER
3    tongmwul-ul hana tteolly-**ess**-eyo.
     animal-AC    one   come up-**Resl**-ENDER
     'What a person came up with inside mind is an animal.'

4    Tongmwul-ul hana tteolli-**ko iss**-nuntey  ku  tongmwul-un

     animal-AC   one   come up-**Resl**-CNJ     that animal-TC

     e    acwu khetalan ku tung-ul   kaci-ko iss-ko ku tamey

     um very  big         um back-AC take-Resl-CNJ next

5    tto kwulkun pal-ul kaci-ko iss-ko,

     one more big foot-AC take-Resl-CNJ

6    ku tam-ey kin kho-lul kaci-ko iss-eyo.

     next long nose-AC have-Resl-ENDER

     'I have an animal in my mind, and the animal has a very big back, and then it has also

     very big feet, and then it has a very long nose.'


7    Ca yelepw-un meli-sokey-nun   etten tongmwul-i **tteoll-a-**yo?

     okay you-TC     mind-inside-TC   what animal-NM  **come up**-Pres-Q

     'Okay, then what kind of animal are you coming up with in your mind?'

8    Hana-uy  kulim-i        **tteoll-u-**cyo?

     one-GN  picture-NM **come up-Pres**-Tag Q

     'You are coming up with one picture, aren't you?'

9    Ku-ke-l         meli-ssokey kaci-ko iss-tako hayse kukey,

     that-NOM-AC mind-inside have-Resl-although

10   talun salam-i yelepwun-i mwusun sayngkak-ul ha-ko iss-nunci celtay moll-ayo.

     other person-NM you-NM what   thought-AC do-Prog-CMP never not know-ENDER

     'Although you have the thought in your mind, other people never know what you are

     thinking.'

In this example, a professor is giving a lecture explaining what a language is. In line 1, he
provides a definition, saying that a language is both a means of expressing one's mind
and a source for forming one's thoughts. He goes on talking about what a person has in
mind in line 2, in which the *-ko iss-* construction appears. The situation type of the verb
constellation (*tteolu-* 'to rise') is Accomplishment, which can denote either the
progressive or the resultative state depending on the context when occurring with *-ko iss-*.
The utterance in line 2 is ambiguous between the progressive interpretation implying the
current state of someone coming up with an idea or thought and the resultative

interpretation implying the resultant state after someone came up with something. We cannot decide on its aspectual meaning until the speaker indicates that he has already come up with an animal by using another resultative suffix -*ess* in the following line 3.[24] In line 4, the speaker goes back to using the -*ko iss*- construction (*tteolli-**ko iss**-nuntey*). This suggests that the -*ko iss*- construction is used interchangeably with another resultative suffix -*ess* in this utterance, which indicates that the interpreted meaning of -*ko iss*- in line 4 is the resultative interpretation.

Interestingly, there is another indication that the -*ko iss*- construction in lines 2 and 4 is interpreted as referring to the resultative state. In lines 7 and 8, the speaker uses the simple present (***tteoll-a-****yo* 'to come up'), which can express the progressive meaning in Korean. I speculate that the reason why the speaker uses the simple present instead of the progressive -*ko iss*- is to prevent confusion between the resultative -*ko iss*- and the progressive -*ko iss*-. In this particular situation, there is a need to distinguish the resultative -*ko iss*- from the progressive -*ko iss*-. Thus, the speaker uses the simple present in lines 7 and 8 to express the progressive meaning instead of using the progressive marking -*ko iss*-.

There are some cases in which temporal adverbials give a clue to whether the resultative meaning of -*ko iss*- or the progressive meaning of -*ko iss*- is intended. Depending on how much time the temporal adverbials represent, the -*ko iss*- construction can denote either the progressive or the resultative as in (63).

(63)

1    Ku tamey, haksup pyenin, kyoswuca pyenin iss-cyo?

     next      learning factor instructor factor exist-Tag Q

     'Next, there are a learning factor and an instructor factor, aren't they?'

2    Haksupca pyenin iss-ko,   haksup kwaceng-ey pyenin-i   iss-cyo, kucyo?

     learner    factor exist-CNJ learning process-in factor-NM exist-Q Tag Q

     'There are a learner factor and learning process factor, aren't they?'

---

[24] In Korean, the suffix -*ess* can also function as a resultative marker as in *ku-nun moca-lul ss-**ess**-ta* (he-TC cap-AC wear-**Resl**-DC 'he is wearing a cap').

3 Haksup  kwaceng, kuntey ku-ke-n akka  malssumtuli-n-ke,

  learning process by the way that-NOM-TC before tell-RL-NOM

  'The learning process, by the way, I mentioned,'

4 hakphwung,   kyophwung,  me   kuphwun,  kulen ke,

  academic tradition school tradition something class tradition like that

  'academic tradition, school tradition, class tradition, something like that…'

5 yo-kes-tul, isipil seyki-eyse sangtanghi  cwungyohan yoso-lo tteolu-**ko iss**-supnita.

  this-NOM-PL 21 century-in considerably important factor-as rise-**Prog**-ENDER

  'these are rising as important factors in the 21st century.'

  ('By the way, as I mentioned, academic tradition, school tradition, class tradition,

  something like that, these factors are rising as important factors in the 21st century.')

In this example, a professor is giving a lecture and explaining what kind of factors are important for learning. He is listing the factors and saying they are rising in importance in the 21st century. In line 7, the *-ko iss-* construction (*tteolu-**ko iss**-supnita* 'to be rising') appears. In comparison to the same construction in the previous example, (62), it is clear that the construction here is interpreted with the progressive meaning due to the temporal adverbial *isipil seyki-eyse* 'in the 21st century'. The time period of the 21st century implies a long period of time, so it signals that the factors are rising for that time period, which matches the progressive aspectual meaning. What the contrast between the two examples attests to, then, is the significant role of temporal adverbials in determining the aspectual meaning associated with *-ko iss-* in a given discourse context.

  The use of *-ko iss-* is often ambiguous between the resultative meaning and the progressive meaning depending on the context. That is, contextual information determines whether the *-ko iss-* construction is the resultative or the progressive. Depending on the speaker's communicative goals and concerns, the interpreted meaning of *-ko iss-* can be determined. The following example illustrates this point.

(64)

1 Ese osipsio kokayk-nim,

  welcome customer-HT

  'Welcome!'

2    A  cehuy sangcwu  kockam         po-si-nun     ke-cyo?

ah our    Sangcwu dried persimmon see-hon.-Pres  NOM-Tag Q

'You are looking for Sangcwu dried persimmon, aren't you?'

3    Sangcwu  kockam         a-si-cyo?

Sangcwu dried persimmon know-hon.-Tag Q

'You know about Sangcwu persimmon, don't you?'

[Lines 4–6 omitted]

7    Cehuy sangcwu kockam-eyse        i-peney   ilehkey

our    Sangcwu dried persimmon-at    this-time like this

8    twu kaci  ceyphwum-i nao-**ko iss**-supnita.

two kind product-NM come out-**Resl**-ENDER

'This time two kinds of products came out at Sangcwu Persimmon.'

9    Hana-nun pan kenco ceyphwum.iko,

one-TC    half dry  product-be-CNJ

10   yo-ke-nun    wancen kenco ceyphwum-i-kwuyo.

this-NOM-TC whole   dry    product-be-ENDER

'One is half-dried product and the other is completely dried product.'

('This time two kinds of products came out at Sangcwu Persimmon. One is half-dried

product and the other is completely dried product.')


In this example, the speaker is talking about his experience of working part-time for a
department store as a salesperson. He describes a situation in which he was explaining a
product to a customer. In line 8, the -*ko iss*- construction (*nao*-***ko iss***-*supnita* 'to come
out') appears. The situation type of the verb constellation (*nao*- 'to come out') is
Achievement type, which can denote either the progressive or the resultative depending
on the context. We cannot decide on its aspectual meaning with -*ko iss*- until we consider
the speaker's communicative goal and interests. In the next lines 9 and 10, it is revealed
that what the speaker wants to tell the customer is that one is a half-dried product and the
other is fully dried product. Considering these two lines, the speaker's communicative
goal is to inform the customer that the two kinds of products have already come out on
the market, not that they are continuously coming out on the market. Taking the speaker's
communicative goal into consideration, it is highly likely that the aspectual meaning of -

*ko iss-* in line 8 refers to the resulting state that has resulted from a prior event. What this example attests to, then, is the significant role of the speaker's communicative goal and concerns in the aspectual meaning of *-ko iss-* in a discourse context.

### *3.3.3.2 Stative resultative*

The resultative meaning of *-ko iss-* can also be obtained when it occurs with State verbs, although the meaning heavily depends on a context in which the State type may shift into an event type verb (Achievement). That way, the *-ko iss-* construction denotes the resultative meaning due to the instantaneous telic features of Achievements. The data show a few discourse contexts in which State verbs denote the "stative resultative" meaning with *-ko iss-* (16 cases). I use the term "stative resultative" in order to distinguish this use from the resultative meaning derived from typical dynamic verbs, discussed in the previous section. This type of State verb mostly consists of cognitive verbs such as *al-* 'to know' and *ihayha-* 'to understand', which are treated differently from other psychological verbs. As discussed earlier, such cognitive verbs may denote the resultative state, while the psychological verbs such as emotive verbs may denote stative progressive. The cognitive verbs *al-* 'to know' and *ihayha-* 'to understand' are treated differently because such verbs may have an initial point of entering-into-knowing depending on the context, and therefore their aspectual meaning when occurring with *-ko iss-* can refer to the resultative meaning. Example (65) from the data illustrates the change in the aspectual meaning when a State type changes to an Achievement type verb at the derived level in a given discourse context. This example is from a linguistics lecture.

(65)

1  Kulayse kaynyem-kwa ene-ey  etten  kwankyey-ka,
    so  concept-and  language-GN somehow relation-NM
    'So what kind of relations are there between language and concept…'

2  yenkwan-i    sangtanghi  kiphkin ha-ciman.
    connection-NM significantly close  do-although
    'although the connection is considerably close'

3       um  ttokkathun kaynyem-un ani-ko,

        um   same      concept-TC  not-CNJ

        'um, they are not the same,'

4       e   ttalottalo  selo  tisosieyisyen       toy-l swu iss-ta

        uh separately each other dissociation become-can-DC

        'uh, they can be dissociated from each other'

5       **ilehkey  al-ko iss**-umyen  toyl kes kath-supnita.

        like this know-**Resl**-if       become-seem-ENDER

        'you'd be fine if you know this like I said.'

        ('So you'd be fine if you know about the relation between language and concept as

        follows. Although the relation between language and concept is very close, they are

        not the same, but they can be dissociated from each other.')


        In line 5, the cognitive verb *al-* 'to know' appears with the *-ko iss-* construction.
The situation type of verb constellation (*al-* 'to know') is originally State at the basic
level, but its type shifts to Achievement in this context. The criterion for the shift to
Achievement is whether there is an initial point of the state meaning "entering-into-
knowing" in the discourse context. Prior to this excerpt, the professor had been
discussing arguments about whether language is formed based on concepts, or language
affects concepts. In lines 2 and 3, the professor concludes that concept and language are
not the same notion although there is a close relationship between them. In line 4, he
makes his key point, that the two can be dissociated, and then he tells the students they
should know his argument. In this context, we can tell when the initial point of the state is
because the professor directs the students to know the relation between the two as he
explains it. Here, the deictic word *ilehkey* 'like I said' in line 5 gives a contextual clue
that the point of entering-into-knowing starts from the moment of the utterance. As a
consequence, the situation type of verb constellation (*al-* 'to know') in this context shifts
to Achievement, which leads to the *-ko iss-* construction's denoting of the resultative
meaning.

*3.3.3.3 Perfect of result*

In the developmental pathway that Bybee el al. (1994) proposed, the perfect (anterior) develops from the resultative. Because, as discussed in the previous sections, *-ko iss-* occurring with Achievement type and Accomplishment type verbs can denote the resultative meaning, there should be the possibility that the resultative *-ko iss-* can be used to denote the perfect (anterior) meaning. Six instances found in the data indicate that the *-ko iss-* construction is interpreted to refer to the perfect meaning. Let us consider Example (66), which comes from a workshop in which a panel is making suggestions for responses to the hacking of a school's computer system.

(66)

1  Cehuy ko-tay-man hayto han hakki-ey twu pen-eyse sey-pen

   our Korea-college say-also one semester-at two times-from three-times

   'As for our university, two or three times per semester'

2  haykhing-ul tangha-ketunyo,

   hacking-AC undergo-ENDER

   'it is hacked.'

3  Kulem    halwu-na ithulssik tawun-i twa-y iss-nuntey

   consequently  one day-or two days down-NM become-Resl-CNJ

   'Consequently, the server is down for one day or two days,'

4  e ancengcek-ieya toy-pnita.

   uh stable-should-ENDER

   uh, it should be stable.'

5  Haykhing-ul tangha-yss-ul ttay-to  paykep sisutheym-i iss-ese

   hacking-AC undergo-PST-RL time-even back-up system-NM exist-if

   'Although the server is hacked, if we have a back-up system,'

6  kumpang  salli-l swu iss-eya toy-nun kulen,

   immediately save-can-should-RL  like this

   'it could be back on immediately,'

7       kulayse hosuthing sepisu-lul  chaythaykha-l kes-ul **cikum** ceyanha-**ko iss**-supnita.

        so       hosting    service-AC adopt-RL NOM-AC   **now**   suggest-**Ant**[25]-ENDER

        'so (we) have suggested adopting a hosting service like this.'

        ('Our university is hacked two or three times per semester, and as a consequence, the

        server is down for one day or two days. So it should be stable. Although the server was

        hacked, it could be back on immediately by being equipped with a back-up system. So

        (we) have suggested adopting a hosting service like this.')


In lines 4, 5, and 6, the speaker suggests adopting a stable back-up system. In line 7, the -
*ko iss-* construction (*ceyanha-**ko iss**-supnita* 'to suggest') appears to denote the
resultative meaning. It is clear that the speaker is not suggesting the solution at the
moment because of the situation, which is that the panel is reporting what solutions have
been suggested earlier. Thus, there is no doubt that the aspectual meaning of *-ko iss-*
entails the resultative state.

The question arises of why the temporal adverbial *cikum* 'now', which implies the
current state, appears with the *-ko iss-* construction in line 7. It is clear that the interpreted
aspectual meaning of *-ko iss-* in line 7 does not denote the action-in-progressive meaning
based on the context in which the talk takes place. The situation type of the verb
constellation (*ceyanha-* 'to suggest') is Achievement with the temporal features of
[+dynamic, +instantaneous, +telic]. It is clear that the utterance in line 7 is interpreted as
referring to the current state of affairs that has resulted from a previous event, that of the
suggestion that was made in the past. This use of *-ko iss-* well fits the definition of the
perfect in that a situation that has occurred prior to some reference time has relevance to
the current moment (Bybee et al., 1994, p. 61). In line 7, the speaker describes the present
state of the suggestion that had already been made at the time of speaking. This use is in
the category of the perfect of result according to Comrie's (1976) subcategories of
perfect/anterior.[26]

A question, then, arises as to how the resultative use of *-ko iss-* is distinguished
from the perfect of result. What contributes most to the perfect use of *-ko iss-* is the

---

[25] Hereafter, the perfect/anterior use of *-ko iss-* is glossed as Ant (Anterior).

[26] There are four subcategories of the perfect/anterior: experiential, continuation, perfect of result, and
completion (Comrie, 1976).

temporal adverbial *cikum* 'now' preceding the *-ko iss-* construction, which also appears in (67), and which explicitly signals the relevance to the current state that has resulted from a past event. Without this adverbial, or with another temporal adverbial, the *-ko iss-* construction cannot acquire the perfect use. Let us consider the following example.

(67)

1    **Caknyentoey** ku ilpon-eyse ku   kwuklip kwuke     yenkwuso-eyse-nun,

     **last year**    that Japan-in   the national language research center-in-TC

     'Last year, as for the national language research center in Japan,'

     [Lines 2–4 omitted]

5    ilpone                kyoyuk-ey kwanhan conghapcekin   cengpo-latunka

     Japanese language education-regarding comprehensive information-or

     'regarding comprehensive information on Japanese education or,'

6    kikwan       sokay-kathun    kes-tul-ul    ceysiha-**ko iss**-supnita.

     organization introduction-like NOM-PL-AC  provide-**Resl**-ENDER

     'provided something like an introduction of the organization.'

     ('Last year the national language research center in Japan provided comprehensive information on Japanese education or an introduction of the organization.')

In this example, the *-ko iss-* construction (*ceysiha-**ko iss**-supnita* 'to provide, suggest') appears in line 6. The situation type of the verb constellation *ceysiha-* 'to provide' is Achievement with the temporal features of [+dynamic, +instantaneous, +telic]. Unlike in Example (66), the *-ko iss-* construction in (67) is interpreted as the resultative use, which focuses more on the resulting state caused by the prior event. Actually, it is not possible to determine its aspectual meaning until we find the contextual factor that signals the time reference. In line 1, the temporal adverbial *caknyentoey* 'last year' signals that the situation described by the *-ko iss-* construction results from a prior event, which implies the resultative use. Compared to the perfect use of *-ko iss-* in (66), the resultative *-ko iss-* in (67) focuses more on the resulting state caused by the past event. Judging from these two examples, the aspectual meaning of the *-ko iss-* construction alone cannot be determined without contextual information even within similar situation

types; it is the contextual information, especially temporal adverbials as in these two examples, that distinguishes the perfect use from the resultative use.

### 3.3.4 Use as stative

Subuses of the Stative are (1) continuing state, (2) permanent state, and (3) anterior continuing state.

#### 3.3.4.1 Continuing state

Based on Smith's classification of verb semantic types, the State type does not generally occur with a progressive marking or a resultative marking. In Korean, however, the *-ko iss-* construction can occur with State type verbs and its interpreted meaning is "continuing state." Chapter 2 explains that the *-ko iss-* construction is better defined as the continuous aspect rather than exclusively as the progressive aspect. This is mainly due to the fact that the aspectual meaning of *-ko iss-* with State verbs does not imply an ongoing action but an ongoing state. The fact that the *-ko iss-* construction can express such a stative meaning contributes the most to defining *-ko iss-* as the continuous aspect. According to Comrie (1976) and Bybee et al. (1994), the continuous aspect views the situation, whether it is dynamic or stative, as ongoing at reference time (Bybee et al., 1994, p. 127). In the data of the present study, the majority of State verbs (223 out of 303 state verbs, 73.6%)[27] with *-ko iss-* imply the meaning of continuing state (223 out of 1,343 tokens, 16.6%).

This kind of use is distinguished from the use of stative resultative and stative progressive discussed above. The uses of stative resultative and stative progressive are derived from State verbs at the basic level. The cognitive verbs such as *al-* 'to know' and *ihayha-* 'to understand' can shift from State type to Achievement type at the derived level, which can denote the stative resultative. The emotion verbs such as *cohaha-* 'to like', *mwuseweha-* 'to be frightened', and *kippeha-* 'to be pleased' can shift from State type into Activity type at the derived level, which can denote the stative progressive.

---

[27] Seven cases implying "stative progressive" and 16 cases implying "stative resultative" are excluded here because they are considered the Activity type and the Achievement type, respectively, at the derived level.

Therefore, State verbs in Korean combined with the *-ko iss-* construction should be further distinguished into (1) cognitive verbs, (2) emotion verbs, (3) thinking verbs, and (4) perception verbs.

The psychological verbs occurring *-ko iss-* in the data are listed in (68).

(68)

a. Cognition verbs: *al-* 'to know' and *ihayha-* 'to understand', *insikha-* 'to be aware', *uysikha-* 'to be conscious', *incengha-* 'to recognize'

b. Emotion verbs: *cohaha-* 'to like', *mwuseweha-* 'to be frightened', *kippeha-* 'to be pleased', *hwangtanghayha-* 'to be frustrated'

c. Thinking verbs: *sayngkakha-* 'to think', *mit-* 'to believe', *kitaytoy-* 'to expect', *sam-* 'to consider', *po-* 'to view'

d. Perception verbs: *tulli-* 'to be heard', *poi-* 'to be seen'

An example of the use of *-ko iss-* implying the continuing state meaning with cognitive verbs is illustrated in (69), which again comes from a lecture in which a professor discusses the relationship between language and concepts.

(69)

1      Etten salam-i,      kkoch-ila-nun kes-ul      sayngkak-un ha-ciman,
       some person-NM flower-be-RL  NOM-AC  think-TC      do-but
       'A person can think of a thing such as a flower, but…'

2      ku-key wuli-ka, kkoch-ila-nun tane-lul  manyakey molun-tamyen,
       it-is    we-NM  flower-be-RL  word-AC     if       not know-if
       'if we don't know the word for "flower",'

3      yekise ehwi-cyo,
       here    vocabulary-ENDER
       'which is vocabulary,'

4      kaynyem-un **al-ko iss**-eyo,
       concept-TC   **know-State**[28]-ENDER
       'we know the concept.'

---

[28] Hereafter, the Stative use of *-ko iss-* is glossed as State.

('A person can think of a thing such as a flower, but if we don't know the word for

"flower", which is vocabulary, instead we know the concept.')

In line 4, the *-ko iss-* construction appears with the cognitive verb *al-* 'to know'. The speaker's interests focus on asserting that someone is in the state of knowing about the concept of flowers. Thus, the interpreted meaning of *-ko iss-* refers to "continuing state." This indicates that the same stative verb can denote different interpreted meanings depending on the context.

Next, let us consider the example of emotion verbs occurring with *-ko iss-*. As discussed earlier, emotion verbs occurring with *-ko iss-* often shift to become event type verbs (Activity) so they can denote the stative progressive meaning. However, the same stative verb can denote different interpreted meanings of *-ko iss-* as in (70).

(70)

1      Nay-ka cikum os-i          mwues-i  iss-nun-ka,

       I-NM   now   clothes-NM what-NM have-Pres-Q

       'What clothes do I have?'

2      Ung?

       uh?

       'Uh?'

3      Nayka cikum kaci-ko iss-nun kicon       os-i         ettehan kes-I       iss-umye,

       I-NM  now   have-Resl-RL    previous clothes-NM what    NOM-NM have-CNJ,

       'What kind of clothes I have now,'

4      etten saykkka-l nay-ka **cohaha**-**ko iss**-nun-ka ha-nun kes-ul

       what color-AC  I-NM    **like**-**State**-Pres-CMP    say-RL NOM-AC

       'about what color I like'

5      mence hanpen com    cheykhu-lul haypo-lan yayki-pnita.

       first    once   a little check-AC    try-RL      say-ENDER

       'what I mean is, first check.'

       ('First, check what kind of clothes I now have, and what color I like.')

87

In this example, the speaker talks about the color that he likes, and in line 4, the *-ko iss-* construction appears with the emotion verb *cohaha-**ko iss**-nun-ka* 'to like'. The aspectual meaning here is interpreted as referring to continuing state because the color that someone likes does not really change. Compare Example (70) to Example (54), which illustrates the stative progressive meaning of the same verb. This again suggests that the same stative verb can denote different interpreted meanings depending on the context, which can allow a State type verb to shift to an Activity type verb at the derived level.

Aside from the psychological verbs shown in (68), some other State verbs can occur with the *-ko iss-* construction; they are listed in (71).

(71) Other stative verbs: *soyuha-* 'to possess', *socangha-* 'to possess', *sal-* 'to live',
*saynghwalha-* 'to live', *concayha-* 'to exist', *pwulmwunha-*
'to disregard', *sokha-* 'to belong to'

The State verbs in (71) also obtain the meaning of continuing state when occurring with *-ko iss-*, counter to Lee's (2006) claim that there are only a few stative verbs in Korean, such as *sokha-* 'to belong to' and *iss-* 'to exist'. Lee also claims that these two verbs cannot occur with *-ko iss-*, and that this supports her argument that they should be classified as State type verbs. However, the data show that the *-ko iss-* construction can occur with *sokha-* 'to belong to'. Consider the following example.

(72)

1    Ikes-ul        wuli-ka kwulcel-hyeng    ene-ta        yayki-hako
     this-NOM-AC we-NM inflectional-form language-PLN say-QT
     'We say that this is an inflectional language, and…'

2    i-ke-l          wuli-ka al-ko iss-nun    yenge-latunka pwule  tokile
     this-NOM-AC   we-NM know-Cont-RL English-or        French German

3    ilen      into-yulep-e-ey           sokha-y iss-nun    ku
     like this Indo-European language-to belong-Cont-RL this

4    taypwupwun-uy ene-tul-i          ilen kwulcel ene-ey          sokha-**ko iss**-supnita.
     most-GN          language-PL-NM this inflectional language-to belong-**State**-DC

'most of the languages that we know belong to the Indo-European group, such as English, French, and German, belong to the category of inflectional language.'

In this example, the *-ko iss-* construction occurring with the State verb *sokha-* 'to belong to' is perfectly fine in any context in Korean. With no specific context, the *-ko iss-* construction in (72) is interpreted as referring to the continuing state of the predicate. This proves that State verbs can occur with *-ko iss-* to denote the continuing state meaning without necessarily shifting into event-type verbs at the derived level. As such, State verbs in Korean can occur with *-ko iss-* to refer to the continuing stative meaning.

Interestingly, some examples of adjectives occurring with the *-ko iss-* construction are found in the Sejong Written Corpus, although there were no such examples in the spoken data that I used. Let us look at the following examples.

(73) Ku   il-tul-i        han pakca-ssik   nuc-**ko iss**-nun        hyengphyen-i-ta.
     the work-PL-NM   one pace-each   be late-**State**-RL     situation-be-DC
     'The situation is that the work is getting later little by little.'

In general, the predicate *nuc-* 'to be late' is used as an adjective as in *onul hakkyo-ey nuc-ess-ta* (today school-at be late-PST-DC 'I was late for school today'). In this example, however, the predicate *nuc-* 'to be late' contains the meaning of 'getting/becoming late', which indicates a change in state. Usually, when adjectives occur with the *-ko iss-* construction, they become intransitive verbs that imply a change of state. For example, if the adjective *nuc-* 'to be late' in (73) is replaced with the intransitive verb *nuc-eci-* (late-become 'to become late'), then the sentence sounds more perfect. In this regard, even adjectives may occur with the *-ko iss-* construction although they behave like verbs when occurring with *-ko iss-*.

Park (2003) found several more adjective-like predicates that can occur with *-ko iss-* in the Sejong Written Corpus.[29] An example appears in (74).

---

[29] In Park's (2003) corpus study, more adjectives occurring with *-ko iss-* were provided such as *tokyachengcengha-* 'to be innocent alone', *chwungsilha-* 'to be faithful, devoted', *camcamha-* 'to be calm', and so forth.

(74)

1       Ku wumwul-ka pawi pyek-ey-nun

the pond-side    rock wall-at-TC

'At the side of the pond'

2       huykwihan kolancho-ka sengha-**ko iss**-ess-umulo

rare         orchid-NM   be prosperous-**State**-PST-because

'because rare orchids were prosperous at the rock wall of the pond,'

3       taywang-un kwungnye-tul-i mwul-ul kil-e      o-l       ttay-nun

king-TC       maid-PL-NM    water-AC bring-INF come-RL time-TC

'when maids bring water'

4       enceyna mwul hangali wiey

always    water jar     on

'always on the water jar'

5       kolancho myech iph-ul ttuywe-o-key ha-yess-ta.

orchid     several leaf-AC float-come-INF do-PST-DC

'he had several leaves of the orchid floated on the water jar.'

('Because rare orchids were prosperous at the rock wall of the pond, the king had several leaves of the orchid floated on the water jar whenever the maids brought him water.')

Unlike the predicate *nuc-* 'to be late' in the previous example, the predicate *sengha-* 'to be prosperous' in (74) does not incorporate the meaning of changing a state because it cannot be replaced by its corresponding intransitive verb \**sengha-y ci-ko iss-ta* (be prosperous-become-*ko iss*-DC 'to become prosperous'). Thus, the predicate *sengha-* 'to be prosperous' behaves more like an adjective than a verb, so the interpreted meaning of *-ko iss-* with this predicate is the stative meaning. Here, the important thing is that such predicates as *nuc-* 'to be late' and *sengha-* 'to be prosperous' are not dynamic but stative whether they are considered adjectives or verbs. In Modern Korean, it is definitely possible that the *-ko iss-* construction can occur with stative predicates that do not necessarily shift to event-type verbs at the derived level. This is supporting evidence that the *-ko iss-* construction is more like the continuous aspect than the progressive. Based on

the results of the present study, I suggest that *-ko iss-* should be viewed as a continuous aspect marker, rather than exclusively a progressive marker.

Regarding the suggestion that *-ko iss-* is a continuous aspect marker, it is helpful to consider that *-e iss-*, another aspectual marker, can take a consolidated status as a resultative marker in the Korean aspectual system. There has long been a controversy about viewing *-ko iss-* as a resultative marker because there is another resultative marker, *-e iss-*, in Korean. It is widely known that transitivity influences the selection between the two resultative markers; *-ko iss-* tends to occur with transitive verbs, whereas *-e iss-* occurs with intransitive verbs to express the resultative meaning. Intransitive verbs usually go with the resultative meaning because an intransitive sentence focuses on change of an action or a state, while a transitive sentence does not usually go with the resultative meaning because transitive verbs generally have an agent (or subject) who performs an action. By viewing *-ko iss-* as a continuous aspect marker, *-ko iss-* with the resultative interpretation can be distinguished from *-e iss-* as the resultative marker in the aspectual system. In other words, the resultative state that is expressed by *-ko iss-* with transitive verbs can be viewed as a subcategory of a continuous aspect, while the resultative state that is expressed by *-e iss-* with intransitive verbs can be viewed as a resultative aspect.

### 3.3.4.2 Permanent state

There is another subtype of the Stative use, which originated from dynamic verbs, but its interpreted meaning refers to the "permanent state" of an entity. This type of Stative use is distinguished from the dynamic resultative meaning despite there being a close relation between the two uses. The meaning of permanent state expresses attributes or permanent states of an entity. It is distinguished from the dynamic resultative meaning in the sense that the use of permanent state only focuses on a current state and not on whether an event/action occurs or not. The dynamic resultative, on the other hand, implies that an event or an action happened in the past and the state persists as a result of the past action as in *I'm wearing a red dress*. Accordingly, the use of permanent state is clearly distinguished from the use of dynamic resultative.

The results of the present study show that there are some instances (78 cases) when the *-ko iss-* construction is interpreted as referring to a permanent state of an entity that does not result from a past event or action, although the verbs in these cases originated from dynamic verbs. In the data, most of the verbs denoting the meaning of permanent state when occurring with *-ko iss-* are Achievement type verbs. The following example illustrates the permanent state use of *-ko iss-*.

(75)

1    A ce salam-un,
     ah that person-TC

2    nay moksoli-nun na-man kaci-**ko iss**-nun,
     my voice-TC     I-only   take-**State**-TC

3    ce salam-un    kwumyengwan-ilanun  salam-uy moksoli-ta.
     that person-TC Koo Myungwan-called person-GN voice-DC

     'My voice is the thing that only I have, and tells that I am Koo Myungwan.'

In this example, the verb occurring with *-ko iss-*, *kaci-* 'to take' is originally not a stative predicate but an Achievement verb, which is normally interpreted with the resultative meaning due to its temporal features [+dynamic, +instantaneous]. The verb *kaci-* 'to take' typically denotes the resultative meaning with *-ko iss-* as in *na-nun catongcha-lul kaci-**ko iss**-ta* (I-TC car-AC take-**Resl**-DC 'I am in a state of having a car'). In Example (75), however, the *-ko iss-* construction (*kaci-**ko iss**-ta*) in line 3 does not denote a resultant state caused by a past action because one's voice is an entity that one has permanently. In this respect, the interpreted meaning of *-ko iss-* in this example expresses the permanent state.

