

A History of the
**KOREAN
LANGUAGE**

Ki-Moon Lee and S. Robert Ramsey



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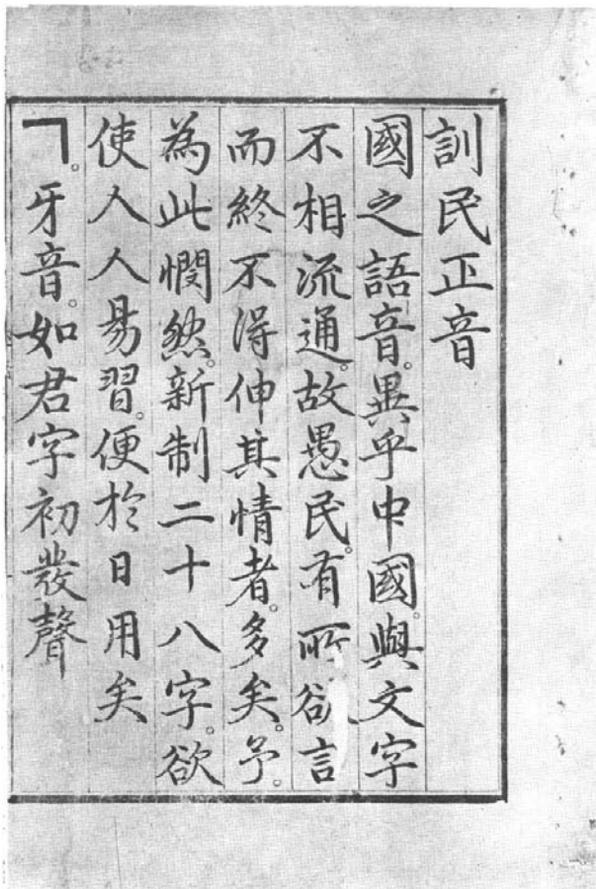
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A History of the Korean Language

A History of the Korean Language is the first book on the subject ever published in English. It traces the origin, formation, and various historical stages through which the language has passed, from Old Korean through to the present day. Each chapter begins with an account of the historical and cultural background. A comprehensive list of the literature of each period is then provided and the textual record described, along with the script or scripts used to write it. Finally, each stage of the language is analyzed, offering new details supplementing what is known about its phonology, morphology, syntax, and lexicon. The extraordinary alphabetic materials of the fifteenth and sixteenth centuries are given special attention, and are used to shed light on earlier, pre-alphabetic periods.

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Frontispiece: Korea's seminal alphabetic work, the *Hunmin chongŭm* "The Correct Sounds for the Instruction of the People" of 1446

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Map 1. The Korean peninsula

Introduction

The story of Korean begins with the invention of the Korean alphabet. Ever since it was introduced in 1446, the Korean alphabet has been the source of precise and detailed information about the phonological and morphological structure of the language. In that year, some three years after an announcement of its creation had been made in the dynastic annals, the reigning monarch, King Sejong, promulgated a handbook introducing the new script and explaining its use, and from that point on Korean has been a language structurally accessible to future generations of linguists. Before the alphabet, there is virtually nothing in the way of quality documentation; with the alphabet, Korean structure is laid out for us to see. (The invention, how it happened, and what we know as a result, will be discussed in detail in [Chapter 5](#).) Thus, lucid and precise written records of the Korean language go back slightly more than five and a half centuries.

That length of time may seem ancient by most standards, but it is not particularly long on the time scale of East Asian history, or even of Korean history. Chinese writing is thought to have begun around the seventeenth century BC; and it was certainly a fully developed writing system by the fourteenth century BC. That means histories were being written and literature composed almost two thousand years before the Korean alphabet was invented. That was of course in China. But on the Korean peninsula as well, local scribes most certainly wrote in Chinese – at least soon after the Han commanderies established a presence there in 108 BC. In other words, Koreans were literate and creating histories and literature about a millennium before the beginning of the alphabetic period.

But what do such early writings tell us about the Korean language? The simple answer is, frustratingly little – at least not in a direct and easily accessible way. People on the Korean peninsula were writing in Chinese, after all. But quite naturally Koreans did attempt to record elements of their native language – first and foremost proper names – and they did so with the only writing system they knew, Chinese characters. There were two ways to use these logographs: either to approximate sounds or to suggest meanings, and Koreans experimented with both methods, often in combinations.

Such writing of native words was apparently practiced in all the peninsular states during the Three Kingdoms period, and evidence of that usage can still sometimes be found in the transcriptions of place names. But it was in Silla (57? BC – 935 AD), the last of the three kingdoms to take up Chinese writing, where we see the most advanced adaptation of Chinese characters to transcribe Korean. There, the poems now known as *hyangga*, or ‘local songs,’ were written down in a complex interweaving of Chinese graphs, one hinting at meaning, the next one or two at sounds, then perhaps another one or two with by now obscure associations. (The method is described in [Chapter 3](#).) The Silla system might best be compared to the *man’yōgana* writing of early Japanese verse. But whereas almost 5,000 *man’yōgana* poems from the eighth century alone are still extant, no more than 25 *hyangga* from all the centuries in which such verse was being composed in Korea have survived. What is more, Buddhist priests in Japan soon made annotated editions of the *man’yōgana* poems, with readings transcribed in *katakana*, and these texts, too, have survived. The differences are stark. People on the Korean peninsula began writing much earlier, and Koreans were almost surely recording words in their own language earlier as well, but far fewer vestiges of those early Korean texts remain. Inscriptional fragments from ancient Korea certainly exist. And, somehow, those fragments must once have been read with the sounds and words of a poem, say. But whatever those sounds may have been, they are not overtly recoverable by the modern reader. The corpus is too small, and the transcription method too opaque for the poems to be read without supplemental knowledge of the language. For this reason, what is known as “Old Korean” is largely a reconstruction.

Structural information from the fifteenth century is used to reconstruct all pre-alphabetic stages of Korean. That dependence is as true for “Early Middle Korean” ([Chapter 4](#)) as for “Old Korean” ([Chapter 3](#)). In both cases (and for whatever “Proto-Korean” form comparativists would reconstruct as well), the departure point is always the fifteenth-century system. Recovery of the earlier system proceeds by reconciling internal reconstruction with the philological hints found in the textual corpus.

The origin of Korean

An enduring problem in Korean historical linguistics is the question of genealogy and origin. Proposed relationships to Altaic and Japanese are the most seriously considered genetic hypotheses; Korean has been compared to Altaic for almost a hundred years, and considerably longer to Japanese. Some of this comparative work has been detailed and professional, even convincing in some cases, and we describe what we believe to be positive results of comparative research in [Chapter 1](#), “Origins.” In doing so, we present two

different approaches comparativists have taken in their efforts to prove a genetic affinity of Korean with Altaic. The first and more common approach is through the classic application of the comparative method; the second, a kind of methodological shortcut to proof that in many ways is more convincing, is by looking at specific morphological details that Korean and the Altaic languages have in common, in this case, the inflectional endings of verbs used to form nominals and modifiers. We also draw attention to what might well be the most promising avenue of research of all, the comparison of Korean to Tungusic, a family of languages considered by most comparativists to be a branch of Altaic. More than half a century ago, one of us (Lee) published a preliminary study comparing Korean to the best-known Tungusic language, Manchu. We believe the genetic relationship suggested in that work deserves renewed consideration.

Nevertheless, the answer to the question of where Korean came from is still incomplete. In order for a genetic hypothesis to be truly convincing, the proposed rules of correspondence must lead to additional, often unsuspected discoveries about the relationship. Concrete facts must emerge about the history of each language being compared in order to put the hypothesis beyond challenges to its validity, and that has so far not happened in the case of Korean. As a result, we cannot yet say with complete certainty what the origin of Korean was. [Chapter 1](#), “Origins,” is really an essay about prehistory.

The beginnings of Korean history

[Chapter 2](#), “The formation of Korean,” brings the descriptions in this book into the realm of recorded history. The historical narratives described there, the earliest about language and ethnicity on the Korean peninsula, were drawn from Chinese histories and were based, at least in part, upon the first-hand reports of Han Chinese observers. In annals compiled by the Han, the Wei, and others, Chinese visitors to the peninsula recorded the names of states, the earliest being that of the legendary Chosŏn; towns and settlements; and peoples, such as the Suksin, the Puyŏ, and the Hán. They wrote down the names of exotic “Eastern Barbarian” groups, including the Puyŏ, Koguryŏ, Okchŏ, and Ye, and the so-called “Three Hán”: the Mahan, Chinhan, and Pyŏnhan; they described ethnic characteristics, such things as what the locals looked like, and what some of their customs were. All of these local words and names were transcribed in Chinese characters of course, and now, more than a millennium and a half later, the sounds and meanings that those characters were intended to represent have long since been lost. The romanized forms given for the names represent the modern Korean pronunciations of the characters and nothing more. Nevertheless, much has been made of those early descriptions. Historians and linguistic historians have scrutinized

every word and phrase looking for any hint, any shred of information that could be used to solve the mysteries surrounding early life, language, and culture on the Korean peninsula.

A bit more light emerges with the rise of the first true states. In the third century, Wei ethnographers had found only tribal confederations, but by the fourth century, wars and political alliances had brought about a coalescence of those groups into what were undeniably nation-states. They included, among others, the powerful northern state of Puyŏ and in the south, Kaya, or Mimana, as it is usually called in Japanese annals. But the best-known states to emerge around that time were Koguryŏ, Paekche, and Silla, the “three kingdoms” of what later became known as the Three Kingdoms period. Koguryŏ, Paekche, and Silla were also the first states to arise on the Korean peninsula for which linguistic evidence still exists. Japanese annals contain a few hints as to names and terms used in those kingdoms, but most of the lexical information comes from place names recorded in the *Samguk sagi*, a Koryŏ-period history from 1145 compiled out of older peninsular histories and records long since lost. How linguistic information is gleaned from that source is described in some detail in [Chapter 2](#).

Out of those lexical fragments we build a case that what was spoken in the three kingdoms were different but closely related languages. To be sure, many controversies remain, both about that issue and about the *Samguk sagi* place names, particularly those found on Koguryŏ territory. We discuss some of the controversies; we show that Koguryŏ place names in particular have transcriptions characteristics that distinctively mark them as Koguryŏan.

Finally, we describe why it was the Silla language that should properly be referred to as “Old Korean.” It was Silla that effected a linguistic unification of Korea, and its speech, through military conquest and political consolidation, was the language form that eventually became the lingua franca of the entire peninsula. In that way, Sillan gave rise to Middle Korean, and is thus the direct ancestor of the language spoken throughout Korea today.

Each subsequent chapter after [Chapter 2](#) deals with a separate period in the history and development of Korean. And although those chapters, five in all, differ greatly in detail and length, all have the same narrative structure. Each begins with a description of the historical and cultural background. The literature of each period is then listed and described, along with the script(s) used to write it. Finally, the description of each language stage is organized into the details of phonology, morphology, syntax, and lexicon.

The historical periods

The first known stage of Korean, “Old Korean,” is described in [Chapter 3](#). As mentioned earlier, Sillan literati wrote in Classical Chinese, but some apparently made incipient efforts to transcribe native literature as

well. All we know about such literary efforts, however, comes from much later historical records mentioning compilations of *hyangga*, and, of course, from the twenty-five examples of such verse that are still extant. But poems are not the only sources of linguistic information from the Old Korean period. A much more common traditional method of writing Korean was the scribal technique known as *idu*, the use of which goes back to the Three Kingdoms period. While mostly used for annotating Chinese texts, and providing little in the way of phonological information, *idu* does contain some useable information about early Korean. Both transcription systems, *idu* as well as the “*hyangch'al*” method of writing *hyangga*, are explained in some detail in [Chapter 3](#). Besides *idu* and *hyangch'al*, there are also phonogramic transcriptions of Korean names; Chinese transcriptions of Korean words, loanwords into Japanese; and, finally, the information that can be surmised from the traditional Sino-Korean readings of Chinese characters, which were imported into Korea during the Three Kingdoms period.

None of these Old Korean sources is sufficient to establish its phonological system in any detail, however. The best they can be used for is to determine a few general characteristics of the system. In a word, Old Korean is reconstructed by using such philological information as reference points and triangulating from Middle Korean.

For Old Korean grammar, *idu* and *hyangch'al* provide information about the use and morphology of some particles and verb endings. There are hints about first- and second-person pronouns.

Two important lexical facts emerge from Old Korean attestations. The first observation to be made is that most of the Silla words found in extant sources correspond to reflexes in the vocabulary of Middle Korean. These correspondences are significant, because they help confirm the identification of Sillan as Old Korean. The second fact to be learned is how the growing influence of Chinese civilization affected the Korean lexicon. For the most part, Sinitic importations into Silla usage were not loanwords per se, but rather vocabulary derived from the codified readings of rime tables and dictionaries. These readings were passed down without significant additional input from China to become the traditional “Eastern Sounds” used in Middle Korean texts. As a result, the Silla readings of Chinese characters were the sources of Sino-Korean readings used today.

The term “Middle Korean” (MK) usually refers to the language of the alphabetic documents of the fifteenth and sixteenth centuries, and that is how we use it as well when the reference is clear. However, the usage can also be misleading. The language itself did not abruptly change when the alphabet was invented; instead, the linguistic period that Middle Korean represents appears to have actually begun around 500 years earlier, in the tenth century,

when the capital was moved from the southeast to the middle of the peninsula. For this reason, we call the earlier centuries of the Koryŏ period “Early Middle Korean”; and, when clarity demands it, we call the language of the fifteenth and sixteenth centuries “Late Middle Korean” (LMK).

The Early Middle Korean period (Chapter 4) began when the Koryŏ established a new government and moved the geographic base for the language away from the old Silla capital. From the fragmentary evidence available to us, it appears that Koguryŏ substrata still existed in local speech at that time, but such traces gradually faded over the centuries as the Sillan-based language continued to exert its influence.

In this pre-alphabetic period, attestations of the language are hard to come by and difficult to interpret, just as they are for Old Korean. There are two important sources of phonological information about Early Middle Korean, however. The first is a vocabulary list compiled by a Chinese visitor to the Koryŏ capital in the early twelfth century, the *Jílín lèishì*, or, as it is known in Korea, the *Kyerim yusa*. The Korean words on that list are transcribed impressionistically with Chinese characters used as phonograms, and their interpretation poses many challenges to historical reconstruction. Still, combined with internal reconstruction from the fifteenth-century system, the *Jílín lèishì* evidence is a valuable phonological resource. The second Koryŏ-period resource is the thirteenth-century medical treatise, *Hyangyak kugŭppang*. Unlike the *Jílín lèishì*, that medical compilation is a native work that contains the local names for plants and other products used in herbal cures. Though these Korean words are only occasionally written phonetically using phonograms, the transcriptions reflect an older Korean convention and are systematic enough to approach a kind of rudimentary syllabary. Philologists speculate that if the corpus were larger, the *Hyangyak kugŭppang* might reveal a fuller picture of Early Middle Korean phonological structure.

Another resource that must be mentioned is that of loanwords. Through Yuan-dynasty China, Koreans borrowed a number of terms from Mongolian, and these words provide information about the sounds of Korean at the time.

There is also one more important resource for Early Middle Korean: interlinear annotations of Chinese texts. In the Koryŏ period, there were two different ways of elucidating texts, both of which were unobtrusive almost to the point of being invisible. The first used simplified Chinese characters known as *kugyŏl* that were written by hand between the lines of Chinese; these markings were discovered in the 1990s. (*Kugyŏl* use and structure are illustrated in Chapter 4, with comparisons to *hyangch'al* and Japanese *katakana*.) The second marking method did not involve writing at all; it consisted of making tiny dots and angled lines with a stylus. Known as *kakp'il*, these marks are truly bordering on invisible; they were discovered only in 2000 with the help of a strong angled light – and, of course, sharp

eyes. Both *kugyŏl* and *kakp'il* are generating considerable excitement among philologists and linguists for the information they potentially reveal about the use of particles and other grammatical markers. The final story of this linguistic resource has still to be written.

Since Early Middle Korean is less distant in time from the fifteenth century, more of its phonological system is evident from internal reconstruction than that of Old Korean is. Combined with philological clues, the method reveals something of how clusters and aspirates seen in the fifteenth century had developed through vowel syncope. There was also, we believe, a “Korean Vowel Shift” that took place between the thirteenth and fifteenth centuries; the principal evidence for the timing of the shift comes from Mongolian loanwords.

The lexical sources for Early Middle Korean show evidence of native vocabulary since lost, some of which was evidently displaced by Sinitic vocabulary. Loanwords from Mongolian and Jurchen, which were surely borrowed during the Early Middle Korean period, lingered into the alphabetic period.

As we have said, Late Middle Korean ([Chapter 5](#)) was the language’s most important historical period. Its texts are consistent and phonologically precise, the textual corpus rich and voluminous. Its transcriptions record segmentals and suprasegmentals; the symbols incorporate articulatory features; spellings are standardized. For both phonological and morphological information, this textual record is unsurpassed anywhere in the premodern world. Syntax and stylistics, however, are not of the same quality. Since most writings were pedagogical interpretations of Chinese texts, they were often stylized and stilted. Philologists believe the syntax of these texts did not always represent natural, idiomatic Korean.

We try to present a reasonably exhaustive list of the many texts of the period, first by century, then by the reign period and year, describing their features, what copies are extant and where they are located. Since the nature of the writing system critically affects analyses, considerable space is devoted to describing the alphabet, Hangul, its orthographic conventions, the philological issues around its early history, and the transcription of Sino-Korean.

Linguistic structure is treated in far more detail in [Chapter 5](#) than in any other part of the book. We pay particular attention to phonology and morphology. Over the past century and more, the phonological system of Middle Korean has been the focus of intensive research; and the findings of that research are presented in [Chapter 5](#) together with new interpretations. We bring in comparative information from modern dialect reflexes. Morphology, too, is described in detail. In treating syntax, we have focused on ways in which fifteenth-century structure differed from that of today’s language.

Early Modern Korean ([Chapter 6](#)) formed a transition between Middle Korean and Contemporary Korean. That stage is reflected in texts written between the beginning of the seventeenth century and the end of the nineteenth.

Unlike the literature of the Middle Korean period (or, of course, that of the twentieth century), writings of the Early Modern period were relatively unconstrained by convention and spelling practices. The Imjin Wars at the end of the sixteenth century, followed by disease and famine, had disrupted the social order underlying writing conventions, and ongoing changes that had long been masked by standard writing practices suddenly appeared. The textual record was different from Middle Korean in other ways as well. In addition to official government publications both new and reissued, the Early Modern corpus included such genres of literature as new types of *sijo* poetry, literary diaries, and, most important and popular of all, vernacular novels.

During this unstandardized period, variant spellings and transcriptional mistakes were extremely common, and it is mainly from this kind of evidence that linguistic changes have been documented. Among the most salient phonological changes the language underwent were the spread of reinforcement and aspiration, palatalization (and spirantization), the loss of the vowel /o/, monophthongization, and the erosion of vowel harmony. In its grammar, the language showed a tendency toward structural simplification in both verbal and nominal morphology. A more natural syntax and style can be seen in the Early Modern period. In the lexicon, native vocabulary continued to be lost and replaced by Sinitic words and expressions, as well as by Western words making their way into Korea through China.

“Contemporary Korean” (Chapter 7) is a description of how Korean emerged from its traditional forms to become the modern world language spoken and written in South Korea today. It begins with the script reforms of the late nineteenth century during the “enlightenment period” and the establishment of orthographic standards in 1933. These early script reforms revealed changes in the language that had long since taken place. But shifts have also taken place since the nineteenth century. The most noticeable of these more recent changes have been in the lexicon, of course; after all, Korea has become integrated into virtually every aspect of modern world culture, from economics and politics to technology to pop media, and new words are very much at the heart of these changes, as they are of what is so enthusiastically called “globalization.” But phonology and morphology have also not remained static. In this last chapter we try to document the most salient of those changes, both those that the script reforms revealed, and those that resulted later from powerful social and economic forces.

Background to the present work

In writing this volume, we have tried to summarize what is known to date about the history of Korean. It is based upon an earlier work, *Kugŏ-sa kaesŏl*

(‘An Introduction to the History of Korean’), originally written by one of us (Lee) and published in its first edition in 1961. That book was subsequently reissued in a completely revised edition in 1972, later reworked and enlarged numerous times, and today it is widely used as a textbook in language and literature departments in many Korean universities. In 1975 the book was translated into Japanese by Fujimoto Yukio, and in 1977 into German by Bruno Lewin. The present work is different in both presentation and structure from those translations, however. *Kugŏ-sa kaesŏl* was written for students studying the history of their native language, and a translation involving Korea’s textual philology unavoidably confronts problems of cultural transferability difficult to surmount. As a result, we set out from the beginning to produce a different kind of work, one aimed at making the history of Korean more straightforward for, and at least a little more accessible to, an English-language readership. That goal turned out not to be a simple undertaking. One of us (Ramsey) spent a number of years working on the manuscript, consulting all the while with the other (Lee). In the end, significant changes have been made in both content and expression. Some conclusions about earlier Korean have been revised as well.

We have added considerably more detail about the phonology and morphology of Late Middle Korean, as well as inferences to be made from internal reconstruction within those systems. Although the amount of print space in Lee’s original book devoted to that stage of the language was nearly as great as that used for all the other stages of the language combined, still more attention was called for, we thought, especially in addressing a Western readership unfamiliar with the alphabetic documents of the fifteenth and sixteenth centuries and their unparalleled linguistic significance.

A minor difficulty with periodization was deciding what to call the two stages of the language that followed Middle Korean. In most English-language publications, “Modern Korean” refers only to what was spoken between the seventeenth and nineteenth centuries, while what’s spoken today is “Contemporary Korean.” We find that convention confusing. It’s difficult to get used to talking about a “modern language” when it hasn’t been spoken in over a hundred years. For this reason, we decided to call that earlier stage “Early Modern Korean” instead.

The philology presented choices. In *Kugŏ-sa kaesŏl* a separate chapter was devoted to a summary of the various kinds of writing systems that have historically been used in Korea. In this work, however, each type of writing is described separately, together with the stage of the language when it was employed. For example, descriptions of how Chinese characters were used to transcribe Korean can be found in the chapter on Old Korean; the structure of the early alphabet appears in the chapter on Late Middle Korean; etc.

Romanization

No one system of romanization fits every purpose. To write Korean names and general terms appearing in the body of the text, we have chosen the McCune-Reischauer Romanization. That system ignores the internal structure and history of the Korean form in favor of approximating how the word sounds to English speakers, but it is also usually judged by Westerners to be esthetically pleasing, with a scholarly appearance on the page. The South Korean Ministry of Education has campaigned vigorously to win acceptance for the new revised system that it introduced in 2000, but that system ignores history and structure just as much, and as yet McCune-Reischauer remains the academic standard in the Western world. On the other hand, we have retained some non-standard spellings familiar to Western readers. Most prominently, the name of the Korean alphabet is transcribed throughout as “Hangul” (we thought McCune-Reischauer’s “Han’gŭl” too freighted down with diacritics, and the Ministry of Education’s revised spelling “Hangeul” intuitively odd and misleading for speakers of English). Personal names are spelled according to individual preferences when known.

For transcribing Korean linguistic forms we use the romanization found in Samuel E. Martin’s *Reference Grammar of Korean* (RGK, 1992). That system is an adaptation of Yale Romanization that Martin created to account for the extra letters and distinctions found in Middle Korean. It is the most systematic and thoughtfully constructed transcription of earlier Korean that we have found; it is also commonly used now in professional writing about the history of Korean. Nevertheless, the system has a few troublesome features. One is the graphic complexity required to reflect all the Middle Korean symbols, including those used for suprasegmentals. Another is that the sounds represented by the letters are not always intuitively obvious. There are also a few minor philological problems. One such confusing detail, for example, is how the Middle Korean letter ○ is transcribed. That particular letter is not reflected at all in Martin’s transcriptions in case it represented the “zero initial,” and this choice seems unassailable. However, in words where philologists have shown the letter to stand for a weakened, syllable-initial consonant, it is transcribed with a capital *G*, a choice that is also usually appropriate, because the consonant that lenited was most often a velar. But in some cases the weakened consonant was a labial, and in those cases the *G* can be misleading. Nevertheless, these are minor quibbles. Any romanized transcription of Middle Korean encounters difficulties.

We depart from Martin’s romanization practice in three principal ways. First, and most importantly, we believe that the original Korean, including Chinese characters, must always be included for each historical citation, and

that is what we have done, showing the original alongside the romanization. We also show the textual source of the citation in parentheses, along with the date of the text. Second, to reduce the complexity of the transcriptions, we have omitted tone marks, except in cases where information from those tones is required for the analysis. Third, we use the same modified Yale system for both Middle Korean and Contemporary Korean. Thus, for example, Martin romanizes the particle ‘도 ‘also, even’ as italicized *two* when it occurs in a Middle Korean text, but as bolded **to** when it occurs in Contemporary Korean. We write both as *two*.

Two approaches have been adopted for the transcription of Sino-Korean:

- (1) The readings of Chinese characters found in the earliest alphabetic texts are prescriptive ones codified in the 1447 dictionary *Tongguk chǒngun*. We follow Martin’s practice (1992, p. 4) of transcribing such readings in italic capitals; thus, the title of the dictionary in question, 東國正韻, is written *TWONG-KWUYK CYENG-NGWUN*. In these early alphabetic texts the Chinese character is usually followed by the prescriptive reading; in cases where that reading is omitted, however, we have (again, following Martin) enclosed the romanized transcription in brackets.
- (2) Beginning in the 1480s, prescriptive readings gave way to actual Korean pronunciations, called “Eastern Sounds” 東音. The earliest text where this change in notation occurred is assumed to be the 1481 Korean exegesis of the Tang poet Dù Fǔ’s poems, *Tusi ōnhae*. Again, as is done with *Tongguk chǒngun* prescriptive readings, these Eastern Sound readings (compiled in Nam 1995) are transcribed in modified Yale written in italic capitals. Thus, the title of the Du Fu exegesis 杜詩諺解 is transcribed [*TWU-SI EN-HOY*].

The thorniest romanization problem of all has been the transcription of Korean words represented with Chinese characters. In fact, if the text characters were used to approximate meanings, little at all could be reasonably done without additional information, and such words have unavoidably been left unrepresented in romanized form. If, on the other hand, the characters were used as phonograms, our romanization choice depended upon whether the transcription was made by Koreans or by Chinese.

- (1) Phonograms written by Koreans, regardless of time period, are treated as “Eastern Sounds” and romanized in modified Yale, as above.
- (2) Phonograms written by Han Chinese are assumed to represent reconstructed Chinese sound values, and are therefore romanized, in italic capitals, according to Pulleyblank (1991).

Chinese names and general terms are romanized in Pinyin; Japanese terms are romanized in Hepburn.

Grammatical terms

We use the grammatical terminology found in Martin's *Reference Grammar of Korean*. That choice was a natural one: *RGK* is now the most widely used Western-language reference for Korean grammatical terms, and the most comprehensive compilation of such terminology in English. As explained on p. 3 of that work, much of the terminology found there stems from several decades of structuralist practice in codifying the grammatical categories of Korean. And although Martin made a variety of additions and small changes, *RGK* reflects for the most part what has through long practice become standard.

From time to time we have made exceptions. One example is the term “converb,” which is discussed and footnoted in [Chapter 1](#), “Origins.” That exception was made because the term has often been used in the literature about Altaic, where it is said to be one of the defining structural features of the language family. But we do not otherwise use the term in describing the structure of Korean.

1 Origins

Where does the Korean language come from? This origin question is of ultimate interest to linguists, but it has also captured the imagination of the Korean lay public, who have tended to conflate the question with broader ones about their own ethnic origin. Linguistic nomenclature has added to the confusion. When specialists speak to the public about “family trees” and “related languages,” the non-specialist naturally thinks that the Korean language has relatives and a biological family like those people do. And when a people as homogeneous as Koreans are told that their language belongs to a family that includes Mongolian and Manchu, they envision their ancestors arriving in the cul-de-sac of the Korean peninsula as horse-riding warriors. It becomes a personal kind of romance.

In this way, linguistic theories presented in a simplistic way tend to overshadow complex ethnographic and archeological issues. But the linguistic question is no less complex, all the more so because, unlike archeological evidence, linguistic evidence cannot be dug from the ground. Artifacts have been extracted from the Korean earth that speak to the structure of earlier societies and cultures, but there is nothing of comparable age to be found in records of the language. To explore the history of the language at that time depth, far beyond what has been actually written down, linguists can only rely upon the comparison of Korean with other languages and hope to find one that has sprung from the same “original” source. For if such a “related” language can be found, then the question of origin will at last have a satisfactory answer.

There are two problems comparativists immediately face. The first is that there is no a priori guarantee such a language exists. There is always the possibility that Korean is an “isolated” language like Basque, or perhaps Ainu. Moreover, if Korean does in fact have “living relatives,” the relationships are at the very least distant ones far removed from historical times. Otherwise, the connections and relationships with those languages would already have long since been established. The second problem is the difficult and highly technical nature of the methodology necessary to establish a genetic relationship. Resemblances between the languages, even striking ones, are not

enough. As is well known among comparativists (but often not to their broader reading public), the resemblances must occur in interlocking and systematic sets that banish all possibility of accident or borrowing. Vigorous comparative research on Korean has been ongoing for a very long time. Efforts to link the language with Altaic have been under way since the early twentieth century; with Japanese even longer, starting with Aston in 1879. Rules of correspondence have been proposed in various formulations. Yet, none has resulted in the critical mass necessary to convince skeptics. For if such a critical mass had been reached, it would have precipitated a chain reaction of discoveries, perhaps previously unsuspected, about the relationship and the prehistoric structures of the languages being compared. That is in fact what most famously happened with Indo-European, time and time again, from William Jones's original formulation to Grimm's Law, Verner's Law, Grassman's Law, the Laryngeal Theory and beyond. But other language families have also been established this way as well, from Semitic to Austro-nesian. It can rightly be argued that nothing like that is possible in the case of Korean. This is because any genetic relationship Korean may have is necessarily too remote in time for the methodology to produce such a robust set of correspondences. Perhaps so. But comparativists have no choice but to work toward that goal. And above all, researchers must always remember that any evidence bearing on the proof of a genetic relationship must be completely linguistic in nature. Even were, say, historical records of ethnic migrations to be discovered, or even if archeological digs uncovered evidence of connections between earlier cultures, neither would constitute a contribution to the linguistic evidence. Such factors can sometimes indicate the directions in which linguistic research should go, but they can never serve as substitutes for that research. The methodology is strict in this requirement.

There is also another matter that is often lost sight of. Most specialists, and certainly the lay public, consider the discovery of a genetic relationship to be the holy grail of historical linguistics. But in fact a discovery of that kind should not be thought of as the end of the search. Rather, it is really the beginning. For when comparative research produces a critical mass of correspondences, the hard work of establishing the correspondences sets off a chain reaction of other discoveries, as suggested above. In this way, the history of each language quickly expands quantitatively and qualitatively far beyond what is known from written records. It is this expansion of knowledge that should be the goal of the comparative linguist, not the discovery of a genetic relationship per se.

1.1 Genetic hypotheses

Experts now take seriously two genetic hypotheses about Korean: (1) the Altaic hypothesis and (2) the hypothesis that Korean and Japanese are related.

In addition, what is often called “Macro-Altaic” combines both hypotheses by including Korean and Japanese within a greater Altaic family.

Over the years Korean has been compared to a variety of other languages and language families as well, including even Indo-European. Most of those attempts have been amateurish and based upon superficial similarities, however.¹

1.2 Altaic

The Altaic family includes languages spoken across northern Asia, from Anatolia and the Volga basin to the northern coast of northeastern Siberia. It is made up of three branches: Turkic, Mongolic, and Tungusic.

Each of these three branches is a well-established family in its own right. The internal rules of correspondence within each are both productive and predictive. However, the overarching, Altaic hypothesis linking the three branches together as a larger family remains relatively controversial. Scholars who question its validity believe that the Altaic languages did not all spring from a common source, but rather resemble each other closely because of extensive borrowing through prolonged cultural contact. The meaning of “Altaic” is an ongoing subject of debate among specialists.

The Altaic languages share certain salient characteristics of phonology, morphology, and syntax. Vowel harmony, a verb-final word order, and agglutination are the best known of those characteristics; they were noticed very early on by comparativists. But over the years researchers have adduced a number of other structural features that also distinguish Altaic languages from neighboring languages and language families. These features are not found, say, in Indo-European or Chinese. Moreover, one of those core distinguishing features, the existence of what is called a “converb,” a term coined to describe

¹ On the other hand, Morgan Clippinger, an independent scholar who has written on a variety of Korean subjects, presented an argument in 1984 for a genetic connection between Korean and Dravidian, a family of languages found today in southern India. The article caused experts to give the idea a second look. In spite of what many thought at the time to be a far-fetched comparison, Clippinger’s application of the methodology was informed and his knowledge of the data professional. Using Middle Korean forms and selected words from Dravidian (including reconstructions), Clippinger presented 408 pairs of lexical items he believed were cognate, and from them postulated 60 phonological correspondences. The resemblances were striking. In fact, the similarities were so striking that, as early as 1905, Homer B. Hulbert had put forward much the same idea, though in less detail and with less professional argument. Then, only a couple of years before Clippinger’s study, in 1980, Ōno Susumu had caused something of a sensation in Japan by suggesting that one of the modern Dravidian languages, Tamil, constituted the source of a lexical strata in both Japanese and Korean. Following that surge of interest in the 1980s, however, the idea seems to have been abandoned. Nevertheless, it is difficult to escape the conclusion that Clippinger’s study deserves to be reexamined, at the very least as an exercise in the use of the comparative method and what meanings can be drawn from it.

a structural element commonly found in Altaic languages, is not found in Uralic, a language family once believed to be part of a greater Ural-Altaic family.²

However, not only are all these characterizing structural features found in Altaic languages, most are also found in Korean and Japanese as well. Of course, exhibiting common linguistic features does not in any way constitute proof of genetic affinity, but they are suggestive. Related languages are expected to be structurally similar, and such resemblances unquestionably play a role in the formulation of genetic hypotheses.

1.2.1 *Comparison of Korean and Altaic*

There are two ways in which comparativists have tried to demonstrate that Korean sprang from the same source as Altaic. The principal and by far the more common way has been to use the core concept of the comparative method; that is, linguists have attempted to establish regular sound correspondences between words and morphemes found in Korean with matching ones found in the Altaic languages. Efforts in this first case have unquestionably produced plausible comparisons; the correspondences appear likely. However, the proposed lexical matches have not yet been numerous or systematic enough to convince all skeptics. That is to say, the proposed sound correspondences have not yet led to an ever-growing series of discoveries that would place the comparisons beyond all possibility of chance or borrowing through cultural contact.

The second way comparativists have tried to prove Korean is related to Altaic is by using a supplementary method, one that might be thought of as a shortcut. This quick alternative, first proposed in the early twentieth century by the French structuralist Antoine Meillet, involves using what Meillet called a *fait particulier* 'singular fact' to prove the existence of a genetic relationship. Instead of assembling a list of sound correspondences, it was possible to establish the relationship, Meillet said, by simply adducing specific morphological elements that the languages have in common. For example, the correspondence of the suppletive English triad *good, better, best* to the equally irregular *gut, besser, best-* in German is thought to be so detailed and unlikely to be borrowed as to demonstrate immediately that English and German are related languages. This method does not obviate the eventual need to establish sound correspondences. But it does set a baseline of genetic affinity from which to begin. It is this second kind of comparison of Korean with Altaic that is most persuasive.

² "Converb" refers to a verbal suffix that functions the way a relative pronoun or conjunction does in a European language.

But first, let us look at how the traditional comparative method has been turned to the problem. As far as Korean is concerned, the most important early comparativist was the Finnish scholar G. J. Ramstedt, who, in 1928, presented a plausible argument that Korean was a member of the Altaic family. Then, following the appearance of his monograph *Studies in Korean Etymology* in 1949, and subsequently, in the 1950s, three more monographs on the subject, the idea won general acceptance among Altaicists. But it was in Korea that the hypothesis found particularly broad support. In the years since Ramstedt's works first appeared, Korean scholars and non-specialists alike have pursued it energetically and with enthusiasm, so that today, in reference works and school textbooks, descriptions of Korean usually begin with the Altaic hypothesis. Korean's membership in the family is treated as an established fact, and only rarely are the controversies surrounding the Altaic hypothesis itself mentioned in this literature. Nor do most scholarly treatises present the hypothesis with the kind of caution called for by the state of the art.

The comparative method has not yet shown to everyone's satisfaction that Korean is related to Altaic. Still, most experts believe it is there, in that widely dispersed family, that the origin of Korean is to be found. What follows is a brief outline of a version of the hypothesis that we find compelling.

1.2.1.1 Vowel correspondences

Altaicists generally reconstruct Proto-Altaic with a vowel harmony system consisting of front vowels paired against back vowels.³ On the basis of evidence from Early Middle Korean, we believe that earlier Korean had a similar system of vowel harmony. In the display below we present those Early Middle Korean values along with the attested Late Middle Korean values. The Proto-Altaic system is that of Poppe (1960).

	Back vowels					Front vowels			
	1	2	3	4	5	6	7	8	9
Proto-Altaic	*a	*o	*u	*i	*e	*ê	*ö	*ü	*i
Early MK	*a	*ɔ	*u	*i	*ä	*i	*ɔ̄	*ü	*i
Late MK	ㅏ	ㅓ	ㅜ	ㅣ	ㅑ	ㅣ	ㅡ	ㅟ	ㅣ
	[a]	[ʌ]	[o]	[i]	[ə]	[i]	[i]	[u]	[i]
	/a/	/o/	/wo/	/i/	/e/	/i/	/u/	/wu/	/i/

³ Quite recently Starostin *et al.* (2003) have argued instead that the original Altaic language lacked vowel harmony of any kind, and that the various branches of the family developed vowel harmony systems independently through complex, assimilative processes. That scenario seems to us implausible. Besides vowel harmony, many Altaicists, perhaps most, believe that Proto-Altaic also had distinctive vowel length; some argue that it had distinctive pitch as well. We take no position on these latter issues since we have seen nothing in Korean that would be determinative.

Examples:

<i>Altaic forms</i>	<i>Middle Korean</i>
(1) Evenki <i>alas</i> ‘leg, base’; Mongolian <i>ala</i> ‘thigh’; Old Turkic <i>al</i> ‘lower side’; Middle Turkic <i>altin</i> ‘lower part’	<i>alay</i> 아래 ‘lower part’ < * <i>al</i>
(2) Manchu <i>morin</i> ‘horse’; Mongolian <i>morin</i> ‘id.’	<i>mol</i> 물 ‘horse’
(3) Evenki <i>uri-pta</i> ‘be earlier’; Mongolian <i>urida</i> ‘before, formerly’	<i>wola-</i> 오라- ‘be a long time’ < * <i>ula-</i>
(5) Mongolian <i>keseg</i> ‘piece’; Turkish <i>kes-</i> ‘break off’	<i>kesk-</i> 켜- ‘break off’
(7) Manchu <i>muke</i> ‘water’; Evenki <i>mū</i> ‘id.’; Mongolian <i>mören</i> ‘river’	<i>mul</i> 물 ‘water’
(8) Manchu <i>fulgiye-</i> ‘blow’; Mongolian <i>üliye-</i> ‘id.’; Middle Mongolian <i>hülli</i> ‘e-’ < * <i>püligē-</i> ‘id.’	<i>pwul-</i> 불- ‘blow’ < * <i>pülö-</i>

Notice that for correspondences (4), (6), and (9), the Middle Korean reflexes are uniformly /i/. What this situation means, if the comparisons are valid, is that the Korean high front vowel /i/ represents the merger of earlier vowel distinctions. Korean would not be unique in undergoing this kind of merger, however, as can be seen in the reflexes of other languages given in the examples below.

(4) Mongolian <i>iraya</i> ‘ridge between fields’; Manchu <i>irun</i> ‘id.’; Chuvash <i>yêran</i> ‘id.’ < * <i>iran</i> ; Tatar <i>izan</i> ‘id.’	<i>ilang</i> 이랑 ‘ridge between fields’
(6) Manchu <i>erde</i> ‘early’; Mongolian <i>erte</i> ‘id.’; Chuvash <i>ir</i> ‘id.’; Turkmenian <i>ir</i> ‘id.’; Azerbaijani Turkic <i>ertä</i> ‘id.’	<i>il</i> 일 ‘early’; <i>ilu-</i> 이르- ‘be early’
(9) Manchu <i>firu-</i> ‘curse, pray’; Evenki <i>hiruge</i> ‘pray’; Mongolian <i>irüge-</i> ‘bless’	<i>pil-</i> 빌- ‘pray, beg’

There are, of course, many problems with the correspondences suggested in the above vowel chart. Of these, one of the most conspicuous is the suspiciously small number of Korean words exemplifying correspondences (2) and (7). Correspondence (7) illustrated by Korean *mul* ‘water’ looks reasonable. But then so do the following correspondences:

<i>Altaic forms</i>	<i>Middle Korean</i>
*ü: Manchu <i>fusu-</i> ‘sprinkle (water)’; Mongolian <i>üsür-</i> ‘sprinkle, splash’; Monguor <i>fuzuru-</i> ‘pour’; Turkish <i>üskür-</i> ‘spit out’	<i>puz-</i> 부- ‘pour’

*u: Manchu *fulgiyan* ‘red’; Mongolian *ulayan* *pulk-* 붉 - ‘red’
 ‘id.’ < **pulagān*

In other words, the Korean vowel — /u/ appears to correspond to **ü*, **u*, as well as to **ö* in Altaic. Which, if any, of these proposed correspondences is correct? In this connection, however, note that almost no Korean words begin with the vowel /o/ or /u/ anyway (the only one in Middle Korean was *ustum* 으뜸 ‘the head, basis’). That is already a curious distributional fact about the vowels that deserves to be researched.

As we have already said, the criterion for judging the validity of any genetic hypothesis is that it must be productive – predictive. That is to say, the proposed correspondences must lead to other, additional discoveries about the languages being compared. One observation suggested by Altaic vowel correspondences is that word-final vowels in Korean seem to have been lost. Thus, through vowel syncope or apocope, two-syllable words are reduced to one syllable; three-syllable words to two syllables. Consider these examples:

<i>Altaic forms</i>	<i>Middle Korean</i>
Manchu <i>hūlan</i> ‘chimney’; Ulch <i>kula</i> ‘id.’; Mongolian <i>kulang</i> ‘id.’	<i>kwul</i> 굴 ‘chimney’
Manchu <i>jafa-</i> ‘grasp’	<i>cap-</i> 잡- ‘grasp’

Other Altaic comparisons also point toward syncope in the historical development of Korean. For example, *l*-clusters apparently developed when a vowel separating /l/ from another consonant was lost:

<i>Altaic forms</i>	<i>Middle Korean</i>
Manchu <i>solohi</i> ‘weasel’; Evenki <i>soligā</i> ‘id.’; Mongolian <i>soloŋyo</i> ‘id.’	<i>solk</i> 솔k ‘wildcat’

Syncope as an historical process in the earlier history of Korean is supported by evidence from other sources. Internal reconstruction, along with some documentary evidence, indicates that Middle Korean consonant clusters and aspirates resulted from the loss of medial vowels. (See [Chapter 4](#).)

1.2.1.2 Consonant correspondences

The following display shows correspondences for consonants. The evidence for correspondences (1) through (11), both in Korean and in Altaic, is taken mostly from consonants in word-initial position. The reflexes of the velar nasal in correspondence (12), on the other hand, are found only in non-initial position (either medial or final), and the same is true for the four reconstructed liquids in correspondences (13) through (16). Again, the Altaic reconstructions are from Poppe (1960); the Korean values are those of Late Middle Korean.

	1	2	3	4	5	6	7	8
Proto-Altaic	*p	*b	*t	*d	*k	*g	*c	*j
Korean		ㅍ /p/		ㅌ /t/		ㅋ /k/		ㅊ /c/
Proto-Altaic	9	10	11	12	13	14	15	16
	*s	*m	*n	*ŋ	*r ¹	*r ²	*l ¹	*l ²
Korean	ㅅ /s/	ㅁ /m/	ㄴ /n/	ㅇ /ŋ/			ㄹ /l/	

As correspondences (1) through (8) show, Korean obstruents do not reflect the voicing distinctions believed to have existed in Proto-Altaic. Nor are the Korean aspirates /ph, th, kh, ch/ (ㅍ, ㅌ, ㅋ, ㅊ) relevant here. Although a few initial aspirates are believed to have existed in Old Korean, they were rare, and the series as a whole is believed to be a secondary, historical development in the phonological system. If, as is suspected, Korean did once have a voiced–voiceless distinction, the conditioning factors for the loss have not yet been found. Were they to be discovered, and were they to jibe with Altaic comparisons, that coincidence would constitute strong confirmation of a genetic relationship.

Comparativists long ago reconstructed a **p* as the ancestral form for a wide variety of reflexes. In the Tungusic branch of Altaic, Manchu cognates begin with an *f*; in Evenki, with an *h*; in Solon the initial consonant was lost. Only Nanai⁴ among the Tungusic languages is known to have preserved an initial *p*. Mongolic languages show a similar variation, except that none has preserved an initial *p*. The reflex of the consonant was *h* in Middle Mongolian; Monguor now has an *f*; Dagur an *x*; and in most of the rest of the Mongolic languages, the consonant has been lost entirely. Traces of **p* in the Turkic languages are even harder to find. Only Khalaj has an *h* in its place; in the rest of this large family the consonant has disappeared altogether.

Thus, most Altaicists agree that besides Nanai, only Korean has preserved the original bilabial consonant. In Ramstedt's early formulation, he compared, for example, Korean *pal* 'foot' to Nanai *palgan* 'id.' But Altaicists today recognize a number of other Korean etymologies that show this correspondence. See, for example, the comparisons given above: *pwul*- 불- 'blow' in vowel correspondence (8); *pil*- 빌- 'ask, pray' in (9); and *puz*- 붓- 'pour' compared, e.g., to Manchu *fusu*- 'sprinkle (water),' etc.

Conspicuously missing in the above list of correspondences is the Korean consonant *h*. This lacuna is particularly significant for reconstruction purposes because the consonant is the morphophonemic and historical source of most occurrences of aspiration in Korean. But no such glottal fricative

⁴ Formerly called Goldi by the Russians; Hezhen by the Chinese.

has been reconstructed for Altaic. And so, to explain the absence, Ramstedt has speculated that Korean *h* was not original, but was rather derived from an **s* occurring before a high front vowel **i*. In support of that hypothesis, Korean *hoy* 호이 ‘sun’ has been compared to Manchu *šun*, Nanai *siú*, and Solon *šigun*, all of which also mean ‘sun.’ Similarly, Korean *holk* 홀크 ‘earth’ has been compared to Nanai *siru* ‘sand,’ Solon *širuktan* ‘sand,’ and Mongolian *širuyai* ‘earth, dust.’ However, complicating the hypothesis somewhat is the fact that some non-initial occurrences of aspiration in Contemporary Korean were apparently derived from velar stops. For example, the reflex of Middle Korean *swusk* 습ᄃ ‘charcoal’ is *swuch*; that of *twosk* 돛ᄃ ‘sail’ is *twoch*; *phosk* 포ᄃ ~ *photh* 풀 ‘redbean’ is *phath*. Some northeastern dialects preserve a /k/ reflex here: *phaykki* ‘redbean’; *swukk-* ‘charcoal.’ The development of Korean *h* was surely an unusually complex one.

Proto-Altaic has been reconstructed with four liquids (**r¹*, **r²*, **l¹*, **l²*), as shown above. Today, the Altaic languages only have a two-way contrast between an *r* and an *l*; but the reconstruction of two more, **r²* and **l²*, was thought necessary in order to accommodate Turkic, which has a reflex *z* corresponding to **r¹*, and an *š* corresponding to **l¹*.

Needless to say, Korean now has only one liquid phoneme, /l/, and the same was true of Middle Korean. But Old Korean transcriptions seem to indicate that at that stage of the language there were two. For the sake of the genetic hypothesis, researchers need to find internal evidence of two such Korean liquids confirming, say, the distinctions in the following comparisons:

<i>Altaic forms</i>	<i>Middle Korean</i>
(13) Mongolian <i>boroyan</i> ‘rain’; Middle Mongolian <i>boro’an</i> ‘snowstorm’; Yakut <i>burxān</i> ‘snowstorm’	(<i>nwun</i>) <i>pwola</i> 눈보라 ‘snowstorm’
(14) Mongolian <i>iraya</i> ‘ridge between fields’; Manchu <i>irun</i> ‘id.’; Chuvash <i>yâran</i> ‘id.’ < <i>*ïran</i> ; Tatar <i>izan</i> ‘id.’	<i>ilang</i> 이랑 ‘ridge between fields’
(15) Evenki <i>alas</i> ‘leg, base’; Mongolian <i>ala</i> ‘thigh’; Old Turkic <i>al</i> ‘lower side’; Middle Turkic <i>altin</i> ‘lower part’	<i>alay</i> 아래 ‘lower part’ < <i>*al</i>
(16) Mongolian <i>čilayun</i> ‘stone’ < <i>*tila-gun</i> ; Chuvash <i>čul</i> ‘id.’; Old Turkic <i>taš</i> ‘id.’ < <i>*til²a</i>	<i>twolh</i> 돌 ‘stone’ < <i>*tuluh</i> < <i>*tilagu</i>

1.2.2 A methodological shortcut

As mentioned above, many linguists believe it is also possible to demonstrate genetic affinity by adducing a small number of common elements found within the structures of the languages being compared. Inflectional morphemes

represent particularly fertile ground for the application of this historical method, since such elements are by their nature relatively impervious to borrowing.

1.2.2.1 Particles

Korean has a number of inflectional morphemes that it seems to share with Altaic. Some of these are found in the particle systems. Here are three suggested matches:

<i>Altaic forms</i>	<i>Middle Korean</i>
Dative *-a/e: Old Turkic <i>at-īm-a</i> ‘to my horse’; Mongolian <i>yaḷar-a</i> ‘in the land’	Locative -ay/ey -이/에
Directional *-ru/rü: Old Turkic <i>äb-im-rü</i> ‘to my house’; Mongolian <i>inaru</i> ‘this way,’ <i>činaru</i> ‘that way’	Directional -lwo -로
Prolative *-li: Evenki <i>hokto-li</i> ‘along this road’	<i>ili</i> 이리 ‘this way,’ <i>kuli</i> 그리 ‘that way,’ <i>tyeli</i> 더리 ‘that way (there)’

1.2.2.2 Verbal inflection

In Middle Korean, three verb endings were used to form nominals and modifiers: (1) *-(o/u)m*, (2) *-(o/u)lq*, (3) *-(o/u)n*.⁵ The endings reconstructed for Proto-Altaic were virtually identical: (1) *-m, (2) *-r, (3) *-n.

(1) Reflexes of *-m serve as nominalizers in many Altaic languages. For example, Old Turkic *öl-* ‘die,’ *öl-üm* ‘death’; Mongolian *nayad-* ‘play,’ *nayad-um* ‘game.’ In Manchu and other Tungusic languages the morpheme does not occur independently but only in combination with other verbal suffixes.

The ending *-(o/u)m* was the most widely used nominalizer in Middle Korean. For example, the noun *yelum* 여름 ‘fruit’ was derived from the verb stem *yel-* 열- ‘bear fruit,’ *kelum* 거름 ‘step’ from *ket/kel-* 걷/걸- ‘walk,’ *elum* 어름 ‘ice’ from *el-* 열- ‘freeze.’ Such nominals are, of course, still used today. But note that in Middle Korean the ending was also used to nominalize sentence predicates: *yelwum* 여름 ‘bearing fruit,’ *kelwum* 거름 ‘walking.’ What is noteworthy about this fact is that traces of a dual function can also be seen in Mongolian, where, in earlier texts, the nominalizing suffix *-m* was also used in predicates to express the present tense: *yubu-m* ‘goes, is going.’

⁵ The Contemporary reflexes of *-(o/u)n* and *-(o/u)lq* are used exclusively as modifier endings, but in the fifteenth century both also served as nominalizers. The use of *-ki*, which is now the most productive nominalizer, was rare at that time.

(2) The reflex of **-r* in Old Turkic formed present-tense modifiers; e.g., *olur-ur* ‘is sitting.’ In Mongolic languages the morpheme forms nominals; written Mongolian *amu-* ‘to rest,’ *amu-r* ‘rest.’ The reflex in Tungusic languages is generally used to mark modifiers in the future tense; e.g., Solon *wā-* ‘kill,’ *wār* (*xonin*) ‘(sheep) to be slaughtered.’

The Middle Korean ending *-(o/u)lq* was used for conjectures about the future, much as its Contemporary reflex still is today; for example, *cwuki-* ‘kill,’ *cwukilq* (*salom*) 주궐 (사름) ‘(person) to be killed’ (1459 *Wōrin sōkpo* 25:75b). As can be seen, the morpheme corresponds closely to its equivalent in Tungusic.

(3) The reflex of **-n* in Old Turkic formed nominals; e.g., *aq-* ‘to flow,’ *aqin* ‘flow.’ The Mongolic reflex has that same function; for example, Mongolian *singge-* ‘melt,’ *singgen* ‘liquid.’ The Tungusic situation is a little more complex, but there, too, the morpheme forms nominals. In Evenki, it is used to build adnominal modifiers that in turn form present-tense verbals; for example, the word *təgənni* ‘you’re sitting’ is derived from **təgən-si*, which is composed of the stem *təgə-* ‘to sit,’ the suffix *-n*, and the second-person suffix *-si*.

Middle Korean *-(o/u)n* was, in its basic usage, much the same as its modern reflex. When attached to a verb, it marked past or completed action; e.g., *taton* (*MWUN*) 다든 (鬥門) ‘closed (door)’ (1481 *Tusi ōnhae* 8:61a).

To summarize, then, the three Middle Korean verb endings used to form nominals and modifiers were: the general nominalizer *-(o/u)m*; the future marker *-(o/u)lq*; and the marker of past or completed action *-(o/u)n*. To our way of thinking, the correspondence of this Korean triad with three almost identical Altaic morphemes constitutes the most serious evidence brought forward so far in making the case for a genetic relationship between the languages. (It is the same kind of structure Antoine Meillet made use of in his research on Indo-European languages.) In both Korean and Altaic, the corresponding morphemes are found in a part of the grammar where borrowing rarely occurs, and, just as Meillet argued, it is difficult to imagine that the correspondence could be completely accidental. The correspondence is limited in its scope; it alone does not prove the genetic hypothesis. For that, robust rules must be established for interlocking lexical correspondences that in turn lead to other discoveries about linguistic prehistory. Nevertheless, the structural details of this particular comparison are too significant to be dismissed.

1.2.3 Korean and Tungusic

Although comparativists have proposed cognates from all three branches of Altaic, it is clear that the most likely correspondences for Korean vocabulary

are not evenly distributed. Few potential matches are found in Turkic; a slightly larger number of look-alikes can be seen in Mongolic. For example, in basic Mongolian vocabulary, *naran* ‘sun’ bears a strong resemblance to Middle Korean *nal* 날 ‘day’; *nidiin* < **nün-diin* ‘eye’ to Korean *nwun* 눈 ‘id.’ Also, the stem of the first-person pronoun, **na-* (attested in the locative *nadur* and the accusative *namayi*), looks identical to Korean *na* 나 ‘I’; Mongolian *oru-* ‘enter’ resembles *wo-* 오- ‘come’; *yar-* ‘to exit’ is similar to *ka-* 가- ‘go.’

But the greatest number of viable comparisons by far are found in Tungusic. This is particularly true of Southern Tungusic, a branch of the family consisting of ten or so languages, the best known of which is Manchu.

Korean was influenced by Manchu. The Manchu people were the last Altaic conquerors of China and Korea and the rulers of the empire during the Qing dynasty, but even before that they had occupied, for some time, lands to the immediate north of Korea. The Manchus are moreover believed to be the descendants of the Jurchen, a people who left numerous monuments throughout the northeastern part of the peninsula itself, territory which they considered to be part of their homeland. Korean records preserve clear cases of cultural borrowing from Manchu during the Qing period. But other vocabulary shared by the two languages consists of the more humble words of everyday life.

At least 250 Manchu lexical items correspond to Korean words in more than a superficial way. For the most part, these words belong to the kind of vocabulary considered basic; the correspondences are those proposed above for Altaic. Here is a small sampling: Ma. *cejen* ‘upper part of the chest,’ K. *cec* 젖 ‘breasts’; Ma. *coco* ‘penis,’ *cwoc* 좆 ‘id.’; Ma. *deke, deken* ‘a rise, high place,’ K. *-tek* -덕 ‘id.’ (attested in place names); Ma. *fatan* ‘sole of the foot,’ K. *patang* 바당 ‘bottom’; Ma. *ferhe(singgeri)* ‘bat,’ K. *polk(cwuy)* 북(쥐) ‘id.’; Ma. *golo* ‘river bed,’ K. *kolom* 곶흙 ‘river’; Ma. *gu* ‘jadite, precious stone,’ K. *kwusul* 구슬 ‘gem, precious stone’; Ma. *hacin* ‘kind, sort,’ K. *kaci* 가지 ‘id.’; Ma. *jahari* ‘pebbles and stones found along a river bed,’ K. *cakal* 자갈 ‘gravel’; Ma. *mu-ke* ‘water,’ *mul* 물 ‘water’; Ma. *na* ‘earth, land,’ note also, Nanai *na* ‘id.’ (the ethnonym itself means ‘local people’), K. *nalah* 나랑 ‘country, land’ (*-lah* is a suffix).

A few noun comparisons possibly represent early cultural or contact loans. For example, Manchu *bele* ‘rice’ could be so connected to *pwo- li* 보리 ‘barley,’⁶ and Manchu *mere* ‘buckwheat’ to Korean *mil* 밀 ‘wheat.’⁷ Manchu *mama* ‘smallpox’ alongside Korean *mama* ‘id.’ is also a suspicious comparison for this reason. Manchu *morin* ‘horse’ and Korean *mol* 몰 ‘id.’ is another.

⁶ The low–low tone structure of the Middle Korean form is more typical of loanwords than native vocabulary.

⁷ These crops have been cultivated on the Korean peninsula since the Mumun period (c. 1500–850 BC); less is known about the history of Manchu crop cultivation.

But another type of vocabulary is relatively free from such concerns about borrowing. In the comparison of Manchu with Korean, what is especially remarkable is that a large number of apparent correspondences are inflecting forms, verbs, because that lexical category in Korean is known to be particularly resistant to borrowing. And at least seventy Manchu verb stems bear a close resemblance to Korean forms. Here is a selection of about half of those:

<i>Manchu</i>	<i>Korean</i>
<i>dasa-</i> ‘rule, correct’	<i>tasoli-</i> 다스리- ‘rule, govern’
<i>dori-</i> ‘gallop’	<i>tol-</i> 돌- ‘go at a gallop’
<i>ete-</i> ‘overcome, win’	<i>et-</i> 얻- ‘get, obtain’
<i>fata-</i> ‘pinch, pick (fruit)’	<i>pto-</i> 뽎- ‘pick, pluck, gather’
<i>firu-</i> ‘pray, curse’	<i>pil-</i> 빌- ‘pray, beg’
<i>fithe-</i> ‘snap, spring, pluck, play (a stringed instrument)’	<i>ptho-</i> 뽎- ‘play on (a stringed instrument), beat (cotton) out’
<i>foro-</i> ‘spin, turn, face, turn toward’	<i>pola-</i> 바라- ‘hope for, expect’
<i>foso-</i> ‘shine’	<i>pozoy-</i> 보식- ‘shine’
<i>fufu-</i> ‘saw’	<i>pwupuy-</i> 부퓌- ‘rub’
<i>fulgiye-</i> ‘blow’	<i>pul-</i> 불- ‘blow’
<i>furu-</i> ‘slice finely, grate’	<i>poli-</i> 브리- ‘cut with a sharp instrument’
<i>fuse-</i> ‘propagate, reproduce’	<i>psi</i> 씨 ‘seed’
<i>fusu-</i> ‘sprinkle (water)’	<i>puz-</i> 붓- ‘pour’
<i>gai-</i> ‘take’	<i>kaci-</i> 가지- ‘take, keep’
<i>goci-</i> ‘draw, extract, press out’	<i>kwocwo</i> 고조 ‘device for extracting dregs from oil or wine’
<i>hala-</i> ‘exchange, change’	<i>kal-</i> 갈- ‘change’
<i>here-</i> ‘ladle out, fish for, take out of water with a net’	<i>kelu-</i> 거르- ‘strain, filter’
<i>hete-</i> ‘roll up, fold’	<i>ket-</i> 권- ‘fold up, roll up’
<i>holbo-</i> ‘connect, join, pair’	<i>kolp-</i> 꺾- ‘line up together’
<i>ili-</i> ‘stand, stop’	<i>nil(u)-</i> 닛- ‘come up, stand up’
<i>jafa-</i> ‘grasp, hold, grip’	<i>cap-</i> 잡- ‘grasp, hold, catch’
<i>jirga-</i> ‘be at ease, enjoy leisure’	<i>culki-</i> 즐기- ‘enjoy’
<i>karka-</i> ‘scrape w. chopstick’	<i>kulk-</i> 긁- ‘scratch’
<i>karma-</i> ‘protect’	<i>kalm-</i> 감- ‘put away, put in order, conceal’
<i>mara-</i> ‘decline, reject, refuse’	<i>mal-</i> 말- ‘cease, refrain from’
<i>mari-</i> ‘return, go back’	<i>mulu-</i> 머르- ‘retreat, go back’

<i>meihere-</i> ‘carry on the shoulder’	<i>mey-</i> 메- ‘carry on one’s shoulder’
<i>momoro-</i> ‘sit silently’	<i>memul-</i> 머물- ‘stop, stay’
<i>monji-</i> ‘rub, knead, massage’	<i>monci-</i> 몬지- ‘finger, handle, stroke’
<i>neme-</i> ‘add, increase’	<i>nem-</i> 넘- ‘exceed, go over’
<i>nerki-</i> ‘open out, unroll’	<i>nel-</i> 널- ‘spread out’
<i>silgiya-</i> ‘rinse out’	<i>selGec-</i> 설겅- ‘wash dishes’
<i>sime-</i> ‘soak, moisten, seep into’	<i>sumuy-</i> 슝- ‘soak into, permeate’
<i>somi-</i> ‘hide, conceal, bury’	<i>swum-</i> 숨- ‘hide’
<i>tama-</i> ‘collect scattered thing, fill (a vessel) with’	<i>tam-</i> 담- ‘fill, put in’
<i>tasga-</i> ‘saute quickly, cook dry’	<i>task-</i> 닻- ‘polish, roast (beans or sesame)’
<i>tebeliye-</i> ‘hug, embrace’	<i>tepul-</i> 더블- ‘go with, take (a person) with, accompany’

One suggestion for why these correspondences are so numerous is that Korean might have branched off from Tungusic after the Proto-Altaiic unity. There is also the possibility that the physical proximity between Korean and Manchu (and/or other South Tungusic languages) might have reinforced ties of common heritage long after the languages became distinct entities.

But some Anti-Altaiicists have more recently aired a totally different idea. Impressed by the resemblances between Korean and Tungusic in spite of their Anti-Altaiicist views, they have suggested that Korean and Tungusic are related to each other and to Japanese, but neither to Turkic or Mongolic. This school of thought, an offshoot of the Anti-Altaiicist camp, is one that arose out of research comparing Korean with Japanese.⁸

1.3 Japanese

Korean has been compared with Japanese even longer than with Altaiic. Considering the prominence of Japanese in the world and the similarity of its structure to that of Korean, the attention is understandable. In 1717, well before the comparative method was even developed, the Japanese Confucian Arai Hakuseki speculated that the two languages must have had an earlier historical relationship. Later in the same century, in 1781, still long before the methodology of historical linguistics was known in Japan, Fujii Teikan suggested the two must have come from a common source. Serious

⁸ This hypothesis is described in Unger (1990).

comparative research, however, actually began in 1879, with the publication of a 48-page study on the subject by William George Aston. Aston, a British consular officer stationed first in Tokyo, then (as Consul-General) in Seoul, was a graduate of Queens University Belfast in Classics and Modern Languages who became a serious Japanologist during his time in Japan. Before his death in 1911, Aston authored numerous highly regarded books and articles on Japanese history, literature, religion, and language, including the first modern grammar of the language. As an educated Victorian, Aston was thoroughly versed in Greek, Latin, and Sanskrit and the reconstruction of Indo-European, and he was an avid student of Japanese language and literature, as well.

Aston's knowledge of Korean, however, was much shakier and in most cases second-hand. He acknowledged that his principal source of information had been some manuscript manuals prepared by Japanese interpreters resident in the Japanese settlement in Korea, as well as, for the grammar, a sketch in Dallet's "Histoire de l'Eglise de Corée."⁹ It is undeniably impressive that in spite of this faulty and fragmentary knowledge of Korean, many of his observations and conclusions are still valid. He wrote, for example, that "the Korean word *chül* [sic] 'a Buddhist temple,' must be the original of the Japanese *tera*, which has the same meaning." Still, the fundamental imbalance between what Aston knew about Japanese and what he knew about Korean could not help but handicap his comparative work.

Traces of this imbalance remained in comparative research long after Aston, and to an extent even today. By the time Aston's article appeared, modern linguistic science had reached Japan, and within a few years serious Japanese scholars picked up the idea of a genetic relationship and pursued it. This late nineteenth- and early twentieth-century scholarship in Japan culminated in the 1910 and 1929 works of Kanazawa Shōzaburō, a comparative linguist from Tokyo Imperial University who argued that both Korean and Ryūkyūan were branches of Japanese, a baldly political view that remained unchallenged until after the Pacific War. Then, in the liberal atmosphere of the postwar period, Japanese comparativists expanded the scope of their research far afield, and the latter half of the twentieth century saw attempts to relate Japanese not only to Korean and Altaic, but also to Austronesian, Dravidian, Tibetan, and to a host of other languages. For a time, one popular idea was that Japanese was a "mixed language" with "genetic" connections to both north (Altaic) and south (Austronesian). In comparative linguistic circles in Japan, quite reputable scholars floated one sensational idea after another, and all the while, the only real progress toward resolving origin questions was

⁹ His essay is also marred for the modern reader by blatantly racist asides larded into the text. Aston speaks, for example, of "the poverty of imagination . . . of these races" that had resulted from structural defects found in their languages.

produced by research into Japanese and Ryūkyūan dialects. Meanwhile, because this was in Japan, Korean remained understandably of secondary interest.

But in the West, too, comparisons of Korean and Japanese have usually begun with research on Japanese. Western scholars active in the field have invariably been trained Japanologists whose interests in Korean came later, and usually because of its purported genetic relationship with Japanese. Some of these linguists have pursued comparative work in the context of Macro-Altaic – that is, a relationship of Japanese to Korean was treated as subsidiary to the grander comparative scheme that would include Japanese within an expanded Altaic family. The best-known publication in this genre was Roy Andrew Miller's 1971 book *Japanese and the Other Altaic Languages*, a work that won general acceptance among Altaicists, especially in Russia and parts of Europe, and since that time their explorations of the genetic affinities of Korean have generally been shaped by the Macro-Altaic agenda. Most linguists in North America and Western Europe, however, have continued to focus primarily on establishing a link between Japanese and Korean. For them, Altaic has remained largely an afterthought.

The seminal modern work of this kind was Samuel E. Martin's 1966 article in *Language*, "Lexical Evidence Relating Korean to Japanese." Martin's central contribution in that essay was to put order into what had before been unsystematic. He began with 265 lexical pairs, Japanese and Korean words he believed were etymologically linked. Then, rather than remain content with pairing look-alikes (as other comparativists had done), Martin drew up interlocking correspondences for each phoneme in each lexical pair. He realized that no matter how startling the resemblances might be, the pairings were worthless for comparative purposes unless rules could be established explaining how the modern words had developed from the proto forms. Finally, he classified the pairs into three categories: those of equivalent meaning with perfect fit; those of equivalent meaning with partial fit; those with perfect fit but divergent meanings. For good measure he added 55 more word pairs he suspected were linked for a total of 320 proposed etymologies.

Yet, in spite of this systematic treatment, Martin's article was subsequently criticized, sometimes sharply. For one thing, many of the etymologies it included, especially those in the second and third categories, were judged to be implausible. But the strongest objections were leveled at the rules themselves. Matching all the phonemes in each word pair had resulted in such a complex set of correspondences that a single vowel in one language, say, could correspond to as many as six vowels in the other language, a consonant could correspond to four or five different matches. Thus, as Martin wrote, the reconstructed vowel system was "of necessity rich"; sixteen reconstructions were used to represent the correspondences of vowels. And consonant correspondences required the reconstruction of complex consonant clusters. In other

words, critics thought the treatment was too mechanical, and that the reconstructions were no more than formulations reflecting that mechanical process and bearing no resemblance to real language. In addition, Altaicists objected that no attempt had been made to verify the comparisons by independent witness, such as, say, through equivalents found in “other” Altaic languages.

Nevertheless, despite the criticisms from some quarters, Martin’s article won applause and acceptance from others, and formed the basis upon which much of the subsequent work comparing Japanese with Korean was based. Over the next four decades historical research resulted in sharper arguments and better data used in the comparisons, especially for Korean. Western knowledge of the Korean language and its history has unquestionably improved.

Of course, the source of that knowledge and its improvement has naturally come largely from research advances in South Korea. In the decades following the end of the Korean War, linguistics underwent a remarkable boom in interest and expertise in that country, and advances and new discoveries continue to be made there today. Moreover, in the twenty-first century Korean scholars are ever more closely linked to colleagues in the West. Research findings are shared. Scholarly papers are written in English. But differences remain. For the most part, Korean comparativists and historical linguists do not share their American and European colleagues’ preoccupation with Japanese connections; for them, the question of possible Korean links to Japanese is of secondary interest, and only within the context of Macro-Altaic.

A genetic relationship between Korean and Japanese is widely accepted today in the West nevertheless. In North America, that hypothesis has at least as much currency as any of the various versions of the Altaic hypothesis. And yet, it is difficult to say how much closer we are now than we were in 1966 to resolving the questions surrounding the relationship between Korean and Japanese. As Martin himself later wrote, in 1991, “[t]here is no general agreement on the genetic relationships of either Japanese or Korean” (p. 269). Still, failing that ultimate prize, much progress has in fact been made in uncovering the prehistory of both languages. At the very least, we are beginning to understand how very complex prehistoric change was, and how much it altered the phonological and morphological structure of the two languages. As a result, instead of rushing to apply the comparative method to Japanese and Korean, or to compare either with Altaic, serious research has, in recent years, been concentrated more on first reconstructing earlier stages of each language independently. In other words, first reconstruct, then compare, rather than the other way around.

To our way of thinking, the single-minded focus of Western comparativists on the relationship of Korean to Japanese is overdone. At least judging from the present state of the art, there are at most 200 lexical pairs in Japanese and

Korean that look convincing, and no more than fifteen possible comparisons to be found in their sets of inflectional morphemes. In our view, the prospects for comparative work between Korean and Tungusic appear to be somewhat better. Recall how remarkably close the Altaic correspondences are for the three Middle Korean verb endings used to form nominals and modifiers: (1) *-(o/u)m*, (2) *-(o/u)lq*, (3) *-(o/u)n*. Only one of the three, *-(o/u)m*, appears to have a reflex in Old Japanese: *-mi*.

There are, to be sure, matches between Korean and Japanese for which correspondences are not to be found in Altaic or anywhere else. One, for example, is the well-attested pair Korean *syěm* 섬 ‘island’ and Japanese *sima* ‘id.’ And there are numerous others like it, including *nat* 낫 ‘sickle’ : *nata* ‘hatchet’; *path* 밭 ‘(dry) field’ : *patal/patakey* ‘id.’; and *patah* 바닷 ‘sea’ : *wata* (< **bata*) ‘id.’ The extent to which such look-alikes resulted from cultural contact or came down as inheritances from proto forms cannot, at the present time, be known. And until such time as interlocking correspondences, whether Martin’s or anyone else’s, produce the critical mass described at the beginning of this chapter, such matters can never be completely clarified.

Ultimately, it is more likely than not that Korean is related to Japanese, though at the present state of our knowledge it is impossible to say just how distant such a relationship, if it exists, might be. What we do know is that the task of proving the relationship remains as yet very much incomplete.

1.4 Toward history

Experts are not in complete accord about the origins of Korean. Despite the perceived centrality of the question, we cannot yet know to what extent the numerous resemblances of Korean to other languages in northeastern Asia truly reflect development from a common origin, or are the result of long-term, intimate contact instead. The evidence of kinship with Altaic, especially with Tungusic, and with Japanese, is strong. The correspondences tantalize. And yet, what is missing is the enumeration of new information provided by those relationships. What do other languages tell us about Korean’s ancestral, prehistoric structure? What did that earlier language sound like? Speculation about such issues excites the imagination. But, still lacking a breakthrough, the myriad questions surrounding them have not been definitively resolved.

In the next chapter we will visit the beginnings of written history on the Korean peninsula. Those earliest records were written by outsiders, the Han Chinese, who wrote down impressions of the languages and words they heard spoken there. As we will see, their transcriptions provide the earliest adumbrations of Korean linguistic history.

2 The formation of Korean

In the world today, few nations are as homogeneous as Korea. There are no ethnic or linguistic minorities anywhere in its indigenous population. But the kinship-like bonds of this nation, together with its ties to the land itself, have fostered a monolithic view of the past. There is a tendency among Koreans to think of every artifact taken from Korea's soil as the handiwork of their forebears, every ancient tribe as ancestors, all prehistoric languages as forms of early Korean. However, in the remote past the Korean peninsula was a multicultural place.