In this example, what contributes most to the stative resultative meaning of *-ko iss-* is the argument of the predicate. The object argument of the predicate *kaci-* 'to take' in line 3 is the voice, which is an innate attribute, not the result of the action of taking. In this given context, the Achievement verb *kaci-* 'to take', which is typically interpreted as the dynamic resultative, is able to denote the meaning of permanent state by means of shifting from Achievement type at the basic level to State type at the derived level. This

suggests that in Korean, type shift is possible between State and Dynamic, and such a shift can occur in either direction. As for English, stative verbs can be used non-statively and occur with progressive marking, but dynamic verbs with progressive marking do not behave like statives (Comrie, 1976). This indicates that the *-ko iss-* construction does not behave exclusively as a progressive marker, but as a continuous marker encompassing the non-progressive.

More examples of the permanent state use of *-ko iss-*, which occurs with verbs derived from Achievement verbs, are found in the data.

(76)

      Ile-n-ke-y          sasil mwunpep-uy keuy   taypwupwun-ul chaciha-**ko iss**-eyo.

      this-RL-NOM-NM fact grammar-GN  almost most-AC          obtain-**state**-ENDER

      'In fact, most grammar consists of these kinds of things.'

Actually, in (76), the verb occurring with *-ko iss-* is not a stative predicate. The verb *chaciha-* 'to take, obtain' is involved with dynamic activities, and yet the *-ko iss-* construction in line 3 denotes a permanent state, not a state resulting from a past activity. The example in (76) discusses what grammar consists of; that is, it indicates the permanent state of grammar. In this case, the situation type of the verb *chaciha-* 'to take, obtain' is Achievement type at the basic level; the context enables its shift to State type at the derived level, and this leads to the permanent state meaning of *-ko iss-*.

Still, we can also find some examples that indicate that *-ko iss-* combined with these verbs denotes the resultative state, as illustrated in (77).

(77) Ku cip    atul-i    cip-an-uy        anpang-ul          chaciha-**ko iss**-ta.

    the house son-NM house-inside-GN master bedroom-AC   obtain-**Resl**-DC

    'The son of the house occupied the master bedroom of the house.'

In Example (77), it is not possible that the *ko iss* construction denotes an attribute or a state of an entity; rather, it denotes the result of a past action and remains the state of the result. In this example, what contributes most to the dynamic resultative use of *-ko iss-* is

93

the argument of the predicate. The object argument of the predicate *kaci-* 'to take, obtain', found in Example (75), is a person's voice, which is someone's innate attribute that is not a result of the action of taking or obtaining. In the given context in (75), the Achievement verb *kaci-* 'to take, obtain', which is typically interpreted as the resultative, was able to express the stative meaning by means of shifting from the Achievement type at the basic level to the State at the derived level.

### 3.3.4.3 Anterior continuing state (perfect aspect)

Unlike in English, there is no specific perfect (anterior) tense form in Korean. Instead, the past tense marker *-ess* is used as a perfect depending on the context. (78a) is an example of *-ess* used for past tense, and (78b) illustrates the perfect use.

(78) a. Mia-ka   ecey      mikwuk-ulo ttena-**ss**-eyo. (simple past)

Mia-NM yesterday America-to  leave-PST-ENDER

'Mia left for America yesterday.'                    (Examples from Sohn, 1999, p.362)

 b. Ku  paywu-nun hongkhong-ulo tten-**ass**-ta.   (kulayse cikum yeki eps-ta) (perfect)

  the actor        Hong Kong-to  leave-PST-DC (so       now   here not-DC)

  'The actor (has) left for Hong Kong (and he is no longer here).'

                                          (Examples from Sohn, 1999, p.364)

The simple past and the perfect can be determined depending on co-occurring temporal adverbials such as *ecey* 'yesterday' as in (78a) and *cikum* 'now' as in (78b), among others. The difference in meaning between the two sentences is that the perfect *-ess-* as in (78b) focuses just on the current state related to the action of leaving for Hong Kong, so that the actor is no longer here.

When it comes to the definition of the perfect aspect, there are more specific uses of perfect than that found in (78b). According to Comrie (1976) and Bybee et al. (1994), specific uses of perfect have such senses as "resultative," "experiential," "recent past," and "continuation/persistence." Here, a question arises as to whether *-ko iss-* can function as perfect/anterior or not. Among these specific uses of perfect, *-ko iss-* can express

"perfect of result"[30] and "perfect of continuation" (anterior continuing state). The results of the present study show 20 examples of *-ko iss-* indicating the perfect of continuation (anterior continuing state) in the data; one example appears in (79).

(79)

1    Kulayse cehuy-ka cikum hankwuke kyoyuk-ey kwanhayse

     so      we-NM   now   Korean    education-regarding

2    haksupca sihem kathun ke    myech nyen-ey sicak-ul   hay-**ss**-ko,

     learner   test   like    NOM several years-in begin-AC do-**Ant**-CNJ

     'So we have begun something like a learners' test regarding Korean language education,'

3    tto  cwungkwuk-to han   **sip-ye      nyen-pwuthe**

     also Chinese-also   about 10-around year-from

4    ike-l          sihayng-ul  ha-**ko iss**-cimanun,

     this NOM-AC enforce-AC do-**Ant**-CNJ

     'Also China has been enforcing this since 10 years ago.'

As can be seen in (79), what contributes most to the perfect use of *-ko iss-* is the temporal adverbial in line 3. The temporal adverbial *sip-ye nyen-pwuthe* 'since 10 years ago' gives a signal that the action has been ongoing for 10 years and still continues. Without the temporal adverbial, the *-ko iss-* construction would be interpreted as referring to a habitual state in this example. The evidence that the *-ko iss-* construction in this example is perfect (anterior continuing state) is the temporal adverbial *cikum* 'now' in line 1, which explicitly signals the relevance to the current state that has resulted from the past event. That's why the anterior marker *-ess* (in *hay-**ss**-ko*) occurs in line 2. In line 2, *-ess* is not used as a past marker because it has relevance to the current situation. In Chapter 2, we discussed how the *-ko iss-* construction functions to mark the continuous aspect rather than the progressive. This use of *-ko iss-* to indicate an anterior continuing state fits perfectly with the definition of the continuous aspect in the sense that the meaning of *-ko iss-* does not imply an action-in-progress but the continuing state of the action, which

---

[30] The use of *-ko iss-* as perfect of result was discussed in Section 3.3.3.3.

refs to the continuous aspect. As a continuous marker, *-ko iss-* covers part of the perfect aspect in Korean.

## 3.4 Basic Meaning of *-ko iss-* and Grammatical Category of *-ko iss-*

The discussion so far has shown that various interpretations that have been assumed to be the meanings of *-ko iss-* are not the basic meanings of the construction, but rather, meanings derived from the context in which tokens of *-ko iss-* occur. This is the reason why it has been so hard to determine the semantic nature and the grammatical category of this construction. The results of the present study indicate that *-ko iss-* can be neither exclusively a progressive marker nor solely a resultative marker, countering the explanations of traditional Korean grammar. We've observed in the data that *-ko iss-* actively occurs with State verbs (303 out of 1,343 tokens, 23%), most of which imply the stative meaning of continuing state (223 cases), which leads to viewing *-ko iss-* as a marker of the continuous aspect encompassing the non-progressive. By viewing *-ko iss-* as expressing the continuous aspect, the resultative interpretation of *-ko iss-* can be distinguished from that of another resultative marker, *-e iss-*, in the aspectual system of Korean. The resultative use of *-ko iss-* can be subcategorized as non-progressive, which Comrie classified under the continuous aspect, although Comrie did not specify what "non-progressive" refers to. In Korean, non-progressive refers to the Resultative use and the Continuous use. The results of this study also show that the Habitual use of *-ko iss-* accounts for a considerable portion (15%) of its total frequency. Therefore, these four major uses of *-ko iss-* are subcategories of the imperfective as shown in Figure 3.4.

**Figure 3.4**

*Classification of Korean Imperfective*

```
                          Imperfective
                               |
              _____|_____
             |                                   |
          Habitual                          Continuous
                                                 |
                                    _____|_____
                                   |                           |
                            Non-Progressive               Progressive
                                   |
                          _____|_____
                         |                   |
                    Resultative           Stative
```
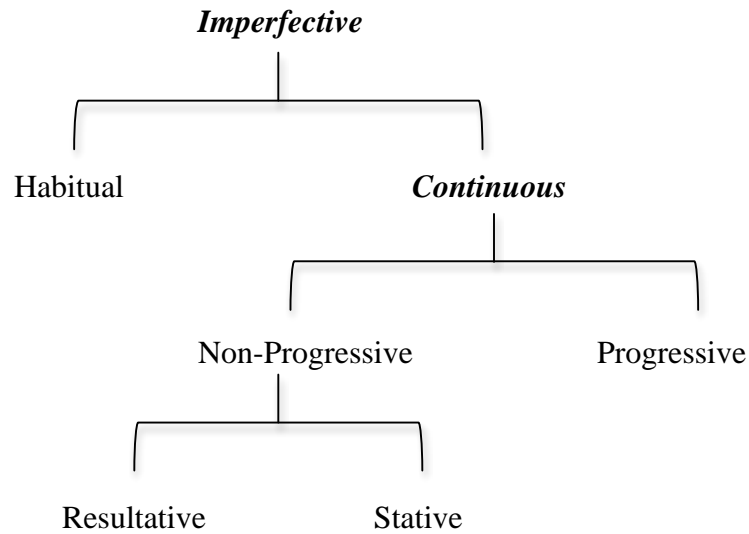
      This study's findings support the idea that the basic meaning of *-ko iss-* underlying all its current variant uses is "continuous action/status at reference time," which better describes the continuous aspect than the progressive aspect. With the extended meaning of the Habitual use, the *-ko iss-* construction can be categorized as a general imperfective in Comrie's classification. Therefore, I suggest that the basic meaning of *-ko iss-* is the meaning of continuous action/status at reference time, and its grammatical category is the general imperfective.

      As a general imperfective, *-ko iss-* has a number of distinct uses that correspond to part of the meaning of imperfectivity. According to Comrie, some languages have a single category to express imperfectivity, while other languages' imperfectivity is subdivided. In Korean, imperfectivity is expressed by various uses of the *-ko iss-* construction in discourse, and the meaning is determined by the interaction between the general imperfective *-ko iss-*, the inherent lexical aspect of verbs, and other contextual information including temporal adverbials, pragmatic context, and the speaker's involvement or interest in the interaction. Therefore, this account explains the multiple uses of *-ko iss-* and why there has been no agreement on the grammatical category of *-ko iss-*. Viewing *-ko iss-* as a general imperfective also helps to answer the longstanding

question of what kind of aspectual meaning *-ko iss-* denotes when it occurs with State verbs. Based on Comrie's (1976) subcategory of the imperfective, the continuous is placed right under the imperfective as a subcategory encompassing non-progressive as well as progressive; therefore, *-ko iss-* can be broadly viewed as the continuous aspect without the habitual use.[31] Based on the results of the present study, I suggest that *-ko iss-* should be viewed as the continuous aspect under the category of the general imperfective, rather than exclusively a progressive marker.

In conclusion, I propose a new classification of verbs in Korean based on their functions and meanings in discourse and the interaction between the verb situation type and the general imperfective *-ko iss-*. Table 3.6 summarizes the interactions between the verb situation type and the general imperfective *-ko iss-*.

**Table 3.6**

*Interaction of General Imperfective* **-ko iss-** *and Verb Situation Type in Discourse*

| Situation type | Aspectual meaning | Example |
|---|---|---|
| **Activity** | Progressive | ACTION IN PROGRESS<br>*Swuci-nun talli-**ko iss**-ta.*<br>Suzie-TC run-**Prog**-DC<br>'Suzie is running.' |
| **Accomplish.** | Progressive | ACTION IN PROGRESS<br>*Swuci-nun os-ul mantul-**ko iss**-ta.*<br>Suzie-TC clothes-AC make-**Prog**-DC<br>'Suzie is making a suit.' |
| | Resultative | RESULTATIVE STATE<br>*Tosi-uy yakyeng-i cangkwan-ul ilwu-**ko iss**-ta*<br>city-GN cityscape-NM fine view-AC form-**Resl**-DC<br>'The cityscape is formed as a fine view.' |

---

[31] For the habitual use of *-ko iss-*, temporal expressions dominantly determine the habitual meaning. Thus, without the habitual use of *-ko iss-*, the *-ko iss-* construction can be viewed as the continuous aspect.

**Table 3.6 (Continued)**

*Interaction of General Imperfective **-ko iss-** and Verb Situation Type in Discourse*

| Situation type | Aspectual meaning | Example |
|---|---|---|
| **Achieve.** | **Progressive** | **ACTION IN PROGRESS**<br>***Swuci-nun  yangmal-ul   sin-ko iss-ta.***<br>**Suzie-TC   socks-AC     put on-Prog-DC**<br>**'Suzie is putting on a pair of socks.'** |
| | Progressive | ITERATIVE ACTION IN PROGRESS<br>*Swuci-nun thaca-lul       chi-**ko iss**-ta.*<br>Suzie-TC typing-AC       hit-**Prog**-DC<br>'Suzie is typing.' |
| | Progressive | PROCESS LEADING UP TO AN ENDPOINT<br>*Kicha-ka tochakha-**ko iss**-ta.*<br>train-NM arrive-**Prog**-DC<br>'A train is arriving at the station.' |
| | Resultative | RESULTATIVE STATE (with transitive verbs)<br>*Swuci-nun nwun-ul kam-**ko iss**-ta.*<br>Suzie-TC   eye-AC close-**Resl**-DC<br>'Suzie has her eyes closed.' |
| | Resultative<br>*-e iss-* | CHANGE OF A STATE (with intransitive verbs)<br>*Kkoch-i       patak-ey     ttelecy-**e iss**-ta.*<br>flower-NM ground-on   drop-**Resl**-DC<br>'The flower was dropped on the floor.' |
| **State** | Stative | CONTINUING STATE<br>*Swuci-nun  ku salam-ul       al-**ko iss**-ta.*<br>Suzie-TC   that person-AC   know-**Cont**-DC<br>'Suzie knows him.' |
| | Stative | PERMANENT STATE<br>*Swuci-nun alumtawun moksoli-lul kaci-**ko iss**-ta.*<br>Suzie-TC   beautiful    voice-AC   have-**Cont**-DC<br>'Suzie has a beautiful voice.' |
| | Resultative | STATIVE RESULTATIVE (COGNITIVE VERBS)<br>*Cikumpwuthe ilehkey  al-**ko iss**-umyen toy-pnita.*<br>from now on like this know-**Resl**-should-ENDER<br>'You should know that just like this from now on.' |
| | Progressive | STATIVE PROGRESSIVE (EMOTION VERBS)<br>*Mak   cohaha-**kwu iss**-e!*<br>wildly  like-**Prog**-DC<br>'They are liking it!' |

## 3.5 Conclusion

In this chapter, I explored the multiple uses of *-ko iss-* by examining naturally occurring conversation, and investigated the inherent lexical aspect of verbs (situation aspect) and its interaction with *-ko iss-*. The study analyzed how the multiple meanings of *-ko iss-* are derived in discourse contexts. The findings regarding the distribution of the uses of *-ko iss-* in the data show that there is no significant difference in the frequency between the Progressive (40%) and the non-Progressive (45%). The distribution of the uses of *-ko iss-* in relation to the situation type of the verbs in Korean indicates that there is a correlation between the inherent aspect of verbs (situation aspect) and the meanings of *-ko iss-*. The *-ko iss-* construction tends to occur with verbs of Activity and Accomplishment to denote the progressive meaning, with verbs of Achievement to denote the resultative meaning, and with verbs of State to denote the stative meaning. The results also show that the multiple meanings of *-ko iss-* emerge from various contextual factors as well as the interaction between the inherent lexical semantics of verbs and the grammatical aspect as a general imperfective. Table 3.6 summarizes the multiple meanings of *-ko iss-* as a general imperfective and in interaction with the inherent lexical semantics of verbs.

Based on the results of the study, I suggested that the basic meaning of *-ko iss-* underlying all its current variant uses is "continuous status at reference time," which fits better with the continuous aspect than the progressive aspect. With the extended meaning of the habitual, the *-ko iss-* construction is categorized as a general imperfective under Comrie's classification system. As a general imperfective marker, *-ko iss-* expresses the various meanings of imperfectivity in discourse, and the specific meaning is determined by the interaction between the general imperfective meaning and inherent lexical aspect of verbs, together with other contextual information including temporal adverbials, pragmatic context, and the speaker's involvement or interest in the interaction. This explains the multiple uses of *-ko iss-* in discourse and why there has been no consensus on the grammatical category *of -ko iss-*.

Viewing *-ko iss-* as a general imperfective addresses the issue of the aspectual meaning of *-ko iss-* with State verbs. As in Comrie's (1976) classification, the continuous falls under the imperfective as a subcategory encompassing non-progressive as well as

progressive: therefore, *-ko iss-* can be broadly viewed as the continuous aspect without the habitual use. Based on the results of the present study, I suggest that *-ko iss-* be viewed as a continuous aspect marker under the category of the general imperfective, rather than exclusively a progressive marker.

Another benefit of this view of *-ko iss-* is that it distinguishes *-ko iss-* from *-e iss-*, another aspectual marker in Korean, which can take a consolidated status as a resultative marker in the aspectual system in Korean. There has been a controversy about viewing *-ko iss-* as a resultative marker because *-e iss-* is traditionally known as a resultative marker in Korean (Sohn, 1999). By viewing *-ko iss-* as the continuous aspect marker under the general imperfective, the resultative interpretation of *-ko iss-* can be distinguished from the resultative marker *-e iss-* in the aspectual system in Korean. Therefore, the resultative state that is expressed by *-ko iss-* with transitive verbs can be viewed as part of the continuous aspect under the general imperfective, while the resultative state that is expressed by *-e iss-* with intransitive verbs can be viewed as a resultative marker.

In the next chapter, I will investigate the historical development of the *-ko iss-* construction in order to answer the question of why the *-ko iss-* construction should have both a general meaning and various context-dependent interpretations. The synchronic distribution of a grammatical morpheme is tied to its development over time (Bybee et al., 1994). According to Bybee et al., the multiple uses of a grammatical morpheme can often be explained by its grammaticalization path. Thus, in the next chapter, I will investigate the historical development of the *-ko iss-* construction based on empirical evidence from Middle Korean in conjunction with the grammaticalization theory.

# CHAPTER 4

## GRAMMATICALIZATION OF *-KO ISS-*

## 4.1 Introduction

In this chapter, I investigate the historical development of the *-ko iss-* construction in order to find the answer to the question of why it should be the case that the *-ko iss-* construction has a general meaning and various context-dependent interpretations. As Bybee et al. (1994) explain, a grammatical morpheme's diachronic development strongly influences its synchronic distribution. In the crosslinguistic study conducted by Bybee et al., they presented two distinct developmental paths of tense/aspect markers by examining samples from a number of typologically diverse languages. Bybee et al. claimed that, universally, a progressive marker is originally restricted to referring to action in progress at reference time, and tends to develop into a general imperfective marker by extending its reference to habitual situations. However, empirical evidence from Middle Korean texts indicates that the imperfective grammaticalization path of the Korean aspect marker does not fully correspond to the universal grammaticalization path proposed by Bybee et al., whereas the perfective grammaticalization path of the Korean perfective aspect marker does correspond to their description of this universal path.

Therefore, in this chapter, first, I investigate the historical development of *-ko iss-* based on empirical evidence from Middle Korean texts in conjunction with the grammaticalization theory. Second, I attempt to prove that the multiple uses of *-ko iss-* in Modern Korean reflect the developmental paths of *-ko iss-* over time in line with Bybee et al.'s (1994) claim that the multiple uses of a grammatical morpheme can be traced to its grammaticalization history. Finally, based on the empirical evidence from Middle Korean texts, I suggest an imperfective grammaticalization pathway of the Korean aspect marker.

*The Middle Korean data*

The Middle Korean[32] documents that I selected for this exploration of the historical development of *-ko is(i)-* into the aspectual marker *-ko iss-* are largely divided into two text styles. First, I selected *enkan* style "spoken family letters" because the style has the closest resemblance to spoken language; hence, it is the least conservative. The other texts are a series of *Nokeltay* (a Chinese-learning textbook), which were written in different versions in the 16$^{th}$, 17$^{th}$, and 18$^{th}$ centuries. These versions of *Nokeltay* from three different periods have basically the same content and thus are very useful in tracking historical changes of the Korean language. I will use the *Nokeltay* texts to confirm the perfective grammaticalization of *-e is(i)-*. The historical development of *-e is(i)-* into the perfective/past *-ess-* has been fully established by many previous studies, but it is necessary to discuss it in connection with the development of *-ko iss-*, for reasons I explain in Section 5.3.1. Nevertheless, this study's focus is on the imperfective grammaticalization of *-ko is(i)-*, based on the *enkan* style texts written in the Middle Korean period, which are shown in Table 4.1. In addition to the *enkan* style texts, two other written texts, *Sekposangcel* and *Samyekchonghay*, were included because they contain some useful examples of the *-ko is(i)-* construction.

**Table 4.1**

*Middle Korean Data:* **Enkan** *Style (Spoken Letter) Texts*

| Text | Year (C) |
|---|---|
| *Samkanghayngsilto* | 1471 |
| *Pephwakyeng enhay* | 1463 |
| *Iungthaymyo chwultho en* | 1586 |
| *Swunchenkimssimyo chwultho kanchal* | 15xx |
| *Cincwuhassimyo chwultho kan* | 16xx |
| *Hyenphwungkwakssi enkan* | 16xx |

---

[32] Middle Korean refers to the language of the 15$^{th}$ to 16$^{th}$ c., Early Modern Korean to that of the 17$^{th}$ to 19$^{th}$ c., and Modern Korean to that of the 20$^{th}$ c. on.

**Table 4.1.1**

*Middle Korean Data: Other Texts*

| Text | Year |
|---|---|
| *Sekposangcel* | 1447 |
| *Samyelchonghay* | 1703 |

**Table 4.1.2**

*Middle Korean Data:* **Nokeltay** *Texts*

| Text | Year |
|---|---|
| *Penyek Nokeltay* | 1571 |
| *Nokeltay Enhay* | 1670 |
| *Monge Nokeltay* | 1741 |
| *Chenge Nokeltay* | 1765 |

## 4.2 Historical Development of *-ko is(i)-*

The Middle Korean periphrastic construction *-e is(i)-* consisting of *-e* 'and' and *-is(i)-* 'to exist' is the erstwhile form of *-e iss-* in Modern Korean. In the 15th c., the *-e is(i)-* construction expressed durative meaning. Unlike the *-e iss-* construction in Modern Korean, the *-e is(i)-* construction could be combined with various predicates such as transitives, intransitives, and even adjectives regardless of telicity or transitivity (Kim, 2003; Lee, 1981). However, it is still disputable whether the *-e is(i)-* construction in the 15th c. could express both resultant static duration and progressive ongoing duration as an aspectual marker. Along with the *-e is(i)-* construction, the *-ko is(i)-* construction was used with the same function in the 15th c. (Jeong, 2002; Kim, 2003).

In the *-ko is(i)-* construction in the 15th c., however, two verbs "V1 and exist" are sequentially connected by the connective *-ko* 'and', and their combination is interpreted as having the sequential meaning rather than the progressive meaning (Jeong, 2002; Kim, 2003), although there is disagreement on whether or not the *-ko is(i)-* construction was used as a progressive marker in Middle Korean. Based on the fact that the frequency of the *-ko is(i)-* construction is very low, we can presumably conclude that the *-ko is(i)-* construction was not fully grammaticalized as the progressive aspect in the 15th c. As mentioned, it is important to trace the grammaticalization pathway of the *-ko is(i)-* construction because its diachronic pathway can be expected to be closely related to its

synchronic uses in Modern Korean. Bybee et al. (1994) argued on the basis of their crosslinguistic studies of tense, aspect, and modality that multiple uses of a grammatical morpheme can be viewed as stages on a path of grammaticalization and that "patterns of multiple uses in effect constitute fossil evidence and can thus serve as a diagnostic of earlier history" (p. 18). They postulated earlier versus later uses of a grammatical morpheme and then characterized it as lying at some point along a grammaticalization path. In this section, I examine how the *-ko is(i)-* construction developed into the aspectual marker with the progressive meaning and why two aspectual markers exist in the Korean aspectual system.

### 4.2.1 The existential verb *is(i)-*

Crosslinguistically, verbs denoting existence are among the most common sources for the development of grammatical markers (Heine, Claudi, & Hünnemeyer, 1991; Hopper & Traugott, 1993; Kim, 2003; Rhee, 1996, 2000). The Korean verb of existence, *is(i)-* (the erstwhile form of *iss-*) in combination with various linguistic structures, has grammaticalized into diverse grammatical markers in Korean such as locative particles, clausal connectives, and aspectual markers (Kim, 2003; Lee, 2004; Rhee, 1996).

In the grammaticalization history of Korean verbs, it is also a common process that diverse markers evolve through verbal serialization, because Korean is an agglutinative language in which most words are formed by joining morphemes together. Thus, the existential verb often takes an infinitive connective to link clauses. This strategy of clause linking was even more popular in Middle Korean. Among various infinitive connectives such as *-e*, *-key*, *-ci*, and *-ko*, the connective *-e* was frequently serialized with the existential verb *is(i)-* in Middle Korean (Kim, 2003; Rhee, 1996). With the expansion of the connective *-ko* from the 15th to the 17th c., the *-ko is(i)-* construction started to replace the *-e is(i)-* construction (Kim, 2003; Lee, 1981). In this respect, it is necessary to discuss the grammaticalization of *-e iss-* along with that of *-ko iss-* in order to talk about the Korean aspectual system.

**4.2.2 Grammaticalization path of aspectual markers in Korean**

In this section, I discuss the emergence of the resultative *-e iss-* and the progressive *-ko iss-*. In the crosslinguistic study conducted by Bybee et al. (1994), they examined data from a wide range of typologically diverse languages. They proposed two distinct developmental paths for perfective and imperfective tense/aspect markers, as shown in (80).

(80) Two grammaticalization paths of tense/aspect markers (Bybee et al., 1994)
    a. The perfective path: Resultative > Anterior > Perfective/Past
    b. The imperfective path: Locative > Progressive > Imperfective/Present

In this section, I discuss whether these two developmental paths of tense/aspect markers introduced by Bybee et al. are applicable to the Korean aspectual system, and then I present the developmental pathway of the Korean aspectual markers based on empirical evidence from Middle Korean texts.

*4.2.2.1 The perfective developmental pathway of aspect in Korean*

One of the universal paths of grammaticalization proposed by Bybee et al. (1994) is the perfective/past path as shown in (80a). According to Bybee et al., in this perfective path, resultative (or completive) markers, which have originated from lexical morphemes, often develop into anterior, and then into perfective/past markers. This particular path has been found in a number of Romance and Germanic languages such as Spanish, French, Italian, English, Dutch, and German. It is interesting to see that the history of the Korean suffix *-ess-*, as established by previous studies (Huh, 1992; Kim, 2003; Ko, 2005; Lee, 1991; Lee, 1981, 1998; Rhee, 1996; inter alia), fits perfectly in the description of this perfective/past path. First, I will briefly discuss the perfective path of grammaticalization of the suffix *-ess-* in Korean.[33]

---

[33] For examining the perfective grammaticalization of *-ess-,* I investigate examples from previous studies (Kim, 2003; Oh, 2003) as well as the *Nokeltay* texts.

### *4.2.2.1.1 Grammaticalization of the simple past **-ess-** from **-e** is(i)-*

The process of grammaticalization of *-e is(i)-* into the simple past *-ess-* in Korean has been empirically investigated by a number of studies (Huh, 1992; Kim, 2003; Ko, 2005; Lee, 1991; Lee, 1981, 1998; Rhee, 1996; inter alia). It is generally agreed among scholars that the suffix *-ess-* originally developed from the periphrastic resultative construction *-e is(i)*, which consists of a connective *-e* 'and' and a lexical verb *is(i)-* 'to exist'. The source form's meaning is resultative duration. In Middle Korean, the periphrastic construction *-e is(i)-* denoted duration due to the existential verb *is(i)-*. The resultative construction in fact started out as a simple combination of two verbs with a connective suffix, with *is(i)-* as the second verb (V2). According to the Middle Korean study conducted by Kim (2003), *-es-*, the phonologically reduced form of *-e is(i)-*, is already found in 15th c. texts such as *Nammyeng* (1482) and *Nungem* (1462).[34]

The historical development from *-e is(i)-* to *-es-* can be easily observed by comparing different versions of the *Nokeltay* texts. These different versions were written in the 16th, 17th, and 18th c.: *Penyek Nokeltay* (1517), *Nokeltay Enhay* (1670), *Monge Nokeltay* (1741), and *Chenge Nokeltay* (CN, 1765). Let us consider the following examples in (81), which were found in the three versions from the different periods.

(81)  a. *Penyek Nokeltay* (1517)

hAnkot tAli muletiy-**e is**-te-ni              icey kothy-**e is**-nAnka

one place bridge collapse-RESUL-RETRO-DET    now repair-RESUL-INTERR


   b. *Nokeltay Enhay* (1670)

hAnkos tAli mulhety-**e is**-te-ni              icey  kothy-**e is**-nAnka

one place bridge collapse-RESUL-RETRO-DET    now repair-RESUL-INTERR


   c. *Monge Nokeltay* (1741)

hAn tAli mwunhecy-**es**-tA-ni                icey  kothy-**es**-nAnka

one bridge collapse-ANT-RETRO-DET           now repair-RESUL-INTERR

'A bridge had collapsed. Has it been repaired now?'   (Examples from Oh, 2003, p. 1209)

---

[34] Examples of *-es* in these Middle Korean texts appear in Kim's (2003, p. 127) study.

As illustrated in (81), the resultative *-e is-* found in *Penyek Nokeltay* (1517) is replaced by *-es-* in both *Nokeltay Enhay* (1670) and *Monge Nokeltay* (1741) (*kothy-e is-nAnka* → *kothy-es-nAnka & kochy-es-nAnya* 'has been repaired'). Perhaps, the replacement had not yet been completed in the 17th c., as only one of two *-e is-* constructions was replaced by *-es-* in *Nokeltay Enhay* (1670). Finally, both of the *-e is-* constructions were replaced by *-es-* in *Monge Nokeltay* (1741) (*muletiy-e is-te-ni* → *mwunhecy-es-tA-ni* 'had collapsed'). The *-e is-* construction in (81a) implies the resultative state of a bridge being collapsed and asks about the resultative state of the bridge being repaired. In (81c), however, *-e is-* was replaced by *-es-* and what the speaker asks about is the current state of the bridge resulting from the past action of it being collapsed. This clearly indicates that *-e is(i)-* implying the resultative state was replaced by *-es-* functioning as the anterior. Therefore, the Middle Korean examples in (81) confirm that the resultative *-e is-* developed into the anterior *-es-*, and that its developmental path accords with the universal perfective path that Bybee et al. (1994) proposed, shown in (80a).

Semantic change triggers the reanalysis of grammatical structure and results in formal reduction under the assumption of "unidirectionality." Formal reduction is clearly observed in the grammaticalization of *-e is(i)-* into *-es-* as observed in Example (81). In the grammaticalization of *-es*, a semantic reanalysis triggered and intersected with a morphosyntactic conflation from *-e isi-* to *-es-*. With the formal reduction, *-es-* underwent morphosyntactic change, which can be observed in the course of the grammaticalization. It loses the ability to occur with various grammatical categories. Heine et al. (1991) also mentioned that loss of syntactic variety is common in grammaticalization. The syntactic context in which *-es-* occurs is quite different from that of *-e is(i)-*. For example, Hahn (1986, as cited in Oh, 2003) provides evidence that the newly developed form *-es-* co-occurs with *eps-* 'not exist', a verb that was incompatible with *-e is-* or its variant *-eys-* in the 15th c. Therefore, the assumption of unidirectionality is borne out in the grammaticalization of *-e is(i)-* into *-es-* with the semantic change that triggers the reanalysis and leads to formal reduction.