Just when Korea became so homogeneous is not altogether clear, but certainly, there was a time when many diverse groups of people lived in that part of the world. Such was clearly the case around the beginning of the Christian era. In 108 BC, when Han Chinese forces first established commanderies on the peninsula, the region was already filled with local polities. In their interaction with these local groups, a process which had already been going on for centuries, the Chinese transcribed a scattering of names as best they could in phonograms. Some of the group names are thus preserved in Chinese historical annals; and from these records we know a little about where they lived and how they related to each other. But little institutional memory of the languages remains. For the most part, the vague records left about the peoples on the Korean peninsula provide room largely only for guesswork. Which of the groups were the ancestors of today's Koreans? Out of which of their languages would Korean be formed?

2.1 Old Chosŏn

The earliest state mentioned in Chinese historical annals was Chosŏn. Even though it occupied only a small part of what is Korean territory today, this early state came to be central to Korea's foundation myth. According to traditional reckoning, Korean history began in 2333 BC, when the founding ancestor Tan'gun 檀君 established his capital in an area near modern Pyongyang and called it "Chosŏn." Because of the name's cachet for nationhood, it was later adopted as the official name of the state by the founders of the



Map 2. The Korean peninsula during the Three Kingdoms period, around AD 400

Yi dynasty (1392–1910), and it is still used as the name of the state in North Korea. To distinguish the original name from these latter-day usages, historians usually refer to it as “Old Chosŏn.”

No one can say for sure what “Chosŏn” meant. If the name ever had some clear significance it was lost long ago, for the characters with which it was

written were almost certainly no more than a Chinese transcription of what the state was called locally. And yet the Tan'gun story contains what some believe to be a suggestive clue. After founding his capital at Chosŏn, Tan'gun later moved it to a place called Asadal (*asatal* 阿斯達), which was the name of a nearby mountain. In that name, *-tal* appears to have been a suffix much like a similar-sounding word used for 'mountain' in Koguryŏ place names. The part that remains, *asa-*, resembles both Middle Korean *achom* 아츰 'morning' and Japanese *asa* 'id.,' two words that have often been compared to each other and thought to have a common origin. Was it then an accident that the first of the two characters used to write Chosŏn (朝鮮) could mean 'morning'? A problem with this inference is that the Chinese have always read the character in the name with a pronunciation that could never be interpreted as 'morning' but only as 'tide' or 'court.' There is also thought-provoking speculation about a few other ancient words. One is *wangkem* 王儉, a title used for Tan'gun that apparently meant 'ruler' or 'sovereign.' Since *wang* 王 was Chinese for 'king,' *kem* may well have been the nearest native equivalent, an inference reinforced by its phonological resemblance to a Silla word for 'king.'

Besides "Old Chosŏn," there was also "Kija Chosŏn." This was the second state said to have existed in ancient Korea. Kija (or the Viscount of Ki) was a nobleman of the Chinese Shang dynasty, described in Chinese records as the paternal uncle or brother of the dynasty's last emperor. But when Kija remonstrated with the emperor over his corrupt practices, the emperor threw him into prison. After the Shang was subsequently overthrown by the Zhou, Kija took refuge in Chosŏn and established a state there (though just where is a hotly disputed topic in modern Korea). The new Zhou rulers, rather than pursuing this member of the previous dynasty's nobility, rewarded Kija for his virtue and conferred upon him a peerage. At one time, this story was important to Koreans because it tied the nation's origins to Chinese institutions and classical traditions. Now, however, in this latter era, when ancient connections to China are less valued, Korean scholars usually dismiss the story as legend; it is glossed over briefly in passing, and Old Chosŏn is described as giving way to what was traditionally the third successive state of ancient Korea, "Wiman Chosŏn," which was, after all, a much better documented entity. Nevertheless, some philological scholars have recently noted that the term used in Paekche for 'king' had a phonological shape similar to that of "Kija"; as a result, there is some speculation that the name might actually have been another early transcription of a local word for 'ruler.' Whether true or not, the reasoning shows the tantalizing nature of these ancient names and titles.

2.2 The Puyǒ and the Hán¹

After the Han Empire fell in AD 220, China came under the control of three kingdoms, Wu, Shu, and Wei. The northernmost of these kingdoms, Wei, bordered what is now Korea, and the account of that state known as the *Wei zhi* 魏志 contains a “Description of the Eastern Barbarians” (*Dong Yi zhuan* 東夷傳), the term the Han had used for the indigenous peoples of the area. This description is regarded as reasonably reliable because it was based upon an ethnographic survey the Wei had conducted following a victory against Koguryǒ in AD 244. According to the survey findings, the languages of the local inhabitants were roughly divided into three groups, the Suksin 肅愼, the Puyǒ 夫餘, and the Hán 韓. (These names are of course the modern Korean readings of the transcriptional characters; what the names actually sounded like at the time is not clear. Even more of a mystery is what the words they represented might have meant, or even what languages they might have come from.) The various Suksin and Puyǒ groups were scattered over Manchuria, southern Siberia, and the northern half of Korea; the Hán peoples occupied the southern half of the peninsula.

2.2.1 *The Puyǒ languages*

If the Chinese descriptions are to be believed, the “Puyǒ language group” included four languages: Puyǒ, Koguryǒ, Okchǒ, and Ye. The Chinese considered the Puyǒ to be friendly allies, and perhaps for that reason they appear to have been the starting point for describing nearby peoples. The Koguryǒ, on the other hand, were warlike and constantly giving the Chinese trouble; they dominated many of the surrounding peoples, including the Okchǒ and Ye. Here is what the *Dong Yi zhuan* had to say, first of all about Koguryǒ: “According to old statements by the Eastern Barbarians, the Koguryǒ are a special branch of the Puyǒ; in language and in many things they are similar to the Puyǒ, but they differ from them in character and clothing.” Of the Eastern Okchǒ, the document reported that “the language is much the same as Koguryǒ but with small differences here and there.” And as for the Ye, it was noted that “their elders say of themselves that they are of the same branch as the Koguryǒ; their language, laws, and customs are for the most part the same as those of the Koguryǒ; in their clothing there are differences.” The *Hou Hanshu* (fifth century) gave similar descriptions about these peoples and their languages.

The Chinese chroniclers further reported that the Puyǒ languages contrasted with those in the Suksin group. The Suksin peoples, which consisted

¹ Here the reading of the character 韓 is transcribed *Hán* to distinguish it from that of 漢, *Hàn*.

largely of northern, semi-nomadic tribes, included the Ŭmnu, who were descended from the Suksin and related to the Mulgil and Malgal. Of the Ŭmnu, the *Dong Yi zhuan* said that “these people resemble the Puyǒ in appearance, but their language is not the same as that of the Puyǒ or Koguryǒ.” The “Description of the Mulgil” in the *Beishi* (659) described these nomadic people as “living north of the Koguryǒ, and their language is different.”

These descriptions are all we actually know about the Suksin languages. Suksin, Ŭmnu, Mulgil, Malgal – these are but names as far as the languages are concerned. All we have to work with are where the people who spoke them lived, what they were reported to look like, and what they practiced as customs. It is usually said that the Suksin were the ancestors of the Jurchen, but the only basis for that assertion is such extralinguistic evidence as their geographical distribution and physical appearance. Though possible, perhaps even likely, it is not even certain that the Suksin languages were Tungusic at all. Not a single word from any of them has been preserved.

The Puyǒ languages are different in this respect from Suksin only because one of them, Koguryǒ, became a powerful and well-established kingdom. But the linguistic evidence from Koguryǒ, too, is neither voluminous nor of high quality, and even those traces of the language that do exist are not unquestionably of Koguryǒan origin. The evidence and its problems will be discussed presently.

2.2.2 *The Hán languages*

Turning to the south, the Wei portrayed the peoples there as significantly different from the Puyǒ and Koguryǒ. The Hán groups were not nearly so far along in the process of state formation; they were farther from the Chinese not only geographically but in their customs and lifestyles, too. The Wei survey divided them into three general groups, the so-called “Three Hán”: the Mahan, the Chinhan, and the Pyǒnhan (which were also called the Pyǒnjin). The Mahan communities, which were the most numerous, were found in the southwest and as far north as modern Kyǒnggi; the Chinhan were in the southeast; the Pyǒnhan were also in the southeast and living among the Chinhan, but some of their communities were found west of the Chinhan beyond the Naktong River. Thus, the Mahan lived in territory that would later become the kingdom of Paekche. The Silla kingdom arose out of Chinhan lands. And Pyǒnhan is generally recognized as related to the later state of Kaya (or Kara).

How did the various Three Hán communities relate to each other linguistically? The *Dong Yi zhuan* notes only that, “The Chinhan are found east of the Mahan . . . their language is not the same as the Mahan”; and “the Pyǒnjin lived mixed together with the Chinhan . . . their languages, laws, and customs

resemble each other.” From these statements, it appears that the Pyŏnhan and Chinhan languages were similar to each other, and the Mahan different from both. However, another archival source, the *Hou Hanshu* (fifth century), casts doubt on that conclusion: of the Chinhan and Pyŏnhan, it says, rather, that “the languages and customs have differences.” This textual confusion about basic facts serves as a reminder of how tenuous conclusions based upon such sources really are. The ancient Chinese authors may have had no direct access to information; and they certainly did not know any of the languages themselves, probably not a word. For them, the Three Hán existed on the extreme outer fringes of the civilized world; they were exotic and half savage, and whatever they spoke was incomprehensible to Chinese ears. Perhaps it is better to say only that the languages of the Three Hán very likely resembled each other but also had differences. What we know for sure is that the Three Hán coalesced later into the two states of Paekche and Silla. And the state of Kaya, which had formed in the Naktong River basin, was incorporated into the kingdom of Silla in the sixth century.

An even more difficult question concerns the relationship between the Puyŏ and Hán language groups. The compilers of Chinese histories wrote about language, but their writings contain no mention of this issue. And later texts written by Koreans, including the *Samguk sagi*, contain not a single word about the languages spoken in the Koguryŏ, Paekche, and Silla kingdoms, much less offer suggestions as to what relationships could have obtained between them. These later authors at least must have known one or more of the languages, yet, in what has been preserved of their writings, they were silent about linguistic matters. For even the most basic information about the formation of Korean, one has to look beyond the historical narratives.

2.3 The Three Kingdoms

It was in the Three Kingdoms period that the first true states took shape on the Korean peninsula. The Wei survey had found no more than tribal federations, but by the fourth century these loosely defined groups had transformed themselves through a series of wars and political consolidations into impressive and sophisticated states. The eponymous “three kingdoms” of the period, Koguryŏ, Paekche, and Silla, were the political entities that would later be described in the *Samguk sagi*, the “History of the Three Kingdoms” (see Map 2). But Puyŏ also existed as a fully articulated state during this period (at least until it was absorbed by Koguryŏ in 370), as did Kaya. The first of the states to emerge were Puyŏ and Koguryŏ, which were already well on their way to statehood at the time of the Wei survey. Paekche and Silla arose a bit later. Just when Kaya became a state is not clear.

2.3.1 *The Samguk sagi*

Our information about the Three Kingdoms period comes from the *Samguk sagi*. Compiled by Kim Pusik in 1145, it is Korea's oldest extant history. Koguryŏ, Paekche, and Silla each had its own national history, but none of these has survived. All we know from those and other earlier historical sources is what was incorporated into the *Samguk sagi*, or, in some cases, into Japanese histories. Writing two hundred years after the fall of Unified Silla, Kim Pusik structured his work after the retrospective style of imperial Chinese histories, dividing its fifty volumes into four parts: narrative histories called "annals" for each of the three kingdoms; tables of dates and events; monographs or essays on various topics; and biographies.

Linguistic information can be found in the *Samguk sagi* monographs on geography. There are four of those. Volumes 34, 35, and 36 treat Sillan geography. Volume 34 describes the history and extent of lands Silla controlled during the Three Kingdoms period, and then details the administrative divisions of those lands. Volume 35 recounts what had happened to the administrative units Silla had seized from Koguryŏ, while volume 36 treats the territories Silla had taken from Paekche. Volume 37 is devoted to Koguryŏ and Paekche. The *Samguk sagi* has a distinctly Sillan bias in almost all its parts, and in the volumes on geography, this imbalance is seen not only in the fuller treatment of the three volumes devoted to Silla, but in the structure of volume 37 as well. There the discussion of Koguryŏ place names, for example, is confined only to those parts of Koguryŏ that were later incorporated into Sillan territory. The *Samguk sagi* is silent about the vast Koguryŏ lands extending from north of the Taedong River across the Yalu and into Manchuria.

2.3.2 *Koguryŏ*

As has been mentioned, Koguryŏ is the only Puyŏ language for which any linguistic evidence is believed to still exist. These fragments of language are difficult to decipher, however, since they consist solely of the words and morphemes out of which Koguryŏ names are composed. The most important of these proper nouns are the toponyms recorded in the *Samguk sagi* monographs on geography.

The majority of Koguryŏ place names are found in volumes 35 and 37. The basic data come from the names given in volume 37; the names in volume 35 provide supplementary and explanatory information. In volume 37, a Koguryŏ place name was often transcribed in two different ways. For example, what is now Suwŏn (a large city just south of Seoul) was written both as 買忽 and as 水城. Here is the form the entry in volume 37 took:

買忽 一云 水城

The first transcription, 買忽, was an attempt to represent the SOUNDS of the Koguryŏ name using phonograms. The second transcription, 水城, used Chinese characters to approximate the MEANING of the name, ‘water city.’ The second transcription, in other words, invited the reader to ignore the Chinese sounds associated with the characters and to read them as native words. This method of reading characters is called *hun* 訓 by Koreans (in Japan that same type of reading is called *kun*). The important thing to keep in mind here is that the two transcriptions in volume 37 represented two different ways of writing exactly the same name. Volume 35, on the other hand, was different. Unlike the names in volume 37, the names given in volume 35 reflected what had happened historically after the Three Kingdoms period, in the Unified Silla and Koryŏ periods.

In the Three Kingdoms period, the structure of place names had often been radically different from one place to another, and that remained true well after Silla had effected its unification of the peninsula in 668. In 757, however, the powerful Sillan monarch King Kyŏngdŏk carried out a reform in which all place names within the realm were made to conform to a rigid standard. From that point on, every significant place in Korea was given a Chinese-style name. Each was to be written with two Chinese characters, and both of those characters were to be read with standardized Sino-Korean pronunciations. Volume 35 of the *Samguk sagi* recorded these changes, as can be seen in the parallel entry for Suwŏn:

水城郡 本高句麗 買忽郡 景德王改名 今水州
 ‘Susŏng County was originally Koguryŏ Maehol County; King Kyŏngdŏk changed the name; now it is Suju.’

The first part of this entry, 水城郡 ‘Susŏng County,’ was the name given under King Kyŏngdŏk’s rectification of names; the original Koguryŏ name came next; and Suju 水州 was the Koryŏ name used at the time the *Samguk sagi* was written. Notice that the characters used to write the name 水城郡 ‘Susŏng County’ were exactly the same as those used in one of the two original transcriptions of the Koguryŏ place name. But that original 水城 in volume 37 was completely different in nature from the 水城 in volume 35. That’s because in volume 37 the characters 水城 were read as the Koguryŏ words that meant ‘water city,’ whereas the same characters 水城 in volume 35 were read Chinese-style – that is, as Sino-Korean. We can well imagine that the choice of names in this latter case simply meant changing the way the original transcriptional characters were read. But the result was a truly fundamental change. Korean place names would never again be the same.

For us today, the difference in the way these two geography volumes of the *Samguk sagi* were structured means that research on the Koguryŏ language

must be focused primarily on the place names given in volume 37. It is from that volume, in the two ways each place name was transcribed, that Koguryō words and morphemes can best be deduced. For in that volume, one of the two transcriptions gives us clues as to how the words sounded, and the other indicates what the words meant.

Another Koguryō place name (which meant something like ‘water valley city’) was transcribed with the same characters: 水谷城郡 一云 買旦忽. This entry confirms that the Koguryō word for ‘water’ sounded much like the reading for the character 買, and ‘city’ sounded like the reading for the character 忽. Thus, from these place names we know the identity of two Koguryō words, 買 ‘water’ and 忽 ‘city.’ How the phonograms 買 and 忽 were meant to be read is a problem that may never be completely solved. Nevertheless, since the characters were borrowed from China, the readings must at least have been similar to their pronunciations in China around that time. There are also other clues. For example, the phonogram 買 was often replaced by 美 or 彌 in other place names:

內乙買 一云 內尔美; 買召忽 一云 彌鄒忽.

And so, by reconstructing the Middle Chinese pronunciations of 買, 美, and 彌, we can surmise that ‘water’ must have sounded something like **mɛ:j*, **mi*, or **mji*. Or, if we assume that the traditional, Middle Korean readings were closer to the way characters were read in Koguryō, we arrive at something like **may* or **mi* (the reading of both of the latter two characters). Until other kinds of evidence are discovered, these are about the best approximations we can make for the sounds of this Koguryō word.

Altogether, scholars have found about 100 words used in Koguryō place names in the *Samguk sagi*. These data remain very much tentative of course, first of all because we can never deduce the phonemic structure of the words from phonograms alone. But there are other problems as well.

For one thing, a word was not always transcribed the same way. In the entry for ‘water valley city’ (given above), the pronunciation of 谷 ‘valley’ was indicated by the phonogram 旦, but that particular transcription is found in no other place name. However, since the sounds of ‘valley’ were indicated elsewhere by 頓 or 吞, and since these characters had readings that were at least similar, ‘valley’ must have sounded something like **tan* 旦 (旦), **twon* 吞 (頓), or **thwon* 吞 (吞).

Other attestations were unique. That is the case with the following two entries, for example:

十谷縣 一云 德頓忽 (‘Ten Valley District’)
於支吞 一云 翼谷 (‘Wing Valley’)

From these entries we deduce that the words for ‘ten’ (十) and ‘wing’ (翼) sounded something like **tek* 덕 (德) and **eci* 어지 (於支). But nowhere else were these words transcribed this same way, with indicators of the meanings as well as transcriptions of the sounds.

Then there is a still more serious question that has recently been raised about the nature of data derived from the Koguryŏ place names. The towns and administrative jurisdictions for which these names have been preserved were certainly located within the boundaries of the Koguryŏ kingdom; but, some ask, did not various other groups live in many of these areas? And that being the case, is it not likely that many towns and villages already had non-Koguryŏ names when the territories fell under Koguryŏ control? (In some cases the lands were only controlled by Koguryŏ for less than 200 years, from 475 to 668.) In other words, according to this line of reasoning, we do not necessarily know that all Koguryŏ place names were composed of Koguryŏ words. (It only takes a moment’s reflection to see the logic of this argument: Sapporo may be a Japanese city but the name is Ainu; the names Chicago and Terre Haute are not made up of English morphemes even though the people who live there speak English.) Absolute identification of these place names with Koguryŏan is not an easy thing to do from geography alone. (Cf. Whitman 2002.)

However, it is important to note that the identification of these place names with the Koguryŏ language does not depend solely, or even principally, upon the fact that they were located in territories controlled by Koguryŏ. That would be unwarranted, for the reasons cited above (one cannot imagine that no other languages existed, or had left no distinct traces, on territory so recently brought under Koguryŏ control).

Rather, the belief that the place names so annotated were Koguryŏan rests upon a totally different idea, a subtle cultural assumption that has to do with the nature of the transcriptions themselves. The reasoning goes as follows: first, Koguryŏ names were transcribed in a unique way. As explained above, this Koguryŏ method was a system in which a *hun* 訓 transcription was used to annotate the meaning, while phonograms were used in a second transcription to represent the sounds. For example, as cited above, the city that was to become Suwŏn was written 買忽 一云 水城, using the phonograms 買忽 to represent the sounds of the name (**mayhwol* 매홀), and 水城 to approximate the meaning of the name, ‘water city.’ Now, given that kind of system, how could the Koguryŏ place names thus annotated represent words in some other language? It strains the imagination to suppose that Koguryŏ scribes might deliberately devise a *hun* transcription to represent meanings of morphemes making up some foreign name. But then, it might be argued, could not the transcription have been devised earlier, created by some other literate people, and thus already have existed when the territory came under Koguryŏ control?

For example, one might note that Paekche had controlled the territory where modern Suwŏn is before it was taken over by Koguryŏ; could not the transcription, then, represent a Paekche name? But that scenario, too, seems unlikely, for one very good reason: we do not see that kind of bipartite system in the records of Paekche place names.

The broader sociological and historical claim incumbent in this assumption about Koguryŏ place names has to do with how writing practices developed. Since Chinese writing reached Koguryŏ well before it did Paekche and Silla, it seems safe to assume that many of the writing methods used in the latter two kingdoms came to them via that northern neighbor. And if that was so, it is highly likely that the *hun* method of transcription itself was devised, or at least refined, by members of the Koguryŏ ruling classes or their scribes. Inevitably, this Koguryŏ invention reached Silla and Japan, where it would shape writing practice down to the present day.

Confirming evidence is hard to come by, however. Data from place names north of the Taedong River, in the “original” Koguryŏ homeland, are conspicuously missing in the *Samguk sagi* materials. For years scholars have pored over Koguryŏ writing found in stele inscriptions, including that of the famous Kwanggaet’o Stele just north of the North Korean border, yet, to date, no one has found identifiable morphemes in any place or personal name. For all these reasons, conclusions about the *Samguk sagi* place names unfortunately remain tentative.

2.3.2.1 Koguryŏ lexical strata

Still, such problems notwithstanding, the Koguryŏ corpus contains strata that can readily be compared to known sets of vocabulary. Many of the words appear to be Altaic – or at least Tungusic. For example, the word for ‘water’ discussed above (which sounded something like **may* or **mi*) had a phonological shape that strongly resembled Evenki *mū* ‘water,’ Manchu *muke* ‘id.,’ and Middle Mongolian *mören* ‘lake, river.’ And it looked even more like Japanese *mi(du)* ‘water.’ This resemblance suggests that Koguryŏan was linked to Japanese as well as to its continental neighbors. Overall, Tungusic look-alikes are numerous. They include, among other words, Koguryŏ 內米 ‘pool,’ which compares to Tungusic forms reconstructed for ‘lake, sea’ (**namu*, **lamu*); Koguryŏ 難隱 ‘seven,’ which looks like **nadan* ‘seven’; and various transcriptions of ‘earth’ or ‘dike’ (內, 那, 奴), which resemble Manchu *na* ‘earth.’

Some Koguryŏ words strongly resemble Japanese. For example:

Koguryŏ	Old Japanese
旦 <i>*tan</i> , 頓 <i>*twon</i> , 吞 <i>*thon</i> ‘valley’	<i>tani</i> ‘valley’
烏斯含 <i>*wosaham</i> ‘rabbit’	<i>usagi</i> ‘rabbit’
那勿 <i>*namwul</i> ‘lead’	<i>namari</i> ‘lead’



Figure 1. The Kwanggaet'o Stele

This stone monument stands just north of the Yalu River, in what is now Jilin Province in China. Erected in 414 as a memorial to King Kwanggaet'o of Koguryŏ, the stele is one of the principal primary sources of information about the history of that ancient kingdom. But because its inscription relates a story of wars the king waged against Japanese forces (the Wa 倭), the interpretation of the text and where those wars took place remains highly controversial. Carved out of one enormous slab of granite, the monument is almost 7 meters tall, with a girth of almost 4 meters.

Of these resemblances to Japanese, most startling of all are the numbers:

	<i>Koguryō</i>	<i>Old Japanese</i>
‘3’	密 * <i>mil</i>	<i>mi</i>
‘5’	于次 * <i>wucha</i>	<i>itu</i>
‘7’	難隱 * <i>nanun</i>	<i>nana</i>
‘10’	德 * <i>tek</i>	<i>topo</i>

These four words for 3, 5, 7, and 10 are the only numbers preserved in the corpus of Koguryō place names, and all look remarkably like Japanese. Such a resemblance could hardly be accidental. It is a powerful indication that a language closely related to Japanese once existed on the Korean peninsula, and that language is usually believed to have been Koguryōan.

At the same time, however, the vocabulary found in the Koguryō place names includes even more elements that relate solidly to Middle Korean and thus to the mainstream development of the Korean language. At least thirty such comparisons seem secure. For example:

<i>Koguryō</i>	<i>Middle Korean</i>
於斯 * <i>esa</i> ‘horizontal’	<i>es-</i> 엇- ‘crosswise’
也次 * <i>yacho</i> ‘mother’	<i>ezi</i> 어씨 ‘mother, parent’
波兮 * <i>phahyey</i> , 波衣 * <i>phauy</i> , 巴衣 * <i>phauy</i> ‘boulder’	<i>pahwoy</i> 바회 ‘boulder’
別 * <i>pyel</i> ‘pile’	<i>pol</i> 퓌 ‘pile, layer’
首 * <i>sywu</i> ‘ox’	<i>sywo</i> 쇼 ‘ox’

Occasionally a Koguryō element shows greater similarity to the Silla corpus than to Middle Korean. For example, Koguryō 於乙 ‘spring’ corresponds to the Silla element 乙 ‘well,’ while the Middle Korean words *soym* 십 ‘spring’ and *wumul* 우믈 ‘well’ are completely different forms. But such connections to a contemporary language believed ancestral to Middle Korean only underscore the Koreanness of the lexical strata.

In sum, Koguryō place names contain at least three strains of vocabulary. Some of the words can clearly be linked to Korean; some are Japanese-like; and some others look broadly Altaic and/or Tungusic. What are we to make of these facts?

2.3.2.2 *The place of the Koguryō language*

The multiple groupings of the Koguryō toponyms appear to be evidence of links that obtained between Altaic, Korean, and Japanese. In Korea, most researchers have long believed that the language spoken in Koguryō was in fact a “dialect” of Old Korean, and accordingly treat the toponyms as Korean words pure and simple. Others, particularly in Japan and the West, have

been more impressed with the lexical resemblances to Japanese. However, if the various strains of vocabulary represented the lexicon of a single language, a more logical conclusion is that Koguryōan was related not just to Korean or Japanese, but to both. The corpora are too large and the words too basic to represent merely layers of cultural borrowing. And if that was so, Koguryōan might possibly have been a language intermediate between what later became those two important world languages.

2.3.3 *Paekche*

Chinese visitors took note of the Paekche language. In the “Description of Paekche” found in the *Liang Shu* 梁書 (629), we are told that “At present, the language and clothing are about the same as those of Koguryō.” This statement most likely referred to what was spoken by the rulers of the state. As we have seen, Paekche came into being on Mahan territory, and from that fact historians surmise that the basic population there spoke a Hán language. But historians also agree that these southern people were ruled over by a Puyō elite, immigrants from the north who had come in and founded the Paekche kingdom. Moreover, a speech difference between the two groups is strongly suggested by the *Zhou Shu* 周書 (636) in its “Description of Strange Lands,” where we read: “The surname of the [Paekche] king is Puyō 夫餘; he is known by the name **elaha* 於羅瑕, the people call him **kenkilci* 健吉支, and both of these terms refer to what in Chinese is called ‘king.’” This mention of two different words is usually taken as direct evidence that the Puyō overlords and the Hán governed spoke different languages.

The few fragments of the Paekche language that still exist today strongly resemble Sillan. This fact suggests that the language of the rulers did not displace the language of the people they ruled, but only influenced it to a certain extent. That would mean that Paekchean was basically a Hán language with a Puyō superstratum.

Of the three kingdoms, Koguryō, Paekche, and Silla, the linguistic information from Paekche is the most difficult to glean from the *Samguk sagi* transcriptions. As was mentioned earlier, the geography essays are our principal source of information in that work, but the Paekche place names given there are far more opaque than was the case for Koguryō. The reason is that, for whatever reason, very few Paekche place names in volume 37 are represented with the same kind of dual transcription, one for sound and the other – the *hun* reading – for meaning. Thus, most of whatever information can be gleaned comes from volume 36 (which tells what happened to the Paekche place names after the Three Kingdoms period, in the Unified Silla and Koryō periods). There, for example, one of the recurring elements in Paekche place names is 夫里. This form appears to correspond to the word **pul* ‘plain’ in

Silla place names, and since it is transcribed with two characters, it seems to show that a syllable-final vowel was preserved in Paekchean. That kind of guesswork is just about the extent of what can be known structurally about the Paekche language from the *Samguk sagi* place names.

There is yet another source of information about the Paekche language. The *Nihon shoki*, a Nara-period Japanese history traditionally dated to 720, contains a few dozen fragments of Paekche words, words which, for the most part, were taken from records brought to Japan by Paekche envoys or immigrants. (The Paekche state and the Japanese court had long enjoyed good diplomatic relations, and, following Silla's destruction of Paekche in 663, many of its people purportedly fled to Japan.) The meanings of more than three dozen of these words are decipherable. Some of the words are written in phonograms in the *Nihon shoki* itself, but, in addition, Japanese pronunciations of many more were transcribed in a late thirteenth-century compendium using *katakana* orthography. These transcriptions include such words as *kuma* 久麻 'bear,' *nuri* 'ford,' *sema* 斯麻 'island,' *nirimu* 爾林 'master,' *mure* 武禮 'mountain,' *aripisi* 'south,' and *sasi* 'walled city.'

The best-known evidence adduced for the Paekche language, however, comes from a much later period. In the Middle Korean text *Yongbi ōch'ōn ka* of 1447, the name of the old Paekche capital 熊津 'Bear Ford' was transcribed as *kwòmá nòlò* 高·마·늑, and for obvious reasons the pronunciation is thought to have reflected a trace of the Paekche language. At the same time, however, the element *kwòmá* 高·마 in the name is taken to be an older form of Middle Korean *kwòm* :곰 'bear,' because even the tone shows a regular, Middle-Korean development. And comparativists have long noted the striking resemblance to Japanese *kuma* 'bear,' which has the same second-syllable vowel as the Paekche form.

Paekche correspondences to Sillan and Middle Korean yield a few intriguing clues about the history of the Korean language. One example can be found in this entry from volume 36 of the *Samguk sagi*:

石山縣本百濟珍惡山縣. . .

'Stone Mountain Prefecture was originally Paekche "珍惡 Mountain" Prefecture.'

In this Paekche name, the character 珍 was used to represent the meaning of the Paekche word, which was 'stone,' while the character 惡 was added as a phonogram to indicate that the word ended in a sound much like *-ak. What is interesting about this transcription is that it compares to the Middle Korean word for 'stone,' which was *twōllh* :돌. The /h/ at the end of the MK form is believed to have developed from a velar stop *k (see p. 147, below), a reconstruction supported by the modern dialect reflex [tok] (which is found distributed widely throughout the southern part of the peninsula, from North

Ch'unghch'ǒng to Cheju). The MK “Rising Tone,” in this case, resulted from the syncope of a second-syllable, high-pitched vowel: **twòlók* > *twǒlh* : ㄹᄆ. The Paekche form seems to lend support to the reconstruction of that second syllable.

Other Paekche words found in the *Samguk sagi* that correspond to Middle Korean vocabulary include:

<i>Paekche</i>	<i>Middle Korean</i>
沙 * <i>sa</i> ‘new’	<i>say</i> 새 ‘new’
勿居 * <i>mwulke</i> ‘clear’	<i>molk-</i> 𑏲- ‘clear’
毛良 * <i>molyang</i> ‘high’	<i>molo</i> 𑏲𑏲 ‘ridge, ridgepole’

To these words can be added vocabulary attested in the *Nihon shoki*; here are examples:

<i>Paekche</i>	<i>Middle Korean</i>
<i>arosi</i> ‘below’	<i>alay</i> 아래 ‘below’
<i>sema</i> ‘island’	<i>syem</i> 섬 ‘island’
<i>aripisi</i> ‘south’	<i>alph</i> 앞 ‘front’

2.3.4 *Kaya*

Kaya, a fourth kingdom on the Korean peninsula during the Three Kingdoms period, was smaller than the three major peninsular states and has never merited separate treatment in Korean annals. Still, situated on the lower reaches of the Naktong River, Kaya was able to maintain vigorous trading relationships with both the Chinese commanderies and the Wa in Japan. But squeezed as it was on both sides by Paekche and Silla, this small state was greatly constrained in how much it could grow and develop. Eventually, in the sixth century, Kaya was overrun and absorbed by Silla.

Much about Kaya remains mysterious. This is particularly true because of how the kingdom has been treated in Japan, where it occupies a special place in the historical imagination. Much has been made there of the fact that in the *Nihon shoki*, where it is known as “Kara” or “Mimana,” Kaya is presented as a colony or vassal state of the Wa in Japan. Some Korean historians, on the other hand, maintain that Kaya had that kind of relationship not with Japan but with Paekche instead.

Whatever the nature of the Kaya state might have been, only one word has been preserved of its language. That word is found in volume 34 of the *Samguk sagi*, which contains the following explanatory note for the word 旃檀梁 ‘Sandalwood [something]’:

城門名 加羅語謂門爲梁云
 ‘Name of the fortress gate. In the Kaya language “gate” is called 梁.’

The interpretation of this note is convoluted. First, philologists note that the character 梁 was commonly used in Silla transcriptional convention to represent the Silla word for ‘ridge,’ a form ancestral to the Middle Korean word *twol* 돌 ‘ridge.’ Then, they reason, the sound value of that Silla word was taken and used to approximate the sounds of the Kaya word for ‘gate.’ (Although the reasoning might otherwise seem strained, such transcriptional strategies were very much in line with methods early Koreans and Japanese used to write their languages; in Japan, this particular kind of character usage was known as *kungana*.) What most catches the eye and tantalizes about this curious note is that the Japanese word for ‘gate, door’ is *to*.

2.3.5 *Silla*

Silla arose in the southeastern part of the Korean peninsula, on territory described in the Wei surveys as belonging to Chinhan tribes. According to the traditional story of its origin (the earliest version of which is found in the thirteenth-century work *Samguk yusa* ‘Vestiges of the Three Kingdoms’), Silla began as a statelet called Sōrabōl located where Kyōngju is now. (In the same source we are told that Sōbōl 徐伐 (*syepel*), an alternate form of the name Sōrabōl 徐羅伐, was the word there for ‘capital.’) This tiny city-state gradually began to annex its neighbors until it dominated the area east of the Naktong River, and the confederation ultimately became the Silla kingdom.

What we can know about the Sōrabōl language is of course limited, to say the least. But it does not take a big stretch of the imagination to surmise that with the growth of the state, the language also spread. Whatever was spoken by its neighbors, whether completely different languages or simply different dialects of the same Chinhan language, Sōrabōl must have provided the linguistic center of gravity around which the kingdom came into being.

Moreover, once Silla had defeated its rivals and consolidated control over the peninsula, much the same process must have continued, this time on a still larger scale. The first state to fall under Silla control was Kaya, the small kingdom lying on Silla’s southwest flank. This annexation took place in the sixth century. Then, in the seventh century, Silla overwhelmed first Paekche, then, finally, Koguryō in the year 668. This series of conquests brought the entire Korean peninsula under Silla control, and for the first time made it possible to begin the process of linguistic unification. For this reason, the establishment of Unified Silla was the most important event in the formation of Korean.

How long it took Silla to effect a linguistic unification is not known, nor is it possible to know in any meaningful way the details of that process. It would certainly have been likely for local speech patterns to linger long after 668, particularly in places far removed from the capital. It may even be that there

are still substratal traces of Koguryŏ, Paekche, and Kaya – or even of other, historically unnoted languages – to be found in the diverse dialects of contemporary Korean. (That at least is a romantic image of the Korean countryside that continues to resonate in the popular mind today.) Still, what seems beyond question is that the local language of Sŏrabŏl, the speech of an area near what would become the Silla capital of Kyŏngju, was the source out of which flowed the mainstream of the Korean language. Through military conquest and political consolidation, these speech patterns became the *lingua franca* of the Silla kingdom, then of the entire peninsula.

2.3.6 Relationships between the three languages

The Silla language was the direct ancestor of Middle Korean, and for that reason is most properly called “Old Korean.” Koguryŏan, and especially Paekchean, appear to have borne close relationships to Sillan. As mentioned above, at least thirty Koguryŏ words (perhaps a third of the attested vocabulary) bear a close resemblance to Silla forms. The resemblance of Paekche to Silla is even greater. Nevertheless, the similarities are not great enough to bolster the claim that the three belonged to the same, mutually intelligible language. For linguistic purposes it is better to treat the fragments of the three languages as representing three separate corpora.

How closely these three speech communities were in contact remains a matter of guesswork. Nevertheless, there are clues to be found. Connections can be explored, at least in part, by looking at the various word forms for two cultural concepts. The first is ‘king,’ or political ruler.

2.3.6.1 ‘king’

In this early period, different etymological groups can be detected in titles for high rank. Here is how one group of words was transcribed in phonograms:

	Koguryŏ	Puyŏ	Paekche (elite)	Silla
	皆 ‘king’	_加 [suffix for titles]	_暇 [‘king’ suffix]	_干 [‘king’ suffix]
Chinese	<i>kəij</i>	<i>kai</i>	<i>yai</i>	<i>kan</i>
MK	<i>kay</i>	<i>ka</i>	<i>ha</i>	<i>kan</i>

These forms seem clearly related to each other and possibly comparable to the Middle Mongolian words for ‘monarch,’ *qaxan*, *qan*, *qa*, as well. The likelihood is strong that these terms for ‘ruler’ represented widespread cultural borrowing.

But other words for the ruler of the state are represented in the records as well. One is the Paekche word transcribed as 韃吉支, which is believed to have been the term for ‘king’ used by the non-elite. This Paekche title is also

attested in Japan, where it was transcribed in the *Nihon shoki* (720) as *kisi*. And certainly to be noted in this context as well is the Middle Korean word *kuyco* 𑖇𑖆, which was the gloss for the character ‘king’ given in the 1575 Kwangju edition of the *Thousand Character Classic*. These three forms, **kilci* 𑖇𑖆지 吉支 (of 韃吉支), *kisi*, and *kuyco*, were surely all transcriptions of what was etymologically the same lexical item. (The phonogram **ken* 𑖇𑖆 may well have represented a form prefixed to the word for ‘king,’ and which can possibly be compared to Middle Korean *khun* 𑖇𑖆 ‘great.’)

Silla records also show evidence of differing terminology. One term appears as the suffix -干, which compares to the Koguryŏ word **kay* 𑖇𑖆 皆 ‘king,’ as shown above. This suffix can be seen in *Samguk sagi* and *Samguk yusa* transcriptions of Silla ‘king’ such as 居西干 and 麻立干. But the same texts also transcribe ‘king’ in various other ways, including 尼師今 and 尼叱今. Here, the form -今² compares to the second syllable of the Middle Korean word for ‘king,’ *nimkum* 𑖇𑖆 𑖇𑖆, which itself is a compound of the word *nim* 𑖇𑖆 ‘ruler.’ It is likely that the Old Japanese word *kimi* ‘prince, lord’ is a borrowing of the Silla term.

2.3.6.2 ‘city’

The fortified city is another concept for which words varied. As we have seen, a word for ‘city’ (城) transcribed 忽 [Chinese *xwət*, MK *hwol* 𑖇𑖆], appeared in numerous Koguryŏ place names. It was phonetically similar to another form 溝淩 [Chinese *kəwluə*, MK *kwulwu* 𑖇𑖆] appearing in a certain place name, which a note in the *Wei zhi* “Description of the Eastern Barbarians” explains was the Koguryŏ word for ‘fortified city.’ These two transcriptions are close enough to suppose that they represented variants of the same word. And the two-syllable transcription in the *Wei zhi* may well have represented the older of the two forms.

The Paekche word for ‘fortified city’ was not the same; it was transcribed 己 [Chinese *ki*, MK *ki* 𑖇𑖆]. And the Silla form was yet again different. In the seventh-century poem “Song of the Comet” (as recorded in the 1285 text *Samguk yusa*), the Silla word was written in a way indicating that the form was ancestral to Middle Korean *cas* 𑖇𑖆.

The variation in the terms for ‘city’ during the Three Kingdoms period may well be indications of the early history of fortification in that part of the world. Note that in Japan two words for ‘fortification, fort’ found in Old Japanese (eighth century), *ki* and *sasi*, strikingly paralleled the Paekche and Silla forms. These words related to military construction were clearly borrowed into the islands from the Korean peninsula.

² The reading given here is the reconstructed Early Middle Chinese form in Pulleyblank (1991).

3 Old Korean

We have suggested in the previous chapter that Silla's unification of the Korean peninsula was the most important event in the formation of Korean. That political and cultural consolidation led to the unification of the Korean language, passing through Middle Korean and Early Modern Korean directly to the language spoken on the peninsula today. The languages of the Three Kingdoms period, that is, those spoken in Koguryŏ, Paekche, and Silla – and probably in Kaya, too – appear from the fragmentary evidence we have to have been closely related. Paekchean and Sillan seem to have been particularly close. Yet, however close or distant those languages may have been, the mainstream of what later became the Korean language today flowed directly out of the wellspring that was Silla.

And yet that stage of the language is documented in only the most rudimentary way. We know virtually nothing about the speech of the tiny city-state Sŏrabŏl. Nor can we establish what changes the language underwent during the approximately one thousand years between the founding of the Silla state and its overthrow by the Koryŏ in 935. The documentary record provides little more than a vague outline of what that long first stage of Korean was like.

Silla was the last of the three kingdoms to take up Chinese writing. Curiously, the seventh-century history *Liang shu* 梁書 describes Silla as “without writing; one carves wood to convey messages,” but that characterization surely represented little more than a fantasy passed along by Chinese ethnographers. Silla scribes most certainly wrote in Chinese. They had probably learned from Koguryŏ and Paekche ways of transcribing the local language using Chinese characters, but it is also likely that those methods were developed further once they reached Silla. In any event, wherever and however such transcriptional methods were devised, most of the textual evidence that has survived bears witness to their use in Silla.

What about Korean literature during the Old Korean period, then? Most prose writing was apparently done in Classical Chinese, the language that served for ordinary affairs of state and commerce. But for the Korean language, about all that is known about literary activity during that time is that poetic expression took the form of what are known today as *hyangga*

鄉歌, or ‘local songs.’ These short poems are the oldest examples of completely Korean writing and literary composition that still exist.

We can imagine that Silla had a long tradition of poetic recitation in the local language, and certainly, during the Unified Silla period from the seventh to the tenth century, the *hyangga* verse form flourished. In the ninth-century Queen Chinsōng commanded that one of the highest-ranking Silla ministers, Wihong, together with the monk Taegu, put together a collection of *hyangga* verse, and in 888 they produced the compilation known as *Samdaemok* 三代目. Although that text has been lost, the royal attention given to the project shows the importance the verse form had at that time.

As a more broadly considered fact about the Korean language, we know that Chinese influence on its vocabulary grew during the Old Korean period. This increase in sinification was, in a way, formalized by the state in 503, when the official word for ‘king’ was changed from native terms to the usual Chinese title *wang* 王. Chinese linguistic and cultural influence can also be surmised from naming practices. As mentioned in the previous chapter, King Kyōngdōk gave an order in 757 that all place names in the state be standardized by giving them a two-character Chinese-style reading. Not long after that, personal names too became sinified.

3.1 Sources

There are six sources of information about Sillan.

3.1.1 *The transcription of names*

The *Samguk sagi* and the *Samguk yusa* contain the names of numerous Silla people, places, and bureaucratic offices, and these entries are supplemented by Chinese and Japanese historical sources. Linguistic information can be obtained from these names by using the method described in the previous chapter for Koguryō names. That is, if a Silla name was transcribed in two ways, one using phonograms to represent the sounds and the other using Chinese characters to represent the meaning, its component morphemes can be deciphered, at least in an approximate way.

This is how linguists use the Silla place names in chapter 34 of the *Samguk sagi*. However, decipherment in these cases is complicated by the fact that chapter 34 ordinarily does not contain two different transcriptions of the same name, but rather one transcription of the original, native Silla name together with the name that replaced it under the reforms initiated by King Kyōngdōk. The reformed name was of course not the same thing as a different transcription of the old name; it was a new name that may or may not have been determined by what the place had been called before. For this reason, the Silla

place names must be treated with great caution. Moreover, even in cases where the reformed name appears to have followed the old name, it still remains to be determined whether the old name was written in phonograms or with characters approximating the meaning. This determination often involves informed guesswork. Take this transcription, for example:

密城郡本推火郡

Here the old Silla name of this county, 推火, appears to have been transcribed with characters used not for their sounds, but for their associated meanings. Why? Because, first of all, we know that the characters in the reformed name were read Chinese-style, which means that 密 was pronounced something like *mil* (pronounced Middle Korean-style). Now, the Middle Korean word *mil*- ‘push’ bears a phonetic resemblance to that pronunciation. Then we see that the 推 in the old name means ‘push.’ Our best guess, then, is that ‘push’ was the intended transcription.

In contrast is this transcription:

永同郡本吉同郡

The interpretation of this county name works in exactly the opposite way. Here the character 吉 in the old name was a phonogram approximating native sounds. It was read something like *kil*, and the word it represented meant ‘long.’ That at least is what students of the text surmise because, first of all, the corresponding character in the reformed name, 永, has that meaning of ‘long,’ and, second, the Middle Korean word for ‘long’ is *kil*-.

Nevertheless, despite the difficulties with interpretation, such transcriptions can provide useful etymological clues. Consider this *Samguk sagi* entry:

星山郡本一利郡一云里山郡

If the reformed county name 星山 represented a sinification of ‘Star Mountain,’ then it is likely that the characters 一利 in the old name were phonograms; and if that was so, the transcription may have been used to represent the sounds of an old Silla word for ‘star.’ That word could then in turn be linked to the etymology of the modern dialect word *ili-nay* ‘Milky Way’ (still used in South Ch’ungch’öng and elsewhere). The modern word, otherwise etymologically opaque, can thus be analyzed as ‘star stream.’

The texts of the *Samguk sagi* and the *Samguk yusa* themselves contain etymologies that have long piqued the interest of Koreanists. The most famous example is found in the first volume of the *Samguk sagi*, where the surname of the founder of Silla, “Pak,” is explained as follows: “The people of [Silla] call a gourd *pak* (朴), and because the original, great egg [out of which the founder was born] resembled a gourd, he was given the name Pak.” “The man was born from an egg. The egg was like a gourd. The native people

call a gourd *pak*; therefore, he was named Pak.” What to make of such legends is a question that will probably never be resolved.

3.1.2 *Idu*

Idu was the most common traditional method of writing Korean using Chinese characters. It was employed as far back as the Three Kingdoms period, and it continued to be used well into the nineteenth century. The purpose of an *idu* transcription was to alter a Chinese-language text so that it could be read in Korean; and, unlike other methods of writing Korean, *idu* continued to be used as a scribal technique for centuries after the invention of the alphabet. It is the best-known and historically most enduring of the pre-alphabetic transcriptional methods.

In translating a Chinese-language text into Korean using *idu*, the scribe first changed the words of the text around into Korean syntactic order. Then he added Korean particles and verb endings and other function words using Chinese characters either phonetically or semantically to represent those function words. As can well be imagined, *idu* is complex and difficult to decipher.

Idu also developed and changed over the centuries, reaching its more or less fully developed form around the eleventh century. The following example, taken from after the Old Korean period, shows how the system came to be used. It is an *idu* transcription from the 1395 Korean translation of the Ming legal code. First, the original Chinese text:

雖 犯 七 出 有 三 不 去
 tho' violate 7 go-out exist 3 not go
 ‘Even though there may be a violation of the “Seven Reasons for Divorcing a Wife,” there are three (reasons) not to go.’

Next, the Korean translation (the underlined elements are transcribed function words; Middle Korean readings for them are given in italics underneath):

必于 七 出 乙 犯 爲去乃 三 不 去 有去乙
pilok *ul* *hokena* *iskenul*
 tho' 7 go-out OBJ violate do, but 3 not go exist

It can be seen that the original text has been altered in the *idu* translation to fit Korean syntactic order. Then the Chinese word for ‘although’ is replaced by a Korean equivalent, 必于 (*pilok*); the Korean object marker 乙 (*ul*) is added after the grammatical object; and the verbs are given Korean inflectional endings. At the same time, however, the original Chinese elements 七出 and 三 不去 are left unchanged, in their original order. As is apparent in this example, *idu* involved mixing Chinese words and phrases together with Korean words and Koreanized syntax and morphology.



Figure 2. The *Imsin sŏgi sŏk*

The *Imsin sŏgi sŏk* is a small inscribed stone 34 cm. in length that was discovered in the city of Kyŏngju in 1934. Though the inscription is written in Chinese characters, the syntax is almost pure Korean.

This complex system did not emerge fully developed of course. In its incipient forms, the *idu* method was used during the Three Kingdoms period, as is shown by the manipulations of Chinese text found in a few Koguryŏ transcriptions. One such transcription comes from an engraving on an ancient silver box; though excavated from a Silla tomb, the box is believed to have been crafted in Koguryŏ in 451. The engraving contains the phrase 三月中 ‘in the third month,’ where 中 is thought to have represented a locative particle. Such early examples amount to little more than subtle alterations of Classical Chinese syntax, however.

It was in Silla that *idu* seems to have been developed into a functional transcription method. A Silla stele called the *Imsin sŏgi sŏk* 壬申誓記石 ‘The Imsin Vow Stone’ bears an extended inscription dating from 552 (or 612):

壬申年六月十六日 二人并誓記 天前誓 今自三年以後 忠道執持 過失無誓
若此事失 天大罪得誓 若國不安 大亂世 可容行誓之 又別先辛 未年七月廿
二日 大誓 詩尙書禮 傳倫得誓 三年

‘On the sixteenth day of the sixth month in the year *imsin*, we two together do solemnly swear and record. We swear before heaven. We swear that from now and thereafter for three years to hold to the way of faithfulness without fail. We swear that should we fail in this matter, we will receive severe punishment from heaven. Even should the land not be at peace and the world in great discord, we will without fail go the way of faithfulness, we swear this. Further, we have in addition already taken a great vow on the twenty-second day of the seventh month in the year *sinmi*. We swear to learn in turn [the classical Chinese texts] *Shi jing*, *Shang shu*, *Li zhi*, and *Zuo zhuan* for three years.’

In this text, all the Chinese characters are used in their original, Chinese meanings, but the order in which they are put together is completely different from that of Classical Chinese. The syntax is almost purely Korean. For example, instead of the Chinese construction 自今 ‘from now,’ the order of the two characters is reversed, Korean-style (今自), so that ‘from’ becomes used as a postposition. Sentences end in verbs. Still, function words used in later *idu* texts do not appear here; only the symbol 之 is used to express the ending form of a verb.

Further development of the *idu* form can be seen on a stele erected on South Mountain in Kyŏngju in 591:

辛亥年二月廿六日 南山新城作節 如法以作 後三年崩破者 罪教事爲聞
教 令誓事之

Although this particular inscription has not yet been fully deciphered, it bears the hallmarks of a transition between the stages of *idu* represented by the two texts cited above. The use of 之 is like that of the earlier text, but the employment of other characters such as 節, 以, 教, 令, and 爲 resembles usage in later transcriptional practice. For example, 節 was read *tiwuy* 디위 ‘time, occasion’ in later texts; and 以 was used for the instrumental particle. It is also possible that 者 was being used here to represent the Korean topic marker.

An even more developed form of *idu* was inscribed on the famous three-story stone pagodas erected at Karhang Temple 葛項寺 in 758:

二塔天寶十七年戊戌中立在之
 媻姊妹三人業以成在之
 媻者零妙寺言寂法師在跡
 姊者照文皇太后君女 ㄱ 在跡
 妹者敬信太王女 ㄱ 在也

The use of the characters 中, 以, and 者 to represent Korean elements are features seen in earlier texts, but here we see new constructions that, on the one hand, look like later *idu*, but on the other hand reveal information about Korean syntax of the time. For example, the 在 appearing in the sequences 在之, 在跡, and 在也 was read in later texts as *kyen* 견 and was an adnominal functioning like the contemporary copular form *i.n* 인. Now, the stem of that verb, *kye-* 겨-, appeared in Middle Korean only as a bound form together with the honorific morpheme *-si-* as the honorific verb of existence and location, *kyesi-* 께서- (today, in the contemporary language, the form is *kyeysi-* 계시다). But here, in this Silla text from 758, we see what must have been the same verb appearing with a variety of endings. The 之 in this text was an early phonogram used to represent a verb ending. It is probably to be equated to the morpheme often written as 齊 in *idu* texts. The character 跡, read *mye* in *idu*, represented the Middle Korean (and contemporary) verb ending *-mye* -며 ‘does/says/is and. . .’

The word *idu* itself has an obscure etymology. We do not know what the system was called by the people of Silla or any of the other states during the Three Kingdoms period. The most common written form of the word, 吏讀, first appears much later, after the alphabet was invented in fact, in the anti-alphabet memorial by Ch’oe Malli in 1444. But all of the various transcriptions of the word begin with the morpheme 吏 ‘clerk,’ and there is little reason to doubt that the system was most commonly used by government clerks, at least in the Koryŏ period and thereafter. Yet, the transcription of the second syllable is so varied, the word *idu* might possibly have a native origin. In any event, all of the countless passages in Korean historical writings that attribute the invention of *idu* to the famous seventh-century scholar Sŏl Ch’ong amount to no more than legend. That would have been impossible, for, as we have seen, there are textual examples of writing with *idu* that preceded him.

Characters added to an *idu*-type text to annotate the purely Korean grammatical elements eventually came to be known as *kugyŏl*, or, roughly, ‘oral embellishments.’ Though the conventions of *kugyŏl* usage evidently originated in the Old Korean period, what is known about the symbols and their development comes largely from later, Koryŏ-period texts.

3.1.3 *Hyangch'al*

Another, much fuller method Sillans used to write their language is called *hyangch'al*. It is the written form in which the poetry known as *hyangga* appears.

Only twenty-five *hyangga* have been preserved. Moreover, those that do exist are of somewhat mixed provenance. The oldest are the fourteen verses found in the thirteenth-century *Samguk yusa* ‘Vestiges of the Three Kingdoms,’ one of which is said to have been composed by a Paekche prince. The other thirteen were written by Silla poets between 600 and 879, for the most part during the eighth century. The remaining eleven poems are found in the biography of the scholar Kyunyö 均如傳. Although these latter verses were actually composed in the early Koryö period between 963 and 967, they are also considered Silla poetry.

Hyangch'al was thus used for literary writing that was purely Korean, and the *hyangga* poems transcribed in it are native in both form and spirit. Yet, though different in intent, *hyangch'al* writing did not involve the use of any new transcriptional methods. The scribes who wrote in it employed the same transcription strategies already seen in the representation of place names, as well as in both *idu* and *kugyöl* annotations.

The methods can also be compared to those seen in the transcriptions of Japanese poems found in the eighth-century collection *Man'yōshū*. But while the readings of most *Man'yōshū* poems were explicated in the ninth century by priests using *kana* transcriptions, interpretation of the *hyangga* remains a monumental task. We quite honestly do not know what some *hyangga* mean, much less what they sounded like.

And so, interpretation of the poems is an extremely difficult task. Much of the content remains undeciphered, the sounds of the poems mysterious. Still, let us look briefly at the “Song of Ch'öyong” 處容歌, one of the poems found in [chapter 2](#) of the *Samguk yusa*. This verse is a representative *hyangga*, but fortunately, unlike most other *hyangga*, Koryö-period versions of the poem are found in the fifteenth-century music collections *Akhak kwebȫm* and *Akchang kasa*. These latter-day poems give clues as to what the Silla version of the “Song of Ch'öyong” meant and how it might have been read. For this reason, much of what is known about the *hyangga* begins with this particular poem. The readings on the right are reconstructed interpretations of the eighth-century forms romanized to conform with Yale-Romanization conventions for Middle Korean. The translation of the poem that follows is by David McCann:

東京明期月良
夜入伊遊行如可
入良沙寢矣見昆

TWONG-KYENG polki to.l ala
pam tuli nwolnitaka
tulesa caloy pwokwon

脚烏伊四是良羅	katoli ney.h ilela
二盼隱吾下於叱古	twuWulun nay.h ayeskwo
二盼隱誰支下焉古	twuWulun nwuy hayenkwo
本矣吾下是如馬於隱	mituy nay.h ay tamalon
奪叱良乙何如爲理古	asal esti holikwo

The Song of Ch'öyong
 In the bright moon of the capital
 I enjoyed the night until late
 When I came back and looked in my bed
 There were four legs in it.
 Two are mine.
 But the other two – whose are they?
 Once upon a time what was mine;
 What shall be done, now these are taken?

The word *hyangch'al* 鄉札 means 'local letters,' and that is just what it was of course. But the word itself comes to us from a text written later, in the early Koryŏ period. No Silla text ever mentions that native writing system – we do not even know if Sillans had a special term for it. But just as the word *hyangga*, meaning 'local songs,' is what Koreans today call the ancient Silla poems, *hyangch'al* is what they call the native system used to write those poems. Both words are imbued with the romance and pride Koreans take in their ancient literary accomplishments.

3.1.4 Chinese transcriptions

Chinese ethnographers on the peninsula noted a few of the Sillan words they heard. The *Liang shu* description of Silla, for example, contains this passage: "In the local language they call a fortification 建牟羅. Their own villages they call 啄評; ones of outsiders are called 邑勒. In Chinese, these are called 'counties' (郡) and 'prefectures' (縣) . . . The hats of their officials they call 遺子禮; jackets are 尉解; trousers are 柯半; boots are 洗." The Silla word for 'jacket' noted here was surely cognate with sixteenth-century *wuthuy* 우퓌 'clothes' (a word still found in North Korean dialects). The attested word for 'trousers' was the earlier form of fifteenth-century *kowoy* 𪛗외 < *koWoy (this word was transcribed in the twelfth-century *Jīlín lèishì* as 珂背); and 'boots' is to be identified with fifteenth-century *sin* 신 'shoes.' But the other transcriptions have so far proved uninterpretable.

3.1.5 Loanwords into Old Japanese

The ancient Japanese borrowed words from the Korean peninsula, but it is not always possible to know from which language the word was taken. Thus, to

use a loanword as information about Sillan, the word needs to be attested in other sources as well. Still, given this condition, the Japanese word can still be invaluable, because it can provide phonological information difficult to adduce from transcriptions written only with Chinese characters.

The Old Japanese word *kimi* ‘prince, lord,’ for example, is believed to have been borrowed from the Silla word for ‘king,’ a form transcribed with the phonogram -今 [Chinese *kim*]. (That Silla word was cognate with the second-syllable morpheme of Middle Korean *nimkum* 님금 ‘king.’) Another Japanese word believed to be such a loan is *sasi* ‘fortified city,’ from the Sillan word ancestral to Middle Korean *cas* 砦 ‘fortress.’ Old Japanese *kopori* ‘county’ has been identified with the Silla word for ‘county,’ which later became Middle Korean *koWol* 弓忽 ‘district, village’ – which in turn became Contemporary Korean *kwoul* 古邑 ‘district.’

3.1.6 Chinese character readings

Since the traditional readings of Chinese characters in Korea date from the Old Korean period, they reveal some information about the state of the Korean phonological system at that time.

3.2 Transcription methods

How Sillans transcribed their language is not well understood. To be sure, the principles are known, but most of the essential details are missing. The scarcity of writing samples is of course the first, most obvious problem. But even for those texts that do exist, it can sometimes be difficult to tell whether a particular transcription character was meant to represent the meaning of a Silla word, or its sounds. And in those cases where we do know for sure that the Chinese character was meant to represent sounds, the crudeness and imprecision of the transcription renders it difficult, if not impossible, to reconstruct the phonemic shape with any accuracy. Nevertheless, some facts are clear.

3.2.1 Phonograms

In Sillan writing most phonograms represented a syllable. This principle can be seen in the transcriptions of both names and *hyangga*. A very tentative and partial listing of those syllabic transcriptions is given below (phonological shapes are, at best, approximations):

a 阿 (我); na 乃, 奈, 那; ra/la 羅; ta 多
 i 伊 (異); ki 己; mi 美; ri/li 利, 理, 里
 ko 古; mo 毛; no 奴; ro/lo 老; so 所; to 刀, 道

al 闕; pal 發; tal 達
 kan 干; han 翰
 mil 密

For certain syllables, however, the transcription of names differed from that used for writing *hyangga*:

Names Hyangga

ka: 加 可
 ke: 居 去

The phonograms in these lists were used not only in Silla, but in Koguryŏ and Paekche as well. That fact is not particularly surprising, since the three peninsular kingdoms were presumably in fairly close cultural contact. Faced with similar transcriptional problems, they probably learned ways of solving them from each other.

But the Silla phonograms also corresponded closely to Japanese *man'yōgana* (in this case, the so-called “*ongana*” 音仮名) symbols, as most famously found in the poetry of the eighth-century anthology *Man'yōshū*. That coincidence is of great historical and cultural significance, for it could hardly be accidental. How should it be explained? We might at first be tempted to ask the question: who taught whom? Since peninsular peoples began using Chinese characters much earlier than people in the Japanese islands, and since many of the teachers of Chinese in ancient Japan (the so-called “*on-hakase*” 音博士) were from the Korean peninsula, it stands to reason that techniques of transcription were learned from peninsular teachers, and that is almost surely what happened. But the question itself betrays a modernist bias. In the eighth century and earlier, that part of the world was not so clearly divided by national boundaries into Korea and Japan as it is today. In those early days culture diffused across the sea to Japan the way it did on the peninsula itself and in adjacent parts of the Asian mainland. Perhaps this diffusion represented an ecumenical sharing of knowledge through Buddhist channels; perhaps it resulted from entrepreneurial teachers teaching transcription techniques wherever they found paying students. In any case, however it happened, what is most striking is that the non-Chinese peoples on the eastern fringes of Asia made almost identical use of Chinese characters to transcribe the sounds of their own languages. The *man'yōgana* are not uniquely Japanese.

3.2.2 *Non-syllabic phonograms*

Certain phonograms were not read as syllables by Sillans, however. These characters were used instead to indicate the sounds of a syllable-final consonant, and they usually occurred together with a meaning indicator, a gloss

(a *hun* reading) for the word. For example, in the transcription 夜音 (Middle Korean *pam* 밤 ‘night’), the character 夜 indicated to the reader that the meaning of the word was ‘night,’ and 音 (read *um*) showed that the word ended in *-m*, thus cueing the reader in to exactly what Korean word was meant. Here are a few of those characters used as indicators of syllable-final consonants: *-m* 音; *-r/l* 尸, 乙; *-s* 叱; *-c* 次.

3.2.3 Problematic phonograms

Certain phonograms were particularly problematic. The following six are noteworthy:

良 This phonogram was (approximately) read either as *-ra/la* or, it is often assumed, as *-a/e*. The first, *-ra*, conforms to the familiar reading of *man'yō-gana* usage. But when the phonogram was used to transcribe the infinitive ending of Old Korean verbs, linguists have assumed the character was read *-a/e* instead.¹ If true, the reading becomes difficult to explain.

旡 This character, a simplified form of 彌, was used to transcribe the coordinate conjunctive ending of verbs that meant ‘and also,’ and is thought to have been read *-mye*. That reading would indicate an especially old pronunciation of the character. For by the eighth century at least (if not slightly earlier), the prestige reading in China is believed to have changed from something like *myie* to *myi*.

遣 The Old Korean coordinate ending ‘and then’ was consistently transcribed with this character. Both Chinese reading (*k^hjian*) and traditional Korean reading (*kyen* 견) confirm that the phonogram should be read with a final nasal. But the Middle Korean form of the morpheme, *-kwo* -고, not only shows no sign of the nasal, but the vowel looks substantially different as well.

The other three of the six graphs have even more questionable readings. In fact, it has not been definitively established that the three were phonograms at all. (These will be discussed in more detail in the section on Old Korean phonology, below.)

尸 Of all the transcriptional symbols used by Sillans, this particular character is probably the most enigmatic. If the character was a phonogram, then it must have represented a sibilant (the prestige Chinese reading was *si*, and the traditional Korean reading is also *si*). But an *s*-like pronunciation does not appear to have been its phonetic value. Instead, the graph was used in Silla transcriptions as an annotation for a terminal consonant, which in later attestations was the liquid *l/*. Take, for example, 日尸 ‘day’ (where 日 is a *hun* reading indicating the meaning of the Korean word). Here 尸 represents

¹ Because those were the phonological shapes of the Middle Korean infinitive.

the syllable-final consonant, thought to have been **l* or **r* in Silla times. (Since *nal* 날 is the Middle Korean form of the word, something like that consonant is assumed.) Similarly, Sillans used the characters 道尸 to write what later became Middle Korean *kil* 길 ‘road.’ It is not clear how this transcriptional usage can be adequately explained. Did the Silla consonant have a significantly different phonological shape (as some have proposed)? Or was the character being used in a way that we just do not understand?

叱 This is another character Sillans used to write a syllable-final consonant, assumed in this case to have been **s*. But the readings of the character (Chinese *tʂʰit*; traditional Korean *cul* 즐) would be more in keeping with the transcription of an affricate than of a fricative.

只 In *idu* tradition this character is read *ki* 只], and thus that is what it is thought to have represented in *hyangch'al* transcriptions as well. Both the Chinese reading of the character (*tʂi*) and the traditional Korean reading (*ci* 只), too, point toward a pronunciation with an affricate initial consonant rather than a velar. But it seems highly unlikely that an earlier affricate would have changed to a velar before a high front vowel.

(One suggested possibility is that these latter three characters, 尸, 叱, and 只, were in fact the simplified forms of some other, as yet unidentified Chinese characters. But if so, what might those characters have been? As yet, the idea is not supported by much evidence.)

3.2.4 Word glosses

Many of the Chinese characters in a Sillan text were used for their meanings instead of their sounds. Each individual character was then read as a native word, using what was called a *saegim* 새김 ‘tag translation’ or *hun* 훈 ‘explanation’ reading. (It is no accident that this method of reading characters worked the way *kun* readings do in Japan; both word and method originally crossed over to the islands from the peninsula.) Using a Chinese character for its meaning like this was not a nonce transcriptional device; the character was by convention associated with the native word it represented.

Hun associations linking Chinese characters with native words remained part of Korean tradition in Middle Korean, and they are still used today. A *hun* reading is the way a Chinese character was, and is, identified. In the sixteenth-century character dictionary *Hunmong chahoe*, entries take the form (for example): 朝 *achom tywo* 아침도 [‘the character’] *tywo* [that is to be equated with] “morning.” A modern Chinese–Korean dictionary uses the same method of character identification. When Korean people meet, they often use the same formula to tell each other what Chinese characters their

names are written with. In other words, *hun* readings served, and still serve, as tag translations of the characters.

Because of this unbroken tradition, Middle Korean *hun* readings were, for the most part, to be identified with readings used in Silla times. That is certainly true, for example, of the characters 夜, 日, and 金, identified in Middle Korean texts as *pam* 밤 ‘night,’ *nal* 날 ‘day,’ and *swoy* 쇠 ‘metal.’ Occurrences of the characters in Silla texts were unmistakably meant to be read as the reflexes of these Middle Korean words. For some characters, however, the *hun* readings changed. For example, the character 谷 ‘valley’ was consistently identified with *kwol* 골 ‘valley’ in all Middle Korean texts. But in Silla transcriptions 谷 was read instead as (the earlier form of) another word for ‘valley,’ *sil* 실. Why would a reading change? There were undoubtedly many complex reasons. But in this case, although the word *sil* ‘valley’ is found widely even today in local place names, it is attested in Middle Korean only occurring together with *nay* 내 ‘stream’ in the compound *sinay* 시내 ‘brook, valley stream.’ Perhaps by Middle Korean times *sil* was no longer an independent word, making it less transparent as a *hun* reading.

3.2.5 Mixed transcriptions

The transcription of Silla names was done with phonograms, *hun* readings, or a mixture of the two. All three methods are seen in the *Samguk sagi*. But in *hyangch'al*, the mixed style of transcription came to dominate over the other two. There, for the most part, nouns and verb stems were written with characters used for their meanings and read as Korean words, while native particles and verb endings were transcribed with phonograms. In this respect at least, the transcription system resembles nothing so much as the *senmyō-gaki* 宣命書き writing style used for imperial edicts and Shinto prayers in Japan. Given the striking resemblance, the style’s use in Japan appears to be another case of cultural diffusion. On the other hand, no direct evidence of such a process still exists, and given that scribes in both realms had the same writing principles to work with, it is certainly not inconceivable that the two systems just happened to emerge around the same time but independently.

3.3 Phonology

Silla linguistic materials are far too poor in both quantity and quality to establish the phonological system of the language with any certainty. The best that can be done is to recover some of the characteristics of the system through philological detective work combined with internal reconstruction from Middle Korean.

3.3.1 Consonants

3.3.1.1 Obstruents

The Silla obstruent system is believed to have consisted of the plain consonants *p*, *t*, *c*, *k* and the aspirated consonants *ph*, *th*, *ch*, *kh*. The Proto-Altaic system with which Korean is often compared has been reconstructed with an opposition between voiced and voiceless obstruents, and for that reason Korean scholars have theorized that the two Altaic series merged in Korean, after which the aspirated series developed.

If it is true that Korean once had a voiced–voiceless distinction (regardless of whether Korean is considered Altaic or not), the details of the process have yet to be worked out. Still, we might imagine that as a result of the merger, voiceless obstruents only appeared word-initially and in obstruent clusters, and voiced obstruents medially, in voiced environments. (That, after all, is the phonetic realization of plain consonants today.)

However, there is also the lingering question of whether the Old Korean reflexes of Middle Korean voiced fricatives were voiced. In the fifteenth century, the two consonants /z/ △ and /W/ ㅁ occurred in medial voiced positions, and, certainly, many of their occurrences were demonstrably the result of lenition from /s/ and /p/. Thus, [**s*] > [z], and [**b*] > [β]. But not all occurrences of /z/ and /W/ can be easily explained that way. There is unmistakable evidence that [z] at least existed in the twelfth century. The question is whether any of these consonants were distinctively voiced in the Old Korean period. As yet, no philological evidence has been found to resolve the issue. Nor has internal evidence been conclusive, either. Some comparativists have tried to relate the consonants to voiced obstruents in Altaic, but such speculations remain highly tentative.

3.3.1.2 Aspirates

The development of the aspirates is somewhat better understood. In Middle Korean, as at all later stages of Korean, plain obstruents combined medially with *h* (e.g., *-ph-*, *-hp-*) to produce aspirated obstruents morphophonemically; and there is little reason to think the rule did not also apply in Old Korean. In word-initial position, aspirated consonants were far fewer in number in Middle Korean than plain consonants. In the case of the velar aspirate *kh*, that is especially so: there were only a few words attested in Middle Korean that began with this consonant: *khwong* 콩 ‘soybeans,’ *khi* 키 ‘a winnow,’ *khoy-* 췌- ‘dig,’ and *khu-* 크- ‘big.’

Some Middle Korean aspirates historically developed from clusters following the syncope of an interceding vowel. Thus *khu-* 크- ‘big’ is from **huku-*. (See the evidence from Early Middle Korean, [Chapter 4](#), below.) Some aspirates arose in other ways. After the Middle Korean period, for

example, *kwoh* 𪛗 ‘nose’ changed to *kho* 𪛗, and *kalh* 𪛗 ‘knife’ to *khal* 𪛗, the plain initials of both nouns assimilating the word-final *h* as aspiration. The development of the Korean aspirated series was a process that continued for many centuries.

This does not mean aspirated consonants did not exist at all in Old Korean, however; some clearly did. One unmistakable indication of their existence, at least in nascent form, can be seen in the Korean readings of Chinese characters. Around the seventh or eighth century, when Koreans adopted their traditional readings of Chinese characters, the prestige variety of Chinese had a three-way distinction in its obstruents. The distinction between voiced and voiceless in Chinese was not maintained in Korean; both consonant series were, and are, treated as plain consonants in Korean. But the aspirated series in Chinese had a more complex outcome. The dental aspirates were consistently reflected (as expected) as the Korean aspirates *th* 𪛗 and *ch* 𪛗. But labial and velar aspirates were different; they did not usually give rise to aspirated consonants in Korean. In fact, the Chinese velar aspirate **k^h* was quite regularly reflected as unaspirated /k/. All told, there are only a few examples of Korean character readings with velar aspirates: 𪛗 *khwoay* 𪛗; 𪛗 *khwoay* 𪛗; 𪛗 *khwoay* 𪛗. These facts point to the conclusion that the Korean aspirate series were not fully established at the time the readings were borrowed. The dental aspirates arose first; then the labials; and, finally, the velars.

Nevertheless, transcriptions of Silla place names confirm the existence of aspirates in medial position. The Silla word for ‘uncultivated, fallow’ (glossed as 荒 or 萊) was transcribed in the phonogrammic form 居柒, the Middle Korean reading of which is *kechul* 𪛗. The reflex of the Middle Korean verb *ich-* 𪛗- ‘dislike, hate’ was written 異次 or 伊處, and both of these second characters are read in Korean with the aspirated initial *ch-*. *Hyangga* transcriptions provide further confirmation. In the *Pohyŏn sibwŏn ka* 普賢十願歌 ‘Song of the Ten Great Vows of the Lord of Truth,’ the form 佛體 ‘body of the Buddha’ corresponds to the Middle Korean word *pwuthye* 𪛗 ‘Buddha.’ There is a consistency about the transcription of these dental aspirates that could not be accidental.