The most convincing evidence for the progression of grammaticalization into *-es-* is the change in its frequency. The frequency of *-es-* in the different versions of *Nokeltay* increased over time as shown in Table 4.2 (Oh, 2003).

**Table 4.2**

*Comparison of Textual Frequency of* **-es-** *in Three Versions of* **Nokeltay**

| Text version | *Penyek Nokeltay* (1517) | *Nokeltay Enhay* (1670) | *Chenge Nokeltay* (1765) |
|---|---|---|---|
| **Number of *-es-*** | 17 | 35 | 91 |

As we can see in Table 4.2, the overall frequency of the suffix *-es-* drastically increased (by 5.4 times) from the early $16^{th}$ c. to the $18^{th}$ c. In recent studies, it has been demonstrated that frequency takes a crucial role in grammaticalization in that the semantic force and impact of a construction are weakened and become more general when a construction frequently and repeatedly occurs in a local context (Haiman, 1994; Bybee & Hopper, 2001, as cited in Kim, 2003). Considering that these three versions include basically the same content, the remarkable increase in frequency reflects the increasing degree of the grammaticalization of the suffix *-es-* during this period.

The form *-es-* in Middle Korean, which later became *-ess-* in Modern Korean, functioned as both the perfective/past and the anterior (or perfect). The suffix *-ess-* in Modern Korean also shows multiple functions of the anterior and the perfective/past. Many studies on the suffix *-ess-* (e.g., Huh, 1992; Kim, 2003; Ko, 2005; Lee, 1991; Lee, 1981, 1998; Oh, 2003; Rhee, 1996) have confirmed that its historical development follows the crosslinguistic pattern where the perfect/anterior develops into the perfective/past. The suffix *-ess-* in Modern Korean is still in the process of grammaticalization into the perfective/past marker. According to studies based on naturally occurring discourse data (Lee, 1991; Oh, 2003), *-ess-* shows multiple functions: simple past (62% in Lee, 76% in Oh), anterior (21% in Lee, 13% in Oh), and perfective (19% in Lee, 8% in Oh). Based on its functional distributions according to these studies, it is reasonable to conclude that *-ess-* is placed far to the right on the cline of

grammaticalization into a perfective/past marker, as presented by Bybee et al. (1994) and shown in (80a).

Historical traces of the resultative *-e is(i)-* in the perfective *-ess-* are still observable in Modern Korean. The suffix *-ess-* still has the resultative function in Modern Korean in some cases, such as *ku salam-un kyelhon h**a-yss**-ta* 'He is married' (instead of *\*ku salam.un kyelhonh**a-y iss**-ta*). As seen in the example, the verb *kyelhonha-* 'to marry' is combined with *-ess-* to express the resultative state. Some other verbs that combine with *-ess-* to express the resultative state are *sihem-ey pwuth-* 'pass the exam', *kkuthna-* 'finish', *hayka ci-* 'the sun set', and so on. These examples indicate that evidence of the diachronic developmental path from *-e is(i)-* to *-ess-* can be seen synchronically.

### *4.2.2.1.2 Grammaticalization of the resultative* **-e iss-** *from* **-e is(i)-**[35]

In Middle Korean, the periphrastic construction *-e is(i)-* denoted duration due to the existential verb *is(i)-*. The resultative construction comes from a simple combination of two verbs and a connective suffix, with *is(i)-* as the second verb (V2).

(82)

    [V1]    +    *e*    +    [*is-* (V2)]    →  V  +  *-e is-*

                connective     'exist'           Resultative suffix

                                                  (Modified from Oh, 2003)

As (82) demonstrates, the two verbs, V1 and V2, are sequentially linked by the connective *-e*, which functions as a sequential connective. The event of V1 happens first and then the latter event of V2 continues to exist, thus generating the meaning "the resultant state from the prior event." The *-e is(i)-* construction in Middle Korean could occur with a variety of verb types regardless of telicity and dynamicity. Crosslinguistically, the resultative meaning is commonly derived from combining an aspect marker with telic and non-durative verbs (Bybee et al., 1994; Shirai, 2000; Smith, 1991, 1997). In contrast, Kim (2003) found examples of *-e is(i)-* occurring with all four

---

[35] I only briefly discuss the grammaticalization of the resultative *-e iss-* here, as the focus of this dissertation is on the *-ko iss-* construction. For more details about *-e iss-* both synchronically and diachronically, Kim's (2003) dissertation provides a number of examples in Middle Korean, and references.

categories of predicates that Smith (1991, 1997), Shirai (2000), and Vendler (1967) proposed for the framework on aspect.[36] Accordingly, it was possible to combine verbs in all the four categories of State, Activity, Accomplishment, and Achievement with the *-e is(i)-* construction, some of which can be combined with the *-ko iss-* construction rather than the *-e iss-* construction in Modern Korean. This difference in collocation between Middle Korean and Modern Korean comes from the fact that the *-e is(i)-* construction was later replaced by the *-ko is(i)-* construction. The *-e is(i)-* construction was selected to occur with intransitive verbs, which generally are telic and non-durative, and thus developed into the resultative aspect. Thus, the aspectual system in Korean underwent some changes and is now established as a system that is broadly divided into two separate categories with the aspectual markers *-e iss-* and *-ko iss-*.

Figure 4.1 shows the perfective developmental path of aspect in Korean.

**Figure 4.1**

***The Perfective Developmental Path of* -ess- *(modified from Oh, 2003)***
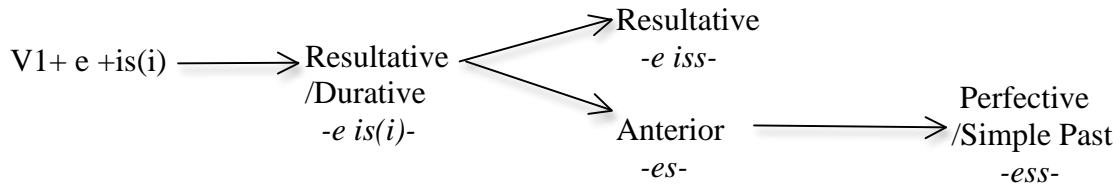


In the next section, I will discuss what kind of changes the Korean aspectual system historically has gone through since the 15<sup>th</sup> c. based on Middle Korean texts. How is it possible that the two aspectual markers are separately used to denote the resultative aspect and the progressive aspect in complementary distribution? The following discussion will detail the changes in the Korean aspectual system and the emergence of the imperfective aspectual marker *-ko iss-*.

---

[36] Examples of the four categories in Middle Korean are illustrated in Kim (2003).

### 4.2.2.2 The imperfective developmental pathway of aspect in Korean

#### 4.2.2.2.1 The -ko is(i)- construction in Middle Korean

In the 15th c., the *-e is(i)-* construction and the *-ko is(i)-* construction coexisted. However, there is disagreement on whether or not the *-ko is(i)-* construction was used to express aspectual meanings. Huh (1989) argued that the *-ko -is(i)-* construction in the 15th c. and the 16th c. expressed duration of the event of the predicate, and Lee (1981) and Ko (1987) claimed that the auxiliary construction *-ko is(i)-* was used as a progressive marker in Middle Korean. In contrast, based on Middle Korean texts, Jeong (2002), Kim (2003), and Rhee (1996) argued that there is no evidence for the usage of the *-ko is(i)-* construction as the progressive aspect in Middle Korean. They claimed that the *-ko is(i)-* construction was used to mean the resultant state or the durative state, but not to mean the progressive process in Middle Korean. In the 15th c., the *-ko is(i)-* construction expressed the sequential meaning of "V1 and stay/exist" rather than the aspectual meaning. In two Middle Korean texts written in the 15th c. (see Table 4.1.1), I found seven examples of *-ko is(i)-* in *Samkanghayngsilto* (written in 1471), and two examples of *-ko is(i)-* in *Sekposangcel* (written in 1447). None of them entails the meaning of action-in-progress, unlike *-ko iss-* in Modern Korean. Thus, the periphrastic construction of *-ko* 'and' and *is(i)-* 'to exist' in the 15th c. was simply a clausal verb construction before undergoing grammaticalization into the auxiliary verb construction later to denote the aspectual meaning. With the expansion of the connective *-ko* from the 15th c. to the 17th c., the *-ko is(i)-* construction started to replace the *-e is(i)-* construction (Kim, 2003; Lee, 1981). Furthermore, the frequency of the *ko -is(i)-* construction in the 15th c. was very low and its frequency did not increase until the 17th c. The Middle Korean data I selected for the study show that while only 10 examples of *-ko is(i)-* were found in the texts written in the 15th c., its frequency markedly increased in the texts written in the 17th c. Taking all these claims into account, one thing that is clear about the *-ko is(i)-* construction in Middle Korean is that it was not actively used and thus was not yet fully grammaticalized as the progressive aspect in Middle Korean, in contrast to Modern Korean.

### 4.2.2.2.2 Frequency and functions of the -ko is(i)- construction

There was a large gap in frequency between the *-ko is(i)-* construction and the *-e is(i)-* construction in the 15<sup>th</sup> c. corpus collected by M. Kim (2003), as shown in Table 4.3.

**Table 4.3**

*Frequencies of* **-e is(i)-** *and* **-ko is(i)-** *in the 15<sup>th</sup> Century*

|  | V-*e is(i)-* | V-*ko is(i)-* |
|---|---|---|
| **15 c.** | 412 | 11 |

The Middle Korean data that I selected for this study also indicate an increase in the frequency of *-ko is(i)-* approaching the period of Modern Korean, as shown in Table 4.4.

**Table 4.4**

*Change in Frequencies of* **-ko is(i)-** *from 15<sup>th</sup> Century to 17<sup>th</sup> Century*

| Text | Year (c.) | Frequency of *-ko is(i)-* |
|---|---|---|
| *Samkanghayngsilto Sekposangcel* | 15 c. | 9 |
| *Iungthaymyo chwultho en Swunchenkimssimyo chwulthokanchal* | 16 c. | 40 |
| *Cincwuhassimyo chwultho kan Hyenphwungkwakssi enkan* | 17 c. | 89 |

S. Sohn (1996) also supports the view that the *ko -is(i)-* construction was not actively used in Middle Korean, judging from the fact that only three examples of the *-ko is(i)-* construction were found in the Middle Korean texts which he collected for his study.

The question, then, arises whether the *-ko is(i)-* construction functioned as the progressive aspect similarly to the *-ko iss-* construction in Modern Korean. As shown in Table 4.4, seven examples of *-ko is(i)-* from *Samkanghayngsilto* (written in 1471), and two examples of *-ko is(i)-* from *Sekposangcel* (written in 1447) were found. None of them entails the meaning of "action-in-progress," unlike *-ko iss-* in Modern Korean. Let us consider the examples in (83).

(83)

a. Masal-hi  kakay cis-**ko is**-ye      acham    naco-hi      o-teni.

   village-at  hut   build-**ko iss**-and  morning evening-in   come-CNJ

  '(He) built a hut in the village and stayed there, and came every morning and evening.'


b. Khun kwuk-ey  kato-ko      umsik ani-cwu-teni    siwuk-kwa mek-**ko is**-kenul.

   big    room-in  lock up-and food   not-give-CNJ      leaves-and eat-**ko iss**-CNJ

  '(He) was locked up in a room without food, so (he) stayed there by eating leaves.'

<div align="right">(<em>Samkanghayngsilto</em>, 1471)</div>


As for Example (83a), it does not imply the meaning of action-in-progress of building a house, but the resultant state of staying there after building a house. In Example (83b), the existential meaning clearly stands out in the sense that the subject was staying without food and eating leaves while being in custody. In this regard, M. Kim (2003) also claimed that in the 15$^{th}$ c., two verbs in the *-ko is(i)-* construction, "V1 and exist" are sequentially connected by *-ko* 'and' and their combination is interpreted as V1 and stay rather than V1-ing. Therefore, the meaning of the sentence in (83a) is "built a hut temporarily and stay there." Kim (2003) claims that such uses of the *-ko is(i)-* construction would undoubtedly be closer to the resultative aspect than to the progressive if forced to be extended aspectually. In short, the 15$^{th}$ c. construction V1 *-ko is(i)-* mainly expressed the sequential meaning of V1 and stay rather than the progressive meaning. Still, the resultant state of *-ko is(i)-* in the 15$^{th}$ c. is distinguished from the typical resultant state caused by the prior action. The other seven examples that were found in the 15$^{th}$ c. texts indicate that the interpreted meaning of *-ko is(i)-* is more like a resultant state due to the existential verb *-is(i)-* sequentially connected by *-ko*. Based on this attested use of *-ko is(i)-,* I suggest that the meaning of *-ko is(i)-* in the early stage of grammaticalization was resultative rather than progressive.

Let us discuss more examples found in the Middle Korean texts.

(84)

a. Tyoh-an   hyang   phiwu-**ko is**-keni   sikyok-i      encey eps-uly-o   ha-teni.

   good-RL   incense burn-**ko iss**-CNJ   appetite-NM when  lack-PRS-Q  say-CNJ

   '(He) stays with good incense burning, so when does he not have an appetite?'

<div align="right">(<i>Sekposangcel</i>, 1447)</div>

b. Sulh-e        kuwisil        ani-ha-ko   nam   kul      kaluchi-**ko is**y-e.

   grieve-and public service not-do-CNJ others writing teach-**ko iss**-CNJ

   '(He) does not work for public office because he grieves, instead he teaches writing.'

<div align="right">(<i>Samkanghayngsilto</i>, 1471)</div>

The sentence in (84a) refers to a repeated situation of staying in a place with good incense burning. Example (84b) also does not imply the action-in-progress meaning. Its corresponding sentence in Modern Korean would be *kaluchiko issta*, which is more likely to mean that (he/she) teaches at a school. That is, it does not denote the action-in-progress meaning, but the habitual meaning that the action of teaching repeatedly happens. The -*ko is(i)-* construction here presents internal stages of durative events as static. This refers to "habitual stative," which presents "a pattern of situations that are semantically stative" (Smith, 1997, p. 50). In this regard, Jeong (2002) considers the -*ko is(i)-* construction as the duration of a state, which is closer to the resultative meaning than the progressive meaning, similar to the view of Kim (2003). What Jeong meant by "resultative" here is not the resultant state caused by the past event, but rather the duration of a state. I strongly agree with the claim that -*ko is(i)-* in the 15th c. is more like a "duration of a state," which is very similar in aspectual meaning to the continuous aspect. In conclusion, considering the empirical examples from the texts written in the 15th c., in the early stage of grammaticalization of -*ko is(i)-*, the construction was used to express the resultant state or the durative state rather than the action-in-progress meaning.

Entering the 16th c., the frequency of the -*ko is(i)-* construction gradually increased, as seen in Table 4.4. This indicates that the historical replacement of -*e is(i)-*

with *-ko is(i)-* began in the 16<sup>th</sup> c. First, I will discuss whether or not the *-ko is(i)-* construction in the 16<sup>th</sup> c. functioned as an aspectual marker. The example in (85) was extracted from *Swunchenkimssimyo chwultho kanchal* (*Swunchen* Kim family letters), written in the 16<sup>th</sup> c.

(85) Tyang-os-ina          ci(s)-eta     nip-**ko isi**-ni.

    Tyang-clothes-or.so  make-CNJ  wear-**ko iss**-CNJ

    '(I) made the clothes and am wearing them.'

The sentence in (85) denotes the resultative state that was caused by a prior action, meaning 'wearing thin clothes'. This resultative use of *-ko is(i)-* is an advancement from that of the 15<sup>th</sup> c. *-ko is(i)-* construction in the sense that the 16<sup>th</sup> c. *-ko is(i)-* construction is closer to the typical meaning of resultative, which refers to the state resulting from a prior action or a past event.

      More examples denoting the resultant state were found in *Samkanghayngsilto (Sequel)* written in the 16<sup>th</sup> c. (Jeong, 2002).

(86)

a. Poyyahulo chion cey   hawus-os-ul      nip-**ko**   **is**-ta ha.ye.

  now        cold   time  thin-clothes-AC  wear-**ko iss**-QT say-CNJ

  'Someone says that (he) is wearing thin clothes now when it is cold.'

b. Hansam nip-ko      stuy   stuyo hwe   sin-**ko is**-il      ttay.

  clothes wear-CNJ   band  wrap boots wear-**ko iss**-RL  time

  'When (he) is wearing boots wrapped with band.'

<div align="right">(Examples from Jeong, 2002, p. 177)</div>

The resultative use in (86) is exactly the same as the use of *-ko is(i)-* in referring to the resultative state in Modern Korean. This indicates that the *-ko is(i)-* construction in the 16<sup>th</sup> c. denoted the resultative state and functioned as the resultative aspect. In this regard, the early stage of grammaticalization as an aspectual marker started as an auxiliary verb

construction denoting the resultative meaning, not the progressive meaning. With respect to the aspectual meaning of *-ko is(i)-*, Kim (2003) also suggested that during the early stage of the grammaticalization, there were a steady number of examples of the resultative *-ko is(i)-*. Moreover, these examples were not limited to verbs of wearing and contact (i.e., *ip-* 'to wear', *sin-* 'to wear (shoes)', *tul-* 'to carry'). According to Kim (2003), theoretically, when a durative meaning is derived from the *-ko is(i)-* construction, it is expected to be more susceptible to the resultative interpretation than the progressive one. This is because the two verbs in the construction [V1 *-ko-*'exist' *is(i)-*] are sequentially connected and the existential verb is located in the V2 position (resultative duration).

Many of the verbs occurring with the *-ko is(i)-* construction were the so-called stative verbs, judging from the examples from *Swunchenkimssimyo chwultho* (*Swunchen* Kim family letters) written at the end of the 16<sup>th</sup> c. Thirty-nine examples of the *-ko is(i)-* construction were found in this text, which indicates the high frequency of *-ko is(i)-* in comparison to the seven examples found in the 15<sup>th</sup> c. texts. Stative verbs occurring with the *-ko is(i)-* construction in the *Swunchenkimssimyo chwultho* (*Swunchen* Kim family letters) include *alachali-* 'to recognize', *pala-* 'to want', *yeki-* 'to consider', *sayngkakha-* 'to think', *molu-* 'not to know', *thasha-* 'to blame', *uyciha-* 'to depend on', *mit-* 'to believe', *ic-* 'to forget', and *cengsin-ul ilh-* 'to lose one's mind'. Several examples are illustrated in (87).

(87)

a. Tto    chay-syepang-ina         ha-l-ka         pala-**ko is**-ini.

   again Chay-married.man-or so  do-PRS-CMP  want-**ko iss**-CNJ

   '(He) wants Mr. Chay or someone to do it again.'


b. Nay phalca-nal hanha-**ko in-**nola.

   my  fate-AC     blame-**ko iss**-DC

   'I blame my fortune.'

c. Nehuy   hyengcey-lal   mit-**ko in**-nola

   your   brothers-AC   believe-**ko iss**-DC

  'I believe (trust) you and your brothers.'

As seen in (87), the verbs occurring with the *-ko is(i)-* construction are considered to be the State type according to Vendler's (1967) classification. In addition, the *-ko is(i)-* construction was even found occurring with an adjective.

(88) Syul   chwiha-n salam-kathi   elyepphwusha-**ko is-**ini.

   alcohol  drunk-RL  person-like   be.vague-**ko iss**-CNJ

  '(He) is vague just like a drunk person.'

In Example (88), the predicate *elyepphwusha-* 'to be dim, vague, indistinct' is more like an adjective that denotes an attribute or a state of an entity. When combined with the *-ko is(i)-* construction, it indicates the continuation of the state. From this example, we can observe that the *-ko is(i)-* construction in Middle Korean was used more like the continuous aspect, which includes both non-progressive and progressive. In Modern Korean, the State type of verbs denotes the continuation or duration of a state when occurring with the *-ko iss-* construction, which is different from the use of stative progressive because the use of stative progressive is part of the progressive. In this regard, I categorized the *-ko iss-* construction as the continuous aspect in Chapter 3. Therefore, I suggest that the *-ko is(i)-* construction in Middle Korean is highly likely to denote an aspectual meaning similar to the continuous aspect.

     It is well known that stative verbs are difficult to classify into a certain type. Vendler (1967, pp. 110–112) also sees it as difficult to identify the category of stative verbs such as *think*, *know*, *understand*, and so forth, stating that the verb *know* typically functions as the State type but can function as the Achievement type in the moment one knows the answer to a math problem. If we follow Vendler's view, then the aspectual meaning occurring with Achievements is resultative.[37] Although the aspectual meaning of stative verbs is still disputable and no concrete conclusion can be made, one thing that

---

[37] The issue of the aspectual meaning with stative verbs in Korean was discussed in detail in Chapter 3.

can certainly be seen is that the aspectual meaning of the *-ko is(i)-* construction with such stative verbs is different from the meaning of action-in-progress. This suggests that in the early grammaticalization of the *-ko is(i)-* construction, it started to refer to the resultant state or the continuous/durative state.

Meanwhile, Kim (2003) claims that the *-ko is(i)-* construction started to express both the resultative meaning and the progressive meaning in the 16th and 17th c., based on her Middle Korean study. Let us consider the examples in (89).

(89) Examples from Kim, 2003, p. 145 (18, 19)

a. Satang-al **tikuy-o is**-taka cap-i-ye

   shrine-ACC **guard-ko iss**-while capture-Pass-Conn

   'While (Tokyeng) was guarding the shrine, he was captured and' (*Ilyun chokan*, 16th c.)

b. Sulkhes wu-ca ha-ko i stay tye stay **kitali-ko isi**-ni

   heartily cry-Hort say-Conn this time that time **wait-ko iss-**Conn

   'Saying "let's cry heartily," they were waiting for the right moment (to cry).'

   (*Syekwung*, 17th c.)

The verbs occurring with the *-ko is(i)-* construction in (89) are classified into Activity ('to guard') as in (89a) and Accomplishment ('to wait') as in (89b). According to the two-component theory (Smith, 1991, 1997), with verbs that have internal temporal duration (i.e., Activity and Accomplishment), the *-ko is(i)-* construction delivers a progressive reading. In this regard, Kim claimed that the *-ko is(i)-* construction expressed both the resultative meaning and the progressive meaning in the 16th and 17th c., although she admitted that there are relatively few examples of the *-ko is(i)-* construction in Middle Korean. However, Example (89a) is ambiguous in meaning between the resultative state and the progressive meaning in the sense that the existential meaning of *-is(i)-* is still strong in this example. This example exhibits the early stage of the grammaticalization of the *-ko is(i)-* construction. The same implication applies to Example (89b) in which the verb *kitali-* 'to wait' and the existential verb are sequentially connected and may entail the resultative state due to the strong existential meaning.

When comparing the frequency of *-ko is(i)-* occurring with stative verbs and with dynamic verbs (i.e., Activity and Accomplishment) from the Middle Korean data collected for this study, it is considerably higher with stative verbs, as Table 4.5 shows.

**Table 4.5**

*Stative and Dynamic Verb Type Frequency of* **-ko is(i)-**

|  | Stative verb Type frequency of *-ko is(i)-* | Dynamic Verb Type frequency of *-ko is(i)-* |
|---|---|---|
| **Spoken style written in Middle Korean** | 22 | 18 |

The stative verbs occurring with *-ko is(i)-* include *alachali-* 'to recognize', *pala-* 'to want', *yeki-* 'to consider', *sayngkakha-* 'to think', *molu-* 'not to know', *thasha-* 'to blame', *uyciha-* 'to depend', *mit-* 'to believe', *ic-* 'to forget', and *cengsin-ul ilh-* 'to lose one's mind'. As for the dynamic verbs occurring with *-ko is(i)-*, on the other hand, the majority of them are *kitali-* 'to wait', *tali-* 'to take', and *kenuli-* 'to take care of'. Considering the low type frequency of stative verbs with *-ko iss-* in Modern Korean,[38] the number of occurrences in Middle Korean is extremely high. As mentioned in Chapter 3, although the results of that chapter's study showed that the token frequency of *-ko iss-* with stative verbs is relatively high, it is accounted for by only a few stative verbs such as *al-* 'to know', *sal-* 'to live', and *sayngkakha-* 'to think'. In conclusion, the *-ko is(i)-* construction started to express the progressive meaning in the 16th c. and the 17th c. However, the extremely low frequency of *-ko is(i)-* with dynamic verbs cannot prove that the construction was used to denote the full progressive aspect, but indicates the very early stage of the grammaticalization into the progressive. In the 18th c., the *-ko is(i)-* construction was actively developed into the progressive aspect.

So far, the uses of the *-ko is(i)-* construction in Middle Korean have been examined, and it is confirmed that there were relatively few examples of the *-ko is(i)-* construction, most of which denoted the resultant state or the continuation/duration of a state. In Chapter 2, I discussed which grammatical category *-ko iss-* falls under in Modern

---

[38] Chapter 3 showed that the frequency of State verbs occurring with the *-ko iss-* construction is the lowest among the four verb types.

Korean, and in Chapter 3, I suggested that *-ko iss-* should be viewed as the continuous aspect marker under the category of the general imperfective, rather than exclusively a progressive marker. My suggestion was based on Comrie's (1976) subcategorization of the imperfective, which states that the continuous aspect includes the non-progressive as well as the progressive. Judging from the empirical evidence found in the Middle Korean texts as illustrated in this chapter, the *-ko is(i)-* construction was used to denote the non-progressive, which includes the resultative state when occurring with Achievement verbs and Accomplishment verbs and the continuous/durative state when occurring with State verbs. Here, it is noticeable that the progressive aspect is missing in the aspectual system thus far. Therefore, we can expect that the progressive aspect develops later. In the next section, I will discuss the development of *-ko is(i)-* into the progressive aspect marker.

### 4.2.2.2.3 *Development of the progressive* **-ko iss-** *from* **-ko is(i)-**

With the spread of *-ko* during the 15$^{th}$ c. through the 17$^{th}$ c., the *-ko is(i)-* construction came to be more frequently used as the sequential construction V1 and exist. In turn, generalization of the existential meaning of *is(i)-* led to the derivation of aspectual meaning from this construction. Therefore, it is highly likely that its genuine development into the progressive aspect began as the frequency of *-ko* increased over the period. I suggest two pieces of empirical evidence from Middle Korean examples that show that the *-ko is(i)-* construction developed into the progressive aspect. First, the time span between V1 and the existential verb *-is(i)-* in the 18$^{th}$ c. was shorter than during the 16$^{th}$ c. and the 17$^{th}$ c. Second, a wider range of verbs could occur with the *-ko is(i)-* construction in the 18$^{th}$ c. than in the 16$^{th}$ c. and the 17$^{th}$ c.

*Advancement to the progressive aspect.* The examples from *Samyekchonghay*,[39] written in the 18$^{th}$ c., show that the *-ko is(i)-* construction had advanced in its grammaticalization as an aspectual marker in that the *-ko is(i)-* construction in the 18$^{th}$ c. implies a much shorter time span compared to that of the 16$^{th}$ and 17$^{th}$ c. Let us compare examples that were written during the two different times.

---

[39] I found no example of *-ko is(i)-* showing the advancement into the progressive aspect in *Nokeltay* written in 18$^{th}$ c., so I examined *Samyekchonghay*, also written in the 18$^{th}$ c.

(90)

Kongmyeng-i    amwun-ey anc-asye cyenghi        yeleh-uth      ticyepha-**ko is**-il

Kongmyeng-NM gate-at    sit-CNJ   whole-heartedly many.people-AC entertain-**ko iss**-RL


cey    cuksi        wuncang-i   on-ta    ha-ye   aloy-ni

time immediately  admiral-NM  come-QT say-CNJ  tell-CNJ

'When Kongmyeng was entertaining many people whole-heartedly while sitting at the door, (somebody) reported that the admiral would come immediately…'

<div align="right">(<em>Samyekchonghay</em>, 18<sup>th</sup> c.)</div>

In Example (90), it is clearly seen that the *-ko is(i)-* construction (*ticyepha-**ko is-*** 'to be entertaining') denotes the meaning of action-in-progress in the sense that it describes the moment when the subject (Kongmyeng) is entertaining a number of people. Thus, the *-ko is(i)-* construction here cannot mean a repeated action going on for some time period. It also cannot mean a resultant state because entertaining a number of people entails that the action of entertaining them was going on at the reference time when somebody reported that the admiral would come immediately, rather than indicating a resultant state after entertaining people.

Example (91) from *Samyekchonghay* also expresses the meaning of action-in-progress. The *-ko is(i)-* construction (*aloy-**ko is-*** 'to be telling, reporting, informing') cannot mean the resultant state after informing the admiral of releasing (someone) while (he was) standing up. It clearly indicates that the interpreted meaning of *-ko is(i)-* is action-in-progress.

(91) Cangwun-to    nilal-esye   wuncang-uy noh-a        ponay-m-ul      aloy-**ko is**i-l cey

    cangwun-also stand-while admiral-GN release-INF send-NOM-AC tell-**ko iss**-RL time

    'When Cangwun was also standing up and informing the admiral of releasing (someone)…'

<div align="right">(<em>Samyekchonghay</em>, 18<sup>th</sup> c.)</div>

The advancement of *-ko is(i)-* into the progressive aspect can be seen by the comparison between two different time periods. Let us consider the following examples.

(92)

a.  Nankan   ka-uy     sye-sye     kitali-**ko is**-teni.

    banister edge-at  stand-CNJ  wait-**ko iss**-CNJ

    '(He) was waiting while standing up at the edge of the banister.'

<div align="right">(<em>Samyekchonghay</em>, 18<sup>th</sup> c.)</div>

b.  Sangwen congma-lul  kitali-**ko in-n**ola.

    Sangwen stallion-AC  wait-**ko iss**-DC

    '(I) am waiting for a stallion.'        (<em>Swunchenkimssi</em>, 16<sup>th</sup> c.)


Example (92a) is found in *Samyekchonghay*, written in the 18<sup>th</sup> c., while Example (92b) is found in *Swunchenkimssi* (*Swunchen* Kim family letters), written in the 16<sup>th</sup> c. The time of a subject waiting in Example (92a) is relatively shorter than the time in Example (92b) in the sense that the subject in (92a) was standing while waiting, whereas the subject in (92b) could be waiting for days or months. The long time span in Example (92b) indicates that the *-ko is(i)-* construction is sequentially connected, and thus, the existential meaning of staying is still so strong that the time of staying could be long. On the other hand, the short time span in Example (92a) indicates that the existential meaning became weakened so the *-ko is(i)-* construction was used to express the short time of staying while standing. This is closer to the action-in-progress meaning. In this respect, the *-ko is(i)-* construction of the 18<sup>th</sup> c. in Example (92a) shows more advancement in the grammaticalization into the progressive aspect.

We can also observe that Example (89a), written in the 16<sup>th</sup> c., indicates a relatively longer time span than Example (89b), written in the 17<sup>th</sup> c. The time of the subject waiting in Example (89a) is relatively longer than the time in Example (89b) in the sense that the subject in (86a) was captured while guarding and staying at the place he guarded for days or months, whereas the subject in (89b) is waiting a short time for the right moment to cry. This suggests that the existential meaning was becoming weakened, which means that the generalization of the existential meaning of *is(i)-* led to the derivation of aspectual meaning from this construction.

Another piece of evidence indicates the advancement in the grammaticalization of *-ko i(i)-* as the progressive aspect. The early use of the *-ko is(i)-* construction reveals that it had not fully developed as an aspectual marker. That is, it had not yet lost its existential meaning. As a consequence, the verbs that were not compatible with the existential meaning did not occur with the *-ko is(i)-* construction. As mentioned earlier, dynamic verbs occurring with *-ko is(i)-* were very infrequent in Middle Korean, and were most often the verbs *kitali-* 'to wait', *tali-* 'to take', and *kenuli-* 'to take care of' until the 18th c. As observed in the examples in the earlier sections, the verbs occurring with the *-ko is(i)-* construction were mostly those that were still compatible with the existential meaning, as in *kitali-ko iss-* 'to be waiting', *tali-ko iss-* 'to be taking with me', and *kenuli-ko iss-* 'to be taking care of (children)'. These verbs do not involve change of location, so they are compatible with the existential meaning (Kim, 2003). This pattern supports the finding that many of the examples occurring with the *-ko is(i)-* construction in the 16th c. were stative verbs, which are compatible with the continuous and durative meanings.