3.3.1.3 Terminal consonants

One of the most consistent tendencies in the history of the Korean sound system has been toward an implosive articulation of syllable-final consonants. In Old Korean the reflexes of /t/, /s/, and /c/ maintained their distinctiveness in final position, but not /ch/ from /c/. In Middle Korean, /s, c, ch/ no longer remained distinct before a pause, but were, rather, pronounced there as the sibilant [s]. And today, in Contemporary Korean, the consonants /t, s, c, ch/ are all pronounced as an unreleased [t] in final position.

As noted earlier, the phonogram 叱 is believed to have represented a syllable-final *s. In the *hyangga* “Song of the Presentation of Flowers” 獻花歌, the form that would become Middle Korean *kes.ke* 것거 ‘breaking off’ was transcribed 折叱可, and in the “Song of the Comet” 彗星歌, *cas* 잣 ‘fortified city’ was written 城叱. These transcriptions were unmistakably aimed at representing *s. Moreover, the supposition that the graph reflected a sibilant is supported by the fact that it was also used to represent what in later periods was the genitive particle *s. (This same transcription convention was maintained in the Early Middle Korean period; see Chapter 4, below.)

As mentioned above, the affricates *c and *ch were apparently not distinct in terminal position. The phonogram 次, for example, could be used to represent either. In “Song of Praise for the [Hwarang] Knight Kip’a” 讚耆婆郎歌, (the reflex of Middle Korean) *kac* 잣 ‘branch’ was written 枝次; as noted above, the verb *ich-* 잊- ‘dislike, hate’ was written 異次.

Old Korean reflexes of syllable-final liquids merit particularly close examination, because in Middle Korean, syllable-final /l/ appears to have been the result of an earlier consonant merger. One such indication is that Middle Korean verb stems ending in -l- were at least four times greater in number than stems ending in any other consonant. Second, these stems were differentiated by tone in ways that other stems were not: in Middle Korean texts, (monosyllabic) *l*-stems were either marked with a low, high, or long rising tone, or they belonged to a class of stems whose pitch alternated between low and rising. This kind of distribution across the tone classes was true of no other stem-final consonant. There were other morphophonemic oddities as well.

Old Korean transcription conventions seem to confirm the existence of two kinds of liquids. For in writings from that earlier period, the phonograms 尸 and 乙 were both used to transcribe consonants corresponding to later occurrences of /l/, and since the two graphs were not interchangeable, they must have reflected a distinction. In particular, note that 尸 was used, among other things, to transcribe the prospective modifier of verb forms (in Middle Korean, *-o/ulq*). For example, in a *hyangga* written at the end of the seventh century, “Song in Admiration of the [Hwarang] Knight Chukchi” 慕竹旨郎歌, there is the line 慕理尸 心未 行乎尸 道尸 ‘the road that [my] longing heart follows.’ Here, in addition to transcribing a terminal liquid in the reflex of *kil* 길 ‘road’ (道尸), the line contains two verb forms, *kulilq* 그릴 ‘longing’ (慕理尸) and *nyewolq* 녀을 ‘coming’ (行乎尸). In Middle Korean (as in Contemporary Korean) the prospective modifier caused the reinforcement of a following consonant, as is shown by the fact (among others) that it was often written as /l/ followed by a glottal stop (ㅁ). (In passing, it might also be noted that the characteristic was, and is, typical of obstruents, but what that fact reveals about the nature of the distinction is not at all clear.)

Altaicists have long maintained that the Korean liquid /l/ represents the merger of an earlier *r versus *l distinction. If that was so, the evidence from Old Korean suggests that the loss of the distinction had at that time not yet taken place. In any event, in the larger Korean historical context such a merger, if and when it took place, could also be seen as part of the overall tendency toward an increase in implosive articulation.

3.3.2 Vowels

Reconstruction of the Old Korean vowel system remains especially tentative. In the absence of better philological materials, facts about its structure are mainly those that can be surmised from the system reconstructed for Early Middle Korean. Supplementary information is provided by Old Korean phonograms, but such vague phonetic hints are little more than suggestive.

Based at least on this kind of detective work, the Old Korean vowels do not appear to have been substantially different from those of Early Middle Korean. Evidence for change in either the inventory of vowels or their phonological values is thin. It has sometimes been suggested that Middle Korean /i/ represented an historical merger of a front vowel *i and an earlier back vowel *i, because the Middle Korean vowel /i/ was a neutral vowel in the vowel harmony system. But that supposition is not well supported by the Old Korean philological evidence. The thirteenth-century rounded vowel *ɔ (corresponding to Late Middle Korean [ʌ] /o/·) is thought to have been even more rounded in Old Korean. But the evidence from phonograms is, again, inconclusive. Late Middle Korean *kalol* 가를 ‘split’ was transcribed 脚烏, but Chinese readings for 烏 have been reconstructed only as *ə or *ɔ, and never as a fully rounded [o]. The reflex of thirteenth-century *ə (Late Middle Korean [i] /u/ ㅡ) was almost never represented in Old Korean. Thirteenth-century *u and *ü (= fifteenth-century [o] /wo/ ㅜ and [u] /wu/ ㅜ) were transcribed with the phonograms 烏 and 于; Chinese readings confirm the rounding of these two vowels, but not much more. The Middle Korean vowel *e appears to have been slightly lower in Old Korean, something like *ä perhaps, at least judging from its transcription in phonograms. The Middle Korean vowel *a* seems to have been *a in Old Korean as well. All in all, these were not big changes.

What may have been a significant phonological change, however, was the loss of some vowel occurrences. As we will see in the discussion of Early Middle Korean, syncope was the process through which some aspirates and, after the twelfth century, most initial consonant clusters were created. To what extent such processes were under way before then, in Old Korean, is still not altogether clear.

3.3.2.1 *Vowel harmony*

The status of vowel harmony in Old Korean is also not clear. There is no evidence of it in the extant materials; nothing in the documents shows us whether it then existed, or, if it did, what form it took. The *hyangch'al* transcriptions reflect no such alternations.

Nevertheless, it cannot be concluded so simply that Old Korean had no such system. The quality of the transcriptional materials is much too poor to reach that conclusion. Moreover, most internal evidence points toward just the opposite. For as we move back in time from Contemporary Korean to Early Modern Korean to Middle Korean, we find that the system of vowel harmony becomes more and more regular, with fewer and fewer exceptions to its rules. It seems reasonable that the tendency would continue to increase as we move back farther in time. One more fact can be added to the evidence. In reconstructing the vowel values before the vowel shift (to be discussed in [Chapter 4](#), on Early Middle Korean), we arrive at a system that fits more naturally with the kind of palatal harmony commonly found in other languages.

3.3.2.2 *Complex vocalic elements*

Middle Korean had a vocalic system in which /w/ and /y/ appeared as onglides. But in addition to the attested occurrences of /y/ before /a, e, wo, wu/, there is morphophonemic evidence in Middle Korean of a broader distribution of /y/ as an onglide before /o, u/, and even as an offglide of /i/, *iy. (See [Chapter 5](#), on Late Middle Korean.) The extent of Old Korean evidence for a broader distribution of onglides and offglides is a subject that has still not been explored.

3.4 Sino-Korean

Chinese writing was introduced very early into the Korean peninsula, and it came into widespread use during the Three Kingdoms period. As this foreign writing system was being assimilated and naturalized, the Korean readings of the characters were probably patterned, at least in the very early stages, on the pronunciations that Koreans heard from Chinese visitors. But beyond that initial assumption, there is little that can now be said about the incipient parts of the process. Silla was the last of the kingdoms to adopt Chinese writing, and so Silla scribes most likely were also influenced by reading and writing practices already in use in Koguryŏ and Paekche. But that is a guess, because no records have been preserved to confirm the roles as intermediaries possibly played by other peoples.

What we do know is that the Korean readings of Chinese characters have been preserved in an unbroken tradition from Unified Silla, through Middle Korean, down to the readings used in Contemporary Korean today. After the

eighth or ninth century there was no massive reintroduction of new readings or new rules based upon a later variety of Chinese. For the most part, the changes that character readings have undergone have been those operative within the Korean language more generally.

This Sinitic vocabulary, known in the West as “Sino-Korean” and in Korea as “Eastern Sounds” *tongŭm* 東音, is not a simple collection of loanwords, however. Rather, Sino-Korean forms are patterned as closely as possible on the interlocking relationships found in traditional Chinese rime tables and dictionaries. In other words, in adopting Sino-Korean, Koreans borrowed the system, not individual words. It is true of course that the Korean lexicon contains numerous early Chinese loanwords, but that vocabulary is separate from the lexical body represented by Sino-Korean. Those early Chinese loanwords are not associated now in any way with Chinese characters, and only scholars know that they are Chinese in origin.

The sounds associated with the traditional character readings of Sino-Korean reflect the structural features of Late Middle Chinese. For that reason, they are generally believed to have been patterned more or less on the prestige Chang’an readings of Tang-period Chinese. Of course, there are a few irregularities that may have stemmed from other sources.

One curious mystery about Sino-Korean is its treatment of the *-t* coda of “entering tone” syllables. Whenever Chinese syllables ended in *-t*, the corresponding Korean syllables consistently end in *-l* instead. For example, in the transcription of place names the character 勿, which was read *mut* in Chinese, was used to represent the word that became *mul* 물 ‘water’ in Middle Korean; in the *hyangga*, the character 乙 (Chinese *?it*) represented the accusative particle *-o/ul*. These consonants were not borrowed as **t*. How do we know they were not? Because if they had been, native syllables ending in *-t* would also have changed to *-l*, and they did not. Many sinologists believe that fairly early on in the history of the Chinese language, the ending consonants in entering-tone syllables weakened in some northern Chinese dialects, and in those dialects *-t* weakened to [r]. The Sino-Korean readings seem to support that hypothesis. They indicate that it was probably from one of those leniting dialects that Koreans borrowed their readings of the characters.

In those same northern Chinese dialects, velar stops are also thought to have lenited: *-k* > [**g*] > [**ɣ*]. The Sino-Korean readings of these entering-tone syllables preserve the original *-k*, but some very early Korean borrowings from Chinese reflect a weakening of the consonant instead. In Middle Korean, these loanwords (which were considered native and thus never written with Chinese characters) were transcribed with a syllable-final /h/: alongside Sino-Korean *sywok* 속俗 ‘common, unrefined,’ there was the Middle Korean word *sywoh* 송 ‘ordinary person’; Sino-Korean *zywok* 속褥 ‘mattress’ was paralleled by “native” *zywoh* 송 ‘mat, futon’; *tyek* 덕笛 ‘flute’ by *tyeh*

뎡 ‘flute’; *pwok* 복 襖 ‘hood’ by *pwoh* 봉 ‘wrapping cloth’; and *chyek* 척 尺 ‘(Chinese) foot’ by *cah* 창 ‘(Korean) foot.’

Sino-Korean readings provide another vantage point from which to look for information about the phonological structure of Old Korean. Some Chinese structural features could not be accommodated into the Korean system. Chinese voiced initials, for example, were completely merged with voiceless initials; both were interpreted as Korean plain consonants. Chinese diphthongs and triphthongs were simplified. Knowing how the Chinese system was reflected in Korean, seeing how Chinese sounds were accommodated and how they were altered, provides information not always easily obtained through other methods.

3.5 Grammar

The only sources of information on the grammatical features of Old Korean are *hyangch'al* and *idu* transcriptions.

Idu transcriptions can be useful in the study of Korean morphology, but dating the information found there can be problematic. Most of the surviving *idu* documents were written during the Chosŏn period, and although these latter-day texts preserve transcription conventions harking back to Silla times, the archaic forms they contain are mixed together indiscriminately with what appear to be forms dating from later periods. The data in *hyangch'al* transcriptions are more reliable in this respect, but far fewer such texts have survived, and their decipherment is still imperfect. Research into the grammar of Old Korean is reliant on both types of materials, each of which presents the researcher with its own special problems.

3.5.1 Nouns and noun phrases

3.5.1.1 Particles

The following particles are attested in Old Korean:

Case particles	Old Korean transcription	Middle Korean form
nominative	伊, 是	<i>i</i> 이
genitive	矣, 衣	<i>-oy/uy</i> -으 /의
locative	叱	<i>-s</i> -스
	良	<i>ay/ey</i> 애 에
	中	<i>kuy</i> 귀
	良中	<i>akuy</i> 아귀
accusative	乙	<i>-ol/ul</i> -을 을
	勝	<i>[h]ol/ul</i> [ㅎ]을 을
instrumental	留	<i>-(o)u/two</i> -(으 으)로
Focus particles		
topic marker	隱, 焉	<i>(n)on/un</i> 은 은
‘too, also, even’	置	<i>two</i> 도

The Old Korean accusative particle was usually transcribed with the character 乙. But it was also sometimes written with the character 盼, a transcription believed to have represented **hul*, the initial **h* of which belonged morphemically to the preceding noun. If true, the form would parallel the Middle Korean transcription *hul* 忽.

In Middle Korean texts, the shape of the accusative particle was notably varied. It appeared in a number of different forms, as *-l*, *ol/ul*, or *lol/lul* (-ㄹ, 올/을, 흘/를), depending on the phonological environment and the rules of vowel harmony. The question that naturally arises is, did the particle in Old Korean have similar variation, or did it have a uniform, unvarying shape? This question bears most critically on the issue of vowel harmony, and whether it existed at that stage of the language. The imprecise nature of Chinese character phonograms makes it extremely difficult to find a resolution to this question.

3.5.1.2 Pronouns

Hyangga and *idu* texts contain a pronominal self reference transcribed as 矣 or 矣徒. According to *idu* texts from the late Chosŏn period, these forms were read as *uy* 의 and *uynoy* 의니. The second syllable of the latter form, *noy* 니, was apparently the reflex of the pseudo-pluralizing suffix *-nay* -내 ‘the group, all of. . .’ that is seen in such Middle Korean forms as *emanim-nay* 어마님내 ‘mothers.’ (The form of the suffix in Contemporary Korean today is *-ney*.) Comparativists have speculated that 矣 (*uy* 의) was a reflex of what has been reconstructed in Altaic as the first-person pronoun **bi*.

The first-person singular pronoun itself was transcribed with the character 吾, the Chinese graph for the word ‘I.’ The plural ‘we’ was transcribed 吾里, and it seems certain that this transcription represented the reflex of Middle Korean *wuli* 우리 ‘we.’

The second-person pronoun was transcribed simply with the character 汝, a Chinese graph for ‘you.’

3.5.2 Conjugations

One thing that is readily apparent from Old Korean transcriptions is that the language already had a complex inflectional system back then. From a typological point of view, Korean has remained unchanged in that respect throughout its recorded history.

The final endings attested in Old Korean can be classified into three types: (1) modifiers and nominalizers; (2) conjunctive endings; and (3) finite verb endings.

Just as is true today, verbs that modified nouns or noun phrases took special modifier endings. And the most common modifier endings in Old Korean were, as expected, reflexes of Middle Korean *-(o/u)n* (은/은) and *-(o/u)lq* (을/을).

However, what is especially noteworthy is that these same forms could serve as nouns. In other words, modifier endings were also nominalizers.

The Old Korean reflex of Middle Korean *-(o/u)lq* (을/을) was transcribed with the character 尸. As mentioned above, the *hyangga* “Song in Admiration of the Knight Chukchi” contains the line 慕理尸心未行乎尸道尸 ‘the road that [my] longing heart follows.’ The two verb forms in this line, *kulilq* 그릴 ‘longing’ (慕理尸) and *nyewolq* 녀올 ‘going’ (行乎尸) are marked with this ending.

The Old Korean reflex of Middle Korean *-(o/u)n* (은/은) was annotated with the character 隱. In the phrase 去隱春 ‘the spring that passed’ (also from “Song in Admiration of the Knight Chukchi”) the modifier ending is attached directly to (the reflex of) the verb stem *ka-* 가- ‘go.’

3.5.2.1 Conjunctive endings

The conjunctive endings attested in Old Korean are, for the most part, reflexes of endings still used in Korean today.

良 The conjunctive ending transcribed with this character was a reflex of Middle Korean *-la* (-라), an auxiliary indicating ‘desire.’ (This ending became the purposive *-(u)le* in Contemporary Korean.) The ending is seen, for example, in such passages as this one from the *hyangga* “P’ungyo” 風謠 (‘Local Air’): 功德修叱如良來如 ‘coming in order to beg for food.’

拈 As mentioned above, this character represented the coordinate conjunctive ending of verbs that meant ‘and also.’ The phonological form of the ending is believed to have been *-*mye*, and it was formed from the nominalizer *-m* and the particle *ye* ‘or, and, and the like.’ Here is an example from the eighth-century *hyangga* “Song of Prayer to the Bodhisattva of a Thousand Hands” 禱千手觀音歌: 膝盼古召拈 ‘dropping [to] his knees, and . . .’

如加 This transcription represented the reflex of Middle Korean transferative *-taka* -다가, ‘does and then . . .,’ which was a compound of the assertive *-ta* and particle *-ka* (which marked the complement of a change of state). It is found, for example, in this line from the “Song of Chöyong”: 夜入伊遊行如可 ‘I enjoyed the night until late, and then . . .’

遣 As mentioned earlier, the phonological interpretation of this phonogram is problematic. However, the graph was clearly used to transcribe an Old Korean conjunctive ending marking coordination of clauses, ‘and . . .,’ and so the ending it represented is usually treated as identical to the ending transcribed with the phonogram 古. But if that identification is correct, the nasal coda that seems to be indicated by the reading of the character 遣 remains unexplained. An example of the ending, 抱遣 ‘embrace and . . .,’ is found in the *hyangga* “Ballad of the Yam [gathering] Youths” 薯童謠.

(This *hyangga* was said to have been composed by a Paekche prince, who, according to the lyrics, fell in love with a Silla princess, had children of Kyōngju sing the song, and then took the princess as his wife.)

古 This graph represented the ending that became the Middle Korean conjunctive *-kwo* -고 ‘and . . .’ An example from “Song of Sacrifice for a Departed Younger Sister” 祭亡妹歌: 一等隱枝良出古 ‘grew from one branch, and . . .’

可 The ending represented by this graph, which was read *-*ka*, corresponded to Middle Korean *-a* -아 ‘and.’ The usage in “Song of the Presentation of Flowers” is typical: 花勝折叱可 ‘pick flowers and. . .’ (Notice that the verb stem to which the ending attached was the Old Korean reflex of *kesk-* 𪎗-, which ended in a velar stop that was carried over to begin the syllable of the ending.)

3.5.2.2 Finite verb endings

The inflectional endings concluding the sentence indicated whether it was a statement, a question, an exclamation, or the like.

如 This graph was used to transcribe the declarative ending, which in Middle Korean was *-ta* -다 (as it still is today).

古 This phonogram, which also represented the conjunctive ending, was used to transcribe the interrogative ending. Its Middle Korean reflex was *-kwo* -고.

齊 This form differed from other finite verb endings. It appears frequently at the end of sentences in the *hyangga*; but in addition, it is quite commonly found in *idu* texts as well. According to philological descriptions, it closed declarative sentences in *idu* texts. The readings given for it in such late Chosŏn-period texts were *-cyey* -제 or *-cye* -저, and the latter reflects well what is believed to be its modern reflex, the finite verb ending *-ce* found in the Cheju dialect.

3.6 Vocabulary

The paucity of Old Korean materials makes it impossible to present a comprehensive overview of the vocabulary. However, one thing that can be said about the Old Korean lexicon is that most of the words that are attested correspond to reflexes found in the vocabulary of Middle Korean.

Old Korean numerals illustrate these points – as well as the abstruse ways in which words were transcribed. First, three different Silla numerals are attested in the *Hyangga*: ‘one,’ ‘two,’ and ‘thousand.’ (Other numerals also appear, but the transcriptions contain no indications of their phonological shapes.) Each of the three is written with the Chinese character for the

numeral plus a phonogram transcribing the ending sound. ‘One’ is attested in the following passage from the “Song of Sacrifice for a Departed Younger Sister” 祭亡妹歌: 一等隱枝良出古 (**hoton kacay nakwo* ㅎ든 가재 나고 ‘grew from one branch, and . . .’). The word is found as well in the “Song of Prayer to the Bodhisattva of a Thousand Hands” 禱千手觀音歌: 一等沙 (**hoton sa* ㅎ든사 ‘it is one!’). In both examples, ‘one’ is written 一等. The first syllable of the word was transcribed with the Chinese character for ‘one,’ which of course reveals nothing but the meaning. But since the second-syllable phonogram 等 was read **tung*, the word apparently corresponded to Early Middle Korean **hoton* **ㅎ* ㄷ ㄴ ‘one.’ The stem of that form was **hot* ㅎ. Note in this connection that the Late Middle Korean compound *holo* ㅎㄹ ‘one day’ is from **holol*, which in turn goes back to **hotol*, a form composed of **hot* ‘one’ and **ol* ‘day.’ (In isolation, the Middle Korean word for ‘day’ was of course *il* 일, but the shape it took in numbers had a minimal vowel: *ithul* 이틀 ‘two days,’ *saol* 사을 ‘three days,’ *naol* 나을 ‘four days,’ *yelhul* 열흘 ‘ten days.’)

The numeral ‘two’ is attested in the “Song of Ch’öyong” 處容歌 as 二盼, and in the “Song of Prayer to the Bodhisattva of a Thousand Hands” 禱千手觀音歌 as 二尸. Neither of these transcriptions gives a clear indication of the phonological shape of the word. But since the character 盼 is ordinarily thought to have represented the syllable **hul*, and since 尸 was used to represent **l* or **r* in Silla times, the Old Korean word for ‘two’ appears to match up with Early Middle Korean **twupull*/**twuWul* ‘two.’ The numeral ‘thousand’ was written 千隱 in the “Song of Prayer to the Bodhisattva of a Thousand Hands” 禱千手觀音歌. That word corresponded to Middle Korean *cumun* 즈믄 ‘thousand.’

Nevertheless, there were certainly Old Korean words that left no obvious traces in that latter stage of the language. One case in point is the word for ‘spring, well.’ In the *Samguk sagi* and the *Samguk yusa* the birthplace of the founder of Silla is recorded in two ways, as 蘿井 and as 奈乙. These two transcriptions indicate that the Silla word 井 ‘spring, well’ sounded like 乙 **ul* 을. Such a word is nowhere to be found in the Middle Korean corpus. The word for ‘youth’ is another example. In [chapter 4](#) of the *Samguk yusa* one particular name was transcribed in two ways, as 蚺福 and as 蚺童. And for this second transcription the text notes that 蚺童 “is elsewhere also written 蚺卜; moreover, both 巴 and 伏 also are [ways of] expressing ‘youth.’” In other words, the Old Korean word for ‘youth’ was transcribed as 福, 卜, 巴, or 伏, phonograms which indicate a reading probably something like **pwok* ㅍ. Nothing like that form meaning ‘youth’ is seen in Middle Korean.

Or take the word for ‘community, settlement’ found in many place names. That word was usually written with the phonogram 伐 (**pel* ㅍ), but

sometimes with the *kungana*-type transcription 火 (that is, the native Korean reading of the character ‘fire’ was borrowed to write the sound **pul* 불). That Silla word matches up with a similar word for ‘community’ (written 夫里) in Paekche place names. But the only traces of the word in Middle Korean are found in frozen compounds. One of those traces is the word *koWol* 可忽 ‘town, district, village’ (> *kowol* 可忽 – and, later, > (*san*-)kwol ‘(mountain) district’ in Contemporary Korean). Another is the word *syɛWul* 瑟忽 ‘capital’ – in other words, ‘Seoul.’ (In this connection it should be noted that the Korean word for ‘capital’ had existed from a time even before the founding of Silla – that is, if we believe the narrative about it found in the *Samguk yusa*. For in that work we are told (in [chapter 1](#)) that Silla began as the statelet Sōrabōl, or Sōbōl 徐伐 (*syepel*), and that the name of that state was also the local word for ‘capital.’ A variety of other names for the Silla state are found in both the *Samguk sagi* and the *Samguk yusa*, and almost all of them appear to be variants of that same word.)

The *Samguk sagi* and the *Samguk yusa* texts themselves offer a number of etymologies and explanations for Silla words, both works citing the Unified Silla scholar Kim Taemun as the source of the information. Here are three:

- (1) “[A word written] 次次雄 is called 慈充 by many. Kim Taemun says that this means ‘shaman’ in local speech. Because the shaman serves demons and gods and also conducts sacrifices, the people fear and look up to him, and as a result call that respected elder 慈充 (**cochywung* 次充)” (*Samguk sagi*, [chapter 1](#)). The word being described compares to Middle Korean *susung* 스승 ‘master, shaman.’
- (2) “Kim Taemun says that 尼師今 (**nisokum* 니스금) is a regional word and means ‘tooth’” (*Samguk sagi*, [chapter 1](#)). The same word is also written 尼叱今 (**niskum* 닷금) and 齒叱今 (*‘tooth’-*skum* 齒스금) in the *Samguk yusa*. Clearly related is the Middle Korean word *ni* 니 ‘tooth.’
- (3) “Kim Taemun says that 麻立 (**malip* 마립) means ‘post’ in regional speech” (*Samguk yusa*, [chapter 1](#)). The reflex of this word in Middle Korean was *malh* 말ㅎ ‘post.’

What is doubly interesting, and curious, about these particular words is that they were used in the titles for Silla kings, from the founder to the twenty-second sovereign in the line. However, during the time of that twenty-second sovereign, the Chinese system of posthumous titles was adopted, and the native titles were all corrected to the Chinese title *wang* 王 ‘king.’ That was in the year 503.

That particular word change was part and parcel of the general sinification of the Korean vocabulary during the Silla period, a process that would continue for another millennium and a half, up until modern times. The fact that today place names, personal names, and official titles are virtually all derived from Chinese character readings had its origins in that process.

The influence of Chinese civilization on Korean vocabulary was enormous and long-lasting. Chinese institutions and learning penetrated deeply into Korean society and language, and Sinitic vocabulary became an intimate part of Korean life as a result. But, as we have already pointed out, the words and morphemes of this vocabulary were not ordinary loanwords. New terms were not borrowed by listening to how Chinese pronounced the words and then imitating those pronunciations. Rather, Koreans borrowed literary systems. Koreans patterned their readings of the characters not on what they heard, but on the relational systems found in Chinese rime tables and dictionaries. Sino-Korean vocabulary was, in other words, not borrowed from Chinese speakers, but rather created out of literary texts. The resulting Sinitic vocabulary formed a distinctive, largely recognizable strain of the Korean lexicon, something that remained true of the Korean language down to the present day. It is still like that. Korean words and morphemes of Chinese origin dominate literary usages, while native Korean words are overwhelmingly the words of everyday life.

That does not mean Koreans did not borrow words from Chinese. They did. There are many Chinese loans in Korean, and some have been there for thousands of years. But these words do not look like Sino-Korean and are not thought of as Chinese; they are considered native and never written with Chinese characters. Most (at least those loanwords we know of) are associated with cultural contact, terms brought in along with the objects they describe. They include the words we have already mentioned above. But, in addition, *pwut* 擘 ‘writing brush’ and *mek* 墨 ‘inkstone’ are two other, well-known examples of early Chinese loans. The phonological shapes of both fall outside the rules laid down for Sino-Korean. The *-t* coda of *pwut* 擘 ‘writing brush’ is particularly noticeable, since the Sino-Korean rendering of an original Chinese *-t* is always *-l*.

4 Early Middle Korean

The stage of the language known as “Middle Korean” lasted from the tenth century until the end of the sixteenth century. It began with the establishment of the Koryŏ dynasty in AD 918, when the new government moved the capital from Kyŏngju, in the southeast, to Kaegyŏng (later to be renamed Kaesŏng) in the middle of the peninsula. It nominally ended when the Japanese invaded Korea in 1592, and the resulting chaos disrupted the written record of the language.

Middle Korean can be most conveniently divided into two parts: Early Middle Korean and Late Middle Korean. The language of the Koryŏ period (918 ~ 1392) is considered to be Early Middle Korean, while the language of the first two hundred years of the Chosŏn period is taken to be Late Middle Korean. That division is not made to mark sweeping changes in the language. On the contrary, political and social developments point more toward linguistic stability than significant change between the Koryŏ and the Chosŏn. At the end of the Koryŏ, in 1392, the founders of the new, Chosŏn dynasty chose a place not very far away to build their capital. Unlike the move from Kyŏngju to Kaesŏng, the move from Kaesŏng to Seoul (then called Hanyang) took place over a relatively short distance and is usually thought to have had a minimal effect on the language. The regional base of the language did not change.

What did fundamentally change was how the language was recorded. Late Middle Korean is attested by a detailed and cohesive body of works in alphabetic script; Early Middle Korean is barely attested at all. Unlike Chosŏn texts, extant Koryŏ documents are relatively rare, and written only in Chinese characters. The Chosŏn-period textual corpus, on the other hand, consists of a large number of books and writings in Hangul. The importance of this change in the writing system can hardly be overstated. While the written records from Koryŏ (and before) give at most broad hints about sounds and structures, the alphabetic writings of the fifteenth and sixteenth centuries show in minute detail what the Korean language was like. In a sense, Early Middle Korean still represents linguistic prehistory, since many, if not most, of the linguistic facts must be reconstructed.

But note that the dividing line between the Early and Late periods is not set precisely at the beginning of alphabetic writing. (Some Chinese phonograms written slightly before that are considered attestations of Late Middle Korean.) The demarcation is set instead at the fourteenth century, because that is when some noteworthy changes are believed to have taken place in the Korean phonological system, particularly in the vowels. These changes and the evidence for them will be discussed presently.

4.1 The formation of Middle Korean

What was Early Middle Korean, the language of the Koryŏ period, like? By moving the capital to the central region, the Koryŏ elite established a new base for the language, away from that of the old Silla capital. The land on which the new capital lay was in the extreme northwestern part of the Silla kingdom, on territory that had once belonged to Koguryŏ. It had been annexed by Silla in the latter part of the seventh century (in 668), and ruled by that southern kingdom for almost three centuries; does that mean the people who lived there spoke Sillan at the time? And if they spoke Sillan, did their dialect retain elements of Koguryŏan?

The answer to both questions is probably yes. Since, as has already been noted, Middle Korean was a direct descendant of Sillan, it stands to reason that the Sillan language would have been spoken in Kaegyŏng in the tenth century, when Middle Korean took shape. The Koguryŏan language must have already been displaced by Sillan when the Koryŏ set up their capital there. That does not mean that Koguryŏan left no traces, though. When speakers give up one language for another, they usually retain features of the old language in the new, and if a community of people who had once spoken Koguryŏan lived in Kaegyŏng, a Koguryŏan substratum may well have existed in the Sillan dialect spoken there. That appears, in fact, to have been the case. Although the philological evidence is fragmentary, it nevertheless suggests that there were Koguryŏan elements at least in Koryŏ vocabulary. For example, the thirteenth-century pharmacological compilation *Hyangyak kugŭppang* contains the entry: 鉛 俗云 那勿 “lead” is called **namol* in the vernacular.’ The correspondence here to the Koguryŏan word **namər* ‘lead,’ which was reconstructed from the nearly identical phonograms 乃勿, is not likely to have been an accident. Another possible correspondence can be found for the Koguryŏan word for ‘valley,’ which was written with the phonogram 吞, 旦, or 頓. The Middle Korean correspondence can be seen in the 1400 Chinese booklet *Cháoxiān-guǎn yìyǔ* (‘A glossary from the Chosŏn Interpreters Institute’), where the Korean word for ‘village’ is transcribed with the phonogram 吞, suggesting that the Koguryŏan word survived into the fifteenth century.

What is particularly noteworthy about these two words, however, is that at some point both disappeared from the Korean vocabulary. Not long after the Chinese booklet was published, in the alphabetic texts of the fifteenth century, the words for ‘lead’ and ‘village’ were *nap* and *mozol*. Both of these two latter words are believed to be of Sillan origin. The fact that they replaced the other words even after the Koryŏ central language had become established suggests that the old central language of Silla spoken in the southeast continued to exert an influence. Moreover, the influence of southeastern dialects on the central language was not limited to the Koryŏ period but continued to be important long after that.

4.2 Sources

4.2.1 Phonology

The two principal sources of information about Early Middle Korean phonology are the Chinese booklet *Jīlín lèishì* (known in Korea as the *Kyerim yusa*), and the pharmacological work, the *Hyangyak kugŭppang*. Some phonological information can also be gleaned from thirteenth-century Mongolian loanwords. Though these loanwords were first written down a few centuries later, they nevertheless provide important clues about the phonetic values and phonological structure of Korean at the time they were borrowed.

The *Jīlín lèishì* 鷄林類事, ‘Assorted matters of Jīlín,’ is a Chinese compilation and vocabulary list. The curious name for Korea seen in this title – Jīlín, or “Kyerim” in Korean – was an old state name used by the Silla kingdom from AD 65 to 307, which was then picked up and used by imperial China during the Tang dynasty. Since the characters literally mean ‘Chicken Forest,’ it is usually thought to have been a reference to the white cock crowing in a forest that figured prominently in the founding myth of the Silla royal family. (The crowing of the cock had drawn attention to a golden box from which emerged the wondrous boy who became the first of the Kim line of kings.) But the explanation is itself curious. Another explanation might be that the transcriptional characters were phonograms representing a native Korean word. Just what word that might have been is unknown, however.

The *Jīlín lèishì* was compiled over a period of two years, 1103–4, by a secretary of the Song imperial legation in the Koryŏ court named Sūn Mù 孫穆. It has long been surmised that Sun Mu’s work was originally made up of three chapters dealing with local customs, system of government, and language, together with a supplement consisting of “texts of imperial decrees, inscriptions, and the like.” However, the original text is not extant today, and all that now exists are excerpts found in two Chinese encyclopedic compilations, the 1726 Qing volume *Gūjīn túshū jíchéng* (古今圖書集成) and the Ming text *Shuō fú* (說郛). The Ming edition of the *Shuo fu* has unfortunately

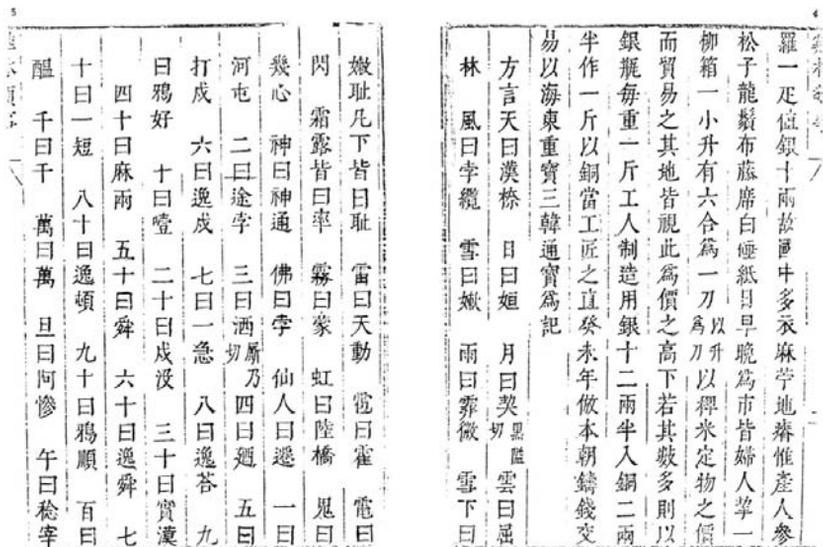


Figure 3. The *Jilin lèishì* (*Kyerim yusa* 鷄林類事)

This twelfth-century Chinese compilation contains a list of Korean words and phrases. The page shown here is reproduced from the 1647 edition of the Ming text *Shuo fú*.

also been lost; all that remains of it are around thirty of its lexical entries cited in the 1558 Korean text *Taedong unbu kunok* (大東韻府群玉), as well as later editions of the *Shuo fu* from 1647 and 1925. The 1925 edition was compiled by using then-extant excerpts of the Ming edition to correct the 1647 copy, and the contents are for the most part identical to the citations found in the *Taedong unbu kunok*. These various extant excerpts comprise a text consisting of a short introduction, which deals principally with local customs and government, and a section on “regional language” (方言). Fortunately, despite the many problems with the text’s transmission, the section on language seems to preserve much the same form it had in Sun Mu’s original document.

The language section of the *Jilin lèishì* is a simple vocabulary list of something over 350 words and phrases. Each entry takes, for example, the form 天曰漢捺 “‘sky’ is called [the Korean word],” with the Korean word or phrase being transliterated using phonograms. These phonograms reflect Chinese readings of the characters from the late Song period, and recovering the sounds of the Korean word from them is a tenuous process. The Chinese readings of the phonograms must first be reconstructed, and then those sounds reconciled with what can be reconstructed by projecting back Korean phonological values known from fifteenth-century Hangul texts. At this remove,

there is much room for guessing and error; still, useful information can nevertheless be recovered.

The *Hyangyak kugŭppang* (鄉藥救急方) is a compilation of herbal prescriptions for emergency treatment, and is the oldest Korean medical treatise that has been preserved. It was published in the mid-thirteenth century by the Interim Office of the Tripitika (*Taejang togam* 大藏都監), the Koryŏ agency charged with the production of the Buddhist Pali Canon, the Tripitika Koreana. The first edition of the *Hyangyak kugŭppang* has been lost; the only extant copy is a later edition from 1417 in the possession of the Imperial Household Ministry Library in Japan. This book contains brief descriptions of over 180 plant, animal, and mineral ingredients used for medicinal purposes, and in these descriptions, the “local names” of the ingredients are recorded with *hun* transcriptions, occasionally supplemented with phonograms. Such transcriptions are scattered throughout the three volumes of the work, but the largest number are found in a supplementary list of herbal names.

The phonograms in the *Hyangyak kugŭppang* have to be treated differently from those in the *Jilín lèishì*, because the characters were written by Koreans and thus must represent Korean readings, not Chinese ones. For this reason, the phonograms in the *Hyangyak kugŭppang* can be used not only in the reconstruction of the Early Middle Korean phonological system, but also to learn how Koreans read Chinese characters at that time, which in turn can help elucidate readings used in earlier periods, especially in Old Korean. The problem is avoiding circularity in applying these two uses. In any case, the work is also valuable for information it contains about the Korean lexicon.

Besides these two works, there are a few other, minor sources of phonological information. One is the Japanese compilation *Nichū-reki* (二中曆), which contains *kana* transcriptions of some Korean numerals. This text, a lexical compendium dealing with a variety of subjects, was put together in later years by unknown hands out of two source works (*Kaichū goyomi* 懷中曆 and *Shōchū-reki* 掌中曆) believed to have been compiled around the beginning of the twelfth century. That dating means that it coincides chronologically with the *Jilín lèishì*. The numeral names it gives are as follows: *katana* ‘1,’ *tufuri* ‘2,’ *towi* ‘3,’ *sawi* ‘4,’ *esusu* ‘5,’ *hasusu* ‘6,’ *tarikuni* ‘7,’ *tirikuni* ‘8,’ *etari* ‘9,’ *etu* ‘10.’ The first two numerals match up reasonably well with the *Jilín lèishì* transcriptions (河屯 [**xŋa-tŋun*] ‘1’ and 途孛 [**tŋuə-pŋut*] ‘2’), but the rest are almost completely different. There appears to have been considerable confusion in how those other numerals were transcribed. ‘Three’ seems to have been switched with ‘4,’ ‘5’ with ‘6,’ and ‘8’ and ‘9’ might possibly have been ‘7’ and ‘8.’ For the most part, these data are disappointing.

Some songs from the Koryŏ period are found in the fifteenth-century collections *Akhak kwebŏm* (樂學軌範) and *Akchang kasa* (樂章歌詞), and

these provide a few clues. Since these vernacular songs were first written down in the Late Middle Korean period, most traces of Early Middle Korean have been lost. Nevertheless, a smattering can be found here and there – for example, in the song “Tongdong” (動動), where the word for ‘stream’ is *nali* 나리. Since the songs sometimes show this kind of archaic quality, they can be thought of as Early Middle Korean compositions, but for the purpose of linguistic reconstruction they can only be used with caution.

Despite the fact that it is written in Classical Chinese, the *Koryŏ-sa* (‘History of Koryŏ’) constitutes a potential source of linguistic information. In this 1454 official history of the dynasty are to be found a wide variety of personal and place names and bureaucratic titles, some of which provide provocative clues about the structure of Korean at the time. Moreover, not to be overlooked is the fact that this history contains numerous Mongolian loanwords. Another work that contains some Korean words is the *Xuānhé fēngshǐ Gāolì tújīng* (宣和奉使高麗圖經) of 1124, a description of Koryŏ sights and sounds written by Xu Jing when he was posted there as part of a Song Chinese legation. In Xu Jing’s work, the (Late) Middle Korean word *syem* ‘island’ is transliterated in numerous places with the character 苦 [**ɕiam*]; his text also offers the explanation that something “smaller than an island and yet having grass and trees is called a ‘苦.’” In volume 36 of the same work can be found the statement that “the Koryŏ vernacular for the spines of the hedgehog is ‘苦筍’ [**kʰuə-ɕiam*].” Here, ‘苦筍’ [**kʰuə-ɕiam*] corresponds to the *kwoswom* 고슴 of Late Middle Korean *kwoswomtwoth* 고슴돌 ‘hedgehog,’ suggesting that *kwoswom* was the original name of the animal, to which *twoth* ‘pig’ was added as a suffix. As supporting evidence for this idea, note that the *Hyangyak kugŭppang* contains the explanation: “the hide of the hedgehog is popularly called ‘苦蔘猪.’” The character 猪 ‘pig’ was not used here as a phonogram; it was meant, rather, to be understood as a semantic gloss.

The contact between Koryŏ and Yuan China left some Mongolian traces in the Korean language. However, except for names of Koryŏ governmental offices, loanwords from Mongolian were limited to terms related to horses, falconry, and the military. The majority of these loanwords were first put into writing after the fifteenth century, and the most reliable transcriptions are those written in Hangul in the sixteenth century, in the 1517 *Pŏnyŏk Pak T’ongsa* and the 1527 *Hunmong chahoe*. Information can also be gleaned from the phonogram transcriptions found in the *Ŭnggolbang* (鷹鵞方) and other writings. (The *Ŭnggolbang* itself purports to be a book from the Koryŏ period, but the oldest edition now extant dates from 1444; a handwritten copy of that latter text is in the possession of the Imperial Household Ministry Library in Japan.) Mongolian loanwords in Korean are not especially numerous, but it is still possible to derive information from them about the phonological systems of both languages at the time the words were borrowed.

If the *kugyŏl* are removed, the sentence is standard Classical Chinese. In other words, these markings were unobtrusive supplements to the Chinese text, and the information they provide about Korean is limited. Still, just as was the case with *hyangch'al* (see above, Chapter 3), some *kugyŏl* characters were phonograms and others were meaning indicators with *hun* readings.

One important feature of *kugyŏl* is that many of the symbols could be abbreviated. For example, the *kugyŏl* used in the text cited above often appeared as 𠄎 (匡), 𠄎 (伊), 𠄎 (爲), 𠄎 (尼), 𠄎 (隱), and 𠄎 (羅). Here is how the text would appear with those abbreviated *kugyŏl*:

天地之間萬物之中 𠄎 唯人 𠄎 最貴 𠄎 所貴乎人者 𠄎 以其有五倫也 𠄎

These abbreviated *kugyŏl* were normally brushed into the printed text later by hand, most likely by a Buddhist monk or priest or the book's owner, as a kind of private punctuation to help in understanding the text.

Simplified *kugyŏl* look like Japanese *katakana*. Some of the resemblances are superficial; *Kugyŏl* 𠄎 (*ho-*), for example, resembles *katakana* 𠄎 (*so*); 𠄎 (*ni*) looks like 𠄎 (*hi < fi*); etc. But many other symbols are identical in form and value. For example, among the *kugyŏl* in the example given above, 𠄎, which was abbreviated from 伊, represents the syllable *i*; there is also 𠄎 (*ta*) from 多, 𠄎 (*ka*) from 加, 𠄎 (*ya*) from 也, etc. These are the same as their Japanese equivalents. We do not know just what the historical connections were between these two transcription systems. The origins of *kugyŏl* have still not been accurately dated or documented. But many in Japan as well as Korea believe that the beginnings of *katakana* and the orthographic principles they represent, derive at least in part from earlier practices on the Korean peninsula.

In the year 2000, a second kind of textual marking system was discovered. This system was what is known as *kakp'il*, or stylus, annotations. This particular system consisted of tiny depressions made with a stylus in the paper – dots and/or angled lines – the interpretation of which depended upon where they were placed relative to the characters they were intended to annotate. The marks are even more unobtrusive than the *kugyŏl* described above. Dots look as if they might have been made with the tip of an awl, and except for their regularity – either perfectly round and at most a millimeter in diameter, or forming a straight, angled line – they are difficult to distinguish from flaws in the paper.

Stylus annotations had been known for some time in Japan (where they were known as *kakuhitsu* 角筆), because there are records mentioning them, and some of the actual stylus implements have survived. (In at least one case a distinguished priest had died while in the act of annotating a text, and, out of respect for the priest, his stylus had been left at the location in the text where he had left it.) Since discovering that stylus annotations are also found in Korea, both Japanese and Korean scholars have been involved in a flurry of activity documenting and deciphering the marks.

By their nature, *kugyŏl* and *kakp'il* reveal little about Korean phonology, but they do give information about the use of particles and other grammatical markers. Through philological analysis, these recent textual discoveries may yet reveal new and unsuspected information about the structure of earlier Korean.

4.3 The transcription of Korean

As has been mentioned, the transcriptional systems of the two principal sources differ greatly from each other. The transcriptional characters of the *Jīlín lèishì* are all phonograms based upon Chinese sounds. The transcriptional characters in the *Hyangyak kugŭppang*, on the other hand, reflect a different, native tradition of indicating readings.

The *Jīlín lèishì* use of characters is completely unrelated to the native Korean transcriptional system. Apparently, Koreans played no role in the compilation of this work. The author was Chinese, the book was intended to be read by Chinese, and the characters served their purpose only if they succeeded in eliciting pronunciations resembling those of the transcribed Korean words. That was what the phonograms were intended to do. There was quite naturally no point in using transcriptional characters chosen for the meanings associated with them. However, these characters were not completely disassociated from meaning. One example is the transcription 刀子曰割 ‘knife is called [**kat*].’ The transcribed word corresponds to Late Middle Korean *kal*, and the phonogram clearly represents sound values close to those the Korean word had. But since the transcriptional character meant ‘cut,’ it also stayed within the general semantic range of ‘knife.’ Similarly, in the lexical entry 傘曰聚笠 (“umbrella” is called [**tsŕyǝ-lip*]’), the sounds of the phonograms closely resemble *sywulwup*, but, in addition, the second character means ‘rain hat.’ In 水曰沒 (“water” is called [**mut*]’), the phonogram represents the sounds of *mul* ‘water,’ but the character is also associated with the meaning ‘sink.’ This kind of double duty for transcriptional characters is usual in Chinese transcriptions.

A feature of the *Jīlín lèishì* transcriptions deserving special attention is the treatment of syllables with a *-p*, *-t*, or *-k* coda. These transcriptions have curious patternings. First of all, representing a velar stop, the transcription 蚤曰批勒 (‘“flea” is called [**p^hi-lǝk*]’) shows a coda that matched that of fifteenth-century *pyelwuk* 벼룩 ‘flea.’ That velar correspondence looks perfect. But in the transcription 射曰活索 (“shoot an arrow” is called [**xŕuat-sak*]’), which represented *hwal_swo-* 활소-, there was no velar consonant at all in the Korean form. Next, consider transcriptions with a dental stop *-t*, such as 火曰孛 (‘“fire” is called [**pŕhut*]’) for *pul* 불, and 馬曰末 (“horse” is called [**muat*]’) for *mol* 말. Here, the Chinese **t* represented what was attested three

centuries later as /l/. But Chinese *t represented other Korean consonants as well: -th, -c, -t, and -s. For instance: 猪曰突 (“pig” is called [**tʰut*]) for *toth* 돌; 花曰骨 (“flower” is called [**kut*]) for *kwoc* 꽃; 笠曰蓋音渴 (“rain hat” is called [**kaj*]; it sounds like [**k^hat*]) for *kat* 간, 梳曰苙音必 (“comb” is called [**pjit*]; it sounds like [**pjit*]) for *pis* 빗. On the other hand, a *p coda in Chinese consistently represented a -p in Korean: 七曰一急 (“seven” is called [**ʔjit-kip*]) for *nilkwup* 칠곱; 口曰邑 (“mouth” is called [**ʔip*]) for *ip* 입. What are we to make of these patterns?

The Chinese phonograms must have reflected northern Chinese sounds from the twelfth century, but that is a time frame for which it has been especially difficult to reconstruct a Chinese phonological system. The reconstructed values we have given in the examples above were for “Late Middle Chinese,” a stage of the language representing the Chang’an standard of around the seventh or eighth century, when Chinese had syllables closed by distinct -p, -t, or -k codas. But by the time of Old Mandarin in the early fourteenth century, these codas had all weakened to glottal stops, [ʔ]. It stands to reason that in the early twelfth century the Chinese codas could have had weakened values somewhere between those of the two stages, perhaps sounds like *β, *r, and *γ. Phonetic values such as these would help explain the choices of phonograms in the coda transcriptions. (In passing, it might also be noted that in the transcription 尺曰作 (“ruler” is called [**tsa^h*]), the character used to transcribe fifteenth-century *cah* 𪛗 ‘ruler,’ had an *h as its reconstructed Late Middle Chinese coda.)

In contrast with the use of phonograms in the *Jilin lèishì*, the transcriptional system of the *Hyangyak kugüppang* continued the Korean tradition of character usage, in which some characters were used as phonograms, but many others as *hun* readings, i.e., semantic glosses. These two very different kinds of transcription were also often mixed together in sequences and combinations that may have made sense to people of the time, but they can sometimes be difficult for us to unravel today. For example, the medicinal herb *Scutellaria baikalensis* (黃芩) was transcribed in two different ways, as 精朽草 or as 所邑朽斤草. The first transcription used characters only for their meanings, and the second mixed sounds with meanings. Both were meant to be read as the native word *swop_sekun phul* 습서근플, which literally meant ‘inside-rotten grass.’ In the first transcription, the character 精, which means ‘essence,’ glossed *swop* 습 ‘inside,’ a word rendered in the second transcription phonetically by 所邑 *swo-up* 소읍. The character 朽 ‘rotten’ appeared in both transcriptions for *sekun* 서근 ‘id.,’ but in the second transcription, the phonogram 斤 *kun* 근 was added to suggest the sounds of the second syllable. Finally, both transcriptions were completed using 草 ‘grass’ as a semantic gloss for *phul* 플 ‘id.’

Yet, even though phonograms and semantic glosses could be mixed together, the character sets used for each of the two types of transcription

were in general carefully distinguished. A few characters, such as 加 and 耳, could be used to gloss either sound or meaning, but such crossovers were rare. In general, the phonogram usage in this pharmacological treatise was quite regular, and formed, in fact, a kind of elementary syllabary. The most commonly used of these syllabic graphs are as follows (the phonological values given are from the fifteenth century):

加 = *ka* 가, 居 = *ke* 거, 斤 = *kun* 근, 只 = *ki* 기, 古 = *kwo* 고
 乃 = *na* 나, 你 = *ni* 니
 多 = *ta* 다, 刀/道 = *two* 도, 豆 = *twu* 두
 羅 = *la* 라, 老 = *lwo* 로, 里 = *li* 리
 尔 = *ma* 마, 毛 = *mwo* 모, 勿 = *mull/mol* 물/몰
 朴 = *pak* 박, 夫 = *pwu* 부, 非 = *pi* 비
 沙 = *sa* 사, 參 = *sam* 삼, 所 = *swo* 소
 耳 = *zi* 지
 阿 = *a* 아, 於 = *e* 어, 五 = *wo* 오, 尤 = *wu* 우, 隱 = *un* 은, 伊 = *i* 이
 也 = *ya* 야, 余 = *ye* 여

For the most part, this transcription system was the same as the one that had been used in Silla. That fact gives what are perhaps important clues to the older readings of phonograms such as 只 [**tʃi*] = *ki* 기. Note that, among other similarities, the phonogram 羅 [**la*] was often written as 𪛗, a simplification also used in transcriptions from earlier periods. Still more suggestive is the fact that the characters used to transcribe syllable codas were the same as those used in the *hyangch'al* transcriptional system of the Old Korean period. These transcriptional characters are as follows (the readings are the traditional Korean ones from the fifteenth century): 乙 *ul* 을 = *-l*, 音 *um* 음 = *-m*, 邑 *up* 읍 = *-p*, 叱 *cil* 질 = *-s*, 次 *cha* 차 = *-c*. Perhaps most provocative of all, the character 支 [**tʃi*] was used in the transcription 尔支, which was used to represent the word for ‘yam.’ In Late Middle Korean, the phonological shape of ‘yam’ was *mah*, so it appears that 支 [**tʃi*] was intended to transcribe *-h* – or its twelfth-century antecedent. One of the more difficult problems in reading phonograms in *hyangch'al* transcriptions is determining what phonological value or values were represented by the character 支, and this transcription from the twelfth-century *Hyangyak kugŭppang* sheds what is perhaps revealing light on this problem.

The semantic glosses of the *Hyangyak kugŭppang* are generally divided into two types. In the first type, the meaning associated with the Chinese character is directly related to the meaning of the word being glossed. Thus, the character 冬 ‘winter’ was used to transcribe (the antecedent of) Korean *kyezul* 겨울 ‘winter’; 犬 ‘dog’ = *kahi* 가히 ‘id.’; 山 ‘mountain’ = *mwoy* 피 ‘id.’; 水 ‘water’ = *mul* 물 ‘id.’; etc.

But in the second type of gloss, the transcriptional character was abstracted from the original meaning. This usage was a complex process in which a semantic link was first established, and then the character was used as a phonogram for sounds similar to those of the first word. For example, the character 置 ‘put, place’ was first linked to the Korean verb *twu-* 두- ‘put, place’ by meaning; then the character was used to transcribe any syllable pronounced *twu*. Thus, 置 became a phonogram for *twu* 두. In a similar way, 火 ‘fire’ was associated with Korean *pul* 불 ‘fire,’ then it became a way to transcribe any syllable pronounced *pul*. The character 等 ‘rank, grade’ became first associated with the Korean postnoun *tol/tul* 들/들 ‘and others,’ then it became a phonogram for *tol/tul* 들/들; 休 ‘rest, cease,’ through a semantic association with Korean *mal-* 말- ‘stop (doing),’ became a phonogram for *mal*. Consider these examples: the transcription 置等스只 represented what later became the fifteenth-century word *twutuleki* 두드러기 ‘rash’; all four characters were phonograms, but the first two were only used as phonograms through their semantic associations. In 楊等渠 (the name of a kind of spurge called, in Late Middle Korean, *petul-wos* 버들웃 ‘[literally] willow-lacquer’) the first character is a semantic gloss for *petul* 버들 ‘willow,’ the second a derived phonogram for the syllable *tul* 들, and the third a semantic gloss for *wos* 웃 ‘lacquer.’ In 刀古休伊 (Late Middle Korean) *twoskwomali* 돛고마리 ‘cocklebur,’ 刀, 古, and 伊 are straightforward phonograms, while 休 is used as a phonogram through a semantic gloss. This transcriptional practice closely parallels Japanese *man’yōgana* usages known as *kungana* 訓假名.

Traces of what appear to be this same transcriptional strategy can be seen again and again in the *Hyangyak kugŭppang*. The hints are tantalizing. In the plant names 雉骨木 (*skuytyelkalis-pwulhwuy* 씨덜가릿불휘 ‘the root of Komarov’s bugbane, *Cimicifuga heracleifolia*,’ used in Chinese medicine for the common cold and bowel disorders) and 雉矣毛老邑 (*skuy-mwolwop* 씨모릅 ‘pinellia,’ one of the most important herbs in Chinese medicine, used in moxibustion and to stop coughing), the character 雉 ‘pheasant’ appears to be used indirectly, through that semantic gloss, to represent the syllable *skuy* 씨 even though the fifteenth-century Korean form of ‘pheasant’ was *skweng* 썩. (Notice also the Contemporary Korean word *kkathuli* ‘hen pheasant.’) How did the association work? Or take this example: in the plant name 虎驚草 (*stas-twulhwup* 싹들흙 ‘spikenard, *Aralia cordata*’), the character 虎 ‘tiger’ seems to transcribe the syllable *sta* 싹. Then there is the even more provocative use of the character 數 ‘number’ to represent (the ancestral form of) *ton* 든. For example, the plant name *ton-nezam* 든너삼 (*Astragalus membranaceus*,’ one of the fifty fundamental herbs in Chinese medicine, used to speed healing) was transcribed as either 甘板麻 or 數板麻, where *ton* 든 ‘sweet’ is rendered with 甘 ‘id.’ as a semantic gloss, or with 數,

presumably used as a (derived, *kungana*-like) phonogram. That is pretty strong evidence that Old Korean had a word for ‘number’ that sounded like *ton* 屯. Note that that Old Korean word, in turn, looks very much like Old Written Mongolian *toγan* (modern *tō*) ‘number’ and Manchu *ton* ‘number.’

4.4 Phonology

Just as is the case with Old Korean, what can be stated about the phonological system of Early Middle Korean must necessarily be tentative. Nevertheless, as has already been mentioned, despite the paucity of Early Middle Korean materials, it appears that significant phonological changes took place sometime around the fourteenth century.

4.4.1 Consonants

4.4.1.1 Clusters and aspirates

The profusion of initial clusters found in the fifteenth century is believed to have developed sometime after the twelfth century through the syncope of vowels separating the consonants. The word *psol* 粟 ‘(uncooked) rice’ was transcribed in the *Jīlín lèishì* with the two phonograms 菩薩 [**pɦuə-sat*], the first of which began with a labial stop, indicating that the form of the word was then **posol*. In the pharmacological work *Tongüi pogam* (東醫寶鑑 湯液篇), which was compiled at the end of the sixteenth century and published in 1613, the medicinal herb *wotwoktwoki* ‘arbor monkshood’ was transcribed as *wotwok.ptwoki* 오독뽕기 (3:19). In the *Hyangyak kugŭppang*, the word was transcribed with phonograms in two ways, as 五得浮得 and 烏得夫得, both of which point toward a reconstruction like **wotwokputuk*, with a vowel between the *p* and the *t*. Since the *Hyangyak kugŭppang* was compiled in the mid-thirteenth century, the syncope of the vowel must have taken place some time after that.

Aspirates existed in Early Middle Korean, but they appear to have been fewer in number than was the case later. Some aspirates developed through vowel syncope. The antecedent of the fifteenth-century verb *tha* ‘rides’ was transcribed in the *Jīlín lèishì* as 轄打 [**xɦja:t-ta(jŋ)*], indicating that the verb was then pronounced **hota*. The fifteenth-century aspiration was apparently produced by syncope of the first-syllable vowel, then metathesis of the two consonants: **hota* > **hta* > *tha* [t^ha]. The *Jīlín lèishì* transcription of ‘big’ was 黑根 [**xəək-kən*], which suggests the reconstruction **hukun*, which gave rise to fifteenth-century *khun* ‘big.’ In other words, the same phonological process that produced consonant clusters also produced aspirates.

4.4.1.2 Reinforcement

Reinforced pronunciation of obstruents probably existed even in Old Korean as an automatic feature following the genitive *s* or a verb stem ending in the

liquid transcribed with the character 尸, usually thought to be **r*. But it is not clear just when reinforced consonants first developed in initial position. It may well be that they existed as variants of *s*-clusters in the fifteenth century, or even before. One *Jilín lèishì* transcription that adds support to that contention is 寶姐 [**puaw-dfiat*] ‘daughter,’ a word which probably must be reconstructed as **potol*. But that word is written only as *stol* 𪛗 in Late Middle Korean texts, and never as **ptol*, which is the form that should have been produced by syncope of the first-syllable vowel. How could that have happened? Perhaps the form written as *stol* 𪛗 was actually pronounced [tʰɔl], with a reinforced initial, at least as a variant. Or perhaps *stol* simply represents an irregular development. In any event, reinforced consonants were almost certainly not phonologically distinctive at an earlier stage of Middle Korean, in the twelfth century. There is no philological evidence for such a consonant series.

4.4.1.3 Voiced fricatives

In the fifteenth century, the letter △ represented *z*. Both the *Jilín lèishì* and the *Hyangyak kugŭppang* provide evidence that that same voiced consonant also existed in the twelfth century. In the *Jilín lèishì*, ‘younger brother’ is transcribed as 了兒 [**liaw-ri*], and ‘forty’ as 麻刀 [**ma-rin*]. Since the fifteenth-century reflexes of those Korean words are *azo* 아△ and *mazon* 마△, it seems clear that Sun Mu picked characters with the intention of representing the *z* sounds he heard in those words. The *Hyangyak kugŭppang* shows very much the same kind of transcription. One herb name, for example, is transcribed as either 豆音矣齋 or 豆衣乃耳; in the first transcription, the character 齋 ‘shepherd’s purse’ serves as a semantic gloss, and in the second, 乃耳 [**naj-ri*] are phonograms representing sounds. Both transcriptions were intended to represent *nazi* ‘shepherd’s purse.’ Another name is transcribed 漆矣母 and 漆矣於耳, where 母 ‘mother’ and 於耳 [**ʔyǎ-ri*] both represent *ezi* 어△ ‘mother, parent.’

However, not all occurrences of *z* in the fifteenth century go back to a *z* in the twelfth. The plant ‘dodder, love vine’ was transcribed in the *Hyangyak kugŭppang* as 鳥伊麻, where 鳥 ‘bird’ and 麻 ‘hemp’ were semantic glosses intended to be read as (the earlier reflexes of) *say* ‘bird’ and *sam* ‘hemp’ (伊 was a phonogram representing the -y glide at the end of the syllable *say*). That means that the twelfth-century form of ‘dodder’ was something like **saysam*, a word that became *sayzam* in the fifteenth. Similarly, another plant name was written 板麻 ‘board-hemp,’ or **nelsam*, which became *nezam*. These examples indicate that the change **s* > *z* took place sometime around the fourteenth century. (The loss of **l* in words like **nelsam* will be discussed later.) The words *twuze* ‘several’ and *phuzeli* ‘overgrown land’ also appear to have undergone this change: *twul* ‘two’ + *se* ‘three’ > **twulse* > *twuze*; *phul*

‘grass’ + *seli* ‘midst’ > **phulseli* > *phuzeli*. And *hanzwum* ‘sigh’ must surely be derived from **hanswum*, since, of course, *swum* meant (and still means) ‘breath.’ From these examples, it appears that the change *s* > *z* took place when the consonant occurred between a *y*, *l*, or *n* and a vowel.

On the other hand, *z* could apparently occur at the end of a syllable in the twelfth century. In the *Jilín lèishì*, the word ‘scissors’ was transcribed in phonograms as 割子蓋 [**kat-tsz-kaj*]. Although there are problems with the interpretation of this transcription, in light of the fact that the fifteenth-century form of the word was *kozGay* 𪛗애, the word should probably be reconstructed as **kozgay*. This word was derived from *koz-* ‘cut’ (attested in the 1459 *Wörin sökpo*, 10.13) + the nominalizing suffix *-kaj*. Between vowels this consonant cluster underwent the following changes: [**zg*] > [**zʁ*] > [*zɦ*] > [*z*]. The fifteenth-century phonetic shape [*zɦ*] (which is transcribed phonemically in Yale Romanization as /zG/), was seen in *kozGay* 𪛗애 ‘scissors’; then, in the sixteenth century, the form became *kozay* 𪛗애, and this marked the last appearance of the *z*. Another example of the occurrence of [**zg*] is found in the word for ‘earthworm,’ which was transcribed 居兒乎 [**kyə-ri-xɦuə*]; this form corresponded to fifteenth-century *kezGwuy* 𪛗위 ‘id.’ and to sixteenth-century *kezwuy* 𪛗위. Allowing for vowel changes, this twelfth-century form can perhaps be reconstructed as [**kezʁüy*]; the fifteenth-century form was *kezGwuy* 𪛗위, and the sixteenth-century form was *kezwuy* 𪛗위.

Early Middle Korean materials give no clear indication that the fifteenth-century bilabial fricative /W/ 𪛗 existed in that form then. Nevertheless, it is premature to conclude that it did not. We must remember, after all, that transcribing sounds with Chinese characters was an inexact art. It is true that a bilabial fricative like [β] could perhaps have been rendered with a Chinese character read with an initial [f] or [v], but it is also possible that such a Korean consonant might have sounded to a Chinese ear more like [p] or [b]. And so, with that in mind, we notice that in the *Jilín lèishì* transcriptional evidence can be found for a labial consonant that might possibly have been [β]. Here are the relevant transcriptions: 途孛 [**ɦuə-pɦut*] ‘two’ (fifteenth-century *twuul* 두을, *twul* 둘), 酥孛 [**suə-pɦut*] ‘rice wine’ (= *swuul* 수을, *swul* 술), 珂背 [**k^ha-puaj*] ‘trousers’ (= *kowoy* 𪛗외), 枯孛 ‘trunk’ (= *kwol* 골), 雌孛 ‘scale’ (= *cewul* 저을). The phonograms in question here, 孛 and 背, were also used to represent sounds that almost surely were labial stops; for example, 孛 ‘fire’ (*pul* 불) and 背 ‘cloth’ (*pwoy* 𪛗). But this double duty does not necessarily mean that they represented stops intervocally. Later, in the fifteenth century, the bilabial fricative /W/ was clearly distinct from a bilabial stop /p/: yet, the phonogram usage in the Chinese glossary *Cháoxiān-guān yìyǔ*, which was compiled around 1400, did not give even a hint of such a distinction.

Pre-alphabetic Korean transcriptions also do not confirm the existence of a bilabial fricative. But neither do they disprove it. It would not have been easy to provide unambiguous evidence for such a consonant in any case, since Sino-Korean has apparently never had a distinction between /W/ and /p/. And yet, notice that the *Hyangyak kugüppang* does contain transcriptions such as 多里甫里 ‘flatiron’ (*taliwuli* 다리우리). The phonogram 甫 was clearly being used here to transcribe a labial that later lenited. This suggests that a *[β] did in fact exist in Early Middle Korean even though it was not reflected in any transcription system.

Though the evidence is not nearly so clear, it appears that lenition produced /W/ in the same phonological environment that gave rise to /z/ – that is, between *y* or /l/ and a vowel: *[b] > [β]. This change took place at some unspecified time before the fifteenth century. We can see convincing evidence of the change in the fifteenth-century word *kulWal* 글왈 ‘written letter’ (1447 *Yongbi öch’ön ka* 26). Since this word was a compound of *kul* ‘writing’ and the nominal suffix *-pal*, the bilabial fricative *W* had clearly lenited from a *p*. There are also numerous other cases where lenition must have taken place; for example: *twothwol.wam* 도톨왠 ‘chestnut-oak nut’ (1481 *Tusi önhæ* 5.26) < *twothwol* ‘acorn’ + *pam* ‘chestnut’; *kalwem* 갈웜 ‘tiger’ (1527 *Hunmong chahoe* 1.18) < *kal* ‘reed’ + *pem* ‘tiger’; *tayWat* 대왈 ‘bamboo field’ (1447 *Yongbi öch’ön ka* 5.26) < *tay* ‘bamboo’ + *pat(h)* ‘field’; *tayWem* 대웜 ‘big tiger’ (1447 *Yongbi öch’ön ka* 87) < *tay* (Sino-Korean 大 [TAY]) ‘big’ + *pem* ‘tiger’; *meyWas-* 메왓- ‘to bare a shoulder’ (1447 *Sökpo sangjöl* 9.29) < *mey-* ‘to shoulder’ + *pas-* ‘to take off.’

4.4.1.4 Terminal consonants

In Old Korean consonantal distinctions were generally maintained in syllable-final position. Much the same seems to have been true in Early Middle Korean. Here are two revealing transcriptions from the *Jīlín lèishì*: 渴翅 [**khat-syi*] ‘skin’ (> LMK *kach* 갓), 捺翅 [**nat-syi*] ‘face’ (> LMK *noch* ㄴ). These phonograms indicate that the words ended in an aspirated dental affricate *[tʰ], even in isolation. It might be supposed that these forms incorporated the subject particle *i*, since, after all, before a vowel was the only environment where aspirated affricates were realized in the fifteenth century (*ka.ch_i* 가치 and *no.ch_i* ㄴ치), and it is easy to imagine that the same would have been true three hundred years earlier. But that was not the case. The subject particle does not appear once in the *Jīlín lèishì*, even in constructions where it might be expected; for example: 嫩恥 [**nwen thri*] ‘snow falls,’ 孫烏囉 [**swen uo-le*] ‘guests arrive.’ Regardless what conclusions we might draw about Korean particle usage from this Chinese text, Sun Mu would certainly not have added subject particles to nouns in isolation when he did not do so in syntactic constructions. Moreover, as has been

pointed out, a terminal **-h* was represented with a phonogram read with a velar coda; thus, **h* was also realized in terminal position, and not just when a vowel was added.

Transcriptions in the *Hyangyak kugŭppang* represent distinctions in terminal consonants even more clearly. In this book, the character 叱 was not only used to represent the genitive particle **s*; it was also used to represent the same sound as a terminal consonant: e.g., 你叱花 ‘rouge (makeup),’ 雞矣碧叱 ‘cockscorb.’ In the first example, 花 ‘flower’ is a semantic gloss, and 你叱 are phonograms representing what would later be *nis* 닷. In the second, 雞 ‘chicken’ is a semantic gloss; 矣 was a phonogram representing the genitive particle **uy*; and 碧叱 were phonograms representing later *pyes* 벋 ‘(chicken’s) comb.’

Besides **s*, the compilers of this medical treatise also represented **[ts]* as a terminal consonant. But that was not true of the dental aspirate **[tsʰ]*. The transcriptions did not reflect that latter distinction. On the one hand, we can see evidence for the consonant **[ts]* in the transcriptions of **twolac* ‘bellflower root,’ 刀冬次, 道羅次, where the character 次 was used as a phonogram to represent a final affricate. This usage plainly indicated a contrast with the fricative **s*, which, as a terminal consonant, was consistently transcribed with the character 叱. This transcriptional convention dated back to Old Korean. But 次 was also used to represent the terminal consonant in **kach* (獐矣)加次 ‘(roe deer’s) skin,’ suggesting that the contrast between **c* and **ch* may have been neutralized there. Of course, precisely because the use of 次 to transcribe final consonants was a convention passed down from the Old Korean period, using it as evidence for neutralization is somewhat suspect. Nevertheless, considering the system as a whole, the probability is great that such was the case.

As has been noted, the word for ‘yam’ was transcribed 尔支. This indicates that the *-h* in the Late Middle Korean form *mah* was realized as such in Early Middle Korean as well.

To sum up, the contrast between **c* and **ch* was neutralized in the thirteenth century, but the contrast between **s* and **c* was not. This suggests that aspiration was not distinctive in terminal position except as a feature of the consonant **h*. Thus, the terminal consonant distinctions that existed in the middle of the thirteenth century were **[p, t, k, s, z, c, l, n, m, ng, h]*.

4.4.1.5 The liquid and its (later) development

In later stages of the language, the liquid **l* dropped before the dentals **t, *s, *z, *c, *ch, *n*. But in Early Middle Korean it did not. We can see this was true because ‘firewood’ was transcribed in the *Jilín lèishì* as 孛南木 (**pulnamwo*), indicating that the terminal **-l* of **pul* ‘fire’ was preserved in this compound. Examples in the *Hyangyak kugŭppang* are even clearer. For example,

‘mistletoe’ **kyezul-sali* (literally, ‘winter-living’) was transcribed 冬乙沙伊, with the character 乙 used explicitly to indicate an [ɪ] pronunciation. The plant ‘*Sophora angustifolia*’ **nel-sam* (literally, ‘board-hemp’) was written 板麻, with the characters used as semantic glosses for ‘board-hemp.’ In Late Middle Korean texts, these two compound words were written *kyezul-sali* 겨즈사리 and *ne-sam* 너삼, showing that the liquid had dropped by that time. Thus, it can be seen that **l* was lost in this environment by the latter half of the fifteenth century, but the process probably began a little earlier than that.

4.4.2 Vowels

Documentary evidence suggests that a significant phonological change – a “Korean Vowel Shift,” as it has been called – took place between the thirteenth and fifteenth centuries. The evidence for the change comes primarily from Mongolian loanwords.

First, we note that Middle Mongolian had a phonological distinction between front and back, with three front vowels *ü*, *ö*, *e* contrasting with three back vowels *u*, *o*, *a*. (A seventh vowel, *i*, was neutral in the system.) These vowels were reflected in Korean in the fifteenth and sixteenth centuries as follows:

	Front vowels			Back vowels		
Mongolian	ü	ö	e	u	o	a
Korean	[u]	[wə]	[ə]	[o]		[a]
	ㅜ	ㅟ	ㅓ	ㅛ		ㅓ

(Examples will be cited in the discussion of vocabulary in the following section.)

The crucial question is, why was the Korean vowel ㅜ equated to a front vowel? Had it been pronounced [u] in the thirteenth century, it would surely have been used to render a Mongolian back vowel. Instead, however, both of the Mongolian back vowels *u* and *o* were accommodated by the single Korean vowel ㅛ. It is reasonable to conclude from this that (the antecedent of) ㅜ was not a back vowel, but rather a front vowel, **ü*, which moved to the back of the mouth by the fifteenth century. Similarly, ㅓ represented the Mongolian front vowel *e* and therefore must itself have been a front vowel **e* that only later became [ə].