Verbs involving change of location, on the other hand, were not found occurring with *-ko is(i)-* until the 18th c. (Kim, 2003), although they are all acceptable in Modern Korean. For example, the actions denoted by verbs such as *ka-* 'go' and *tochakha-* 'arrive' involve a change of location, so they are not compatible with the lexical meaning of existence. That is why this type of example was not found until the 18th c. In Modern Korean, however, these verbs deliver the progressive meaning when occurring with the *-ko iss-* construction, as in *ka-**ko iss-*** 'to be going' and *tochakha-**ko iss-*** 'to be arriving'. The fact that such examples are possible only in Modern Korean confirms that the progressive meaning of *-ko iss-* is a further advancement on the cline of grammaticalization.

Compared to the Japanese aspectual marker *-te i-* and the Chinese progressive *zai*, the aspect marker *-ko iss-* in Modern Korean is further advanced as a progressive marker on the cline of grammaticalization. Japanese *-te i-* cannot express the progressive meaning when occurring with Achievement verbs like 'to go' and 'to arrive';instead it denotes the resultative meaning. The Chinese progressive *zai* cannot occur with Achievement verbs (Smith, 1997). According to the two-component theory (Smith, 1997), the inherent lexical aspect of verbs determines the aspectual meaning. Verbs with internal

temporal duration such as Activity verbs and Accomplishment verbs are likely to denote the progressive meaning, while Achievement verbs with an endpoint denote the resultative meaning. The *-ko iss-* construction in Modern Korean, however, now actively superimposes the progressive meaning even on Achievement verbs that are less compatible with the progressive aspect. Therefore, I suggest that the *-ko iss-* construction in Modern Korean is further advanced in its grammaticalization as a progressive marker in comparison to the Japanese progressive *-te i-* and the Chinese progressive *zai*.

In summary, the *-ko is(i)-* construction of the 15th c., most instances of which denoted the resultant state or continuation/duration of a state, showed advancement to the progressive aspect marker from the 16th c. through 18th c. as the frequency of *-ko* increased. I speculate that the development of *-ko is(i)-* into the progressive aspect marker was motivated by a need to fill a semantic gap in the aspectual system in Korean, in which the progressive aspect had not been marked until then. The need to fill gaps in grammatical paradigms is one of the possible motivations that have been proposed to explain grammaticalization processes (Hopper & Traugott, 1993). With its development into the progressive aspect marker, the *-ko is(i)-* construction could be used to express both the non-progressive and the progressive, which refers to the continuous aspect and which completes the imperfective aspectual system in Modern Korean.

### 4.2.3 The criteria for the replacement of *-e iss-* with *-ko iss-*

With the spread of the connective *-ko* during the period from the 15th through the 17th c., the *-ko is(i)-* construction started to replace the *-e is(i)-* construction (Jeong, 2002; Kim, 2003; Lee, 1981). The functions of *-ko is(i)-* are very similar to those of *-e is(i)-*, and the two forms coexisted in Middle Korean, as illustrated in (93).

(93) Examples from Lee, 1981, pp. 232–233

a. Sanahi kesang           nip-**e is**-iltilul hako.

   man    mourning.dress wear-**e iss**-CNJ

   'The man is wearing a mourning dress.'                        (*Sohak*, 16th c.)

b. Namca-nun iseng-uy       isi-l-cey        hansam      nip-**ko is**i-lsi.

   man-TC     woman-NM  exist-RL-time  undershirt  wear-**ko iss**-CNJ

   'The man is wearing an undershirt when a woman is around.'        (*Uncwungkyeng*, 16<sup>th</sup> c.)


Jeong (2002) and Kim (2003) empirically demonstrated the replacement by comparing 15<sup>th</sup> c. texts with 16<sup>th</sup> c. texts as illustrated in (94).


(94) Examples from Kim, 2003, p. 142, p. 146

a. Chyenlyang-al  manhi moyho-a           twu-ko      swukolavi

   money-ACC    plenty accumulate-Conn  put-Conn  laboriously

   **tikuy-ye is-ye**       pi-l-li                is-ketun.

   **guard-e iss**-Conn   borrow-Rel-person exist-Conn

   '(He) accumulates a great amount of money and guards (lit., remains guarding) it laboriously

   when there is a person who wants to borrow.'                     (*Sekposangcel*, 1447)


b. Cin-ey     po-m-al        nilawat-a  selu      **kituly-e isi**-ni

   truth-Loc  see-Nom-Acc  raise-Conn together   **wait-e iss-**Conn

   'To obtain the ability to see truth, (they) stayed waiting together...'        (*Yengka*, 1464)


Their claim is convincing because the same verbs ('to guard' and 'to wait') occurring with the *-e is(i)-* construction in the 15<sup>th</sup> c. texts as in (94) occurred with the *ko -is(i)* construction instead of the *-e is(i)-* construction in 16<sup>th</sup> c. and 17<sup>th</sup> c. texts, as shown in Example (89).[40] Therefore, it is most likely that the *-e is(i)-* construction was replaced by the *-ko is(i)-* construction historically.

　　　Here, a question arises in regard to the criteria for replacing the *-e is(i)-* construction with the *-ko is(i)-* construction. As seen in Table 4.2, the frequency of *-e is(i)-* was much higher than that of *-ko is(i)-* in the 15<sup>th</sup> c. The replacement took place over the period from the 16<sup>th</sup> c. through the 18<sup>th</sup> c. Once the replacement of *-e is(i)-* with *-ko is(i)-* began, it was visibly selective. The criteria for this historical replacement have long been discussed among Korean linguists. Most Korean linguists including Huh

---

[40] More examples showing this replacement from 15<sup>th</sup>, 16<sup>th</sup>, and 17<sup>th</sup> c. Korean texts are presented by Kim (2003, p. 142, p. 146).

(1975), Kim (2003), Lee (1981), and Ko (2005) have claimed that the divergence between the progressive *-ko is(i)-* and the resultative *-e is(i)-* was strongly influenced by transitivity. Another linguist, H. S. Lee (1991), characterized the difference between the resultative and the progressive and suggested that the criterion for the replacement is dynamicity. And contrary to the view that this is a historical replacement, Rhee (1996) claimed that it was not a replacement, but an instance of the genesis of a new grammatical marker for the imperfective. However, Rhee's claim lacks persuasiveness, because it has been clearly demonstrated by Middle Korean texts that the *-e is(i)-* construction was replaced by the *-ko is(i)-* construction.

Many linguists have claimed that the determining factor for the historical replacement of *-e is(i)-* with *-ko is(i)-* is transitivity (Huh, 1975; Kim, 2003; Ko, 2005; Lee, 1981). Their claim is based on analogy with other connectives in Middle Korean. For example, Ko (1987, 2005) pointed out that depending on the transitivity of the combined verbs, two different allomorphs, *kenul* and *enul*, are selectively used. Specifically, the connective *kenul* was used when the combined verb was intransitive, whereas *enul* was used when the combined verb was transitive. Similarly, Huh (1975) suggested that in Middle Korean, among different allomorphs of a determiner construction, *on* and *wun* were used when the combined verb was transitive, whereas *us* was used when the combined verb was intransitive. Hence, they came to the conclusion that the criteria for the replacement of *-e is(i)-* with *-ko is(i)-* is transitivity.

The spoken letter texts (*enkan*) used for the present study also provide empirical evidence for the claim that the historical replacement of *-e is(i)-* with *-ko is(i)-* is related to transitivity. With the *-ko is(i)-* constructions found in the *enkan* written from the 15th c. through the 17th c., all the predicates except for one adjective (illustrated in the above examples) are transitive. As the connective *-ko* expanded from the 15th c. to the 18th c., the domain of *-ko is(i)-*, which could occur only with transitive verbs, was encroaching into that of *-e is(i)-*, which could occur with both transitive and intransitive verbs. As mentioned, most verbs occurring with *-ko is(i)-* were stative verbs such as *al-* 'to know', *mit-* 'to believe', and *ic-* 'to forget', which are all transitive. In the early stage of grammaticalization, the *-ko is(i)-* construction was much closer to the resultative/durative due to the durative meaning of the existential verb *is(i)-*. As the *-ko is(i)-* construction

gained power with the increase in the frequency of -*ko*, it further developed into the progressive aspect but continued to mark the resultative/durative meaning with transitive verbs.

### 4.2.4 Divergence between the resultative -*ko iss-* and -*e iss-* in Modern Korean

If the resultative -*ko iss-* in Modern Korean is combined with the same type of transitive verbs, then the claim that transitivity is the determining factor of the historical replacement would gain credibility. Comparing the verbs that occur most frequently with -*ko iss-* and -*e iss-* in Modern Korean can confirm the criteria for the historical replacement of -*e is(i)-* with -*ko is(i)-*. Park (2003) conducted a corpus study on the combined verbs occurring with the auxiliary verb constructions including -*e iss-* and -*ko iss-*. The corpus data involved the entire Sejong Corpus including spoken and written data, which was collected from 1999 to 2001. The size of the dataset is 5,576,035 *ecel*. The total number of occurrences of the -*ko iss-* construction extracted from the data is 47,198. Out of 47,198 -*ko iss-* constructions, there are 3,810 verbs occurring with the construction. The statistical method Park used was to verify statistical significance by using z-scores in line with Kang's (2003) method of calculating the z-score. What needs to be verified is whether the probability of a verb occurring with a certain connective is statistically more significant than the probability of a verb occurring in the entire corpus. Beom (2009) also used z-scores to measure the strength of associations between verbs and connectives in Korean. One hundred verbs that are combined with -*ko iss-* and -*e iss-* with high frequency in terms of the z-score are illustrated in Appendix A.

Out of the hundred frequent verbs with a high z-score in Appendix A, the verbs that can be combined with the resultative use of -*ko iss-* are the following:

(95) *kac-* 'to take', *kaci-* 'to take', *cini-* 'to hold', *calicap-* 'to settle', *tam-* 'to input', *chaciha-* 'to occupy', *math-* 'to take', *tti-* 'to take', tuytep- 'to cover', *twulessa-* 'to surround', *cemyuha-* 'to occupy', *ceysiha-* 'to suggest', *pwunphoha-* 'to distribute', *tamwul-* 'to close', *an-* 'to hug', *phwum-* 'to hold', *cwi-* 'to hold', *ip-* 'to wear'

These verbs are all transitive except for *calicap-* 'to settle', *caliha-* 'to settle down', and *pwunphoha-* 'to distribute',[41] and the verb category is either Achievement type or Accomplishment type, which corresponds to the results of the study reported in Chapter 3. In other words, they are telic transitive verbs.

This becomes more obvious when comparing transitive–intransitive verb pairs in Korean. Let's consider the following examples.

(96) a. Ku kukcang-un 5-kay-uy  sangyengkwan-**ul  kacchwu-ko iss**-ta.
     that theater-TC 5-CL-GN  screen-**AC**        equip-**Resl**-DC


    a.' Ku kukcang-un   5-kay-uy sangyengkwan-i **kacchwu-ecy-e iss**-ta.
      that theater-TC 5-CL-GN  screen-**NM**       equip-**PAS**-**Resl**-DC
     'That theater is equipped with 5 screens.'


The intransitive counterpart of the verb in (96a') is combined with the resultative *-e iss-* instead of *-ko iss-* and both constructions denote the resultative meaning. Other transitive–intransitive pairs are *math-**ko iss**-* vs. *mathkye-cy-**e iss**-*, *tam-**ko iss**-* vs. *tamky-**e iss**-*, and *ic-**ko iss**-* vs. *ichye-cy-**e iss**-*, among others. These transitive–intransitive pairs show that the *-ko iss-* construction favors transitive verbs, while the *-e iss-* construction favors intransitive verbs. More specifically, transitive telic verbs are combined with the *-ko iss-* construction, while intransitive telic verbs are combined with the *-e iss-* construction in Modern Korean when expressing the resultative meaning.

The semantic characteristics of the frequent verbs occurring with *-e iss-* in Appendix A indicate that they usually imply "change of state"; for example, *-toy-*, *-eci-*, and *-hita-*. This suggests that most verbs occurring with the *-e iss-* construction are Achievements and Accomplishments, which tend to denote the resultative meaning when occurring with an aspect marker. Generally, if the focus of a sentence is on the change of

---

[41] Although these verbs are syntactically intransitive, they can behave as transitive. Originally, *calicap-* consists of *cali-lul cap-* (position-AC take- 'to take a position'). The same rule applies to *caliha-*, which consists of *cali-lul ha-* (position-AC take- 'to take a position'), and *pwunphoha-*, which consists of *pwunpho-lul ha-* (distribution-AC do- 'to distribute').

state, it is intransitive, while it is transitive if the focus of a sentence is on the subject's performance.

Assuming that the two resultative aspectual markers in Korean diverged in terms of transitivity, most of the verbs combined with the resultative *-ko iss-* may cause ambiguity between the progressive and the resultative because transitive verbs generally have an agent (or subject) who performs an action as well as an object that involves a change of state. Let us consider the example in (97).

(97) Emeni-nun   kesil-eyse       cenki-lul   kku-**ko iss**-ta.

mother-TC   living room-in  light-AC   turn off-**ko iss**-DC

a. My mother is turning off the light in the living room.

b. My mother is in the living room with the light off.

The interpretation of Example (97) is ambiguous, depending on the context. If the focus of the sentence is the subject's action of 'turning off', then the sentence has the progressive reading as in (97a). But if the focus of the sentence is the change of state, then the sentence has the resultative reading as in (97b). In Vendler's four verb categories, the verb *kku-* 'to turn off' in (97a) is classified as the Accomplishment type, which has internal temporal duration of an agent's action, leading to the progressive meaning, while the verb of (97b) is classified as the Achievement type, which typically leads to the resultative meaning. According to Smith's (1997) two-component theory, there is a distinction between the situation type at the basic level and at the derived level. Therefore, the situation type can shift to another type depending on the context. This suggests that the inherent lexical aspect of verbs, as well as transitivity, is a crucial factor for determining aspectual meaning in Korean.

Transitivity also matters in determining between the resultative and the progressive meaning of the Japanese aspect marker *-te i-* (Shirai, 2000). Shirai also countered Smith's (1997) two-component theory using the illustration of Japanese transitive-intransitive pairs. In Japanese, the *-te i-* construction expresses both the resultative and the progressive depending on its interaction with the inherent lexical aspect of the combined verbs. Even though this theory justifies the Japanese aspectual

system in principle, verbs of the same type may denote different aspectual meanings depending on transitivity. Shirai (2000) insisted that the role of transitivity should be considered when determining the aspectual meaning of *-te i-* in Japanese. The reason why transitivity matters is that there is a correlation between the intransitive change of state and the resultative sense on the one hand, and between transitive action of the subject and the progressive sense on the other hand. Considering the aspectual systems in the two languages, it is very convincing that transitivity also plays an important role in determining the aspectual meanings of the Japanese *-te i-* and the Korean *-ko iss-*.

The question arises of whether or not this syntactic phenomenon is observed in languages other than Korean and Japanese. In a typological study on resultative constructions by Nedjalkov (2001, as cited in Park, 2003), two main syntactic types of resultatives are distinguished: (1) object-oriented resultatives, and (2) subject-oriented resultatives. In object-oriented resultatives (also called P[atient-oriented] resultatives), the subject corresponds to the direct object (patient) of the base verb as in *Suddenly the window was opened*. In subject-oriented resultatives (also called S[ubject-oriented] resultatives), the subject of intransitive verbs retains the underlying subject as in *He is still gone*. A third type of resultative is the agent-oriented resultative (also called A[gent-oriented] resultative). This type is different from the S-resultative in that it is most commonly derived from transitives whose object is a body part or a thing in immediate contact with the agent, which results in a possessive relationship between the agent and patient as in *He had a cap on*. According to Nedjalkov, A-resultatives are not as common as the other two syntactic types; there are only a few languages in which A-resultatives are actually attested.

Using these distinctions among resultatives, the A(gent-oriented) resultative type is manifested by the aspect marker *-ko iss-* in Modern Korean, while the S(ubject)-resultatives and P(atient-oriented) resultatives are manifested by the other aspect marker *-e iss-*. Let us consider the following Examples (98–99) in Korean.

(98) a. Con-i      huyn  syechu-lul  ip-**ko iss**-ta.

    John-NM white  shirt-AC  wear-**Resl**-DC

    'John is wearing a white shirt.'

b. Con-i      sin-ul      sin-**ko iss**-ta.

   John-NM  shoes-AC  wear-**Resl**-DC

   'John is wearing shoes.'


c. Con-i      kapang-ul tul-**ko iss**-ta.

   John-NM   bag-AC    carry-**Resl**-DC

   'John is carrying a bag.'


(99) a. Ku salam-un      sewul-ey k-**a iss**-ta. (He went to Seoul and is still there.)

     that person-TC  Seoul-in  go-**Resl**-DC

     'He is in Seoul.'


b. Mwun-i    yel-ly-**e iss**-ta.

   door-NM open-PAS-**Resl**-DC

   'The door is open.'


(98a) can be interpreted as indicating that after putting on a white shirt, John remains in the state of the result, although its interpretation may be ambiguous depending on the context. Two interpretations are possible for each of the sentences shown in (98). The verbs *sin-* 'to wear', *ip-* 'to wear', and *tul-* 'to carry' in (98) are all action verbs. Although they are all dynamic and action verbs, they can also all refer to a resultative state of V-ing as well as a progressive action when combined with *-ko iss-*. Meanwhile, in (99a), the other aspectual marker, *-e iss-*, expresses the S-resultative and in (99b) the P-resultative. In fact, *-e iss-* is the representative resultative marker in Modern Korean. What is unique about the Korean aspectual system is that the A-resultative has a separate aspect marker that is different from the marker used with the other resultatives.

       I will now examine whether there is any correlation between this syntactic phenomenon and transitivity. Based on Nedjalkov's typological study on resultative constructions, it can be said that the *-ko iss-* construction in Korean denotes the A-resultative as illustrated in (98). In his view, the A-resultative is a subtype of the subject-oriented resultative and is most commonly derived from transitive verbs with the agent,

132

while another subtype is derived from intransitive verbs and retains the underlying subject. The correlation between agentivity and transitivity is that a transitive verb tends to have an agent who performs an action and affects an object as in *He broke the clock*, while an intransitive verb does not overtly express the agent and usually focuses on a change of state as in *The clock broke*. Therefore, the strong correlation between agentivity and transitivity is fairly natural, and thus the correlation between non-agentive and intransitive is also natural. As illustrated in Appendix A, most verbs frequently occurring with *-e iss-* imply passive and causative states, which indicates non-dynamicity and non-agentivity.

There is significant evidence that transitivity plays an essential role in deciding on the choice of the aspectual marker in Korean. In the corpus data collected by Park (2003), he found some examples of transitive verbs combined with the *-e iss-* construction instead of the *-ko iss-* construction, which usually attracts transitivity. Let's examine the examples found from Sejong Written Corpus.

(100) a. Pwukhan-in-tul-i               namhan-ulo     thalchwulha-ki wihay twuman-kang-ul
        North Korean-people-PL-NM South Korea-to escape-NOM    for     Twuman-river-AC
        kennew-**a iss**-tako han-ta.
        cross-**Resl**-QT      say-DC
        'People say that North Koreans crossed the Twuman River and stay there to escape into
        South Korea.'

    b. (Kunun) cikum-un hankwuk-ul ttena-**a iss**-e.
       (he)    now-TC   Korea-AC    leave-**Resl**-DC
       'He left Korea and is not in Korea now.'

The resultative *-e iss-* is combined here with transitive verbs, *kenneo-* 'cross' in (100a) and *ttena-* 'leave' in (100b), and their direct objects are visibly placed before the transitive verbs. How can the *-e iss-* construction possibly collocate with transitive verbs in these cases? There is a subtle difference between the transitive verbs in (100) and typical transitive verbs. A typical transitive sentence consists of a subject (or agent), an

object (or patient), and a transitive verb, as in *Swuci-ka os-ul ip-ko iss-ta* (Suzie-NM clothes-AC wear-**ko iss**-DC 'Suzie is wearing clothes'). Generally, an agent performs an action, while a patient gets affected and goes through change by the agent's action. As for the transitive verbs collocated with *-e iss-* in (100), on the other hand, the subjects of these verbs cannot affect an object's state, so there is no change of state for the objects. As shown in (100a), the verb *kenneo-* 'cross' is a transitive verb that requires *pwukhanintul* 'North Koreans' as a subject, and *twumankang* 'Twuman river' as an object. Although the verb *kenneo-* 'cross' is transitive, the object *twumankang* 'Twuman river' has no change of state because of the subject's action of 'crossing' it. The verb *ttena-* 'leave' in (100b) is also a transitive verb that requires *hankwuk* 'Korea' as an object. However, the object *hankwuk* 'Korea' is not affected by the subject's action of 'leaving'. This suggests that if a subject has non-agentivity, then it cannot affect a change of state of the object and thus can possibly be collocated with the *-e iss-* construction instead of the *-ko iss-* construction, which requires agentivity.

There is supporting evidence that the difference in agentivity affected the replacement of *-e is(i)-* with *-ko is(i)-*. According to the two-component theory, an aspect marker tends to express the resultant state when occurring with telic verbs, which are Achievement and Accomplishment. However, the atelic verb *sal-* 'to live' can be combined with either *-e iss-* or *-ko iss-*, and the two constructions have different meanings: *sal-**a iss-ta*** means 'to be alive', whereas *sal-**ko iss-ta*** means 'to be living'. According to M. Kim (2003), in Middle Korean, both meanings, "alive" and "living," were expressed with *-e is(i)-*. But as we have seen, the *-e is(i)-* construction started to be replaced by *-ko is(i)-* as the frequency of *-ko* expanded over time. Therefore, *-ko is(i)-* selected the meaning of living, which has agentivity, while *-e is(i)-* selected the meaning of being alive, which has non-agentivity. This suggests that agentivity also plays an important role in determining the distinction between the two Korean aspectual markers.[42]

Taking all things into consideration, the selection of the two aspectual markers is closely intertwined in a complementary distribution depending on temporal duration,

---

[42] Lee (1991) claims that the difference between "alive" and "living" in Korean is dynamicity, which I believe is closely related to agentivity.

verb semantic type, transitivity, and agent/patient-orientedness. No single factor determines the selection of the aspectual marker in Korean. In order to understand the whole picture of the Korean aspectual system, a syntactic approach considering transitivity and agentivity, in addition to the two-component theory as a theoretical framework, is necessary. As mentioned in Chapter 2, Shirai (2000) suggested an integrated approach to the Japanese imperfective *-te i-*. Shirai's integrative approach is compatible with the aspectual system in Korean, in which two resultative markers (*-ko iss-* and *-e iss-*) are distinguished depending on transitivity. This unified approach that integrates the syntactic approach and the two-component theory helps provide a comprehensive explanation of the Korean aspectual system.

### 4.2.5 Summary

So far, based on empirical evidence, I've examined the historical development of the Korean aspectual system and the development of the Korean aspectual markers along two pathways: the perfective path and the imperfective path. In summation, the *-e is(i)-* construction has been grammaticalized into the perfective/past *-ess-* (the perfective path), whereas the *-ko is(i)-* construction has been grammaticalized into the progressive *-ko iss-* (the imperfective path) after the historical replacement of *-e is(i)-* with *-ko is(i)-*.

Based on Middle Korean texts, the *-ko is(i)-* construction in the 15th c. was used to denote the resultative state and the continuous/durative state rather than the progressive meaning because the existential verb *is(i)-* was more compatible with the resultative and durative state in the early stage of its grammaticalization. With the spread of the connective *-ko* from the 15th through 17th c., the historical replacement of *-e is(i)-* with *-ko is(i)-* began selectively. The criteria for the replacement were transitivity and agentivity. The correlation between agentivity and transitivity is that a transitive verb tends to have an agent who performs an action and affects an object, while an intransitive verb does not overtly express an agent and usually focuses on a change of state. That is why the *-ko iss-* construction in Modern Korean tends to express the resultative state when occurring with transitive verbs, while the resultative *-e iss-* tends to occur with intransitive verbs.

The advancement to the progressive aspect was observed in the 18th c. Although there is no agreement on the exact time when the *-ko is(i)-* construction was used to

denote the action-in-progress meaning, it is agreed by most linguists that the progressive meaning of *-ko is(i)-* showed late development. In Modern Korean, the *-ko is(i)-* construction expanded its power and further grammaticalized into the progressive aspect marker. The grammaticalization of *-ko is(i)-* into the progressive aspect marker completed the imperfective path of the Korean aspectual system, which had lacked the progressive aspect until then. I hypothesized that the motivation for the development of *-ko is(i)-* into the progressive aspect was the need to fill the gap in the grammatical paradigm (Hopper & Traugott, 1993).

## 4.3 Ongoing Imperfective Grammaticalization of *-ko iss-*

Considering all the historical evidence and findings from the study of the Modern Korean aspectual system reported in Chapter 3, I suggested a new imperfective pathway of the grammaticalization of Korean aspect, illustrated in Figure 4.2. I argued that the progressive aspect of the *-ko iss-* construction developed later because the existence meaning of the periphrastic construction *-ko iss-* is more compatible with the resultative and durative state than the progressive meaning. In addition, some empirical examples from Middle Korean texts were provided as supporting evidence for these claims.

**Figure 4.2**

*The Imperfective Developmental Path of* **-ko iss-**
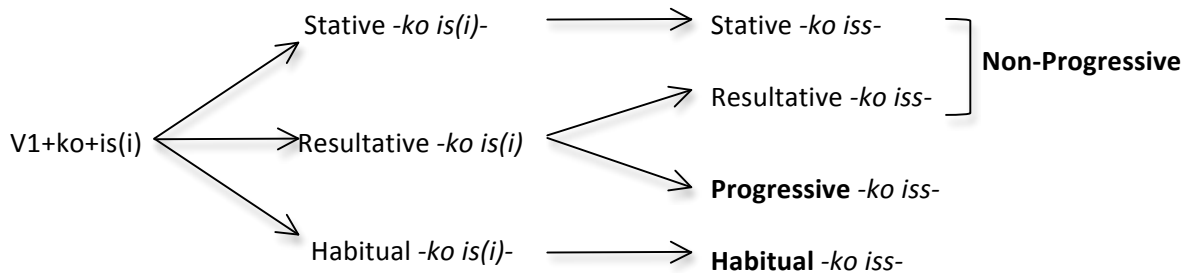


Comparing my suggestion to the universal path of grammaticalization that Bybee et al. (1994) proposed, shown in (80b), the discrepancy between the two is that the progressive aspect in Korean develops later in the grammaticalization of the imperfective.

The imperfective aspect marker in Korean has gone through a unique process of grammaticalization in comparison to the universal paths of grammaticalization proposed by Bybee et al. (1994). It seems that the Korean imperfective grammaticalization pathway has gone in the opposite direction, because the *-ko iss-* construction in the early stage had a more general meaning, encompassing all states and situations in the extended time span. The progressive meaning is more specific and is obtained only with more limited types of verbs (e.g., dynamic or action verbs) in reference time. The *-ko iss-* construction in the early stage of grammaticalization could collocate with stative verbs to express the non-progressive meaning. In Korean, therefore, *-ko iss-* was used as the aspectual marker implying the non-progressive meaning first, and then developed into the progressive aspect marker later. Based on the imperfective grammaticalization path in Korean, I speculate that there must be some crosslinguistic variations in the development of the imperfective aspectual system depending on the source constructions from which the aspectual markers are developed.

The developmental path of the imperfective *-ko iss-* provides the answer to the question of why *-ko iss-* has multiple uses in discourse contexts in Modern Korean. According to Bybee et al. (1994), the multiple uses of a grammatical morpheme can be traced to the grammaticalization path the form follows. This explains the multiple uses of *-ko iss-* found in the data for the study described in Chapter 3.

The question that next arises is in regard to the degree of the grammaticalization of *-ko iss-* based on the results of the study on the Modern Korean aspectual system discussed in Chapter 3. The frequent uses of *-ko iss-* are, in descending order, action-in-progress (401 out of 1,343 tokens, 29.8%), dynamic resultative (20%), continuing state (16.6%), and habitual (15%). Thus, the frequency of the progressive use of *-ko iss-* also supports its later development along the grammaticalization path of the imperfective aspect in Korean. In general, a grammatical morpheme that developed more recently shows higher frequency than in the earlier stages of grammaticalization. The other uses of *-ko iss-*, however, show considerable frequency as well (29.8% vs. 20% vs. 16.6% vs. 15%). This indicates that although the *-ko iss-* construction developed into the progressive aspect later, its old uses continue to coexist with and interact with the newer grammatical functions. This phenomenon may be explained as "layering," one of the five

principles of grammaticalization proposed by Hopper (1991). According to Hopper, new layers are continually emerging within a broad functional domain. However, the older layers are not necessarily discarded. In the case of *-ko iss-*, the older uses of the habitual, the stative, and the resultative still appear at considerably high frequencies. Consequently, we cannot conclude that *-ko iss-* is exclusively the progressive aspect, but it is rather the continuous aspect encompassing the non-progressive under the category of the imperfective as Comrie (1976) proposed. In this view, as a general imperfective marker, *-ko iss-* expresses various meanings of imperfectivity in discourse, and the specific meaning is determined by the interaction between the general imperfective meaning and the inherent lexical aspect of verbs as well as other contextual information including temporal adverbials, pragmatic context, and the speaker's involvement or interest in the interaction. This explains the multiple uses of *-ko iss-* in Modern Korean discourse and why there has been no consent on the grammatical category of *-ko iss-*.

In the next section, I will discuss the mechanisms and the principles involved in the grammaticalization of the imperfective *-ko iss-* and its ongoing grammaticalization path in more detail based on grammaticalization theory.

## 4.4 Principles of Grammaticalization and the Imperfective *-ko iss-*

### 4.4.1 The mechanisms of grammaticalization

As a kind of language change, the process of grammaticalization involves several mechanisms of linguistic change such as semantic change, structural reanalysis, formal reduction, and analogical spread. Semantic change triggers structural reanalysis and often results in formal reduction or phonological attrition. Many linguists consider that reanalysis is key to structural change in grammaticalization (Heine et al., 1991; Hopper & Traugott, 1993). In dealing with cases of reanalysis in Korean, Sohn (1996) indicated that the typical reanalysis process turns a structure like A, B, C into a new structure like (A, B) C; A (B, C); or (A, B, C). He also stated that reanalysis involving boundary loss is the most productive example of grammaticalization in that it involves semantic-pragmatic shift and morphosyntactic reduction, and frequently results in phonological attrition.

### 4.4.1.1 Semantic change in the grammaticalization of -ko is(i)-

One of the features associated with grammaticalization is an increase in abstractness, which is considered a unidirectional process. Traugott and König (1991) argued that grammaticalization is unidirectional in the course of the meaning shift from the propositional to the textual to the expressive level. Pragmatic meaning tends to increase whereas semantic content may be reduced in the early stages of grammaticalization. In addition, meaning tends to shift from objective, referential meanings towards more subjective meanings that express speaker-based attitudes and viewpoints, but not in the reverse direction.

The auxiliary verb construction -ko iss- developed from a periphrastic construction that consisted of the conjunctive suffix -ko and the existential verb is(i)- in Middle Korean. With the spread of the use of -ko from the 15$^{th}$ c. through the 17$^{th}$ c., the -ko is(i)- construction came to be more frequently used in the sequential construction of V1 and exist. As a consequence, the existential meaning of is(i)- became more generalized and led to the derivation of aspectual meaning from this construction. Semantically, grammaticalization is the process by which a word or a morpheme gradually loses its original meaning and gains a more abstract meaning. This can be explained by the term "generalization" that is used to refer to "the loss of specific features of meaning with the consequent expansion of appropriate contexts of use for a grammatical morpheme" (Bybee et al., 1994, p. 289). As a grammatical morpheme loses more and more of its original meaning through semantic bleaching and further generalizes, so its interpretation gradually depends more on the meaning contained in the context. Hence, the context-dependent nature of -ko iss- in Modern Korean that was discussed in Chapter 3 may be regarded as the result of its semantic generalization.

### 4.4.1.2 Structural change and reanalysis

Korean takes a converb type when combining clauses to form a complex sentence (Haspelmath & König, 1995; Lee, 2005; Rudnitskaya, 1998). Unlike English, the combined two clauses of Korean take different forms in terms of finiteness, that is, only the main clause takes the finite verb but the subordinate clause does not. This type of converb makes two clauses more tightly connected to each other both syntactically and

semantically (Lee, 2005). The closeness between two clauses tends to form a verb chaining structure in which verbs are conjoined adjacently. This phenomenon frequently occurs in clause combining in Korean. A device for linking clauses such as a coordinator, a connective, or a complementizer attaches to a verb stem. In Korean, a verb stem cannot stand alone, and is required to take a terminal suffix in order to form a verbal complex.

A notable point regarding the verb chaining structure in Korean is that the boundary between these suffixes is not clear and the same suffixes may have multiple grammatical functions. Among the verbal suffixes, one of the most frequently used morphemes is the verbal suffix *-ko*.[43] There are five basic types of embedded clauses in a complex sentence in Korean (Sohn, 1999). The embedded clause usually precedes the main clause, and typically ends in an inflectional verbal suffix such as CNJ (conjunctive suffix), RL (relativizer suffix), CMP (complementizer suffix), or NOM (nominalizer suffix). Among the different types, the verbal suffix *-ko* may be used in a conjunctive clause, complement clause, and quotative clause. The boundary between these different categories has long been discussed from the grammaticalization perspective (Ho, 2003; Oh, 1998; Rhee, 1996; Sohn, 1999).

The verbal suffix *-ko* has been actively involved in the process of grammaticalization in Korean. A number of studies in functional and typological linguistics have demonstrated that linguistic categories are in general not discrete, but exist on a continuum (Englebretson, 2009; Fielder, 2009; Hopper & Thompson, 1980, 1984; Langacker, 1987; Okamoto & Ono, 2008; inter alia). Their findings support the claim that linguistic items achieve their categories through use in discourse, that is, categoriality is a result of use of patterns in discourse. As previously mentioned, the verbal suffix *-ko* is used not only as a clausal connective in clausal conjunctive constructions (CCCs) but also as a complementizer in auxiliary verb constructions (AVCs),[44] although the boundary between the three categories is not clear and is still debated.

---

[43] Another frequently used verbal suffix in Korean is *-e/a*, but the verbal suffix *-ko* is focused on for this dissertation.

[44] The V-*ko* V construction in Korean is further classified into four grammatical categories: clausal conjunctive constructions (CCC), serial verb constructions (SVC), auxiliary verb constructions (AVC), and compound verbs (CV).

I will discuss how the clausal conjunctive construction (CCC) *-ko is(i)-* is involved in not only semantic change but also structural change into the auxiliary verb construction (AVC) *-ko iss-* in Korean.

AVCs are defined as monoclausal structures in which one verbal element expresses lexical meaning and the second one displays grammatical, functional information (Anderson, 2006, as cited in Choi, 2011). Traditionally, the key function of AVCs is to assist and help the lexical verb to play a role as a main verb in the sentence. Mostly, auxiliary verbs express the meaning of aspect, modality, and tense so that they can be said to function as a grammatical element (Kim, 1996; Lee, 1992; Park, 1996). As shown in (101), the verb *iss-* 'to exist' is used as a main verb in (101a) and as an auxiliary verb in (101b), where it expresses the aspectual progressive meaning.

(101) a. Nongpwu-ka path-ey **iss-**ta.

       farmer-NM  farm-at  **exist**-DC

       'A farmer is at the farm.'


   b. Nongpwu-ka path-eyse ilha-**ko iss**-ta.

     farmer-NM  farm-at   work-**Prog**-DC

     'A farmer is working at the farm.'


Let us now discuss the criteria for distinguishing an auxiliary verb from a main verb. Heine (1993) presented 22 properties of AVCs. Most of them can be applied to both SVCs and AVCs and only a few distinctive features of AVCs appear as follows:

1. Auxiliaries tend to provide expressions for a small range of notional domains, especially for the domains of tense, aspect, and modality, as well as a few other functional domains.
2. They form a closed set of linguistic units.
3. They express grammatical functions but exhibit, at least to some extent, a verbal morphosyntax.
4. While having some verbal properties, they also show a reduced verbal behavior, having, for example, "highly defective paradigms."

5. They may not be the (semantic) "main predicate" of the clause.

6. They tend to be cliticizable or necessarily clitic.  (Heine, 1993, p. 22–24)


Based on the criteria presented by Heine (1993), I will argue that the clausal conjunctive construction (CCC) *-ko is(i)-* has gone through structural change into the auxiliary verb construction (AVC) *-ko iss-*.

First, an auxiliary verb shows a tendency to not be separated from a main verb because of its dependence. For example, other grammatical elements are not permitted between the main verb and the auxiliary verb except for particles such as *-man* 'only', *-nun* 'as for', and *-to* 'also', as in (102a).

(102) a. Yenghuy-ka    ku  hoysa-eyse  ilha-**ko-(nun) iss**-ta.

Yenghuy-NM the company-at work-**ko-(TC) iss**-DC

'Yenghuy is working at the company.'


   b. Yenghuy-ka    ku  hoysa-eyse  ilha-**ko**    **(chaksilhi) iss**-ta.

Yenghuy-NM the company-at  work-**and (steadily) stay**-DC

'Yenghuy works at the company and stays (steadily) there.'


As you can see in (102a), the insertion of the particle *nun* does not affect the meaning of the auxiliary verb. By adding an adverb as in (102b), on the other hand, the grammatical function as an auxiliary verb disappears and the second verb *iss-* 'to stay' becomes a main verb in the CCC. Similarly, negation of an AVC affects the whole predicate of the sentence, and it is not possible to partially negate it as shown in (103).

(103) a. Yenghuy-ka    ku  hoysa-eyse   ilha-**ko iss**-**ci anh**-ta.

Yenghuy-NM the company-at work-**ko iss-INF not**-DC

'Yenghuy is not working at the company.'


   b. *Yenghuy-ka    ku  hoysa-eyse  ilha-**ko**    ***an iss**-ta.

Yenghuy-NM the company-at work-and **not** exist-DC

Second, an auxiliary verb cannot directly take arguments because it is not a main predicate of the clause.

(104) Emeni-ka    apeci-lul   kitali-**ko iss**-ta.
    mother-NM father-AC wait-**ko iss**-DC
    'Mother is waiting for father.'

In (104), the main verb *kitali-* 'to wait' is transitive so it takes an object, although the verb *iss-* 'to exist' is intransitive.

Based on the criteria described in this section, V1 + V2 are more closely combined in AVCs than CCCs. Thus, the auxiliary verb tends to depend on the main verb and is difficult to separate from it. As mentioned earlier, AVCs historically developed from CCCs through a grammaticalization process (Kim, 1996; Oh, 1998; Rhee, 1996; You, 1996). The two verbs V1 + V2 in CCCs went through structural reanalysis to become AVCs, and finally, V2 gained a new grammatical function.

### 4.4.2 Principles of grammaticalization

Many studies that analyze the tense-aspect-modality of Korean complex verb constructions have been conducted from the grammaticalization perspective (Ho, 2003; Oh, 1998; Rhee, 1996; Sohn, 1999). In the grammaticalization of the imperfective aspect *-ko iss-*, some principles of grammaticalization are involved. In this section, I discuss the principles and the mechanisms of the grammaticalization of the imperfective *-ko iss-*. The application of some assumptions on grammaticalization is possible, although a number of diverse theoretical viewpoints on grammaticalization have been presented by many linguists. In their crosslinguistic studies on tense, aspect, and modality, Bybee et al. (1994) presented five major mechanisms of semantic change that they argued account for the grammaticalization of grammatical morphemes: metaphor, inference, generalization, harmony, and absorption of contextual meaning. Hopper (1991) suggested that grammaticalization should be distinguished from language change as it involves certain general processes and mechanisms of change, beginning with one stage and ending with another.

*Persistence in the dual functions of -ko iss-*

Based on some of the general assumptions on grammaticalization from a crosslinguistic perspective, five principles of grammaticalization have been proposed by Hopper (1991): (1) layering, (2) divergence, (3) specialization, (4) persistence, and (5) de-categorization. These five principles are defined by Hopper (1991, p. 22):

1. *Layering*: "Within a broad functional domain, new layers are continually emerging. As this happens, the older layers are not necessarily discarded, but may remain to coexist with and interact with the newer layers."

2. *Divergence*: "When a lexical form undergoes grammaticalization to a clitic or affix, the original lexical form may remain as an autonomous element and undergo the same changes as ordinary lexical items."

3. *Specialization*: "Within a functional domain, among competing forms, only a small number eventually assume more general grammatical meanings."

4. *Persistence*: "When a form undergoes grammaticalization from a lexical to a grammatical function, so long as it is grammatically viable some traces of its original lexical meanings tend to adhere to it."

5. *De-categorization*: "Forms undergoing grammaticalization tend to lose or neutralize the morphological markers and syntactic privileges characteristic of the full categories Noun and Verb, and to assume attributes characteristic of secondary categories such as Adjective, Participle, Preposition, etc."

Of the numerous mechanisms of language change, the mechanisms relevant to grammaticalization presented by Hopper and Traugott (1993) include semantic change, structural reanalysis, formal reduction, and analogical spread. Semantic change from less abstract to more abstract concepts is the cognitive base for grammaticalization (Heine et al., 1991). Meaning shifts affected by such conceptual modifications result in the reanalysis of grammatical structure. Formal reduction accompanies the reanalysis, including phonological attrition as well as morphosyntactic reduction. For example, the English *going to* has been reduced to *gonna*, and *got to* to *gotta*. Finally, analogical

spread of locally grammaticalized forms generalizes the new grammatical forms and establishes them as a new grammatical category; for instance, *going to/gonna* and *want to/wanna* function as modal auxiliaries in English.

Korean auxiliary verb constructions are also considered to have developed from corresponding main verbs, and verbal serialization is considered the most important mechanism in the development of Korean auxiliary verb constructions (Ho, 2003; Kim, 1996; Oh, 1998; Rhee, 1996; Sohn, 1999). The auxiliary verb construction *-ko iss-* has developed from a periphrastic construction that consisted of the conjunctive suffix *-ko* and the existential verb *(i)si-* in Middle Korean (Huh, 1975, 1989; Jeong, 2003, 2007a, 2007b; Kim, 2003; Rhee, 1996). The *-ko is(i)-* construction became more frequently used in the sequential construction of V1 and exist. In turn, generalization of the existential meaning of *is(i)-* led to the derivation of aspectual meaning from this construction. Theoretically, when a durative meaning is derived from the *-ko is(i)-* construction, it is expected to be more susceptible to the resultative interpretation than the progressive one. This is because the two verbs in the construction (V1 *-ko-*'exist' *is(i)-*) are sequentially connected and the existential verb is located in the V2 position (resultative duration). This phenomenon can be explained by the principle of persistence, one of the principles of grammaticalization proposed by Hopper (1991) and presented above. When a form grammaticalizes from a lexical to a grammatical function, its original lexical meanings still leave some traces. In other words, the more grammaticalized a form is, the less of its original meaning is left. Therefore, in the grammaticalization of the imperfective aspect in Korean, the resultative *-ko iss-* developed first because the resultative meaning of *-ko iss-* is closer to the original meaning of the *-ko iss-* construction.

There is historical evidence that the resultative *-ko iss-* developed first. A connective *-kose* 'and; and then' was also derived from the resultative meaning of the *-ko is(i)-* construction in the history of the Korean language (Kim, 2003). The result of the grammaticalization process of the connective *-kose* can be found in Modern Korean because the trace of the existential verb and its durative meaning still remains in the connective *-kose*. Even though grammatical items go through semantic/syntactic changes or phonological change during the grammaticalization process, the meanings of the original linguistic forms continue after the change. The connective *-kose* illustrates this

principle of persistence. As shown in (105), both *-ko* 'and' and *-kose* 'and; and then' have the sequential function, but they are not used interchangeably in this case.

(105) Nwun-ul   kam-**ko/\*kose**   tte-ss-ta.

     eyes-AC   close-CNJ       open-PST-DC

    '(He) closed his eyes and then opened (them).'

This is because there is no time for duration after the completion of the first event when it comes to closing and then opening eyes in this example. In contrast, it is possible to use the connective *-kose* when the second action happens within the duration of the first action as in (106).

(106)  Nwun-ul     kam-**kose**     pil-ess-ta.

     eyes-AC    close-CNJ    pray-PST-DC

    '(He) closed his eyes and prayed.'

In this example, praying can be done in the period during which the eyes are closed. The connective *-kose* still has the resultative meaning because it was derived from the *-ko is(i)-* construction. Therefore, we can empirically prove that the *-ko is(i)-* construction developed first as the resultative rather than the progressive aspect marker.

      This principle of persistence also explains why the so-called stative verbs collocated with the *-ko is(i)-* construction in Middle Korean and expressed the continuous/durative state, as mentioned earlier. The stative verbs are not involved with any movements or locations, so the existential verb *-iss-* of *-ko iss-* was more associated with them. Moreover, the *-ko is(i)-* construction could collocate even with some adjectives in Middle Korean. In addition, in Chapter 3, I demonstrated *-ko iss-* occurring with adjectives in Modern Korean from the data for the present study. As such, it can be concluded that the principle of grammaticalization verifies the imperfective path of *-ko iss-* in the early stage of grammaticalization, as proposed in Figure 4.2.

      The development of *-ko is(i)-* into the progressive aspect can also be verified by the principle of persistence. According to the definition of Bybee et al. (1994, p. 136), the

original meaning of the progressive construction is "the subject is located in the midst of doing something." Unlike past or present tense, the semantics of the progressive aspect is formed compositionally of two basic components. This is in accord with Dahl's (1985, as cited in Rhee, 1996) observation that 95% of the progressives in his crosslinguistic data are periphrastically expressed. This first establishes the concept of "a state at a given moment of time" and the concept of "ongoingness of an action," and then indicates that the two are overlapping. Usually, this periphrastic construction of the progressives consists of the existential, locative or copula verbs, and connective devices. The Korean progressive *-ko iss-* is composed of a connective particle (*-ko*) and an existential/locative verb (*iss-*). The connective *-ko* contributes most to deriving the progressive meaning of the *-ko iss-* construction in the sense that the connective *-ko* isolates the two domains, whereas use of another connective *-e* 'and' would unify them as a unit in which the two denoted events would be sequential. Based on the usage of *-ko* and *-e* in Modern Korean, the connective *-ko* is used more like a simultaneous marker, while the connective *-e* is a sequential marker (Choi, 1965). Heine (1994, p. 269, as cited in Rhee, 1996) presents the Sequence Schema "X V1 X V2" that can, for example, represent a proposition that "he stays and eats." In this proposition, there would be no way of deriving the progressive meaning from it if the connective *and* meant strict sequentiality of bound events. It should signal that *staying* and *eating* are events of equal status and that they are temporally overlapping. This explains how the *-ko iss-* construction developed into the progressive aspect. Furthermore, this explanation justifies how the *-e iss-* construction developed into the resultative aspect marker. The connective *-e* sequentially connects two events and the existential verb is located in the V2 position, and thus derives resultative duration.

Here, we can find the answer to the longstanding question of why the *-ko iss-* construction has dual functions as the progressive as well as the resultative. This is due to the dual functions of the connective *-ko* as a simultaneous marker as well as a sequential marker. The *-ko is(i)-* construction in Middle Korean could first develop into the resultative aspect marker due to the sequential function of *-ko*, while it could later develop into the progressive aspect marker due to the simultaneous (overlapping) function of *-ko*. In conclusion, I propose that the dual functions of the *-ko iss-*

construction in Modern Korean are due to the dual functions of the connective *-ko* in the source construction of the grammaticalization.

## 4.5 Progressive Aspect *-ko iss-*: Motivations for Grammaticalization

### 4.5.1 Transitivity, agentivity, and dynamicity

The question, then, arises as to what motivations underlie the processes of semantic development into the progressive aspect in the imperfective path of the grammaticalization of *-ko iss-*. The changes in semantics and structures are made possible in the local discourse contexts where pragmatic inferences are gradually semanticized through frequent use (Traugott & Dasher, 2002). In recent studies, it has been demonstrated that frequency has a crucial role in grammaticalization in that semantic force and impact of a construction are weakened and become more general when a construction frequently and repeatedly occurs in a local context (Bybee & Hopper, 2001; Haiman, 1994; Bybee, 2001, as cited in Kim, 2003). As a consequence, a series of words or phrases is used together frequently and gradually perceived as a single processing unit. Later, this construction gains a pragmatic inference in the local context where it is frequently used and the pragmatic inference becomes semanticized.

In the early stage of its grammaticalization, the *-e is(i)-* construction could collocate with diverse types of predicates regardless of the transitivity of the verbs. As the connective *-ko* increasingly expanded from the 15th c. to the 17th c., the *-ko is(i)-* construction started to replace the *-e is(i)-* construction (Jeong, 2002; Kim, 2003; Lee, 1981). One of the important criteria for this replacement is transitivity, as discussed earlier. Due to the replacement, the local context of the grammaticalization of *-ko is(i)-* underwent change in the type of collocations in which it could occur. The replacement had a strong influence on the Korean aspect system, creating a difference between the resultative aspect *-e iss-* and the progressive aspect *-ko iss-*.[45] Based on the aspect system in Modern Korean, all transitive and intransitive verbs may occur with the progressive *-ko iss-*, whereas the resultative *-e iss-* tends to collocate with a limited number of telic

---

[45] Although the *-ko iss-* construction is also used to express a resultative state in Modern Korean, the *-e iss-* construction is representative of the resultative aspect in the aspectual system in Korean.

intransitive verbs, as illustrated in (107). The verb *mantul-* 'to cook' in (107) does not collocate with the *-e iss-* construction because it is a transitive verb.

(107) John-un    achim-ul        mantul-**ko iss-/\*e iss**-ta.

     John-TC   breakfast-AC    cook-**Prog-/\*Resl**-DC

     'John is cooking breakfast.'

Generally, transitive actions are correlated with the progressive meaning because a transitive sentence usually consists of an agent, a predicate, and an object/experiencer. In a transitive sentence, an agent performs an action, which normally requires some temporal duration, and thus the transitive sentence is quite compatible with the progressive meaning. In a transitive sentence, however, an agent's action is not focused; the change-of-state, which is normally punctual, is more focused. Consequently, the intransitive sentence is compatible with the resultative meaning. These frequent collocational patterns were the local discourse context for the grammaticalization of the progressive *-ko iss-* and the resultative *-e iss-*. The collocational patterns in local discourse contexts triggered the semantic change of the *-ko iss-* construction to express the progressive meaning.

### 4.5.2 Intersubjectivity (Traugott & Dasher, 2002)

Several possible motivations for the development of a grammatical morpheme have been proposed such as the discourse-pragmatic need to be informative, clear, and expressive and the need to fill gaps in grammatical paradigms or in the universe of abstract concepts (Hopper & Traugott, 1993). Traugott and Dasher (2002) developed the widely recognized hypothesis that the primary driving force in the processes of regular semantic change is pragmatic. The context-dependency of abstract structural meanings allows for change in situations of use. Their view is that polysemy is central to a theory of semantics and semantic change. It arises out of processes of invited inferencing. How pragmatic inferences are employed in any situation is a matter of language use. In semantic changes, two mechanisms are usually recognized: metaphor and metonymy. It has been often asserted that metaphor is one of the most frequently used mechanisms of

language change, especially in grammaticalization, in which metaphoric semantic transfer is observed (Heine et al., 1991). Heine et al. (1991) suggested a transfer from the concrete (physical) to the abstract (mental). Another mechanism of language change is metonymy. There are several different types of metonymy, one of which, pragmatic inferencing, involves more discourse-orientation. Pragmatic inferences involve semantic evaluation and the adjustment of a linguistic form from the discourse. From this pragmatic view, subjectivity and intersubjectivity are central to a theory of semantics and semantic changes. Intersubjective meanings are interpersonal and arise directly from the interaction of the speaker with the listener (Traugott & Dasher, 2002).

A progressive marker usually involves ongoing activities and is used with predicates that describe an overt activity or a state that is "developing by degree" (Hatcher, 1951, p. 268, as cited in Bybee et al., 1994). As a result, the progressive implies a greater involvement of the subject in the activity: Either the subject is an active agent or the subject is affected by the action. This explains the fact that the progressive *-ko iss-* in Korean has a strong tendency to collocate with transitive verbs as discussed earlier. This implication of the progressive meaning makes the stative progressive meaning possible in discourse. The progressive can change the interpretation of the predicate to a dynamic one that involves an agent; and the more agentive, the more dynamic. Let us consider Example (54) from Chapter 3 again:

(54)

| 5 | P1: Mak | phayn-i-nikka | mak | nwun-i | hwak | tolaka-canha, |
|---|---|---|---|---|---|---|
| | wildly | fan-be-because | wildly | eye-NM | suddenly | turn-ENDER |

      'Because (they) are a fan, their eyes are suddenly turning,'

6      P2: E

      Oh

7      P1: kulayse mak  nolay-lul ttala  pwull-e  mak  cohaha-**kwu iss-**e.

      so      wildly song-AC  follow  sing-Pres wildly like-**Prog**-DC

      'so (they) are wildly singing along, and they are wildly liking it.'

8      P2: (laughing)

In this example, P1 is describing vividly how fans at a concert were excited, so he uses the stative progressive *cohaha-**kwu iss**-e* (like-**Prog**-DC 'to be liking') in line 3. Here, the State type verb shifts to the Activity type so that it can take the progressive *-ko iss-* to convey the vividness of the situation. Furthermore, the predicate *cohaha-* 'to like' is not an overt activity but a state of emotion; thus, its aspectual meaning is normally continuous state when it occurs with the *-ko iss-* construction, as discussed in the previous chapter. In this situation, however, the discourse explicitly signals that the state *cohaha-* 'to like' is being described as if it is a dynamic event. What makes it a dynamic event is the involvement of the subject. Moreover, the involvement of the subject is increased by the use of the sentential adverbial *mak* 'wildly, violently', which implies that an agent is actively performing an action. The English progressive also has the same implication that the involvement of the subject is increased by the use of the progressive (Bybee et al., 1994).

The increase in the subject's involvement by the use of the progressive *-ko iss-* is also observable in a narrative situation. If, when narrating past events, the present tense verb is employed, the effect is one of making past events more vivid. More recently, analysts of its use in conversation have argued that it functions not by making an event present, but by marking segments of a narrative as foregrounding events (that is, signaling that one event is particularly important, or relevant to others), and marking a shift to evaluation (Brinton, 1992, p. 221). That is, a speaker's subjective judgment and evaluation is an important reason why the speaker uses the narrative present for past situations. In Korean, the narrative present is mostly expressed by the progressive *-ko iss-* rather than the present tense. This is because the employment of the progressive *-ko iss-* increases the subject's involvement more than the employment of the present tense. In narration, a speaker is usually aware of the listener so that the situation is interpersonal. The increase in the use of the progressive *-ko iss-* in narration indicates that the progressive involves more interpersonal interaction between the speaker and the listener. This accords with the notion of intersubjectivity, which Traugott and Dasher (2002, p. 20) explained as follows: "Speakers constitute themselves as 'subject' in saying 'I' and in contrasting themselves with 'you'. In communication, each participant is a speaking

subject who is aware of the other participant as speaking subject." Intersubjectivity explains the use of *-ko iss-* for the narrative present.

The contrast between the following example in (108) and the examples in (72) clearly indicates the intersubjectivity of *-ko iss-*.

(108) Hankwuke program-un enehak-kwa-ey        sokha-n-ta. / *sokha-**ko iss**-ta.

　　Korean program-TC    Linguistics Department-to belong-Pres-DC/*belong-**ko iss**-DC

　　'The Korean language program belongs to the Linguistics Department.'

In this example, the verb *sokha-* 'belong to' cannot collocate with the *-ko iss-* construction. Instead, the simple present tense marker can occur with the verb *sokha-* 'belong to'. In this regard, Lee (2006) claimed that there are only a few stative verbs in Korean such as *sokha-* 'belong to', and they cannot occur with the *-ko iss-* construction. However, we can see that some speakers do use the *-ko iss-* construction with the verb *sokha-* 'belong to' in a situation where there are listeners. Let us consider Example (72) from Chapter 3, repeated here, which comes from naturally occurring spoken data:

(72)

1　　Ikes-ul  wuli-ka kwulcel-hyeng    ene-ta        yayki-hako

　　this-AC  we-NM inflectional-form language-PLN say-QT

　　'We say that this is an inflectional language, and…'

2　　ike-l    wuli-ka  al-ko iss-nun    yenge-latunka pwule  tokile

　　this-AC  we-NM  know-Cont-RL  English-or    French German

3　　ilen    into-yulep-e-ey        sokha-y iss-nun   ku

　　like this Indo-European language-to belong-Resl-RL this

4　　taypwupwun-uy ene-tul-i        ilen kwulcel ene-ey      sokha-**ko iss**-supnita.

　　most-GN      language-PL-NM this inflectional language-to belong-**ko iss**-DC

　　'most of the languages that we know belong to the Indo-European group, such as

　　English, French, and German, belong to the category of inflectional language.'

The context of this example is that a professor is delivering a public lecture to many students at a conference. He is talking about types of language and describing individual

languages as belonging to certain language families. Interestingly, in line 4, the speaker uses the *-ko iss-* construction with the verb *sokha-* 'belong to'. How can we possibly think that *-ko iss-* in this utterance sounds natural? The only difference between this and the previous example is that actual communication is going on between a speaker and listeners in a real situation in Example (72), while Example (108) is a sentence invented by the researcher. In the natural situation in Example (72), the speaker is aware of the listeners and using *-ko iss-* involves more interpersonal interaction between the speaker and the listeners. This example justifies Traugott and Dasher's (2002) pragmatic view and suggestion that intersubjectivity is a driving force of semantic change. It is intersubjectivity that causes the speaker's use of *-ko iss-* in the interpersonal situation and makes it possible for Example (108) to sound natural. This usage is a newly emerging function of *-ko iss-* in Korean, which supports my hypothesis that the motivation of the grammaticalization of *-ko iss-* into the progressive aspect marker is intersubjectivity.

Perhaps the subject/speaker's involvement is closely related to the agentivity of the transitive sentence. Kim (2003) claimed that it is agentivity that triggered the different degrees of sensitivity to transitivity in *-e iss-* and *-ko iss-*. For example, the contrast between *sal-a iss-ta* 'to be alive' and *sal-ko iss-ta* 'to be living' is made in terms of agentivity. Normally, *-e iss-* collocates with telic intransitive verbs, as mentioned earlier. However, an atelic predicate such as *sal-* 'to live' can be combined with *-e iss-* as in *sal-a iss-ta* 'to be alive' due to the un-agentivity of the *-e iss-* construction. Being alive or dead is not a subject's intention or volition. In this regard, Lee (1991) explained that the difference between the two examples is dynamicity because "living" is more dynamic than "being alive." I speculate that transitivity, agentivity, and dynamicity are somehow all related to one another and affect the collocational pattern of *-ko iss-* in a local discourse context, and thus created the motivation for the divergence of the two different aspectual markers in Korean.

### 4.5.3 Summary

Thus far, I have argued that the progressive *-ko iss-* has developed sensitivity to transitivity (including agentivity and dynamicity) and the subject/speaker's involvement (intersubjectivity). As a result, in Modern Korean, *-ko iss-* can denote the progressive

meaning and is found more commonly collocated with telic transitive verbs. Such a collocational distributional pattern in the local discourse triggered the semantic change of *-ko iss-* in the grammaticalization of the progressive *-ko iss-*. I suggest that transitivity and agentivity is the motivation for the grammaticalization of the progressive *-ko iss-* and triggered the distinction between *-e iss-* and *-ko iss-*.

## 4.6 Conclusion

In this chapter, I used the framework of grammaticalization theory to investigate the historical development of *-ko iss-* based on empirical evidence from Middle Korean texts. I attempted to prove that the multiple uses of *-ko iss-* in Modern Korean reflect the developmental path of *-ko iss-* over time in line with Bybee et al.'s claim (1994) that the multiple uses of a grammatical morpheme can be traced to its historical progress along the pathway of its grammaticalization.

In Section 4.2, I examined the historical development of the Korean aspectual system and the development of the Korean aspectual markers along two pathways based on Middle Korean texts and previous studies. In summary, the *-e is(i)-* construction has been grammaticalized into the perfective/past *-ess-* (the perfective path), whereas the *-ko is(i)-* construction has been grammaticalized into the progressive *-ko iss-* (the imperfective path) after undergoing the historical replacement of *-e is(i)-* with *-ko is(i)-*. Based on Middle Korean texts, it is clear that the *-ko is(i)-* construction in the 15$^{th}$ c. was used to denote the resultative state and the continuous/durative state rather than the progressive meaning because the existential verb *is(i)-* is more compatible with the resultative and durative state in the early stage of its grammaticalization. The advancement into the progressive aspect was observed in the 18$^{th}$ c. The grammaticalization of *-ko is(i)-* into a progressive aspect enriched and completed the imperfective path of the Korean aspectual system.

In Section 4.3, considering all the historical evidence and findings from the study of the Modern Korean aspectual system reported in Chapter 3, I suggested a new imperfective pathway of the grammaticalization of the Korean aspect marker. The imperfective aspect marker in Korean has followed a unique path of grammaticalization that contrasts with the universal paths of grammaticalization proposed by Bybee et al.

(1994). In the early stage of the imperfective grammaticalization, *-ko iss-* was used as the aspectual marker implying the non-progressive meaning first, and then developed into the progressive aspect later. The developmental path of the imperfective *-ko iss-* that I suggested could clearly explain the multiple uses of *-ko iss-* found in the data for the study conducted in Chapter 3.

In Sections 4.4 and 4.5, I applied the principles of grammaticalization theory to the imperfective *-ko iss-* and discussed the motivation for the development of the progressive aspect marker. Based on the principles of the grammaticalization theory, I proposed that the multiple functions of the *-ko iss-* construction in Modern Korean are due to the multiple functions of the connective *-ko* in the source construction. The *-ko is(i)-* construction in Middle Korean first developed into the resultative aspect marker due to the sequential function of *-ko*, and later developed into the progressive aspect marker due to the simultaneous (overlapping) function of *-ko*. Finally, I argued that the progressive *-ko iss-* developed sensitivity to transitivity (including agentivity and dynamicity) and the subject/speaker's involvement (intersubjectivity). I suggested that transitivity and agentivity motivated the grammaticalization of the progressive *-ko iss-* and triggered the distinction between *-e iss-* and *-ko iss-* in the aspectual system in Korean.

# CHAPTER 5

# PEDAGOGICAL IMPLICATIONS

## 5.1 Introduction

The results of the study presented in Chapter 3 indicate that the *-ko iss-* construction has multiple uses in discourse and that its different aspectual meanings are basically determined by the interaction between the inherent verb semantic types and the grammatical marker. Moreover, we observed that various contextual factors such as temporal adverbials, contextual information, pragmatic implicature, and speaker's interest or involvement play a crucial role in determining temporal/aspectual meanings of the *-ko iss-* construction. Therefore, we came to the conclusion that the *-ko iss-* construction has the general meaning of a continuous marker under the imperfective category and various context-dependent interpretations.