The *Jilín lèishì* also provides some evidence bearing on the phonological values of Korean vowels. There, (the antecedent of) the Late Middle Korean low back vowel · *o* [ʌ] was represented in phonograms as follows: 河屯 ‘one’ (LMK **hoton* **호屯*), 渴來 ‘walnut’ (*kolay* ㄱ래), 珂背 ‘trousers’ (*koWoy* ㄱㅞ), 末 ‘horse’ (*mol* ㅓ); 擺 ‘pear’ (*poy* ㅓ), 敗 ‘boat’ (*poy* ㅓ), 捺翅 ‘face’ (*noch* ㄴ). The Yuan-period Chinese pronunciations of the phonograms 河,

渴, and 末 have been reconstructed as *xɔ, *kʰɔ, and *mɔ; and those of 擺, 背, and 捺 as *paj, *puj, and *na. These point to a vowel that was back and slightly rounded, perhaps something like *ɔ.

The Late Middle Korean high, unrounded back vowel — *u* [i] occurred in 亨 ‘fire’ (*pul* 불) and 沒 ‘water’ (*mul* 물), the Yuan-period values of which were *pɔ and *mu. But the Late Middle Korean form *khun* 큰 ‘big,’ a word which was derived historically from **hukun*, provides a much better clue. That form was represented in the *Jīlín lèishì* as 黑根, and since these phonograms had the Yuan-period pronunciations *xəj and *kən, the vocalism points toward a mid value for the Korean vowel: *ə.

Here, then, is how we believe Korean vowels changed during this period:

Thirteenth century	→	fifteenth century		
*i		[i]	/i/	ㅣ
*ü		[backing]	[u]	/wu/ ㄱ
*e		[backing]	[ə]	/e/ ㄷ
*ə		[raising]	[i]	/u/ ㅡ
*u		[lowering]	[o]	/wo/ ㅓ
*ɔ		[lowering]	[ʌ]	/o/ ㅜ
*a		[a]	/a/	ㅑ

4.5 Vocabulary

The source materials for Early Middle Korean contain more than a few lexical mysteries. Not only are the transcriptions rough and imprecise, they also contain what were surely numerous copying errors, where today we can only guess as to what the original meaning or intent might have been. But some of the *Jīlín lèishì* and *Hyangyak kugŭppang* transcriptions appear to be records of actual words that soon thereafter disappeared. Here are a few examples of vocabulary found in the *Jīlín lèishì* that left no traces in later texts: 稱 ‘dragon’ (in the 1925 edition of the *Shuō fú* text, the phonogram used is 珍), 阿尼 ‘Buddhist nun,’ 長官 ‘older brother,’ 漢吟 ‘young woman, female,’ 了寸 ‘married woman,’ 訓鬱 ‘mother’s older brother,’ 次鬱 ‘mother’s younger brother.’ Although scribal errors remain a very real possibility, these particular examples give every appearance of having been real words. For example, there are also traces of the word 阿尼 ‘Buddhist nun’ in texts from the Old Korean period. Among the Silla bureaucratic offices listed in volume 39 of the *Samguk sagi*, one finds 阿尼典 母六人, and volume 5 of the *Samguk yusa* contains the passage “The place where he met the woman was called 阿尼帖.”

There are also some examples in the *Hyangyak kugŭppang* of vocabulary that later vanished. They include this entry: “Dried seeds of *Citrus aurantium* (枳實) [are called] 只沙伊; the rind of *Citrus aurantium* (枳殼) [is called]

只沙里皮.” Now, in texts from the (late) fifteenth century and after, the word for this thick-skinned orange was the completely different form *thoyngco* 텅즈. But since the Late Middle Korean reading of the character for the tree, 枳, was *ki* 기 (1527 *Hunmong chahoe* 1.10), both of the earlier words were perhaps compounds containing that reading: **ki-sai* ‘citrus seeds,’ **ki-sali* ‘citrus rind.’ Here are other examples of vocabulary that was subsequently lost: (1) “White grubs [are called] 夫背也只”; (using fifteenth-century phonemic values) this form can be reconstructed as **pwupoyyaki*. Later, in LMK, the word for grubs and maggots was *kwumpeng* 굼병, *kwumpeng.i* 굼병이. (2) “Taro [is called] 毛立” (**mwoli*). By LMK times this word for ‘taro’ had been replaced by Sino-Korean *thwolan* 토란 (土卵 ‘earth egg’). (3) “Lead is called 那勿 (**namol*) in the vernacular.” By the sixteenth century, this word had disappeared completely from the textual record, replaced by the form *nap* 납. As we have already mentioned, **namol* gives every indication of being a lexical holdover from Koguryōan. That being the case, it is also possible that some of the unidentified words attested in the *Jīlín lèishì* were remnants of Koguryō vocabulary.

4.5.1 Borrowings from Mongolian

The Early Middle Korean period was a time of contact with Mongolian, principally through Yuan-dynasty China (1206–1367). We see this Mongol influence in the *Koryō-sa* (‘History of Koryō’), where some of the Koryō official ranks listed were taken directly from rank titles used by the Yuan. But those rank names, copied from Chinese sources, reveal little about the Korean language, because we have no records of their Korean pronunciations.

More useful are loanwords related to horses, falconry, and the military. This specialized vocabulary comprised almost all the rest of the lexical borrowing from Mongolian, and in such vocabulary we see the essence of the contact between Koreans and Mongols. The Mongols were a pastoral people, and words from their nomadic, military culture left a clearly defined mark on the Korean language. Here are attestations of such Mongolian words found in the sixteenth-century alphabetic works, *Pōnyōk Pak T’ongsa* (1517) and *Hunmong chahoe* (1527):

Equestrian vocabulary: *acilkey-mol* 아질게몰 ‘stallion’ < Middle Mongolian (MM) *ažirγa*; *aktay* 악대 ‘gelding’ < MM *ayta*; *celta-mol* 절다몰 ‘red horse’ < MM *že’erde*; *kala-mol* 가라몰 ‘black horse’ < MM *qara* ‘black’; *kwola-mol* 고라몰 ‘brownish horse, roan’ < MM *qula* ‘palomino’; *kwuleng-mol* 구렁몰 ‘chestnut horse’ < Written Mongolian (WM) *küreng*; *kwodolkay* 고들개 ‘crupper’ < WM *qudurγa*; *wolang* 오랑 ‘girth’ < MM *olang*.

Falconry vocabulary: *kalcikey* 갈지게 ‘brown hunting falcon’ < MM *qarciyai*; *kwekcin* 꺾친 ‘old wild falcon’ < WM *kögsin*; *nachin* 나친 ‘male Asiatic sparrow-hawk [*Accipiter nisus*]’ < WM *načün*; *pwola-may* 보라매 ‘immature hunting falcon’ < WM *boro* < **bora*; *sywongkwol* 송골 ‘[variant word for] falcon’ < WM *šingqor*, *šongqor*; *twolwongthay* 도롱태 ‘Asiatic sparrow-hawk [*Accipiter nisus*]’ < MM *turimtai*, WM *turimatai*, *turumtai*; *thwuykwon* 튀곤 ‘white hunting falcon’ < WM *tuiyun*.

Military vocabulary: *kwotwoli* 고도리 ‘blunt arrow’ < MM *γodoli*; *wonwo* 오노, *wonoy* 오너 ‘arrow notch, nock’ < WM *onu*, *oni*; *pawotal* 바오달 ‘military camp’ < WM *payudal*, MM *ba’u* (‘make camp’); *sawoli* 사오리 ‘stool (to stand on)’ < MM *sa’uri*, WM *sayuri*; *thyellik* 털릭 ‘officer’s uniform’ < WM *terlig*; *chywulachi* 추라치 ‘military musician who blows on a triton shell’ < WM *čuračĩ*.

There were also one or two Mongolian loanwords related to eating and drinking. One was *thalak* 타락 ‘milk’ < WM *talay*. Another possibility sometimes suggested was an honorific word used in the royal palace for meals served to the king, *sywula* 슈라 (水刺). The Middle Mongolian word *šülen* ‘soup,’ or a word related to it, might well be the source.

Another word borrowed from Mongolian was the subject of an interesting anecdote. Around the end of Koryŏ, the founder of the Chosŏn dynasty Yi Sŏnggye was in Unbong in Chŏlla Province chasing after Japanese pirates. At the time, there was a bold pirate chieftain, apparently no older than sixteen, who, according to a note in the *Yongbi ōch’ŏn ka* (7.10) was called “*aki pathwol*” (아기바톨 阿其拔都) by Korean soldiers. The note goes on to explain the name: “‘*aki*’ is Korean for ‘child’; ‘*pathwol*’ is the Mongolian word for a brave, unconquerable enemy.” This notation shows that the word *pathwol*, which was taken from Middle Mongolian *ba’atur* ‘hero,’ was widely used in Korea at the time.

4.5.2 Jurchen words

Since Jurchen lived in Hamgyŏng Province from the twelfth through the fifteenth centuries, that is where most traces of the language are found. A well-known example of a Jurchen place name is that of the Tumen River (known as Tuman-kang 豆滿江 in Korean), a waterway running along the boundary between North Korea and China in its upper reaches, then between North Korea and Russia as it flows into the East Sea. In notes to canto 4 of the 1447 *Yongbi ōch’ŏn ka* (1.8a), the river is called “Thwumen-kang (豆漫투먼江)” and the name explained as follows: “In the Jurchen language ‘ten

thousand' is *thwumen*; it was called that because a multitude of streams flowed into it." There are also numerous other Jurchen place names listed in the *Yongbi ŏch' ŏn ka*, the geographical annals of the *Sejong sillok*, and the *Tongguk yŏji sŭngnam* 東國輿地勝覽, a gazetteer published in the Chosŏn period during Sŏngjong's reign (1469–94). For example, in the *Yongbi ŏch' ŏn ka* (7.23a), the place name Wehe (斡合위허) is accompanied by the explanation, "In this place round stones are piled up, often more than 200 *chang* (600m.) high . . . In the [Jurchen] language 'rock' is *wehe*, and so the name comes from [the nature of] the land." There is a similar entry in the *Tongguk yŏji sŭngnam* gazetteer. Not only are these records in accord with extant Jurchen materials, the word for 'rock' used by the Manchus, a people believed to be descended from or closely related to the Jurchen, was also *wehe*. Another Jurchen word found in Korea was *tungken* 'bell,' which is attested in an old name for Chongsŏng (鐘城 'Bell City'). Chongsŏng, a city on the northern border of North Hamgyŏng Province, is located in the middle of erstwhile Jurchen territory, and its name bears witness to that origin. In the *Sejong sillok* geographical annals, the name is explained: "The northern barbarians call a bell *tungken* (童巾); the Tungken Mountain (童巾山) is in this district, thus the name [of the city]." There is also something else to be said about this word. In Jurchen materials, *tungken* (written 同青) meant 'drum.' (Not coincidentally, the Manchu word *tungken* meant the same thing.) Most likely, 'drum' was the original meaning, and when the Jurchen came into closer contact with Sinitic civilization, they extended the word's meaning to include 'bells,' which were new to their society. Notice that in Korean (as attested in the Late Middle Korean period), 'bells' were also at first called 'drums' (*pwup* 북), then later, 'iron drums' (*swoy-pwup* 쇠북). The semantic association in Jurchen between drums and bells seems to have been similar.

4.5.3 Sinitic vocabulary

Words associated with Chinese characters began to inundate the language in Middle Korean times. In order to strengthen royal authority, King Kwangjong (949–75) instituted a series of reforms, and these served as a spur to the growth in importance of Chinese. The centerpiece of the reforms was the establishment of a Chinese-style civil service examination in 958, an action guaranteeing a heightened attention to Chinese writings among the ruling classes. As a result, specialized and literary terminology from Chinese swelled the Korean lexicon, often at the expense of older, native words, which then fell into disuse. A glimpse of this process can be seen in the lexicon of the *Jilín lèishì*. There, for example, '100' was transcribed with the phonogram 百 (百曰百) representing the native word that would be written

won 文 in the fifteenth century), but ‘1,000’ was rendered only by the Chinese character for ‘1,000’ (千曰千). This transcriptional choice indicates that Koreans were then using the Chinese word for the larger number. Of course, since the native Korean word for ‘1,000,’ *cumun* 즈믄, was attested later, in fifteenth-century documents, both native and Chinese words for ‘1,000’ must have coexisted in the twelfth century. But the native word had already begun to be displaced by the Chinese term during the Koryŏ. And after the fifteenth century it disappeared completely from the textual record.

5 Late Middle Korean

Late Middle Korean is the stage of the language reflected in the Hangul texts of the fifteenth and sixteenth centuries. It is the earliest stage that is fully attested. Written records from before the invention of Hangul are fragmentary, unsystematic, and difficult to interpret; sound systems from earlier, pre-alphabetic periods must to a great extent be reconstructed. The use of the new alphabet changed that completely. The *Hunmin chŏngŭm* and the Hangul texts which followed it over the next century and a half present a fully developed and finely detailed picture of the phonological system, complete with transcriptions of its phonemes and allophonic variants. It is a contrast difficult to overstate: on the earlier side of this fifteenth-century divide there are hazy adumbrations; after 1446, there are precise and clearly defined written records. In quality and accuracy of phonological detail, the Hangul texts of Late Middle Korean are arguably the finest premodern linguistic records in the world.

Phonological and morphological quality is seldom matched by syntactic and stylistic quality, however. The body of Hangul works from this period consists mainly of vernacular exegeses of Chinese texts, and the compositional style is that of translation. In the fifteenth century there was already a long tradition in Korea of clarifying the reading of a Classical Chinese text through the use of *kugyŏl* inserted into the body of the text, and the creation of these exegeses, called *ŏnhae* (諺解), must have been influenced by the earlier notational tradition. As a result, it is difficult to find Late Middle Korean texts written in a style that reflected the syntax of natural, idiomatic Korean. Almost the only works thought to lack this stilted quality are the *Sŏkpo sangjŏl* of 1447 and the *Pŏnyŏk Pak T'ongsa* and *Pŏnyŏk Nogŏltae* of the early sixteenth century. Strictly speaking, the *Sŏkpo sangjŏl* also belongs to the *ŏnhae* genre, but the prose shows a natural stylistic quality that contrasts with that of other works of the period. The *Pŏnyŏk Pak T'ongsa* and *Pŏnyŏk Nogŏltae* are even more unusual; they are narratives written, for the most part, in everyday, conversational style.

Almost all Late Middle Korean Hangul texts were published in the Seoul capital. Many of these works, especially those issued early in the period, were

compiled in government offices, such as the Vernacular Script Commission (Ŏnmun Ch'ŏng 諺文廳) or the General Directorate for the Publishing of Sūtras (Kan'gyŏng Togam 刊經都監), and probably for this reason they reflect an extremely homogeneous language. Scholars from other parts of the country occasionally participated in the compilations, but for the most part the resulting works appear to represent the language then spoken by the upper classes of the central region.

5.1 Sources

5.1.1 Chinese

The alphabetic record of this period extends from the publication of the *Hunmīn chŏngŭm* in 1446 to the Japanese invasion of 1592. However, these are not the only records of Late Middle Korean, nor are they the earliest. A Chinese booklet called *Cháoxiān-guǎn yìyǔ* ('A Glossary from the Chosŏn Interpreters Institute' 朝鮮館譯語), which dates from around 1400, contains a list of Korean words transcribed with Chinese characters used as phonograms. Though similar in structure to the earlier, Koryŏ-period glossary, the *Jīlín lèishì*, this Korean glossary from Ming China reflects linguistic characteristics enough like those seen in Sejong's Hangul texts to be classified as a Late Middle Korean document. While far less revealing, the Chinese word list can be used to supplement information from the alphabetic texts.

The *Cháoxiān-guǎn yìyǔ* is contained in the *Hwá-Yí yìyǔ* ('Sino-Xenic Glossaries' 華夷譯語), a Chinese-government collection of word lists from various languages. These word lists, the compilation of which was begun in the early Ming dynasty (1368–1644), fall generally into four groups by origin. The oldest is the 1389 prototype for the compilation, called simply the *Hwá-Yí yìyǔ*, which was a collection of words from Mongolian. Following that first word list came the compilations produced by offices responsible for tributary affairs, the Translators Institute (四夷館) and the Interpreters Institute (會同館). Finally, the last and most recent of the word lists were those compiled by the Interpreters and Translators Institute, the office into which the two previous government offices were combined in 1748.

The *Cháoxiān-guǎn yìyǔ* was one of thirteen glossaries compiled by the Interpreters Institute. The compilations of the Interpreters Institute are difficult to date with any precision, but the *Cháoxiān-guǎn yìyǔ* appears to be among the earliest. Probably first compiled around the beginning of the fifteenth century, it later went through a few minor emendations. Several copies of the text are preserved in London and Japan, and all show small differences in content. Still, each of the copies contains 590 word entries, and each entry is formulaically divided into three parts. This three-part form is

illustrated by the first entry, “天 哈嫩二 忝.” The first part of the entry, 天, represents the Chinese word *tiān* ‘heaven.’ The middle part, 哈嫩二, is a representation, in phonograms, of the Korean word for ‘heaven,’ *hanol*. Using Mandarin approximations, the reader would presumably have read the transcription as something like *hānùr* (the third character, 二, which today is pronounced *èr*, was used to approximate the final liquid of the Korean word). The last part of the entry was the character 忝, which was another phonogram. Pronounced *tiǎn* in Mandarin, the phonogram was intended to represent the Korean reading of the Chinese character 天, which, at the time, was [tʃən].

5.1.2 Korean

The textual record of the Chosŏn dynasty is customarily classified by the reign dates of the dynasty’s kings. The first and most important era is that of Sejong, who presided over the early years of the alphabet, in the middle of the fifteenth century.

5.1.2.1 Fifteenth century

Sejong (r. 1418–50) The Korean alphabet, usually known today as Hangul, was promulgated in an official document known as the *Hunmin chŏngŭm* (‘The Correct Sounds for the Instruction of the People’ 訓民正音). First issued in a 1446 woodblock edition, the original printing of this document was bound together as a single book consisting of two parts, both of which were written in Classical Chinese. The first part is the *Hunmin chŏngŭm* proper. It is a small handbook of only four leaves that was intended to serve as a primer for teaching the new alphabet. The second part, the *Hunmin chŏngŭm haerye* (‘Explanations and Examples of the Correct Sounds for the Instruction of the People’ 訓民正音解例), is a long (29-leaf), scholarly treatise written by a group of young scholars commissioned by the king. It concludes with a postface written by Chŏng Inji, the head of the royal commission. This second part, the *Haerye* text, is our primary source of information about the shapes, construction, and use of the original Hangul letters; it provides an explanation of the phonological and philosophical theories upon which the writing system is based; and, finally, in the process of explaining the use of the alphabet, it provides an analysis of the Late Middle Korean phonological system, giving examples of words and sounds and how they were to be written. Most citations of linguistic information from the *Hunmin chŏngŭm* come from the *Haerye* text. Several copies of the *Hunmin chŏngŭm* have been preserved, but only one copy of the first edition containing the *Haerye* text is known to have survived. This unique and invaluable text was discovered in Andong, North Kyŏngsang Province, in

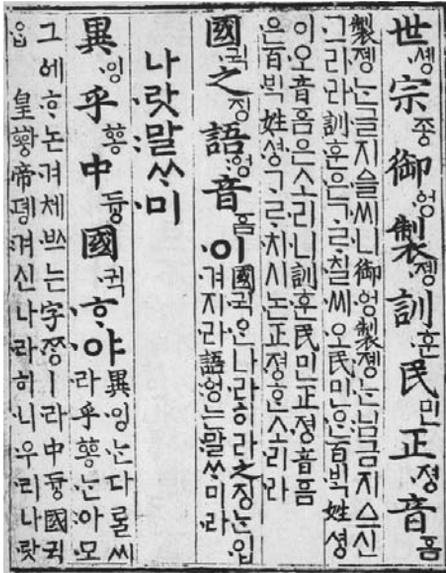


Figure 5. The Korean version of the *Hunmin chongum*. Though published in 1459, thirteen years after the original Chinese-language text, this Korean-language version is believed to have also been composed during Sejong's reign.

verse,¹ which in turn is followed by a Chinese commentary. The linguistic value of the text lies not only in the Korean stanzas, but also in many of the personal and place names embedded in the Chinese commentary. These names written in Hangeul and glossed in Chinese often provide the historical linguist with unique attestations of early morpheme shapes. The ten volumes of the first edition have all survived, but they are preserved in various different libraries in Korea. A later edition of uncertain date printed before the Japanese invasion, as well as still later redactions from 1612, 1659, and 1765, are preserved in the Kyujanggak Library of Seoul National University. The version most widely available to the public is a photocopy of the 1612 edition.

The *Sökpo sangjöl* ('Detailed Articles on the Record of Sakyamuni' 釋譜詳節) was the first of many Buddhist works to be published during the early Chosön dynasty. Distressed by the death of his queen in 1446, King Sejong

¹ However, there is ample reason to believe that the Chinese versions of the verses were composed first. According to the *Sejong sillok*, the king was planning the compilation in 1442, well before the announcement of the alphabet in 1443/4, and the evidence is that he was thinking only of creating Chinese verses at the time, not having yet conceived of creating Korean versions (see Ledyard 1998, p. 328).



Figure 6. “The Song of the Dragons Flying through Heaven”
 The collection of epic verses known as the *Yongbi ōch’ōn ka* was the first work of Korean literature ever written in the Korean alphabet. Shown here is the first canto.

urged his son, Prince Suyang (the later King Sejo), to head a group of writers and compile a devotional work in her memory. The compilation that resulted from this directive was completed in 1447. Of the estimated twenty-four original volumes of the *Sōkpo sangjōl*, only eight volumes (6, 9, 13, 19, 20, 21, 23, 24) from the first, movable-type edition survive. The copies of volumes 6, 9, 13, and 19 are complete; they are preserved today in the National Library. Fragments of the two volumes 23 and 24 are kept in the Tongguk University Library, and volumes 20 and 21 are in the Hoam Art Library. Later reprints of volumes 3 and 11 are extant and kept in private collections.

The *Wōrin ch’ōn’gang chi kok* (‘Songs of the Moon’s Imprint on the Thousand Rivers’ 月印千江之曲) was written about the same time, and published in 1447 as a companion piece to the *Sōkpo sangjōl*. According to the *Sōkpo sangjōl* preface, King Sejong was so moved by Prince Suyang’s work, he composed these Buddhist hymns of praise himself. Of the original three volumes of Sejong’s verse, which were apparently printed with the same



Figure 7. “Songs of the Moon’s Imprint on the Thousand Rivers”
 The *Wörin ch'ön'gang chi kok* consists of a series of Buddhist hymns
 composed by King Sejong.

movable type used for the *Sökpo sangjöl*, only volume 1 is known to still exist. This particular volume contains 194 poems, but all the verses of the *Wörin ch'ön'gang chi kok*, including those from the missing volumes, were later incorporated into the *Wörin sökpo*, and a number of volumes of this later work remain in existence. It is estimated that the original, complete text of the *Wörin ch'ön'gang chi kok* contained around 580 poems.

One of the major purposes of the new alphabet was to indicate the pronunciations of Chinese characters, and Sejong early on established a commission concerned with this task. The first work the commission compiled was the *Tongguk chŏngun* (‘The Correct Rimes of the Eastern Country’ 東國正韻), which was completed in 1447, then printed and distributed to schools in November, 1448. The *Tongguk chŏngun* is a six-volume dictionary of Chinese characters issued as an official standard for Sino-Korean pronunciations. The pronunciations that it contains are very much prescriptive and intended to “correct” the Chinese character pronunciations then in use in Korea. And though it ultimately failed to accomplish this objective, the artificial pronunciations the *Tongguk chŏngun* specified were followed

carefully in the Hangul writings published over the next few decades. In 1940, the first and last volumes (1, 6) of the dictionary came to light and are kept today in the Kansong Library; then, in 1972, a copy of the complete text was found and is now in the possession of Kŏn'guk University. Another compilation of Chinese characters, the *Hongmu chŏngun yŏkhun* ('The Correct Rimes of Hong Wu, Transliterated and Glossed' 洪武正韻譯訓), was published in 1455. Printed in sixteen volumes, this dictionary gave the pronunciations in Hangul for all of the characters in the 1375 Ming Chinese dictionary, the *Hóng wǔ zhèng yùn* 洪武正韻. But the *Hongmu chŏngun yŏkhun* differed from the *Tongguk chŏngun* in that it was meant to record the Chinese pronunciations of characters, not Korean ones. A copy of the *Hongmu chŏngun yŏkhun* is in the possession of Koryŏ University, but it is missing the first two volumes, as well as a few Hangul transcriptions in other volumes, which were apparently cut out and removed. Because the *Hongmu chŏngun yŏkhun* was so voluminous, it was abridged and published as the *Sasŏng t'onggo* ('A Thorough Investigation of the Four Tones' 四聲通攷). Although that latter work has not survived, it was used by Ch'oe Sejin as the basis for his 1517 dictionary, the *Sasŏng t'onghae* ('A Thorough Explanation of the Four Tones' 四聲通解), a work in which he also reproduced the original introductory material. All of these lexical works provide valuable information for research on the history of Chinese phonology.

Sejo (r. 1455–68) The *Wŏrin sŏkpo* (月印釋譜) (twenty-five volumes, 1459) puts together the *Wŏrin ch'ŏn'gang chi kok* and the *Sŏkpo sangjŏl*. This later, combined edition of the two works underwent considerable expansion and revision and was then published in a woodblock edition. Until recently, only the first volume, along with the copy of the *Hunmin chŏngŭm ōnhae* attached to it, was believed to survive from the original printing, but in recent years a number of other volumes have also been discovered. Nevertheless, many of the volumes of that first run are still missing, and most of what is extant comes from later reprints and recut woodblock editions found in various Buddhist monasteries. The *Wŏrin sŏkpo* was long thought to consist of only twenty-four volumes, but more recently volume 25 was also found.

In 1461 King Sejo established the General Directorate for the Publication of Sūtras (Kan'gyŏng Togam 刊經都監), and the first work this office compiled and published was the *Nūngŏm kyŏng ōnhae* ('A Vernacular Interpretation of the Sūrangama sūtra' 楞嚴經諺解). The ten volumes of the text were originally published that same year, in 1461, in a movable-type edition, then, the following year, in a woodblock printing. A number of other Buddhist works soon followed: The *Pŏphwa kyŏng ōnhae* (法華經諺解) (seven volumes, 1463); the *Kūmgang kyŏng ōnhae* ('The Diamond sūtra' 金剛經諺解) (one volume, 1464); the *Sŏnjong yŏngga chip ōnhae* (禪宗永嘉集諺解) (two volumes, 1464); the *Amit'a kyŏng ōnhae* (阿彌陀經諺解) (1464); the *Panyasim kyŏng ōnhae* (般若心經諺解) (1464); the *Wŏn'gak kyŏng ōnhae* (圓覺經諺解) (twelve volumes, 1465); the

Moguja susimgyŏl ōnhae (牧牛子修心訣諺解) (one volume, 1467). First editions of these works are extremely rare; most of the various extant copies are reprints or recut woodblock editions. What is usually called the *Odaesan Sangwŏnsa chungch'ang kwŏnsŏnmun* (五臺山上院寺重創勸善文) of 1464 is composed of two things: a royal letter sent by King Sejo and his queen offering aid for the repair of the Sangwŏn Temple, and the *Chungch'ang kwŏnsŏnmun* document itself, written by the Buddhist monk Sinmi (信眉). Although these texts are very short, they are of special interest because they are handwritten. They are kept today in a repository of the Wŏlchŏngsa Temple in Kangwŏn Province. Another text written in Korean script during the reign of King Sejo, but with no connection to Buddhism, is the *Kugŭppang ōnhae* ('A Vernacular Interpretation of Prescriptions for Emergency Treatment' 救急方諺解). The two volumes of this work were written around 1466, but still extant are only two copies of a later recut woodblock edition (one preserved in the Hōsa Library in Japan, and the other in the Karam Library of Seoul National University). The text is the oldest pharmacological work written in Korean script.

Sŏngjong (r. 1469–94) Although interest in Buddhism waned after the death of King Sejo, Buddhist works continued to be published throughout the reign of his successor, King Sŏngjong. The *Mongsan Hwasang pŏbŏ yangnok ōnhae* (蒙山和尚法語略錄諺解) (one volume), a Korean version of a popular work from the Chinese tripitika, is believed to have been printed in 1472. This text is characterized by an extremely conservative orthography that gives it the appearance of a much older work. The *Kūmgang kyŏng samga hae* (金剛經三家解) (five volumes) and the *Yŏngga taesa chūngdo ka Nammyŏngch'ŏn sŏnsa kyesong ōnhae* (永嘉大師證道歌南明泉禪師繼頌諺解) (often abbreviated to *Nammyŏng-chip ōnhae* 南明集諺解, two volumes) were published in 1482. (They are now kept in the library of Seoul National University.) The *Pulchŏng simgyŏng ōnhae* (佛頂心經諺解) (three volumes) and the *Yŏnghŏm yakch'o* (靈驗略抄) (one volume) were both published in 1485, and it is noteworthy that they are the last Korean interpretations of Buddhist works that follow the prescriptive pronunciations of Chinese characters laid down in the *Tongguk chŏngun*. (Both are now in the possession of Seoul National University.)

From the beginning, Sejong had planned to produce vernacular editions of some of the more important works in the Confucian canon, but, for one reason or another, these projects had been largely set aside. Then, as interest in Buddhism faded and the state became more strongly neo-Confucian, works of this genre began to appear. Didactic works became a focus of attention during Sŏngjong's reign. The *Naehun* (內訓) (three volumes), published in 1475, was a work the Queen Mother Insu Taebi had compiled as a moral guide for aristocratic ladies. The oldest version of this work still in existence

today is a reprint from 1573 (in possession of the Hōsa Library in Japan), which bears traces of alterations added to the original edition. Sejong himself had been particularly interested in the teaching of neo-Confucian morality, and toward that end he had had assembled a collection of stories illustrating virtuous behavior by loyal subjects, filial sons, and faithful wives. The resulting book of anecdotes, which was published in Chinese in 1434, was called the *Samgang haengsil to* ('The Three Bonds and Actual Examples of Their Practice, with Illustrations' 三綱行實圖). Around the time the alphabet was invented, there had been some discussion of a Korean translation, but the work remained available only in Chinese during Sejong's reign. Then, in 1481, more than three decades after his death, a Korean version was finally published, and in various editions, it remained a popular work up until the end of the dynasty. Just when this Korean translation was actually made is not known, but, judging from the conservative nature of the orthography seen in the use of the symbols ㄹ and ㅍ, it appears to have been completed at a much earlier time. Of the various editions still in existence, the oldest is the one preserved in the Sōngam Library, which is possibly the first edition.

A variety of secular writings were published during Sōngjong's reign. An especially popular work of this kind was the Korean exegesis of the Tang poet Dù Fū's poems, the *Pullyu Tu kongbu si ōnhae* (分類杜工部詩諺解), the title of which is customarily shortened to *Tusi ōnhae* (杜詩諺解) (twenty-five volumes). Compiled by the scholar Cho Wi at the king's command, the work was finished in 1481, but a complete copy of the first edition has as yet not been found. Still missing are volumes 1, 2, and 4. (Most of the extant volumes are in the possession of Yi Kyōmno.) Du Fu's verses were widely read and loved in traditional Korea, and the literary quality of this Korean translation was high. It is one of the best of the *ōnhae* genre. For both qualitative and quantitative reasons, the *Tusi ōnhae* is especially valuable as material for linguistic research. One noteworthy feature of the text is that it is the first work not to follow the prescriptive values laid down for Sino-Korean readings during Sejong's reign. Although it does not usually give sound glosses for Chinese characters, the transcriptions of words of Sino-Korean origin are believed to follow actual pronunciations.

The *Kugŭp kani pang* ('Simplified Prescriptions for Emergency Treatment' 救急簡易方) (eight volumes) was a pharmacological work compiled in 1489 based upon the earlier *Kugŭppang ōnhae*. Only later recut woodblock editions of this work survive. When the high-ranking scholar-official Kang Hūmaeng retired from office to his home in Kūmyang (present-day Sihŭng, just south of Seoul), he wrote a treatise on agricultural practices called the *Kūmyang chamnok* (衿陽雜錄). This comprehensive essay was published in 1492, and a copy is preserved today in the Japanese Cabinet Library. In the same year, 1492, the Chosŏn dynasty Interpreters' School (司譯院) published a Korean

version of the Japanese *Iroha* (伊路波) poem, a copy of which can be found today in the collection of Kagawa University in Japan. By transliterating the Japanese syllabary into Hangul, this textbook of Japanese provides phonetic information valuable for historical research on Japanese phonology. It is the only language text published by the Interpreters' School in the fifteenth century that still survives.

Yōnsan'gun (r. 1494–1506) During Prince Yōnsan's short reign as monarch, two representative Hangul writings were published: the *Yukcho pōppodan kyōng ōnhae* (六祖法寶壇經諺解) (three volumes) and the *Sisik kwōn'gong* (施食勸供) (two volumes). Both of these Buddhist works were printed in 1496 at the behest of the Queen Mother Insu Taebi, who considered them important, the *Sisik kwōn'gong* in particular, because it was a translation of texts needed for the Buddhist mass, the *Chinōn kwōn'gong* 眞言勸供 and the *Samdan sisik* 三壇施食. (Copies of these two volumes, as well as the first volume of the *Yukcho pōppodan kyōng ōnhae*, are maintained in the Ilsa Library.) The *Yukcho pōppodan kyōng ōnhae* and the *Sisik kwōn'gong ōnhae* broke with tradition by not following the prescriptive pronunciations specified by the *Tongguk chōngun*, and, by transcribing the actual readings of Chinese characters, mark a turning point in the textual record.

5.1.2.2 Sixteenth century

While the alphabetic works of the fifteenth century have received a great deal of attention ever since the beginning of the twentieth century, research on the sixteenth-century corpus began in earnest only in the 1950s. (The lone exception is the 1527 Sino-Korean glossary *Hunmong chahoe*.) Nevertheless, a significant number of Korean-language works were published during the reigns of Chungjong and Sōnjo in particular, and it is fortunate indeed that copies of almost all of these texts have now been found. In Korea itself, not a few have been completely lost, but in Japan, where a great number of Korean books are believed to have ended up during and after the Imjin Wars, many of these still exist. Writings of the sixteenth century are of particular importance because they make it possible to determine how the language changed between the Middle Korean and Early Modern stages.

Chungjong (r. 1506–44) Books published during the reign of Chungjong include: the *Sok Samgang haengsil to* (續三綱行實圖) (1514), the *Iryun haengsil to* (二倫行實圖) (1518), the *Pōnyōk sohak* (翻譯小學) (1518), the *Yōssi hyang-yak ōnhae* (呂氏鄉約諺解) (1518), the *Chōngsok ōnhae* (正俗諺解) (1518), the *Kani pyōgon pang* (簡易辟瘟方) (1525), the *Uma yangjō yōmyōkpyōng ch'iryō pang* (牛馬羊猪染疫病治療方) (1541), the *Punmun onyōk ihae pang* (分門瘟疫易解方) (1542), as well as the various works written by Ch'oe Sejin.

The *Sok Samgang haengsil to* (one volume) was patterned after its predecessor, the *Samgang haengsil to* of 1434, and as a result its orthography is peculiarly archaic. The letters ㄹ and ㅍ, for example, are used in its spellings, even though the two symbols were by that time ordinarily no longer in use. The first edition of the *Sok Samgang haengsil to* is missing, and the reprint found in the Karam Library is believed to be the oldest known copy. The *Iryun haengsil to* portrays in writing and in illustrations exemplary acts bearing on the relationship between the old and the young, and the relationship between friends (a copy of the first printing is extant and preserved in the Oksan Reading Room in Wölsöng County, North Kyöngsang Province; another is kept in the library of Ehwa University). Seven volumes of the *Pönyök sohak* ('A Translation of [Zhu Xi's] "Lesser Learning" ten volumes) are extant (volumes 3, 4, 6, 7, 8 at Koryö University, 9 in the Karam Library, and 10 at the National Library), and all appear to be from a later edition. The *Yössi hyangyak önhæ* and the *Chöngsok önhæ* are both translations by Kim An'guk of Chinese books about villagers helping each other and following codes of ethics and proper customs. Both contain *kugyöl* marking as well as Hangul to explicate the texts. Copies in excellent condition can be found in the Sonkeikaku Library in Tokyo, and in the collection of Yi Wönju. The *Kani pyögon pang* and the *Punmun onyök ihæ pang* are medical works intended to teach methods of treating infectious diseases, and the *Uma yangjö yömyökpöng ch'iryo pang* is a book about the pharmacological treatment of veterinary diseases. The first printings of these three works have not been found, but the contents can be recovered through later reprints.

Throughout the Late Middle Korean period, Hangul was not considered a primary medium of literacy. That role, after all, was served by Chinese characters and Classical Chinese, and the supremacy of Chinese writing remained unchallenged. As a result, the vernacular writing system was employed only as a practical, linguistic tool. Hangul was used to explicate the reading of Chinese texts and the pronunciation of Chinese characters, and, for Buddhist doctrine and neo-Confucian ethics and ideology, a method of disseminating information and proselytizing.

Nothing illustrates this practical aspect of the vernacular script better than the pedagogical works of the Interpreters' School, and the central figure in this foreign language pedagogy was Ch'oe Sejin. As professor of Chinese and a renowned interpreter of that language, Ch'oe wrote a wide variety of pedagogical and lexical works for which he is still much admired. His dictionaries, textbooks of colloquial Chinese, and other pedagogical materials reveal much to us today about how both Korean and Mandarin Chinese were spoken at the time. Among the most important of his works were the Korean versions of the textbooks *Nogöltæ* ('The Old Cathayan' 老乞大) and *Pak T'ongsa* ('Interpreter Pak' 朴通事). The first volume of *Pönyök Pak T'ongsa*

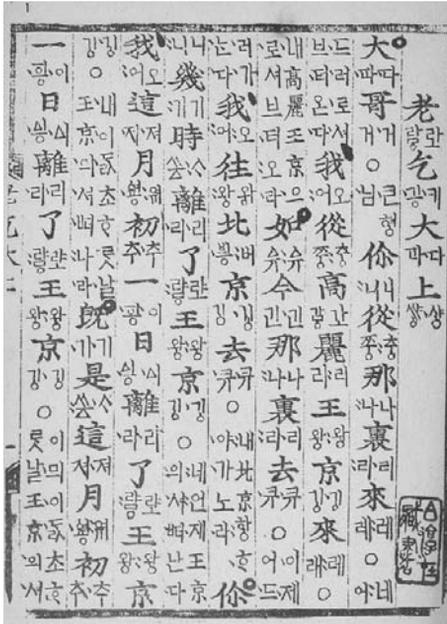


Figure 8. The Chinese-language textbook, “The Old Cathayan”

Although the *Pönyök Nogöltae* was a textbook for learning colloquial Chinese, it was, ironically, also one of the very few early Korean works written in natural, conversational Korean.

(翻譯朴通事) (two volumes, c. 1517), which is now kept in the ROK National Assembly Library, is from the first, movable-type edition. His translation of *Nogöltae* (翻譯老乞大) (two volumes, c. 1517) was also first printed with movable type, but both volumes now extant are from a later, woodblock edition. Although the date of this latter edition is unknown, it is believed to have been published before the Imjin Wars. (The first volume of *Pönyök Nogöltae* is in the possession of Paek Sunjae, and the second volume is in the Söngam Library.) In addition, there also exists a third work, the *No-Pak chimnam* (老朴集覽), which is a collection of annotated notes on the important words and phrases found in both texts; this volume is in the possession of Tongguk University. It is not known with any certainty what year any of these three works was published, but they are believed to have been issued in the second decade of the sixteenth century. As we mentioned earlier, Ch’oe Sejin’s 1517 dictionary, the *Sasöng t’onghae* (two volumes), was a reworking of Sin Sukchu’s *Sasöng t’onggo*. The *Sasöng t’onghae* is important for its Hangeul transcriptions of the Chinese readings of characters; it also records more than 460 Korean lexical items. The first edition was set in movable type, and an original copy was formerly in the possession of



Figure 9. The sixteenth-century Chinese–Korean glossary, *Hunmong chahoe*. This dictionary gives the natural Korean reading of each character together with a corresponding native Korean word. It is also the source of the Korean alphabetical order and the names used today for the Hangul letters.

Song Sōkha, but today its whereabouts are unknown. The copies presently to be found in the Kyujanggak Library are ones printed soon after the Imjin Wars.

The work for which Ch'oe Sejin is best known, however, is his 1527 Sino-Korean glossary, the *Hunmong chahoe* ('Collection of Characters for Training the Unenlightened' 訓蒙字會). It is this work for which he has justifiably been most praised. Intended as a pedagogical compilation, the *Hunmong chahoe* gives both Sino-Korean and native Korean readings, as well as definitions, for 3,360 Chinese characters. What sets Choe's dictionary apart from earlier compilations is that its Sino-Korean readings reflect actual pronunciations, not prescriptive standards, and for this reason it is the earliest systematic source of Sino-Korean pronunciations. In addition, the *Hunmong chahoe* is the source of the alphabetical order and names of the Hangul letters used today. A copy of the original, movable-type edition, as well as a woodblock redaction of the text published immediately after the original, can be found in Japan, in the Eizan Library in Shiga Prefecture and the Tokyo University Central Library.

Sŏnjo (r. 1567–1608) Several books published during the reign of Sŏnjo are linguistically useful today. The *Ch'iltae manpŏp* (七大萬法) (one volume) is a Buddhist book published in 1569. According to its inscription, the book was first printed in the Hŭibang Temple of the Sobaek Mountain in the P'unggi area of North Kyŏngsang Province. This work is unusual in that, first of all, the text contains no Classical Chinese and instead is written in a mixed style of Chinese characters and Hangul. Another unusual feature of the text is that it reflects dialect elements from Kyŏngsang. The *Sŏn'ga kwigam* (禪家龜鑑) was originally a Chinese-language introduction to Zen Buddhism written by the priest Sŏsan (Hyujŏng) in 1564, and the Pohyŏn Temple issued a vernacular exegesis of that work in 1569 (a copy is preserved in the private collection of Lee Ki-Moon). Three editions of the *Ch'ŏnjamun* ('The Thousand Character Classic' 千字文) published before the Imjin Wars are preserved in Japan. One was printed in Kwangju in 1575; it is kept in the Ogura Library of Tokyo University. It is characterized by very conservative Korean forms used to explicate the Chinese characters. Similar but with certain differences is the edition in the collection of the Daitōkyū Memorial Library in Tokyo; the publication date of this work is unknown. The third edition is a first printing of the so-called *Sŏkpong Ch'ŏnjamun* (石峰千字文) published in 1583 and is kept in the Japanese Cabinet Library. This edition shows many points of difference from the later, "Kapsul" reprint of 1754(?), which is often reproduced in Korea. The *Sinjŭng yuhap* (新增類合) (two volumes), a lexical work compiled by Yu Hŭich'un and published in 1576, gives Korean explications and readings for 3,000 Chinese characters. Copies in excellent condition can be found in both Korea and Japan (in the possession of Kim Tonguk and the Tōyō Bunko). Two printed versions of the *Yaun chagyŏng* (野雲自警), the *Palsim suhaengjang* (發心修行章), and the *Kyech'o simhak inmun* (誠初心學人文), have been preserved. One of these two Buddhist compilations is from 1577, and the other is from 1582. The print notice for the first indicates that it comes from the Songgwang Temple on Chogye Mountain in the Sunch'ŏn area of Chŏlla Province (several copies of this work are extant); the print notice of the other states that it originated in the Sŏbongsa Temple on Kwanggyo Mountain in Yongin, Kyŏnggi Province (there are only two known copies of this rare work, one in the Yŏngnam University Library and the other in the Ogura Library in Tokyo).

Vernacular exegeses of the "Lesser Learning" and the "Four Books" were published in the government office known as the Kyojŏng Ch'ŏng (校正廳), and these are the last materials that show the characteristics of the Middle Korean stage of the language. (All are in the possession of the Tosan Sŏwŏn.) The first of these texts to be finished was the exegesis of the "Lesser Learning" (*Sohak ŏnhae* 小學諺解) (six volumes). Published in 1588, an inscription indicates that the work was completed in 1587. As is pointed out in the postface, this book was unlike the relatively free-flowing *Pŏnyŏk Sohak*, because it was based upon a more literal translation of the Chinese

original. The Korean versions of the “Four Books” (*Sasŏ ōnhae* 四書諺解) – the “Great Learning” (大學諺解), the “Doctrine of the Mean” (中庸諺解), the “Analects of Confucius” (論語諺解), and the “Mencius” (孟子諺解) – have no postface or print notice, but from a dedication inscription it can be surmised that they were published in 1590. The Korean version of the “Canon of Filial Piety” (孝經諺解) (one volume) was published in 1590 and is preserved in Japan in the Sonkeikaku Library. Although this book was not published in the Kyojŏng Ch’ŏng, it bears the features of works from that office.

5.2 The Korean alphabet

In traditional East Asia, phonology began with the syllable. As the sound unit represented by a Chinese character, it was thought of as the building block of language. Fairly early on, however, the Chinese realized that syllables could rime, they could alliterate, and so on; by about the fifth century AD they knew that syllables could be classified into four tonal categories. These structural regularities made the syllable amenable to analysis. Before that time, the only way to transcribe pronunciation was with a homophone. But now, with expanded knowledge, the Chinese were able to develop a better method. They realized that if two syllables alliterated, they shared the same first sound, which they (later) called the “character mother” (字母). If two syllables shared all the rest of their sounds, they were said to have the same “rime mother” (韻母). Thus, the pronunciation of a syllable could be indicated with two characters, one alliterating character to gloss the initial sound, and a second character sharing everything besides the initial to gloss the rest of the syllable. This Chinese spelling method was called *fǎnqiè* (反切), or “turning and cutting,” and it was how pronunciations were indicated in all Chinese dictionaries up until modern times. In this division, there was no explicit awareness of discrete consonants and vowels, but, in effect, specifying the “character mother” was to identify the initial consonant (if the syllable began with a vowel, the initial consonant was zero). The *fǎnqiè* method of spelling represents a discovery that the syllable could be divided into two separate units, and this discovery made Chinese phonological science possible. It gave Chinese scholars a way to record, after a fashion, the phonological system of their language.

In Korea, this syllabic phonology of the Chinese was adapted and greatly improved upon. Whereas the Chinese division of the syllable had been into two parts, in Korea, with the invention of the Korean alphabet, the analysis changed into a three-way division. This new, Korean analysis appeared for the first time in the promulgation document for the alphabet, the *Hunmin chŏngŭm*, where the syllable is divided into an “initial sound” (初聲), a “medial sound” (中聲), and a “terminal sound” (終聲). In modern phonemic analyses, “initial sounds” and “terminal sounds” have equal standing as phonological units since they are all identified as consonants. But for Sejong the initial sounds were more basic

because they were the departure point provided by the Chinese-style framework. His innovation was that he realized the initials could be equated to sounds occurring at the end of the syllable: “For the terminal sounds, one again uses the initial sounds,” he wrote. That was all he chose to say about the terminals. Since the initial sounds had all been listed and explained, the terminal sounds did not need to be given again because they were the same. The part of the syllable that remained was the “medial sound,” which we recognize as the vocalic element. Thus arose the discovery of the vowel, for which separate symbols were devised, making the new writing system into a true alphabet.

5.2.1 The initial sounds

The *Hunmin chŏngŭm* provides seventeen letters for initial sounds. The sounds associated with the letters are illustrated with Chinese characters (using prescriptive pronunciations later spelled out in detail in the *Tongguk chŏngun* of 1447). The reason is that, as the *Haerye* explains: “The initial sounds of the [new writing system] are equivalent to the Character Mothers of the rime books.”² In addition, the *Hunmin chŏngŭm* notes that six of the letters (ㄱ, ㅋ, ㆁ, ㆁ, ㆁ, ㆁ) could be doubled and used as geminates. These geminate spellings (ㄱㄱ, ㅋㅋ, ㆁㆁ, ㆁㆁ, ㆁㆁ, ㆁㆁ) were not ordinarily used to write Korean, but they were provided for in order to transcribe the “wholly muddy” sounds of the Chinese rime books. The following is a display of the *Hunmin chŏngŭm* letters and the Chinese characters used to gloss them. The categories of classification are the conventional ones of Song Chinese philology:

	Molars	Linguals	Labials	Incisors	Laryngeals	Semi-lingual	Semi-incisor
	(牙音)	(舌音)	(唇音)	(齒音)	(喉音)	(半舌音)	(半齒音)
Wholly clear (全清)	ㄱ 君	ㅋ 斗	ㆁ 驚	ㆁ 郎 ㆁ 戍	ㆁ 搥		
Partly clear (次清)	ㅋ 快	ㆁ 吞	ㆁ 漂	ㆁ 侵	ㆁ 虛		
Wholly muddy (全濁)	[ㄱ] 𪛗	[ㅋ] 覃	[ㆁ] 步	[ㆁ] 慈 [ㆁ] 邪	[ㆁ] 洪		
Neither clear nor muddy (不清不濁)	ㅇ 業	ㆁ 那	ㆁ 彌		ㅇ 欲	ㆁ 閭	ㆁ 穰

5.2.1.1 Initial letter shapes

The rationale behind the letter shapes is detailed in the *Hunmin chŏngŭm haerye* section entitled “Explanation of the design of the letters.” First, five

² Throughout this work, the translations of passages from the *Hunmin chŏngŭm* are taken from Ledyard (1998).

“basic” letters were created. In each case, the shape of the basic letter was modeled on the articulatory organs used to pronounce the sound it represented:

The molar sound ㄱ [k] depicts the outline of the root of the tongue blocking the upper palate.

The lingual sound ㄴ [n] depicts the outline of the tongue touching the upper palate.

The labial sound ㅁ [m] depicts the outline of the mouth.

The incisor sound ㄷ [s] depicts the outline of the incisor.

The laryngeal sound ㅇ [∅] depicts the outline of the throat.

The five sounds represented by these basic letters were considered the “weakest” of the sounds pronounced at each position in the mouth.³

The remaining letters represent stronger sounds, which were derived by adding strokes to the basic shapes. Each added stroke makes the sound more “severe”:

The sound of ㅋ [kh] is a little more severe than that of ㄱ [k]; therefore a stroke is added.

ㄴ [n] then ㄷ [t]; ㄷ then ㅌ [th].

ㅁ [m] then ㅂ [p]; ㅂ then ㅃ [ph].

ㄷ [s] then ㅈ [c]; ㅈ then ㅉ [ch].

ㅇ [∅] then ㅊ [q]; ㅊ then ㅌ [h].

The consonants ㄹ [l] and ㅅ [z] fall outside this pattern, because the addition of strokes did not make them “more severe.” However, it was explained that: “The semi-lingual sound ㄹ [l] and the semi-incisor sound ㅅ [z] also depict the outlines of the tongue and the incisor [respectively], but the outlines are altered; in these cases there is no propriety for adding strokes.”

5.2.1.2 Initial letter usage

In the “Examples of the use of the letters” section, the *Haerye* shows each letter used in two native words. Thus, no examples are given there for the geminates (ㄲ, ㄴㄴ, ㅁㅁ, ㅅㅅ, ㅆㅆ, ㅎㅎ), because those symbols were primarily intended for the transcription of Chinese. Moreover, as is explained elsewhere (using native words as illustrations), ㅆ (ss) and ㅎㅎ (hh) represent the “combining of letters,” not unitary initials.

The laryngeal ㅊ [q] is also omitted from this section. That is because, like the geminates, the letter was created for the representation of Chinese character pronunciations. Throughout the reigns of Sejong and Sejo, there were only two ways in which this letter was used for anything else. The first was to

³ As can be seen, three of the “basic” sounds belonged to the “neither clear nor muddy” row. A salient exception was the “molar sound” ㄱ [k], which, the *Haerye* explains, was chosen as basic because the pronunciation of ㅇ [ŋ] was “too similar” to the laryngeal ㅇ [∅].

represent the prospective modifier *-ulq/olq*; e.g., *hwolq (kes)* 훗 것 ‘(something) to be done’; *palo.l_ol kennesilq (cey)* 바르를 건너실 (제) ‘(at the time) they crossed the sea’ (*Yongbi* 18).⁴ The second, a usage found in the two texts *Yongbi ōch’ōn ka* and *Hunmin chōngūm ōnhae*, was to replace the “genitive *s*” (사_이 ㅅ) in certain environments. In the *Yongbi ōch’ōn ka*, the letter was used to transcribe the “genitive *s*” when the morpheme followed a vowel and came before the word *ptut* ‘meaning, intent’; e.g., [*SYEN KHWOW*] *q ptut* 先考 ㅅ 뜻 ‘his deceased father’s will’ (12), *hanolq ptut isini* 하늬 ㅅ ㅍ디시니 ‘since it is heaven’s will’ (4). In the *Hunmin chōngūm ōnhae*, the symbol was used after a vowel and before the Sino-Korean word *CCO* ‘character, letter’; e.g., *KHWAY q CCO* 快靛 ㅅ 字 諺 ‘the character *KHWAY*,’ *NA q CCO* 那 諺 ㅅ 字 諺 ‘the character *NA*.’ This second usage can be found sporadically in a few later texts, as well.

Another letter, the so-called “light labial” ㄹ [β], was added to the list of initials. The letter had been mentioned in the basic text and briefly described there as the symbol ○ written below the labial ㅍ to represent a “light sound,” but that was all that was said about it; the symbol was not actually shown. In this section, however, ㄹ is treated as an initial letter. Two examples of its usage are given, because, unlike ㅍ, it represented a Korean “initial sound,” not a Chinese one.

In the middle of the fifteenth century, the symbol ○ [ŋ] (with a little vertical mark on top of the circle) was often used as an initial letter, but gradually, as time went on, it fell into disuse. In texts from the middle of the sixteenth century, a few examples of the symbol can be found; after that, it disappears completely from the textual record.

5.2.1.3 Complex initials

Two or three initial letters could be written together, either as clusters or as geminates. As we have said, the geminates (ㄱ, ㄲ, ㅃ, ㅆ, ㅈ, ㅉ) were used primarily in the artificial readings of Chinese characters. In native words, they are sometimes found in medial position; for example, *ma.ccoWi* 마쯔비 ‘respectful meeting’ (*Yongbi* 95). Most commonly, however, a geminate spelling in a native string represents the doubling of an initial consonant after the prospective modifier *-ulolq*; for example, *azoWol kka* 아스홀까 ‘shall it be known?’ (*Yongbi* 43), *swumwul kkwum.k_i* 수물 꿈기 ‘hole to hide’ (*Wōrin* 2.51), *pwol ttini* 볼띠니 ‘since one will see’ (*Wōrin* 8.38). (Notice that the ㅍ [q] of the prospective modifier is not written when the geminate spelling is used.) Otherwise, the geminates are not ordinarily found in native words.

⁴ These forms can also be found without the letter: *hwol (kes)* 훗 (것); ... *kennesil (cey)* 건너실 (제).

The exceptions are *ss* (ㅍㅍ) and *hh* (ㅎㅎ) – and to this can be added the curious geminate spelling ㅍㅍ. The *Haerye* explains: “Initial letters can be used side by side with themselves: vernacular speech [i.e., native Korean] *hye* 혀 ‘tongue,’ but *hhye* 햐 ‘pull’; *kwoyye* 꺾여 ‘loving someone,’ but *kwoyGye* 꺾여 ‘being loved by someone’; and *swota* 소다 ‘turn something over,’ but *ssota* 쏸다 ‘shoot something.’”

Another unusual geminate, the double letter ㄴ (nn), can be found in the *Hunmin chŏngŭm ŏnhae*: *tan.nonila* 다ㄴ니라 ‘[the tip of the tongue] touches [the upper teeth].’ But this spelling can only be considered an orthographic anomaly. The expected transcription would be **tan.nonila* 단느니라.

Beginning with the *Wŏn’gak kyŏng ŏnhae* in 1465, initial geminates almost disappear from the textual record. Thus, in subsequent texts, words such as *ssu*- 쓰- ‘write,’ *sswo*- 쏘- ‘shoot,’ and *hhye*- 햐- ‘pull’ are spelled *su*- 스-, *swo*- 소-, and *hye*- 혀-. In other words, what we now know to have been a phonemic distinction between plain obstruents and reinforced obstruents was, for the most part, ignored in the orthography. In the sixteenth century the original distinctions were restored, and in texts from then on, the double-*s* spelling, ㅍㅍ, is again found in word-initial position. But the double-*h* geminate ㅎㅎ was not revived; it was never used again.

Initial clusters were treated separately from geminates. The *Haerye* explains clusters this way: “As the initial sound, two or three letters may be used together and written side by side. For example, vernacular speech *sta* ㅅㅏ ‘earth,’ *pcak* ㅍㅏ ‘one of a pair,’ and *pskum* ㅍㅅㅑ ‘crack, opening.’” In texts of the Late Middle Korean period, the clusters *sk*-, *st*-, *sp*-, *pt*-, *ps*-, *pc*-, *pth*-, *psk*-, *pst*- (ㅅㄱ, ㅅㅌ, ㅅㅍ, ㅍㅌ, ㅍㅅ, ㅍㅈ, ㅍㅊ, ㅍㅊ) are commonly found at the beginning of words. And, although extremely rare, there is also an anomalous *sn*- ㅅㄴ cluster; e.g., *snahoy swoli kasnahoy swoli* ㅅㅏㅎㅣ소리 ㅅㅏ나ㅎㅣ소리 ‘a man’s sound, a woman’s sound’ (*Sŏkpo* 19.14), *snahoy hyang kasnahoy hyang* ㅅㅏㅎㅣㅊㅏ ㅅㅏ나ㅎㅣㅊㅏ ‘a man’s scent, a woman’s scent.’ Finally, a transcription of a Jurchen place name in the *Yongbi ŏch’ŏn ka* contains a ‘*chkh*’ ㅈㅋ cluster: *Nin.chkhwesi* 닌꺾ㅅㅣ (*Yongbi* 7.23).

Besides clusters and geminates, there was yet another kind of complex symbol provided for in the *Hunmin chŏngŭm*. The main text explains: “[The laryngeal letter] ㅇ, written immediately below a labial sound, makes a light labial sound.” The *Haerye* elaborates: “ㅇ, when written immediately below a labial sound, makes a light labial sound. This is because with the light sounds the lips join only momentarily and the pronunciation is more throatish.” These letters representing “light labial sounds” include the symbols ㅁㅇ, ㅂㅇ, ㅍㅇ, ㅍㅇ, but (as was mentioned in section 5.2.1.2, above) only ㅁㅇ was used in writing native Korean words. The other “light labial” symbols were used exclusively for the transcription of Chinese.

5.2.2 *The medial sounds*

Eleven letters were created to represent medial sounds. As we have noted, what is called the “medial sound” was the syllable vocalism, a phonological concept new to fifteenth-century East Asia. And, unlike the initial sounds, which were equated to Chinese character mothers, medial sounds had no correlate in the Chinese phonological tradition. The *Haerye* provides this explanation: “The medial sounds are situated in the middle of the syllable rime, and combine with the initials and terminals to complete the syllable.”

The theory developed for the medials was therefore entirely new, but it was rationalized within the framework of neo-Confucian philosophy. It began with the creation of three basic letters, $\cdot - \lrcorner$, representing the three great powers of the universe. These were known as the “Three Germinants” (三才): Heaven, Earth, and Man:

With \cdot [Λ], the tongue retracts and the pronunciation is deep. Heaven commences in the First Epoch. The roundness of the outline is a depiction of Heaven.

With $-$ [i], the tongue retracts a little and the pronunciation is neither deep nor shallow. Earth opens in the Second Epoch. The flatness of the outline is a depiction of Earth.

With \lrcorner [i], the tongue does not retract and the pronunciation is shallow. Man is born in the Third Epoch. The erectness of the outline is a depiction of Man.

The remaining eight of the eleven medial letters were made by combining the basic letters in various combinations. These composite symbols were rationalized with a similar mixture of articulatory description and philosophical symbolism:

$\underline{\cdot}$ [o] is the same as \cdot [Λ], only the mouth is contracted. Its outline is formed by combining \cdot with $-$. We take the appropriety of Heaven’s initial conjugation with Earth.

$\lrcorner \cdot$ [a] is the same as \cdot [Λ], only the mouth is spread. Its outline is formed by combining \lrcorner with \cdot . We take the appropriety of the operations of Heaven and Earth issuing forth from activities and things, but waiting for Man for their completion.

$\underline{\lrcorner}$ [u] is the same as $-$ [i], only the mouth is contracted. Its outline is formed by combining $-$ with \cdot . Here again we take the appropriety of Heaven’s initial conjugation with Earth.

$\cdot \lrcorner$ [ə] is the same as $-$ [i], only the mouth is spread. Its outline is formed by combining \cdot with \lrcorner . Here too we take [the appropriety of] the operations of Heaven and Earth issuing forth from activities and things, but waiting for Man for their completion.

$\underline{\lrcorner \cdot}$ [yo] is the same as $\underline{\cdot}$, only it arises from \lrcorner .

$\lrcorner \underline{\cdot}$ [ya] is the same as $\lrcorner \cdot$, only it arises from $\underline{\cdot}$.

$\underline{\lrcorner \cdot}$ [yu] is the same as $\underline{\lrcorner}$, only it arises from $\underline{\cdot}$.

$\lrcorner \underline{\lrcorner \cdot}$ [$y\text{ə}$] is the same as $\lrcorner \cdot$, only it arises from $\underline{\lrcorner \cdot}$. . .

As part of the neo-Confucian exegesis, the eight composite symbols are classified as “Yang” and “Yin”:

In ◡, |, ◡, |, the circle is situated above and on the outside. This is because, emerging from Heaven, they are Yang.

In ◡, ◡, ◡, |, the circle is situated below and on the inside. This is because, emerging from Earth, they are Yin.

These “Yin” and “Yang” groupings constitute natural ones within the language, because they represent vowel harmony oppositions. The text continues, noting that “ | [i] alone has no station or number . . .,” apparently out of recognition that this vowel was the neutral member of the vowel harmony system.

5.2.3 Terminal sounds

An important orthographic decision is reflected in the representation of terminals. As we have said, terminals were identified with the initials, but the *Haerye* provides for a modified orthographic system in which only eight of the seventeen letters were to be used. Instead of making use of all the available symbols, the authors of the text decide that: “It will suffice to use [only] the eight letters ㄱ, ㅇ, ㅋ, ㆁ, ㆁ, ㆁ, ㆁ, ㆁ [k, ŋ, t, n, p, m, s, l] for the terminal sounds.” The rationale for this statement is then immediately explained: “[In the case of terminals] like those in *poys kwoc* 빛꽃 ‘pear blossom,’ and *yez_uy kach* 엇의갓 ‘fox pelt,’ ㅅ [s] may stand for all of them. Therefore only ㅅ [s] is needed.”

In this passage, the compilers of the *Haerye* tell us that the contrasts between the dental sibilants /s, c, z, ch/ were neutralized in terminal position, and that these consonants were uniformly pronounced there as [s]. For the morphophonemic spellings *poys kwoc* 빛꽃 ‘pear blossom’ and *yez_uy kach* 엇의갓 ‘fox pelt,’ they recommend using the phonemic spellings *poys kwos* 빛꽃 and *yez_uy kas* 엇의갓 instead. In other words, these scholars of fifteenth-century Korea understood the difference between a morphophonemic script and a phonemic script, and they deliberately chose to make theirs a phonemic one.

This orthographic rule of “eight final sounds” is followed strictly in the textual record of the fifteenth and sixteenth centuries. However, there are two important exceptions. In the *Yongbi ōch’ōn ka* (1447) numerous examples are found in which terminal sounds are written with △ [z], ㅅ [c], ㅅ [ch], and ㅅ [ph]; e.g., *az* ㅅ ‘younger brother’ (stanzas 24, 103), *kwoc* ㅅ ‘flower’ (2), *cwoch-* ㅅ ‘follow’ (36, 55, 78), *niph* ㅅ ‘leaf’ (84). This same, exceptional usage (including ㅅ [th] used as terminal) is also found in the *Wōrin ch’ōn’-gang chi kok* (1447); e.g., *chez* ㅅ ‘first’ (vol. 1, verse 114), *nac* ㅅ ‘daytime’ (1.16), *noch* ㅅ ‘face’ (1.49), *pwuph* ㅅ ‘drum’ (1.40), *nath* ㅅ ‘piece’ (1.40, 62, 91, 92). The early dates and importance of these two texts indicate that in those early years there was probably a scholarly controversy surrounding the

decision to use a strictly phonemic script.⁵ Nevertheless, the dispute was apparently soon resolved, for the phonemic rule governing terminal usage was adhered to conscientiously in all subsequent publications of the period. In many texts, the rule appears to be violated by the use of the symbol Δ [z] as terminal. However, those particular examples constitute a special case, because in the phonological environments where it occurs, a terminal /z/ was not phonemically neutralized to /s/; the phonological conditioning governing this usage will be discussed later.

In the section explaining the combining of the letters, the *Haerye* provides for terminal clusters: “Two or three letters may be used together as the terminal sound. For example, vernacular speech *holk* 糞 ‘soil,’ *naks* 𪗇 ‘hook,’ and *tolks pstay* 𪗇 𪗇 𪗇 ‘Hour of the Rooster (5–7 p.m.)’” When occurrences of the so-called “genitive *s*” (ㅅ|ㅇ|ㅈ) are set aside, there are six different clusters found at the end of syllables in Late Middle Korean texts: ㄱ, ㄴ, ㄷ, ㄹ, ㄴ, ㄷ, ㄹ [ks, ns, lk, lm, lp, lq].

5.2.4 Combining the letters

Korean writing is both alphabetic and syllabic. As the *Haerye* explains, the letters are clustered into syllables:

The three sounds, the initial, the medial, and the terminal, combine to form the complete syllable. Some of the initial sounds stand above the medial sound; some stand to the left of the medial sound . . . Among the medial sounds, the round one and the horizontal ones stand below the initial sound; these are \cdot [ʌ], $-$ [i], \perp [o], \top [u], \perp [yo], and \top [yu] . . . The vertical ones stand at the right of the initial sound; these are | [i], † [a], † [ya], † [ə], and † [yə] . . . The terminal sounds stand below the initial and the medial.

In other words, shapes were determined by the positions the letters would occupy within the syllable. The letters may be alphabetic, but they were designed with syllabic writing as a precondition.

5.2.5 Tones

Tones are recorded in the alphabetic texts of the fifteenth and sixteenth centuries. The *Hunmin chōngūm* provided a system of diacritics that Korean philologists call “side dots” (傍點) to mark the tone of each syllable, and the conventions of the system were followed more or less faithfully until the end of the Middle Korean period.

⁵ Nowhere in the textual record is there explicit mention of this controversy, but good historical and philological evidence does exist to support the idea that Sejong himself advocated the use of morphophonemic spelling (see Lee Ki-Moon 1997).

The side dots were placed on the left of the syllable. One dot indicates a high pitch. Two mark a long, rising pitch. No dots indicate that the pitch of the syllable was low.

The impetus for recording tones was undoubtedly connected to the importance placed on them in the Chinese phonological tradition, and Sejong and his commissioners made full use of Chinese terminology in their treatment. Here is how the side dot convention is described in the main text of the *Hunmin chǒngŭm*: “One dot added to the left [of a syllable] indicates the departing tone. Two indicate the rising tone. If there are none, then it is the level tone. For the entering tone, the adding of dots is the same, while [the pronunciation] is hurried and tense.” The *Hunmin chǒngŭm* description is couched in terms of the traditional four tones because these represented the departure point for any discussion having to do with suprasegmentals. Still, within the confines of the Chinese framework the *Hunmin chǒngŭm* provided a marking convention that accurately represented the Korean data. The *Haerye* fleshes out the description and gives examples:

For the level, rising, departing, and entering tones of vernacular speech, there are the following examples: *hwal* 활 ‘bow, arc,’ in the even tone; *twöl* : 돌 ‘stone’ in the rising tone; *käl* : 칼 ‘knife, sword,’ in the departing tone; and *pwut* : 붓 ‘writing brush,’ in the entering tone.

If at the left of any syllable one dot is added, it is a departing tone; if two dots, it is a rising tone; and if no dots, it is an even tone.

The entering tone of the literary is similar to the departing tone [of the vernacular]. The entering tone of the vernacular is not fixed. Sometimes it resembles the even tone, as in *kit* 긴 ‘pillar’ or *nyep* 녁 ‘rib, flank’; sometimes it resembles the rising tone, as in *nät* : 낱 ‘grain’ or *kíp* : 김 ‘silk gauze’; and sometimes it resembles the departing tone, as in *mwót* : 못 ‘nail’ or *íp* : 입 ‘mouth.’ Adding dots is the same as for the even, rising, or departing.

As can be seen from this passage, the “entering tone” was a concept valid for Chinese vocabulary only. It had no significance for Korean. In the Chinese literary language, pitch distinctions were neutralized in syllables that ended in an unreleased voiceless stop, *-p*, *-t*, or *-k*, and in the Chinese phonological tradition, such syllables were therefore classified in a separate “tone” category called the “entering tone.” The *Haerye* description makes clear that, unlike Chinese, Korean syllables ending in stops were distinguished by pitch just as other syllable types were. Despite the use of Chinese terminology, the *Hunmin chǒngŭm* does not distort the Korean facts or misrepresent the data.

5.2.6 Fifteenth-century orthography

Unlike most premodern scripts, fifteenth-century Hangul was highly standardized. Spellings and other types of symbol use are unusually consistent. And so, even though there is no historical record of such things, there had to

have been considerable discussion and debate surrounding the orthography to be adopted for the new script. Someone, somehow, solved the various problems surrounding the orthography and made decisions about it. The philological evidence from the texts themselves shows that orthographic rules were worked out in detail, and that these rules were followed carefully in almost all published materials throughout the period.

In discussing the terminal consonants, we have mentioned that the orthography of the fifteenth century was a phonemic one. In keeping with that principle, each phoneme was recorded faithfully, in context, without regard for morphemic or syntactic structure. Thus, morphophonemic alternations are reflected in how the words were written in context. For example, the noun *kaps* 값 ‘price, wage,’ which has a lexical, underlying form ending in a *-ps* cluster, appears with the subject particle *i* 이 as *kap.s_i* 값시, but with the focus particle *two* 도 as *kap_two* 값도. The shape of the verb stem *kiph-* ‘deep’ depended upon the inflectional ending attached to it, e.g., *kiphuni* 기쁘니, *kipkwo* 깊고. There was variation, of course. For example, *mitnun* 믿는 ‘believing’ (which consists of the verb stem plus the processive modifier *-nun*), was not written as *minnun* 믿는, even though nasal assimilation is normally expected in such forms. In fact, the textual record contains many alternates such as *ketne-* 건너- and *kenne-* 건너- ‘cross over,’ *totni-* 돌니- and *tonni-* 돈니- ‘goes about,’ and so forth. These forms show that nasal assimilation existed in Late Middle Korean, but that it was not always transcribed.

The phonemic nature of the orthography affected how letters were clustered into syllables. For example, in isolation the final *-m* of the noun *salom* 사람 ‘person’ was written as the terminal of the second syllable, just as it is today. However, when the noun was followed by a particle beginning with a vowel, liaison occurred and the *-m* moved over to become the onset of the following syllable. The orthography reflects this liaison; e.g., *salom_i* 사람미, *salom ol* 사람올. The inflection of the verb stem *mek-* 먹- ‘eat’ was written variously as *mek.ko* 먹고, *me.kuni* 먹그니, etc. Notice that this syllabic clustering contrasts with that of modern Hangul orthography, where the shape of the word is kept constant: *salam_i* 사람이, *mek.uni* 먹으니.

When the syllable boundary was not so clearly delineated, there could be alternative ways of spelling. One such case arose when a terminal *-s* was followed by a syllable beginning with *k*, *t*, *p*, or *s*. When that happened, the *-s* could remain as terminal, or be moved to the onset position of the next syllable and written as an *sC* cluster. Thus, fifteenth-century texts contain alternate spellings like *tas.ka* 닷가 ~ *ta.ska* 닷싸 ‘cultivate, train,’ *eyes.pu-* 어엿브- *eye.spu-* ~ *어엿쁘-* ‘pitiful,’ etc. Another kind of spelling alternation can be found when the consonant *-ng-* [ŋ] appeared in intervocalic position. According to the original orthographic rules of the *Hunmin chōngūm*, the consonant was supposed to be written as the initial of the following

syllable; thus, *pa.ngwol* 바울 ‘drop,’ for example. But very soon, the orthographic practice of writing it as the terminal of the previous syllable came to be more common: *pang.wol* 망울.

Syllable clustering was also complicated somewhat by the mixing of Chinese characters into the text. Normally, for example, the subject marker *i* was written as an offglide /y/ when it followed a syllable ending in a vowel; e.g., *nay* 내 ‘I’; *kemunkwoy* 거문고 ‘Korean harp.’ But if the syllable was represented by a Chinese character, the sound incorporated into the pronunciation of the syllable had to be written separately. The way such exceptions were handled is explained in the *Haerye*: “When the literary and the vernacular are mixed together, there are cases where, depending on the pronunciation of the character, there may be supplementation with medial or terminal sounds. For example, [KWONGCA]_i [LO]_s *salom* 孔子 | 魯 스 사롬 ‘Confucius [was] a man of Lu.’”