It is well-known that aspectual distinctions in languages are very subtle and the acquisition of aspectual semantics is extremely difficult for L2 learners. It is notoriously difficult for L2 learners to reach ultimate attainment in the domain of aspectual semantics (Jeon, 2011). The context-dependent nature of *-ko iss-* causes L2 learners difficulties in learning the aspectual system in Korean. We observed in Chapter 3 that different aspectual meanings of the *-ko iss-* construction are determined depending on inherent verb semantic types. In this chapter, I empirically investigate how L2 learners acquire the Korean imperfective aspect *-ko iss-* with respect to verb semantic type (in Vendler's 1967 classification). I also analyze the textbooks currently used by the participants of the study. Based on the problems found in the textbooks, I finally suggest effective methods for teaching the imperfective *-ko iss-* in the L2-Korean classroom.

## 5.2 The Aspect Hypothesis and L2 Acquisition of Aspect

### 5.2.1 The aspect hypothesis (Andersen & Shirai, 1996)

Andersen and Shirai (1996) proposed in the aspect hypothesis that learners show the universal tendency to use a particular tense-aspect morpheme only with certain aspectual classes of verbs:

1. Learners first use past (or perfective) marking predominantly with Achievement and Accomplishment verbs, eventually extending their use to Activity and finally to State verbs.
2. In languages that distinguish the perfective-imperfective aspect, perfective past precedes imperfective past. The imperfective starts with States and gradually spreads to Activity and telic verbs.
3. In languages that have a progressive aspect, progressive marking begins with Activity verbs, then extends to Accomplishment and Achievement verbs.
4. Progressive marking is not incorrectly overextended to State verbs.

The aspect hypothesis claims that there is a universal developmental sequence of tense-aspect markers: the past tense form starts with Achievements, and progressive marking proceeds from Activities to Accomplishments or Achievements. This is because the prototypical progressive meaning is action-in-progress, so Activity verbs are more compatible with the progressive meaning. Another finding of the primacy of the aspect hypothesis is that overgeneralization of progressive marking with States does not occur in the acquisition of aspect morphology. The aspect hypothesis has been verified through various crosslinguistic studies (Bardovi-Harlig, 2000), and some studies have extended to the investigation of the acquisition of the imperfective aspect (Lee & Kim, 2007; Li & Shirai, 2000; Sugaya & Shirai, 2007, as cited in Shirai et al., 2010).

However, it is problematic to apply the aspect hypothesis to the Korean imperfective because of language-specific features of the Korean aspectual system. First, a number of verbs in Korean display aspectual features of both Activity and Accomplishment because Korean does not have articles (Lee, 2011). Second, the so-called stative verbs in Korean (e.g., *al-* 'to know' and *mit-* 'to believe) can occur with the

*-ko iss-* construction, and these verbs have the continuing stative interpretation with *-ko iss-*. Third, some verbs with *-ko iss-* denote either the progressive or the resultative depending on the context (e.g., *ip-* 'to wear', *sin-* 'to put on (shoes), *tul-* 'to carry'). As such, Korean has a different aspectual classification of verbs, and its aspectual system is so sophisticated and complicated that the traditional definition of *-ko iss-* as a progressive marker should be reconsidered as a continuous aspect encompassing progressive and non-progressive (i.e., resultative, stative) under the category of the general imperfective. In this chapter, I describe an experimental study that I designed and conducted based on the account of the Korean aspectual system that I presented in Chapter 3. Table 5.1 shows the aspectual meanings of the imperfective aspect marker *-ko iss-* in terms of verb type in Korean.

**Table 5.1**

*Imperfective **-ko iss-***: *Meanings in Terms of Verb Type*

| Verb type | Aspectual meaning | Example |
|---|---|---|
| **Activity** | Progressive | *Swuci-nun  talli-**ko iss**-ta.*<br>Suzie-TC   run-Prog-DC<br>'Suzie is running.' |
| **Accomplishment** | Progressive | *Swuci-nun  os-ul          mantul-**ko iss**-ta.*<br>Suzie-TC   clothes-AC  make-Prog-DC<br>'Suzie is making a suit.' |
| **Achievement** | Progressive | *Swuci-nun  yangmal-ul    sin-**ko iss**-ta.*<br>Suzie-TC    socks-AC     put on-Prog-DC<br>'Suzie is putting on a pair of socks.' |
|  | Resultative | *Swuci-nun   kapang-lul   tul-**ko iss**-ta.*<br>Suzie-TC     bag-AC         carry-Resl-DC<br>'Suzie is carrying a bag.' |
| **State** | Stative | *Swuci-nun  ku salam-ul      al-**ko iss**-ta.*<br>Suzie-TC   that person-AC  know-Cont-DC<br>'Suzie knows him.' |

Taking these language-specific features of Korean into account, the present study empirically investigates how L2 learners acquire the Korean imperfective aspect marker -*ko iss-* with respect to verb type. In the present study, I hypothesize that L2 acquisition of the Korean imperfective aspect marker *-ko iss-* will show language-specific

developmental patterns, which does not fully accord with the aspect hypothesis (Andersen & Shirai, 1996).

**5.2.2 Previous L2 acquisition research on the imperfective aspect**

Previous studies have focused on the acquisition of aspectual morphology, especially the interaction between lexical aspect and grammatical aspect. Andersen and Shirai's (1996) aspect hypothesis proposes that learners show a universal tendency to use a particular tense-aspect morpheme only with certain aspectual classes of verbs. First, let us briefly review the L2 acquisition of the Japanese imperfective *-te i-*. The Japanese imperfective *-te i-* and the Korean imperfective *-ko iss-* have a lot in common in that both markers function as the progressive and as the resultative at the same time. Several studies have tested the aspect hypothesis targeting L2 Japanese learners and reached the conclusion that the Japanese imperfective *-te i-* is more strongly associated with Activity in the progressive than with Achievement for resultant states (Shirai, 1995, as cited in Jeon, 2011; Shirai & Kurono, 1998, as cited in Shirai, Ryu, & Horie, 2010). Regarding the prototype of the Japanese imperfective *-te i-*, the progressive meaning is easier for L2 Japanese learners to acquire than the resultative meaning, although a few cases of the opposite pattern have been reported (Ishida, 2004; Shibata, 1999, as cited in Shirai et al., 2010). Therefore, we can conclude that the Japanese imperfective *-te i-* supports the aspect hypothesis.

In the L2 acquisition of the Korean imperfective aspect, some researchers have tested the aspect hypothesis (Brown & Yeon, 2010; Jeon, 2011; Kim & Lee, 2006; Lee & Kim, 2007). Their findings are somewhat similar to those of the L2 Japanese studies in that L2 learners acquire the progressive *-ko iss-* with the action-in-progress reading first and the resultant state reading later. However, the prototype theory that learners naturally correlate progressive marking with Activity first has not been verified in the L2 acquisition of the Korean imperfective *-ko iss-*.

Kim and Lee (2006) tested the aspect hypothesis in the L2 acquisition of Korean, focusing on the past tense form *-ess-* and the progressive *-ko iss-*. Their interesting finding from a production task was that the progressive *-ko iss-* was acquired much later than the past tense *-ess-*. They claimed that the late development of the progressive *-ko*

*iss-* is because an alternative form is available for progressive marking in Korean, which leads to learners getting less input than with the past form *-ess-*. However, this is a hasty conclusion that is not based on quantitative analysis of the usage patterns of the alternative form, and it is therefore necessary to examine the usage patterns of the progressive marking *-ko iss-* and its alternative (simple present tense *-(n)un-*).

The same researchers conducted a further study of the L2 acquisition of the Korean imperfective (Lee & Kim, 2007). This time they included the resultative marker *-e iss-* as well as *-ko iss-*. They hypothesized that the prototype of *-ko iss-* is progressive, and thus learners will acquire the progressive interpretation of *-ko iss-* first. However, the results did not fully support their hypothesis, because the learners' accuracy scores on the progressive *-ko iss-* were higher than on the resultative *-ko iss-* only in an interpretation task, and not in a production task. Another finding was that the learners did not improve their performance on the resultative *-ko iss-* even as their proficiency level increased.

Lee and Kim's (2007) study laid the foundations for the present study in that some issues were raised by their research. First, why did the production task results not support their hypothesis that the progressive *-ko iss-* is acquired faster than the resultative *-ko iss-*? Was it due to the optionality of *-ko iss-* and its alternative, as the authors claim? Or was the production task too demanding for the learners' level? The present study will examine if optionality affects the L2 learners' performance on a production task, taking native speakers' usage patterns into account. Second, why did only the learners' performance on the resultative *-ko iss-* not show improvement as their proficiency level increased? Is it because of the dual functions of *-ko iss-* in comparison to the resultative *-e iss-* with its single function? The authors did not reach a conclusion, and thus further research is needed to look into the detailed reasons for their observations. Finally, methodological problems appear in both of their studies (2006, 2007). A majority of the participants in both studies were heritage learners, who should be treated differently from non-heritage learners in L2 acquisition. In the present study, the participants consist of both heritage and non-heritage learners in equal number.

Brown and Yeon's (2010) study is very useful in that they attempted to address the problems in Kim and Lee's (2006) and Lee and Kim's (2007) studies. First, they examined whether the progressive *-ko iss-* occurs with Activity type verbs first and later

on with Accomplishment and Achievement type verbs. Second, they tried to investigate when L2 learners acquire the use of *-ko iss-* with cognitive/emotive verbs (State in Vendler's classification). Based on the results, they concluded that learners used the progressive *-ko iss-* with Accomplishment verbs more frequently than with Activity verbs. However, the problem is that the results of their study did not show a statistically significant difference between the learners' use of Activity verbs and their use of Accomplishment verbs with the progressive *-ko iss-* (60% vs. 74% for a Beginning group and 80% vs. 87% for an Advanced group). Without statistical confirmation, we cannot conclude that learners use the progressive *-ko iss-* with Accomplishment verbs more frequently than with Activity verbs. Moreover, Brown and Yeon speculated that the optionality of the progressive *-ko iss-* affected the results. However, their claim is not based on analyzing native speakers' usage patterns for the progressive markings. Such a claim should be preceded by an examination of native speakers' preferences between the progressive marking *-ko iss-* and the alternative (simple present tense *-(n)un-*). In the present study, Korean native speakers were recruited as a control group larger in number than the L2 learners' groups in order to obtain a reliable analysis of the native speakers' usage patterns.

Regarding the L2 development of *-ko iss-* with stative verbs, Brown and Yeon (2010) found that *-ko iss-* occurs with State type verbs much later than with the other types, and that the L2 learners' performance did not show any improvement even at the advanced level. This is an improvement over Kim and Lee's (2006) and Lee and Kim's (2007) studies in that Brown and Yeon classified the stative verbs as Achievement type, and they separated the cognitive/emotive verbs from the traditional Achievement verbs in their study. However, I have a concern about the type of test that Brown and Yeon used for their experiment. They used a survey method to conduct a cloze test without pictures, which limited the possibilities for describing vivid situations for the action-in-progress meaning. This is why many researchers of L2 acquisition have recently utilized picture-based cloze tests that supply information about contexts/situations (Lee & Kim, 2007). Moreover, judging from the sample questions that Brown and Yeon (2010) provided, the sentence ending that was used on the questions in the cloze test provided a potential cue

161

to learners to choose the same sentence ending in their answers. These methodological problems were considered in designing the experiment conducted for the present study.

Jeon (2011) conducted an L2 acquisition study focusing on the imperfective *-ko iss-*. Her study is meaningful in that she considered both L1 transfer and the prototype theory in her attempt to find the fundamental factors that determine the acquisition of aspectual semantics. The results showed that L1 Japanese learners acquire the resultative interpretation of *-ko iss-* as well as the progressive interpretation especially at the beginning level, while L1 English learners first acquire the progressive *-ko iss-* and later the resultative *-ko iss-*. Based on these results, Jeon concluded that her study supports L1 transfer effects on the acquisition of the imperfective *-ko iss-*. However, her study provided only partial support for the L1 transfer effect because the L1 Japanese learners in the intermediate group did not show better performance on the resultative *-ko iss-*. Therefore, room remains for further study on L1 transfer effects.

So far I've discussed the findings and the shortcomings of the previous studies on L2 acquisition of the Korean imperfective *-ko iss-*. One finding on which there is consensus is that the progressive use of *-ko iss-* is acquired first and the resultative use of *-ko iss-* is acquired later. However, there is no consensus among the previous studies on acquisition order in terms of verb semantic types, and the findings so far do not fully accord with the aspect hypothesis. The accuracy of the participants' usage of the progressive *-ko iss-* with Activity type and Accomplishment type is not always consistent and can vary depending on factors such as task type and participants' levels. In addition, few studies have focused on the stative use of *-ko iss-* when it occurs with State type verbs. Therefore, the previous studies have provided only inconclusive and partial understanding of the acquisition order of the imperfective *-ko iss-*. In this chapter, I present an empirical investigation designed to improve our understanding of how L2 learners acquire the Korean imperfective aspect *-ko iss-* with respect to verb semantic types.

## 5.3 L2 Acquisition Study on the Korean Imperfective *-ko iss-*

### 5.3.1 Research questions

In this study, I focus on finding the answers to the following questions, on which no consensus has been reached in the previous studies:

1. When *-ko iss-* is combined with Activity verbs or Accomplishment verbs, with which verb type do learners more frequently produce the progressive meaning?
2. Do learners know that when the so-called stative verbs occur with *-ko iss-*, they denote the stative meaning?
3. Do learners distinguish the progressive *-ko iss-* from the resultative *-ko iss-* depending on the context?

### 5.3.2 Method and participants

Data were collected from 38 English-speaking learners of Korean as the L2 learners' groups and 50 native speakers of Korean as a control group. All of the L2 learner participants were recruited at the University of Hawai'i. Based on in-house assessment results, the learners were divided into two groups: (a) Intermediate group (*n* = 19), and (b) Advanced group (*n* = 19). A beginning group was not included in the present study because the previous studies (Kim & Lee, 2006; Lee & Kim, 2007) showed that the frequency with which beginning groups use *-ko iss-* is too low (approximately 10% for the production task) to produce meaningful results. The ratio of heritage to non-heritage learners was 10 to 9 for the Intermediate group and 9 to 10 for the Advanced group. The native speakers of Korean were all recruited at Pusan University in Korea. For reliable analysis of the native speakers' usage patterns, the number of native speakers is greater than the number of L2 learners. In order to see whether or not optionality (using alternative forms) affects the usage of L2 learners, the effects of optionality on the native speakers' production must first be understood.

To address the research questions, I conducted an experiment using a picture-based contextualized cloze test (Lee & Kim, 2007). First, I made a story for each picture, and then I asked a graphic designer to draw the pictures according to the story.

Participants were asked to provide the target verb form using a given verb stem in writing while looking at a picture. For example, the first picture describes a day when students at a school have sports competitions and parents watch. The participants looked at the picture and then completed the story by filling in the blanks with given verbs. I chose the production task as an experimental method because the previous studies indicated that there are some inconsistencies in the results of production tasks. In the production task for the present study, five sets of pictures were shown to participants, and each picture included five items (one item per verb type) and five fillers. In total, the task consisted of 25 target items (five items per verb type) and 25 fillers. Table 5.2 shows target items of each picture in terms of verb type.

**Table 5.2**

*Target Items of Each Picture in Terms of Verb Type*[46]

|  | Picture 1 | Picture 2 | Picture 3 | Picture 4 | Picture 5 |
|---|---|---|---|---|---|
| **State** | *kippeha-* 'to be happy' | *al-* 'to know' | *mit-* 'to believe' | *sal-* 'to live' | *salangha-* 'to love' |
| **Activity** | *talli-* 'to run' | *tut-* 'to listen' | *sayongha-* 'to use' | *tha-* 'to ride a bike' | *kwukyengha-* 'to watch' |
| **Accomplish.** | *mek-* 'to eat' | *palphyoha-* 'make a presentation' | *kitali-* 'to wait' | *mantul-* 'to make' | *ccik-* 'to take a picture' |
| **Achieve. 1 (Resultative)** | *tal-* 'to hang' | *tul-* 'to carry' | *ssu-* 'to wear a hat' | *kki-* 'to wear gloves' | *cap-* 'to hold' |
| **Achieve. 2 (Progressive)** | *may-* 'to tie a shoelace' | *sin-* 'to put on shoes' | *tha-* 'to get on a train' | *may-* 'to tie a necktie' | *ssu-* 'to put on a helmet' |

As can be seen in Table 5.2, the Achievement type is divided into two: one is to denote the resultative (Achievement 1) and the other is to denote the progressive (Achievement 2) when occurring with *-ko iss-*. One of the methodological problems of the picture-based cloze test used by Lee and Kim (2007) was that target items and fillers consisted of only two constructions, *-ko iss-* and *-e iss-*, which gives participants a fifty-fifty chance of

---

[46] A sample picture is shown in Appendix B.

choosing the correct response. In order to keep a balance between target items and fillers, equal numbers of target items and fillers were included for each picture in the task.

## 5.4 Results

### 5.4.1 Overall results

For each item, a correct answer is *-ko iss-*. Each group's total number of uses of *-ko iss-* in the production task was counted. The percentages in Table 5.3. show the proportion of answers using *-ko iss-* out of the total number of answers. The Native group used *-ko iss-* the most frequently, followed by the Advanced group and the Intermediate group, in descending order, as shown in Table 5.3.

**Table 5.3**

*Total Frequency of Three Groups' Use of* **-ko iss-**

|  | Intermediate | Advanced | Native |
|---|---|---|---|
| **Frequency (%)** | 33% | 46% | 71% |

The overall results of the group frequency of -ko iss- in terms of verb type are shown in Table 5.4.

**Table 5.4**

*Frequency of* **-ko iss-** *Uses in Terms of Verb Type*

|  | State | Activity | Accomplish. | Achieve. 1 | Achieve. 2 |
|---|---|---|---|---|---|
| **Intermediate** | 22% | 39% | 38% | 23% | 44% |
| **Advanced** | 16% | 59% | 58% | 41% | 56% |
| **Native** | 62% | 75% | 74% | 66% | 80% |

As seen in Table 5.4, the Native group's frequencies for the production task were the highest in all verb types; the Advanced group's were the second highest for all verb types except for the State type; and the Intermediate group's were the lowest, except for the State type verbs. Overall, there was no great difference in accuracy scores between dynamic verbs (Activity, Accomplishment, and Achievement 2) within a group, but there was a large gap between State type and dynamic verbs, except for in the Native group.

165

That is, the learners' groups showed very low frequency on State type verbs, and better performance was not related to higher proficiency level (22% for Intermediate and 16% for Advanced), as seen in Table 5.4.

The overall frequency of uses of *-ko iss-* in the production task (Table 5.3) confirms that the Native group used *-ko iss-* the most frequently. Looking at Table 5.3, one might ask what the rest of the answers are if the Native group got 71% on the production task. As previously mentioned, the progressive marking *-ko iss-* is not obligatory in Korean because the simple present tense can also express the progressive meaning. The same rule applies to the State verbs occurring with *-ko iss-* to denote the stative meaning (e.g., *Na-nun ku salam-ul al-**ko iss**-ta/a**n**-ta.* 'I know the person.').[47] Thus, native speakers of Korean may use either *-ko iss-* or the simple present tense.

As for the alternative form of the resultative *-ko iss-* (with Achievement 1) to denote the resultant state caused by a past event, there is another way of expressing the resultative meaning by using *-ess-*, which is also used to denote "a state as the result of a prior situation" (Oh, 2003). For example, *Con-i pwulkun os-ul ip-**ko iss**-ta* 'John is wearing red clothes' in Table 5.1 can use the alternative *-ess-*, giving *Con-i pwulkun os-ul ip-**ess**-ta.*[48] Taking these alternative forms into consideration, Table 5.5 shows the frequency of the three groups use of the alternative forms.

**Table 5.5**

*Frequencies of Three Groups Uses of Alternative Forms*

|               | Intermediate | Advanced | Native |
|---------------|--------------|----------|--------|
| **Frequency (%)** | 46%      | 37%      | 23%    |

When comparing Table 5.5 with Table 5.3, the frequency of uses of the alternatives is in inverse proportion to the frequency of using *-ko iss-*. The Native group used the alternative forms less frequently than the L2 learners' groups (Intermediate and Advanced). In other words, the L2 learners of Korean tend to use the simple present tense form more frequently to express the progressive meaning when their proficiency level is

---

[47] The example is repeated here from Table 5.1. Refer to Table 5.1 for English gloss.

[48] Refer to Table 5.1 for English gloss.

lower. Thus, can we conclude that the poor performance of the Intermediate group on the production task is because of the alternative forms of *-ko iss-*? In the production task done by Lee and Kim (2007), the L2 learners' scores on the progressive *-ko iss-* were lower than on the resultative *-ko iss-*. The authors speculated that the reason was that the heritage learners in their study were aware of the optionality. However, the participants in the present study consist of equal numbers of heritage and non-heritage learners. Therefore, heritage learners' knowledge of optionality does not explain the poor performance of all the learners on the progressive *-ko iss-* in the production task. Moreover, these results also indicate that the L2 learners' performance with *-ko iss-* improves as their proficiency level goes up, even though the higher-level learners are more aware of the alternatives than the lower-level learners. The conclusion must be that the L2 learners at the lower level have simply not fully acquired the aspectual use of *-ko iss-* yet. Interestingly, even though the Native group is aware that there are other ways of expressing the aspectual meanings (including progressive, resultative, and stative) in Korean, this group also shows a strong tendency to prefer *-ko iss-* over the alternative forms (71% vs. 23%). This suggests that this optionality has no major influence on the participants' use of the *-ko iss-* construction in the production task.

A one-way ANOVA was conducted in order to ascertain how differently L2 learners behaved from native Korean speakers. The results of the one-way ANOVA indicate that there were significant differences among the groups in terms of using *-ko iss-* with all verb types ($p < .001$).

### 5.4.2 Discussion

In this section, each research question will be answered separately and its implications will be discussed based on the results. The first research question asks with which verb type, Activity or Accomplishment, learners more frequently produce the progressive meaning with *-ko iss-*. Based on the results of the production task, there is no considerable difference between any of the groups in how frequently they used *-ko iss-* for the progressive meaning with Activity versus Accomplishment verbs (Table 5.4). In addition, *t*-tests confirmed that there was no statistically significant difference. This result does not accord with the claim of the aspect hypothesis that progressive marking is

acquired first with Activity verbs and then extends to Accomplishment and Achievement verbs, thus supporting my hypothesis that *-ko iss-* will show different developmental patterns due to the language-specific features of Korean.

The question, then, arises of what kinds of specific features of Korean cause L2 learners to show a different tendency in their acquisition of the progressive *-ko iss-*. As mentioned in Section 5.3, Brown and Yeon (2010) speculated that the optionality of the progressive *-ko iss-* had a major influence on the result of their study because learners may use the alternative forms (simple present tense) instead of the progressive *-ko iss-*. They claimed that the progressive marking *-ko iss-* can be more easily omitted with Activity verbs, so learners used the progressive *-ko iss-* more frequently with Accomplishment verbs.[49] However, the results of the present study show that there is no significant difference between Activity and Accomplishment verbs in how they affect L2 learners' or native speakers' choice of the alternative form over the *-ko iss-* form, as shown in Table 5.6.

**Table 5.6**

*Frequency of Alternative Forms for Progressive with Activity/Accomplishment Verbs*

|  | Activity | Accomplishment |
|---|---|---|
| Intermediate | 47% | 49% |
| Advanced | 36% | 31% |
| Native | 22% | 22% |

This proves that Brown and Yeon (2010) made an incorrect inference that the reason for L2 Korean learners not acquiring the progressive *-ko iss-* with Activity verbs is the optionality of the progressive marking *-ko iss-*.

I have a better explanation for the lack of significant difference between the two types of verbs in learners' acquisition of the progressive *-ko iss-*. Korean has a different aspectual classification of verbs, and often the distinction between Activity and Accomplishment is not clear. A number of verbs in Korean display features of both Activity and Accomplishment and many collocate with both temporal adverbials *tongan*

---

[49] In Brown and Yeon's (2010) study, there was no statistical difference between the two verb types, so in fact they did not show that the progressive *-ko iss-* with Accomplishment verbs is acquired first.

'for' and *maney* 'in'. The reason why there are so many verbs with two aspectual features at the same time is that Korean does not have articles (Lee, 2011). In languages that do have articles, whether or not an argument shows definiteness by occurring with an article affects whether a verb type can be transferred to another type. In English, for example, if there is a definite article *the* that modifies a noun, then the phrase's verb type turns into Activity from Accomplishment as in (109).

(109) a. John built the house in a month.

    b. *John built houses in a month.

    c. John built houses for two years.                     (Examples from Lee, 2011, p. 74)

Therefore, the finding of no significant difference in frequency of use between Activity and Accomplishment verbs with the progressive *-ko iss-* resulted from the language-specific feature that many verbs in Korean display features of both Activities and Accomplishments, because Korean does not have articles. The finding also supports the distributional bias hypothesis (Andersen, 1993, as cited in Shirai & Andersen, 1995) in that L2 Korean learners exhibit the same distributional pattern as native speakers of Korean in choosing to use the progressive *-ko iss-* with the two verb types.

      The second research question asks if learners know that when the so-called stative verbs occur with *-ko iss-*, they denote the stative meaning. As seen in Table 5.4, for all groups, the mean percentage score of the State type is the lowest among all the verb types. A one-way ANOVA was conducted in order to ascertain how differently L2 learners behave from native Korean speakers. The results of the one-way ANOVA indicate that there were significant differences among the groups in terms of using *-ko iss-* with the State verbs ($p < .001$). Of the five verb types, the State type shows the biggest gaps between the three groups ($F = 38.089$). This result indicates that L2 learners show late development of using *-ko iss-* with the State type, and thus have difficulty producing *-ko iss-* with the State verbs to denote the stative meaning.

      This result does not fully accord with the aspect hypothesis, because of the fact that *-ko iss-* does occur with the State verbs in Korean. As discussed earlier, however, the aspectual meaning of *-ko iss-* with the State verbs is not the action-in-progress meaning,

but the continuing stative meaning. This suggests that the L2 learners did not acquire the stative use of *-ko iss-* occurring with State verbs. Their performance was poor even at the higher proficiency level, The State type is the only one of the verb types with which the Advanced group did not show a better performance than the Intermediate group.

What hinders L2-Korean learners from acquiring the stative use of *-ko iss-* with State verbs in Korean? According to Jeon (2011), L1 transfer is one of the main factors that can determine the acquisition of aspectual semantics by L2 learners. She investigated L1 transfer effects on L2 acquisition of aspectual semantics and her data partially supported the L1 transfer effects. Based on her experiments in the study, Jeon reported that among L1 Japanese learners of Korean, the learners at the beginning level in particular did not prefer the action-in-progress interpretation to the resultative interpretation.[50] She came to the conclusion that the reason that L1 Japanese learners performed better on the resultative *-ko iss-* than L1 English learners at the beginning level is that the Japanese imperfective *-te i-* also functions as a resultative marker, and the so-called stative verbs can also occur with *-te i-* to express the resultative meaning. Therefore, I speculate that the L2 learners' poor performance on the State verbs in the present study resulted from their L1 (English) grammar in which the State verbs are incompatible with the progressive marking to denote the stative interpretation.

The third research question is whether learners distinguish the progressive *-ko iss-* from the resultative *-ko iss-* depending on the context. As seen in Table 5.4, the frequency of Achievement 1, which denotes the resultative with *-ko iss-*, is much lower than that of Achievement 2, which denotes the progressive with *-ko iss-*. The results of the *t*-tests also confirmed that there was a statistically significant difference between the two verb types for the Intermediate group ($p < .05$) and the Native group ($p < .05$). As for the Advanced group, while the raw scores of the production task show a considerable difference between the two types (41% vs. 56%) as shown in Table 5.3, there is no statistically significant difference between the two types ($p > .05$). The reason for the smaller difference is that the Advanced group had a relatively high frequency on the resultative *-ko iss-* with Achievement 1 as well. Therefore, we can conclude that L2 learners acquire the progressive *-ko iss-* more easily than the resultative *-ko iss-*.

---

[50] Jeon (2011) viewed the aspectual meaning of *-ko iss-* with stative verbs as the resultative meaning.

The results of the production task in the present study fill the gap caused by some inconsistencies in the results of Lee and Kim's (2007) production task. Therefore, the present study can conclude that the prototype of the imperfective *-ko iss-* is the progressive interpretation of *-ko iss-* rather than the resultative *-ko iss-*. This supports the prototype theory that the prototype of *-ko iss-* is progressive, and thus learners will acquire the progressive interpretation of *-ko iss-* first.

Here, let's briefly discuss how the L2 learners' groups chose the alternative forms instead of *-ko iss-* in terms of function, as shown in Table 5.7.

**Table 5.7**

*Comparison of* **-ko iss-** *with Its Alternatives in Terms of Function*

|  | Achievement 1 (Resultative) | | Achievement 2 (Progressive) | |
|---|---|---|---|---|
|  | *-ko iss-* | *Alternative* | *-ko iss-* | *Alternative* |
| **Intermediate** | 23% | 27% | 44% | 40% |
| **Advanced** | 41% | 24% | 56% | 25% |
| **Native** | 66% | 26% | 80% | 12% |

For the Intermediate group, the learners chose the alternative forms as frequently as *-ko iss-* both in the resultative situation (23% vs. 27%) and in the progressive situation (44% vs. 40%). As for the Advanced group, however, the learners preferred *-ko iss-* over the alternatives both in the resultative situation (41% vs. 24%) and in the progressive situation (56% vs. 25%). Regardless of the situation, the L2 learners show a tendency to prefer using *-ko iss-* over the alternatives as their proficiency level goes up. Their preference for using *-ko iss-* becomes stronger, although the L2 learners are aware that the alternative forms can be used for these situations. The native speakers of Korean also showed a strong tendency to use *-ko iss-* over the alternative forms, as shown in Table 5.7. This suggests an L2 developmental pattern in acquiring the imperfective *-ko iss-* in which the learners' usage becomes more native-like as their proficiency level increases.

## 5.5 Pedagogical Implications

The results of the L2 acquisition study indicate that there are significant differences between the Native group and the L2 learners' groups: L2 learners have difficulties in producing the imperfective *-ko iss-*. How then can L2 learners achieve ultimate attainment in the area of aspect in Korean? Based on this study's results, I suggest several effective methods for teaching the imperfective *-ko iss-* in the L2 classroom.

### 5.5.1 Analysis of Korean textbooks for L2 learners

#### 5.5.1.1 Grammatical descriptions of **-ko iss-** *in Korean textbooks*

Based on the results of the study analyzing naturally occurring data that I reported in Chapter 3, I presented a proposal that the general meaning of *-ko iss-* is continuous aspect, and the context-dependent meanings are basically determined by the interaction between the inherent verb semantic types and the grammatical marker. Table 5.8 summarizes the different aspectual meanings of the *-ko iss-* construction.

**Table 5.8**

*General and Context-Dependent Meanings of* **-ko iss-**

|  | **Aspectual meanings of *-ko iss-*** |
|---|---|
| **General meaning of *-ko iss-*** | Indication of continuing action/status |
| **Context-dependent meanings** | Progressive meaning with dynamic verbs<br>Resultative meaning with Achievement verbs<br>Resultative meaning with Accomplishment verbs<br>Stative meaning with State verbs |

Brown and Yeon (2010) analyzed existing Korean textbooks and found that only a few textbooks introduce the resultative use of the *-ko iss-* construction. Jang (2005) also reported that only 7 out of 30 textbooks analyzed for her study introduce the resultative use of *-ko iss-* as well as the progressive use of *-ko iss-*, and the rest of the textbooks introduce only the progressive use of *-ko iss-*.[51] In the present study, the participants in

---

[51] Brown and Yeon (2010) and Jang (2005) did not include the stative use with stative verbs in their analysis of textbooks.

the experiment used a textbook that introduced the progressive meaning of *-ko iss-* first (in the second semester of first-year Korean),[52] whereas the resultative use of *-ko iss-* was not taught explicitly as a grammar point, only being used in lexical expressions to describe clothes with verbs of wearing. As for the stative use of *-ko iss-*, the texts provided no explanations that *-ko iss-* can occur with State verbs to denote the meaning of continuing state. Although the L2 acquisition study described in this chapter indicates that the prototype of the imperfective *-ko iss-* is the progressive meaning, this might not be the reason for the L2 learners' better performance on the progressive *-ko iss-*. The better performance of the L2 learners' on the progressive *-ko iss-* in the experimental study might result from the frequency effect of their being exposed to the progressive *-ko iss-* more frequently than the resultative use and the stative use of *-ko iss-* This would explain why the L2 learners in the present study gained the lowest frequency on the State verbs, because the stative use of *-ko iss-* with State verbs was not introduced with explanation as a grammar point in their textbooks.