One significant exception to the orthography’s use of the phonemic principle is its treatment of the so-called *sai-sios* 사이스, or “genitive *s*.” This “genitive *s*,” a particle used to link nouns, was by convention transcribed as *s*; e.g., *phuls nip* 풀넙 ‘blade of grass.’ However, two very early texts show that it was not always realized as /s/ phonemically. In the *Yongbi ōch’ōn ka* (1447), the genitive *s* was transcribed in a chameleon-like variety of ways. Before most obstruents it was written as the normative *s*. However, in voiced environments – that is, between vowels, laterals, and nasals – it was consistently written as a *z* (△); e.g., *nimkumz mozo.m_i* 님굼 므스미 ‘the king’s mind’ (39); *nalaz ilhwum* 나라 일흠 ‘the nation’s name’ (85). Moreover, before the cluster *pt* (ㅃ), as well as once before *c* (ㅈ) and once before *s* (ㅅ), the *s* was omitted or replaced by another letter; e.g., [HYWENG]_k *ptu.t_i* 兄 ㄱ ㅃ디 ‘older brother’s wish’ (8); *myes* [KAN]_t *ci.p_uy* ㅁ ㅈㅍ ㅍ ㅈㅍ ‘in a house of how many rooms’ (110); *hanolq ptu.t_ul* 하늘 ㅍ 들 ‘the will of heaven’ (86). The *Hunmin chōngŭm ōnhae* shows the same kind of phonological pattern in its use of the genitive *s* to gloss Chinese characters: [ZYANG]_k [CCO] 穰 양 ㄱ 字 ㅈ ‘the character ZYANG’; [KWUN]_t [CCO] 君 군 ㅈ 字 ㅈ ‘the character KWUN’; [CHIM]_p [CCO] 侵 침 ㅃ 字 ㅈ ‘the character CHIM’; [CCO]_q [CCO] 慈 ㅈ ㅈ 字 ㅈ ‘the character CCO’; etc. As can be seen from these examples, the *s* was replaced by a stop homorganic with the preceding consonant, or, after /l/ or a vowel, by the glottal stop *q*. (See also section 5.2.1.2, above.) These replacements were evidently intended to show that the genitive *s* was realized as reinforcement of the following obstruent. In other words, if we take the transcriptions in these two texts at face value, the genitive *s* was alternatively realized as /s/, /z/, or reinforcement, depending upon the phonological environment. This transcription system was apparently too cumbersome to be used as a practical orthography, however, and, in other texts, the morpheme was instead written uniformly as *s*. The orthographic practice adopted in this case was morphophonemic.

5.2.7 *The transcription of Sino-Korean*

If we take Sejong at his word, the new symbols were devised explicitly to represent the sounds of Korean. In the preface to the *Hunmin chŏngŭm* he wrote:

The sounds of our country's language are different from those of the Middle Kingdom and are not smoothly adaptable to those of Chinese characters. Therefore, among the simple people, there are many who have something they wish to put into words but are never able to express their feelings. I am distressed by this, and have newly designed twenty-eight letters. I desire only that everyone practice them at their leisure and make them convenient for daily use.

But from the very beginning, the new letters were used to transcribe the readings of Chinese characters as well as to write native Korean words, and both are found together in the texts of the period. As we have said, these character readings do not represent natural Korean but rather the prescriptive pronunciations spelled out in detail in the *Tongguk chŏngun* of 1447.

In fact, the initial sounds given in the *Hunmin chŏngŭm* itself are illustrated solely by those prescriptive pronunciations of Chinese characters. In the *Hunmin chŏngŭm haerye* the king's commissioners elaborate on these descriptions, explaining that: "The initial sounds of the [new writing system] are equivalent to the character mothers of the rime books." Throughout the *Hunmin chŏngŭm*, the terminology Sejong and his commissioners used to classify the initial sounds are the same as those found in the *Tongguk chŏngun*; in both cases, the terms are those of traditional Chinese philology. In other words, the two orthographic systems are overlapping and related. The *Hunmin chŏngŭm* system of initial consonants was clearly connected to the categories of Chinese language science. It represents the Sinitic base upon which the Korean writing system is built, the departure point for Sejong's analysis of Korean phonology.

The character readings in the *Tongguk chŏngun* dictionary of 1447 were certainly artificial. For example, among its initials the *Tongguk chŏngun* contains geminate consonants (ㄱ, ㄷ, ㅃ, ㅆ, ㅍ, ㅍ) to represent "wholly muddy" sounds, as well as a glottal stop (ㅇ) and a velar nasal (ㅇ). These were prescriptive pronunciations intended to "correct" the readings of Chinese characters then in use in Korea. Readings such as KKYWUW 蚪罇 'writhe,' TTAM 覃岬 'vast,' PPWO 步擧 'step,' CCO 慈穹 'compassion,' HHWONG 洪壘 'flood,' QUP 淸挹 'decant,' NGEP 업業 'profession' were offered as substitutes for KYWU ㄱ, TAM ㄷ, PWO ㅍ, HWONG ㅎ, UP ㅍ, EP ㅍ.

But these artificial pronunciations were not, strictly speaking, simply imitations of Chinese. The *Tongguk chŏngun* did not adopt, or reconstruct, the

system of the Chinese rime tables wholesale. For example, the traditional Song Chinese sources usually recognize 36 “character mothers” and 206 rimes, while the *Tongguk chǒngun* has only 23 character mothers and 91 rimes. The internal structure was also different. Among other things, while Chinese riming dictionaries are divided into separate volumes by tone, the *Tongguk chǒngun* grouped syllables differing only by tone together in one place. In other words, the *Tongguk chǒngun* system was a theoretical construct representing a compromise between the Chinese rime tables and dictionaries and the Sino-Korean readings actually used in Korea.

Still, because it did not reflect reality, the *Tongguk chǒngun* orthographic system could not be sustained. It did not last past the 1480s. The readings it mandated were transcribed scrupulously in the works published throughout the reigns of Sejong and Sejo, but during the reign of Sǒngjong these artificial conventions broke down. The Buddhist works published in the 1480s were the last to follow the prescriptive readings of the *Tongguk chǒngun*.

From this point on, the *Tongguk chǒngun* prescriptive system gave way to spellings based upon the way the characters were actually read. These natural Korean pronunciations were, and still are, called “Eastern Sounds” (東音). Since only the *Tongguk chǒngun* readings are found in the earliest texts, there is a question as to when these so-called “Eastern Sounds” were systematized. The *Hunmong chahoe* makes reference to a work called the *Ch’ohak chahoe* (‘Collection of Characters for Elementary Studies’ 初學字會) compiled in 1459 that, though no longer extant, was apparently put together using the “Eastern Sound” orthography. If so, it means the transcription of actual Sino-Korean pronunciations can be traced back to the reign of Sejo. This more authentic orthography came into general use during the reign of Prince Yǒnsan at the end of the fifteenth century, when it was employed for such representative works as the Buddhist translations, *Yukcho pǒppodan kyǒng ōnhae* and *Sisik kwǒn’gong ōnhae* of 1496. By the sixteenth century all Korean-language publications made use of these more natural spellings. A representative work from this latter orthographic period is the *Hunmong chahoe*, a glossary providing our most important source of Sino-Korean pronunciations during the Late Middle Korean period.

5.3 Phonology

Phonological analysis of Late Middle Korean begins with the *Hunmin chǒngŭm* system, supplemented and emended by linguistic and philological data from the textual record of the fifteenth and sixteenth centuries. It is constrained and shaped by information from later recorded stages of the language and the modern dialects.

5.3.1 Consonants

The consonant system of Late Middle Korean was as follows:

Late Middle Korean consonants						
Plain:	p	t	k	c	s	h
Aspirated:	ph	th	kh	ch		
Reinforced:	[pp]	tt	kk	(cc)]	ss	hh
Voiced:	W		G		z	
Nasal:	m	n	ng			
Liquid:		l				

5.3.1.1 Aspiration

In Late Middle Korean there was a primary distinction between a series of “plain” consonants /p, t, k, c/ and a series of aspirated consonants /ph, th, kh, ch/. A separate symbol was created for each of these eight consonants and illustrated with examples. However, aspirated consonants occurred far less often than plain consonants, particularly in word-initial position. The consonant *kh* was especially rare; *ph* was the next least common. Over time, words with aspirated initials began to increase in number. For example, as early as the fifteenth century *polh* 𪎠 ‘arm’ became *phol* 𪎡; in the latter half of the sixteenth century *kwoh* 𪎢 ‘nose’ developed into *khwo* 𪎣, *kalh* 𪎤 ‘knife’ into *khal* 𪎥. But the imbalance between aspirates and plain consonants remained. In medial position, the glottal fricative *h* combined with plain consonants, often by metathesis, to produce aspirates – just as it does in the language today. It is especially common to find contracted forms of the verb *ho-* ‘is, do’ showing this process. For example, *hota* 𪎦다 was often written as *tha* 𪎧타; *hokuy* 𪎨긔, *hokey* 𪎨게, and *hokwo* 𪎨고 all appear alternatively as *khuy* 𪎩긔, *khey* 𪎩게, and *khwo* 𪎩코: *kulithangita* 𪎪리타이다, [KWANGMYENG]_i wonols nal [HYEN] thas ma.l ila 光明이 오늘날 現 𪎫타리라, [PHYENAN]_khuy 便安긔, [LIIK] key khwocye hoye 利益계코져 𪎬야, and so forth.

5.3.1.2 Reinforcement

In Contemporary Korean, the consonants written as geminates (ㄱ, ㄷ, ㅂ, ㅈ, ㅊ, ㅍ) are pronounced with a tense, unaspirated articulation referred to here as “reinforcement.” These sounds also existed in Late Middle Korean, but reinforced consonants did not yet form a phonemically distinct series. As was noted in section 5.2.1.2, the *Hunmin chōngūm* does not provide symbols for such consonants in native words, and the geminate spellings used today for reinforced consonants were introduced there as a convention to transcribe the “wholly muddy” sounds of the Chinese rime books. Only ㅍ

(*ss*) and *ᄒᄒ* (*hh*) were explicitly said to represent Korean initial consonants (see section 5.2.1.3).⁶

Reinforcement regularly occurred in medial position. It was a demonstrably productive process in Late Middle Korean. As was noted in section 5.2.1.2, an initial obstruent was often written as a double consonant following the prospective modifier *-ulqlolq*; e.g., *kwum.k_i* *꺾기* ‘hole (as subject)’ but *swumwul kkwum.k_i* *수물 꺾기* ‘hole to hide in’ (1459 *Wŏrin sŏkpo* 2:51a). The geminate spelling indicated that the consonant was reinforced, just as it is in the language today. Another important source of reinforcement was the ubiquitous “genitive *s*.” As described in section 5.2.6, above, this linking particle was sometimes replaced by a stop homorganic with the preceding consonant, or, after /l/ or a vowel, by a glottal stop. In the 1447 *Yongbi ōch’ŏn ka* and the *Hunmin chŏngŭm ōnhae*, this replacement took place when the “genitive *s*” was followed by a word beginning with *s*-, *c*-, or the cluster *pt*-. But replacement is occasionally found in other texts as well; e.g., *CYWONG-CYWONG k kwos* 種_중種_중 ㄱ_곳 ‘all kinds of flowers’ (1447 *Sekpo sangjŏl* 9:22b); *salom_p seli_la* *사_ㅍ 서리_라* ‘it is in the midst of people’ (1459 *Wŏrin sŏkpo* 1:19b). Such transcriptions provide evidence that the morpheme was realized in these environments as reinforcement. In other words, a cluster of two obstruents automatically induced a tensing in the pronunciation of the second consonant, giving rise to what is here called reinforcement; e.g., *s + k-* → *skk*. If the first obstruent was *s*, the sibilancy was suppressed in some environments. In the *Yongbi ōch’ŏn ka* and the *Hunmin chŏngŭm ōnhae*, the suppression of the [s] was limited to occurrences before *c*-.⁷ But the 1447 *Sekpo sangjŏl* shows that sibilancy was apparently suppressed in some cases before *k-* as well – that is, if the above cited example is taken at face value. Another example from the same text, *CYWONG-CYWONG k HYANG* 種_중種_중 ㄱ_향 ‘all kinds of incense’ (9:22b), shows replacement of /s/ before *h*-. A parallel phrase from the 1459 *Wŏrin sŏkpo*, *CYWONG-CYWONG k*

⁶ The 1447 *Tongguk chŏngun* states unequivocally that “muddy” sounds did in fact occur in Korean. What “muddy” originally indicated in Chinese does not come into question, since the feature, usually interpreted as voicing, had been historically lost in any variety of Chinese that could have been heard by fifteenth-century Koreans. What was meant by “muddy” in these Korean works could therefore only have been a feature (reinforcement, glottalization, or tensing) found in the Korean language. The statement in the *Tongguk chŏngun* about this phonological feature comes from the Introduction, where it is said that: “The differentiation of ‘clear’ and ‘muddy’ in the sounds of our language is no different from that of China; it is only the sounds of characters that are without ‘muddy’ sounds . . .” In other words, native Korean words did in fact have reinforced sounds, but the Korean readings of characters did not. Note that even today Sino-Korean morphemes do not, with few exceptions, have reinforced initials.

⁷ Replacement before *pt*- was redundant, as is shown by the fact that there are also cases where the *s* was simply not transcribed at all before that cluster. Replacement before the homorganic *s* was equally vacuous.

TTWANG-PEN 種중種중 ㄱ 幢浬幡浬 ‘all kinds of banners’ (9:41a), suggests occasional suppression before *t*- as well.

Reinforcement was also a feature of some initial consonants. The *Hunmin chōngūm haerye* gives only *ss* (ㅍㅍ) and *hh* (ㅎㅎ) as examples of reinforced consonants in native words (section 5.2.1.3). But it also seems likely that /pp, tt, kk/ sometimes occurred as variant pronunciations of *sp*-, *st*-, and *sk*- clusters. The sibilancy of the *s* in such clusters had certainly been lost at least by the seventeenth century, but the historical change was under way well before that. We see textual evidence of this fact in the variety of ways the “genitive *s*” was transcribed (see above, and sections 5.2.1.2 and 5.2.6).

The reinforced consonant *cc* (ㅈㅈ), however, never occurred in initial position. It is found only in word-medial position, in such morphemically complex forms as *ma.ccoWi* 마쯔뵵, *yen.ccopkwo* 연쯔고, and *cwo.ccowa* 조쯔와, in which the verb stems *mac*- 맞- ‘meet,’ *yenc*- 옌- ‘place,’ and *cwoch*- 좃- ‘chase’ are combined with the deferential verbal suffix *-sop-* (-zoW-) -습-. The noun *nwun.ccozo* 눈쯔스 ‘the pupil of the eye’ (which was also transcribed variously as *nwunt.cozo* 눈쯔스, *nwuns.cozo* 눈쯔스, and *nwun.cozo* 눈쯔스) is a compound consisting of *nwun* 눈 ‘eye,’ the “genitive *s*,” and *cozo* 쯔스 ‘nucleus, core, kernel.’ No native word in Late Middle Korean is transcribed with either an initial **cc*- or an initial **sc*-.

The reinforced sibilant *hh* (ㅎㅎ), which does not exist in Korean today, occurred only in the stem of the verb *hhye*- 햃- ‘pull.’ This morpheme is also found in compounds such as *spa.hhye*- 썩햃- ‘extract,’ *nilu.hhye*- 니르햃- ‘raise up,’ *twolo.hhye*- 도르햃- ‘turn one’s head,’ and *twulu.hhye*- 두르햃- ‘turn around.’ Beginning with the 1465 *Wŏn’gak kyŏng ōnhae* when geminate spellings were eliminated from the orthography, *hh* (ㅎㅎ) was replaced by a simple *h* (ㅎ). In the sixteenth century the geminate spelling *ss* (ㅍㅍ) was restored, but the double-*h* spelling was not. However, in the seventeenth century the morpheme ‘pull’ was spelled with an initial *sh*- (ㅅㅎ-), showing that the consonant was at that time still pronounced with reinforcement.

Late Middle Korean texts also contain another geminate spelling, the curious double-zero 〇〇 (as noted in section 5.2.1.3, above). This symbol is found in medial position in compound verbs consisting of a stem ending in *-Vy* plus the passive (or causative) morpheme; for example, *kwoyOOye* 귀〇여 ‘being loved by someone,’ *moyOOi.nonila* 락〇이느니라 ‘is bound to, by.’ Since the single circle 〇 (without a tick on top) represented zero in syllable-initial position, there was no consonant to be reinforced. The most likely possibility is that the doubling was a way of indicating that the causative/passive morpheme began with a voiced velar fricative *ɣ* (transcribed in this work as *G*).

5.3.1.3 Initial clusters

Three kinds of consonant clusters are found at the beginning of words in Late Middle Korean texts: (1) clusters that begin with *s-*; (2) clusters that begin with *p-*; and (3) clusters that begin with *ps-*. The *Haerye* illustrates the three types succinctly with the examples *sta* ^{ㅅ따} ‘earth,’ *pcak* ^{ㅍ작} ‘one of a pair,’ and *pskum* ^{ㅍ쑤} ‘crack, opening’ (See section 5.2.1.3, above). There are nine of these clusters:

- (1) sp- st- sk-
- (2) pt- pth- ps- pc-
- (3) pst- psk-

Here are examples of each:

- (1) *spul* ^{ㅅ풀} ‘horn’; *stek* ^{ㅅ적} ‘rice cake’; *skwum* ^쑤 ‘dream’
- (2) *ptut* ^{ㅍ똥} ‘intent’; *ptho-* ^{ㅍ똥-} ‘pluck’; *psol* ^{ㅍ쌀} ‘rice’; *pcak* ^{ㅍ작} ‘one of a pair’
- (3) *pstay* ^{ㅍ때} ‘time’; *pskwul* ^{ㅍ꿀} ‘honey’

These initial clusters are believed to have developed in Early Middle Korean, sometime after the twelfth century, through the syncope of vowels separating the consonants. The word *psol* ^{ㅍ쌀} ‘(uncooked) rice’ was transcribed in the Chinese glossary *Jīlín lèishì* (c. 1103) with the two phonograms 菩薩, the first of which began with a labial stop, indicating that the form of the word was then **posol*. In the pharmacological work *Tongŭi pogam* (東醫寶鑑 湯液篇), which was compiled at the end of the sixteenth century and published in 1613, the medicinal herb *wotwoktwoki* ‘arbor monkshood’ was transcribed as *wotwok.ptwoki* 오독뽕기 (3:19). In the earlier, Koryŏ-period pharmacological guide *Hyangyak kugŭppang*, the word was transcribed with phonograms in two ways, as 五得浮得 and 烏得夫得, both of which point toward a reconstruction like **wotwokputuk*, with a vowel between the *p* and the *t*. Since the *Hyangyak kugŭppang* was compiled around 1250, the syncope of the vowel must have taken place some time after that.

Most words beginning with *pst-* or *psk-* appear to have morphemically complex etymologies. If vowels indeed once separated the consonants in these clusters, the earlier forms of the words consisted of three or more syllables, too long to be single morphemes. (As a rule, Korean morphemes do not exceed two syllables in length.) Many of these words form a semantic word family having to do with breaking, cracking, piercing, etc. Here are examples: *pskay-* ^{ㅍ깨-} ‘break’; *psketi-* ^{ㅍ끼디-} ‘collapse, fall in’; *pskey-* ^{ㅍ끼-} ‘thread, stick through’; *psko-* ^{ㅍ끼-} ‘peel (a shell, etc.), hatch’; *pski-* ^{ㅍ끼-} ‘stick in’; *pskul* ^{ㅍ끼} ‘chisel’; *pskum* ^{ㅍ끼} ‘crack, interstice’; *psto.li* ^{ㅍ끼리-} ‘break, shatter’; *pstilG-* ~ *pstilo-* ^{ㅍ끼-} ‘pierce, gore, stick, poke.’ Because of their phonological shape and meaning, such words appear to be compounds containing the (pre)verb *pozo-* ~ *poso-* ~ *pozG-* ~ *posG-* ^{ㅍ즈-} ~ ^{ㅍ스-} ~ ^{ㅍ스-} ~ ^{ㅍ스-} ~ ^{ㅍ스-} ‘break,

shatter.’ (Notice, for example, that *pstilG-* ~ *pstilo-* 𑖑- is an intensive variant of *tilG-* ~ *tilo-* 𑖑- ‘hit, stick in.’) Another word family consists of *psku* ~ *pski* ~ *pskuy* 𑖑 ~ 𑖑 ~ 𑖑 ‘time, occasion’ and *pstay* 𑖑 ‘time, occasion.’ A few words, such as *pskwul* ‘honey,’ *pskwu-* ‘borrow,’ and *pstuli* ‘smallpox,’ have more opaque etymologies. Whatever the origin, however, words with these initial clusters remain lexical anomalies.

Initial clusters became reinforced consonants in Contemporary Korean, and the reinforcement is usually all that remains to show there was an earlier cluster. However, in a few *pC-* and *psC-* clusters, the labial stop left a trace. For example, a *p* is seen today in such compounds as *cwop-ssal* 𑖑 𑖑 ‘hulled millet’ (*cwo* ‘millet’ + *ssal* ‘rice’), *chap-ssal* 𑖑 𑖑 ‘glutinous rice’ (< *chal-* ‘sticky’), and *hayp-ssal* 𑖑 𑖑 ‘new rice’ (< *hay* ‘year’). This *p* is written as if it belonged to the first noun, but it was originally part of the initial cluster of *psol* 𑖑 ‘rice.’ Similarly, the *p* in *pyep-ssi* 𑖑 𑖑 ‘rice seed’ (*pye* ‘rice plant’ + *ssi* ‘seed’) shows that *ssi* 𑖑 comes from *psi* 𑖑. The form *ip-ccak* 𑖑 𑖑 ‘this side,’ often heard in Kangwŏn and Kyŏnggi dialect usage, confirms that *ccak* 𑖑 ‘side’ was once *pcak* 𑖑. The forms *ipttay* 𑖑 𑖑 ‘(until) that time’ (*i* ‘this’ + *ttay* ‘time’) and *cepttay* 𑖑 𑖑 ‘that time’ (*ce* ‘that’ + *ttay* ‘time’) preserve the earlier *p-* in *pstay* 𑖑 ‘time, occasion.’ The Contemporary Korean word *hamkkey* 𑖑 𑖑 ‘together’ is derived from fifteenth-century *hon pskuy* 𑖑 𑖑 ‘at one and the same time.’ In sixteenth-century texts, the form is attested as *hom skuy* 𑖑 𑖑 (1518 *Pŏnyŏk sohak* 10:6), showing that the *n* in *hon* changed to *m* as the result of assimilation to the labial in *pskuy* 𑖑 ‘time.’

Reinforcement is the only trace that remains of the *s-* in Late Middle Korean clusters, however. There is no known evidence left in Korean today to show that *sC* clusters ever contained a sibilant. There is also very little historical evidence from before Late Middle Korean. For these reasons, the authenticity of the *s-* in some of the clusters is open to question. As we have said, the historical change of clusters into reinforced consonants was already under way in the Late Middle Korean period, and for some scribes the *s-* may well have been used simply to mark reinforcement, as it habitually was a few decades later.⁸ As has been noted, the Koryŏ-period form of the word *stol* 𑖑 ‘daughter’ must be reconstructed as **potol*, since it is transcribed in the *Jilīn lèishì* with the phonograms 寶姐, the first of which was clearly meant to represent a labial stop, not an *s-*. Yet, the word is written only as *stol* 𑖑 in Late Middle Korean texts, beginning with the *Yongbi ōch’ŏn ka*. It may well be that the word was actually pronounced with an initial *s-* in the fifteenth century, and that it simply represents an irregular development of a *pt-* cluster.

⁸ This “thick *s*” (된시옷) convention was the rule in the late traditional period; 𑖑, 𑖑, 𑖑 (*sk-*, *st-*, *sp-*) can be found in place of 𑖑, 𑖑, 𑖑 (*kk-*, *tt-*, *pp-*) even in texts written in the early twentieth century.

But, at the very least, the *Jīlín lèishì* transcription brings the etymological identity of such clusters into question.

It is also the case that some of the reinforced consonants found in Contemporary Korean do not go back to clusters. Reinforcement of a plain consonant has been used in Korean for centuries as an emotive device to add emphasis to a word, and over time the more forceful, reinforced pronunciations have tended to displace the original pronunciations.⁹ In Late Middle Korean, these emphatic variants were transcribed as *sC* clusters. For example, the verb *kuz* (G)- 그즈- ~ 𪎗- ‘drag’ is recorded as *skuzu-* 𪎗즈- in a number of fifteenth-century texts; e.g., *skuzul ssi la* 𪎗슬 씨라 (1463 *Pōphwa kyōng ōnhae* 7:91), *skuzetaka* 𪎗씨다가 (1481 *Tusi ōnhae* 8:66). The verb forms *pipuy-* ‘rub’ and *twutuli-* ‘beat’ coexisted with *spipuy-* and *stwutuli-*. The verbs *tih-* ‘pound’ and *pih-* ‘scatter (seed), sprinkle’ are found in the earliest Hangeul texts, but the variants *stih-* and *spih-* appeared soon after, in texts such as *Kugūppang ōnhae* (c. 1466). In the sixteenth century this emphatic vocabulary began to spread more widely through the lexicon; for example, the 1527 *Hunmong chahoe* contains the forms *ssip-* 씹- ‘chew,’ *spwupuy-* 𪎗뵈- ‘rub,’ and (in the first edition only) *ssus-* 𪎗- ‘wash’; the 1542 *Punmun onyōk ihae pang* has *skulh-* 𪎗- ‘boil,’ *ssahol-* 𪎗홀- ‘chop,’ etc.

There were also other sources of reinforcement. A few words came to have initial reinforced consonants because they frequently occurred in non-initial position after an obstruent, usually the genitive *s*. Such words include the noun *kocang* 𪎗장 (< *koz* 𪎗 ‘brink’) ‘end, most, many,’ which was used together with the genitive *s* as a delimiting particle, *skocang* 𪎗장 ‘until, to that extent.’ That word was the precursor of *skoci* 𪎗지, which in turn became the modern particle *kkaci* 𪎗지. The honorific dative particle *skuy* 𪎗, from which modern *kkey* 𪎗 is derived, is another postposition formed with the genitive *s*, as is *stolom* 𪎗름 ‘just, only,’ the source of modern *italum* 따름. The words *kwoc* 𪎗 ‘flower’ and *pwulhwuy* 𪎗휘 ‘root’ occurred frequently with the genitive *s* in plant names, e.g., *poys kwoc* 𪎗꽃 ‘pear blossom’ (1446 *Hunmin chōngūm*) and *nomol spwulhuy* 𪎗물쑈휘 ‘herb roots’ (1587 *Sohak ōnhae* 6:133), and the usage eventually produced reinforcement in the initials of the isolated words as well.

For the most part, the textual spellings of the fifteenth century have to be taken at face value. The authors of the *Haerye* obviously intended *sC* clusters to be treated in the same way as *pC* clusters (see section 5.2.1.3, above); at least some of the time, they must have heard the sibilancy of an *s-*. And the scribe who wrote the curious cluster *sn-* 𪎗- in *snahoy* 𪎗히 ‘man’s’

⁹ The process is still going on today; for example, *ccokkum* ‘a little’ is a smaller amount than *cokum*, *kkam-* ‘wash’ is more serious cleaning than *kam-*, and *ssey-* ‘strong’ represents something more powerful than *sey-*. A *kkochwu* is a spicier ‘chili pepper’ than a *kochwu*.

(see section 5.2.1.3) surely intended the *s-* to be taken as *s-*; the same word is attested later as *sonahoy* 스나희, after all. But the suppression of the *s-*, as well as the loss of *p-*, was a complex process that took place over a long period of time, and the balance between cluster and reinforced consonant probably varied greatly from speaker to speaker.

The change of *sC* clusters into reinforced consonants is generally believed to have taken place in the sixteenth century. At the latest, the process must have been complete by the time *sC* clusters and *pC* clusters began to be confused; mistakes of that kind can be seen in the 1632 reprint of the *Tusi ōnhae*, where, for example, the word *ptut* 뜻 ‘meaning, intent’ is repeatedly transcribed as *stut* 쯏. Still, as we have said, reinforced variants of the clusters are found even in the earliest fifteenth-century texts.

By the middle of the fifteenth century, the *p-* in *psk-* clusters had dropped in some people’s speech. Even in the earliest Hangul texts there is variation between *psk-* and *sk-*, and both pronunciations must have coexisted throughout the fifteenth and sixteenth centuries. For example, ‘collapse’ is written *psketi-* 뿌디- in the *Nūngŏm kyŏng* of 1461, but as *sketi-* 씨디- in the *Yongbi ōch’ŏn ka* of 1447. The sixteenth-century glossary *Hunmong chahoe* (1527) transcribes *skwul* 쑈 instead of *pskwul* 뿔 ‘honey,’ and *skum* 쑈 instead of *pskum* 뿔 ‘crack, interstice.’ But the same text also shows the opposite, more conservative tendency, giving *pskul* 뿔 ‘chisel’ instead of *skul* 쑈, a form which is attested in the 1459 *Wŏrin sŏkpo* (21:45). By the seventeenth century, reinforcement was probably all that remained of these clusters. In the 1617 *Tongguk sinsok samgang haengsil*, the verb *psketi-* 뿌디- ‘collapse’ is written alternatively not only as *sketi-* 씨디-, but also as *pketi-* 뿌디-; *pskwuli-* 뿌리- ~ *skwuli-* 쑈리- ‘wrap up’ is written as *pkwuli-* 뿌리-. What all of these transcriptions represented was surely the reinforced consonant /kk/.

The cluster *pst-* is not confused with *st-* in texts written during the fifteenth and sixteenth centuries, and it was the seventeenth century before it was transcribed as *pt-*. Just why there is this textual difference between *psk-* and *pst-* is difficult to explain. Still, it seems unlikely that *pst-* clusters had not begun to change into reinforced consonants at around the same time that *psk-* clusters did.

Reduction of the clusters *pt-* and *ps-* took place around the middle of the seventeenth century. In the 1632 reprint of the *Tusi ōnhae*, the word *ptut* 뜻 ‘meaning, intent’ is often transcribed as *stut* 쯏, and in texts from the latter half of the seventeenth century *pt-* and *ps-* are regularly confused with *st-* and *ss-*. In the *Ch’ŏphae sinŏ* of 1676, ‘leave, depart’ is written both as *ptenasye* 떠나셔 (5:3) and *stenasye* 떠나셔 (5:11) (the verb is a compound of *ptu-* ‘float, leave’ and *na-* ‘go out, come out’). The mistaken transcription *pse* 뿌 (1:9) as the infinitive of *ssu-* 쓰- ‘write’ can be found in the same source. The *Pak T’ongsa* text of 1677 records ‘use’ as *psukwo* 뿔고 (3:28) and the

nominalization of the verb as *ssum.i* 쑤미 (2:2); the same text contains *pswuk* 꺾 ‘wormwood’ (1:35) and *sswuk* 쑤 ‘id.’ (1:35), *ptu-* ㅍ투- ‘cauterize with moxa’ (1:35) and *stu-* 스투- ‘id.’ (1:35). The earliest example of *sc-* can be found in the 1676 *Ch’ōphae sinō*, but by the eighteenth century, *pc-* had generally been replaced by *sc-*. For example, in the *Waeō yuhae* (early eighteenth century), *pcwoch-* 꺾- ‘drive out’ was written as *scwoch-* 꺾- (1:29), and *pcak* 짝 ‘one of a pair’ as *scak* 짝 (2:33).

There are a few cases of clusters developing into aspirates. In the fifteenth century, *ptelp-* ㅍ텔- ‘astringent’ was occasionally transcribed as *pthelWun* 펄븐 (1447 *Sōkpo sangjōl* 19:20); *ptel-* 펄- ‘shake’ as *pthelusya* 떠르샤 (1461 *Nūngōm kyōng ōnhae* 2:29); and *ptut-* ㅍ투- ‘pluck out’ as *pthutkwo* 툄고 (1459 *Wōrin sōkpo* 10:24). Today, in many Kyōngsang dialects, ‘astringent’ has the form *thelp-*; and in a few places in Kyōngsang (e.g., Chinju), ‘shake’ is *thel-*. In the Cheju dialect, /th/ and /ch/ are the regular reflexes of Middle Korean *pt-* and *pc-*. For example, *pto-* ㅍ투- ‘pluck, pick’ is *thA-*; *ptel-* 펄- ‘shake’ is *thel-*; *pteleti-* 떠러디- ‘fall’ is *theleci-*; *ptu-* ㅍ투- ‘open (eyes),’ *thu-*; *ptalki* 딸기 ‘strawberry,’ *thAl*; *ptwuy-* 뛰- ‘run,’ *thwi-*; *ptey* 뺨 ‘raft,’ *they-* [t^he]; *ptoy* 툄 ‘grime,’ *thay* [t^hε]; *ptolwo* ㅍ로 ‘separately,’ *thAlō*; *ptut-* ㅍ투- ‘pluck out,’ *thut-*; *pcwoy-* 꺾- ‘warm (over a fire),’ *cho-*; *pcak* 짝 ‘one of a pair,’ *chak*; *pcuc-* 꺾- ‘tear,’ *chuc-*; *pcoy-* 꺾- ‘cut open,’ *chay-*; *pcō-* ㅍ- ‘weave,’ *chA-*; *pcō-* ㅍ- ‘squeeze out,’ *chA-*.

The *p-* in the aspirated cluster *pth-* dropped after the Late Middle Korean period, leaving only *th-* as the initial. This simplification is believed to have taken place in the seventeenth century; in texts from the eighteenth century, *pth-* regularly appears as *th-*.

5.3.1.4 Medial clusters

Clusters of two consonants were common in medial position between vowels. There were also clusters of three consonants in case the first consonant was /l/, or a nasal plus an *sC* cluster. When a consonant followed the stem of a verb ending in two consonants, the final consonant of the stem dropped. For example, if the stem of the verb *task-* ㅌ- ‘cultivate, train’ was followed by the infinitive ending *-a*, the resulting form was *tas.ka* ㅌ가; but if the stem was followed by the ending *-ti*, the *k* dropped and the word was written *tas.ti* ㅌ디. In texts of the fifteenth and sixteenth centuries, the stem of the verb ‘overflow’ was transcribed variously as *nem.psti-* 넘ㅍ디- (1461 *Nūngōm kyōng ōnhae* 8:101), *nems.ti-* 넘디- (1459 *Wōrin sōkpo* 2:48), or *nem.sti-* 넘씨- (1461 *Nūngōm kyōng ōnhae* 9:54; 1527 *Hunmong chahoe* 3:11). Whether the *p-* was excrement or an artifact of the orthography is unclear; in any case, there was no phonemic difference between the three forms. In texts from the middle of the fifteenth century, the phrase *hon pskyu* 혼씨 appears in the meaning of ‘at one and the same time,’ but by the beginning of the sixteenth

century it had changed into the word *homskuy* 함씨 ‘together.’ The juncture between the two words in the phrase was lost and the resulting cluster reduced.

When verb stems ending in *-lk*, *-lm*, or *-lp* were followed by an ending beginning with a consonant, a cluster consisting of three consonants resulted; for example, *molk.ti* 몰디 ‘clear,’ *polk.tela* 폴더라 ‘bright,’ *wolm.kwo* 웁고 ‘move,’ *kolp.kenmalon* 콜건마론 ‘line up.’ In these cases, the clusters were never reduced, and we assume they were fully pronounced.

5.3.1.5 Voiced fricatives

In the middle of the fifteenth century Korean had a series of voiced fricatives, /W, z, G/. The distribution of these obstruents was extremely restricted, and all three soon disappeared from the language.

W (뵤) The consonant *W* (뵤) was a voiced bilabial fricative [β]. That the consonant was a labial follows from the fact that it alternated morphophonemically with /p/; that it was voiced can be deduced from the fact that it appeared only in voiced environments. Labiality and voicing, as well as the fact that the consonant was a fricative, are phonetic values also supported by the explanation given in the *Hunmin chōngŭm haerye*, where, in the “Explanation of the design of the letters,” the symbol 뵤 is said to represent a “light labial sound.” The text continues, explaining that “the lips join only momentarily, and the pronunciation is more throatish [than p].”

A reflex of *W* in some modern, peripheral dialects is /p/, which, because the environment is voiced, is always realized as [b]. For example, corresponding to Middle Korean *saWi* 사비 ‘shrimp’ is Kyōngsang [sɛbi]; the South Hamgyōng reflex of *chiWe* 치벼 ‘cold’ is [c^hibə]. These forms suggest that [β] represents the lenition of an earlier [*b], and that the change was originally restricted to the central region.

The consonant *W* appeared in the following phonological environments: (1) *V_V*; (2) *y_V*; (3) *l_V*; (4) *z_V*. Unlike *z*, *W* was never transcribed in word-initial position.

Most occurrences of *W* are found between vowels. The *Hunmin chōngŭm haerye* gives examples of this type of environment, (1): “*W* (뵤), as in *saWi* 사비 ‘shrimp,’ and *tuWuy* 드뵤 ‘rounded-out gourd.’” Here are examples of the consonant in the other environments: (2) *tayWem* 대뵤 ‘big tiger’ (1447 *Yongbi ōch’ōn ka* 87), *tayWat* 대뵤 ‘bamboo field’ (1447 *Yongbi ōch’ōn ka* 5:26); (3) *kulWal* 글뵤 ‘letter’ (1447 *Yongbi ōch’ōn ka* 26), *malWam* 말뵤 ‘water chestnut’ (1459 *Wōrin sōkpo* 21:80); (4) *wuzWu-* 웃뵤- ‘funny.’

Evidence bearing on the phonemic status of this consonant is difficult to find in the pre-alphabetic records. The twelfth-century Chinese glossary *Jilín lèishì* gives phonogram readings for five words that later contained an occurrence of *W*. These indicate that there was a labial in the words but give no

indication that the consonant was then distinct from **p*. The Chinese transcriptions found in the *Cháoxiān-guān yìyǔ* (c. 1400) are no different. There are nine that bear on this question:

Gloss	Transcription	Late Middle Korean form
(a) (月)斜 ‘(moon) goes down’	(得二)吉卜格大	(tol) kiwulGeta (들)기울어다 < *kiWulGeta
(b) (江)心 ‘(river) middle’	(把刺)戛噴得	(pala) kawontay (바라)가온대 < *kaWontay
(c) 隣舍 ‘neighbor’	以本(直)	iwus (cip) 이웃(집) < *iWus
(d) 蝦(蟹) ‘shrimp (and crab)’	洒必(格以)	saWi (key) 사비(계)
(e) 妹 ‘younger sister’	媛必	nwuuy, nwuwuy 누의, 누위 < *nwiWi
(f) 酒 ‘wine, beer’	數本	swul, swuul, swuwul 술, 수을, 수울 < *swuWul
(g) 熱酒 ‘warm wine’	得本數本	teWun swul 더븐 술
(h) 二 ‘two’	都卜二	twul, twuul 둘, 두을 < *twuWul
(i) 瘦 ‘thin’	耶必大	yewuyta 여위다 < *yaWita

Note: These reconstructed forms are supported by modern dialect evidence.

The phonograms used in the above to transcribe this labial, 卜, 噴, 本, and 必, were also used to transcribe the consonant that became /p/ in Late Middle Korean (for example, *pyelwo* 硃로 ‘inkstone’ was written 必路), and from this fact one might conclude that around 1400 there was no distinction between /p/ and /W/ in Korean. But it seems highly unlikely that that was the case, since soon thereafter all these words apparently did contain a /W/. The lack of a graphic distinction is much more probably to be attributed to the crudeness of the transcription instrument, Chinese phonograms, which seldom reflect anything more than gross phonetic differences. Similar reasoning can be used about the *Jīlín lèishì* phonograms as well. Pre-alphabetic transcriptions do not provide evidence of a phonemic distinction, but they do not conclusively disprove it, either.

However, some occurrences of *W* in Late Middle Korean can be shown to have lenited from an earlier **p*. These known cases of lenition all come from compounds. The following examples are classified by the phonological environments given above:

(1) *V_V*: Demonstrable cases of lenition between vowels are fairly rare. One that has been clearly established, however, is *phywoem*, *phwowem* 표염, 표웁 ‘leopard, panther’ (1527 *Hunmong chahoe* 1:9,18). This form is a compound of Sino-Korean *phywo* 豹 ‘leopard’ and *pem* 범 ‘tiger’ (and in Early Modern Korean the word was restored to *phywopem* 표범). The noun *koloWi* ㄹㄹ비 ‘drizzle, fine rain’ is a compound of *kolo* ㄹㄹ ‘fog, mist’ and *pi* 비 ‘rain.’ Another example that has often been cited is *howak* 窩, 窩, ‘mortar,’ which appears to be derived from **hopak*, but the etymology is uncertain.

Intervocalic lenition may also have occurred in the stems of certain irregular verbs. These verbs, which include, for example, *nwup-* ~ *nwuW-* 눕- ~ 뉘- ‘lie down’ and *twop-* ~ *twoW-* 돕- ~ 뉘- ‘help,’ have predictable stem shapes,

/p/ appearing before consonants and /W/ before vowels: *nwupkwo*, *nwuWe* 눅고, 누벼; *twopkwo*, *twoWa* 돕고, 도박. The problem with treating these alternations as the result of lenition is that the *-p* in other verb stems, such as *cap-* 잡- ‘catch,’ does not alternate with *-W*: *capa* 자바. If lenition produced the *p~W* alternations found in the irregular verbs, it remains to be explained why the *-p* in these other verbs did not lenite. (Proposed solutions to these and other problems in the irregular verbs will be discussed below.)

(2) *y V*: The nouns *tayWem* 대범 ‘big tiger’ and *tayWat* 대밭 ‘bamboo field’ are compounds of *pem* 범 ‘tiger’ and *pat* 밭 ‘field.’ The verb stem *meyWas-* 메탓- ‘remove clothing from one shoulder (as a sign of respect)’ is a compound of *mey-* 메- ‘carry on the shoulder’ and *pas-* 탓- ‘take off (clothing).’

(3) *l V*: The noun *kulWal* 글밭 ‘letter’ is apparently a compound of *kul* 글 ‘writing’ and *pal* 밭 ‘(a nominal suffix).’ *malWam* 말밭 ‘water chestnut’ combines *mal* 말 ‘water chestnut’ (though this etymology is not certain) with *pam* 밭 ‘chestnut.’ The noun *kalwem* 갈범 ‘spotted (i.e., striped) tiger’ (as opposed to a *phwowem* ‘leopard, panther’) is a compound of *kal-* 갈- ‘spotted’ and *pem* 범 ‘tiger.’ The noun *twothwolwam* 도톨왓 ‘acorn’ combines *twothwol* 도톨 ‘acorn’ with *pam* 밭 ‘chestnut.’ Both show the development *p > *W > w*. Another obvious case of this kind of lenition is *syelwep* 설범 ‘Buddhist sermon,’ the Sino-Korean reading of 說法 found in the early sixteenth-century *Pönyök Pak T’ongsa* (1:75).

(4) *z V*: The evidence for lenition here is not conclusive. The verb *wuzWu-* 웃브- ‘funny’ combines *wuz(u)-* 웃- ‘laugh’ with *-pu/Wu/po/Wo-* -브/브/브/브-, a postverb used to derive adjectives from (process) verbs. The phonological shape of this postverb varies with the shape of the stem to which it attaches, the bilabial fricative /W/ appearing after voiced segments, and /p/ after /h, k, t/. But the alternation is not necessarily evidence of lenition, since it could also represent the neutralization of a voicing distinction after a voiceless obstruent.

It is difficult to date these changes of /p/ to /W/. However, as will be seen below, the lenition of *s > z* took place around the fourteenth century, and so it seems reasonable to assume that labial lenition also happened around that time.

In any event, /W/ disappeared around 1450. The advent of the Korean alphabet in 1446 coincided with almost the very end of the historical existence of this phoneme. Only a few decades earlier, as can be seen from the *Cháoxiān-guǎn yìyǔ* transcriptions, words such as *kiwulketa* 기울거다 ‘go down,’ *kawontay* 가운데 ‘middle,’ *iwus* 이웃 ‘neighbor,’ *nwuuy* 누의 ‘younger sister,’ *swul* 술 ‘wine, beer,’ *twul* 둘 ‘two,’ and *yawita* 야위다 ‘thin’ had all contained a labial consonant. Yet, nowhere in the alphabetic

corpus is that consonant attested in these words; all that remained, and then only in some cases, was its trace in the form of the semivowel /w/. The verb *toWoy*- 득꺾- ‘become’ is attested in the 1447 *Yongbi ōch’ ōn ka*. But in the 1447 *Sŏkpo sangjŏl* and the 1449 *Wŏrin ch’ ōn’ gang chi kok*, this form with /W/ is found only in morphemically complex verbal expressions such as *UYSIM_toWoy*- 疑心득꺾- ‘doubt’ and *enkuk_toWoy*- 언극득꺾- ‘be destitute’; otherwise, the verb is always written *towoy*- 득외-. By the time Sejo ascended the throne in 1455, the letter ㅓ had almost vanished from the textual record. It is seen in a few forms in the 1464 *Amit’a kyŏng ōnhae* and in the 1467 *Moguja susimgyŏl ōnhae*, where, among other uses, it appears in derived adverbs, such as *kapoyyaWi* 가비야꺾 ‘lightly’ (9), *cwozoloWi* 조스르꺾 ‘importantly’ (11), *swuWi* 수꺾 ‘easily’ (14), *elyeWi* 어려꺾 ‘with difficulty’ (44), and *sawonaWi* 사오나꺾 ‘harshly’ (44). But these two texts were the last ones to make regular use of the letter.

In most environments, *W* lenited and merged with the semivowel *w*. For example, *kulWal* 글꺾 ‘letter’ > *kulwal* 글왈; *teWe* 더꺾 ‘hot’ > *tewe* 더꺾; *sukoWol* 스꺾 ‘the country’ > *sukowol* 스꺾; *elyeWun* 어려꺾 ‘difficult’ > *elyewun* 어려운. However, when followed by the vowel /i/, *W* usually did not weaken to *w* but elided instead: *swuWi* 수꺾 ‘easily’ > *swui* 수이; *kaskaWi* 갖꺾 ‘closely’ > *kaskai* 갖꺾이; *teleWi* 더꺾 ‘dirty (something)’ > *telei*- 더꺾이-, *teley*- 더꺾-; *nwuWi*- 누꺾- ‘lay (something) down’ > *nwui*- 누꺾이; *saWi* 사꺾 ‘shrimp’ > *sai* 사이. There are three counterexamples where *Wi* > *wi*: *chiWi* 치꺾 ‘cold(ness)’ > *chiwi* 치꺾이, *teWi* 더꺾 ‘heat’ > *tewi* 더꺾이, and the derived adverbial ending *-tiWi* -꺾이 > *-tiwi* -꺾이.

z (△) The consonant represented in Late Middle Korean by a triangle, △, was the voiced dental fricative *z*. This value can be deduced from the fact that the consonant alternated morphophonemically with *s*, and because it was found only in voiced environments. In the *Hunmin chŏngŭm*, the consonant is called a “semi-incisor sound” and identified with the “*ri* (日) character mother” of the rime tables. That particular “character mother” has been reconstructed for Middle Chinese as a palatal nasal (a fact that has led to speculation that the Korean initial might also have been a nasal), but at least by Song times, the Chinese initial had a dental sibilant quality, **nz*, and in Old Mandarin (fourteenth century) the consonant was pronounced *ʒ. Like the Chinese sound, the Korean consonant was a voiced dental spirant.

In the same modern dialects that show /p/ as a reflex of *W*, the reflex of Late Middle Korean *z* is often *s*. For example, LMK *mozol* 모꺾 ‘village’: Andong [masil]; LMK *kozolh* 꺾 ‘autumn’: Pukch’ŏng [kasil]. Note that /s/ is never voiced in these dialects, even intervocally. These correspondences suggest that *z* lenited from an earlier **s* in the central dialects.

The occurrence of the consonant *z* was normally restricted to medial position. It was found in the following phonological environments: (1) *V_V*; (2) *y_V*; (3) **l_V*; (4) *n_V*; (5) *m_V*; (6) *V_W*; (7) *V_G*.

The *Hunmin chǒngŭm haerye* gives examples of the first environment, (1): “*z* (△), as in *azo* 아스 ‘younger brother’ and *nezi* 너씨 ‘bustard.’” An example of (2) is *sayzam* 새삼 ‘dodder, love vine.’ Examples of (3) entail the reconstruction of **l*. These include *twuze* 두써 ‘a couple of,’ which is derived from *twul* 둘 ‘two’ + *se* 서 ‘three’; and *phuzeli* 프써리 ‘land overgrown with weeds,’ a combination of *phul* 풀 ‘grass’ and *seli* 서리 ‘space.’ Examples of (4) include *hanzwum* 한숨 ‘sigh,’ *hanzam* 한삼 ‘a creeper, vine,’ and *swonzwo* 손소 ‘with (his) own hands, personally’; (5) includes *mwomzwo* 몸소 ‘in person (i.e., with one’s own body)’; and (6) *wuzWu-* 웃브- ‘funny, laughable.’ An example of (7) is *kozGay* 쫄애 ‘scissors’; occurrences of *z* in this environment will be discussed together with /G/, below.

The examples in (3), (4), and (5) coexisted with doublets containing /s/ in Late Middle Korean; e.g., *twuze* 두써 ~ *twuse* 두서, *phuzeli* 프써리 ~ *phuseli* 프서리, *hanzwum* 한숨 ~ *hanswum* 한숨, *hanzam* 한삼 ~ *hansam* 한삼, *mwomzwo* 몸소 ~ *mwomswwo* 몸소. In addition, the example in (2), *sayzam* 새삼, is transcribed as *saysam* in the seventeenth-century pharmacological text *Tongŭi pogam* (*T’angaek-p’yŏn* 2:39).

Although the occurrence of *z* was usually restricted to medial position, the consonant also appeared, in certain special vocabulary, in word-initial position. This special vocabulary included mimetics such as *zelzel* 설설 ‘(the appearance of flowing water)’ and *zemzem* 썹썹 ‘(the shimmering heat of the sun).’ But there were also two rather interesting nouns that began with *z-*: *zywus* 숫 ‘the Four-Stick Game, *yut*’ and *zywoh* 송 ‘mattress, futon.’ The word *zywus* is found only in the first edition of the *Hunmong chahoe* (1527). Neither the origin nor the name of the Four-Stick Game is known, but note that, in addition to the modern standard form *yuch*, the word also appears in various dialects as *swus*, with an initial /s/ corresponding to Middle Korean /z/. The word *zywoh* is a borrowing of the Chinese word for ‘mattress, bedding, cushion.’ It is not Sino-Korean; the regular Korean reading of the character 褥 is *ywok*, with a final velar stop. To be sure, the word *zywoh* is written with the appropriate character in the *Tusi ōnhae* (22:19), but in other texts it is treated as a native word, just as its reflex, *yo*, is in Contemporary Korean. In texts of the fifteenth and sixteenth centuries, there were a number of transcriptions of Sino-Korean and Chinese loans that were written with an initial *l-* or *z-*; for example, *lwongtam* 룡담 (弄談) ‘joke,’ *zin.skuy* (人氣) 신씨 ‘popularity,’ *zichyen* 씨천 (二千) ‘two thousand.’

An initial *z* was in fact a common Sino-Korean correspondence of the “*rì* (日) character mother” in Chinese. The *Cháoxiān-guǎn yìyǔ* (c. 1400)

contains transcriptions that clearly show the pronunciation was real. For example, *noyzi* 訖日 (來日) ‘tomorrow’ was transcribed 餒直. The character 直, read in modern Mandarin as *zhí*, would only have been used if the second syllable of the Korean word actually began with a spirant (the character is also used in the same text to transcribe the syllable *zi* of *sozi* 슝지 ‘space, interval’). Similarly, *nyezin* 녀신 (女人) ‘woman’ was transcribed 呆忍, the second character of which is (today) read *rén* in Mandarin. Notice, however, that the initial *z* was usually only preserved in these Sino-Korean readings when the morpheme appeared in non-initial position (though there are exceptions like those given in the previous paragraph); the morpheme *-zin* ‘person’ (人), for example, also occurred in initial position in *inso* 인스 (人事) ‘greeting,’ and there the *z* dropped.

The oldest attestations of a *z* in Korean are found in the twelfth-century Chinese glossary, the *Jilín lèishì*. The thirteenth-century *Hyangyak kugŭp pang* also shows clear evidence of the phoneme. These Early Middle Korean transcriptions are discussed in [Chapter 4](#), above.

But other *Hyangyak kugŭppang* transcriptions indicate that some fifteenth-century examples of *z* had lenited from an earlier **s*, most probably sometime in the fourteenth century. The word *sayzam* 새삼 ‘dodder, love vine,’ for example, is written there as 鳥伊麻. The character 麻 is a transcription of the native word **sam* ‘hemp,’ which had an initial **s-*. The medicinal plant name *nezam* 녀삼 ‘*Sophora flavescens*’ is glossed in that same text as 板麻, representing the native word **nelsam* (**nel* ‘board’ + **sam* ‘hemp’).

The composition of compounds is also evidence of this change, that is, that earlier *s* lenited to *z* in voiced environments, between /y, l, n, m/ and vowels. The verb form *malmoyzam-* 말미삼- ‘is caused by’ must come from *malmoyzam-* 말미삼- (attested in 1518 *Pŏnyŏk sohak* 8:31) because it is composed of *malmoy* 말미 ‘reason’ + *sam-* 삼- ‘adopt, take as.’ Similarly, *twuze* 두써 ‘a couple of’ < **twulse* (*twul* 둘 ‘two’ + *se* 서 ‘three’); *phuzeli* 프써리 ‘land overgrown with weeds’ < **phulseli* (*phul* 풀 ‘grass’ + *seli* 서리 ‘space, midst’); *hanzwum* 한숨 ‘sigh’ (*han* 한 ‘big’ + *swum* 숨 ‘breath’). Notice that the lenition of *s* in some of these forms also entails the loss of /l/, which, before a dental consonant, is a well-documented historical change; e.g., *swul* 술 ‘spoon’ + *cye* 저 ‘chopsticks’ > *swucye* 수저 ‘spoon and chopsticks.’ Thus, a typical derivation was: *twul* 둘 ‘two’ + *se* 서 ‘three’ > **twulse* > **twulze* > *twuze* 두써 ‘a couple of.’ With this sequence of changes in mind, other etymologies can be surmised. For example, the earliest attested form of modern standard *pwuekh* ‘kitchen’ is *puzep* 브첩, in the meaning of ‘cooking stove’ (*Hunmin chŏngŭm*). If the word originally meant ‘the place around the cooking fire’ (as it still does in many modern dialects), then *puzep* was perhaps a compound of *pul* 불 ‘fire’ plus **sep* *첩 ‘side’ (which is

attested in modern dialects and in modern standard compounds such as *kilseph* ‘roadside’).¹⁰

Middle Korean *z* was in general lost without a trace: $z > \emptyset$. This loss took place between the 1470s and the middle of the sixteenth century. The earliest attestation of the change can be found in the *Tusi ōnhae* (1481), where *sozi* 소지 ‘space, interval’ is also written as *soi* 소이. In the same text, *moyzyang* 미양 (每樣) ‘every time’ coexists with *moyyang* 미양. In the sixteenth-century *Pōnyōk Pak T’ongsa*, the word ‘space, interval’ is written *soi* 소이, and Sino-Korean *noyil* 니일 (來日) ‘tomorrow’ is *noyil* 니일. These early examples of the elision of *z* are all restricted to the environment $_i, y$, which suggests that the process of change started there.

The 1527 *Hunmong chahoe* shows that the consonant was in a state of flux in the 1520s. In that text, the Sino-Korean readings of 人 ‘person’ and 日 ‘day’ were transcribed as *zin* and *zil*, both with an initial *z*-. But the latter morpheme had lost its initial *z*- in the word *noyil* 니일 (來日). Then there is the entry “讓 소양상” (3:11, 25), where the reading of the character 讓 ‘yield’ is given as *zyang* 양, but in the gloss for it, *soyang* 소양 (辭讓), the reading has lost the initial *z*-. In the text under the chart showing tone marking conventions (平上去入定位之圖), the readings given for the characters 入 and 如 are *ip* 입 and *ye* 여. The glosses *yeu* 여으 ‘fox’ (1:19) and *aol* 아올 ‘taking away’ (3:9), which in earlier texts had been *yezo* 여소 and *azol* 아솔, shows that the elision of *z* had spread to more general occurrences in intervocalic position.¹¹ Since the author of the *Hunmong chahoe*, Ch’oe Sejin, was born in the 1470s, the elision of *z* must have begun around then.

Texts from the latter half of the sixteenth century show clearly that *z* had been lost by that time. Texts from the 1570s, such as the Kwangju edition of the 1575 *Ch’ōnjamun* and the 1576 *Sinjūng yuhap*, contain a number of occurrences of the letter Δ (*z*), but in most places the letter has been replaced by the zero initial, \emptyset . By the 1580s, in texts such as the 1587 *Sohak ōnhae* and the 1590 *Sasō ōnhae*, the symbol Δ is rarely used, and in the 1583 *Sōkpong Ch’ōnjamun* it does not appear at all. The later, occasional uses of the letter Δ in words such as *mozom* 모슴 ‘heart, mind’ and the emphatic particle *za* 자, as well as in transcriptions of character readings such as *zo* 소 (兒) and *zi* 지 (而), are only instances of orthographic conservatism, not

¹⁰ This etymology leaves unexplained, however, the hapax *pus* பு ‘kitchen,’ which is attested later, in the 1587 work *Sohak ōnhae* (6:92). Thus, *pul* ‘fire’ + **sep* ‘side’ > **pulsep* > *puzep* ‘cooking stove,’ which, through a series of later changes, became modern standard *pwuekh* ‘kitchen.’ Labial dissimilation of *-p* to *-k* is well documented, but why the consonant became aspirated has yet to be explained satisfactorily. Nevertheless, note that the final consonant in Contemporary Korean *seph* ‘side’ is also aspirated.

¹¹ Although the 1659 redaction of the *Hunmong chahoe* transcribes a *z* in these forms, the original edition shows that the consonant had already been lost in these words.

evidence that the sound still existed. It is safe to assume that *z* had disappeared from the central dialects by the middle of the sixteenth century.

Although *z* generally elided completely, there are a few textual attestations from the sixteenth and seventeenth centuries showing the change *z* > *c*. The word *swonzwo* 손소 ‘with (his) own hands, personally’ is transcribed as *swoncwo* 손조 in both the c. 1517 *Pönyök Pak T’ongsa* and the 1587 *Sohak önhæ*, and *mwomzwo* 몸소 ‘in person’ appears as *mwomcwo* 몸조 in the 1617 *Tongguk sinsok samgang haengsil to*. The fifteenth-century form *nam-cin* 남진 ‘man, male’ may well have been an early example of this change, since it appears to be a development of Sino-Korean **namzin* (男人). The Contemporary Korean word *samcil* 삼질 ‘the third day of the third month of the lunar calendar’ must also have undergone the same change, since it is almost certainly derived from Sino-Korean **samzil* (三日) ‘third day.’ The attested cases of this change, *z* > *c*, occurred following a nasal.

G (○) In addition to *W* and *z*, there was also a third voiced fricative in Late Middle Korean, the velar spirant *G*, which was probably realized phonetically as [ɣ] or [ɦ]. The occurrences of this consonant are often difficult to establish from the textual record, because the symbol used to represent it, ○, was also used as a “zero consonant” to indicate that a syllable began with a vowel. However, the explanation of graphic design given in the *Hunmin chöngüm haerye* suggests that the symbol was primarily constructed to represent a velar consonant. In the “Explanation of the design of the letters” section of the *Haerye*, the sound represented by the symbol ○ (*ng*) is explained as being similar to that of ㅅ: “[T]he root of the tongue blocks the throat and the breath of pronunciation is emitted through the nose, but even so the pronunciation resembles that of ㅅ.” From this and other statements in the *Haerye*, it is clear that the authors associated a sound with the symbol ○, and that the sound was pronounced in the back of the throat.

Philological evidence taken from fifteenth-century texts provides proof of the phonemic status of *G*. Here is an example: the initial *k* of the concessive *-kenul* -거늘 or the gerund *-kwo* -고 seems to disappear when either of these verbal endings follows a stem ending in *l*- such as *al-* 알- ‘know’: *al.enul* 알어늘, *al.wo* 알오. But if the velar consonant had completely elided, liaison would have occurred and the stem-final *-l* would have been written as the onset of the first syllable of the ending: **a.lenul* *아러늘, **a.lwo* *아로. This was the orthographic treatment, for example, when the same stem was followed by the infinitive ending *-a/e* -아/어: *a.la* 아라 (see section 5.2.6, above). But liaison did not take place in these cases, because there was already a consonant at the beginning of that next syllable. The *-l* could only have been written as a terminal if the following syllable began with a consonant, and that consonant must have been a lenited form of the original *k*-.

Here is another example of the philological sleuthing used to establish *G* as a phoneme. In the middle of the fifteenth century, the volitive suffix *-wo/wu-* *-오/우-* gained an excrescent *y-* and was written *-ywo/ywu-* *-요/유-* whenever it followed a verb stem ending in *i-* or *y-* such as *mwuy-* *뛰-* ‘move’: *mwuyywu-* *뛰유-*. The same was true of the infinitive ending *-ale* *-아/어*: *mwuy.ye* *뛰여*. That was the rule for endings beginning with a vowel. However, the causative morpheme *-wo/wu-* *-오/우-*, which appears superficially to be homophonous with the volitive, never gained an excrescent *y-*: *mwuy.wu-* *뛰우-*. The reason must be because that particular suffix did not begin with a vowel. Instead, it began with the consonant represented by *○*. There is no other way to explain the phonemic contrast between *mwuyywu-* *뛰유-* and *mwuy.wu-* *뛰우-*.

The conclusion to be reached from facts such as these is that the symbol *○* was used for two purposes in the fifteenth century. (1) It was used to represent the phoneme *G*; and (2), it was used as a “zero consonant” to preserve the canonical shape of a syllable that began with a vowel.

Evidence from the modern dialects supports this conclusion. In the peripheral dialects where lenition did not occur (and [b] and [s] are preserved as reflexes of *W* and *z*), a [g] is often found as a reflex of *G*. Here are some correspondences found in the Pukch’ong dialect of South Hamgyong (modern Seoul forms are given for comparison):

	Late Middle Korean	Pukch’ong	Seoul
‘wild grapes’	melGwuy <i>멜위</i>	məlgi	melwu [mæru]
‘insect’	pelGey <i>벌에</i>	pəlgəji	pelley [pəlle]
‘sand’	mwolGay <i>몰애</i>	molgɛ	molay [mɔrɛ]
‘placate’	talGay- <i>달애-</i>	talgɛ-	tallay- [talɛ-]

The phoneme *G* can be shown to have occurred in the following environments: (1) *l_V*; (2) *z_V*; (3) *i, y_V*. (These are the only environments where the spellings can distinguish /G/ from zero.) This fricative was produced through the lenition of [*g], a process that probably took place in the central dialects sometime after the thirteenth century.

Examples of (1) include: *mwolGay* *몰애* ‘sand’; *nwolGay* *놀애* ‘song’; *talGay-* *달애-* ‘placate’; *elGuy-* *얼의-* ‘curdle.’ Examples of (2): *kozGay* *꺇애* ‘scissors’; *kezGwuy* *것위* ‘worm’; *wuzGi-* *웃이-* ‘make laugh.’ Examples of (3): *poyGay* *빅애* ‘Pear Inlet (a place name)’; *kolayGwol* *꺇래울* ‘Walnut Village (a place name).’

The lenition of *k* to *G* in these phonological environments can be demonstrated in certain specific cases. Among the most obvious are occurrences of a *k-* at the beginning of a particle or a verb ending.

k-initial particles. Particles that began with a *k-* were subject to lenition following a noun ending in *-l*, *-i*, or *-y*. These particles include *kwa* *과* ‘with,’ *kwos* *곳* ‘precisely,’ and *kwom* *끔* ‘each.’ For example, *mul_Gwa* *물와* ‘with

water’; *mul_Gwos* 물웃 ‘precisely water’ (*Tusi ōnhae* 7:9); *atol_Gwom* 아들옴 ‘each son’; *wuli_Gwos* 우리웃 ‘precisely us.’ Notice that the *k-* in these particles was not transcribed after the other vowels, either (e.g., *namwo_wa* 나무와 ‘with trees’), and it may well be that, at some point in time, a trace of the velar consonant remained in these intervocalic cases as well. But the orthography does not give us sufficient information to show that this was the case, and most Korean grammarians assume that the *k-* was totally suppressed there. The question particles *ka* and *kwo* also lenited after *-l*, *-i*, or *-y*: *musum elkwul_Gwo* 무슨 얼굴오 ‘what face is it?’. After other vowels, the *k-* in these question particles sometimes elided, but sometimes it did not.

k-initial verb endings. Like particles, verb endings beginning with *k-* were subject to lenition after *-l*. These endings include the gerund *-kwo* -고, the adverbative *-key* -게 and its variant *-koy/kuy* -기/기, as well as forms built upon the perfective *-ke* -거-, such as *-kenmalon* -건마른, *-kenul* -거늘, *-keni* -거니, *-ketun* -거든. For example, with *al-* 알- ‘know’: *alGwo* 알오, *alGey* 알에, *alGenul* 알아늘, etc. The *k-* in these verb endings also lenited after *-y*: *yehuyGenul* 여회어늘 ‘though bereaved of...’ However, the *k-* did not elide after *z*; e.g., *wuz-* 웃- ‘laugh’ + *-key* -게 > *wuskey* 웃게 ‘laughingly.’ Nor did the *k-* elide after vowels, including after *-i*, unless the *-i* occurred in one of two morphemes. The first was the copula *i-* 이-: *iGwo* 이오 ‘being...’, *iGenul* 이어늘 ‘while it is...’ The second was the causative derived from the verb *ti-* 디- ‘drop’ (*ti-* 디- ‘drop’ > *ti-* 디- ‘make drop’): *tiGwo* 디오 ‘make drop, and...’ Because the *i-* of these two stems induced lenition in this way, it has been suggested that it was phonemically /iy/, a treatment that would also explain why the copula is abbreviated as ‘y-’ after a vowel.

Causatives and passives. Velar lenition also left a conspicuous mark on the postverb used to form causatives and/or passives. This morpheme had a variety of shapes, *-ki-* ~ *-hi-* ~ *-Gi-* ~ *-i-*, the choice of which depended upon the final segment of the verb stem to which the morpheme was attached. The shape *-ki-* appeared after a nasal or *s-* (*swumki-* 숨기- ‘hide’; *paski-* 받기- ‘remove’); *-hi-* after *p-*, *t-*, *c-*, or sometimes *k-* (*capki-* 잡기- ‘get caught’; *machi-* 마치- ‘stop something’; *mekhi-* 먹기- ‘be eaten’; *meki-* 먹기- ‘feed’); *-Gi-* after *l-*, *z-*, or *y-* (*nolGi-* 놀이- ‘fly something’; *wuzGi-* 웃이- ‘make laugh’); *-i-* after *h-* or sometimes *k-* (*tahi-* 다히- ‘touch something’), and the semivowel *-y-* after a vowel, (*syey-* 세이- ‘stand something up’).

For this morpheme, the lenition of /ki/ to *-Gi-* after *l-* is substantiated by reflexes found in the modern dialects.

	Late Middle Korean	Pukch’ŏng	Seoul
‘fly (something)’	nolGi-	nalgi-	nalli-
‘be bitten’	mwulGi-	mulgi-	mulli-
‘be spread’	skolGi-	k’algi-	kkalli-

The transcription of *-Gi-* after *y-* was unique. In this environment (*y__i, y*), the symbol \circ would normally be interpreted as the zero initial, so the transcription method used instead was to double the symbol and write it as $\circ\circ$. In Late Middle Korean, the only use ever made of this double-zero symbol was in the transcription of the passive or causative morpheme after a stem ending in *-y*; for example, *kwoyOOye* 꺾이여 ‘being loved by someone’ is derived from *kwoy-* 꺾- ‘love,’ and *moyOOi.nonila* 띠이느니라 ‘is bound to, by’ is derived from *moy-* 띠- ‘bind, tie.’ The double zero, $\circ\circ$, was devised to represent some sound associated with this morpheme, and it seems probable that it was /G/.

The form *-Gwu(y)-* was also used as a causative postverb (but apparently not to mark passives). It is not clear how this form related to the morpheme with *i*-vocalism discussed above. However, here too, the lenited consonant appears following *l-*, *z-*, or *y-*: *alGwoy-* 알외- ‘inform’ (< *al-* 알- ‘know’); *meyGwu-* 메우- ‘cause to shoulder’ (< *mey-* 메- ‘shoulder’). Modern dialect reflexes of this causative show a velar; the morpheme is found in Seoul, for example, in (non-standard) *meykkwu-* ‘fill in,’ *totkwu-* ‘make higher,’ and *soskwu-* ‘make rise.’ Notice, too, the fifteenth-century transcription *mwuyOO-wue* 뉘워 ‘moving’ (1459 *Wörin sōkpo* 14:14), with the unique double-zero symbol, $\circ\circ$, used for the lenited consonant, indicating that a velar-initial variant of this postverb was around in the fifteenth century as well.

The morpheme *-key/kay*. The nominalizing suffix *-key/kay* is seen today in a variety of words, including *cipkey* ‘tweezers’ (< *cip-* ‘pick up’), *cikey* ‘A-frame’ (*ci-* ‘carry on the back’), *peykay* ‘pillow’ (< *pey-* ‘use as a pillow’), *ciwukey* ‘eraser’ (< *ciwu-* ‘erase’), *sswusikay* ‘a pick’ (< *sswusi-* ‘to pick, poke’), etc. The same suffix can be reconstructed for *kozGay* 쪼애 ‘scissors.’ This fifteenth-century noun was a nominalization of the verb *koz-* 쪼- ‘cut’ plus the instrument-marking suffix *-kay*, and it shows the lenition of [**g*] to *G* after *z-*. The word is attested today in Kyōngsang dialects in a number of forms preserving a reflex for the velar, including *kasegi*, *kafige*, *kafige*, and *kasige*. Lenition of *-kay* after *l-* can be found in the word *tolGay* 툨애 ‘mudguards hanging on either side of a horse’ (from *tol-* 툨- ‘hang’). Another word possibly composed of this morpheme is *nwolGay* 놀애 ‘song’ (?< *nwol-* 놀- ‘perform (music), play (an instrument)’ + *-kay*).

Compounds. The lenition of /*k/* to *G* is found in a few compound nouns: *kolGamakwoy* 꺾이마괴 ‘jackdaw’ (< *kamakwoy* 가마괴 ‘crow’); *kalGwoy* 갈외 ‘blister-beetle’ (< *kwoy* 꺾 ‘cat’), *poyGay* 띠애 ‘Pear Inlet (a place name)’ (< *kay* ‘inlet’); *kolayGwol* 꺾래울 ‘Walnut Village (a place name)’ (< *kwol* ‘village’).

Nouns and verb stems. There were a variety of other lexical items containing a consistent occurrence of *G*. These include such words as *melGwuy* 멀위

‘wild grapes,’ *pelGey* 벌에 ‘insect,’ *mwolGay* 몰에 ‘sand,’ *talGay*- 달에- ‘placate,’ *kezGwuy* 겹위 ‘worm.’

But there were other words where a *G* only appeared in morphophonemic variation. Examples of these include two classes of nouns where *G* is found before a particle beginning with a vowel.

The first shows the lenition of [g] after *l*-. It is comprised of *nolo* 노럭 ‘ferry,’ *nwolo* 노럭 ‘deer,’ *colo* 즈럭 ‘handle,’ *cyalo* 자럭 ‘sack,’ and *silu* 시럭 ‘steamer.’ Before a vowel-initial particle these nouns are written, for example, as *nol.G_i* 놀이, *nwol.G_uy* 놀의, *col.G_i* 줄이, *cyal.G_oy* 찰의, and *sil.G_ul* 실을. In these cases, dialect reflexes show the correspondence of [g] to *G*; for example, Pukch’ong [nolgi] ‘deer (+ object particle).’ Pre-fifteenth century forms of these words have been reconstructed as **nolok*, **nwolok*, **colok*, **cyalok*, and **siluk*.

The second shows the lenition of [g] after *z*-. Among the nouns where this change took place are *azo* 아스 ‘younger brother,’ *yezu* 여스 ‘fox,’ and *mwuzwu* 무수 ‘radish.’ Before vowel-initial particles (or the copula) these are written *az.G_i* 앞이, *yez.G_un* 엇은, and *mwuz.G_ila* 뭇이라. Again, dialect reflexes attest to /k/; for example, Hamhŭng [ak²i], Pukch’ong [yeenjk²i] and [muk²-]. These have been reconstructed as **azok*, **yezuk*, and **mwuzuk*.

There was another group of nouns that underwent velar lenition, but not to *G*. These words were characterized by a medial nasal. They include *namwo* 나무 ‘tree,’ *kwumwu* 구무 ‘hole,’ *pwulmwu* 불무 ‘bellows,’ and *nyenu* 녀느 ‘other (person).’ In these cases the Late Middle Korean forms before vowel-initial particles show an unlenited velar: *nam.k_on* 남곤, *kwum.k_ul* 곱클, *pwulm.k_uy* 뿍귀, *nyen.k_i* 년기. In the modern standard language, the velar has dropped: *namu*, *kwumeng*, *phwulmu*, *yenu*. But, again, it shows up in non-leniting dialects: Pukch’ong *nangk*-, *kwungk*-, Kŏch’ang [puŋgu]. Here, too, it is possible to reconstruct a morpheme-final **k*: **namok* (notice the Contemporary Korean form *namak-sin* ‘wooden shoes’), **kwumuk*, **pwulmuk*, **nyenuk*.

Certain leniting verb stems were characterized by a medial *-z*-; for example, *pozo*- 뼉스- ‘break, shatter,’ *kuzu*- 그스- ‘drag,’ *pizu*- 비스- ‘dress up.’ Before a vowel, the stem-final vowel elided and a *G* appeared after the *z*: *poz.Ga* 뼉아, *kuz.Ge* 굶어, *piz.Ge* 빗어.

In the fifteenth century a class of verbs made up of stems such as *wolo*- 오럭- ‘go up’ and *talo*- 다럭- ‘be different’¹² showed a lenited velar before an ending beginning with a vowel: *wolGa* 올라, *talGa* 달아. But here again (see discussion of the causative morpheme *-Gwu*-, above), questions arise about the identity of the lenited consonant, because reflexes in some South Chŏlla dialects show a labial instead: [talbu-] ‘be different.’

¹² This class merged with “*l*-doubling” verbs in the sixteenth century.

G and W. The consonant *G* was also transcribed in several words where a labial is unmistakably attested in earlier texts. The noun *kulWal* 글왈 ‘letter,’ a compound of *kul* 글 ‘writing’ and *pal* 발 ‘(a nominal suffix),’ is found in the 1446 *Yongbi ōch’ ōn ka* (26). But in the *Sŏkpo sangjŏl*, which was printed only a year or so later (1447), as well as in the *Wŏrin sŏkpo* of 1459, the same word is transcribed *kulGwal* 글왈. The prospective verbal form *syelWul* 설블 ‘sad’ (*Wŏrin sŏkpo*) is transcribed in the *Hunmong chahoe*, as *syelGwul* 설블. A similar orthographic development is seen in the forms *solWoni* 슬벗니 ‘say respectfully’ and *solGwoni* 슬오니. Whether these transcriptions represent orthographic confusion or something else is not clear.

Non-alphabetic transcriptions. The word *swolGwos* 솔웃 ‘awl’ was transcribed in the 1431 pharmacological work *Hyangyak ch’aejip wŏllyŏng* as 所乙串 and in the 1541 *Uma yangjŏ yŏmyŏkpyŏng ch’iryo pang* as 所乙古吡. Both transcriptions were clearly intended to be read as [solgos]. The word is almost certainly a compound of *swol-* ‘narrow’ and *kwoc* ‘skewer, spit.’ Notice, also, that the modern standard form of the word is *swongkwos*.

Nine words and phrases containing a *G* are attested in the *Cháoxiān-guǎn yìyǔ* (c. 1400).

Gloss	Transcription	Late Middle Korean form
(a) (天)晚 ‘(sky) grows dark’	(哈嫩)展根格大	(hanol) cyemkulGeta (하늘) 점글어다
(b) (天)旱 ‘(sky) is dry’	(哈嫩)格悶格大	(hanol) komolGeta (하늘) 막몰어다
(c) (月)斜 ‘(moon) goes down’	(得二)吉卜格大	(tol) kiwulGeta (달) 기울어다
(d) (早)起 ‘rise (early)’	(阿怎以)你格刺	(achom ay) nilGela (아침애)닐어라
(e) 說 ‘speak’	你格刺	nilGela 닐어라
(f) 上(梁) ‘go up’	(直墨勒)我根大	wolGita 올이다
(g) 上(御路) ‘go up’	(額路)我憂	wolGa 올라
(h) 馬黏 ‘mudguards’	得盖	tolGay 들애
(i) 省諭 ‘inform’	阿貴	alGwoy- 알외-

The verb ending in the first three entries, *-Geta*, is the morphophonemic variant of *-keta* that is found after a stem-final *l*-. The first phonogram used in the transcription, 格, was clearly intended to transcribe a velar stop. The same character is used for the ending *-Gela* in the next two entries. All of these forms represent occurrences of the perfective *-ke-*. The transcriptions in (f) and (g) represent occurrences of the “*l*-extending” verb *wolo-* 오럭 ‘go up,’ where *G* was regularly found before an ending beginning with a vowel (see above). The noun ‘mudguards’ contains an occurrence of the nominalizing suffix *-kay*, which lenited after *l*- (see above); the character 盖 had a reading that could only have begun with a velar stop. The transcription of the verb form *alGwoy-* 알외- ‘inform’ using the character 貴 is confirmation that the causative morpheme *-Gwoy-* began with a velar (see the discussion of the morpheme, above).

The noun *kozGay* 𪛗애 ‘scissors’ was transcribed 割子蓋 in the twelfth-century *Jilín lèishì*, as discussed above in Chapter 4. The phonogram 蓋 represented a syllable with the velar stop [*g] as its initial consonant. In the *Hyangyak kugŭppang* of 1250, the noun *kezGwuy* 것위 ‘worm’ was written variously as 居乎, 居兒乎, and 居叱口乎. Although the interpretation of these phonograms presents certain difficulties, the character 乎 probably represented a velar fricative.

In the 1492 essay on agricultural practices known as the *Kŭmyang chamnok* (2), the verb form *eyGwuti* ‘encircling’ is transcribed in both phonograms and Hangul: 於伊仇智 and 에우디. Notice that the phonogram 仇, which must have been read with an initial velar stop, represents what the Hangul indicates is an occurrence of *G* in the environment *y__V*.

Later developments of *G*. Texts printed in the first half of the sixteenth century maintained the transcription convention for *G*, but in the latter half of that same century, the orthography began to change. In the late 1500s, spellings of verbal inflections such as *wolGa* 올라 ‘goes up’ and *talGa* 달아 ‘is different’ were replaced, for example, in the 1587 *Sohak ōnhae*, by spellings such as *wolla* 올라 ‘goes up’ and *tallwom* 달롬 ‘being different.’ By the seventeenth century, these double-*l* spellings became the rule. The same orthographic change can be found in the transcriptions of nouns. For example, *nwolGay* 놀애 ‘song’ is spelled *nwollay* 놀래 in the *Ch’ ōphae sinŏ* of 1676; and *nwol.G_i* 놀이 ‘deer (plus subject particle)’ is written *nwol_li* 놀리 in the 1617 *Tongguk sinsok samgang haengsil to*. In the eighteenth century, spellings with a single *l*, such as *nwolay* 노래, became common, replacing the double-*l* spellings in the transcriptions of nouns.

5.3.1.6 Spirants

In the fifteenth century, Korean had two affricates, plain *c* and aspirated *ch*. In word-initial position, these consonants were phonetically realized as [ts] and [ts^h]. Unlike their modern Seoul counterparts, they were not palatalized.

Evidence that the pronunciation of /c/ was apical can be found in the transcription of the deferential morpheme *-zoW-*. The initial consonant of that morpheme was realized phonemically as *s* after obstruents, but, curiously enough, the *s* was consistently transcribed as *c* (𪛗) in case the preceding obstruent was *t*, *c*, or *ch*; for example, *etcoWonywo* 언즈벌노 (1447 *Sŏkpo sangjŏl* 13:16). This transcription of *t + s* as *tc* would only have been possible if the pronunciation of *c* was not palatal, but apical [ts] instead. The letter 𪛗 transcribed the sound [ts].

Both affricates occurred freely before *i* and *y*. Thus, *cang* 장 ‘cupboard,’ for example, contrasted phonemically with *cyang* 장 ‘soy sauce’; *ce* 저 ‘oneself’ was pronounced differently from *cye* 저 ‘chopsticks’; *chwo* 초 ‘vinegar’

contrasted with *chywo* 燭 ‘candle.’ These contrasts are usually assumed to involve palatalization, that is, that *c* and *ch* had palatal pronunciations before *i* or *y*; thus [tsaŋ] ‘cupboard’ : [tʃyaŋ] ‘soy sauce’; [tsə] ‘oneself’ : [tʃyə] ‘chopsticks’; [ts^ho] ‘vinegar’ : [tʃ^ho] ‘candle.’ That may well have been the case. However, there remains the nagging question of when these palatal allophones developed. Today, in the northwestern dialects where [ts] and [ts^h] pronunciations have been preserved, the consonants are not only pronounced without palatalization before (other) vowels, but before *i* and *y* as well. In no environment are /c/ and /ch/ palatalized in P’yŏngan speech. In the central dialects, as well as in the other dialects where palatalization developed, /c/ and /ch/ must have developed palatal allophones before *i* and *y* before the end of the Late Middle Korean period. But whether or not that had happened before the middle of the fifteenth century remains an unresolved question.

The dental fricative *s* and its reinforced counterpart *ss* were pronounced much the same in the fifteenth century as they are today. However, at that time *s* occurred freely before *y*, creating contrasts such as *sem* 섬 ‘stone stairstep’ : *syem* 섬 ‘island’ and *swoh* 송 ‘swamp’ : *sywo* 쇼 ‘ox.’ Since the dental fricative is thought to have been palatalized before *i* or *y*, these contrasts are usually assumed to have been realized phonetically as [səm] : [ʃyə:m]; etc. But again, just as is true with the affricates, /s/ is realized as [s] before *i* or *y* in the modern northeastern dialects, leaving the question open as to when palatalization in this environment occurred.

Although *s* can be shown to have lenited to *z* (△) in many words, lenition was not automatic, for [s] regularly occurred in voiced environments in the fifteenth century. However the process of lenition is treated historically, /s/ and /z/ were contrasting phonemes in the fifteenth century; e.g., *tasi* 다시 ‘again,’ *azi* 아△ ‘first.’

5.3.1.7 Nasals and liquids

Nasal distribution The labial *m* occurred freely in almost all phonological environments. The distribution of the dental nasal *n* was also relatively unrestricted; unlike the central dialects today, Middle Korean contained many occurrences of *n* before *i* and *y*; e.g., *ni* 니 ‘tooth,’ *nima* 니마 ‘forehead,’ *niph* 님 ‘leaf,’ *nyelum* 녀름 ‘summer.’ It was somewhat later, during the Early Modern Korean period, that *n* was lost in this position. The distribution of the velar nasal *ng* (◊) was more restricted. It did not occur in word-initial position, though it was apparently found in morpheme-initial position in *syongaci* 송아지 ‘calf’ (*sywo* 쇼 ‘ox’ + diminutive *-ngaci* -아지) and the polite marker *-ngi-* -◊-, as well as in a few Sino-Korean words such as *sange* 상어 ‘shark’ (*sa* 사鯊 + *-nge* 어魚). But there is little reason to believe that *ng* has ever occurred in word-initial position in Korean.

The most glaring difference in the distribution of these three nasals could be found at the end of verb stems. While labial *m* was commonly found at the end of stems, the dental nasal *n* was rare in that position. It occurred at the end of two common verb stems: *an-* 안- ‘embrace’ and *sin-* 신- ‘put on (shoes),’ verbs obviously related to the nouns *anh* 안ㅎ ‘inside’ and *sin* 신 ‘shoes.’ Also, there was another, very marginal *n*-final stem: *ten-* 던- ‘bet, gamble’ (1527 *Hunmong chahoe* 3:8). But this latter stem was not only rare; it also had an aberrant canonical shape for other reasons, which will be discussed below. The velar nasal *ng* did not occur at all at the end of verb stems, and it still does not.

Nasal epenthesis Occurrences of a nasal before an affricate present certain problems for historical reconstruction. In some cases, the Middle Korean words in question had alternate forms with and without a nasal; other words have Early Modern Korean and/or modern dialect reflexes in which a nasal seems to have been inserted. Here are some correspondences:

	MK	post-MK	Pukch'ŏng	Seoul
hide	kochwo-~konchwo- ~komchwo- ㄱ초-~ 근초-~곱초		kamchwu-	kamchwu-
magpie	kachi 가치	kanchi 간치	kkachi	kkachi
repair	kwothi- 고티-> kwochi-고치-	kwonchi- 곤치-	kwochi-	kwochi-
vine	nechwul 너출	nenchwul 년출	nengkwuli	nengkwul
throw	teti- 터디-	teci- 터지-	tenci-	tenci-
hammer	machi 마치		mangchi	mangchi
stop	mechwu- 머추-	memchwu- 멈추-	memchwu-	memchwu-
sit	anc-~as-~az-~ac- 앗-~앗-~앗-~앗-		anc-	anc-
place	yenc-~yec- 엿-~엿-		enc-	enc-
still, yet	ancok~acik~ancik 안죽~아직~안직		ancuk	acik
worth	echi 어치	enchi 언치	—	echi
now	icey 이제		incey~icey	incey~icey
cause to subside	canchi-~cachi-		—	cachi-
alone	hoWoza~howoza~ howoa~hwonca ㅎ벌사~ㅎ오사~ ㅎ오아~혼자	hwonca 혼자	honca	honca
harelip	—	esthyengi~enchyengi 엇텅이~언청이	heycheyngi	enchengi

There is no obvious way to explain these correspondences. On the one hand, there does not seem to be anything to motivate the insertion of a nasal before an affricate, especially one which seems to be sporadic. But some of the nasals could not possibly be original.

First, it has been shown that the forms *ac-* ‘sit’ and *yec-* ‘place’ are older than their more general, nasalized counterparts. Though the stem *ac-* only appears in the alphabetic corpus in the form *acas.skay* 아쟝깨 ‘a sitting place (i.e., a cushion)’ (1517 *Pönyök Pak T’ongsa* 1:31), the word is also transcribed with phonograms in earlier works. The *Cháoxiān-guǎn yìyǔ* (c. 1400) gives as the entry for ‘sit’ (坐) the transcription 阿格刺; and the twelfth-century *Jílín lèishì* has 阿則家囉. In both cases, the phonograms lack any trace of a nasal. The earlier, *Jílín lèishì*, transcription in particular gives a clear indication that the stem should be read [*ats_Λ-]. Today, the unnasalized forms of both of these stems can be found in the Cheju dialect, where the reflex for ‘sit’ is *ac-*, and the reflex for ‘place’ is *yoc-* [y_Λdz-]. Note that the unnasalized form of ‘sit’ can even be found in the standard language in the mimetic *acang-acang* ‘the tottering gait of a baby (about to topple onto its rear end).’

Still more convincing are the developments of *teti-* 터디- ‘throw’ and *kwothi-* 고티- ‘repair.’ Here, the Middle Korean forms were characterized by dental stops, not affricates. Thus, the nasals cannot be original, since it is only after the stops were palatalized and affricated that the phonological environment in which the nasals are found emerged. The verbs *cachi-* 자치- ‘cause to subside’ and *mechwu-* 머추- ‘stop (something)’ are derived from the verbs *cac-* 잣- ‘subside’ and *mec-* 멧- ‘stop’ plus a causative postverb *-hi-* -히- or *-hwu-* -후-, and none of these morphemes contains a nasal.

But perhaps the most conclusive evidence for epenthesis comes from the Chinese loanword *panchywo* 반초 ‘plantain.’ This noun is found in the 1527 glossary *Hunmong chahoe*, where it is correctly identified with the characters 芭蕉. Since neither the original Chinese word (*bājiāo* in modern Mandarin) nor the Sino-Korean reading of either of these characters (*pha* and *chywo*) contains a nasal, the nasal could only have come about through epenthesis after the word was borrowed into Korean.

Liquid l (ㄹ) In Middle Korean, the liquid /l/ had two allophones, [r] and [l], just as it does today. The *Haerye* explains:

In the case of the semilingual, there are two sounds, light and heavy. Although in the rime books there is only one character mother, and although in our national speech light and heavy are not distinctive, both can be pronounced. If one desires to provide for this usage, one may, on the precedent of the ‘light labial’ sounds, write ◯ immediately below ㄹ, making a light semilingual sound in which the tongue momentarily touches the upper palate.

Like *ng*, the liquid /l/ did not occur at the beginning of native words, though it was found in initial position in Sino-Korean. But even in this Sinitic vocabulary, we find cases where initial *l-* had already changed to *n-* by the fifteenth century; for example, *noyzil* 너실, *nozil* 녹실 ‘tomorrow’ (來日,

cf. the Mandarin Chinese reading *láirì*). Many more such cases are found in sixteenth-century texts; e.g., *Ni Sywoza* 니쇼사 ‘(a name)’ (李小兒), *nwomwo* 노모 ‘old mother’ (老母), *nyeycel* 네절 ‘etiquette’ (禮節).

Some medial occurrences of [r] represent the lenition of a dental stop. A few conspicuous ones, such as *mwolan* [morán] 모란 ‘peony’ (牡丹), are Chinese in origin. Since the regular Sino-Korean shape of this particular compound is *mwoktan*, the word *mwolan* must be a later loan, borrowed after the *-k* had been lost in northern Chinese. The word *cholyey* 차례 ‘order’ is from *chotyey* 차례 (次第); *twolyang* 도량 ‘Buddhist seminary’ is from *twotyang* 도당 (道場); *pwoli* 보리 ‘Bodhi’ is from *pwotyey* 보데 (菩提). There was also the native doublet *patah* ~ *palol* 바닷 ~ 바를 ‘sea.’ In addition, a *t* at the beginning of certain inflectional endings was replaced by an [r] when the ending followed the copula. Perhaps most importantly, [t] alternated with [r] in a number of irregular verb stems.

A morpheme-final /l/ sometimes (but not always) elided before a coronal consonant (*t*, *c*, *s*, *z*, *n*). This *l*-dropping occurred consistently in verbal inflection. It was also occasionally found in noun compounds. Examples: *petu-namwo* 버드나무 ‘willow tree’ (*petul* 버들 + *namwo* 나무); *to-nim* 덕님 ‘the respected moon’ (1459 *Wörin sökpo* 2:51b) (*tol* 들 + *nim* 님); *swu-cye* 수저 ‘spoon and chopsticks’ (1459 *Wörin sökpo* 23:74) (*swul* 숟 ‘spoon’ + *cye* 저 ‘chopsticks’). There were doublets, e.g., *atol-nim* 아들님 ‘respected son’ (1449 *Wörin ch’ön’gang chi kok* 31) and *ato-nim* 아드님 ‘id.’ (1459 *Wörin sökpo* 2:1a); *hwal-sal* 활살 ‘bow and arrow, arrow’ (1459 *Wörin sökpo* 10:27) and *hwa-sal* 화살 ‘id.’ (1588 *Sohak önhae* 3:19). But there were fewer such examples of *l*-dropping in compounds than are found in the Seoul dialect today.

5.3.1.8 Terminal consonants

In Late Middle Korean, a word could end in a vowel, *y*, or one of eight consonants: *p*, *t*, *k*, *m*, *n*, *ng*, *s*, or *l* (see 5.2.3, above). Other consonants occurring morphophonemically in that position were realized phonemically only when followed by a particle or inflectional ending beginning with a vowel. In final position, the feature of aspiration was neutralized; thus, *-ph*, *-th*, and *-kh* were realized as *-p*, *-t*, and *-k*. And by the fifteenth century, the affricates *-c* and *-ch* were no longer distinct from *-s*. Thus, in isolation, *nac* 낮 ‘daytime’ was spelled (and pronounced) *nas* 낮; *noch* 낫 ‘face’ was *nos* 낫. (See the discussion on Early Middle Korean in Chapter 4, above.)

However, *-s* was still distinguished from *-t* at the end of a syllable. The transcriptions in the *Cháoxiān-guǎn yìyǔ* (c. 1400) give excellent confirmation of this fact. At the time, the only consonants that could close a northern Chinese syllable were *-n* and *-ng* (and, perhaps in some cases, *-m*), and to

represent other codas with phonograms the Chinese scribes devised special orthographic conventions. For example, the Korean phoneme *l*, which was realized as [l] in final position, was represented by the character 二 (read *èr* in modern Mandarin); e.g., *tol* 朧 ‘moon’ was transcribed 得二, and *pyel* 別 ‘star’ was transcribed 別二. To represent an *-s* coda, the scribes used the character 思 (read *sī*). Here are examples:

Gloss	Transcription	Late Middle Korean form
‘flower’ (花)	果思	kwos 𪎠 (← kwoc 𪎠)
‘walled city’	(城)雜思	cas 𪎠
‘pine nuts’ (松子)	雜思	cas 𪎠
‘face’ (面)	𪎠思	nos 𪎠 (← noch 𪎠)
‘clothing’ (衣服)	臥思	wos 𪎠
‘lined clothes’ (夾衣)	結臥思	kyep.wos 𪎠

In contrast, a *-t* coda went unrepresented in phonograms. For example, *pat* 𪎠 ‘rice paddy’ (田) (← *path* 𪎠) was transcribed with the single character 把; *pyet* 𪎠 ‘sunshine’ (陽) (← *pyeth* 𪎠) was written simply as 別; *pwut* 𪎠 ‘writing brush’ (筆) was 卜; *twot* 𪎠 ‘swine’ (猪) (← 𪎠) was 朧; *pit.ssota* 𪎠 ‘expensive’ (貴) was 必色大; *pit.tita* 𪎠 ‘cheap’ was 必底大.

This Chinese transcription convention not only reflects the distinction between *-s* and *-t*, it also gives valuable hints about the pronunciation of the consonant. It is worth noting that the character 思 was also used to represent [s] in the Mongolian and Jurchen transcriptions found in the *Hwá-Yí yiyǔ*. To Chinese ears, all these consonants sounded like sibilants.

***z* (△) as terminal** Although only eight consonants could end a word, nine could close a syllable. This ninth terminal consonant, *z*, was realized only in case the following syllable began with another voiced fricative, *G* or *W*; for example, *kozGay* 𪎠에 ‘scissors,’ *kezGwuy* 𪎠것위 ‘worm,’ 𪎠- *wuzWu* ‘funny.’ Otherwise, the *z* was neutralized with *s*.

Seven terminal consonants By the turn of the sixteenth century, *W* and *G* had disappeared, and *z* ceased to be transcribed as a terminal. Around this same time, the distinction between *-t* and *-s* became neutralized in final position. Fifteenth-century forms such as *isonni* 𪎠 ‘is and ...,’ *ithus.nal* 𪎠 ‘the second day,’ *muysmuys_hota* 𪎠 ‘slippery,’ and *nas.nachi* 𪎠 ‘one by one’ were transcribed as *innoni* 𪎠, *ithunnal* 𪎠, *muynmuys_hota* 𪎠 and *nannachi* 𪎠 in texts written around the beginning of the sixteenth century. These later forms show that *-s* had been neutralized to *-t*, which then underwent regressive assimilation to the following nasal.

Terminal clusters The general rule was that only one consonant could close a syllable, and the only clusters that occurred in this terminal position were sequences beginning with *l*: *-lm*, *-lp*, and *-lk*. Middle Korean texts also contain *-ks* clusters transcribed at the end of words such as *naks* 낫 ‘hook’ and *neks* 녁 ‘spirit,’ but it is not clear that the *s* in these words was ever pronounced before a juncture.

5.3.1.9 Morphophonemic replacements

When certain consonants occurred together in Middle Korean, they were converted into different phonemic strings. These replacements can be divided into five categories.

(1) The glottal fricative *h* (ㅎ) was the most protean consonant. Whether occurring morphophonemically before or after the plain consonants *p*, *t*, *c*, *k*, it combined with them to form aspirates, *ph*, *th*, *ch*, *kh* (ㅃ, ㅆ, ㅈ, ㅋ). An *h* combined with *s* was replaced by *ss*. Before an *n*, *h* changed to *t*; and before a pause, *h* dropped. Some of these changes are illustrated by the behavior of the verb stem *nwoh*- 놓- ‘put, place.’ This stem combined with the gerund ending *-kwo* -고 to form *nwokhwo* 노코; with *-sopkwo* -습고 gave *nwossopkwo* 노쑹고; with *-nwon* -노니 gave *nwotnwon* 논노니. The noun *tyeh* 텃 ‘flute’ plus the particle *kwa* 과 was written *tye khwa* 텃과 (1463 *Pōphwa kyōng ōnhae* 1:221); in isolation, the noun was written *tye* 텃, without its morphophonemic *h*.

(2) The voiced fricatives *z* (ㄷ) and *W* (빙) devoiced to *s* and *p* when combined with *k*, *t*, *c*, or *s*. For example, the verb stems *wuz*- 웃- ‘laugh’ and *twoW*- 둘- ‘help’ plus the gerund *-kwo* -고 formed *wuskwo* 웃고 and *twopkwo* 돕고.

(3) A *t* assimilated the nasality of a following *n*. Competing transcriptions such as *ketne*- 건너- ‘cross over’ and *kenne*- 건너- ‘id.,’ or *totni*- 든니- ‘go about’ and *tonni*- 든니- ‘id.,’ are commonly found in the fifteenth-century textual corpus. (A *t* derived from an underlying *h*, as noted in (1), above, was also subject to this assimilation rule, but the orthography usually did not reflect it.)

(4) An initial *k*- lenited to *G*- after a morpheme ending in *-l* or *-y*. For example, following *al*- 알- ‘know’ or *towoy*- 되외- ‘become,’ the gerund ending *-kwo* -고 changed to *-Gwo* -오: *alGwo* 알오, *towoyGwo* 되외오. In addition, the particles *kwa* 과, *kwos* 껏, and *kwom* 껌 were realized as *wa* 와, *wos* 옷, and *wom* 옴 after vowels.

(5) The initial *t*- of a number of morphemes lenited to *l*- ([r]) when attached to the copula *i*- or certain other stems. For example, the copula plus the indicative ending *-ta* -다 was *ila* 이라; the copula and the prefinal *-two*- -도- became *ilwo*- 이로-, and the copula plus the retrospective *-te*- was

ile- 이러-. In addition, the adjectival postnominal *-toWoy/toW-* -드웁|뿔- was realized as *-loWoy/loW-* -르웁|뿔- following *l-*, *y-*, or a vowel; for example, *cywupyen-towoy-* 쥬변드외- ‘being free,’ but *woy-lowoy-* 외르외- ‘lonely.’

5.3.2 Vowels

Late Middle Korean had seven vowels:

ㅣ i [i]	ㅡ u [ɨ]	ㅓ wu [u]
	ㅓ e [ɛ]	ㅜ wo [o]
	ㅏ a [a]	ㅛ o [ʌ]

Six of these vowels correspond to phonemically distinct reflexes in the modern standard language. The seventh, the vowel represented by the letter *ㅛ*, does not exist per se in the Seoul dialect today, but it has been preserved as a distinct entity in the Cheju dialect, where it is pronounced [ɔ] or [ʌ]. Largely for that reason, the vowel is believed to have been pronounced similarly, as [ʌ], in Middle Korean.

The articulation of the Middle Korean vowels has long been a subject of interest and controversy largely because of the unique descriptions given in the *Hunmin chŏngŭm haerye* (see section 5.2.2, above). These descriptions, while suggestive, are couched in terminology that is not completely understood today, and as a result they have been interpreted in various different ways by investigators. Some believe that “deep” referred to an articulation with the tongue relatively far back in the mouth, and “shallow” to a pronunciation with the tongue at the front of the mouth. Others associate these terms more with relative tongue height. It is generally thought that “contracted” and “spread” referred to the presence or absence of rounding, and that is certainly a strong possibility. But for all such features of this kind there is an inherent danger in assuming a one-to-one relationship between the categories devised by fifteenth-century Korean literati and those of modern phonology. The textual interpretation of the *Hunmin chŏngŭm haerye* provides valuable evidence, but it is difficult to determine fifteenth-century pronunciation based upon that witness alone.

Foreign transcriptions offer clues to the phonetic values. Among the most relevant are the phonograms used in the *Cháoxiān-guǎn yìyǔ* (c. 1400), which suggest strongly that the pronunciations of the vowels represented by *ㅜ* and *ㅓ* were much the same as they are today. Here are the transcriptions of various syllables containing those vowels, shown with the Old Mandarin (fourteenth century) readings of the phonograms:

MK syllable with ㅏ	MK syllable with ㅓ
오 [o]: 我 uo 臥 uo	우 [u]: 五 u
고 [ko]: 果 kuo	구 [ku]: 故 ku, 谷 ku
도 [to]: 朶 tuo	두 [tu]: 覩 tu, 杜 tu
로 [ro]: 落 luo	루 [ru]: 路 lu
모 [mo]: 莫 muo	무 [mu]: 母 mu
보 [po]: 播 puo	부 [pu]: 卜 pu

Korean transcriptions of other languages are also useful. In the Late Middle Korean period, a number of Mongolian–Chinese dictionaries circulated among Korean scholars. One of these, the *Mènggǔ yùnlüè* (蒙古韻略),¹³ was used extensively by Ch’oe Sejin in compiling his 1517 dictionary, the *Sasǒng t’onghae*, where he cited the reading of the “Mongol Rimes” for almost every character, transcribing the ’Phags-pa Mongolian letters in Hangul. Here are the phonetic values usually assumed for the ’Phags-pa letters compared with Ch’oe’s Hangul:

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
’Phags-pa:	a	o	u	e, é	ö	ü	i	hi
Hangul:	ㅏ	ㅓ	ㅕ	ㅓ	ㅕ	ㅕ	ㅣ	ㅡ

Transcriptions (2) and (3) again show the phonetic values ㅏ [o] and ㅓ [u]. Transcription (4) is interesting for what it does not show: no unit Korean vowel was associated with the sound [e]. It can be surmised that the pronunciation of ㅓ [ə] was considered too distant, and so ㅓ [yə] was used instead. The association in number (8) is curious, but it is noteworthy that the Chinese rime in which the transcriptions appear (支韻) had a high back vocalism, *i*. The Korean vowel was surely pronounced much the same as it is today: [i].

The 1492 transliteration of the Japanese *Iroha* (伊路波) poem and the basic Japanese numbers show similar phonetic interpretations:

いろはにほへとちりぬるをわかよたれそつね
i ro fa ni fo fe to ti ri nu ru o wa ka yo ta re so tu ne
이로바니부평대도다리누루오와가요다래소두너
ならむうwiのおくやまけふこえてあさきゆめみし
na ra mu u wi no o ku ya ma ke fu ko ye te a sa ki yu me mi si
나라무부이노오구야마계부고예더아사기유메미시

¹³ Though this particular Mongolian work has not survived, its content was much the same as the 1308 dictionary *Mènggǔ zìyùn* (蒙古字韻), which is extant. Both were riming dictionaries structured much like the *Tongguk chǒngun*, except that the readings of Chinese characters were given using the ’Phags-pa Mongolian script instead of Hangul.

𪛗 𪛘 𪛙 𪛚 𪛛 𪛜 𪛝 𪛞 𪛟 𪛠 𪛡 𪛢 𪛣 𪛤 𪛥 𪛦 𪛧 𪛨 𪛩 𪛪 𪛫 𪛬 𪛭 𪛮 𪛯 𪛰 𪛱 𪛲 𪛳 𪛴 𪛵 𪛶 𪛷 𪛸 𪛹 𪛺 𪛻 𪛼 𪛽 𪛾 𪛿
 we hi mo se su fito futa mi yo itu mu nana ya kokono tou fyaku sen
 예 비 모 션 수 피도 후다 미 요 이두 무 나나 야 고고노 도우 꺼구 션
 万 億
 man oku
 만 오구

Here the vowels 𪛗 [o] and 𪛘 [u] were clearly and consistently equated with the expected [o] and [u] vocalisms in Japanese. The Japanese vowel *e* was rendered inconsistently, but usually with Korean 𪛚 [yəy]. That is the symbol used for the syllable *ye*, as well as to transcribe the vowel in Japanese *ke*, *me*, and *we*. The symbol 𪛛 [yə] was used for Japanese *ne*, *te*, and *se*. (The transcription of this last syllable is, for some reason, closed with an *-n*: 션; perhaps this transcription was an error caused by contamination from Japanese *sen* ‘thousand.’) The symbol 𪛜 [ay] was used for *fe* and *re*. As was the case with the ’Phags-pa transcriptions, there was no single Korean vowel unambiguously equated to [e]. The conclusion has to be that Korean did not then have the sound [e].

This transcriptional evidence indicates that the pronunciation of the vowels /i, u, wu, e, a, wo/ (𪛗, 𪛘, 𪛙, 𪛚, 𪛛, 𪛜) was much the same as that of their reflexes in the central region today.

5.3.2.1 The vowel /o/ (·)

The vowel /o/ was lost in two stages. The first was the merger of /o/ with its higher counterpart /u/ in non-initial syllables. This change began in the fifteenth century and appears to have reached completion in the sixteenth. The second stage was the merger of /o/ with /a/ in initial syllables, a round of changes that took place much later, in the eighteenth century.

The merger of /o/ with /u/ in non-initial syllables can be seen here and there in texts written in the fifteenth century. For example, in the 1459 *Wōrin sōkpo* the quasi-free noun *toy* 𪛚 ‘place where ...’ appears sporadically as *tuy* 𪛘. In the 1481 *Tusi ōnhae*, the noun *nakonay* 나그내 ‘stranger, guest’ was written without exception as *nakunay* 나그내, and *kiloma* 기르마 ‘packsaddle’ was recorded as *kiluma* 기르마 (20:44, 22:8). The pronoun *kutoy* 그딴 ‘thou’ was more often than not written as *kutuy* 그딴 in that same work. In the 1489 *Kugūp kani pang*, ‘suddenly, hurriedly’ appears as both *kakoki* 가마기 and *kakuki* 가그기. At the beginning of the sixteenth century, such examples suddenly increased in number. The *Pōnyōk Pak T’ongsa* (c. 1517) contains lexical forms such as *mwotun* 모든 ‘all’ (< *mwoton* 모든 1:24), *twocuk* 도죽 ‘thief’ (< *twocok* 도죽 1:35), *nyenamun* 녀나문 ‘other’ (< *nyenamun* 녀나문 1:34), and *tamun* 다문 ‘only, just’ (< *tamon* 다문 1:63); the inflectional ending *-malon* -마룬 ‘but, however ...’ appears there as *-(en)malun* -(연)마

른 (1:32), and *toy* ㅅ [‘place where ...’ as *tuy* ㅅ (1:21, 1:63). The 1527 *Hunmong chahoe* has *kaphul* 가플 for *kaphol* 가폴 ‘scabbard’ and *mazul* 마술 for *mazol* 마술 ‘government office.’¹⁴

The 1587 *Sohak ōnhae* shows clearly that the first stage in the loss of /o/ was complete by the time that text was written. Throughout that work, the form *kolochi-* ㄱ로치- ‘teach,’ for example, was replaced by *koluchi-* ㄱ루치-; *mozol* 모술 ‘village’ by *moul* 모을; *homolmye* 호몰며 ‘much more’ by *homulmye* 호블며. By the latter half of the sixteenth century, /o/ was no longer distinguished from /u/ in non-initial position.

In initial syllables, /o/ showed no signs of change in the fifteenth and sixteenth centuries. The only exception was the word *holk* 훌 ‘earth,’ which appears as *hulk* 훌 in the 1587 *Sohak ōnhae*. Later, in the seventeenth century, *somay* 소매 ‘sleeve’ came to be pronounced *swomay* 소매 (1617 *Tongguk sinsok samgang haengsil*, *yŏllyŏdo* 4:14). But except in these two words, all occurrences of initial-syllable *o* remained stable until the eighteenth century.

5.3.2.2 Semivowels and diphthongs

Late Middle Korean had two semivowels, *y* and *w*. Both appeared as onglides. In addition, *-y* also functioned as an offglide.

y onglides Four of the seven Middle Korean vowels occurred with a *y* onglide: *ya*, *ye*, *ywo*, and *ywu* ([ya], [yɛ], [yo], [yu]). These diphthongs were written with the symbols ㅑ, ㅓ, ㅗ, ㅜ. The other three vowels, *i*, *u*, and *o*, did not occur with a *y* onglide, at least in the standard spoken in the capital. However, the *Hunmin chŏngŭm haerye* (25a) discusses where two such diphthongs, *yo* [yʌ] and *yu* [yɨ], could be heard:

There is no need in the national speech for sounds in which ㅑ [ʌ] and ㅓ [ɨ] arise from ㅏ [i]. But these sometimes occur in the speech of children or in speech in outlying regions. [In such cases] the two letters may be used in combination, as in ㅑㅓ [kyʌ] or ㅓㅑ [kyɨ].

Although no glosses were given for these syllables, the passage can surely be taken to mean that the diphthongs [yʌ] and [yɨ] then existed in regional dialects. Also, by saying that the sounds occurred “in the speech of children” it suggests that the diphthongs could sometimes be heard in the capital as well. The only other text in which these particular symbols (ㅑ and ㅓ) are found is the 1678 *Kyŏngse chŏngun*. But in 1750, in his *Hunmin chŏngŭm unhae*, the scholar Sin Kyŏngjun created yet another symbol for [yʌ], ㅑ, saying that the sound was used in a “dialect” word for ‘eight’: *yotolp* ㅑ똥. The “dialect”

¹⁴ Related to this change is a kind of regressive assimilation of rounding seen in that same work; *kowol* ㅑ울 ‘county’ (*ㅑ울) is recorded as *kwoul* ㅑ울 (2:4, 8), *howol* ㅎ울 ‘single’ is *hwoul* ㅎ울 (3:14, 33), and *kowoy* ㅑ외 ‘lower garment, skirt, trousers’ is *kwouy* ㅑ외.

Sin was referring to was not necessarily that of Cheju. But note that even today in the Cheju dialect there are still words that contain the diphthong [yʌ], including, for example, [yʌdʌp] ‘eight.’

The diphthong *yo* ([yʌ]) had apparently not disappeared from the central dialects very long before the *Hunmin chōngūm haerye* was written. The historical change **yo* > *ye* can be surmised through internal reconstruction. In texts of the fifteenth century, both *yele* 여러 ‘several’ and *yela* 여라 ‘id.’ can be found as variant forms of the same word. Since the co-occurrence of /e/ and /a/ in the same morpheme represented a violation of vowel harmony, the earlier form of the word must have been **yola*. Then, after the change **yola* > *yela* took place, the vocalism of the latter was restructured to *yele* to bring the morpheme in line with the rules of vowel harmony. This reconstruction is supported by the modern Cheju reflex [yʌra]. Similarly, the fifteenth-century word *yetulp* 여덟 ‘eight’ coexisted with the cognate form *yetolay* 여드래 ‘eight days.’ Putting that fact together with those mentioned in the previous paragraph indicates that the earlier form of ‘eight’ should be reconstructed as **yotolp*. (Note that reflexes with an *a*-vocalism, such as [yadal] and [yadap], are found today in many Kyōngsang and Chōlla dialects.) The change **yo* > *ye* seems to be the underlying reason for a number of violations of vowel harmony in the fifteenth century.

It is difficult to find evidence upon which [**yi*] could be reconstructed. Except for the brief mention of that diphthong in the above-cited passage from the *Haerye*, evidence for it cannot be found in any historical document or modern dialect. Finally, no diphthong **yi* is mentioned in the *Haerye* or anywhere else.

w onglides The semivowel *w* occurred in the diphthongs *wa*, *we*, and *wi*. The sequences *wo* and *wu* also occurred, but only morphophonemically, since they were pronounced as the monophthongs [o] and [u], and regardless of morphophonemic origin, these two sounds were written with the unit vowel symbols, ㅜ and ㅜ.

The diphthongs *wa* and *we* were transcribed by combining vowel symbols: ㅜ (wo) + ㅏ (a) → ㅑ (wa); ㅜ (wu) + ㅓ (e) → ㅕ (we). The vocalic symbol ㅕ, however, was ambiguous in Middle Korean. Today the symbol is used to write the diphthong *wi*, but in the fifteenth and sixteenth centuries it was normally used to transcribe /wuy/ ([uy]). There was no separate way to write [wi] in Middle Korean, and the result was transcriptional confusion. When the voiced fricative *W* in the verbal ending *-tiWi* -디ㅑ ‘but, however’ lenited to *w*, the resulting phonological shape of the morpheme could only have been *-tiwi*. (There was no phonological motivation for an epenthetic *u*.) Yet, this new shape was transcribed variously as *-tiwuy* -디ㅑ, *-tiwoy* -디ㅑ, and *-tiwey* -디ㅑ. Such confusion could only mean that there was no clear-cut way to represent this pronunciation. In Middle Korean texts, the symbol ㅕ normally

represented /wuy/; however, in cases where forms are known to have undergone the historical change $W > w$, such as *chiWi* 차씨 [치씨] ‘cold’ > *chiwi* 차씨 [치씨], the phonological shape intended by “치” was almost surely the diphthong /wi/.

y offglides A y offglide occurred in the diphthongs *oy*, *ay*, *ey*, *woy*, *wuy*, and *uy*. These were pronounced [ʌy], [ay], [əy], [oy], [uy], and [iy], and written ·|, ㅛ, ㅜ, ㅝ, ㅞ, ㅟ, and ㅠ. There were also triphthongs: *way*, *wey*, *yey* (written ㅡ, ㅢ, ㅣ), and, occurring morphophonemically, *yay* (ㅤ).

No diphthong of the shape *iy* was transcribed by the orthography, but one did exist and function as a phonological unit. Here is an example: the causative morpheme *-i-* was realized as *-y-* after a verb stem ending in a vowel; e.g., *syē-* 서- ‘stand up’ + *-i-* -ㅍ- → *syey-* 세- ‘stand something up.’ But in case the stem-final vowel was *-i-*, the *-y-* of the causative was not transcribed; for example, *ti-* 디- ‘fall’ + *-i-* -ㅍ- → *ti-* 디- ‘drop.’ Nevertheless, the *-y* was still there, and the phonological shape was *tiy-*, as can be seen by the behavior of the stem: for example, whereas the gerund of intransitive *ti-* 디- ‘fall’ was *tikwo* 디고, that of the causative verb *ti(y)-* 디- ‘fall’ was *ti(y)Gwo* 디오, because the gerund ending *-kwo* lenited to *-Gwo* after *y-*. If there were no *y-* present, lenition would not have taken place. The Middle Korean copula is another morpheme that may have contained this diphthong. Since its gerund form was *i(y)Gwo* 이오, it also appears to have had the phonological shape *iy-*.

Today, the only diphthong with an offglide is *uy* [iy], which is believed to be a spelling pronunciation. The other diphthongs have all been monophthongized. Here are the changes that have taken place:

Vocalic element	Late MK		Contemporary Korean
·	[ʌy]	>	[ɛ]
ㅛ	[ay]	>	[ɛ]
ㅜ	[əy]	>	[e]
ㅝ	[oy]	>	[ö], [we]
ㅞ	[uy]	>	[ü], [wi]
ㅟ	[iy]	>	[i-]/[i]/[e]/[iy]

These changes from complex vowels to monophthongs have resulted in one of the greatest differences between the Middle Korean vowel system and that of Contemporary Korean.

5.3.2.3 Vowel harmony

In the *Hunmin chŏngŭm haerye*, vowels are arranged into two groups of opposing pairs and classified as either “Yin” (*um* 陰) or “Yang” (*yang* 陽). The lone exception is the vowel *i* (ㅣ), which the *Haerye* said had “no station or number.”

Yang: o (·) wo (ㅓ) a (ㅏ)
 Yin: u (ㅡ) wu (ㅜ) e (ㅓ)
 Neutral: i (ㅣ)

These groupings represented the Middle Korean system of vowel harmony. The fundamental rule of the system was that, within the same word, *yang* vowels only occurred with *yang* vowels, and *yin* vowels only occurred with *yin* vowels. The neutral vowel *i* could occur with vowels of either group. For example, in the word *atol* 아들 ‘son,’ both vowels were *yang* vowels; the modern form of the word, *atul* 아들, would have been an anomaly, because /u/ belonged to the *yin* category. In the word *petul* 버들 ‘willow’ both vowels were *yin* vowels. The neutral vowel *i* could occur with either *yang* vowels, as in *api* 아버지 ‘father,’ or with *yin* vowels, as in *emi* 어머니 ‘mother.’

Vowel harmony also applied to post-stem elements. The result was that many particles and verb endings show alternations between pairs of “*yin*” and “*yang*” vowels. Each pair differed in tongue height, the *yin* vowel being pronounced higher in the mouth, the *yang* vowel with which it alternated, lower. For example, the accusative case marker had the shape *ol* ([ʌl]) 을 after *yang* vowels, as in *salo.m_ol* 사람 *ol* ‘person,’ but *ul* ([il]) 을 after *yin* vowels, as in *yelu.m_ul* 여름 *ul* ‘summer.’ The locative case particle had either the shape *ay* ([ay]) 에 or the shape *ey* ([əy]) 에, depending on the word to which it was attached; e.g., *palo.l_ay* 바닷 *ay* ‘in the sea,’ but *nyelu.m_ey* 여름 *ey* ‘in the summer.’ Here are examples of how the shapes of some verb endings alternated:

	-a/e-	oni/juni -	omyen/umyen
<i>yang</i> -vowel stem: <i>kaph-</i> ‘repay’	<i>kapha</i>	<i>kaphoni</i>	<i>kaphomyen</i>
	가파	가폰니	가폰면
<i>yin</i> -vowel stem: <i>et-</i> ‘receive’	<i>ete</i>	<i>etuni</i>	<i>etumyen</i>
	어더	어드니	어드면

If the particle or verb ending began with a consonant, these harmonic rules were in most cases blocked completely. For example, the particle *man* 만 ‘only, just,’ with a *yang* vowel, had an invariant shape, attaching to words with *yin* vocalism, as in *kes_man* 것만 ‘only (the thing) that . . .,’ as well as to words with *yang* vocalism. The gerund ending *-kwo* could also follow stems of any shape without its vowel changing; e.g., *kuchikwo* 그치고 ‘stopping,’ *cwukwo* 주고 ‘giving,’ *pwokwo* 보고 ‘seeing,’ etc. However, a few consonant-initial elements, such as the retrospective *-telta-* -더/다- and the perfective *-ke/ka-* -거/가-, were subject to the rules of vowel harmony, and the reason for this difference in phonological behavior is as yet unexplained.

5.3.3 Tone and accent

Three tones were recorded in Middle Korean texts. The “departing tone” was marked with one dot appended to the left of the syllable; the “rising tone” was marked with two dots; and the “even tone” was left unmarked (see section 5.2.5, above). The phonetic values of these tones have been determined by examining a number of philological sources, the clearest of which is the *Hunmin chŏngŭm ŏnhae*, where the following explanations are offered:

The departing tone is the highest sound.

The rising tone is a sound that begins low and later is high.

The even tone is the lowest sound. (13b–14a)

The 1527 *Hunmong chahoe* gives more details:

The sound height of all syllables is indicated by the presence or absence of dots next to the syllable, and by how many dots there are. A syllable with a low sound is an even tone, so it has no dots; a syllable with a sound that is stretched out long and later raised is a rising tone, so it has two dots; a syllable with a straight and high sound is a departing tone, so it has one dot; ... (*Pŏmnye* 4)

To summarize, (1) no marking on a syllable indicated the syllable was pronounced with a low pitch; (2) one dot marked a high pitch; and (3) two dots marked a long, rising pitch. Here are some examples of these pitch contrasts:

<i>low</i>	: <i>high</i>	<i>high</i>	: <i>rising</i>
손	· 손	· 발	: 발
son ‘guest’	SON ‘hand’	PAL ‘foot’	paAL ‘bamboo blind’
비	· 비	· 솔	: 솔
pi ‘stele’	PI ‘rain’	SOL ‘pine’	soOL ‘brush’
	<i>low–low</i>	: <i>low–high</i>	: <i>high–high/low</i>
	가지	가· 지	· 가지
	kaci ‘eggplant’	kaCI ‘type’	KACI ‘branch’
		서· 리	· 서리
		seLI ‘frost’	SELI ‘midst’

5.3.3.1 The rising tone

The “rising tone” was not a phonemic unit in Middle Korean. Rather, it is generally believed to have been a combination of a low tone plus a high tone within a single, long syllable. There is considerable evidence to support this analysis.

Many occurrences of the rising tone were contractions of an even tone plus a departing tone. Some of these contractions were historical. For example, in the fifteenth century the word for ‘dog’ had two syllables, low plus high: *kāhi*

가·ᄃᆞ. But by the latter half of the sixteenth century, the *h* had dropped, and in texts from that period the word was written as one syllable with a rising tone, *kǎy* :가|. A two-syllable origin for *kwǒm* :곰 ‘bear’ is attested in the 1447 *Yongbi ŏch’ŏn ka* place name, *Kwǒmá Nòlò* 고·마·늑 ‘Bear Crossing.’ On the basis of earlier phonogram transcriptions, the change **nǎlí* > *nǎy* :내 ‘stream’ has also been documented.

Doublets in Middle Korean show evidence of the same contraction. For example, *nwùlí* ~ *nwǎy* 누·리 ~ :누 ‘world’; *twùúl* ~ *twǎl* 두·을 ~ :둘 ‘two’ (< **twuWul*); *màktàhí* ~ *màktǎy* 막·다·히 ~ 막:대 ‘staff, stick’; *cwùúli* ~ *cwǎli* 주·우·리 ~ :주·리 ‘go hungry.’

The incorporation of the nominative particle *í* into a low-pitched syllable produced a rising tone. Here are examples:

kù 그 ‘that one’ + *í* ·이 → *kúy* :그
pòy 꺾 ‘pear’ + *í* ·이 → *pǒy* :꺾
pwùthyè 부터 ‘Buddha’ + *í* ·이 → *pwùthyǎy* 부:테
tòli 다리 ‘bridge’ + *í* ·이 → *tòlǐ* 다:리
kwòlày 고래 ‘whale’ + *í* ·이 → *kwòlày* 고:래
mòtòy 막·다 ‘joint’ + *í* ·이 → *mòtǒy* 막:다
kùtùy 그·되 ‘thou’ + *í* ·이 → *kùtǎy* 그:되
nèhùy 너·희 ‘you all’ + *í* ·이 → *nèhǎy* 너:희

The same kind of morphological contraction occurred when a low-pitched syllable was followed by the copula *í(y)*:-

tòli 다리 ‘bridge’ + *í* lá ·이·라 → *tòlǐ* ‘lá’ 다:리·라
nwùy 누·의 ‘(a boy’s) sister’ + *í* lá ·이·라 → *nwǎy* ‘lá’ 누:의·라

When the causative postverb *-í-* was incorporated into a low-pitched, stem-final syllable, the result was the same:

nà- 나- ‘be born’ + *-í-* ·이- → *nǎy-* :내- ‘give birth to’
tì- 다- ‘fall’ + *-í-* ·이- → *tǐ-* :다- ‘drop’
pwò 보- ‘see’ + *-í-* ·이- → *pwǒy-* :보- ‘show’

The volitive *-wó/wú-* (called the modulator by Martin) often caused the same morphophonemic change;¹⁵ e.g., *pwò* 보- ‘see’ + *-wó-* + *-m* → *pwǒm* :봌 (Wǒrin sǒkpo 1:25); *kà-* ‘go’ + *-wó-* + *-lq* → *kǎlq* :갸 (Yongbi ŏch’ŏn ka 19).

Not all syllables marked with rising tones are amenable to this kind of parsing; some have etymologies that are as yet opaque. Nevertheless, most investigators favor the analysis of syllables in the rising tone category as two moras, the first with a low tone and the second with a high tone. The result

¹⁵ But not always; see Ramsey (1978, p. 116).

is a simpler Middle Korean suprasegmental system consisting of just two contrasting levels of pitch.

5.3.3.2 *Reflexes in the modern dialects*

The central dialects, including the modern Seoul standard, have lost all lexical pitch distinctions, preserving only the vowel length of rising tones. However, a number of peripheral dialects have systems of pitch accent which preserve the Middle Korean distinctions morphophonemically. In the dialects of the northeast (Hamgyǒng) and southeast (Kyǒngsang), and, marginally, in coastal areas of the central region (Kangwǒn) as well, contrasting levels of musical pitch can still be heard. Similar contrasts have also been reported for a few dialects of the southwest (Chǒlla), but these have yet to be fully verified.

Hamgyǒng In the Hamgyǒng dialects, tonal patterns are determined by the location of an accent. An accented syllable is more prominent than adjacent syllables. Unless the accent is on the first syllable, pitch starts low, then rises toward the accented syllable as a target, which is pronounced higher and with more force. After the accent, the pitch falls immediately, staying low to the end of the word or phrase. But if the accent occurs on the last syllable, or if the word has no accent, the tonal pattern is identical; in both cases, pitch rises into the last syllable, and then trails off at the end.

In other words, words and phrases are distinguished by contrasts in pitch, not by tones of individual syllables. Thus, Hamgyǒng monosyllables cannot be distinguished by pitch, and words such as *pay* ‘pear’ and *páy* ‘belly’ are homonyms when pronounced in isolation. The lexical difference between these words – the difference in accent – can only be pronounced and heard when the nouns are followed by a particle (such as *ika*) or the copula: [*pɛ Ga*] ‘pear’ (low–high) : *Pɛ ga* ‘belly’ (high–low). The tonal pattern of *melí* ‘head’ (low–high) does not contrast phonemically with that of unaccented *pwoli* ‘barley,’ which also rises from low to high. Just as with monosyllables, the pitch contrast between these two words is only evident when they are followed by other elements. These are morphophonemic distinctions.

When Middle Korean words are compared with their reflexes in the modern Hamgyǒng dialects, the correspondences between Middle Korean tones and Hamgyǒng accents become readily apparent. The Hamgyǒng accent occurs on the first syllable that in Middle Korean was marked with a departing tone – that is, a high pitch. Since the Hamgyǒng accented syllable is characterized by high pitch, the phonetic match is obvious. The principal difference is that, in the Hamgyǒng system, that high pitch is phonemically distinct only when it is followed by a low-pitched syllable.

Gloss	MK	Hamgyǒng	Gloss	MK	Hamgyǒng
‘pear’	pòy ㅍ이	pay	‘barley’	pwòli ㅍ리	pwoli
‘belly’	póy ㅍ이	páy	‘head’	mèlí 머리	melí
			‘mosquito’	mwókóy ㅁ오기	mwóki

As for Middle Korean rising tones, the Hamgyǒng reflexes preserve those as accented syllables. They are not phonemically long.

Kyǒngsang The Kyǒngsang dialects form the other principal area where the distinctions of Middle Korean tones have been preserved. These dialects resemble the Hamgyǒng dialects in that (most) tonal patterns depend on an accent locus characterized by a high pitch. And, as in Hamgyǒng, the high pitch in these patterns is followed by a low-pitched syllable. But the system also contains complexities not found in Hamgyǒng. One is a tonal pattern with no prominent syllable. In this pattern, the pitch always begins with two high syllables, and any syllables that follow in the same phrase are all low in pitch. For example (using data from the Kimhae dialect), *PHWOLI* ‘fly’ (high–high); *MWUCIkay* ‘rainbow’ (high–high–low); *MWUCIkay ka* (high–high–low–low); *MWUCIkay man two* ‘even just a rainbow’ (high–high–low–low–low). The anomaly of this pattern, and that of other irregularities as well, has resulted from historical changes in the accent system, as can be seen by comparing Hamgyǒng with Kyǒngsang. Here, for example, are the correspondences for some noun phrases composed of a noun plus the nominative particle *i/ka*:

Gloss	Hamgyǒng	Kyǒngsang
‘flower’	kkwoc_í	kkwóch_i
‘price’	káp_i	'kaps_i
‘the price of flowers’	kkwoc-káp_i	kkwóch-kaps_i
‘wind’	palam_í	palám_i
‘son’	atúl_i	átul_i
‘mosquito’	mwóki_ka	'mwokwu_ka
‘autumn mosquito’	kaal-mwóki_ka	kasíl-mwokwu_ka
‘ladder’	saytali_ká	saytalí_ka
‘raven’	kamakwí_ka	kkamakwu_ka
‘mullet’	kamwúlchi_ka	kámwuchi_ka
‘spirit’	thwókkaypi_ka	'thwokkaypi_ka
‘house spirit’	cip-thwókkaypi_ka	cíp-thwokkaypi_ka

In these correspondences the Kyǒngsang accent locus is consistently found one syllable to the left of the Hamgyǒng locus. In prototonic forms, such as ‘mosquito,’ there is of course no syllable located to the left of the accent, but it is here, in these forms, that the anomalous Kyǒngsang tonal pattern is found. Notice that these lexical items nevertheless contain a kind of morphophonemic

accent in front of the word, as can be seen in compounds such as ‘autumn mosquito.’ The correspondences show that the Kyōngsang dialects have undergone a historical shift of the accent locus one syllable to the left.

Rising tone distinctions, at least when occurring in initial-syllable position, are preserved in all Kyōngsang dialects. In North Kyōngsang dialects, such as Taegu, the syllables retain distinctive vowel length. In South Kyōngsang dialects, such as Kimhae, the reflexes have been described as having a third, extra-low pitch level. In either case, a distinction that has been lost in Hamgyōng has been preserved.

5.3.3.3 *The Middle Korean suprasegmental system*

Reflexes found in the modern dialects substantiate two elements of the Middle Korean tone system. First, they demonstrate that initial rising tone syllables were pronounced long. Second, they show that the location of the first high tone in a word or phrase was distinctive.

However, Middle Korean tones differed in a number of ways from the suprasegmental systems found in the modern dialects. (1) The tones of individual syllables in Middle Korean were apparently distinctive. The proof is that, unless the “side dot” marking was morphophonemic, monosyllables such as *pòy* ㅅ| ‘pear’ and *póy* ㅅ| ‘belly’ contrasted by tone, in isolation. An idealized, morphophonemic transcription is certainly a possibility, but the consistency of the marking in Middle Korean texts makes it a remote one. Mistakes were extremely rare, especially in the fifteenth century. (2) The tones leading up to the first high tone were marked as low, while in the modern accenting dialects the pitches of those syllables are raised. This difference is not an important one, for these intermediate pitches are not distinctive in the modern dialects and, in any case, are often slightly lower in pitch than the following, accented syllable anyway. Some scholars have even described them as low. It may well be that, even though Middle Korean scribes perceived those syllables as distinctively low, there was actually a slight rise in pitch after the beginning of the word then as well. (3) Pitch did not necessarily fall after the first high tone. In fact, the tone of the immediately following syllable was usually high, unless it was followed by another high tone, in which case it was often lowered, and the tones marked on syllables after that fluctuated in an “automatic ‘sing-song’ tune of alternating pitches” (Martin 1992, p. 61). These tonal patterns of alternating high and low pitches were radically different from those heard in the modern dialects, where, once the pitch falls, it stays low to the end of the phrase.

What phonemic distinctions existed, then, in the Middle Korean suprasegmental system? Although modern dialect reflexes show that the first high tone in a morpheme was distinctive, they provide no evidence that any of the succeeding tones were. Moreover, within the Middle Korean corpus itself, the evidence for a contrast, for example, between high–high and high–low is

not clear-cut. The tone marked on the second syllable of a word with an initial high tone often varied. For example, ‘mosquito’ was recorded as *mwókóy* ·모·기 in the 1447 *Sŏkpo sangjŏl* (9:9b), but as *mwókòy* ·모·기 in the 1461 *Nŭngŏm kyŏng ŏnhae* (4:3b). The patterns low–high–low and low–high–high also alternated; *àcómí* 아·즈·미 ‘aunt’ (1527 *Hunmong chahoe* 1:31b), *àcómì* 아·즈·미 ‘aunt’ (1447 *Yongbi ŏch’ ŏn ka* 99). Prototonic patterns were equally subject to variation; ‘spirit, devil’ was sometimes recorded as *twóskàpí* ·똥·가·비, sometimes as *twóskàpì* ·똥·가·비. The evidence suggests that, within the same morpheme, pitches occurring after the first high tone were not distinctive. The alternating tonal patterns so commonly seen in Middle Korean texts must have been, to a great extent, the result of low-level prosodic rules.

This analysis of the Middle Korean tone system also provides a solution to a morphological problem with the rising tone. As was noted above, the rising tone represented a contraction of a low tone plus a high tone. This contraction is seen, for example, in the doublet *màktàhí*~*màktáy* 막·다·히~막·대 ‘staff, stick.’ But a similar contraction of the second two syllables of *cúkcàhí* ·즉·사·히 ‘immediately’ (1459 *Wŏrin sŏkpo* 1:27) did not result in a rising tone ^x*cúkcáy*; the only contracted shapes of this word that occurred were *cúkcày* ·즉·재 (1463 *Pŏphwa kyŏng ŏnhae* 1:90) and *cúkcáy* ·즉·재 (1461 *Nŭngŏm kyŏng ŏnhae* 6:104). The difference is this: in *màktáy* ‘staff, stick,’ the rising tone preserved the first high tone in *màktàhí*; in *cúkcàhí* ‘immediately,’ on the other hand, the second high tone was not distinctive.

5.3.3.4 Tones in earlier Korean

There is no textual documentation of tone before the Late Middle Korean stage. However, information about pre-fifteenth-century Korean can be gleaned from internal reconstruction within the Middle Korean corpus itself. This evidence suggests that earlier Korean had fewer pitch distinctions in its lexicon than are seen in the complex tonal system of Late Middle Korean; it is especially likely that few, if any, tone distinctions existed in earlier verb forms. In the Middle Korean noun classes, monosyllables with a high tone were almost four times as numerous as monosyllables with a low tone. For two-syllable nouns, the low–high pattern was more than three times as common as low–low, and more than five times as common as high–(high). These are significant statistical differences. In other words, the typical noun in earlier Korean carried a high pitch on its last syllable.

Tones arose historically through both internal and external causes. The principal external cause was probably the extensive borrowing of Sinitic vocabulary. Unlike Sino-Japanese, Sino-Korean vocabulary often preserved the distinctions found in the original Chinese tones, especially those in the even tone (平聲) category, where there was a 96.6 percent correlation with Korean low tone. The internal causes were phonological and morphological

changes, the most important of which were vowel syncope and apocope and the resulting syllable crisis. These processes will be discussed below in connection with the irregular verb classes.

5.3.3.5 *The loss of Middle Korean tones*

The transcription of tones in fifteenth-century texts was highly consistent, but even as early as the latter half of the century small perturbations in the system began to be seen. This was especially true in the *Tusi ōnhae* of 1481, where final syllables normally marked with a high tone tended to be recorded as low tones. These subtle changes have been interpreted by Korean investigators as foreshadowing the impending collapse of the system.

The works compiled by Ch'oe Sejin in the early sixteenth century, including his important 1527 glossary *Hunmong chahoe*, reflect fifteenth-century tonal distinctions fairly faithfully. However, other works of that same period were less accurate. The tones recorded in the 1518 *Pōnyōk sohak* and the 1518 *Yōssi hyangyak ōnhae* are noticeably inconsistent. Then, beginning in the middle of the sixteenth century with the *Punmun onyōk ihae pang* of 1542, the tonal transcriptions in the textual record became extremely confused. It was in this period that the first texts without side dots appeared; these include the Sōbongsa reprint of the *Yaun chagyōng*, the *Palsim suhaengjang*, and the *Kyech'o simhak inmun*, all published around 1580. Later works of the Kyojōng Ch'ōng such as the *Sohak ōnhae* of 1588 and the *Sasō ōnhae* of 1590 contain side dots, but there was almost no regularity in how the marks were used. Philological evidence of this kind suggests that tonal distinctions had disappeared from the capital area around the middle of the sixteenth century.

5.4 Morphology

The Korean lexicon today is divided broadly into inflected and uninflected words. Verbs, adjectives, and the copula inflect; nouns, numerals, and adverbs do not. Inflected words consist of a stem plus an ending, neither of which can occur by itself in isolation. Uninflected words, on the other hand, are not so constrained. Particles may be attached to uninflected words, but they are not required by the morphology.

In Middle Korean, however, this morphological distinction was not as great as it is in Korean now. There was considerable overlap between the two classes. Some nouns and verb stems shared the same basic shape; for example, *poy* 뱃 'belly' and *poy-* 뱃- 'get pregnant'; *pis* 빗 'comb' and *pis-* 빗- 'comb'; *phwum* 품 'bosom' and *phwum-* 품- 'carry in the bosom'; *sin* 신 'shoes' and *sin-* 신- 'wear on the feet'; *stuy* 띠 'belt' and *stuy-* 띠- 'wear (a belt)'; *nechwul* 너출 'vine' and *nechwul-* 너출- 'tendrils dangle down,' *kus* 꺾 'stroke (of a Chinese character)' and *kus-* ~ *kuzu-* 꺾- ~ *그스-* 'make

a stroke.’¹⁶ Although reflexes of many of these words are still found in the language, such noun–verb word pairs were considerably more numerous in Middle Korean.

Many adverbs also coincided with the forms of verb and adjective stems. Etymological pairs included *nowoy* ㄴ외 ‘repeatedly’ and *nowoy-* ㄴ외- ‘repeat’; *mis* 밋 ‘in addition’ and *mis-~mich-* 밋-~밋- ‘extend’; *ha* 하 ‘much’ and *ha-* 하- ‘be much’; *il* 일 ‘early’ and *ilu-~ilG-* 이르-~일- ‘be early’; *palo* 바르 ‘correctly, straight’ and *palo-~palG-* 바르-~발- ‘be straight’; *kulu* 그르 ‘mistakenly’ and *kulu-~kulG-* 그르-~글- ‘be wrong’; *pulu* 부르 ‘(eating one’s fill) heartily’ and *pulu-~pulG-* 부르-~블- ‘(the stomach) is full.’ The extent to which adverb usage was unlike that of Contemporary Korean is seen in the following examples with *kot* 곧 ‘similarly’ and *tat* 달 ‘differently, separately’: *Hanols pyeli nwun kot tini.ngita* 하늘벼리 눈 곧 디니이다 ‘The stars in heaven fall like snow’ (1447 *Yongbi ōch’ōn ka* 50); *Woynynek phi tat tamkwo wolhonnyek phi tat tama* 왼녘 피 달 담고 올흔녘 피 달 다마 ‘The blood on the left (he) put in separately and the blood on the right (he) put in separately’ (1459 *Wōrin sōkpo* 1:7). In Contemporary Korean, such adverbs would require derivational suffixes; *kath.i* ‘similarly,’ for example, is derived from the verb *kath-* ‘be like’ with the adverbative ending *-i*. But in Middle Korean, verb stems could be used as adverbs without the addition of suffixes.

Verb compounding worked in a similarly unconstrained way. Combining verb stems directly into compounds, as in *pilmek-* 빌떡- ‘beg one’s bread’ (from *pil-* 빌- ‘beg’ + *mek-* 떡- ‘eat’), was an extremely productive process. Today, in Contemporary Korean, the compounding of verbs is normally buffered through the use of the infinitive ending *-ela*, as in *pil.e mek-* ‘beg one’s bread.’ Although the attested examples are not numerous, Middle Korean verb stems could also be combined directly with nouns, as in *pswus-twolh* 찧돌 ‘grindstone,’ from *pswuch-* 찧- ‘rub, grind’ + *twolh* 돌 ‘stone,’ or *twuti-cwuy* 두디쥐 ‘mole,’ from *twuti-* 두디- ‘rummage, fumble’ + *cwuy* 쥐 ‘rat.’

In other words, verb stems were more independent of their inflectional endings at the Middle Korean stage of the language than they are today.

5.4.1 Compounding and word derivation

Few processes of word formation were unique to the Middle Korean stage of the language; most are also found today in Contemporary Korean. The

¹⁶ Many of the Middle Korean forms of these words were distinguished by tone; for example, the noun *pōy* ㅍ이 ‘belly’ was marked with a departing tone, while the verb stem *pōy-* ㅍ이- ‘get pregnant’ was left unmarked as an even tone. The same was true of *stūy* ㅍ이 ‘belt’ and *stūy-* ㅍ이- ‘wear (a belt).’ However, the phonological distinction was not completely predictable; both *pis* ㅍ이 ‘comb’ and *pis-* ㅍ이- ‘comb,’ for example, were left unmarked, indicating low pitches.

principal differences are the functional loads and productivity of the processes, and the specific morphemes involved.

In Korean, both historical and modern, it is difficult to distinguish many free-word compounds from syntactic phrases. Although *him psu-* 힘쓰- ‘endeavor,’ for example, has the structure of a verb phrase consisting of a verb (*psu-* 쓰- ‘use’) and its direct object (*him* 힘 ‘strength’), Korean dictionaries treat it as a compound. Whenever the noun is marked with the accusative particle *ul*, the structure is considered a phrase; but without the particle, it is analyzed as a compound because of its idiomatic flavor. In cases of this kind, semantics and usage are the deciding factors; if a particular construction is a commonly used one, or if it has an idiosyncratic meaning, it takes on the status of compound. There is no clear dividing line between free-word compounds and syntactic phrases. There are many ambiguous cases.

A related analytical problem peculiar to Korean is that of the so-called “genitive *s*” (see section 5.2.6, above). Ordinarily, this particle linked nouns in noun phrases, as will be discussed later. Its function was syntactic, not lexical. However, some genitive-*s* constructions are considered compounds; for example, *mwoys-kisulk* 밋기슭 ‘the foot of a mountain,’ *muls-tolk* 물닭 ‘wild duck’ (literally, ‘water-chicken’). The deciding factor seems to be the extent to which the genitive *s* had bonded with a member of the compound. In *mwoys-kisulk* 밋기슭 ‘the foot of the mountain,’ for example, *mwoys* 밋 ‘mountain’ idiomatically functioned as a prenoun; it was also found in compounds such as *mwoys-pwongwoli* 밋보오리 ‘mountain peak’ and *mwoys-kwol* 밋골 ‘mountain valley.’ In *nyeys-nal* 옛날 ‘olden days,’ the prenoun *nyeys* 옛 ‘ancient’ is seen in *nyeys-hoy* 옛희 ‘ancient years,’ *nyeys-pskuy* 옛뿌 ‘ancient times,’ *nyeys-kowol* 옛마을 ‘ancient village,’ etc.

The phonological differences between Middle Korean and Contemporary Korean created morphological differences. For example, a morphophonemic *-h* at the end of a noun resulted in the aspiration of a following plain obstruent; e.g., *swuh* 숭 ‘male’ + *tolk* 닭 ‘chicken’ → *swu-tholk* 수닭 ‘rooster’; *amh* 암 ‘female’ + *tolk* 닭 ‘chicken’ → *am-tholk* 암닭 ‘hen’; *anh* 안 ‘inside’ + *pask* 밖 ‘outside’ → *an-phask* 안팎 ‘inside and outside.’ This phonological rule is not a productive one in noun compounding today; still, many of the words that the Middle Korean rule produced are still preserved as lexical relics: *swuthalk* ‘rooster’; *amthalk* ‘hen’; *anphakk* ‘inside and outside.’ The same phonological rule obtained in compounding with verb stems; for example, *nah* 낡 ‘age, year’ + *tul-* 들- ‘enter’ → *nathul-* 나틀- ‘grow old.’

The most productive type of compound was, and is, the compound noun. A compound noun could be formed of two or more free words, or it could contain at least one bound element, such as a prenoun (*woy* 외 ‘only, single, one’ + *pcak* 짝 ‘member of a pair’ → *woy-pcak* 외짝 ‘unmatched member of a pair’), which could also be an inflected modifier (*han* 한 ‘great’ + *api* 아비

‘father’ → *hanapi* 하나비 ‘grandfather’) or an inflecting stem (*pswuch-* 𪛗- ‘rub, grind’ + *twolh* 𪛗 ‘stone’ → *pswus-twolh* 𪛗𪛗 ‘grindstone’).

Adverbs were uninflected words that occurred in absolute position. They differed from nouns in that they did not take case particles; otherwise, they can be thought of as belonging to the same word class. Compounds were formed in much the same way, but reduplication was probably a more common process in the composition of adverbs; for example, *na-nal* 나날 ‘daily,’ *motoy-motoy* 모딕모딕 ‘all joints,’ *kaci-kaci* 가지가지 ‘all kinds.’

The compounding of inflecting stems was a highly productive process in Middle Korean, and a characterizing feature of that stage of the language. As was mentioned above, the stems of verbs and adjectives were combined directly into compounds with much greater frequency than they are today; for example, *pilmek-* 빌멕- ‘beg one’s bread,’ *keskwoc-* 것꺾- ‘take a cutting and plant it,’ *tutpwo-* 들보- ‘listen and see,’ *cwuksal-* 죽살- ‘make live or die,’ *tywokhwuc-* 도꺾- ‘good or bad’ (*tywoh-* 좋- ‘good’ + *kwuc-* 꺾- ‘bad’), *nwopnoskaW-* 높낮잡- ‘high and low’ (*nwoph-* 높- ‘high’ + *noskaW-* 낮잡- ‘low’). Compounds with *ni-* 니- ‘go’ as the second element were especially common. This verb functioned like a verbal suffix to show continuation of motion or action; for example, *nwoni-* 노니- ‘go around enjoying oneself’ (< *nwol-* 놀- ‘play, enjoy oneself’), *ketni-* ~ *kenni-* 걷니- ~ 건니- ‘stroll, ramble’ (< *ket-* 걷- ‘walk’), *noni-* 느니- ‘fly about’ (*nol-* 놀- ‘fly’), *etni-* 연니- ‘keep looking for’ (*et-* 연- ‘look for’), *honi-* 하니- ‘move’ (*ho-* 흥- ‘is, does’). After the sixteenth century, the compounding of verb stems gradually became unproductive, and all that remains of this process today are a few fossilized forms; for example, *twolpwo-* ‘take care of’ (*twol-* ‘turn,’ *pwo-* ‘look’) and *selik-* ‘become half-done, half-ripe’ (*sel-* ‘unripe,’ *ik-* ‘ripen’).