### 5.5.1.2 Suggestions for effective teaching

First, in Korean textbooks, I suggest introducing the *-ko iss-* construction as a continuous aspect including all the imperfective meanings. That is, the general meaning of *-ko iss-* as a continuous aspect marker and its context-dependent meanings should be separately introduced.

As a continuous aspect marker, the *-ko iss-* construction implies the meaning of continuing action/status, and the specific meaning is determined by the interaction between the general continuous meaning and the inherent lexical aspect of verbs. Considering the fact that the *-ko iss-* construction is introduced in the beginning level, it would be overwhelming to introduce three different functions at the same time. So it would be better to first present the progressive use of *-ko iss-* denoting the action-in-progress meaning because L2 learners acquire the progressive meaning first, as the results of the L2 acquisition study indicate. When learning the progressive use of *-ko iss-*, learners should know that the simple present can also express the progressive meaning. L2 learners of Korean tend to use the simple present tense form more frequently to

---

[52] The textbooks that the participants for the present study used were the KLEAR textbooks.

express the progressive meaning when their proficiency level is lower. It is very helpful for L2 learners to know the subtle difference in meaning between *-ko iss-* and the simple present when expressing the progressive meaning. If learners are aware that the *-ko iss-* construction describes a more vivid and interpersonal situation, their usage pattern will become more native-like; as the results of the L2 acquisition study show, the native speaker group preferred *-ko iss-* over the simple present form in the picture-based contextualized task.

As for the resultative use of *-ko iss-*, it would be effective to present the resultative use of *-ko iss-* together with the other resultative marker *-e iss-* rather than presenting it as an independent grammatical category. The *-e iss-* construction is representative of the resultative aspect in Korean although the *-ko iss-* construction can denote the resultative state. Teaching the resultative use of *-ko iss-* and *-e iss-* together would help learners understand the difference between the two constructions in relation to the type of verbs with which they occur. As already discussed, the *-ko iss-* construction is combined with transitive verbs, whereas the *-e iss-* construction is combined with intransitive verbs. In addition, the information should be included that the alternative form *-ess-* can be used to denote the resultative meaning; as the results of the experimental study showed, a considerable number of L2 learners used the alternative form *-ess-* (27% for Intermediate, 24% for Advanced, and 26% for Native). Table 5.9 summarizes the difference between the progressive *-ko iss-* and the resultative *-ko iss-* and *-e iss-* in terms of syntactic verb types.

**Table 5.9**

*Progressive **-ko iss-** and Resultative **-ko iss-** and **-e iss-** in Terms of Syntactic Verb Type*

|  | Aspectual meaning | Alternative form | Syntactic verb type |
|---|---|---|---|
| **Progressive *-ko iss-*** | Progressive | Simple Present | Transitive & Intransitive |
| **Resultative *-ko iss-*** | Resultative | Past *-ess-* | Transitive |
| **Resultative *-e iss-*** | Resultative | Past *-ess-* | Intransitive |

Finally, the *-ko iss-* construction can denote the stative meaning when occurring with State verbs. This stative use of *-ko iss-* should be introduced as an independent

grammatical category because L2 learners have the most difficulty in acquiring the stative use of *-ko iss-* with State verbs. According to the results of the experimental study, the L2 learner groups show late development of the stative use of *-ko iss-* with the State type verbs. Their performance did not improve even at higher proficiency levels. I speculate that this late development is caused by a negative L1 transfer effect. L1 transfer is one of the main factors that can determine the acquisition of aspectual semantics by L2 learners (Jeon, 2011). All the participants in the experimental study speak English as their native language, although 51% of them are classified as heritage learners. The English progressive marking does not occur with State verbs, while the *-ko iss-* construction does occur with State verbs to express the stative meaning rather than the progressive meaning. Therefore, it seems quite likely that L2 learners' poor performance on the State verbs in the experimental study resulted from their L1 (English) grammar, in which State verbs are incompatible with the progressive marking. As a consequence, it is necessary to present the stative use of *-ko iss-* as an independent grammatical point in the L2 classroom.

## 5.5.2 Analysis of verbs occurring with *-ko iss-* in Korean textbooks

Considering the fact that the diverse meanings of *-ko iss-* are basically determined by interaction with inherent verb semantics, it is crucial that all of the different types of verbs should be presented in Korean textbooks. I analyzed the textbooks that the participants of the L2 acquisition study were using at the time of the study, which included textbooks for first year through fourth year. I extracted one hundred verbs with high frequency combined with *-ko iss-*. Appendix C lists these one hundred verbs.

Of the one hundred frequent verbs occurring with *-ko iss-* in the textbooks, those that can express the resultative use and the stative use are shown in Table 5.10. As the table shows, only 20 of the verbs occur with the resultative use and the stative use of *-ko iss-* in the textbooks. The rest of the verbs illustrated in Table 5.10 are all dynamic verbs (80 out of 100), which denote the progressive meaning with *-ko iss-*. In the study analyzing the naturally occurring data in Chapter 3, the progressive use and the stative use including the resultative use showed no considerable difference in frequency (40% for the Progressive use and 45% for the non-Progressive use including the Resultative

and the Stative). In addition, considering the results of the L2 acquisition study, in which the L2 learners showed the lowest frequency on the stative use of *-ko iss-* with State verbs, we can conclude that verbs in L2 textbooks are not appropriately distributed to show the various uses of *-ko iss-* to L2 learners.

**Table 5.10**

*Verbs with the Resultative and Stative Uses in L2 Textbooks*

|  | Verbs | Type frequency |
|---|---|---|
| **Resultative use with *-ko iss-*** | Achievement & Accomplishment: *kaci-* 'take', *kac-* 'take', *ceysiha-* 'suggest', *chaciha-* 'occupy', *calicap-* 'settle down', *math-* 'take charge', *pokwanha-* 'keep' | 7 |
|  | Verbs of wearing and contact: *tha-* 'get on', *cwi-* 'hold', *tam-* 'put', *cini-* 'hold', *cap-* 'hold', *ip-* 'wear' | 6 |
| **Stative use with *-ko iss-*** | State verbs: *al-* 'know', *sal-* 'live', *sayngkakha-* 'think', *molu-* 'not know', *cinay-* 'live', *sam-* 'consider', *kekcengha-* 'be worried' | 7 |
| **Total** | | 20 |

### 5.5.2.1 Comparison of L2 and native speakers' distributional patterns

In this section, let us compare verbs occurring with *-ko iss-* in L2 textbooks with the native speaker's distributional pattern. In Chapter 4, we examined the one hundred frequent verbs with high z-scores occurring with *-ko iss-* from the Sejong Corpus including spoken and written data based on Park's corpus study (2003). The size of the corpus dataset is 5,576,035 *ecel*. The total number of the *-ko iss-* constructions extracted from the data is 47,198. With these 47,198 *-ko iss-* constructions, 3,810 different verbs occur.

Of the one hundred frequent verbs with high z-scores occurring with *-ko iss-*,[53] verbs that can express the resultative use and the stative use are shown in Table 5.11. As the table shows, 40 verbs occur with *-ko iss-* in the resultative use and the stative use. The rest of the verbs illustrated in Table 5.11 are dynamic verbs (60 out of 100), which denote the progressive meaning with *-ko iss-*. This analysis accords with the results reported in

---

[53] Appendix A gives the one hundred frequent verbs with high z-scores combined with the *-ko iss-* construction in the Sejong Corpus (written and spoken).

Chapter 3 from the study analyzing naturally occurring data. In that study, the Progressive use (40%) and the non-Progressive use (45%), which includes the Resultative (21.7%) and the Stative (23.9%), did not show a significant difference.

**Table 5.11**

*Verbs with the Resultative and Stative Uses in the Sejong Corpus*

| | Verbs | Type frequency |
|---|---|---|
| **Resultative use with *-ko iss-*** | **Achievement & Accomplishment**: *kac-* 'take', *kaci-* 'take', *cini-* 'hold', *calicap-* 'settle', *tam-* 'input', *chaciha-* 'occupy', *math-* 'take', *tti-* 'take', *ceykitoy-* 'come up', *twu-* 'put', *kacchwu-* 'equip', *cemha-* 'occupy', *caliha-* 'settle down', *kalomak-* 'block', *tuyteph-* 'cover', *twulessa-* 'surround', *cemyuha-* 'occupy', *ceysiha-* 'suggest', *pwunphoha-* 'distribute', *tamwul-* 'close' | 20 |
| | **Verbs of wearing and contact**: *an-* 'hug', *phwum-* 'hold', *cwi-* 'hold', *ip-* 'wear' | 4 |
| **Stative use with *-ko iss-*** | **State verbs**: *al-* 'know', *nayphoha-* 'involve', *sal-* 'live', *socangha-* 'possess', *kancikha-* 'cherish', *hamyuha-* 'contain', *kiekha-* 'remember', *mit-* 'believe', *soyuha-* 'possess', *cenmangha-* 'expect', *uyconha-* 'depend on', *chwusanha-* 'estimate', *hamchwukha-* 'connote', *wulyetoy-* 'be worried', *kosimha-* 'be concerned', *yeysangtoy-* 'be expected' | 16 |
| **Total** | | 40 |

The results of this chapter's experimental study allow an analysis of the usage patterns of native speakers of Korean. The Korean native speaker participants preferred to use *-ko iss-* to express the progressive meaning more often than the resultative meaning and the stative meaning, as shown by their frequencies on dynamic verbs (Activity, Accomplishment), which are higher than their frequency on State verbs, as shown in Table 5.12, which is a modified version of Table 5.4.

**Table 5.12**

*Native Group's Frequency of* **-ko iss-** *in Terms of Verb Type*

|  | State (Stative) | Activity (Progressive) | Accomplish. (Progressive) | Achieve. (Resultative) |
|---|---|---|---|---|
| **Native** | 62% | 75% | 74% | 66% |

In comparison to the alternative form, however, the Korean native speakers had a strong tendency to use *-ko iss-* in all uses. Another supporting finding is that there was no significant difference between the verb types in the native speaker group's production of *-ko iss-*. This suggests both the difficulty of determining the prototypical meaning of *-ko iss-*, and the preference of Korean native speakers for *-ko iss-* over the alternative forms regardless of verb semantic types. These results also accord with the results of the study in Chapter 3 that analyzes naturally occurring data, which shows that there is no considerable difference in frequency between the Progressive use (40%) and the non-Progressive use (45%) with *-ko iss-*. Therefore, we can conclude that *-ko iss-* is not skewed towards any specific use, but encompasses progressive and non-progressive, which refers to the continuous aspect. The results of the native speakers in the experimental study provide further confirmation that the aspect marker *-ko iss-* is not solely the progressive aspect but the continuous aspect marker.

### 5.5.2.2 Suggestions for effective teaching

As we can see from the comparison of verbs used in the L2 textbooks with those used by native Korean speakers, the textbooks differ from the native speakers' verb usage pattern, which shows a balance between the progressive use of *-ko iss-* with dynamic verbs, the resultative use of *-ko iss-* with Achievement and Accomplishment verbs, and the stative use of *-ko iss-* with State verbs. However, the distributions of verbs shown in the L2 textbooks include a great discrepancy between these different uses of *-ko iss-* with different types of verbs.

It is notable that the stative verb *al-* 'to know' appears with high frequency in both L2 textbooks and native speakers' usage patterns, as shown in Tables 5.10 and 5.11. Despite the high frequency of this verb in L2 textbooks, the L2 acquisition study shows that both the intermediate and the advanced L2 learners have the lowest frequency of uses

of *-ko iss-* occurring with State verbs (22% for Intermediate, 16% for Advanced). Therefore, it is urgent to improve learners' knowledge of the stative use of *-ko iss-* with State verbs.

The most important change that should be made is that the number of State verbs occurring with *-ko iss-* should be increased in L2 textbooks. The Korean native speakers in the experimental study used the *-ko iss-* construction combined with State verbs much more often than this usage appears in the L2 textbooks. The number of Achievement verbs and Accomplishment verbs should also be increased in L2 textbooks. Based on the analyses of L2 textbooks and their comparison with the native usage patterns with verbs, we can observe that L2 textbooks are mainly focused on introducing the progressive use of *-ko iss-* although Korean native speakers are currently using the *-ko iss-* construction for the resultative use and the stative use as frequently as the progressive use. Therefore, in order to improve learners' performance with *-ko iss-* occurring with State verbs, instructors need to put an emphasis on the stative use of *-ko iss-* when teaching the form in the L2 classroom.

Furthermore, it is important to introduce the stative use of *-ko iss-* and the resultative use of *-ko iss-* with grammatical descriptions, as mentioned earlier. It is not enough to present them as example sentences and expressions. In L2 acquisition, L1 transfer is one of the main factors that can determine the acquisition of aspectual semantics by L2 learners. L2 learners' poor performance on the State verbs in the present study resulted from their L1 (English) grammar in which State verbs are incompatible with the progressive marking to denote the continuing stative interpretation. In order to overcome their L2 transfer, more focus on teaching the stative use of *-ko iss-* and the resultative use of *-ko iss-* in the L2 classroom is needed. For L1-English learners of Korean, acquiring the progressive use of *-ko iss-* occurring with dynamic verbs should be much easier because the English progressive can also occur with dynamic verbs to denote the progressive meaning. Therefore, I suggest focusing more on teaching the stative use and the resultative use of *-ko iss-* by introducing different types of verbs that are frequently used by Korean native speakers, as illustrated in Table 5.11.

Based on the analyses of the L2 textbooks, I have found two kinds of problems in the teaching of the *-ko iss-* construction in L2 classrooms. First, currently, L2 textbooks

do not introduce all the different uses of *-ko iss-* as independent grammar points. Only the progressive use of *-ko iss-* is introduced as an independent grammar point, whereas the resultative use of *-ko iss-* is not taught explicitly, only being used in lexical expressions to describe clothes with verbs of wearing. As for the stative use of *-ko iss-*, the textbooks contain no explanation that *-ko iss-* can occur with State verbs to denote the meaning of continuing state. Second, there is a considerable difference in the frequency with which State verbs and dynamic verbs appear in L2 textbooks in comparison with the usage patterns of native speakers of Korean.

## 5.6 Conclusion

In this chapter, I empirically investigated how L2 learners acquire the Korean aspect marker *-ko iss-* with respect to verb type (using Vendler's 1967 classification) and analyzed L2 textbooks used by the participants at the time of the study. Based on the problems found in the L2 textbooks, I suggested more effective methods of teaching the aspectual meanings of *-ko iss-* in the L2 classroom.

The results of the L2 acquisition study indicate that native speakers of Korean show no significant difference in their use of *-ko iss-* with the different verb types, but L2 learners show different development of *-ko iss-* depending on verb types. The results of the study demonstrate that L2 learners have difficulty producing the imperfective *-ko iss-*; there were significant differences in frequency between the Native group and the L2 learner groups. The Native group's mean percentage of the production task is the highest in all verb types; the Advanced group received the second highest except for the State type; and the Intermediate group received the lowest. Overall, there is no significant difference in accuracy score between dynamic verbs (Activity, Accomplishment, and Achievement 2) within a group, but there is large gap between State type and dynamic verbs except for the Native group. That is, the learners' groups show very low accuracy scores on State type, and their performance did not show improvement even as their proficiency level increased.

I speculated that there are two reasons why L2 learners showed poor performance on the stative use of *-ko iss-* occurring with State types. First, L1 transfer from English is likely to have had a negative effect on their ability to use the progressive marking to

denote the stative meaning. Second, the learners' better performance on the progressive -*ko iss-* in the present study might be a result of the frequency effect as they are very likely exposed to the progressive use of *-ko iss-* more frequently than the stative use and the resultative use. The participants of the study are not being exposed to the stative use of -*ko iss-* with State verbs, judging from their textbooks.

The analyses of the L2 textbooks found two kinds of problems in how the *-ko iss-* construction is taught. First, the textbooks do not explicitly introduce all the different uses of *-ko iss-* in interaction with the different verb types. Only the progressive use of -*ko iss-* is introduced as an independent grammar point. The resultative use appears only in some lexical expressions, and the stative use of *-ko iss-* with State verbs is absent. Second, the textbooks display a large difference in type frequency between State verbs and dynamic verbs in contrast to the usage pattern of native speakers of Korean. The native speakers shows a balance between the progressive use of *-ko iss-* with dynamic verbs, the resultative use of *-ko iss-* with Achievement and Accomplishment verbs, and the stative use of *-ko iss-* with State verbs. The experimental study confirms that Korean native speakers have a strong tendency to use *-ko iss-* in all of its uses, and there is no significant difference between verb types in the Native group's performance of *-ko iss-*.

For the effective teaching of the aspectual meanings of *-ko iss-* in L2 classrooms, first, I suggested introducing the *-ko iss-* construction as a continuous aspect including all the imperfective meanings in L2 Korean textbooks. That is, the general meaning of *-ko iss-* should be introduced as a continuous aspect and its context-dependent meanings should be separately introduced depending on verb types. As a continuous aspect marker, the *-ko iss-* construction implies the meaning of continuing action/status, and its specific meanings are determined by the interaction between the general continuous meaning and inherent lexical aspect of verbs. It is better to first present the progressive use of *-ko iss-* occurring with dynamic verbs because it is easier for L2 learners to acquire the progressive use of *-ko iss-*. In order to become more native-like, L2 learners should know that *-ko iss-* makes a situation more vivid and interpersonal than the simple present form. As for the resultative use of *-ko iss-*, it would be effective to present the resultative use of *-ko iss-* and *-e iss-* together to help learners distinguish the resultative *-ko iss-* occurring with transitive verbs from the resultative *-e iss-* occurring with intransitive verbs. Finally,

it is urgent to present the stative use of *-ko iss-* as an independent grammar point in the L2 classroom because L2 learners have the most difficulty in acquiring the stative use of *-ko iss-* occurring with State verbs.

# CHAPTER 6
# CONCLUSION

## 6.1 General Remarks

Claiming that consideration of discourse contexts is necessary to account for the semantic and grammatical nature of the aspectual marker *-ko iss-*, I have comprehensively analyzed the multiple uses of the imperfective *-ko iss-* and how the different meanings are obtained in discourse. I suggested that the multiple uses of *-ko iss-* and the context-dependent nature of this construction in Modern Korean are the result of the grammaticalization of the construction, taking a diachronic perspective. Based on empirical evidence and grammaticalization theory, I confirmed that the grammaticalization of *-ko iss-* is the major factor responsible for its multiple uses in Modern Korean. In what follows, I will briefly summarize my main arguments and findings.

## 6.2 The Study's Findings

This study aimed at providing a comprehensive understanding of the Korean imperfective *-ko iss-* construction and its different aspectual meanings in discourse. The aspectual meanings are basically determined by the interaction between inherent verb semantics and the grammatical marker. In a real situation, however, various contextual factors such as temporal adverbials, contextual information, pragmatic implicature, and speaker's interest or involvement play a crucial role in determining the temporal/aspectual meaning of the *-ko iss-* construction. By taking a discourse-pragmatic approach, I attempted to solve the disagreements and address the different views on the aspectual classification of verbs in Korean and the grammatical category of the *-ko iss-* construction.

The multiple uses of the *-ko iss-* construction can be accounted for by taking a diachronic perspective; in other words, the grammaticalization of *-ko iss-* and the context-dependent nature of this construction can explain its multiple uses in Modern Korean. I

investigated the historical development of the *-ko iss-* construction in order to find the answer to the question of why the *-ko iss-* construction should have the general meaning that it does, along with its various context-dependent interpretations.

In Chapter 2, I introduced the two-component theory as the framework for the research, and I presented some problems in applying that framework to the aspectual system in Korean. First of all, a number of stative verbs are actively combined with the *-ko iss-* construction. Second, syntactic phenomena have an influence on the selection of aspect markers, with transitivity playing a crucial role. Third, the same verb situation type is able to denote different meanings such as iterative, habitual, progressive, stative, and resultative. Finally, another problem of the two-component theory is that equivalent verbs in different languages combined with an aspectual marker can denote different aspectual meanings. In order to resolve these problems, I suggested integrated approaches in conjunction with the framework of the two-component theory.

By taking a discourse-pragmatic approach, we can explain why there are different views and disputes about the aspectual meaning of *-ko iss-* occurring with stative verbs in Korean. Even verbs of the same situation type at the basic level can express different meanings because verb situation type may shift to another type depending on various contextual factors and pragmatic implicature. Therefore, to best characterize the semantic and grammatical nature of the aspectual marker *-ko iss-*, it is important to consider the role of discourse contexts.

In line with Smith's (1997) and Shirai's (2000) views on verb constellations, the present study follows Lee (1991, 1993) in taking a discourse-pragmatic approach and Oh (2003) in developing a diachronic account. Shirai's (2000) integrated approach including the syntactic approach as well as the duration approach also resolves the problems of applying the two-component theory to the aspectual system in Korean.

In Chapter 3, I explored the multiple uses of *-ko iss-* by examining naturally occurring conversation, and I investigated the inherent lexical aspect of verbs (situation type) and its interaction with *-ko iss-*. The study analyzed how the multiple meanings of *-ko iss-* are acquired in discourse contexts. The findings regarding the distribution of the uses of the *-ko iss-* construction in the data show that there is no significant difference in frequency between the Progressive (40%) and the non-Progressive (45%) uses. The

distribution of the uses of *-ko iss-* in relation to the situation type of the verbs in Korean indicates that there is a correlation between the inherent aspect of verbs and the meanings of *-ko iss-*. The results also show that the multiple meanings of *-ko iss-* are obtained from various contextual factors as well as the interaction between the inherent lexical semantics of verbs and the form's grammatical aspect as a general imperfective. I presented a new classification of verbs in Korean that takes account of the interaction of the imperfective aspect marker *-ko iss-* with the verb situation types in discourse. Based on the results of the study, I suggested that the basic meaning of *-ko iss-* underlying all its current variant uses is continuous status at reference time, which better fits in the continuous aspect than the progressive aspect. With the extended meaning of the habitual, the *-ko iss-* construction can be categorized as a general imperfective.

In Chapter 4, I investigated the historical development of *-ko iss-* based on empirical evidence from Middle Korean texts, drawing on the grammaticalization theory. I concluded that the *-ko is(i)-* construction in the $15^{th}$ c. was used to denote the resultative state and the continuous/durative state rather than the progressive meaning because the advancement to the progressive aspect was not observed until the $18^{th}$ c., and the existential verb *is(i)-* is more compatible with the resultative and the stative meaning in the early stage of its grammaticalization. Considering all the historical evidence and the findings from Chapter 3's study of the Modern Korean aspectual system, I suggested a new imperfective pathway of the grammaticalization of the Korean aspect marker. The grammaticalization of the imperfective aspect marker in Korean has taken a unique path that does not match the universal paths of grammaticalization that Bybee et al. (1994) described. In the early stage of the imperfective grammaticalization, *-ko iss-* was used as the aspectual marker implying the non-progressive meaning first, and then later developed to denote the progressive aspect. The developmental path of the imperfective *-ko iss-* that I have suggested can clearly explain the multiple uses *-ko iss-* found in the data for the study presented in Chapter 3. The grammaticalization path taken by *-ko iss-* and the context-dependent nature of this construction are the major factors responsible for its multiple uses in Modern Korean.

In Chapter 5, I extended this research to explore the L2 acquisition of *-ko iss-* and I suggested pedagogical implications of this study's findings on the aspectual system in

Korean. I empirically investigated how L2 learners acquire the Korean imperfective aspect marker *-ko iss-* and its multiple functions in relation to the verb semantic types. The results indicate that while native speakers of Korean show no significant differences in how they use *ko iss-* with the various verb types, L2 learners develop their ability to use *-ko iss-* differently depending on verb types. There was no significant difference in accuracy scores between dynamic verbs (Activity, Accomplishment, and Achievement 2) within each L2 group, but there was a large gap between State type and dynamic verbs within each L2 group.

Overall, the results of the L2 acquisition study indicate that L2 learners have difficulties in producing the imperfective *-ko iss-*, and there were significant differences between the Native group and the L2 learners' groups. I speculated that there are two reasons why L2 learners showed poor performance on the stative use of *-ko iss-* occurring with State types and the resultative use of *-ko iss-*. First, L1 transfer is one of the main factors that can influence the acquisition of aspectual semantics by L2 learners. Second, the learners' better performance on the progressive *-ko iss-* in the present study might result from the higher frequency of their exposure to the progressive use of *-ko iss-* than to the stative use and the resultative use.

By analyzing L2-Korean textbooks, I found two kinds of problems in teaching the *-ko iss-* construction in the L2-Korean classroom. First, L2 textbooks do not introduce all the different uses of *-ko iss-* depending on verb types as independent grammar points. Second, there is a large difference in type frequency between State verbs and dynamic verbs, and this is unlike the usage pattern shown by native speakers of Korean. For more effective teaching of the *-ko iss-* construction in the L2 classroom, I suggested that the general continuous aspect meaning of *-ko iss-* should be taught, and its context-dependent meanings and multiple functions related to verb types should be separately introduced.

# REFERENCES

Ahn, Y. O. (1995). *The aspectual and temporal systems of Korean from the perspective of the two-component theory of aspect* (Unpublished doctoral dissertation). University of Texas at Austin.

Andersen, R. W., & Shirai, Y. (1996). The primacy of aspect in first and second language acquisition: The pidgin-creole connection. In W. C. Ritchie & T. K. Bhatia (Eds.), *Handbook of second language acquisition* (pp. 527–570). San Diego, CA: Academic Press.

Baek, E.-J. (1986). Tense and aspect in Korean and Mongolian. *Korean Linguistics, 4*, 61–74.

Bardovi-Harlig, K. (2000). *Tense and aspect in second language acquisition: Form, meaning, and use.* Oxford: Blackwell.

Beom, G.-H. (2009). *Hankwuke yenkyelemilyuuy silhyen yangsangey tayhan theyksutu pwunsekcek yenkwu* [A text analytical study on the actualization phases of Korean connective endings types] (Unpublished doctoral dissertation). Youngnam University, Kyengsan.

Brinton, L. J. (1988). *The development of English aspectual systems: Aspectualizers and post-verbal particles*. Cambridge: Cambridge University Press.

Brinton, L. J. (1992). The historical present in Charlotte Bronte's novels: Some discourse functions. *Style, 26*, 221–244.

Brown, L., & Yeon, J. (2010). Experimental research into the phases of acquisition of Korean tense-aspect: Focusing on the progressive marker "-ko issta." *Journal of Korean Language Education, 21*(1), 151–173.

Bybee, J. (1985). *Morphology: A study of the relation between meaning and form.* Amsterdam: Benjamins.

Bybee, J., & Hopper, P. J. (Eds.). (2001). *Frequency and the emergence of linguistic structure*. Amsterdam: John Benjamins.

Bybee, J., Perkins, R., & Pagliuca, W. (1994). *The evolution of grammar: Tense, aspect, and modality in the languages of the world.* Chicago, IL: University of Chicago Press.

Choi, H.-P. (1965). *Wulimalbon* [Korean grammar]. Seoul: Cengumsa.

Comrie, B. (1976). *Aspect: An introduction to verbal aspect and related problems.* Cambridge: Cambridge University Press.

Dahl, O. (1985). *Tense and aspect system.* Oxford: Blackwell.

Dowty, D. (1979). *Word meaning and Montague grammar*. Dordrecht: Reidel.

Englebretson, R. (2009). From subordinate clause to noun-phrase: 'Yang' constructions. In R. Laury (Ed.), *Crosslinguistic studies of clause combining: The multifunctionality of conjunctions* (pp. 1–35). Amsterdam: John Benjamins.

Fielder, G. E. (2009). Bulgarian adversative connectives: Conjunctions or discourse markers. In R. Laury (Ed.), *Crosslinguistic studies of clause combining: The multifunctionality of conjunctions* (pp. 79–97). Amsterdam: John Benjamins.

Haiman, J. (1994). Ritualization and the development of language. In W. Pagliuca (Ed.), *Perspectives on grammaticalization* (pp. 3–28). Amsterdam: John Benjamins.

Haspelmath, M., & König, E. (Eds.). (1995). *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms—adverbial participles, gerunds.* Berlin: Mouton de Gruyter.

Hatcher, A. G. (1951). The use of the Progressive form in English. *Language, 27*, 254-280.

Heine, B. (1993). *Auxiliaries: Cognitive forces and grammaticalization*. New York: Oxford University Press.

Heine, B., Claudi, U., & Hünnemeyer, F. (1991). *Grammaticalization: A conceptual framework.* Chicago, IL: University of Chicago Press.

Ho, K. S. (2003). *Study on auxiliary verb constructions in Korean.* Seoul: Yeoklak.

Hopper, P. J. (1991). On some principles of grammaticalization. In E. C. Traugott & B. Heine (Eds.), *Approaches to grammaticalization* (Vol. 1, pp. 17–35). Amsterdam: John Benjamins.

Hopper, P. J., & Thompson, S. A. (1980). Transitivity in grammar and discourse. *Language, 56*(2), 251–299.

Hopper, P. J., & Thompson, S. A. (1984). The discourse basis for lexical categories in universal grammar. *Language, 60*, 703–752.

Hopper, P. J., & Traugott., E. C. (1993). *Grammaticalization* (2nd ed.). Cambridge: Cambridge University Press.

Huh, W. (1975). *Wuli yeysmalpon* [Studies on Middle Korean]. Seoul: Saym mwunhwasa.

Huh, W. (1989). *16 seyki wuli yeysmalbon* [Korean language in the 16th century]. Seoul:

Saym mwunhwasa.

Huh, W. (1992). *15C, 16C wuli yeysmalponuy yeksa* [History of 15th and 16th century Korean language]*. Seoul: Tap Chulpansa.

Ishida, M. (2004). The effect of recasts on acquisition of aspect in Japanese as a foreign language. *Language Learning, 54*, 311–394.

Jang, M.-s. (2005). The improved plans for teaching Korean tense and aspect forms: Focusing on *hanta* type and *hako issta* type. *Journal of Korean Language Education, 16*(3), 305–330.

Jeon, S. (2011). *Second language acquisition of Korean progressive* (Unpublished doctoral dissertation). University of Southern California at Los Angeles.

Jeong, E.-h. (2002). '-ko is-' kwusenguy mwunpephwaey tayhan phongsicek yenkwu [A diachronic study on the grammaticalization of the '-ko is-' construction]. *Cintanhakpo, 94*, 167–203.

Jeong, E.-h. (2003). Cwungsey Kwuke '-e isye>-eysye>-esye'uy mwunpephwaey tayhan yenkwu [A study on the grammaticalization of "-eo isyeo > -esyeo > -eosyeo" in Middle Korean]. *Emwunyenkwu, 31*(4), 33–58.

Jeong, E.-h. (2007a). '-e ista' kwusenguy pwunphowa uymiuy yeksacek pyenhwa [Historical change in the distribution and meaning of the "-e ista" construction]. *Emwun Yenkwu* [Language Research]*, 36*(4), 79–108.

Jeong, E.-h. (2007b). Pocoyongen kwusenguy mwunpephwawa yeksacek pyenhwa [Grammaticalization and historical changes in Korean auxiliary verbs]. *Hankwukehak, 35*, 121–165.

Kang, B.-M. (2003). *Language, computer, corpus linguistics*. Seoul: Korea University Press.

Kim, H. Y., & Lee, E. H. (2006). The development of tense and aspect morphology in L2 Korean. In J. Song (Ed.), *Frontiers of Korean language acquisition* (pp. 91–126). London: Saffron Books.

Kim, M. (2003). *Discourse, frequency, emergence of grammar: A corpus-based study of grammaticalization of Korean existential verb* -is(i)-ta (Unpublished doctoral dissertation). University of California at Los Angeles.