The most productive process of combining verbs in the modern language makes use of the infinitive ending *-e/a* attached to the first stem. This same construction can also be found in Middle Korean texts. For example, *naza ka-* 나사가- ‘go ahead’ (*nas-/naz-* 낫-/낫- ‘proceed,’ *ka-* 가- ‘go’), *twola wo-* 도라오- ‘return’ (*twol-* 돌- ‘turn,’ *wo-* 오- ‘come’), *pese na-* 머서나- ‘get out of’ (*pes-* 벗- ‘take off,’ *na-* 나- ‘come out’). A particularly common construction of this kind consists of a verbal infinitive plus the existential verb *isi-/is-* 이시-/잇- serving as a kind of aspect marker to indicate the continuation of a completed action – as in this passage from the 1459 *Wōrin sōkpo* (1:6a): *howoza anca istesini* 호오사 안자잇더시니 ‘he was sitting alone.’ By the middle of the fifteenth century this form was already commonly contracted to *-ays/ey-* -엿/엿-, and by the sixteenth century a further phonological simplification, *-as/es-* -앗/앗-, came into general use. These contractions are seen, for example, in: *CYENGSYA_ay ancaystesini* 精정솨상에 안챌더시니 ‘he was sitting in the monastery’ (1459 *Wōrin sōkpo* 1:2a), and *mu.l_ey comkyesnoni* 무레 줌꺾느니 ‘it was submerged in the water’ (1517 *Pōnyōk Pak*

T'ongsa 1:68). In addition, *isi-/is-* 이시-/잇- was sometimes contracted to *'si-/sy-* 시-; for example, *kacye 'sil_ssi_la* 가져실씨라 ‘keeping (it)’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 3), *pyesul_hoya 'syom_ay* 벼슬호야 쇼매 ‘in doing (his) service’ (1481 *Tusi ōnhae* 21:45). There were also some curious exceptions to this morphological rule, in which the infinitive was omitted from the construction. These consisted of occurrences of the verb stem *twu-* 두- ‘place,’ to which *isi-/is-* 이시-/잇- or the honorific existential *kyesi-* 거시- was attached directly, as in *twuysnwon* 뒛논, *twuysteni* 뒛더니 or *twukyēsita* 두겨시다, *twukyēsya* 두겨샤; for example, *twusimyen* 두시면 ‘if/when it has been placed’ (1463 *Pōphwa kyōng ōnhae* 1:3). The same construction was also sometimes contracted to *twus-* 뒛-, as in *twusnwon* 뒛노니 (1481 *Tusi ōnhae* 20:11) or *twuskeni* 뒛거니 (1482 *Nammyōng-chip ōnhae* 2:48).

5.4.1.1 Derivations

Suffixation was the principal process of word formation in Late Middle Korean. A suffix attached to a word or morpheme determined the word class and function of the resulting derived form.

5.4.1.2 Nominal suffixes

Nominal suffixes that attached to nouns had a variety of functions and meanings. Some were used broadly as diminutives, vulgarizers, personalizers, and the like; others had more narrowly applicable meanings. A few appear to have been used simply to extend the phonological length of the word. One of the latter was the pleonastic nominal suffix *-i*.

In Late Middle Korean, three postposed nominal elements, all probably from the same etymological source (and perhaps related to the homophonous subject particle as well), had the phonological shape /i/. One was the quasi-free noun *i* 이 ‘one, person,’ which could serve as the head noun of an adnominalized sentence; for example, *wono.n i* 오느니 ‘the one who comes.’ Adnominal constructions of this kind could also be lexicalized as compounds; e.g., *nulkuni* 늑그니 ‘old person’ (literally, ‘one who is old’). The second morpheme *i* 이 was used to derive nouns from verbs; this morpheme will be discussed below, together with other suffixes of inflecting stems.

The third morpheme *i* was the suffix that attached to nouns. Lexical items that in the 1446 *Hunmin chōngūm haerye* are given as *pwuheng* 부형 ‘owl,’ *kulyek* 그럭 ‘wild goose,’ and *phol* 폴 ‘housefly’ appear in texts published after that as *pwuhengi* 부형이, *kulyeki* 그러기, and *pholi* 프리. Moreover, it can also be surmised that nouns such as *api* 아버지 ‘father,’ *emi* 어머니 ‘mother,’ and *ezi* 어씨 ‘mother, parent’ had already incorporated the suffix by the Late Middle Korean period. There are many morphemically complex nouns of this kind. The suffix has a long and productive history that extends

down to the present day, and just which of the numerous occurrences of *-i* and *-y* at the end of Korean nouns resulted from the incorporation of this suffix is often difficult to determine.

The two suffixes *-ek* -억 and *-wong* -웅, both with obscure etymologies, are occasionally seen in the Middle Korean corpus. The suffix *-ek* -억 is found in *thelek* 터럭 ‘hair’ (털 ‘hair’) and *cwumek* 주먹 ‘fist’ (*cwum* 줌 ‘handful’). A variant of this morpheme appears as *-ak* -악 in *cwokak* 조각 ‘bit, fragment’ (*cwok* 족 ‘bit, piece’), and perhaps in *kalak* 가락 ‘toe, finger’ as well, though the form ^x*kal* is unattested. The suffix *-wong* -웅 is found in the noun *kitwong* 기둥 ‘pillar’ (*kit* 긴 ‘id.’).

The diminutive suffix *-(ng)aci* -아지 appears in *sywongaci* 송아지 ‘calf’ (*sywo* 쇼 ‘cow, ox’) and *kangaci* 강아지 ‘puppy’ (*kahi, kay* 가히, 개 ‘dog’). The velar nasal in these two compounds appears to belong to the suffix, but the diminutive *-yaci* -야지 seen in *mo-yaci* 말아지 ‘colt’ (*mol* 말 ‘horse’), was apparently a variant of *-(ng)aci* and does not show the nasal. The diminutive *-aki* -아기, which was derived from *aki* 아기 ‘child’ is found in *psol-aki/sol-aki* 찌라기/스라기 ‘broken bits of rice’ (*psol* 찰 ‘rice’). The vulgarizing suffix *-pak* -박 is attested in *meli-pak* 머리박 ‘head’ and *tyeng-pak* 덩박 ‘crown of the head’ (*tyeng* 頂 ‘top, vertex’). The suffix *-cyangil/tyengi* -장이/덩이 ‘doer of ...’ was used to indicate profession, as, for example, in *tam-cyangi* 담장이 ‘mud wall builder’ (*tam* 담 ‘wall’) and *stuy-cyangi* 씨장이 ‘beltmaker.’ The suffix *-nach* -낫 ‘piece, unit,’ a doublet of the noun *nath* 낫 ‘id.’ is seen in *psol-nach* 찰낫 ‘rice grains,’ *sam-nas* 삼낫 ‘hemp stalks,’ *pyes-nach* 벳낫 ‘rice stalks,’ and *tays nach* 댓낫 ‘bamboo pieces.’ The suffix *-pal* -발 in *pis-pal* 빗발 ‘streaks of rain’ and *hoys-pal* 햇발 ‘sun rays’ was similarly used to indicate noun quality; *Wal/wal* /활/왈 in *kul-Wal/kul-wal* 글활/글왈 ‘letter, writing’ is said to be a lenited form of this same suffix.

There were several quasi-plural suffixes in Late Middle Korean.¹⁷ The best-known of these, *-tolh* -들 ‘and others,’ is seen in *ahoy-tol* 아히들 ‘children,’ *POYK-SYENG-tol* 百姓들 ‘the people,’ and *CWONG-CHIN-tolh* 宗親들 ‘royal clansmen.’ In Late Middle Korean this suffix *-tolh* -들 was a general, unmarked pluralizer. In contrast, the suffix *-nay* -내 ‘and other esteemed persons’ functioned as an honorific plural: *Ema-nim nay mwoy-zopkwo nwuuy-nim nay tepule cukcahi nakani* 어마님내 띄습고 누의님내 더브러 즉자히 나가니 ‘(They) proceeded at once, escorting the respected mothers, together with the respected sisters.’ There was also a separate plural suffix for pronouns. This suffix, *-huy* -희, which was a true marker of plural number, is seen in *ne-huy* 너희 ‘you people’ and the polite first-person *ce-huy*

¹⁷ These suffixes did not mark plural number per se; they indicated, rather, that the noun was representative of a group.

저희 ‘we (humbly).’ However, it was not used with first-person *na* 나, because that pronoun had the suppletive plural *wuli* 우리 ‘we.’ All of these plural pronouns could also take *-tolh* as a suffix, further demonstrating the function of the latter to mark a noun as part of a group; e.g., *wuli-tolh* 우리들 ‘we,’ *nehuy-tolh* 너희들 ‘you people.’

Honorifics and titles were suffixed. The honorific *-nim* ‘esteemed,’ as in *apa-nim* 아바님 ‘respected father,’ *ema-nim* 어마님 ‘respected mother,’ was derived from the native noun *nim* 님 ‘master.’

A large number of suffixes were imported from Chinese, and for the most part these occurred with Sino-Korean vocabulary. But some were also used with native vocabulary. For example, Sino-Korean *-kan* 간 ‘room’ (間) was combined with the native word *twuy* 뒤 ‘rear’ in *twuys-kan* 뒷간 ‘toilet.’ There were also Sino-Korean suffixes naturalized enough to obscure their Chinese origin; for example, *-kyeng* -경 ‘situation, state,’ which is seen in *mozoms-kyeng* 마음경 ‘state of mind,’ was a native development of Sino-Korean *kyeng* (景) ‘bright, luminous, view, scenery.’

Korean numerals were, and are, a class of uninflected words much like nouns. The cardinal numerals occurring in Middle Korean were: *honah* 혼냥 ‘1,’ *twulh* 둘 ‘2,’ *seyh* 셋 ‘3,’ *neyh* 넷 ‘4,’ *tasos* 다섯 ‘5,’ *yesus* 여섯 ‘6,’ *nilkwup* 널곱 ‘7,’ *yetulp* 여덟 ‘8,’ *ahwop* 아홉 ‘9,’ *yelh* 열 ‘10,’ *sumulh* 스물 ‘20,’ *syelhun* 열흔 ‘30,’ *mazon* 마흔 ‘40,’ *swuyn* 쉰 ‘50,’ *yesywuyn* 여현 ‘60,’ *nilhun* 널흔 ‘70,’ *yetun* 여든 ‘80,’ *ahon* 아흔 ‘90,’ *won* 온 ‘100,’ *cumun* 즈른 ‘1,000.’ As modifiers (e.g., *twu kalh* 두 칼 ‘two knives’), the first six of these have different shapes: *hon* 혼 ‘one,’ *twu* 두 ‘two,’ *se/sek* 서/석 ‘three,’ *ne/nek* 너/넉 ‘four,’ *tay* 대 ‘five,’ *yey/yes* 예/엿 ‘six.’ Ordinal numerals were formed by attaching the suffix *-chahi/chahi* to the cardinal numerals; e.g., *yetulp-chahi* 여덟 차히 ‘eighth,’ *twul-chahi* 둘차히 ‘second.’ It can be surmised that the basic form of the suffix was *-chahi*, particularly because that form was also found after classifier constructions; e.g., *nilGweys-chahi* 널셋차히 ‘seventh day’ (1446 *Sökpo sangjöl* 24:28; 1461 *Nüngöm kyöng önhæ* 7:23). The initial aspiration of the alternate form *-chahi* thus would appear to come from metathesis of the final *-h* of a preceding numeral, e.g., *seyh* ‘three’ + *-chahi* → *sey-chahi* 새차히 ‘third.’ But note that the aspirated form could also be found after numerals without a final *-h*: *tasos-chahi* 다섯차히 ‘fifth,’ *yesus-chahi* 여섯차히 ‘sixth’ (1459 *Wörin sökpo* 9:36–37). In any case, the suffix was commonly contracted to *-cay(chay)*; e.g., *yesus-cay* 여섯재 ‘sixth’ (1465 *Wön’gak kyöng önhæ* 1.1-2:179), *ahop-chay* 아홉재 ‘ninth’ (1465 *Wön’gak kyöng önhæ* (1.2-2:154), *twul-chay* 둘째 ‘second’ (1465 *Wön’gak kyöng önhæ* 2.3-2:8). In addition, it is worth noting that (in contrast with its Contemporary Korean reflex *-ccay*), this ordinal suffix also appeared after the cardinal numeral ‘one’ in the sixteenth century: *honas-cay* 혼났재 ‘first’ (1587 *Sohak önhæ* 5:16). (The form is not attested in texts from the

fifteenth century.) When used in modifier constructions, the suffix took the form *cas/chas*; (the *-s* is the genitive particle) e.g., *sey-chas hoy* 셋차트 히 ‘the third year’ (1459 *Wörin sökpo* 2:49). However, as a modifier, the ordinal ‘first’ had the suppletive form *ches*; e.g., *ches kwo.c_i* 첫 고지 ‘first flower’ (1481 *Tusi önhæ* 25:41). To count days, special words were used: *holo* 홀록 ‘one day,’ *ithul* 이틀 ‘two days,’ *saol* 사올 ‘three days,’ *naol* 나올 ‘four days,’ *ta.ssway* 다췌 ‘five days,’ *ye.ssway* 여췌 ‘six days,’ *nilGwey* 닐웨 ‘seven days,’ *yetolay* 여드래 ‘eight days,’ *aholay* 아흐래 ‘nine days,’ *yelhul* 열흘 ‘ten days.’ Although these forms have reflexes still used today, the Middle Korean morphology was remarkable. As will be explained below, *holo* 홀록 ‘one day’ went back to **holol*, and this reconstructed form, together with *ithul* 이틀 ‘two days,’ *saol* 사올 ‘three days,’ *naol* 나올 ‘four days,’ and *yelhul* 열흘 ‘ten days,’ apparently incorporated a suffix **(o)ul*. The shape that ‘two’ took with this suffix was the suppletive form *ith-*; it is also worth noting that before this suffix *se* ‘three’ and *ne* ‘four’ were replaced by the alternate shapes *sa-* and *na-*.

The suffix *-(o)um* attached to inflecting stems to form nominals. As in Contemporary Korean, it was used both to derive lexical nouns and to nominalize sentences. However, unlike the language today, the morphology of these two uses was different. The rule was that lexical nouns were derived by adding the suffix directly to verb stems, while sentential nominalizations incorporated the volitive *-wo/wu-*. For example, the noun *yelum* 여름 ‘fruit’ was derived from the verb stem *yel-* 열- ‘bear fruit’ plus the suffix *-(o)um*. But the same verb was nominalized as *yelwum* 여룸 ‘bearing fruit’ (*yel-* + *wu-* + *-(u)m*) when it functioned as the predicate in a sentential nominalization. Both of these forms occur together in the passage *tywohon yelum yelwu. m_i* 도흔 여름 여루미 ‘the bearing of good fruit’ (1459 *Wörin sökpo* 1:12). Other examples of lexical nouns include: *salom* 사름 ‘person’ (*sal-* 살- ‘live’), *kelum* 거름 ‘step’ (*ket/kel-* 걷/걸- ‘walk’), *kulim* 그림 ‘painting’ (*kuli-* 그리- ‘paint’), *elum* 어름 ‘ice’ (*el-* 얼- ‘freeze’). But there were also morphological exceptions. In cases where nominalizations had become frozen as lexical items, the nouns included occurrences of the volitive *-wo/wu-* plus the nominalizing suffix *-m*; for example, *chwum* 춤 ‘dancing’ (*chu-* 츠- ‘dance’), *wuzwum* 우숨 ‘laughing’ (*wuz-* 웃- ‘laugh’), *wulwum* 우름 ‘weeping’ (*wul-* 울- ‘weep’). In addition, a few lexical nouns were derived with the suffix *-am/em* -암/엄: *mwutem* 무덤 ‘grave’ (*mwut-* 문- ‘bury’), *cwukem* 주검 ‘corpse’ (*cwuk-* 죽- ‘die’), *kwucilam/kwucilem* 구지람/구지럼 ‘scolding’ (*kwucit-* 구질- ‘scold’).

Another suffix used to derive nouns from verbs was *-i*. This suffix was remarkably productive in Middle Korean; the nouns derived with it include *wuzwumGwuzi* 우숨우시 ‘laughter,’ *cwuksali* 죽사리 ‘life and death,’ *kul-cizi* 글지시 ‘literary composition’ (*kul* 글 ‘writing, letter’ *ciz-* 짓- ‘compose’), *hali* 하리 ‘slandering’ (*hal-* 할- ‘slander’), etc.

The suffix *-kay/key* similarly attached to verb stems; for example, *cipkey* 집게 ‘tweezers, tongs’ (*cip-* 집- ‘pick up’), *nolkay/nolGay* 날개/날에 ‘wings’ (*nol-* 날- ‘fly’), and *twupkey* 뚜껍게 ‘lid’ (*twuph-* 뚫- ‘cover’). Nouns such as *pwuchey* 부채 ‘fan’ (*pwuch-* 붓- ‘fan’), *kozGay* 자에 ‘scissors’ (*koz-* 자- ‘cut’), and *twulGey* 둘에 ‘circumference’ (*twulu-* 두르- ‘surround’) also etymologically contained occurrences of this suffix.

Though it is the most productive nominalizing suffix in the language today, *-ki* was rarely used in Middle Korean. But it did occur. For example: *pat nonhwoki* 받 논호기 ‘dividing the fields’ (1447 *Sōkpo sangjōl* 9:19b), *kul suki wa kal psuki wa* 글 스기와 갈 쓰기와 ‘wielding pen and sword’ (1481 *Tusi ōnhae* 7:15a).

The nominal suffix *-(o)u* attached to adjectives. For example, *khuy* 크 ‘size’ (*khu-* 크- ‘big’), *kiphyu* 기푼 ‘depth’ (*kiph-* 깊- ‘deep’), *nwophoy* 노푼 ‘height’ (*nwoph-* 높- ‘high’), *nepuy* 너빚 ‘width’ (*nep-* 넓- ‘wide’), *kiluy* 기리 ‘length’ (*kil-* 길- ‘long’), etc.

5.4.1.3 Verbal suffixes

Suffixes used to derive verbal stems can be roughly divided into two groups. Those that attached to nouns were few in number but interesting nonetheless. They include such morphemes as the suffix *-k-* seen in the derivation of the verb *mwusk-* 묶- ‘tie’ from the noun *mwus* 뭉 ‘bundle,’ and the suffix *-i-* used to derive *cahi-* 자히- ‘measure’ from *cah* 장 ‘ruler’ (an early loan from Chinese). The other group attached to verb or adjective stems. These suffixes in turn were divided into causatives and passives. There were four suffixes used to derive causatives. By far the most important of these were (1) *-hi/ki/Gi/i-* and (2) *-(G)wo/(G)wu-* (which was also sometimes realized as *-hwo/hwu-* or *-kwo-*). But there were also some rare instances of causatives derived with (3) *-h-* and (4) *-o-*.

Causatives The phonological shape of (1) depended upon the final segment of the stem to which it attached: after /p, t, c/ the allomorph was *-hi-*; after /m, s/, *-ki-*; after /z, l/, *-Gi-*. After all other consonants or a vowel, the shape of the morpheme was *-i-* (or *-y-*). Examples: *nephi-* 너피- ‘widen’ (*nep-* 넓- ‘wide’), *kwuthi-* 구티- ‘harden’ (*kwut-* 굳- ‘hard’), *nuchi-* 느치- ‘delay’ (*nuc-* 늦- ‘late’), *anchi-* 안치- ‘seat’ (*anc-* 앉- ‘sit’), *swumki-* 숨기- ‘conceal’ (*swum-* 숨- ‘hide’), *paski-* 밧기- ‘undress (someone), strip’ (*pas-* 밧- ‘undress, take off’), *wuzGi-* 웃이- ‘make laugh’ (*wuz-* 웃- ‘laugh’), *cizGi-* 짓이- ‘have build, make’ (*ciz-* 짓- ‘build, make’), *malGi-* 말이- ‘stop (someone or something)’ (*mal-* 말- ‘stop (doing something)’), *meki-* 머기- ‘feed’ (*mek-* 먹- ‘eat’), *molki-* 물기- ‘clarify, purify’ (*molk-* 맑- ‘clear’), *syey-* 세- ‘erect, build, make stand’ (*sy-* 서- ‘stand’), *nay-* 내- ‘take out, give birth’ (*na-* 나- ‘come out, be born’). Of these, a number of the verb stems ending in *k* or *lk* (which in

the fifteenth century had been followed by *-i-*) came, in the sixteenth century, to be followed by the allomorph *-hi-*. Examples: *nikkhyese* 닉켜서 ‘having made oneself familiar with’ (1587 *Sohak ōnhae* 2:41), *polkhikey* 볼키게 ‘(so that it is) made clear’ (1587 *Sohak ōnhae* 6:11), *CHYEN khukey polkhil chen* 闡 크게 볼킬 천 ‘(the character read) *chen* (that means) “brighten greatly”’ (1576 *Sinjŭng yuhap* 2:42), *TING molkhil ting* 澄 몰킬 텅 ‘(the character read) *ting* (that means) “purify”’ (1576 *Sinjŭng yuhap* 2:9). Verb stems ending in *-lo/lu-*, such as *wolo-* 오르- ‘go up’ and *hulu-* 흐르- ‘flow,’ were divided into two classes with respect to their phonological behavior with this suffix. One is represented by *hulu-* 흐르- with the derived causative *hulli-* 흘리-, the other by *wolo-* 오르-, which had the derived causative *wolGi-* 올리-. Example: [*SSYEK-PYEK*]_{ey} *mo.l_ol wolGisya* 石壁에 막을 올리샤 ‘He rode his horse up the stone precipice’ (1447 *Yongbi ōch’ōn ka* 48). The causative of *ho-* 호- ‘do, is’ was *hoy-* 히- (or sometimes *hoyGwo-* 히오-). It was widely used in Middle Korean. The adverbial form of this causative, *hoyye* 히여, plus the adverb intensifying suffix *-kwom* -꿈, combined to form the construction *hoyyekwom* 히여꿈 ‘letting, making, forcing ...’ (the reflex of which is *hayekum* in Contemporary Korean).

The second most productive causative was (2), *-(G)wo/(G)wu-* -오/우-. As explained above, this morpheme had an initial voiced velar fricative /G/. The textual evidence for this deduction is, in a nutshell, as follows: first, note that morphemes beginning with a vowel normally gained an excrescent *-y* after an *i-* or *y-*. For example, *mwuy-* 뉘- ‘move’ plus the volitive morpheme *-wo/wu-* -오/우- produced *mwuyyu-* 뉘유-. However, the causative *-(G)wo/(G)wu-* did not develop an initial *-y* in this environment: *mwuy-* 뉘- ‘move’ + *-(G)wo/(G)wu-* → *mwuy.wu-* 뉘우-. The transcriptional difference can only be explained by assuming there was an initial consonant to block the liaison, which in this case must have been *G*.¹⁸

The velar fricative was also sometimes realized after /z/ or /l/; e.g., *nizGwuy-* 녀위- ‘get joined, is linked’ (*niz-* 녀- ‘join, link’), *ilGwu-* 일우- ‘accomplish, achieve’ (*il-* 일- ‘happen’), *memulGwu-* 머물우- ‘had stay,’ *elGwu-* 열우- ‘made freeze.’ In other environments, including after obstruents, the morpheme sometimes began with a vowel; e.g., *mwotwo-* 모도- ‘collect’

¹⁸ The philological picture is complicated somewhat by the transcription *koliWomye* 마리븨며 ‘while concealing’ (1459 *Wōrin sōkpo* 18:39) (*koli-* 마리- ‘hide’), which attests a voiced labial fricative, *W*, instead of a velar. This form with a labial, *koliWo-*, occurred only once in the textual corpus, and the causative stem ‘conceal’ was otherwise written as *koliGwo-*; e.g., *koliGwon* 마리온 (1459 *Wōrin sōkpo* 9:31b), *koliGwota* 마리오다 (1459 *Wōrin sōkpo* 2:2a). But there are also three attestations of *epsiWu-* 업시븨- for the stem *epsiGwo-* 업시오- ‘eliminate, get rid of, do away with’: *epsiWo.n i* 업시븨니 (1459 *Wōrin sōkpo* 23:65b), *epsiWuzoWa* 업시븨스바 (1459 *Wōrin sōkpo* 17:77a), *epsiWozoWa* 업시븨스바 (1463 *Pōphwa kyōng ōnhae* 2:15-16). It is not clear whether these transcriptions of a labial should be taken as scribal errors or evidence that a doublet existed.

(*mwot*- 못- ‘assemble’), etc. However, a stem-final obstruent also sometimes became aspirated when followed by this morpheme; e.g., *nathwo*- 나토- ‘appear’ (*nat*- 난- ‘show’). The appearance of aspiration shows that an allomorph of the morpheme was *-hwo/hwu-* -호/후-. More examples: [PYENG-MA] *lol mechwuesini* 兵馬를 머추어시니 ‘he held back his soldiers and horses’ (1447 *Yongbi ōch’ōn ka* 54) (*mec*- 멎- ‘stop’ was not attested in Middle Korean, but it is found in texts from following centuries), *pcak machwol_ssi_ni* 딱 마출씨니 ‘match up with its mate’ (1459 *Wōrin sōkpo* Introduction: 7) (*mac*- 맞- ‘meet’). In addition, there were a few early occurrences of an allomorph with a velar stop, *-kwo-*: *palols mu_l_ul swosk-wononila* 바룻믈를 솟고느니라 ‘made the waters of the sea spew forth’ (1463 *Pōphwa kyōng ōnhae* 1:51) (*swos*- 솟- ‘spurt out’).

Both causatives, (1) and (2), could occur together; e.g., *epsiGwo-/epsiGwu-* 입시오-/업시우- ‘eliminate, do away with, remove’ (*eps*- 없-, ‘does not exist, there is not’), *choyGwo-* 채오 ‘fill’ (*cho*- 채- ‘be filled’), *thoyGwo-* 턱오- ‘incinerate’ (*tho*- 턱- ‘burn’), *ptuyGwu-* 띄우- ‘float (something)’ (*ptu*- 띄- ‘float’), etc. The reverse ordering of the two causatives was also possible: *alGwoy-* 알외- ‘inform’ (*al*- 알- ‘know’), *nizGwuy-* 녀워- ‘get joined, is linked’ (*niz*- 녀- ‘join, link’), etc.

The transitive verbs *nah(o)-* 낳- ‘give birth to’ and *huth-* 흩- ‘scatter’ appear to be derived by adding a suffix *-h(o)-* to the intransitive verbs *na-* 나- ‘come out, be born’ and *hut-* 흩- ‘be scattered.’ Moreover, in Middle Korean the act of naming was always expressed by the phrase *ilhwm cih-* 일흠짱-, which consisted of the noun *ilhwm* 일흠 ‘name’ plus the verb *cih(o)-* 짱-, apparently a causative derived from *ci-* 지- ‘carry on the back.’

In addition to the more common causatives *salGi-* 살이-, *ilGwu-* 일우-, etc., a number of *l*-stem verbs such as *sal-* 살- ‘live’ and *il-* 일- ‘happen, rise’ also had causatives derived with the suffix *-o-*: *salo-* 사르-, *ilo-* 이르-, etc. In such cases, the causative pairs differed in meaning. While *salGi-* 살이- meant ‘to cause to live in some place,’ *salo-* 사르- meant ‘to save someone’s life, let live.’ The causative *ilGwu-* 일우- meant ‘to cause to accomplish some goal or task,’ while *ilo-* 이르- meant ‘to erect a building or tower.’ Examples: *cip cwue salGikwo* 집 주어 살이고 ‘gave (him) a house and let (him) live there’ (1481 *Tusi ōnhae* 24:27), *HHANG-PPWOK_hoya eptetiye salosywo sye* 降服하야 엽더디여 사르쇼셔 비니 ‘he surrendered and, throwing himself on the ground, begged “please let me live”’ (1447 *Sōkpo sangjōl* 6:33b), *khun [KWONG]_ul ilGwuzoWoni* 큰 공을 일우스별니 ‘he achieved a great distinction’ (1447 *Yongbi ōch’ōn ka* 57), *CYENG-SYA_lol ilozoWaci.ngita* 精舍를 이르스바지이다 ‘(I) want to build a monastery’ (1447 *Sōkpo sangjōl* 6:24a).

Passives Examples of passive stems were extremely rare in Middle Korean – just as they are in Contemporary Korean. The suffix used to derive passives

was *-hi/ki/Gi/i-*, which, for the most part, was the same as the causative suffix given in (1), above. The one exception was that the passive of *mek-* 먹- ‘eat,’ *mekhi-* 먹히- ‘be eaten,’ was formed with the allomorph *-hi-*, while, in contrast, the causative of the same verb, *meki-* 먹기- ‘feed,’ was formed with the allomorph *-i-*. More typical examples of passive stems include: *caphi-* 잡히- ‘get caught’ (*cap-* 잡- ‘grab’), *telmki-* 뉘기- ‘be dyed’ (*telm-* 뉘- ‘dye’), *pwoy-* 뵈- ‘be seen’ (*pwo-* 보- ‘see’), etc. A matter of philological note is that, when used to form passives with stems ending in *-y-*, the initial of the suffix *-Gi-* was transcribed with the double zero symbol “oo.” For example, *moyOOi. nonila* 먹이느니라 ‘is bound to, by’ (1447 *Sōkpo sangjōl* 13:9b), is derived from *moy-* 먹- ‘bind, tie’; *kwoyOOye* 귀여 ‘being loved by someone’ (1446 *Hunmin chōngūm haerye* 21) is derived from *kwoy-* 귀- ‘love.’

5.4.1.4 Adjectival suffixes

Just as was true of the verbal suffixes, the adjectival suffixes, too, were divided into two classes. One consisted of suffixes used to convert nouns into adjectives. The most productive of these suffixes was *-toWoy-* -드웁-. It had various allomorphs: following a stem ending in any consonant except /l/, and before another suffix beginning with a consonant, the suffix took the form *-toWoy-* 드웁- (and, later, *-towoy-* -드외-); if it was followed by a vowel, the suffix was realized as *-toW-* -드-; after a vowel or /l/ and before a consonant, the suffix was *-loWoy-* -르웁-; before a vowel it was *-loW-* -를-. Examples: *cywupyen_toW-* 주변을- ‘adaptable,’ *NGUY-SIM_toW-* 疑心들- ‘doubtful,’ *SSYWUW-KHWO_loW-* 受苦를- ‘troublesome,’ *woy_loW-* 외를- ‘lonely,’ *kyelu_loW-* 겨르를- ‘leisured,’ etc. The suffix *-toWoy-* -드웁- formed a doublet with another suffix that attached to nouns, *-taW-* -달- (which was the direct ancestor of the Contemporary adjectival suffix *-tap/taw-*). Like *-toWoy-* -드웁-, *-taW-* -달- was extremely productive in Middle Korean; here are examples: *PEP_taW-* 法달- ‘legal,’ *LYEY_taW-* 禮달- ‘courteous,’ *silum_taW-* 시름달- ‘worrisome.’ The adjective *alomtaW-* 아롬달- ‘beautiful’ also appears to have been derived with this suffix, but the noun **alom* is not attested in the textual record. Traces of yet another, earlier adjectival derivation can be found in the adjectives *pulk-* 붉- ‘reddish’ and *mulk-* 물- ‘watery.’ These two stems were almost certainly derived from *pul* 불 ‘fire’ and *mul* 물 ‘water’ at some older stage of the language.

The second class of adjectival suffixes consisted of morphemes that attached to inflecting stems. These included three etymologically related forms: *-Wo/Wu-* -웁/브-, *-aW/eW-* -아/엿-, and *-kaW-* -갈-.

The suffix *-Wo/Wu-* -웁/브- converted verb stems into adjective stems. It had three basic allomorphs: *-W-* after a vowel; *-Wo/Wu-* after a *z*; and *-po/pu-* after all other consonants. Examples: *muyW-* 뉘- ‘is hateful’ (*muy-* 먹- ‘hate’), *kuliW-* 그렁- ‘is longed-for’ (*kuli-* 그리- ‘long for’), *twuliW-* 두릴- ‘is

frightening' (*twuli*- 두리- 'fear'), *nwollaW*- 놀랄- 'is surprising' (*nwolla*- 놀라- 'surprise'), *wuzWu*- 웃브- 'is laughable' (*wuz*- 웃- 'laugh'), *mitpu*- 민브- 'is believable' (*mit*- 민- 'believe'), *cephu*- 저프- 'is scary' (*ceh*- 좃- 'be afraid of'), *nwuyuspu*- 뉘웃브- 'is regrettable' (*nwuyuch*- 뉘웃- 'regret'), *ispu*- 잇브- 'is tired' (*ich*- 잇- 'tire out'), *paspo*- 밧브- 'is busy' (*pach*- 밧- 'busy (a person)'), *kwolpho*- 골프- 'is hungry, (stomach) is empty' (*kwollh*- 꿏- 'remain unfilled'), *alpho*- 알프- 'is hurt, is sick' (*alh*- 았- 'ail'), *sulphu*- 슬프- 'is sad' (*sulh*- 슸- 'grieved at'), *kispu*- 깃브- 'is happy' (*kisk*- 지- 'rejoice'), *kospo*- 꺏브- 'is hard, trying' (*kosk*- 꺏- 'make efforts'), etc. It is interesting that many of the verb forms in the above list were lost in the Early Modern period, leaving the derived adjectives as isolated lexical items. In addition, among the verbs which do still exist, most native speakers are not aware of a connection between *kwollh*- 꿏- 'remain unfilled' and *alh*- 았- 'ail' and the corresponding derived adjectives, because the /l/ in *kwolpho*- 골프- '(stomach) is empty' and *alpho*- 알프- 'is hurt, is sick' has elided. In Middle Korean, the productivity of this suffix extended to derived verbals such as *solang_ho*- 스랑호- 'think of, love,' *kamtwong_ho*- 감동호- 'is (emotionally) moved,' and *nwo_ho*- 노호- 'become angry': *solang_hoptwota* 스랑혹도다 'is lovable' (1481 *Tusi ōnhae* 21:40), *KAM-TTWONG_hopkwo* 感動혹고 (1463 *Pōphwa kyōng ōnhae* 3:115) 'is moving,' *NWO_hoWon* 怒호원 'anger-causing' (1459 *Wōrin sōkpo* 17:74). However, the suffix is of only etymological significance today.

The morpheme *-aW/eW*- -압/엿- also converted verbs into adjectives, but it only attached to stems ending in the vowel *i*-, which then elided. Examples: *askaW*- 앓갑- 'regrettable' (*aski*- 앓기- 'spare, grudge'), *culkeW*- 즐겡- 'is enjoyable' (*culki*- 즐기- 'enjoy'), *puskuleW*- 붓긔름- 'is shameful' (*puskuli*- 붓그리- 'feel shame'), *mukeW*- 믹겡- 'is heavy' (*muki*- 믹기- 'make heavy'), *tapskaW*- 닻갑/답짱- 'is stifling, stuffy, cramped' (*tapski*- 닻기/답끼- 'feel confined, cramped'). In at least one stem, however, the stem-final vowel *i*- was realized as *y*- and did not drop, the suffix developing an excrescent *y*- instead: *muzuyyeW*- 므의엿- 'is frightening' (*muzuy*- 므의- 'be afraid of').

The suffix *-kaW*- -갓- attached to adjective stems. Examples: *nyetkaW*- 녀갓- 'is shallowish' (*nyeth*- 녀 'is shallow'), *maskaW*- 맛갓- 'is appropriate' (*mac*- 맞- 'is in harmony with, correct'), *kaskaW*- 갓갓- 'is near' (**kac*- 'is near'), *noskaW*- 뇓갓- 'is low' (*noc*- 뇓- 'is low').

5.4.1.5 Adverbative suffixes

Adverbative suffixes attached to nouns or inflecting stems. The adverbs *mwomzwo* 몸소 'personally, by oneself' and *swonzwo* 손소 'personally, with one's own hands' were derived from the nouns *mwom* 몸 'body' and *swon* 손 'hand' with the suffix **-swo*. This particular suffix was not attested in any other words, but it is believed to have had an initial *-s* that assimilated the

voicing of the preceding nasal, *m-* or *n-*. This supposition is buttressed by the fact that an unvoiced initial was in fact recorded in the sixteenth century, in *mwomswu* 몸소 (1587 *Sohak ōnhae* 6:25), a transcription assumed to represent a dialect without the voicing rule. The same is true of the spelling *swonswu* 손소 found in texts dating from the early seventeenth century (e.g., 1617 *Tongguk sinsok samgang haengsil to, Hyojado* 2:43). Both unvoiced forms almost certainly must have existed in the Middle Korean period. Yet another twist in the sixteenth-century textual record can be seen in the transcription *swoncwo* 손조 (1517 *Pōnyōk Pak T'ongsa* 1:63), which shows the change *z > c*. The same change was attested in texts written around the beginning of the seventeenth century, when the form *mwomcwo* 몸조 was recorded (e.g., *Tongguk sinsok samgang haengsil to, Ch'ungsi-do* 1:36). In any event, only unlenited *mwomswu* and *swonswu* appear in the central dialects today.

The adverbs *ili* 이리 ‘this way,’ *kuli* 그리 ‘that way,’ and *tyeli* 더리 ‘that way (over there)’ were originally derived from the deictic pronouns *i* 이 ‘this,’ *ku* 그 ‘that,’ and *tye* 더 ‘that over there’ plus the directional particle *li* 리, and then became fossilized as lexical items. Similarly, the adverb *amoli* 아무리 ‘somehow, however much’ was derived from **amo*, an older form of *amwo* 아모 ‘any person, any thing,’ plus *-li* -리. The Contemporary reflex of this adverb, *amwuli*, is used only in negative contexts, but such was not the case with the Middle Korean word; e.g., *CHIK_un amoli homyen honon kye. ch_ey psunon CCO i la* 則은 아무리 흥면 흥는 겨체 쓰는 字 | 라 ‘*CHIK* is a character used in some way as a particle’ (144? *Hunmin chōngūm ōnhae*).

Three basic suffixes were used to derive adverbs from inflecting stems: (1) *-i*, (2) *-wo/wu*, and (3) *-key* (*/koy/kuy*). Examples of (1) *-i*: *nwophi* 노피 ‘highly’ (*nwoph-* 높- ‘is high’), *kili* 기리 ‘lengthily’ (*kil-* 길- ‘is long’), *kiphi* 기피 ‘deeply’ (*kiph-* 깊- ‘is deep’), *khi* 키 ‘largely’ (*khu-* 크- ‘is big’), *nepi* 네비 ‘widely’ (*nep-* 넓- ‘is wide’), *hay* 해 ‘numerously’ (*ha-* 하- ‘is numerous’), *niki* 니기 ‘thoroughly, ripely’ (*nik-* 닉- ‘ripen’), *niluli* 니르리 ‘so as to lead to’ (*nilu-* 니르- ‘lead to, arrive’), *kotok_hi* 가득히 ‘filled completely’ (*kotok_ho-* 가득ㅎ- ‘is full’), *ile_hi* 이리히 ‘thusly’ (*ile-ho-* 이리ㅎ- ‘is thus’), etc. Examples of (2) *-wo/wu*: *twolwo* 도로 ‘again, back’ (*twol-* 돌- ‘turn’), *nazwo* 나소 ‘preferably’ (*naz-* 낫- ‘is better’), *woolwo* 오오로 ‘wholly’ (*wool-* 오올- ‘is intact’), *kwolGwo* 골오¹⁹ ‘evenly, uniformly, equally’ (*kwolo-* 고르- ‘make it even, level it off’), *kiwulwu* 기우루 ‘askew’ (*kiwul-* 기울 ‘is slanted, leaning’), etc. Examples of (3) *-key* (*/koy/kuy*): *ipkey* 입게 ‘so as to be confused’ (*ip-* 입- ‘get confused’), *akey* 가게 ‘so as to go’ (*ka-* 가- ‘go’), *khukey* 크게 ‘widely’ (*khu-* 크- ‘is large’), *kwopkoy* 곱기 ‘so as to double’

¹⁹ The *G* in this form (transcribed with the symbol ○) apparently belonged to the verb stem.

(*kwop*- 곱- ‘double’), *cyekku* 적기 ‘so as to grow small’ (*cyek*- 적- ‘is small’). The basic form of this morpheme was *-key*; *-koy* and *-kuy* were much less common, minimal-vowel variants. In any case, the initial consonant of all these variants lenited to *G* after *i*, *y*; e.g., *towoyGey/towoyGoy/towoyGuy* 드외에/드외이/드외의 ‘so as to become’ (*towoy*- 드외- ‘become’).

In Middle Korean, all three adverbative suffixes, (1) *-i*, (2) *-wo/wu*, and (3) *-key/(koy/kuy)*, were remarkably productive. Today, however, only *-key* occurs freely with inflecting stems, and, for the most part, occurrences of *-i* and *-wo/wu* are confined to a fixed set of lexical items.

5.4.2 Nouns and noun phrases

When followed by a particle, the shapes of many Middle Korean nouns varied. Some of these variations were predictable from the phonological environment. Predictable alternations can be seen, for instance, in nouns that ended in *c*, *ch*, *z*, *ph*, *th*, or a consonant cluster (other than *lk* or *lp*), because these consonants only occurred before a vowel. Thus the words ‘flower’ and ‘outside,’ for example, were realized as *kwoc* 꽃 and *pask* 밖 before a vowel, but as *kwos* 꽃 and *pas* 밖 before a consonant. As was explained earlier, certain distinctions were neutralized before consonants.

A similar kind of predictable alternation was found in words that ended in *h*. For example, the word ‘stone’ was pronounced (and spelled) *twol* 돌 in isolation, but an *h* appeared before a particle beginning with a vowel: *twol.h_i* 돌히, *twol.h_ay* 돌해, *twol.h_ol* 돌홀, *twol.h_olwo* 돌호로. And when the noun was followed by the comitative particle *kwa*, the *h* was realized as aspiration: *twol_khwa* 돌과. In the Middle Korean corpus, there are about eighty nouns like this that can be confirmed as ending in a morphophonemic *h*. Here is a sampling: *nalah* 나라ㅎ ‘country,’ *stah* 싸ㅎ ‘earth,’ *hanolh* 하늘ㅎ ‘heaven,’ *kilh* 길ㅎ ‘road,’ *nayh* 내ㅎ ‘stream,’ *sinayh* 시내ㅎ ‘brook,’ *kozolh* 꺾을ㅎ ‘autumn,’ *nacwoh* 나조ㅎ ‘evening,’ *wuh* 우ㅎ ‘upside, upper part,’ *twuyh* 뒤ㅎ ‘rear,’ *anh* 안ㅎ ‘interior, inside,’ *mwoyoh* 뫼ㅎ ‘hill, mountain,’ *moyh* 밍ㅎ ‘open field, prairie,’ *tuluh* 뜨르ㅎ ‘uncultivated field, plain,’ *twolh* 돌ㅎ ‘beam, joist,’ *cholh* 출처ㅎ ‘source, origin,’ *stolh* 쫄ㅎ ‘interior, corner, origin,’ *mozolh* 밍술ㅎ ‘village,’ *ptulh* 뜰ㅎ ‘garden, yard,’ *swuh* 수ㅎ ‘forest, thicket,’ *wumh* 움ㅎ ‘dugout mud hut,’ *konolh* 꺾을ㅎ ‘shade,’ *mwoh* 모ㅎ ‘corner,’ *kowolh* 꺾을ㅎ ‘county,’ *syewulh* 셔울ㅎ ‘capital,’ *yeleh* 여러ㅎ ‘several,’ *mah* 마ㅎ ‘yam,’ *nomolh* 녹돌ㅎ ‘herbs, greens,’ *milh* 밀ㅎ ‘wheat,’ *cwoh* 조ㅎ ‘millet,’ *alh* 알ㅎ ‘egg,’ *kwoh* 고ㅎ ‘nose,’ *nimah* 니마ㅎ ‘forehead,’ *polh* 불ㅎ ‘arm,’ *solh* 살ㅎ ‘flesh,’ *amh* 암ㅎ ‘female,’ *swuh* 수ㅎ ‘male,’ *tyeh* 더ㅎ ‘flute,’ *nolh* 늘ㅎ ‘blade, warp,’ *malh* 말ㅎ ‘stake,’ *sywoh* 쇼ㅎ ‘laity,’ *kinh* 긴ㅎ ‘string,’ *nwoh* 노ㅎ ‘rope,’ etc. In the fifteenth century the *h* at the end of many of these nouns

was already showing signs of instability. The word *hanolh* 하늘ㅎ ‘heaven’ is a representative example. In some passages, the word was attested with a final *h*; e.g., *hanol.h_i* 하늘히, *hanol_khwa* 하늘콰. But there were almost as many textual occurrences of the word without the consonant, e.g., *hano.l_i* 하늘리, *hanol_Gwa* 하늘와. Many of the other nouns cited above were also sometimes transcribed without a final *h*, e.g., *kozol_Gwa* 콤솔와 (1481 *Tusi ōnhae* 8:59), *kil_lwo* 길로 (1481 *Tusi ōnhae* 22:30). The *h* at the end of all these words was later lost during the Early Modern period. But texts published up until the end of the sixteenth century give little indication of the change. The transcriptions in these late Middle Korean texts barely differ at all in this respect from those that had been written a century and a half earlier, in the middle of the fifteenth century.

Some shape alternations were not morphophonemic, however. Three classes of nouns with unpredictable alternations relate to the lenition of the velar *G* discussed above. (1) The noun *namwo* 나무 ‘wood, tree,’ for example, appeared before particles variously as follows: *nam.k_i* 남기, *nam.k_ol* 남꼴, *nam.k_oy* 남기, *nam.k_olwo* 남꺾로, *namwo_wa* 나무와, etc. In other words, in absolute position or before a consonant, the word was realized as /namwo/, and before a vowel it was /namk/. The same kind of alternation is seen in *kwumwu* 구무 ‘hole,’ *nyenu* 녀느 ‘other, different,’ and *pwulmwu* 불무 ‘bellows’; this last word, for example, appeared not only as *pwulmwu* 불무, but also as *pwulm.k (i)* 불기, *pwulm.k (ul)* 불꼴. (2) When combined with a particle, the noun *nwolo* 노르 ‘deer’ was realized as *nwol.G_i* 놀이, *nwol.G_ol* 놀을, *nwol.G_oy* 놀이, etc. Thus, the alternation was between /nwolo/ and /nwolG/. Other nouns with this kind of alternation include *nolo* 노르 ‘ferry,’ *silu* 시르 ‘steamer,’ *colo* 즐르 ‘handle,’ and *cyalo* 자르 ‘sack.’ (3) The noun *azo* 아스 ‘younger brother’ showed a similar alternation after a /z/: *az.G_i* 앓이, *az.G_oy* 앓이, *az.G_ol* 앓을, *azo_wa* 아스와. The same was true of *yezu* 여스 ‘fox.’ The noun *mwuzwu* 무수 ‘Korean radish, *daikon*’ also seems to have belonged to this third class of irregular nouns because of attestations such as *mwuz_ila* 뭇이라 ‘it’s a radish’ (1482 *Kūmgang kyōng samga hae* 3:51).

Yet another class of nouns had shapes that alternated under similar conditions. The word *molo* 모르 ‘roof ridge’ plus a particle produced the forms *mol.l_i* 몰리, *mol.l_oy* 몰리, *mol.l_ol* 몰릴, etc. The alternation in this case was /molo/ ~ /moll/. The noun *holo* 홀르 ‘one day’ showed the same kind of alternation, /holo/ ~ /holl/.

The alternations in all four of these noun classes can be explained historically. The alternation /namwo/ ~ /namk/ in (1), for example, allows the earlier form of ‘wood, tree’ to be reconstructed as **namok*. And internal reconstruction of a velar is supported here by comparative evidence from the modern dialects; e.g., Pukch’ōng *nangk-*, *kwungk-*, Kōch’ang [puŋgu]. At some point

in time, this velar stop was lost whenever the noun occurred in absolute position or before a consonant, then the vowel assimilated rounding, **namo* > *namwo*. On the other hand, when the noun occurred before a vowel, it was the vowel in the second syllable that elided instead of the consonant: **namok* > *namk*. Similar reasoning allows the reconstruction of **nwolok* as the earlier form of *nwolo* 노랏 ‘deer,’ except that in this case the velar stop **k* lenited to the voiced velar fricative /G/. The alternations of *molo* 므랏 ‘roof ridge’ and *holo* 호랏 ‘one day’ were a little different because they involved the liquid /l/ instead of a velar. These two words can be reconstructed as **molol* and **holol*. Moreover, the ordinal **holol* ‘one day,’ which apparently incorporated a suffix **(o)ul*, can in turn be surmised to have developed from a still earlier **hotol*.

One more important piece of evidence for reconstruction is provided by the pronoun *musu* ~ *musuk* 므스/므숙 ‘what’: *musu kes kwo* 므스것고 ‘what is it?’ (1447 *Sökpo sangjöl* 21:215); *musu.k_i kispwu.m_iliGwo* 므스기 깃부미 리오 ‘what is joy?’ (1464 *Sönjong yöngga chip önhæ* 2:7). As was true for the nouns of (1) and (2), the final consonant of this reconstructed word, **musuk*, also elided in absolute position or before a consonant. But, unlike those other nouns, the vowel in the second syllable did not elide when the word appeared before a vowel: e.g., *musu.k i*. Why did the vowel not elide? The difference can be found in the suprasegmentals. In all four of the above classes of nouns, the second syllable carried a low tone, e.g., *nämwò*, *nwòlò*, while, in contrast, the second syllable of *musuk* was marked with a high tone: *mùsú* ~ *mùsúk*. A high-pitched vowel was apparently not subject to the same rules of elision that applied to minimal vowels with a low pitch.

Another kind of elision can be seen in nouns that ended in the vowel /i/. When such nouns were followed by the genitive particle *oy/uy* or the vocative *a*, the noun-final vowel often dropped. For example, the genitive of *api* 아버지 ‘father’ was *a.p_oy* 아버지; that of *emi* 어머니 ‘mother’ was *e.m_uy* 어머니; and the vocative of *aki* 아기 ‘child’ was *a.k_a* 아가. Similarly, the genitives of *nulkuni* 늙그니 ‘old person’ and *PYENG_honi* 병호니 ‘sick person’ were *nulku.n_uy* 늙그니 and *PYENG_ho.n_uy* 병호니. In addition to these changes, there is at least one attestation of the final vowel of *kaci* 가지 ‘branch’ dropping in front of the locative particle *ay*: *ka.c_ay* 가지 (1447 *Yongbi öch’ön ka* 7).

A final note about noun morphology. The words *say* 새 ‘new, fresh’ and *nol* 낫 ‘raw, unripe’ are used only as prenominals in Contemporary Korean, but in Middle Korean they were nouns, appearing in absolute position or before particles. Examples: *say_wa nol_koniGwa* 새와 낫그니와 ‘the new and the old ones’ (1461 *Nüngöm kyöng önhæ* 7:83); *say_lol mas_pwokwo* 새를 맛보고 ‘taste the new one, and ...’ (1481 *Tusi önhæ* 15:23); *no.l_ol mekumyen* 낫를 머그면 ‘if one eats raw ones’ (1461 *Nüngöm kyöng önhæ* 8:5).

5.4.2.1 Pronouns

The morphology of pronouns was much the same as that of nouns, but there were a number of particularities worth noting. Pitch behavior was especially irregular. The first-person pronoun *na* ‘I, me’ carried a low pitch in isolation, *nà* 나, but was marked with a high pitch before the topic particle: *nán* ~ *ná_nón* :난 ~ :나. When the subject particle *í* was incorporated into the syllable as a glide, the pronoun was marked with a high tone, *náy* :내; when combined with the genitive particle *óy* as *náy* 내, the syllable was pronounced low. Finally, before the object marker, *na* was marked with a rising tone: *nāl* ~ *nǎ_lól* :날 ~ :나. The second-person pronoun *ne* ‘you’ was also irregular, though somewhat less so. In most environments, including in absolute position and before most particles, it carried a low pitch, *nè* 너. When the genitive marker *úy* was incorporated into the syllable as an offglide, the syllable was, again, low, *nèy* 네. But when the subject marker *í* was the particle included in the syllable, the high tone of the particle was not lost and the syllable was marked as a rising tone (low + high): *něy* :네. The interrogative pronoun *nwu* ‘who’ plus the subject particle had a high pitch, *nwúy* :누, but when the pronoun combined with the genitive particle, the syllable was marked as rising, *nwúy* :누.

The interrogative pronoun *nwu* was also interesting for another reason. It combined directly with the interrogative ending *-kwo* to form *nwukwo* :누고 or *nwukwu* :누구. Examples: *no.m on nwukwu* :누고 누구 ‘who is the other person?’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 20), *pwuthyey nwukwo* :누고 누구 ‘who is the Buddha?’ (1459 *Wōrin sōkpo* 21:195). In the Early Modern period, this fused form *nwukwo/nwukwu* became lexicalized, and in many usages replaced *nwu* as the interrogative pronoun ‘who.’ The interrogative pronoun *musuk* ‘what,’ which was briefly discussed above, sometimes appeared in the alternative form *musum*. Examples: *musum_kwa kothonywo* :무슴과 큰호노 ‘what is it like?’ (1496 *Yukcho pōppodan kyōng ōnhae* 1:5); *musum ZYWOW-YEK_ulwo* :무슴 饒益으로 ‘with what compassionate favor?’ (1447 *Sōkpo sangjōl* 13:25b); *musum phyeliGwo* :무슴 퍼리오 ‘what is spread?’ (1464 *Sōnjong yōngga chip ōnhae* 2:128). In Contemporary Korean, the interrogative *enu* ‘which’ is used only as a modifying prenoun, but in Middle Korean it functioned like other substantives. Examples: *MYWOW-TTWOW_non enu_kwo* :묘道는 어느고 ‘which is the mysterious way [of the Buddha]?’ (1464 *Sōnjong yōngga chip ōnhae* 2:122); *enuy kwute* :어느 구더 ‘whichever [enemy] is powerful’ (1447 *Yongbi ōch’ōn ka* 47); *enul CYWONG_hosilyenywo* :어늘 從호시려노 ‘which one will he wish to follow?’ (1459 *Wōrin sōkpo* 7:26). However, there were also many examples of the word being used adverbially in the sense of ‘how, why, in what way’: *enu ta solWoli* :어느 다 슬블리 ‘how can one tell all?’ (1447 *Yongbi ōch’ōn ka* 118). One curious morphological peculiarity of

Middle Korean pronouns was that they developed an excrement /l/ when used with the instrumental particle (*o/u*)*lwo*: *nal_lwo* 날로 ‘as me,’ *nel_lwo* 널로 ‘as you,’ *il_lwo* 일로 ‘with this,’ *cel_lwo* 절로 ‘with that,’ *nwul_lwo* 놀로 ‘as whom.’ At that time, the form *cel_lwo* already had the modern meaning ‘of its own accord, spontaneously.’ Another idiosyncrasy of this class of words was that an object particle (*l*)*o/ul* plus a comitative particle took the form *-l_Gwa* after pronouns. Examples: *nwul_Gwa tamos-hoya* 놀와 다못 하야 ‘doing together with whom’ (1481 *Tusi ōnhae* 20:8); *IN_kwa nal_Gwa pwononi* 인과 날와 보느니 ‘see the benevolent person and me’ (1447 *Sŏkpo sangjŏl* 13:25). When used with nouns, these two particles normally appeared in the reverse order, (*G*)*wa lol* -와를.

5.4.2.2 Particles

Just as is true in Korean today, there were roughly two kinds of particles in Middle Korean. The first kind consisted of particles used mainly to express the syntactic role of the noun or noun phrase to which they were attached. Korean grammarians refer to these particles as “case particles.” The second type was a general category consisting of postpositions used to express a variety of meanings, including emphasis and focus, attitude, emotion, intent, etc. These are usually referred to as “special particles” (특수조사) or “auxiliary particles” (보조조사).

5.4.2.3 Case particles

Most Korean grammarians recognize seven cases marked by particles: (1) nominative, (2) accusative, (3) genitive, (4) locative-allative, (5) instrumental, (6) comitative, and (7) vocative.

(1) Nominative In Middle Korean, the particle used to mark subjects was *i*. After consonants, the particle was realized phonologically as /i/; following a syllable ending in a vowel, it was reduced to the semivowel /y/ and incorporated into the syllable as an offglide. When used as an offglide, *i* affected the tone of a low-pitched syllable, causing it to gain a rising tone. When the syllable was already tonic, however, *i* produced no change in pitch. Examples: *sālò.m í* :사랏·미 ‘person’ (*sālóm* :사·름); *pwùthyè* 부터 ‘Buddha’ + *i* → *pwùthyěy* 부·테; *tòlì* 드리 ‘bridge’ + *i* → *tòlĩ* 드·리; *pwùlhwí* 불·휘 ‘root’ + *i* → *pwùlhwí* 불·휘.

The subject particle *ka* does not appear in any texts from the fifteenth century. The earliest attestation yet found comes from a letter believed to have been written by the mother of the famous poet Chŏng Ch’ŏl in 1572:

Chon kwutoloy cani poy_ka seynilesye colwo tonnini.

춘 구드릭 자니 빅가 체니려셔 즈로 둔니니

‘Having slept on a cold floor, my stomach hurt, so I had to go a lot.’

This passage shows that the particle *ka* was used in Korean at least by the latter half of the sixteenth century.

As in Contemporary Korean, the marking of a subject as such was not obligatory, and many subjects were left unmarked. Much the same was true of other “case” particles as well. The decision to use or omit these particles probably had semantic implications similar to those of today, but it is difficult to know for sure.

(2) Accusative The particle *-(l)ol/lul* marked direct objects. When attached to nouns ending in a consonant, the particle took the form *ol/lul*, with the choice of vowel normally being determined by rules of vowel harmony. Examples: *musu.k_ul* 므스클 ‘which one,’ *ptu.t_ul* 뿌들 ‘intent, meaning’; *swo.n_ol* 소늘 ‘hand,’ *nala.h_ol* 나라홀 ‘country.’ Following vowels, the particle was frequently realized as just the single consonant *l*/. Examples: *kachi_l* 가칠 ‘(a serpent bit) magpies’ (1447 *Yongbi öch’ön ka* stanza 7), *hanapi_l* 하나빌 ‘(believe in Your) Grandfather’ (1447 *Yongbi öch’ön ka* stanza 125), *nimkum WUY_l* 님금位근 ‘(renouncing) the rank of king’ (1449 *Wörin ch’ön’gang chi kok* stanza 3). That was especially true when the particle was used to mark pronouns; e.g., *wulil* 우릴 ‘us,’ *nwul* 놀 ‘whom,’ *nal* 날 ‘me.’ But there were also many occurrences of the form *lol/lul* after vowels; e.g., *pwuthye_lul* 부터를 ‘the Buddha,’ *nwu_lul* 누를 ‘whom,’ *coy-cwo_lol* 지조를 ‘talent,’ *na_lol* 나를 ‘me.’ This latter form is believed to represent a doubling of the particle.

(3) Genitive There were two genitive particles in Middle Korean, *oy/uy* and *-s*. The particle *oy/uy* was used with animates – people and animals. It was a plain marker in the honorific system, with no implication of elevated status. The genitive *s* (the so-called “medial *s*” 사이시옷), on the other hand, was used in two different ways: when used with people, it was an honorific marker. Otherwise, it was a generic genitive marker for inanimates. Examples: *SSYANG_oy HYANG*, *mo.l_oy HYANG*, *sywoy HYANG* 象의 쉰 므릭 쉰 쇠 쉰 ‘the scent of elephants, the scent of horses, the scent of oxen’ (1447 *Sökpo sangjöl* 19:17b), *nalas [SYWOW-MIN]* 나라트 小民 ‘the common people of the country’ (1447 *Yongbi öch’ön ka* 52), *SYEY-CWON_s SSIN-LUK* 世尊入神力 ‘the holy power of Sakyamuni’ (1447 *Sökpo sangjöl* 6:7b), *cokyas wosolan paskwo KKWU-TTAM_oy wo.s_ol nipusya* 즈갓 오스란 밧 고 瞿曇의 오슬 니브샤 (Sakyamuni) removed what were His own clothes and put on the clothes of (His servant) Kudam’ (1459 *Wörin sökpo* 1:5b). Notice especially the contrastive usage in the last example: here, *cokya* ‘His own,’ which itself is a special polite word, refers to Sakyamuni and is therefore followed by honorific *s*, whereas the name of his servant Kudam is followed by plain *oy*.

One final note about the genitive *oy/uy*. Although this particle was a homophone of the locative marker *oy/uy*, the two could be distinguished by context. Genitive *oy/uy* was used with animates, while locative *oy/uy* was used with inanimates.

(4) Locative There were two basic locative-allative particles, *ay/ey* and *oy/uy*. Both were used only with inanimate nouns, and the difference between the two is still obscure. For the most part, nouns used with *oy/uy* belonged to a fixed lexical set, but there are examples of the same nouns used with *ay/ey*. The phonological shape of both particles was governed by rules of vowel harmony. In the case of the particle *ay/ey*, the allomorph *ay* ㅛ occurred after nouns with “yang” vowels, while *ey* ㅟ occurred after “yin” vowels; after *i* or *y*, the shape was *yey* ㅟ. Examples: *sta.h_ay* 짜해 ‘on the earth,’ *nwu.n_ey* 눈네 ‘in the eye,’ *seli_yey* 서리예 ‘in the midst,’ etc.

The locative *ay/ey* had a peculiar morphological irregularity in Middle Korean. Following certain tonic monosyllables and at least one dissyllabic noun (*swòlí* 소리 ‘sound’), the particle caused a lowering of an immediately preceding high pitch; e.g., *nwún* ‘눈 ‘eye’ + *éy* → *nwùn.éy* 눈네 ‘in the eye.’ Not all tonic nouns were affected, however; e.g., *múl* ‘물 ‘water’ + *éy* → *múl.éy* 물레 ‘in the water.’ Some examples of tonic nouns that underwent this lowering of pitch include *kwúy* ‘ear,’ *nwún* ‘eye,’ *kwóh* ‘nose,’ *mwóm* ‘body,’ *ptút* ‘meaning, intent,’ *pál* ‘foot,’ *íp* ‘mouth,’ and *kwót* ‘place.’ Nouns that did not undergo the tonal change include *múl* ‘water,’ *púl* ‘fire,’ *hóy* ‘sun,’ *póy* ‘belly,’ *mwúl* ‘group, crowd.’ Reflexes in the modern Hamgyǒng dialect substantiate, at least in part, this curious tonal irregularity.

Dative particles were the semantic equivalents of locative-allative particles used with animates. These were transparently complex. The dative marker for plain animate nouns (with no honorific status) was a combination of the genitive particle *oy/uy* plus *key*, *ku.ngey*, *kekuy*, or *swontoy*. Examples: *QA-LA-HAN_oy_key*, *QA-LA-HAN_uy_kekuy* 阿羅漢의게, 阿羅漢의거기 ‘to the arahan’ (1459 *Wǒrin sǒkpo* 9:35c), *no.m_oy ku.ngey* 너미그에 ‘to another person’ (1447 *Sǒkpo sangjǒl* 6:5a), *SSYWU-TTALQ_oy swontoy* 須達의손디 ‘to Sudatta’ (1447 *Sǒkpo sangjǒl* 6:15b). Nouns accorded honorific status took the genitive *s* combined with *key* (or sometimes its allomorph *kuy*), *ku.ngey*, or *kekuy*. Examples: *NGWANG_s ku.ngey* 王스그에 ‘to the king’ (1459 *Wǒrin sǒkpo* 7:26), *TYEK-CCO_s kuy* 嫡子스기 ‘to the rightful heir to the throne’ (1447 *Yongbi òch’òn ka* stanza 98), *pwuthyes_key* 부텃게 ‘to the Buddha’ (1463 *Pǒphwa kyǒng ònhae* 3:96), *ZYE-LOY_s_kekuy* 如來스거기 ‘to the Buddha’ (1459 *Wǒrin sǒkpo* 10:69).

The grammatical elements used with the genitive particle as dative markers were noun phrases meaning ‘to/in that place’ or ‘to/in the place where one is.’ One, the marker *ku_ngekuy* 그어기 ‘to/in that place,’ was built on the deictic

pronoun *ku* 그 ‘that’ plus *ngekuy* 어긔, a form derived from *kekuy* 거긔 ‘to a place’ (e.g., *amwo kekuy* 아모 거긔 ‘some place’ 1459 *Wörin sŏkpo* 1:24a). The form of course contained the locative-allative particle *uy*. The noun phrase *ku.ngey* 그에 ‘to that place’ was a contraction of *ku_ngekuy* 그어긔 ‘to that place.’ The monosyllable *key* was in turn a contraction of *ku.ngey*. Examples: *ku_ngekuy sywoy haa* 그어긔 쇠 하아 ‘there are many cattle in that place’ (1459 *Wörin sŏkpo* 1:24b), *ku.ngey CYENG-SYA_i epkeni* 그에 精舍 | 업거니 ‘there are no monasteries in that place’ (1459 *Wörin sŏkpo* 6:22a), *key_ka mwot nasi.l_ila* 게 가 몬 나시리라 ‘(he) will not be born going to that place’ (1459 *Wörin sŏkpo* 2:11b). One further development is worth noting. The other two deictic markers, *i* 이 ‘this’ and *tye* 더 ‘that over there,’ also occurred with *-ngekuy* 어긔 and formed the noun phrases *i_ngekuy* 이어긔 ‘to/in this place’ and *tye_ngey* 더에 (< **tye_ngekuy* 더어긔) ‘to/in that place over there.’ In texts of the fifteenth and sixteenth centuries, *yekuy* 여긔 ‘in this place’ was used as a contraction of *i_ngekuy* 이어긔.

There were still other dative constructions in Middle Korean. The form *tolye* 드러, which was an adverbial derived from the verb *toli-* 드러- ‘takes a person along with one,’ was used together with the accusative particle (*lollul* to mark a dative. Example: *nal tolye nilosyatoy* 날 드러 니르샤되 ‘He explained it to me’ (1459 *Wörin sŏkpo* Introduction 11). The form *tepule* 더브러, which was derived from the verb *tepul-* 더블- ‘take (a person) with,’ meant ‘to (an inferior).’ It sometimes followed the accusative particle but more often the noun directly. Example: *nwul_tepule* ‘to whom’ (1447 *Sŏkpo sangjŏl* 13:15).

(5) Instrumental The particle (*o/u*)*lwo* served to mark an instrumental in a broad sense that included causality, role, etc. It also marked directionality. Examples: *kal.h_olwo* 갈호로 ‘with a knife,’ *thwo.p_olwo* 토브로 ‘with a saw,’ *mul_lwo* 물로 ‘with water,’ *CWOY_lwo* 罪로 ‘because of a transgression’ (1459 *Wörin sŏkpo* 1:6b), *cey nala.h_olwo kal cce.k_uy* 제 나라호로 갈 찌긔 ‘when going to one’s own country’ (1459 *Wörin sŏkpo* 2 6:22).

(6) Comitative The comitative particle (meaning ‘with, and, accompanying’) was written as 와 or 과. The transcription 과 represented *kwa*, just as it does today. However, the form 와 was a more complex transcription. After a vowel, it represented the phonological shape *wa*, but, as we have seen, when used after /l/, it was a transcription of /Gwa/, with a voiced velar initial. Examples: *mol_Gwa* 몰와 ‘horses and...,’ *sywo_wa* 소와 ‘oxen and...,’ *kwulwum_kwa* 구름과 ‘clouds and...,’ *iwus_kwa* 이웃과 ‘with neighbors.’ However, at the beginning of the sixteenth century, the form *kwa* 과 began to appear after /l/, and in the latter half of the century it became the norm. For example, the forms *hoynsil_kwa* 횡실과 ‘demeanor and...’ and *mal_kwa* 말

과 ‘speech and...’ are seen in the 1577 *Kyech’o simhak inmun*; *swol_kwa* 솔과 ‘pines and...’ and *kulwel_kwa* 글월과 ‘writing and...’ are seen in the 1587 *Sohak ōnhae*. In those same texts there are also examples of *kwa* being used after /y/. Examples: *nunglyey_kwa swolyey_kwa* 능례과 소례과 ‘the propriety of ability and the propriety of place’ (*Kyech’o simhak inmun*); *syenpoy_kwa* 선벽과 ‘with the gentleman scholar’; *eskey_kwa* 어깨과 ‘and shoulders’; *ipatiyey_kwa* 이바디예과 ‘at the banquet and...’; *patwok-cyangkuy_kwa* 바둑장기과 ‘checkers and chess and...’ (*Sohak ōnhae*). This use of *kwa* after /y/ continued for a time into the Early Modern period, but then, as diphthongs became monophthongized, *kwa* was gradually replaced by *wa* in this environment to conform with the usage after other vowels.

(7) **Vocative** The principal vocative particles in Middle Korean were *ha* and *a*. The particle *ha* was an honorific usage, and people lower in rank always used it when addressing a superior. In contrast, a superior used the particle *a* when calling someone below him in rank. For example, when a king addressed Sakyamuni, or when retainers addressed the king, they would say *SYEY-CWON_ha* 世尊하 ‘O Sakyamuni,’ or *TTAY-NGWANG_ha* 大王하 ‘O Great King.’ But when Sakyamuni called out to the king, he said *TTAY-NGWANG_a* 大王아 ‘O King.’ There was also a third vocative particle, *ya/ye*, which seems to have been used with an exclamatory flavor; e.g., *MWUN-SYWUW SO-LI_ye* 文殊師利여 ‘Oh Munjusari!’

5.4.2.4 Auxiliary particles

Nominal postpositions usually classified by Korean grammarians as auxiliary particles (보조조사) or “special particles” include (*n*)*on/un*, *olan/ulan*, *two*, *man*, *spwun*, *puthe*, *skocang*, *twukwo*, *lawa*, *sy*, *cwocha*, *taWiItahi*, *taylwo*, *iston*, *za*, *k*, *kwos/Gwos*, *pos/pwos*, *kwom*, *sik*, (*i*)*ye*, *kalkwo*.

(*n*)*on/un* In Middle Korean, the topic particle was realized as *on/un* after consonants. After vowels, it was sometimes realized as the single consonant *n*, and sometimes as *non/nun*. This latter, more complex form is considered to have been a doubling of the form of the particle. From a usage point of view, *non/nun* was the more common form when the particle was attached directly to a noun. But when the particle followed another particle, *n* was more common. For example, when used with the locative marker *ay/ey*, the usual form was *ayn/eyn*; with the instrumental, *ulwon*; with the comitative, *wan/kwan*; with the dative, *kungen*, *kekuyn*; etc.

The topic marker appeared in a variant shape when it followed the accusative; the two particles combined were realized as (*o/u*)*lan*. Examples: *cey psol_lan kochwokwo* 제 쌀란 ㄱ초고 ‘storing up his own rice, ...’ (1459 *Wōrin sōkpo* 1:45a-b), *tywo.hon kwo.c_olan photi malGwo ta WANG_skuy*

kacye wola 도흔 고즈란 꼭디 말오 다 王의 가져오라 ‘don’t sell the good flowers; bring them all to the king’ (1459 *Wörin sökpo* 1:9b).

***two* ‘too, also, even’** Like the topic marker, the focus particle *two* was much the same in usage and meaning as its modern standard reflex. It replaced *i* or (*l*)*ol/lul*, but it often followed particles such as *ey* or *lwo*. Examples: *hon mal_two mwot_hoya istesini* 혼 말도 못하야 잇더시니 ‘he could not even speak one word’ (1447 *Sökpo sangjöl* 6:7b); *syelWun ils TYWUNG_ey_two 설븐 일 中에도* ‘among sad things, too ...’ (1447 *Sökpo sangjöl* 6:6a); *coycwo_lwo_two* 직조로도 ‘with the talent, too ...’ (1481 *Tusi önhae* 15:37).

***man* ‘only, just’ and *spwun* ‘only, merely, just’** The distribution of *man* paralleled that of *two*, with which it formed a semantic contrast. The distribution of *spwun*, however, was different in that it could be followed by the nominative, accusative, and locative particles. Examples: *pap mekul ssozi_man nekye* 밥 머글 쓰시만 녀겨 ‘consider it only during the time of eating’ (1447 *Sökpo sangjöl* 13:34a); *na_spwun* 나쑤 ‘only I’ (1459 *Wörin sökpo* 2:38); *pwuthye_spwu.n_i anisya* 부터쑤니 아니샤 ‘only the Buddha is not’ (1459 (1459 *Wörin sökpo* 18:32); *pwuthyes ilhwum NYEM_hol spwu.n_ey...* 부터 일흠 念홀 쑤네... ‘in intoning the name of the Buddha ...’ (1447 *Sökpo sangjöl* 9:27a).

***puthe* ‘(starting) from’ and *skocang* ‘up until’** The ablative particle *puthe* 브터 originated as the infinitive form of the verb *puth-* 붙- ‘append.’ It often followed the accusative or the instrumental particle, but it could also follow the noun directly. When it followed the accusative particle, it indicated an origin or cause; when it followed the instrumental, it indicated the starting point. Examples: *musu.k_ul_puthe* 므스글브터 ‘because of what’ (1461 *Nüngöm kyöng önhae* 1:103), *nyey_lwo_puthe* 네로브터 ‘from ancient times’ (1481 *Tusi önhae* 20:54), *chezem_puthe* 처섬브터 ‘from the beginning’ (1459 *Wörin sökpo* 2:62a).