Kim, M. H. (1996). Mwunpephwaui thuleyse ponun pocotongsakwumwun [The grammaticalization of auxiliary verbs in Korean]. *Discourse and Cognition, 2*, 129–146.

Ko, Y. K. (1987). *Phyocwun kwuke mwunpep lon* [Standard Korean grammar]. Seoul: Cipmwuntang.

Ko, Y. K. (2005). *Phyocwun chwungsey kwuke mwunpep lon* [Standard Middle Korean grammar]. Seoul: Cipmwuntang.

Kuo, J. J., & Hsieh, M. L. (1996). *A cognitive treatment of aspect in Japanese to Chinese machine translation*. Paper presented at the Rocling III Computational Linguistics Conference III. Taipei, Taiwan.

Langacker, R. W. (1987). *Foundations of cognitive grammar: Theoretical prerequisites* (Vol. 1). Stanford, CA: Stanford University Press.

Lee, E. (2006). Stative progressives in Korean and English. *Journal of Pragmatics, 38*(5), 695–717.

Lee, E., & Kim, H.-Y. (2007). On crosslinguistic variations in imperfective aspect: The case of L2 Korean. *Language Learning, 57*(4), 651–685. doi: 10.1111/j.1467-9922.2007.00431.x

Lee, H. S. (1991). *Tense, aspect, and modality: A discourse-pragmatic analysis of verbal affixes in Korean from a typological perspective* (Unpublished doctoral dissertation). University of California at Los Angeles.

Lee, H. S. (1993). Tense or aspect: The speaker's communicative goals and concerns as determinant, with reference to the anterior *-ŏss-* in Korean. *Journal of Pragmatics, 20*(4), 327–358.

Lee, I.-S. (2005). *Hankwyke mwunpep* [Korean grammar]. Seoul: Seoul University Press.

Lee, K.-d. (1993). *A Korean grammar on semantic-pragmatic principles*. Seoul: Hankwuk.

Lee, K.-G. (1981). Ssikkuth '-a'wa '-ko'uy yeksacek kyochey [Historical replacement of '-a' with '-ko' in the ending system of Korean]. *Ehakyenkwu, 17*(2), 227– 236.

Lee, K.-G. (1998). '-e/-ese'uy kongsithayey tayhan yeksacek selmyeng [A historical explanation of ending '-e/-ese' in Korean]. *Discourse and Cognition, 5*(2), 101–121.

Lee, K.-S. (2004). *'-se'uy uymiey tayhan thongsicek kochal* [A diachronic study on the "-se" of Korean] (Unpublished master's thesis). Kyonggi University, Suwon, Korea.

Lee, S. (1992). *The syntax and semantics of serial verb constructions* (Unpublished doctoral dissertation). University of Washington, Seattle.

Lee, Y. H. (2011). *Aspectual classification of verbs in Korean and Japanese* (Unpublished doctoral dissertation). Chungnam University, Daejeon, Korea.

Li, P., & Shirai, Y. (2000). *The acquisition of lexical and grammatical aspect.* Berlin: Mouton de Gruyter.

Mourelatos, A. (1981). Events, processes, and states. In P. J. Tedeschi & A. Zaenen (Eds.), *Syntax and semantics, Vol. 14: Tense and aspect* (pp. 191–212). New York: Academic Press.

Nedjalkov. (2001). Resultative constructions. In M. Haspelmath (Ed.), *Language typology and language universalsan international handbook.* (Vol. 2, pp. 928-940). Berlin ;New York :: W. de Gruyter,.

Nedjalkov, V. P., & Jaxontov, S. J. (1988). The typology of resultative constructions. In V. P. Nedjalkov (Ed.), *Typology of resultaitve constructions* (pp. 3–62). Amsterdam: John Benjamins.

Oh, S.-s. (1998). *A syntactic and semantic study of Korean auxiliaries: A grammaticalization perspective.* (Unpublished doctoral dissertation).Ph.D., University of Hawaiʻi, United States -- Honolulu. Hawaii.

Oh, S.-Y. (2003). The Korean verbal suffix *-ess-*: A diachronic account of its multiple uses. *Journal of Pragmatics, 35*(8), 1181–1222.

Okamoto, S., & Ono, T. (2008). Quotative 'tte' in Japanese: Its multifaceted functions and degrees of "subordination." In R. Laury (Ed.), *Crosslinguistic studies of clause combining: The multifunctionality of conjunctions* (pp. 205–230). Amsterdam: John Benjamins.

Park, J.-H. (2003). *Hankwukeuy tongsawa mwunpepyosouy kyelhap yangsang* [Combinatorial patterns of verbs and grammatical elements in Korean] (Unpublished doctoral dissertation). Seoul National University.

Rhee, S. (1996). *Semantics of verbs and grammaticalization: The development in Korean from a cross-linguistic perspective* (Unpublished doctoral dissertation). University of Texas at Austin.

Rhee, S. (2000). *Mwunpephwauy ihay* [Understanding grammaticalization]. Seoul: Mankwukmwunhwasa.

Robinson, R. (1990). The primacy of aspect: Aspectual marking in English interlanguage. *Studies in Second Language Acquisition, 12*, 315–330.

Rudnitskaja, E. (1998). Syntactic properties of the Altaic structure in Korean. *Sprachtypologie und Universalienforschung, 51*, 179–198.

Shirai, Y. (1998). Where the progressive and the resultative meet imperfective aspect in Japanese, Chinese, Korean and English. *Studies in Language, 22*(3), 661–692.

Shirai, Y. (2000). The semantics of the Japanese imperfective *-teiru*: An integrative approach. *Journal of Pragmatics, 32*(3), 327–361.

Shirai, Y., & Andersen, R. W. (1995). The acquisition of tense-aspect morphology: A prototype account. *Language, 71*(4), 743–762. doi: 10.2307/415743

Shirai, Y., Ryu, J.-y., & Horie, K. (2010). *The acquisition of imperfective aspect marking in Korean as a second language by Japanese learners.* Paper presented at the 24th Pacific Asia Conference on Language, Information and Computation, Tohoku University, Sendai, Japan.

Smith, C. (1991). *The parameter of aspect*. Dordrecht: Kluwer Academic.

Smith, C. (1997). *The parameter of aspect* (2nd ed.). Dordrecht: Kluwer Academic.

Sohn, H.-M. (1996). *Functional transfer in sentence-final positions in Korean and Japanese*. Paper presented at the Research Institute of Language and Information, Seoul.

Sohn, H.-M. (1999). *The Korean language*. Cambridge, UK: Cambridge University Press.

Sohn, S. (1996). *Kwuke poco yongen yenkwu* [Study on the auxiliary verb construction in Korean]. Seoul: Hankwuk Mwunhwasa.

Traugott, E. C., & Dasher, R. B. (2002). *Regularity in semantic change*. Cambridge: Cambridge University Press.

Traugott, E. C., & König, E. (1991). The semantics-pragmatics of grammaticalization revisited. In E. C. Traugott & B. Heine (Eds.), *Approaches to grammaticalization.* (Vol. 1, pp. 189–218). Amsterdam: John Benjamins.

Vendler, Z. (1967). *Linguistics in philosophy*. Ithaca, NY: Cornell University Press.

Yip, P.-C., & Rimmington, D. (2004). *Chinese: A comprehensive grammar.* London: Routledge.

You, S.-H. (1996). *Argument licensing in complex verbal constructions in Korean* (Unpublished doctoral dissertation). University of Hawaiʻi, Honolulu.

Zeitoun, E. (2000). Dynamic vs. stative verbs in Mantauran (Rukai). *Oceanic Linguistics, 39*(2), 415–427.

# APPENDIX A

**1. Top 100 verbs with high z-score combined with *-ko iss-* in Modern Korean**

|    | Verbs                              | f(v, *-ko iss-*) | f(v)  | Z-score |
|----|------------------------------------|------------------|-------|---------|
| 1  | *kac-* 'take'                      | 1040             | 4146  | 79.3636 |
| 2  | *kaci-* 'take'                     | 1096             | 6024  | 65.6261 |
| 3  | *cini-* 'hold'                     | 470              | 1711  | 56.4858 |
| 4  | *al-* 'know'                       | 1400             | 11241 | 55.4976 |
| 5  | *calicap-* 'settle'                | 189              | 412   | 48.6907 |
| 6  | kitali- 'wait'                     | 453              | 2267  | 44.9942 |
| 7  | *an-* 'hug'                        | 240              | 822   | 41.923  |
| 8  | *nayphoha-* 'connote'              | 76               | 122   | 36.6809 |
| 9  | kyuceongha- 'specify'              | 194              | 717   | 35.9335 |
| 10 | ilwu- 'accomplish'                 | 355              | 2180  | 34.4164 |
| 11 | *tam-* 'input'                     | 234              | 1069  | 34.3885 |
| 12 | tosali- 'lurk'                     | 51               | 68    | 33.2691 |
| 13 | *sal-* 'live'                      | 810              | 8793  | 31.9152 |
| 14 | *poyuha-* 'keep'                   | 78               | 165   | 31.8201 |
| 15 | *taykiha-* 'stand by'              | 52               | 84    | 30.2355 |
| 16 | *ka*/VX                            | 579              | 5744  | 29.4714 |
| 17 | *il-* 'form'                       | 111              | 411   | 27.1462 |
| 18 | *chaciha-* 'occupy'                | 171              | 934   | 25.9932 |
| 19 | *peli-* 'begin'                    | 222              | 1569  | 24.4388 |
| 20 | *kyek-* 'suffer'                   | 169              | 1011  | 24.1996 |
| 21 | *phwum-* 'hold'                    | 89               | 343   | 23.696  |
| 22 | *cinhayngtoy-* 'progress'          | 126              | 687   | 22.3384 |
| 23 | *math-* 'take'                     | 185              | 1308  | 22.3008 |
| 24 | *tti-* 'take'                      | 132              | 760   | 21.9902 |
| 25 | *socangha-* 'possess'              | 24               | 36    | 21.3982 |
| 26 | *kancikha-* 'cherish'              | 65               | 234   | 21.1439 |
| 27 | *alh-* 'suffer'                    | 91               | 430   | 20.9588 |
| 28 | *twu-* 'put'                       | 308              | 3143  | 20.8971 |
| 29 | *kacchwu-* 'equip'                 | 158              | 1104  | 20.8    |
| 30 | *nul-* 'increase'                  | 111              | 639   | 20.1665 |
| 31 | *kyeysoktoy-* 'continue'           | 126              | 818   | 19.6569 |
| 32 | *ceykitoy-* 'come up'              | 78               | 367   | 19.4598 |
| 33 | *chwucinha-* 'propel'              | 105              | 628   | 19.0754 |
| 34 | *hamyuha-* 'contain'               | 26               | 53    | 18.763  |
| 35 | *kontwuseywu-* 'keep an eye on'    | 31               | 77    | 18.2802 |

| 36 | *hwaksantoy-* 'diffuse' | 54 | 215 | 18.0752 |
|---|---|---|---|---|
| 37 | *wunyengha-* 'operate' | 72 | 372 | 17.535 |
| 38 | *panpalha-* 'oppose' | 41 | 138 | 17.5119 |
| 39 | *toyeka-* 'become' | 27 | 65 | 17.3745 |
| 40 | *peleci-* 'be thrown away' | 122 | 927 | 17.0901 |
| 41 | *pat-* 'get, receive' | 689 | 11523 | 17.0038 |
| 42 | *naylyetapo-* 'look down' | 56 | 259 | 16.6799 |
| 43 | *ttel-* 'shake' | 100 | 698 | 16.559 |
| 44 | *kiekha-* 'remember' | 74 | 430 | 16.3536 |
| 45 | *palapo-* 'watch' | 200 | 2143 | 16.0349 |
| 46 | *cwusiha-* 'stare' | 25 | 65 | 15.9811 |
| 47 | *cicektoy-* 'be pointed out' | 50 | 229 | 15.8646 |
| 48 | *cemha-* 'occupy' | 21 | 48 | 15.791 |
| 49 | *caliha-* 'settle down' | 26 | 74 | 15.4445 |
| 50 | *cikhyepo-* 'watch' | 66 | 387 | 15.3428 |
| 51 | *pic-* 'make' | 61 | 347 | 15.0774 |
| 52 | *cakyongha-* 'operate' | 81 | 561 | 14.9934 |
| 53 | *pyelu-* 'watch for' | 28 | 92 | 14.6886 |
| 54 | *sokchwulha-* 'turn up' | 20 | 51 | 14.4583 |
| 55 | *naytapo-* 'look' | 57 | 332 | 14.3277 |
| 56 | *kocotoy-* 'increase' | 29 | 104 | 14.1565 |
| 57 | *kkul-* 'carry' | 127 | 1293 | 13.4406 |
| 58 | *casayngha-* 'live oneself' | 11 | 19 | 13.3978 |
| 59 | *mit-* 'believe' | 173 | 2077 | 13.2155 |
| 60 | *soyuha-* 'possess' | 40 | 206 | 13.0985 |
| 61 | *mosha-*/VX 'not do' | 552 | 10088 | 13.0295 |
| 62 | *cenmangha-* 'expect' | 33 | 149 | 13.0115 |
| 63 | *kemthoha-* 'check' | 70 | 543 | 12.7255 |
| 64 | *uyconha-* 'depend on' | 54 | 357 | 12.6895 |
| 65 | *memwul-* 'stay' | 52 | 336 | 12.6711 |
| 66 | *col-* 'dose off' | 25 | 96 | 12.5869 |
| 67 | *kupcungha-* 'increase rapidly' | 26 | 105 | 12.4272 |
| 68 | *sitali-* 'suffer' | 56 | 390 | 12.4122 |
| 69 | *cwucangha-* 'insist' | 146 | 1727 | 12.3404 |
| 70 | *chwusanha-* 'estimate' | 10 | 19 | 12.1093 |
| 71 | *pichna-* 'shine' | 57 | 418 | 12.0203 |
| 72 | *kalomak-* 'block' | 37 | 208 | 11.8423 |
| 73 | *kyeyhoykha-* 'plan' | 30 | 146 | 11.7942 |

| 74 | *ssoli-* 'lean' | 28 | 130 | 11.7634 |
|---|---|---|---|---|
| 75 | *cwi-* 'hold' | 64 | 520 | 11.7054 |
| 76 | *ip-* 'wear' | 167 | 2236 | 11.4254 |
| 77 | *tuyteph-* 'cover' | 19 | 69 | 11.3783 |
| 78 | *tamtangha-* 'take charge of' | 48 | 339 | 11.3655 |
| 79 | *kilokha-* 'write' | 66 | 568 | 11.3128 |
| 80 | *twulessa-* 'surround' | 62 | 520 | 11.2127 |
| 81 | *nathanay-* 'reveal' | 102 | 1124 | 11.1229 |
| 82 | *cemyuha-* 'occupy' | 12 | 31 | 11.114 |
| 83 | *hamchwukha-* 'connote' | 13 | 36 | 11.1011 |
| 84 | *cwumokha-* 'pay attention to' | 34 | 200 | 10.9859 |
| 85 | *sayongtoy-* 'use' | 69 | 634 | 10.9106 |
| 86 | *ceysiha-* 'suggest' | 99 | 1096 | 10.9055 |
| 87 | *tamwul-* 'close' | 40 | 266 | 10.8721 |
| 88 | *wulyetoy-* 'be worried' | 23 | 105 | 10.7827 |
| 89 | *yuciha-* 'keep' | 80 | 812 | 10.6976 |
| 90 | *kosimha-* 'be concerned' | 18 | 69 | 10.6921 |
| 91 | *kwencangha-* 'recommend' | 17 | 63 | 10.6166 |
| 92 | *pwunphoha-* 'distribute' | 29 | 161 | 10.5782 |
| 93 | *nulena-* 'increase' | 82 | 853 | 10.5722 |
| 94 | *hulu-* 'flow' | 119 | 1483 | 10.5047 |
| 95 | *kongyuha-* 'share' | 23 | 110 | 10.45 |
| 96 | *yeysangtoy-* 'be expected' | 49 | 391 | 10.3988 |
| 97 | *sesengkeli-* 'wander' | 17 | 66 | 10.3068 |
| 98 | *twingkwul-* 'roll over' | 24 | 121 | 10.2962 |
| 99 | *chitat-* 'reach' | 23 | 113 | 10.2601 |
| 100 | *taytwutoy-* 'come up' | 19 | 81 | 10.2551 |

**2. Top 100 verbs with high z-score combined with *-e iss-* in Modern Korean**

| | Verbs | f(v, *-e iss-*) | f(v) | Z-score |
|---|---|---|---|---|
| **1** | *se-* 'stand up' | 1256 | 3480 | 164.21 |
| **2.** | *nam-* 'remain' | 1054 | 2832 | 152.927 |
| **3** | *anc-* 'sit' | 869 | 3330 | 114.15 |
| **4.** | *nohi-* 'be put' | 399 | 931 | 101.479 |
| **5.** | *nwup-* 'lie down' | 333 | 988 | 81.3811 |
| **6.** | *kkalli-* 'be buried' | 173 | 325 | 74.9976 |
| **7** | *swum-* 'hide' | 235 | 606 | 73.7825 |
| **8** | *pwuth-* 'attach' | 304 | 1112 | 69.2492 |
| **9** | *nelli-* 'be spread out' | 97 | 134 | 66.0016 |
| **10** | *phohamtoy-* 'be included' | 184 | 480 | 64.8771 |
| **11** | *tamki-* 'be input' | 180 | 523 | 60.5122 |
| **12** | *cekhi-* 'be written' | 107 | 194 | 60.0979 |
| **13** | *ci*/VX 'become' | 1319 | 20622 | 56.4681 |
| **14** | *memwulu-* 'stay' | 130 | 354 | 53.2743 |
| **15** | *kwusengtoy-* 'consist of' | 160 | 591 | 49.9561 |
| **16** | *tul-* 'input' | 761 | 10021 | 48.9059 |
| **17** | *kathi-* 'take in custody' | 114 | 336 | 47.7789 |
| **18** | *toy-* 'become' | 1438 | 29493 | 46.5111 |
| **19** | *talli-* 'be hung' | 225 | 1291 | 45.9515 |
| **20** | *camki-* 'be sunk' | 110 | 364 | 44.035 |
| **21** | *pi-* 'vacant' | 148 | 645 | 43.7524 |
| **22** | *kiloktoy-* 'be recorded' | 71 | 163 | 43.1711 |
| **23** | *sal-* 'be alive' | 624 | 8793 | 42.027 |
| **24** | *tephi-* 'be warmed up' | 73 | 183 | 41.7503 |
| **25** | *pay-* 'be smerged' | 79 | 221 | 40.9229 |
| **26** | *pakhi-* 'reveal' | 85 | 271 | 39.5121 |
| **27** | *kelli-* 'be hung' | 218 | 1571 | 39.3594 |
| **28** | *ssahi-* 'be stacked' | 114 | 480 | 39.1598 |
| **29** | *cha-* 'fill up' | 184 | 1179 | 38.8749 |
| **30** | *sekki-* 'be mixed' | 101 | 390 | 38.7105 |
| **31** | *seli-* 'be steamed up' | 53 | 116 | 38.266 |
| **32** | *cec-* 'get wet' | 114 | 545 | 36.4052 |
| **33** | *kkochi-* 'be stuck' | 46 | 100 | 35.7786 |
| **34** | *nayphotoy-* 'connote' | 33 | 53 | 35.576 |
| **35** | *ppaci-* 'fall out' | 233 | 2174 | 34.4881 |

| 36 | *silli-* 'be loaded' | 97 | 458 | 33.8229 |
|---|---|---|---|---|
| 37 | *kkii-* 'be inserted' | 49 | 128 | 33.451 |
| 38 | *yenkyeltoy-* 'be connected' | 88 | 418 | 32.1037 |
| 39 | *cheha-* 'encounter' | 74 | 305 | 31.9337 |
| 40 | *pheci-* 'be spread out' | 95 | 493 | 31.6796 |
| 41 | *kyucengtoy-* 'be regulated' | 61 | 218 | 31.4168 |
| 42 | *nulese-* 'line up' | 43 | 112 | 31.3854 |
| 43 | *selchitoy-* 'be installed' | 72 | 304 | 31.07 |
| 44 | *hutheci-* 'be scattered' | 76 | 352 | 30.2726 |
| 45 | *mwuthi-* 'be buried' | 82 | 406 | 30.2518 |
| 46 | *mwukki-* 'be tied up' | 53 | 180 | 30.1268 |
| 47 | *kistul-* 'be smerged' | 34 | 82 | 29.0926 |
| 48 | *phyelchyeci-* 'be spread out' | 71 | 337 | 28.8481 |
| 49 | *cwunpitoy-* 'get ready' | 38 | 106 | 28.4253 |
| 50 | *malyentoy-* 'get prepared' | 72 | 356 | 28.3694 |
| 51 | *cipcwungtoy-* 'get paid attention' | 55 | 216 | 28.293 |
| 52 | *ttu-* 'float' | 150 | 1356 | 28.2196 |
| 53 | *camcaytoy-* 'be unconscious' | 23 | 41 | 28.1125 |
| 54 | *myengsitoy-* 'be specified' | 24 | 46 | 27.6358 |
| 55 | *hamyutoy-* 'be contained' | 23 | 43 | 27.4131 |
| 56 | *elkhi-* 'be mixed' | 56 | 241 | 27.104 |
| 57 | *paltaltoy-* 'be developed' | 38 | 117 | 26.9298 |
| 58 | *kiwuleci-* 'lean' | 38 | 118 | 26.8041 |
| 59 | *cinyeltoy* 'be displayed' | 17 | 26 | 26.1979 |
| 60 | *chepakhi-* 'be stuck' | 28 | 70 | 25.8942 |
| 61 | *pwunphotoy-* 'be distributed' | 17 | 27 | 25.6843 |
| 62 | *tathi-* ''be closed' | 46 | 184 | 25.6076 |
| 63 | *pokwantoy-* 'be kept' | 21 | 41 | 25.5988 |
| 64 | *camcayha-* 'be unconscious' | 19 | 35 | 25.1115 |
| 65 | *ssai-* 'be stacked' | 32 | 96 | 25.0674 |
| 66 | *maytalli-* 'hang' | 70 | 418 | 25.0173 |
| 67 | *sumi-* 'be smerged' | 31 | 92 | 24.8193 |
| 68 | *swuloktoy-* 'be recorded' | 27 | 71 | 24.7413 |
| 69 | *ppet-* 'spread out' | 64 | 370 | 24.3896 |
| 70 | *tulecha-* 'fill up' | 27 | 73 | 24.371 |
| 71 | *pichitoy-* 'be displayed' | 13 | 18 | 24.1326 |
| 72 | *tulttu-* 'be excited' | 37 | 142 | 23.5087 |
| 73 | *cicengtoy-* 'be designated' | 34 | 122 | 23.4014 |

| 74 | *pwuphwul-* 'inflate' | 36 | 137 | 23.2993 |
|---|---|---|---|---|
| 75 | *moi-* 'come together' | 121 | 1246 | 23.2106 |
| 76 | *socangtoy-* 'be possessed' | 11 | 14 | 23.1948 |
| 77 | *naycayha-* 'be innate' | 23 | 59 | 23.144 |
| 78 | *khyeci-* 'light up' | 26 | 75 | 23.0858 |
| 79 | *salocaphi-* 'be seized by' | 51 | 270 | 22.9358 |
| 80 | *twulessai-* 'be surrounded' | 30 | 101 | 22.7757 |
| 81 | *kalonohi-* 'be laid' | 17 | 35 | 22.3908 |
| 82 | *twitephi-* 'be covered' | 22 | 59 | 22.0962 |
| 83 | *naycaytoy-* 'be innate' | 16 | 32 | 22.06 |
| 84 | *tteleci-* 'fall down' | 178 | 2577 | 21.9302 |
| 85 | *pocontoy-* 'be preserved' | 22 | 60 | 21.8953 |
| 86 | *molli-* 'be centered' | 65 | 455 | 21.8766 |
| 87 | *censitoy-* 'be displayed' | 22 | 63 | 21.3207 |
| 88 | *milcipha-* 'be centered' | 12 | 21 | 20.5049 |
| 89 | *twulli-* 'be surrounded' | 9 | 12 | 20.4785 |
| 90 | *yeycengtoy-* 'be scheduled' | 37 | 182 | 20.3971 |
| 91 | *sos-* 'soar' | 44 | 251 | 20.384 |
| 92 | *kaiptoy-* 'be joined' | 11 | 18 | 20.3387 |
| 93 | *kyelyetoy-* 'be defected' | 25 | 89 | 20.1551 |
| 94 | *nochwultoy-* 'be exposed' | 32 | 142 | 20.1317 |
| 95 | *enchi-* 'be surmounted' | 27 | 104 | 20.0407 |
| 96 | *yenkwantoy-* 'be related' | 27 | 105 | 19.9329 |
| 97 | *paychitoy-* 'be deployed' | 28 | 113 | 19.878 |
| 98 | *kwanlyentoy-* 'be related' | 77 | 714 | 19.8756 |
| 99 | *hamchwuktoy-* 'be connotated' | 9 | 13 | 19.6407 |
| 100 | *ceyhantoy-* 'be limited' | 37 | 197 | 19.4725 |

# APPENDIX B

**Sample picture and close test of the L2 acquisition study**



*Please fill in the blanks with the verbs in parenthesis according to the picture #1. (Conjugate the verbs if necessary. You may also use other sentence endings.)

오늘 어린이날을 축하하는 운동회가 있는 날입니다. 운동장 위에는 만국기와 풍선이 _____ (걸다).

천막 밑에는 사람들이 많이 _____ (앉다).

어머니와 아버지가 아이들을 응원하러 나오셨습니다.

몇 몇 어린이들은 부모님과 함께 맛있게 도시락을 _____ (먹다).

세 명의 어린이들이 힘차게 _____ (달리다).

모두들 이름표가 달린 운동복을 _____ (입다).

이다해, 김민호, 박철수 어린이입니다.

그 다음에 김민수, 정수미, 최지석 어린이가 _____ (나오다). 지금 운동화 끈을 _____ (매다).

달리기 시합에서 이긴 사람은 상품을 _____ (받다).

달리기 시합을 위해서, 지난 한 달 동안 열심히 _____ (연습하다).

방금 줄다리기 시합이 끝났습니다.

줄다리기 시합에서 이긴 팀 어린이들이 아주 _____ (기뻐하다).

## APPENDIX C

**Top 100 verbs with high frequency combined with *-ko iss-* in L2 textbooks**

| | Verbs | F | | | |
|---|---|---|---|---|---|
| **1** | *ha- 'do'* | 39 | **35** | *molu- 'not know'* | 4 |
| **2** | *al- 'know'* | 25 | **36** | *toy- 'become'* | 4 |
| **3** | *sal- 'live'* | 19 | **37** | *swi- 'take a rest'* | 4 |
| **4** | *kaci- 'take'* | 18 | **38** | *paywu- 'learn'* | 4 |
| **5** | *sayngkakha- 'think'* | 13 | **39** | *twu- 'put'* | 3 |
| **6** | *ka- 'go'* | 13 | **40** | *ponay- 'send'* | 3 |
| **7** | *kkul- 'drag'* | 10 | **41** | *cini- 'hold'* | 3 |
| **8** | *chac- 'look for'* | 10 | **42** | *ilwu- 'accomplish'* | 3 |
| **9** | *iyakiha- 'talk'* | 9 | **43** | *pantayha- 'oppose'* | 3 |
| **10** | *kitali- 'wait'* | 9 | **44** | *cwucangha- 'insist'* | 3 |
| **11** | *hwaksantoy- 'be spread'* | 7 | **45** | *cicekha- 'point out'* | 3 |
| | | | **46** | *mak- 'block'* | 3 |
| **12** | *kac- 'take'* | 7 | **47** | *tut- 'listen'* | 3 |
| **13** | *tha- 'get on'* | 7 | **48** | *panpokha- 'repeat'* | 3 |
| **14** | *ceysiha- 'suggest'* | 7 | **49** | *ssu- 'use'* | 3 |
| **15** | *po- 'look at, see'* | 7 | **50** | *cap- 'hold'* | 3 |
| **16** | *ca- 'sleep'* | 7 | **51** | *et- 'get'* | 3 |
| **17** | *cwi- 'hold'* | 6 | **52** | *tolaka- 'turn around'* | 3 |
| **18** | *tam- 'put'* | 6 | **53** | *kongpwuha- 'study'* | 3 |
| **19** | *mosha- 'not do'* | 6 | **54** | *cinay- 'live'* | 3 |
| **20** | *wus- 'laugh'* | 5 | **55** | *yaykiha- 'talk'* | 3 |
| **21** | *tosali- 'lurk'* | 5 | **56** | *peleci- 'happen'* | 3 |
| **22** | *pat- 'get, receive'* | 5 | **57** | *molaneh- 'drive ~into a corner'* | 2 |
| **23** | *mek- 'eat'* | 5 | | | |
| **24** | *chaciha- 'occupy'* | 5 | **58** | *ip- 'wear'* | 2 |
| **25** | *calicap- 'settle down'* | 5 | **59** | *nol- 'hang out'* | 2 |
| **26** | *masi- 'drink'* | 5 | **60** | *cakyongha- 'operate'* | 2 |
| **27** | *nul- 'increase'* | 5 | **61** | *talli- 'run'* | 2 |
| **28** | *michi- 'reach'* | 5 | **62** | *mantul- 'make'* | 2 |
| **29** | *nulena- 'increase'* | 4 | **63** | *tunatul- 'come and go'* | 2 |
| **30** | *mou- 'collect'* | 4 | | | |
| **31** | *kyekk- 'suffer'* | 4 | **64** | *pwullyeci- 'be called'* | 2 |
| **32** | *yuciha- 'depend on'* | 4 | **65** | *kunmwuha- 'work'* | 2 |
| **33** | *malha- 'say'* | 4 | **66** | *o- 'come'* | 2 |
| **34** | *salaci- 'disappear'* | 4 | **67** | *ciphenay- 'figure out'* | 2 |
| | | | **68** | *kel- 'hang'* | 2 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 69 | *pyenha- 'change'* | 2 | 87 | *alh- 'suffer'* | 2 |
| 70 | *math- 'take charge'* | 2 | 88 | *il- 'rise'* | 2 |
| 71 | *kkophi- 'get inside'* | 2 | 89 | *kekcengha- 'be worried'* | 2 |
| 72 | *tayanghayci- 'become diverse'* | 2 | 90 | *naylyeo- 'decrease'* | 2 |
| 73 | *ttayli- 'hit'* | 2 | 91 | *kolu- 'select'* | 2 |
| 74 | *cungkaha- 'increase'* | 2 | 92 | *ilha- 'work'* | 2 |
| 75 | *cwunpiha- 'prepare'* | 2 | 93 | *phal- 'sell'* | 2 |
| 76 | *ketwu- 'collect'* | 2 | 94 | *tholonha- 'discuss'* | 2 |
| 77 | *tani- 'go'* | 2 | 95 | *kongyuha- 'share'* | 2 |
| 78 | *phyelchi- 'spread out'* | 2 | 96 | *silsiha- 'enforce'* | 2 |
| 79 | *pangyengtoy- 'be shown'* | 2 | 97 | *ssot- 'focus'* | 2 |
| 80 | *cwuceha- 'hesitate'* | 2 | 98 | *tuleo- 'enter'* | 2 |
| 81 | *sam- 'consider'* | 2 | 99 | *patchi- 'hold up'* | 1 |
| 82 | *thulecwi- 'hold'* | 2 | 100 | *oychi- 'cry out'* | 1 |
| 83 | *chwucinha- 'propel'* | 2 | | **Subtotal (100 verbs)** | **450** |
| 84 | *wul- 'cry'* | 2 | | **Other verbs** | **120** |
| 85 | *pheci- 'spread out'* | 2 | | **Total** | **570** |
| 86 | *pokwanha- 'keep'* | 2 | | | |