The allative *skocang* originated as the genitive *s* plus the noun *kocang* ‘limit.’ It was used in two meanings, ‘to the full extent of,’ as well as ‘up until.’ Examples: *wonols nals_kocang hyeymyen* 오늻낫 ㄹ장 헤면 ‘if counted up until today’ (1447 *Sökpo sangjöl* 6:37b); *QILQ-POYK hoy_yey hon hoy_Gwom cwolye yel hoy towoylq kocang cwolywo.m ol KAM_ila hokwo* 一百 히예 혼히음 조려 열 히 드웁 ㄹ장 조료뎡 減이라 호고 ‘it is called *KAM*, to reduce it one year in a hundred, until it will be reduced by up to ten years’ (1459 *Wörin sökpo* 1:47b); *mozom_skocang KWONG-YANG_khey hosini* 몃슴신장 供養케 하시니 ‘had provided as much as was desired’ (1485 *Pulchöng simgyöng önhae* 3:8); *him_skocang ta hoya* 힘신장 다 하야 ‘did it all, to the full extent of his power’ (1518 *Pönyök sohak* 8:35).

twukwo ‘than’ and lawa ‘than’ The postposition *twukwo* was used in comparisons with a function corresponding to that of *pwota* in today’s Korean. It was transparently derived from the verb *twu-* 두- ‘put, place.’ Example: *wus-salom_twukwo teunyang_hoya* 옷사름두고 더은 양호야 ‘in a manner greater than the superiors’ (1447 *Sōkpo sangjöl* 9:14a). In the sixteenth century it became usual to combine this particle with the topic marker as *twukwon*; e.g., *syangnyeys salom_twukwon kocang talotesita* 상넛 사름두곤 마장 다르더시다 ‘He was most different from usual people’ (1518 *Pōnyōk sohak* 9:6).

Another postposition used in comparisons was *lawa*. Following vowels or /l/, its shape was *lawā*; after consonants, *ulawa* or *olawa* – or, in the 1481 text *Tusi ōnhae*, *ilawa*. The etymology of the morpheme is obscure, and it cannot be found in any texts written after the sixteenth century. Examples: *ZIL-WEL_lawa nule* 日月라와 느러 ‘is better than (the light of) the sun and moon’ (1459 *Wōrin sōkpo* 9:15a); *polo.m_olawa spolli KWO-SYEN SAN_ay kanila* 브르마라와 썰리 古仙山에 가니라 ‘he went to Kosōn Mountain faster than the wind’ (1459 *Wōrin sōkpo* 7:32); *talon kowol.h_i nyeys kowol.h_ilawa tywothwota* 다른 마올히 넛 마올히라와 도토다 ‘the other town is better than the home town’ (1481 *Tusi ōnhae* 8:35).

syē ‘from, at’ The particle *syē*, which was derived from the infinitive form of the existential verb *isi-* 이시- ‘exist, be,’ was used to indicate origin, or dynamic location. It could be attached directly to a noun or adverb, or to a variety of particles, including the locative markers, *puthe*, directional uses of *lwo*, etc. It was also often attached to verbal forms. Examples: *syewul_syē* 셔울셔 ‘(look around) in the capital’ (1481 *Tusi ōnhae* 15:21a); *meli_syē* 머리셔 ‘from afar’ (1465 *Wōn’gak kyōng ōnhae* Introduction 47); *twol.h_ay_syē* 돌해서 ‘from a stone’ (1459 *Wōrin sōkpo* 1:27a); *hanol_lwo_syē* 하늘로셔 ‘from heaven’ (1447 *Sōkpo sangjöl* 6:17a); *teleWun kekuy_syē* 더러본거괴셔 ‘from a dirty place’ (1447 *Sōkpo sangjöl* 13:33b).

cwocha ‘even, too’ This was the infinitive form of the verb *cwoch-* 좇- ‘chase after.’ When it followed the accusative particle, it meant ‘accompanying, going with’; when it followed the noun directly, it meant ‘even, too, in addition.’ Examples: *mozo.m_on MIMYWO_lol_cwocha polkwo.m_i nile* 막스몬 微妙를조차 불고미 니러 ‘in his mind a brightness together with subtlety rose up’ (1461 *Nūngōm kyōng ōnhae* 2:18a); *psun pak_on pwulhwuy_cwocha psunila* 쓴 바근 불휘조차 쓰니라 ‘As for the bitter pumpkin, even the root is bitter’ (1482 *Kūmgang kyōng samga hae* 2:50).

taWi ‘in accordance with’ This postposition is believed to have developed from an earlier verb stem **taW-* ‘resemble, be like,’ but such a stem only appears in derived forms in Middle Korean. The postposition was also

sometimes transcribed as *tahi* 다히. Examples: *PEP_tawi* 法다히 ‘in accordance with the law’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 21b); *kolochisyan_tawi* 마르치산다히 ‘in accordance with how he had taught’ (1459 *Wörin sökpo* 14:62); *mal_tahi* 말다히 ‘in accordance with what was said’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 13). At the end of the fifteenth century, the form of the morpheme changed to *tai* 다이, and it is from this form, plus the particle *lwo*, that the present-day postposition *taylwo* ‘in accordance with’ is believed to have been derived. In any case, *taylwo* was already found in the textual corpus of Middle Korean. Examples: *pa.p_ol mekwulq_taylwo hyeyye mekwum_kwa* 바블 머굼대로 헤여 머굼과 ‘eating one’s fill of rice’ (1459 *Wörin sökpo* 7:31); *i_taylwo hola* 이대로 흐라 ‘do it this way’ (1542 *Punmun onyök ihæ pang* 13).

iston ‘just, precisely, only’ The postposition *iston* is believed to be etymologically derived from a form of the copula, but that is not certain. Example: *mozom_iston mwuyGwusil_uye* 막슴잇든 귀우시리여 ‘but would his mind waver?’ (1449 *Wörin ch’ön’gang chi kok* 62).

Emphatic za The particle *za*, which was transcribed with the character 沙 in pre-fifteenth-century writings, was the most widely used of the various emphatic particles in Middle Korean. However, its distribution was highly idiosyncratic. The particle followed an unmarked subject, object, or adverb if that substantive ended in /i/ or /y/; it followed time nouns ending in /l/. But it could also be used after the nominative particle *i*, the accusative particle *ol/lul*, the instrumental (*o/u*)*lwo*, and the locative *ay/ey*. It followed various inflectional endings: prefinal *-ke-* and the final endings *-ale*, *-nul*, *-tun*, *-kwo*, and *-key*. Examples: *i kaksi_za nay etninwon mozo.m_ay mastwota* 이 각시사 내 얻고 자 다니논 막스매 맛도다 ‘precisely this bride is the one I am looking for!’ (1447 *Sökpo sangjöl* 6:14a–b); *LOY-ZILQ_za pwonayyo.l_ila hokwo* 來日사 보내오리라 흐고 ‘saying I would send her the very next day’ (1459 *Wörin sökpo* 7:16a); *i twul.h_ul_za tepulusini* 이 둘홀사 더브르시니 ‘he was accompanied by precisely these two’ (1449 *Wörin ch’ön’gang chi kok* 52); *wolakeza* 오라거사 ‘only after a while’ (1447 *Sökpo sangjöl* 21:217).

The particle *za* was replaced by *ya*, and this change could already be seen in texts from the latter half of the sixteenth century. In the 1587 *Sohak önhæ* the transcriptions *zya* 샤 and *a* 아 can be found in place of this particle. Examples: *kwothyecila hoyezya HE_hotela* 고터지라 흐여샤 허허더라 ‘They said precisely that they wanted to correct it and he permitted it’ (6:77b); *mothwon hwu_ey_a* 모톤 후에아 ‘just after they had gathered’ (6:131a). In addition, the form *ya* is seen among the particles in the Chinese-language version of passages in the document. For example: *PUL WUY PANGIN CI SWO I CYA i_ya MYEN PWU intye* 不블 爲위 傍방 人인 之

지 所 移 이 者 자 | 야 免 면 夫 부 근 더 is paired up with the Korean text *kyetthuy's salom uy womkinon pay twoyti aninnon iza MYENholintye* 결딛 사람의 옮기는 때 되디 아닌는 이사 免면 허런더 (5:71b-5:72a). Here we see *ya* written in the Chinese text in place of the *za* found in the Korean text. Such examples can be interpreted as indicating that the actual pronunciation of the particle was by then [ya].

Emphatic -k The emphatic particle *-k* was used after several inflectional endings, most often the infinitive *-ale*. But it was also used after the instrumental particle (*o/u*)/*wo*. Examples: *il lwok HWU_ey* 일록 後에 ‘after this’ (1459 *Wörin sökpo* 2:13a); *etin petun nyey lwok selu sakwoynwola* 어딘 버든 네록 서르 사괴노라 ‘wise friends from olden times associate with each other’ (1481 *Tusi önhæ* 20:44); *KWONG-PWU lol hoyak mozo.m ol pse* 工夫를 호약 막스플 빼 ‘study and stay interested’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 4a).

Emphatic kwos This particle attached directly to nouns and adverbs. Examples: *hotaka nwun kwos kosti mwot homyen* 허다가 눈곳 굶디 못 허면 ‘then if it does not even have an eye’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 56); *hotaka anwon mozom kwos naymyen* 허다가 아논 막스곳 내면 ‘then if it gives rise to a knowing heart’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 42a). The particle was realized phonologically as *Gwos* 옷 following /l/ or a vowel (including /y/). Examples: *nay mal Gwos ani tulusimyen* 내 말옷 아니 드르시면 ‘if you do not even listen to my words’ (1459 *Wörin sökpo* 2:5b); *wuli Gwos kyeyGwumyen* 우리옷 게우면 ‘if even we cannot win’ (1459 *Wörin sökpo* 2:72a); *i pwopoy Gwos kacye isimyen* 이 보빅옷 가져 이시면 ‘if he just has this treasure’ (1459 *Wörin sökpo* 8:11); *na Gwos i SYANG ol alGwo* 나옷 이 相을 알오 ‘only I know this figure’ (1449 *Sökpo sangjöl* 13:42b).

Emphatic pws/pos This emphatic particle had a meaning and usage much like that of *kwos*, and it also attached directly to nouns. However, the conditioning for the vowel alternation is not known. Examples: *mozo.m_ays pet pws animyen* 막스맷 번붓 아니면 ‘if not even a bosom friend’ (1464 *Sönjong yöngga chip önhæ* 2:128); *skwum pos animyen* 꿈붓 아니면 ‘if it is not even a dream’ (1459 *Wörin sökpo* 8:95).

kwom When the postposition *kwom* attached to an adverb, including one derived from the infinitive of a verb, it had an intensifying effect. In *hoye kwom* 허여곰 (of which Contemporary Korean *haye_kum* ‘letting, making, forcing’ is the fossilized relic), for example, the particle intensified the meaning of the infinitive *hoye* ‘doing, making.’ The same was true of its

effect in *sile* **kwom** 시러곰 ‘possibly’ (from *sile* 시러 ‘acquiring’) and *kwop-koy* **kwom** 곱기곰 ‘so as to double it,’ as well as in *ili* **kwom** 이리곰 ‘in this way,’ *kuli* **kwom** 그리곰 ‘in that way,’ and *tasi* **kwom** 다시곰 ‘again.’

kwom/Gwom and sik ‘each’ When either of these two morphemes attached to a numeral or a noun, it carried the meaning of ‘each.’ Examples: *hon nala*. *h_ay hon* SSWU-MI SAN **kwom** isywotoy 혼 나라해 혼 須彌山곰 이쇼디 ‘in each country there is a Sumeru Mountain’ (1459 *Wörin sökpo* 1:22a); *SO-PANG_i KAK-KAK PYEN_hoya SSIP-PANG kwom towomyen SO-SSIP PANG_i ilGwo* 四方이 各各變호야 十方곰 ㄷ외면 四十方이 일오 ‘when the four directions each change and become ten directions each, they grow to forty directions’ (1459 *Wörin sökpo* 19:12). After vowels and /l/, *kwom* was realized as *Gwom*. Examples: *SAM-SYEY KAK-KAK LYWUW_hoya SSIP-SYEY Gwom towomyen SAM-SSIP SYEY ilGwo* 三世 各各流호야 十世곰 ㄷ외면 三十世 일오 ‘if the worlds of the past, present, and future flow and become ten worlds each, they grow to thirty worlds’ (1447 *Sökpo sangjöl* 19:12a); *SO-NGWANG THYEN mokswu.m_i ZIN-KAN_ays swuyn hoy lol holo Gwom hyeyye NGWO-POYK hoy_’ni* 四王天 목수미 人間엿썌 희를 호르곰 헤여 五百 히니 ‘life in the first heaven is five hundred years counting ten years in the world of men as one day each’ (1459 *Wörin sökpo* 1:37b–38a); *PALQ-CHYEN-LI SYANG_on holo PALQ-CHYEN-LI Gwom nyenun SYANG_ila* 八千里象은 호르 八千里곰 녀는 象이라 ‘an 8,000 *li* elephant is an elephant that travels 8,000 *li* each day’ (1459 *Wörin sökpo* 7:57).

In the meaning of ‘each,’ *kwom/Gwom* was eventually replaced by the particle *sik*. This latter particle first appeared in alphabetic documents in the sixteenth century. Examples: *swuyn_nas twon_ay hon syem_sik homyen* 썌낫 돈애 혼 썌식 호면 ‘when (calculated) at fifty pieces of money for one bag each’ (1517 *Pönyök Pak T ongsa* 1:11b); *hwok sey-pen_sik twolGimye hwok tasos pen_sik twolGye* 혹 세번식 돌이며 혹 다섯번식 돌여 ‘sometimes passing [a wine cup] around three times each, and sometimes passing [it] around five times each’ (1518 *Pönyök sohak* 10:32), *holo sey_pen_sik mekumyen* 호르 세번식 머그면 ‘if eaten three times each day’ (1542 *Punmun onyök ihae pang* 9). However, since *sik* ‘each’ was represented in *idu* transcription (式) in the 1395 *Taemyöngnyul chikhae*, it must have existed in actual speech in the fifteenth century as well.

(i)ye ‘or, and, and the like’ This particle was ordinarily used in listing two items, or when indicating that more than one is involved. In the sixteenth century it was also realized as *ya*. Examples: *kwulku.n_ iye hyeku.n_ iye wuti ani ho.l_i eptela* 굴그니여 혀그니여 우디 아니 호리 엽더라 ‘whether great or small, there was no one who would not weep’ (1459 *Wörin sökpo*

10:12); *na.c_ye pa.m_ye* 나저 바며 ‘day and night’ (1481 *Tusi ōnhae* 8:29a; 1466 *Kugŭp kani pang* 1:114); *na.c_ya pa.m_ya* 나자 바마 ‘day and night’ (1517 *Pōnyōk Pak T’ongsa* 1:68). The appearance or elision of the initial *i*- was phonologically unpredictable: *na.c_īye pa.m_īye* 나지여 바미여 (1447 *Sōkpo sangjōl* 24:30; 1475 *Naehun* 2-2:17). The inflectional ending *-mye* ‘does/says/is and’ (which is still a productive part of the language today) was composed of the nominalizing suffix *-(o)u)m* plus this particle *ye*. Supporting evidence for this morphological analysis can be found in the fact that in the sixteenth century, at the same time that *ye* was realized as *ya*, the inflectional ending *-mye* was also realized as *-mya*; e.g., *melmya kaskawon toy* 멀마 갖가온 디 ‘places both far and near’ (1587 *Sohak ōnhae* 6:108).

5.4.3 Conjugations

5.4.3.1 Verbs and adjectives

As is true of Contemporary Korean today, verbs and adjectives in Middle Korean had virtually the same morphology. Almost all inflectional endings attached to both stem classes. There was one important exception, however. The prefinal verb ending *-no-*, which marked processive aspect, attached to verb stems only; as a result, use with this ending is ordinarily taken as the criterion for classifying a stem as a verb. Thus, the existential *is-* ‘be, exist, have’ was a verb stem because it was used with the processive ending *-no-*. But, on the other hand, the negative existential *eps-* has to be considered an adjective because it did not at that time occur with *-no-*. Some inflecting stems functioned as both adjective and verb. The adjective *polk-* ‘is bright’, for example, was used with *-no-* in the processive meaning ‘become bright’; e.g., *kwulu.m_i huthwu.m_ay tol_i polknoni* 구르미 흐투매 들이 붉느니 ‘diffused by clouds, the moon brightened’ (1564 *Sōn’ga kwigam* 1:39).

5.4.3.2 Stems

The typical inflecting stem in Middle Korean was monosyllabic. Two-syllable stems were also fairly common, but stems longer than two syllables were invariably compounds. The shapes of many stems were irregular and changed depending upon the inflectional ending attached to them. Some of these alternations were segmental; others were suprasegmental.

Segmental alternations

Some segmental alternations were derived by phonological rules that applied automatically to a basic phonemic shape. For example, before an ending beginning with a consonant, *W* and *z* were neutralized with *p* and *s*; consonant clusters were reduced. Other alternations were more complex.

W and z stems Many Middle Korean stems ended in *-W-* or *-z-*. Examples: *kwoW-* 꺾- ‘is pretty,’ *kwuW-* 굽- ‘bake, roast,’ *nwuW-* 눕- ‘lie down,’ *teW-* 덥- ‘is hot,’ *swuyW-* 쉽- ‘is easy,’ *etuW-* 어둡- ‘is dark,’ *iW-* 잃- ‘is confused,’ *chiW-* 춥- ‘is cold,’ *kolW-* 꿇- ‘line up,’ *solW-* 숯- ‘tell, inform,’ *yelW-* 옹- ‘is thin’; *naz-* 낫- ‘be/get better,’ *niz-* 닛- ‘join together,’ *toz-* 돛- ‘love,’ *puz-* 붓- ‘pour,’ *az-* 앗- ‘take, snatch,’ *wuz-* 웃- ‘laugh,’ *cwoz-* 좆- ‘peck at,’ *cwuz-* 좆- ‘pick up,’ *ciz-* 짚- ‘make.’ The voiced fricatives were realized phonemically only before vowels; before consonants they were replaced by /p/ and /s/.

Clusters In addition to *-lW-*, a number of other consonant clusters occurred at the end of inflecting stems. These included *-sk-*, *-st-*, *-mch-*, *-ps-*, and *-nc-*, the first three of which are no longer found in Korean. Of the five, only *-sk-* was common, however; it was found at the end of about a dozen stems, e.g., *task-* 따- ‘cultivate,’ *kesk-* 켜- ‘break off,’ *kask-* 자- ‘pare,’ *kisk-* 자- ‘rejoice,’ *kosk-* 켜- ‘endeavor,’ *sesk-* 섞- ‘mix,’ *kyesk-* 켜- ‘experience,’ *yesk-* 엮- ‘plait,’ *mwusk-* 묶- ‘tie together,’ *pwozk-* 볏- ‘toast, parch,’ *pisk-* 뺨- ‘is askew.’ The other four final clusters were rare. Three of them, *-st-*, *-mch-*, and *-ps-*, occurred in one stem each: *mast-* 맡- ‘entrust,’ *wumch-* 움- ‘shrink up,’ *eps-* 엷- ‘is not.’ The fourth, *-nc-*, was found in only two stems, *anc-* 앉- ‘sit’ and *yenc-* 옹- ‘place.’ (Cf. “Nasal epenthesis,” above.) Before a consonant, the five clusters were reduced as follows: *sk* → *s*; *st* → *s*; *mch* → *ms*; *ps* → *p*; *nc* → *ns*.

G and k stems An unexpected velar was found in the conjugations of three stem classes. (1) The stem *simu-* 시므- ‘plant’ had the inflectional forms *simukwo* (*-kwo*) 시므고, *simuti* (*-ti*) 시므디, *simke* (*-e*) 심겨, *simkwum* (*-wum*) 심굶, etc. In other words, the stem shape was *simu-* before a consonant, and *simk-* before a vowel. (2) The stem *talo-* 다르- ‘is different’ was inflected as follows: *talokenul* 다르거늘, *talosya* 다르샤, *talGa* 달아, *talGwom* 달옴, etc. The alternation here was *talo-* ~ *talG-*. Other stems included in this class were *kwolo-* 고르- ‘level,’ *kilu-* 기르- ‘bring up,’ *nilo-* 니르- ‘tell,’ *twulu-* 두르- ‘enclose,’ *molo-* 머르- ‘cut out,’ and *wolo-* 오르- ‘go up.’ (3) The stem *pozo-* 보스- ‘break’ had this inflection: *pozoti* 보스디, *pozomye* 보스며, *pozGa* 보아, *pozGwon* 보온, etc. Other stems found in this class were *kuzu-* 그스- ‘drag,’ *pizu-* 비스- ‘make up,’ and *swuzu-* 수스- ‘is boisterous.’ These alternations were also found in some nouns; cf. the discussion of /G/ in section 5.3.1, above. In the sixteenth century, the stems in (2) merged with the “*l*-doubling stems” described below, and the stems in (3) disappeared.

***tl* stems** An alternation not predictable from a basic phonemic shape was that of the dental stop *-t-* with the liquid [r]. This alternation was found in a number of stems. Examples: *ket-* 걷- ‘walk,’ *kit-* 긴- ‘draw (water),’

kyet- 견- ‘weave,’ *tot-* 돌- ‘run,’ *tatot-* 다돌- ‘arrive,’ *tut-* 듣- ‘listen,’ *mwut-* 묻- ‘ask,’ *skoytot-* 켜듣- ‘perceive,’ *achyet-* 아철- ‘dislike,’ *eptut-* 엎듣- ‘fall down,’ *il.khot-* 일큰- ‘call, name,’ *hut-* 흩- ‘scatter.’ As is still true in the standard language today, the stop appeared before consonants, and the liquid before vowels; e.g., *ketkwo* 걸고, *kele* 거러. Note that the stems contrasted morphophonemically with, for example, both *et-* 얻- ‘receive’ (*etkwo* 얻고, *ete* 어더) and *kel-* 걸- ‘hang’ (*kel.Gwo* 걸오, *kele* 거러).

***l* stems** An *-l-* at the end of an inflecting stem was suppressed before the coronals *t, c, s, z, n*. For example, *tul-* 들- ‘raise up’ + *-noni* → *tunoni* 드누니; *kil-* 길- ‘be long’ + *-ti* → *kiti* (*ani hosimye*) 기다 아니 흥시며. This same kind of *l*-dropping was also found in many noun compounds.

***l*-doubling stems** Stems in this class ended in a vowel plus *-lo/lu-*, except before the infinitive *-a/e* and a small number of other endings beginning with a vowel, where the final vowel dropped and the *l/* doubled. The most common of the stems with this irregularity was *mwolo-* 모르- ‘not know,’ which had the following inflection: *mwolokenul* (*-konul*) 모르거늘, *mwolokwo* (*-kwo*) 모르고, *mwololq* (*-olq*) 모릅, *mwolla* (*-a*) 몰라, *mwollwol* (*-wol*) 몰몰, etc.²⁰ The *l*-doubling class of stems also included *molo-* 머르- ‘dry,’ *mulu-* 머르- ‘retreat,’ *spolo-* 섹르- ‘be quick,’ *pulu-* 부르- ‘call,’ and *hulu-* 흐르- ‘flow.’

***l*-inserting stems** Today, Contemporary Korean has yet another, very small class of verb stems ending in a vowel plus *-lu-*: *nwulu-* ‘be yellow,’ *phwulu-* ‘be blue,’ and *ilu-* ‘reach.’ These stems are often called “*l*-inserting,” because, unlike *l*-doubling stems, the final vowel of the stems never drops, and instead, another *-l-* is added before certain endings beginning with a vowel. In Middle Korean, however, the class was composed of a somewhat different membership, because at that time the only one of these three stems with a final *-lul-* was *nilul-* 니를- ‘reach.’ Moreover, this particular verb had an additional peculiarity in that it was also realized as *nilu-*, with the final *-l-* dropping. For example, the adverbial form (with the adverbative ending *-key/Gey*) was usually *nilulGey* 니를에, but, on occasion, the form *nilukey* 니르게 also appeared. It is difficult to know what conditioned the *-l-* to drop in these cases.

The situation with *nwulu-* 누르- ‘be yellow’ and *phulu-* 프르- ‘be blue’ was different. In Middle Korean, instead of two forms there were two contrasting pairs: *nwulu-* 누르- ‘be yellow’ and *nwulul-* 누를- ‘become yellow’; *phulu-* 프르- ‘be blue’ and *phulul-* 프를- ‘become blue.’ In other

²⁰ The behavior of the liquid was typical, but *mwolo-* was distinguished from the other stems in the class by suprasegmental irregularities. These will be discussed in detail later, in the section on “Tone alternations”.

words, the final *-l-* appears to have been a separate morpheme added to the adjective stems transforming them into verbs. The process verbs that resulted were the etymological source of today's *l*-inserting pair through the loss of the semantic distinction.

Vowels A stem-final vowel was subject to elision or crasis when followed by another vowel. In general, a minimal vowel, *o* (·) or *u* (—), elided. The rules were as follows: $a + a \rightarrow a$; $e + e \rightarrow e$; $o + a \rightarrow a$; $u + e \rightarrow e$; $o + wo \rightarrow wo$; $u + wu \rightarrow wu$; $i + i \rightarrow i$. For example, *ka-* 가- 'go' plus the infinitive *-a* -아 was realized as *ka* 가; *pho-* 꺾- 'dig' plus the volitive *-wo/wu-* -오/우- or the infinitive *-a/e* -아/어 resulted in *phwo-* 꺾 and *pha* 꺾; *psu-* 쓰- 'use' plus those same endings gave *pswu-* 쓰- and *pse* 써.

An *-i-* changed to *-y-* before a following *a*, *e*, *wo*, or *wu*. For example, *neki-* 녀기- 'regard' plus *-e* -어 gave *nekye* 녀겨; *kolochi-* 마르치- 'teach' and the sentential nominalizer *-wom* -음 became *kolochywom* 마르춤. In a similar fashion, a stem-final *-y-* caused an excrescent *y-* to develop before these same vowels; e.g., *yehuyye* 여희여, *yehuyywum* 여희음 'send (someone) far away.'

The exception to these rules was the verb stem *ho-* 호- 'is, does.' It often behaved as if it had an *i* or *y* vocalism; the infinitive was *hoya* 호야, and the volitive usually appeared as *hoywo-* 호요-. However, the regularly formed volitive, *hwo-* 호-, was also sometimes recorded in the literature.

There were a number of other unusual stem alternations. One was that of *nye-* 녀- 'travel about,' a stem which appeared as *ni-* 니- before the perfective ending *-ke-*; e.g., *nikeci.ngita* 니거지이다, *nikenul* 니거늘. Another was that of the honorific existential *kyesi-* 거시- 'is,' which was realized as *kye-* 겨- before the honorific ending *-sywosye* -쇼셔, *keysywosye* 겨쇼셔. The elision demonstrates clearly that the *-si-* in this stem was in origin the honorific morpheme *-(o/u)si-*.

The existential *isi-* 이시- 'is' was conspicuously irregular. The final vowel of this stem was realized, either as *i* or *y*, before another vowel or a voiced consonant – with the salient exception of the processive *-no-* -느-. Before all other endings the vowel elided, and the stem was realized as *is-* 잇-. Examples: *isimye* 이시며, *isye* 이셔, *iskwo* 잇고, *iskeni* 잇거니, *isnon* 잇논. We have already mentioned the fact that when it followed the infinitive *-a/e*, *isi-* 이시- was contracted to *'si-/sy-* 시-. There were also examples of this contraction after words ending in *-i*; e.g., *komani* 'simye' 꺾마니 시며 'he remained quiet' (1461 *Nŭngŏm kyŏng ŏnhae* 10:14b).

Tone alternations

Low The most common type of inflecting stem in Middle Korean was monosyllabic and low in pitch; e.g., *mèk-* 먹- 'eat,' *kwùp-* 굽- 'be bent.' Stems of this type were closed by a consonant, consonant cluster, or *-y*.

High A smaller number of monosyllabic stems were always high. There were two general types. The first type was closed by *-l*, *-m*, or *-y*; e.g., *tól-* ·톨- ‘hang, affix,’ *túl-* ·들- ‘raise up,’ *kóm-* ·굵- ‘wash (hair),’ *swúm-* ·숨- ‘hide,’ *húy-* ·희- ‘be white,’ *kúy-* ·기- ‘crawl.’

The other type of high-pitched stem was characterized by an initial consonant cluster or aspirate, and an open syllable ending in *-o/u* or *-i*.²¹ Examples: *stú-* ·스- ‘scoop,’ *psú-* ·쁘- ‘use,’ *pcó-* ·쁘- ‘squeeze,’ *thó-* ·ㅍ- ‘burn,’ *thó-* ·ㅍ- ‘ride,’ *chó-* ·ㅊ- ‘kick,’ *khú-* ·크- ‘be big,’ *thú-* ·ㅌ- ‘hit, strike,’ *pskí-* ·ㅍ- ‘jam into,’ *ptí-* ·ㅍ- ‘steam.’ As mentioned above, initial clusters are believed to have developed after the twelfth century through vowel syncope. Since low-pitched, minimal vowels (*/ò, ù/*) rarely occurred between voiceless obstruents in Middle Korean, these were probably the vowels subject to elision at an earlier stage of the language. Thus, **pùsú-* > *psú-* ·쁘- ‘use,’ **pòcò-* > *pcó-* ·쁘- ‘squeeze,’ etc. The initial aspirates were also derived through vowel syncope: **hòtó-* > *thó-* ·ㅍ- ‘ride,’ **húkú-* > *khú-* ·크- ‘be big.’²²

Rising Some stems (around forty) were always marked with a rising tone; e.g., *ét-* :연- ‘receive,’ *tywóh-* :똥- ‘be good.’ The great majority of these rising-tone stems (perhaps thirty) ended in *-y-*, and some of these *y*-stems were derived with the passive morpheme *-í-*; e.g., *syéy-* :세 ‘stand (something) up’ (from *sy-* 셔-) and *myéy-* :때- ‘get stopped up’ (from *my-* 떠- ‘stop up’). Other rising-tone stems were derived from two syllables as well; e.g., *wól-* :울- ‘be sound, unimpaired’ is also well attested as *wòól-* 오·울-.

Irregular All other monosyllabic stems were characterized by tone alternations. The most variable were stems with a simple (C)V- segmental shape. Here is a fairly exhaustive list: *ca-* 자- ‘sleep,’ *cwu-* 주- ‘give,’ *ho-* 호- ‘do, is,’ *ha-* 하- ‘be big,’ *ka-* 가- ‘go,’ *na-* 나- ‘grow, come out,’ *nwu-* 누- ‘evacuate (urine, feces),’ *wo-* 오- ‘come,’ *pwo-* 보- ‘see,’ *sa-* 사- ‘buy,’ *sw-* 소- ‘shoot,’

²¹ There were a number of apparent exceptions: *pthút-* ·뽕- ‘pluck,’ *sús-* ·숫- ~ *súc-* ·숫- ‘wash’ (variants of *sis-* ·씻- ‘id.’), *chóc-* ·촉- ‘search for,’ *pcúc-* ·눈- ‘tear,’ *kóth-* ·같- ‘be alike,’ *wólh-* ·옳- ‘be right,’ *súlh-* ·싫- ‘dislike,’ *cwóh-* ·좋- ‘be clean,’ and *chíW-* ·춥- ‘is cold.’ Most of these stems, however, were morphemically complex. For example, *kóth-* ·같- ‘be alike,’ which was also attested as *kóthò-* ·같·호-, was derived from a noun *kót* ·곧- ‘like’ (attested in compounds) plus the verb *ho-* ‘do, be’; *chíW-* ·춥- ‘(the weather) is cold’ is a compound of **chí-*, which was probably a variant of *chó-* ·춌- ‘be cold (to the touch),’ plus *-Wù-* ·-블-, a prefinal ending used to derive adjectives. In addition, there was the anomalous low pitch of *psi-* ·ㅍ- ‘(water) steams,’ which was a variant of *ptí-* ·ㅍ- ‘id.’ and the highly variable stem *phye-* ·펴- ‘spread’ (see below), which was perhaps derived from, or related to, *phú-* ·푸- ‘spread; bloom.’

²² The *Jílín lèishì* (twelfth century) transcriptions of ‘ride’ and ‘big’ were 轄打 and 黑根. These show that the first syllable of the words began with **h*, and that there was metathesis of the consonants.

twu- 두- ‘place,’ *ci-* 지- ‘fatten,’ *ci-* 지- ‘carry on the back,’ *hye-* 혀- ‘pull,’ *hye-* 혀- ‘kindle,’ *phye-* 껴- ‘spread,’ *i-* 이- ‘carry on the head,’ *ni-* 니- ‘travel around,’ *sy-* 서- ‘stand,’ *ti-* 디- ‘lose, fall.’ The alternations seen in these stems were extremely complex, but were consistently the same for all members of the class. Before some specific endings, the stem was marked with a low tone; before other endings it was marked with a high tone. Here are two examples: *pwo-* 보- ‘see’: *pwòkwó*, *pwòmýén*, *pwókèná*, *pwóá*, etc. 보·고, 보·면, ·보·거·나, ·보·아; *sy-* 서- ‘stand’: *syèkwó*, *syèmýén*, *syèkèná*, *syéá*, etc. 서·고, 서·면, 서·거·나, ·서·아. There was no obvious phonological conditioning for the alternations.

Low/rising In about 100 monosyllabic stems, all of which ended in a voiced consonant (*l*, *t/l*, *W*, *z*, *m*, *n*), a low tone alternated with a rising tone; e.g., *tèW* ~ *tép* ‘be hot.’ Examples: *al-* 알- ‘know,’ *két/kèl-* :걸/걸- ‘walk,’ *kwuW-* 쿡- ‘bake,’ *wuz-* 웃- ‘laugh,’ *nam-* 남- ‘remain,’ *an-* 안- ‘embrace.’ The low pitch seen in these stems appeared before a vowel (e.g., *tèWé* 더·혀), and the rising tone before an ending beginning with an obstruent (e.g., *tépkéy* :덥·게). In earlier Korean, the stems appear to have ended in a high-pitched “minimal” vowel; e.g., **tèWú-*. The fifteenth-century alternation resulted from the elision of that vowel: **tèWúkéy* > **tèúpkéy* > *tépkéy*. (See the discussion of the rising tone, section 5.3.3.1 above; also see Ramsey 1978, 1986, 1991.)

Low(-low) Around eighty low-pitched stems had a morphophonemic, second-syllable vowel that was low in pitch. There were several different categories of verbs with this pitch behavior. One was comprised of the *h*-stem verbs. Examples: *nàh(ò)-* 낳- ‘give birth to; produce’: *nàkhwó*, 나·코, *nàhòl* 나·홀; *nwòh(ò)-* 놓- ‘place’: *nwòssòpkwó* 노·츝·고, *nwòhòl* 노·홀; *cèh(ò)-* 쥘- ‘fear’: *cèhé* 저·혀, *cèhòní* 저·혀·니. The transitive verb *nàh(ò)-* 낳- ‘give birth to’ was derived from the intransitive verbs *na-* 나- ‘come out, be born’ by adding the causative suffix *-h(ò)-*, which, at least etymologically, was probably a form of the verb *ho-* 호- ‘do.’ Other *h*-stems may also have been derived with this causative suffix. (See the discussion of causatives, section 5.4.1.3 above.)

Another group of stems with a low(-low) morphology was characterized by a voiced consonant (*t/l*, *W*, *z*, *n*) before the morphophonemic low vowel. Here is a fairly exhaustive list of those verbs: *tòt-/tòlò-* 뜰-/뜨르- ‘run, rush,’ *tùt-/tùlù-* 뜰-/뜨르- ‘hear, listen,’ *kòp-/kòWò-* 꺾-/꺾르- ‘collect,’ *mòyp-/mòyWò-* 뵈-/뵈르- ‘be spicy,’ *mùy-/mùyWù-* 뵈-/뵈르- ‘be hateful,’ *nwùp-/nwùWù-* 눅-/누르- ‘lie down,’ *còs-/còzò-* 쪼-/쪼르- ‘spin (thread),’ *pùs-/pùzù-* 붓-/부르- ‘swell,’ *pùs-/pùzù-* 붓-/부르- ‘pour,’ *mùn(ù)-* 믈- ‘put off, postpone.’ Some were morphemically complex; *mùy-/mùyWù-* 뵈-/뵈르- ‘be hateful,’ for example, was derived from *mùy-* ‘hate’ plus the prefinal ending *Wù-*;

mòyp-/mòyWò- 땀-/땀뵤 - ‘be spicy’ may have had a similar derivation, though the transitive verb from which it would have been derived is uncertain. Another salient characteristic of these stems is that all of them – with the exception of *nwùp-/nwùWù-* 눕-/누뵤 - ‘lie down’ – had a minimal vowel, *u/o*, in both syllables. That kind of vocalism was rare in low/rising stems.

The low(–low) stems *ànc(ò)-* 앉- ‘sit’ and *yènc(ò)-* 엮- ‘place’ had *-nc-* clusters before the minimal vowel, which made them unlike any other stems in Middle Korean. In both, however, the nasal was an innovation (see the discussion of “nasal epenthesis,” above). The earlier forms can be reconstructed as **àcò-* and **yècò-*.

The low(–low) pitch pattern was found in stems with a morphophonemic velar consonant (see the discussion of *G* and *k* stems, above). Examples: *sìmù-/sìmk-* 시므-/심ㄱ - ‘plant,’ *tàlò-/tàlG-* 다르-/달ㅇ - ‘is different,’ *pòzò-/pòzG-* 브스-/븘ㅇ - ‘break.’ low(–low) was also the pattern carried by “*l*-doubling” stems; e.g., *hùlù-/hùll-* 흐르-/흘ㄱ - ‘flow’: *hùlùkáy, hùllé* 흐르·게, 흘·리.

Exceptions Two *l*-doubling stems were exceptional, however. Instead of the low(–low) pitch pattern seen in all the other *l*-doubling stems, *mwòlò-/mwòll-* 모·락-/:몰ㄱ - ‘not know’ and *nwùlù-/nwùll-* 누·르-/:눌ㄱ - ‘press’ had, rather, a low pitch alternating with a rising pitch that appeared whenever the *l* doubled; e.g., *mwòlòkwò, mwòllá* 모·락·고, :몰·라. Note that *mwòlò-* and *nwùlù-* are also the only *l*-doubling stems not characterized by a minimal vowel in both syllables.²³

Longer stems

Dissyllabic stems had a restricted canonical shape. Typically, they ended in *l*, *y*, or *i*, and the second-syllable vowel was almost always *o*, *u*, or *i*. Here are some representative examples: *còwòl-* 즈을- (< **còWòl- *즈뵤-*) ‘snooze,’ *kónol-* ·막·늘 - ‘be thin,’ *cúlki-* ·즐·기 - ‘enjoy,’ *kúli-* ·그·리 - ‘draw,’ *sitúl-* 시·들 - ‘wilt,’ *tèpúl-* 더·블 - ‘accompany,’ *èkúy-* 어·긋 - ‘violate,’ *tòngkóy-* 통·기 - ‘pull,’ *kàcì-* 가·지 - ‘possess,’ *nèkí-* 너·기 - ‘estimate,’ *èlí-* 어·리 - ‘be foolish,’ *nwùlí-* 누·리 - ‘enjoy,’ *kòlí-* 마·리 - ‘hide.’ Few stems ended in an obstruent, and those that did were generally compounds. Nor did many end in *a*, *e*, *wo*, or *wu*.²⁴ In addition, the most common tonal pattern was low–high.

²³ It has often been suggested that *mwòlò-* ‘not know’ is to be identified etymologically with *mwòt* ‘cannot’ and *àl(ò)-* ‘know,’ but how the tonal and segmental irregularities would have arisen from that morphology is still unclear.

²⁴ There were exceptions. Here are a few: *pílús-* 비·룻 - ‘begin,’ *kwùcíc-* ~ *kwùcít-* 구·짚·~·구·짚· - ‘scold,’ *mèkím-* 머·금 - ‘hold in the mouth,’ *tàtóm-* 다·들 - ‘adorn,’ *tètúm-* 더·들 - ‘feel, grope,’ *kèwù-* 거·우 - ‘oppose,’ *cóla-* ·크·라 - ‘grow up,’ *póla-* ·브·라 - ‘hope for,’ *sàmká-* 삼·가 - ‘be prudent,’ *ìé-* 이·어 - ‘shake,’ *sàhwò-* 사·호 - ‘fight,’ *nànhwò-* 난·호 - ‘divide,’ *pòyhwò-* 박·호 - ‘learn,’ *pàskwò-* 바·고 - ‘exchange,’ *wòyGwò-* 외·오 - ‘memorize,’ *kyèncwú-* 견·주 - ‘compare,’ etc.

Stems longer than two syllables were compounds. The only possible exceptions were a few stems with a morphophonemic vowel as the third syllable; e.g., *ètúp-/ètúWú-* 어·듭-/어·드·브- ‘be dark,’ *àché-t-/àché-lú-* 아·천-/아·쳐·르- ‘dislike, hate.’ These stems may also have had complex etymologies, but what those were is now obscure.

5.4.3.3 *The copula*

The copula, *i-* ‘is,’ was an inflecting form that attached to a noun or noun phrase to make it into a predicate. Examples: *LWUW_nun tala.k_ila* 樓는 다라기라 ‘“LWUW” is a two-storied house’ (1447 *Sōkpo sangjōl* 6:2b); *khun poyams SSIN-LYENG_ila* 큰 브얏 神靈이라 ‘[it] is the spirit of a big snake’ (1459 *Wōrin sōkpo* 1:15a).

The copula was transcribed with a form identical to that of the nominative particle *i*, and it attached to the preceding noun with the same tight juncture. However, its phonological behavior with inflectional endings was idiosyncratic. For one thing, when the inflectional endings *-ke-*, *-key*, and *-kwo* attached to the copula, the initial /k/ of those endings lenited to /G/. Examples: *TYEN-CO_iGesini* 天子 | 어시니 ‘it was the Son of Heaven,’ *MEN-NYEN_iGey hwoltini* 萬年이에 홀디니 ‘it is so arranged that [one moment] becomes ten thousand years’ (1482 *Kūmgang kyōng samga hae* 5:40b); *POYK-SYENG_iGwo* 百姓이오 ‘it is the people, and ...’ Because velar lenition regularly occurred after /y/, this behavior of the copula is evidence that its phonological shape was not a simple /i/, but rather /iy/.

However, the copula also induced other phonological changes as well. The most conspicuous of these was the replacement of an initial /t/ by /l/ whenever the endings *-te-*, *-two-*, and *-ta* were attached to it. Examples: *chapan_ileni* 차반이러니 ‘it was food,’ *SSI-CYELQ_ilwota* 時節이로다 ‘it is the season,’ *PEP_ila* 法이라 ‘it is the law.’ It is not known what it was about the copula that caused this replacement.

Another unexplained change was that of the volitive *-wo-*, which was realized as *-lwo-* following the copula. Examples: *hon PPWULQ-SSING_ilwon cyencho_lwo* 혼 佛乘이론 전즈로 ‘for the reason that it is a Bud-dhayna’ (1447 *Sōkpo sangjōl* 13:50b); *hon kaci_’lwo.m_ol nilunila* 혼 가지로 돌 니르니라 ‘he says that it is of one kind’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 19a). Moreover, already in the fifteenth century there were also examples of the elision of this /l/ and the replacement of *-lwo-* by *-wo-*; e.g., *hon kacypo.m_ol nilosini* 혼 가쵸돌 니르시니 ‘because [you] say that it is of one kind’ (1461 *Nūngōm kyōng ōnhae* 2:79b).

As we have said, the Middle Korean copula was fundamentally a predicator for nouns. That is what the copula still is today. However, in the Middle Korean period this same morpheme also had characteristics not shared by its modern reflex. For at that time, the copula appeared freely in a wide variety of

other morphological environments, and its meaning and function in those environments are as yet poorly understood. Particularly noteworthy are cases of its linking with prefinal and conjunctive endings instead of nouns. For example, in the negative construction *ati mwotkeyla* 아디 못게라 ‘one cannot know’ (1467 *Moguja susimgyŏl ōnhae* 43), the copula (which was realized here as [y]) was attached to the prefinal ending *-ke-*. (The form *mwot-* in this construction was an elliptical form of *mwot_ho-* ‘not be able to do.’) Here are a few additional examples: *ati mwotkey.ngita* 아디 못게이다 ‘one cannot know’ (1465 *Wŏn’gak kyŏng ōnhae* 23.2:69b), *mwolla pwoayla* 몰라 보에라 ‘don’t know’ (1459 *Wŏrin sŏkpo* 23:86b); *polkikwoceyeni* 볼기고제니 ‘since he wants to make it clear’ (1464 *Sŏnjong yŏngga chip ōnhae* 2:31).

5.4.3.4 Endings

Inflectional morphemes are classified into “final endings,” which occurred in word-final position, and “prefinal endings,” which occurred in medial positions. Prefinal endings indicated intention, politeness, tense, and aspect; they also included emotives. Final endings showed the modality and function of the predicate – whether it ended the sentence or clause, how it linked to other predicates, modified a noun or was nominalized, etc.

Prefinal endings

(1) **Volitive -wo/wu-** The “volitive” *-wo/wu-* (called the modulator in Martin 1992) was a complex morpheme known only from Middle Korean. Its meaning was enigmatic and its phonological shape varied. After a stem ending in a consonant, the shape of the volitive alternated between *-wo-* and *-wu-* by the rules of vowel harmony. Following the vowels /o, u, i/, it behaved according to the usual phonological rules; that is, a minimal vowel /o/ or /u/ elided before the volitive, while after an *-i-* (or *-y-*), the volitive developed a parasitic y: *-ywo/ywo-* (-요/유-). However, the volitive itself elided after *a*, *e*, *wo*, or *wu*, and the only evidence it was there at all was the change in tone it often induced in the stem. Examples: *makwo-* 마고- (*mak-* 막- ‘obstruct’), *mekwu-* 머구- (*mek-* 먹- ‘eat’), *phwo-* 포- (*pho-* 폭- ‘dig’), *pswu-* 뿌- (*psu-* 뿌- ‘use’), *kǎ- :가-* (*ka-* 가- ‘go’), *iGé-* 이어- (*iGé-* 이어- ‘shake’), *wǎ- :오-* (*wo-* 오- ‘come’), *cwǎ- :주-* (*cu-* 주- ‘give’), *kulywu-* 그류- (*kuli-* 그리- ‘draw’), *yehuyyu-* 여희유- (*yehuy-* 여희- ‘send away’). The shape of the volitive also changed in idiosyncratic ways when combined with certain morphemes: the retrospective *-te-* plus the volitive contracted to *-ta-*; the honorific morpheme *-(o/u)si-* plus the volitive became *-(o/u)sya-*; and the copula *i-* combined with the volitive to give *-ilwo-*. Examples: *i_lol_za puskulitani* 이틀사붓그리다니 ‘he was ashamed of precisely this’ (1449 *Wŏrin ch’ŏn’gang chi kok* 121); *kasyam kyesya.m_ay* 가삼 겨사매 ‘in going or staying’ (1447 *Yongbi ōch’ŏn ka* 26).

The usage of the volitive was also complex. It did not occur before certain final endings; e.g., *-kwo*, *-kuy*, *-twolwok*, *-(o/u)myen*, *-ela*. Before other endings, such as the nominalizing suffix *-(o/u)m* and the adverbial suffix *-toy*, it was obligatory. (See the discussion of “nominalization,” above.) Examples: *mekwum*, *mekwutoy* 머굽, 머구딕 (*mek*- 먹- ‘eat’); *capwom*, *capwotoy* 자뵐, 자보딕 (*cap*- 잡- ‘seize’). Before still other endings, the volitive was sometimes added, sometimes not, for complicated reasons. For example, it sometimes appeared before the modifier endings *-(o/u)n* and *-(o/u)lq*, depending on what the adnominalized sentence modified: in case the modified noun was semantically the object of the adnominalized verb, the volitive was added; otherwise, the volitive was not obligatory. For instance, in the construction *CCYEN-SOYNG_ay cizwon CCWOY* 前生애 지슨 罪 ‘sins that one committed in an earlier life’ (1459 *Wörin sökpo* 1:6b), the verb *cizwon* ‘committed’ incorporated the volitive because it modified its object, ‘sins.’ On the other hand, in *cwoy cizun mwom* 죄 지슨 몸 ‘a body that has committed a sin’ (1459 *Wörin sökpo* 21:20), *cizun* ‘committed’ did not take the volitive because ‘body’ was not its object. Here are other examples (from 1459 *Wörin sökpo*) with the volitive: *nilGwon ma.l i* 닐은 마리 ‘the words that were spoken’ (2:70b); *CCYWUNG-SOYNG_oy nipwul* was 衆生의 니불 옷 ‘clothes that the common people shall wear’ (8:65); *tutnwon swoli* 듣논 소리 ‘the sound that one hears’ (2:53a). Examples (from 1459 *Wörin sökpo*) without the volitive: *cwukun salom* 주근 사롬 ‘a person who has died, a dead person’ (21:25); *kil nyelq salom* 길 념 사롬 ‘people who will travel on the road’ (21:119). Other endings with which the volitive was sometimes used include *-ni*, *-noni*, *-(o/u)lini*, and *-(o/u)lila*; combined with the volitive, these endings were realized as *-woni*, *-nwoni*, *-wolini/-wulini*, and *-wolila/-wulila*.

The meaning of the volitive morpheme is difficult to delineate with any precision. However, it seems to have been used for actions (or states) that were of subjective will or intent, not for factual, objective narrative. In a declarative sentence, the intention was that of the speaker; in an interrogative sentence, the intention was that of the person being questioned. Here are a few examples: *i TWONG-SAN_ol pholwolila* 이 東山을 프로리라 ‘I will sell this garden’ (1447 *Sökpo sangjöl* 6:24b); *nay melthyey_lwo nilGwoli.ngita* 내 멀테로 념오리이다 ‘I will speak roughly’ (1459 *Wörin sökpo* 21:38); *pwuthyes PEP_i CYENG-MI_hoya cyemun ahoy enu tutcoWwoli.ngiska* 부터 法이 精微호야 저면 아히 어느 듣즈보리잇가 ‘if the law of the Buddha is subtle, can a young child listen (understand)?’ (1447 *Sökpo sangjöl* 6:11a). In addition, in an adnominal construction the intention can be that of the subject of the verb. Example: *nilukwocye hwolq pay isyetwo* 니르고저 훔 배 이셔도 ‘though there is something that they want to express’ (144? *Hunmin chöngüm önhæ*).

The volitive began to show instability in the fifteenth century, and it fell into complete disuse in the sixteenth. The collapse seems to have happened in

at least two stages. In the first half of the sixteenth century, the volitive ceased to be used in constructions where it was not obligatory. The *Pönyök Pak T'ongsa* of 1517 contains these constructions: *kwanwen-tol.h_oy moyngkun tywohon swuwul* 관원들히 텅근 도흔 수울 ‘a good wine that the officials had made’ (1:2b); *mu.l_ey solmun tolk* mre 설믈 톱 ‘chicken boiled in water’ (1:5a); *pwopoy_lwo skwumin swunulk nwophun kwos* 보빅로 꾸민 수늬 노픈 곳 ‘high mountain flowers decorating like treasures’ (1:5a). If these constructions had appeared in fifteenth-century texts, the adnominal verb forms *moyngkun* ‘made,’ *solmun* ‘boiled,’ and *skwumin* ‘decorating’ would have incorporated the volitive: **moyngkolwon* 텅근론, **solmwon* 설믈, and **skwumywon* 꾸믈. The next stage in the disappearance of the volitive took place in the latter half of the sixteenth century, when the morpheme was no longer used in constructions where it had once been obligatory. This does not mean of course that the volitive disappeared from written sources all at once; it continued to be seen in some texts until much later. But the *Sohak önhæ* of 1587 shows that by the time that work was published the morpheme had already fallen into disuse; for example, the volitive was not transcribed in the nominalizations *ancom* 안츨 ‘sitting,’ *epsom* 업츨 ‘not having,’ *mekum* 머금 ‘eating,’ and *psum* 뵙 ‘using.’ In the fifteenth century, those forms would have been **ancwom* 안츨, **epswum* 업츨, **mekwum* 머금, and **pswum* 뵙.

(2) **Honorifics** Three prefinal endings were used in the Middle Korean honorific system: the honorific *-(o/u)si-*, the deferential *-zoW-*, and the politeness marker *-ngi-*.

Honorific *-(o/u)si-* Adding *-(o/u)si-* to a verb or adjective showed respect for the subject. Examples: *mol thwon cahi kennesini.ngita* 몰 톤 자히 건너시니이다 ‘he [the monarch] crossed over on horseback’ (1447 *Yongbi öch'ön ka* 34); *wocik pwuthyey_za NUNG_hi alosini* 오직 부테샤 能능히 아르시니 ‘only Buddha fully knows’ (1463 *Pöphwa kyöng önhæ* 4:63a).

The morpheme *-(o/u)si-* had two morphological peculiarities. One was an underlyingly low-pitched initial vowel.²⁵ Examples: *càpòsíní* 자빅·시·니 (*càp-* 잡- ‘catch’) (1447 *Yongbi öch'ön ka* 24); *cwòchòsyà* 조츨·샤 (*cwòch-* 좃- ‘chase’) (1447 *Yongbi öch'ön ka* stanza 112). The other peculiarity was that *-(o/u)si-* plus the volitive *-wo/wu-* became *-(o/u)sya-*; e.g., *kasyam kyesya. m_ay* 가삼 겨샤매 ‘in going or staying’ (1447 *Yongbi öch'ön ka* stanza 26). In addition, the honorific added to the infinitive *-a/e* was also realized as *-(o/u)sya*; e.g., [*HOY-TWONG LYWUK-LYWONG*]*_i nolosya* 海東 六龍이 닌르샤 ‘the Six Dragons of Haedong fly’ (1447 *Yongbi öch'ön ka* stanza 1).

²⁵ The pitch of the vowel is evident only if there are no preceding high tones in the word.

This form *-(o/u)sya* fell into disuse in the sixteenth century, as can be seen already in the 1518 text *Iryun haengsil to*, where it was replaced by *-(o/u)sye*; e.g., *nimkwum_i ... Kwongyey_lol pulle pwo sye* 님금이 ... 공예를 불러 보셔 ‘the king ... called and saw Kongye’ (27).

Deferential -zoW- The morpheme *-zoW-* expressed deference toward the person affected by the action of the verb. Just as *-(o/u)si-* indicated respect for the subject, *-zoW-* exalted the object. For example, if subjects of the realm had caught a glimpse of the king, *-zoW-* was added to the verb to show the people’s deference toward him. Here are some illustrative citations: *icey pwuthyes QWUY-LUK_ul nipsowa* 이제 부텨 威力을 님스바 ‘now he received the power of the Buddha’ (1447 *Sökpo sangjöl* 9:39b); *pwuthyes SSYANG_ol moyngkola cwohon CCWA_ay PPYEN-QAN_hi nwo.sso pkwo* 부텨 像을 링마라 조흔 座에 便安히 노좁고 ‘he made an image of the Buddha and placed it comfortably on a clean stand’ (1447 *Sökpo sangjöl* 9:22b); *ZYE-LOY_s ilhwu.m_ul tutcoWomyen* 如來入일후를 듣즈븐면 ‘if one hears the name of a buddha’ (1447 *Sökpo sangjöl* 9:18b); *nay ZYE-LOY nilosyan KYENG_ey UY-SIM_ol ani hozopnwon* 내 如來 니르산 經에 疑心을 아니 헛습노니 ‘I entertain no doubts about a sutra related by a buddha’ (1447 *Sökpo sangjöl* 9:26b); *PPWUL-SSYANG wolhon nye.k_ulwo kams.twozopkwo* 佛像을 혼 너그로 값도습고 ‘turning to the right side of the statue of Buddha’ (1447 *Sökpo sangjöl* 9:23a); *[ZIN-NGUY CI PYENG]_ul [LYWOW-CA]_i kissoWoni* 仁義之兵을 遼左 | 깃스븐니 ‘Liaodong (people) rejoiced over the Righteous Army’ (1447 *Yongbi öch’ön ka* stanza 41); *[SAM-CCUK]_i cwohcopkenul* 三賊이 좃줍거늘 ‘three robbers [i.e., Mongol leaders] pursued [T’aejo]’ (1447 *Yongbi öch’ön ka* stanza 36).

As can be seen, in part, from the above examples, the deferential *-zoW-* appeared in a variety of phonological shapes. Following *k*, *p*, *s*, or *h*, it was *-soW-* (-습-); after a vowel, *n*, or *m*, it was *-zoW-* (-습-); and after *t*, *c*, or *ch*, it was transcribed as *-coW-* (-줍-).²⁶ The *-W-* at the end of the morpheme devoiced to *-p-* when followed by a consonant.

The tone of the deferential also varied. Following a stem with a high or rising pitch, the tone marked on the deferential could be high or low, depending on prosody. Examples: *pwózoWántí* 보·스·한·디 (1459 *Wörin sökpo* 10:1b); *pwózopkwó ... wüzópkênúl* 보·습·고 ... :우·습·거·늘 (1459 *Wörin sökpo* 10:1b); *pwöyzoWwòlà ... ètcòpcyè* :봐·스·보·라 ... :연·줍·져 (1459 *Wörin sökpo* 2:69a). Following a low-pitched stem, the deferential was

²⁶ The rules were these: the initial consonant of the morpheme was *-z-*. After obstruents, the *-z-* devoiced and was realized as *-s-*. In case the preceding obstruent was an apical stop or affricate (*t*, *c*, or *ch*), the resulting pronunciation (*t + s*) was *ts*, which was written as *-c-* (-스-) because the letter ㅈ transcribed the sound [ts]. See the discussion of spirants, section 5.3.1.6 above.

low if it preceded a vowel, and rising if it preceded a consonant. Examples: *mèksòWóní* 먹스·웠·니 (1459 *Wörin sòkpo* 7:26a); *nìpsòpkwó* 님:습고 (1459 *Wörin sòkpo* 2:72a). This behavior is that of the low/rising verb stem *sólW-* ~ *sòlp-* ‘report (to a superior),’ with which the deferential is etymologically related. Both earlier forms can be reconstructed as **sòlWó-*.

Politeness marker -ngi- The morpheme *-ngi-* was added to verb forms to show respect for the listener. It marked the discourse as polite style. Verb forms in this most polite style include *hono.ngita*, *holi.ngita*, *hono.ngiska*, *holi.ngiskwo*, etc. (호·늑·이다, 호·리·이다, 호·늑·잇·가, 호·리·잇·고). Examples of usage: *SSIM_hi khu.ngita SYEY-CWON_ha* 甚히 크이다 世尊하 ‘it is extremely great, o Shakyamuni’ (1464 *Kūmgang kyōng ōnhae* 61b); *kutuys sto.l_ol maskwoyce hote.ngita* 그뵈 싹를 맞고져 호더이다 ‘he has been wanting to meet your daughter’ (1447 *Sòkpo sangjöl* 6:15a).

In fifteenth-century texts, a slightly less formal style of discourse was characterized by verb forms such as *hononingta* (a contraction of polite *hononi.ngita*), and *honwoniska*. This same speech-style difference was indicated in imperatives, for example, by the use of the less deferential *hoyassye* (호야쨌) instead of the more polite *hosywoosye* (호쇼셔) form. Dialogs found in Middle Korean texts clearly reflect this interplay of speech styles. For example, the following passage from the 1447 *Sòkpo sangjöl* (6:16a-18a) records the less formal style. Here, a conversation takes place between two equals, Sudatta and Homi (護彌), both wealthy contemporaries of Sakyamuni:

SYWU-TTALQ i HHWO-MI tolye mwulwotoy: “CYWU-ZIN i musum chapa.n ol swonzwo totnye moyngkonwoniska. THAY-CO lol CHYENG hozoWa ipatcoWwolye honwoniska. TTAY-SSIN ol CHYENG hoye ipatwolye honwoniska.” HHWO-MI nilGwotoy: “Kuli aningta.” SYWU-TTALQ i . . . tasi mwulwotoy: “Estyey pwuthyey ’la hononiska. Ku ptu.t ul nilGessye.” TWOY-TAP hwotoy: “Kutuy non ani tutcoWaystesiniska. CCYENG-PPEN NGWANG ato-nim SILQ-TTALQ ila hosyali . . . SAM-SYEY yeys i.l ol alosil ssoy pwuthyey ’sita hononingta.”

須達이 護彌드려 무로디: 主人이 므슴 차마놀 손소 들녀 땡그노
 닛가. 太子를 請호스바 이받즈보려 호노닛가. 大臣을 請호야 이
 바도려 호노닛가. 護彌 닐오디: 그리 아닛다. 須達이 . . . 다시 무
 로디: 옛데 부테라 호늑닛가. 그 싹들 닐어쨌. 對答호디: 그디는
 아니 들즈뵈더시닛가. 淨飯王 아드님 悉達이라 호샤리 . . . 三世
 옛 이를 아라실 싹 부테시다 호늑닛다.

‘Sudatta asked Homi: “What dishes is the host taking trouble to prepare with his own hands? Do (you) invite the crown prince, wishing to serve him? Do (you) invite the minister, wishing to serve

him?” Homi replied: “It is not so.” Sudatta . . . asked again: “Why do (you) call (him) the Buddha? Tell me the meaning of it!” He answered: “Have you not heard? The son of King Suddhodana, the one who is called Siddhartha, has knowledge of the three realms of existence [past, present, and future], and so they say he is the Buddha.”

A few pages later in the same text (6:21b-22a), Sudatta speaks with Sakyamuni. In this conversation, the more formal and polite style reflects the distance between the rich merchant and the holy man:

SYWU-TTALQ *i* *pwuthye skuy solWwotoy*: “*ZYE-LOY ha, wuli nala. h ay wosya, CYWUNG-SOYNG oy SSYA-KHWOK ol telGey hosywoosye.*” *SYEY-CWON* *i* *nilosyatoy*: “*CHYWULQ-KA hon salo.m on sywo.h i kotti ani honi, ku.ngey CYENG-SYA i epkeni etuli kalywo.*” *SYWU-TTALQ* *i* *solWwotoy*: “*Nay elwu ilozowwoli.ngita.*”

須達이 부터의 슬보디 如來하, 우리 나라해 오샤 衆生이 邪曲을
덜에 호쇼셔. 世尊이 니르샤디 出家호 사린민 쇼히 곤디
아니호니 그에 精舍 | 업거니 어드리 가료. 須達이 슬보디 내
어루 이르스보리이다.

‘Sudatta said to the Buddha: “O Living Buddha! Come into our land and diminish the wickedness of all living things!” Sakyamuni spoke: “One who has renounced this earthly existence is not the same as the layman, and since there is no monastery there, where could I go?” Sudatta said: “I will build one for you.”’

(3) Tense and aspect The tense and aspect system of Middle Korean was made up of five prefinal endings: processive *-no-*; durative (aorist) *-ni-*; past (perfective) *-ke-*, *-a/e-*; retrospective (imperfective) *-te-*; and future (conjectural) *-li-*. These morphemes are often referred to as tense markers, but they are perhaps better understood as markers of aspect.

Processive *-no-* The morpheme *-no-* indicated that the action of the verb was a process taking place at the present time, or that happened generally without regard to time. Examples: *SAMI samwolye honota hol_ssoy* 沙彌 사모려
호는다 흘썌 ‘since [he] says he intends to make [him] into a religious novice’ (1447 *Sōkpo sangjōl* 6:2a); *kwoc tywokhwo yelum hanoni* 꽃 도코
여름 하느니 ‘its flowers are good and the fruit is bountiful’ (1447 *Yongbi ōch’ōn ka* stanza 2).

A morphological peculiarity of *-no-* was its tone. While virtually all other endings were marked with high tones, the pitch of this morpheme was consistently low following a low-pitched stem. Example: *askâWón ptú.t_í isnōnýé* 앓가·불·쁘·디 잇·느·니·여 ‘do you have thoughts of regret?’ (1447

Sōkpo sangjōl 6:25b). Among Middle Korean inflectional endings, only *-no-* and *-ke-* were verifiably unaccented in this way.²⁷

Durative (aorist) *-ni-* The prefinal ending *-ni-* indicated that a movement or motion was drawn out over a period of time, or that happened generally and was not bounded by time. In these latter usages, it was similar to time-unrelated uses of *-no-*. Examples: *nyenu swuyn ahoy_two ta CHWYULQ-KA_honila* 녀느 원 아히도 다出家하니라 ‘the other fifty children, too, all renounced the world’ (1447 *Sōkpo sangjōl* 6:10a); *mochomnay cey ptu.t_ul sile phyeti mwot_hwolq nwo.m i hanila* 마침내 제쁘들시러피디몬홍노미하나라 ‘there are many who, in the end, are unable to express their feelings’ (144? *Hunmin chōngūm ōnhae* 2b). In origin, *-ni-* was derived from the modifier ending *-(o/u)n* plus the copula.

Past (perfective) *-ke-*, *-a/e-* Both of these two morphemes, *-ke-* and *-a/e-*, are thought to have shown completion of an action or a change of state in the past, but their meanings are not altogether clear. Nor is the difference between them known with certainty, though it has been proposed that *-a/e-* was used mainly with transitive verbs, while *-ke-* was used with intransitive verbs, adjectives, and the copula. Moreover, as noted above, *-ke-* was unaccented (i.e., it was marked as a low tone), while *-a/e-*, like almost all other endings, was accented. Examples: *PPI-KHWUW_tolye nilGwotoy*: “*Tye cywung_a nilGwey homa tatotketa*” 比丘드러닐오디더훙아닐웨하마다듣거다 ‘he said to the Buddhist mendicant: “That monk already arrived nine days ago”’ (1447 *Sōkpo sangjōl* 24:15b); *nwolGay_lol pullwotoy*: “*QAN-LAK-KWUYK_inon api_lul pwola kani emi_two mwot pwoa silu.m i tewuk kipketa*,” *hoyanol* 놀애를블로디安樂國이논아비를보라가니어미도몬보아시르미더욱겁거다하야늘 ‘he sang a song, saying: “In paradise he went to see his father but could not also see his mother, and so his sorrow was deeper”’ (1459 *Wōrin sōkpo* 8:101); “*CWON_hosin NGWANG i epsusini nala.h i QWUY-SSIN_ul ilheta*” *hokwo* 尊하신王이업스시니나라히威神을일허다하고 ‘saying, “since there was no king to be honored, the country had lost the power of the Buddha”’ (1459 *Wōrin sōkpo* 10:9b).

Another complication was that *-ke-* was realized as *-Ge-* (and written *-어-*) following *y*, *l*, or the copula; e.g., *towoyGenul* 드외어늘, *alGenul* 알아늘, *mozo.m iGenul* 막스미어늘. The morpheme also had a curious suppletive alternate. Although *-ke-*, too, was sometimes found after the verb stem

²⁷ The politeness marker *-ngi-* may also have been unaccented; Kim Wanjin (1973, p. 36) gives cogent arguments why the morpheme should be thought of as having had an underlying low tone. However, restrictions on the morphological environment in which it occurred make that assertion difficult to verify. There were also two other accentually unusual endings that should be noted. One was the honorific *-(o/u)si-*, whose first, epenthetic syllable was unaccented; the other was the deferential *-zoW-*, which also had a low-pitched (first) syllable.

wo- ‘come,’ the usual form of the perfective after that particular stem was the unique form *-na-*, which only occurred there; e.g., *wonaton* 오나든.

Retrospective (imperfective) -te- The retrospective *-te-* was used by a speaker recalling an action that had taken place in the past but, at the time of the recollection, had not been completed. Examples: *LYWONG kwa KWUY-SSIN kwa wuy_hoya SYEYWULQ-PEP_hotesita* 龍과 鬼神과 위하야 說法 하더시다 ‘[Sakyamuni] was preaching for the sake of dragons and spirits’ (1447 *Sōkpo sangjöl* 6:1a); *nimku.m_i nakaysteni* 넘그미 나갓더시니 ‘the king took flight’ (1447 *Yongbi ōch’ ōn ka* stanza 49).

Retrospective *-te-* was realized as *-le-* following the copula; e.g., *SYA-NGWUY KWUYK salo.m_i SSIP-PALQ QUK_ileni* 舍衛國 사르미 十八億이러니 ‘the people of the state of Sravasti were 1,800 million’ (1447 *Sōkpo sangjöl* 6:28a).

Future (conjectural) -li- The prefinal ending *-li-* was used for conjectures about things that had not yet taken place. Examples: *tangtangi i phi_lol salom towoyGey hosilila* 당다이 이 피를 사름 드외에 하시리라 ‘[heaven] will as a matter of course make this blood into people’ (1459 *Wōrin sōkpo* 1:7b-8a); *NYELQ-PPAN TUK_hwo.m_ol na kotkey holila* 涅槃 得호몰 나 큰게 하시리라 ‘will let her achieve nirvana like me’ (1447 *Sōkpo sangjöl* 6:1b).

In origin, *-li-* was composed of two morphemes, the prospective modifier ending *-(o/u)lq* plus the copula *i-*. For this reason, it shared morphological peculiarities with the copula, which meant that following *-li-*, *-te-* was realized as *-le-*, and *-ke-* as *-Ge-* (-어-). Thus, *-lile-*, which combined *-li-* with *-te-*, indicated an incomplete action in the future, while *-liGe-* (-리어-), combining *-li-* with *-ke-*, was used when speculating about a completed act in the future. Examples: *KWONG-TWOK_i ile tangta.ng_i pwuthyey towoylilela* 功德이 이러 당다이 부테 드외리러라 ‘accumulating virtuous deeds, he will as a matter of course be becoming a buddha’ (1447 *Sōkpo sangjöl* 19:34a); *CYENG-KAK nalay macwo pwoliGeta* 正覺 나래 마조 보리어다 ‘will meet on the day of enlightenment’ (1459 *Wōrin sōkpo* 8:87).

(4) **Emotives** Emotives were exclamatory or poetic in effect.

-two-, -twos-. The emotives often encountered in Middle Korean texts include *-two-* and *-twos-*; these morphological units (which appear to have incorporated the volitive *-wo/wu-*) were found in such endings as *-twota* -도다, *-twoswota* -도소다, and *-twoswo.ngita* -도소이다. Following conjunctural *-li-* or the copula, *-two-* and *-twos-* were realized as *-lwo-* and *-lwos-*. Examples: *i kaksi_za nay etninun mozo.m_ay mastwota* 이 각시사 내 얻니는 므스매 맞 도다 ‘this very girl is the one I’ve been wanting to have!’ (1447 *Sōkpo sangjöl* 6:14a-b); *pwoni no.m_oy ci[p]s_tam_tol ta mulGetitwostela* 보니 낙막 짓담들 다 물어디똥더라 ‘I see the walls of his house have all fallen down!’ (1517 *Pōnyōk Pak T’ongsa* 1:9b); *ywuyey psulilwota* 유예 뿌리로다 ‘we will spend enough [money]’ (1517 *Pōnyōk Pak T’ongsa* 1:2a).

-s- In addition, the *-s-* seen in endings such as *-kesta* -것다, *-nwosta* -נות다, *-tasta* -탓다, and *-syasta* -샷다 (and in *-twos-* as well) is believed to have been an emotive. This *-s-* was usually found together with the volitive *-wo/wu-*. Examples: [HWAN-NAN] *ha.m_ay* [PHYEN-AN] *_hi sati mwot hoswola* 患難 하매 便安히 사디 못 호소라 ‘with so many misfortunes we cannot live at ease’ (1481 *Tusi ōnhae* 8:43a); *ne-huy tol.h_i musu.k_ul pwonosonta* 너희들히 므스글 보느슨다 ‘what do you people see?’ (1459 *Wōrin sōkpo* 10:28a); *ne-huy tol.h_i alasola* 너희들히 아라스라 ‘you people know them’ (1459 *Wōrin sōkpo* 10:26).

-kwa-, -kwas- Finally, the prefinal endings *-kwa-* and *-kwas-* are believed to have worked as emotives. Example: *ta kacang kiske nyey epten i_lol etkwala hoteni* 다 가장 깃거 네 업던 이를 얻과라 헛더니 ‘all were most happy and said that, Oh! they had got something that in earlier times had not existed’ (1447 *Sōkpo sangjōl* 19:40b).

Sequences Prefinal endings occurred in a fairly fixed order relative to each other. The following forms of the verb *ho-* ‘do, be’ illustrate typical sequences:

ho-zop-te-si-ni (헛 습더시니), *ho-zoW-osi-ni-ngi-ta* (헛 슥 불시니이다),
ho-zoW-wo-li-ngi-ta (헛 슥 보리이다), *ho-li-lwo-swo-ngi-ta* (헛 리로 소이다).

The basic order in the fifteenth century was as indicated below:

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
deferential	past/retrospective	honorific	present/aorist	volitive	future	emotive	polite
<i>-zoW-</i>	<i>-te-</i>	<i>-(o/u)si-</i>	<i>-no-</i>	<i>-wo/wu-</i>	<i>-li-</i>	<i>-two(s)-</i>	<i>-ngi-</i>
	<i>-ke-</i>		<i>-ni-</i>				
	<i>-a/e-</i>						

In this formulation, the past and the present were mutually exclusive categories, as were the present and the future. But the past (retrospective) and the future (conjectural) were not. As we have seen, both *-lile-* and *-liGe-* occurred freely in Middle Korean. These two sequences constituted exceptions to the above formulation. In other words, whenever a retrospective morpheme was combined with the future (conjectural) morpheme *-li-*, it appeared out of its usual order. There were other exceptions as well. The usual ordering of a past (retrospective) morpheme and the honorific was *-kesi-* or *-tesi-*. But even in the fifteenth century there were already examples of *-sike-* and *-site-*. This reordering later became permanently fixed in the Early Modern period.

Final endings

Modifiers As in Korean today, predicates used to modify nouns or noun phrases were marked with special modifier endings. There were two of these: *-(o/u)n* and *-(o/u)lq*.

Modifier *-(o/u)n* The ending *-(o/u)n* was, in its basic usage, much the same as its modern reflex. When attached to an adjective, it signaled the present tense or a general quality removed from time; e.g., *pwulhwuy kiphun namkon* 불휘 기픈 남곤 ‘a tree whose roots are deep’ (1447 *Yongbi ōch’ōn ka* 1). When attached to a verb, it marked past or completed action; e.g., *pwuthyes i.p_eyseye nan ato.l_i* 부터 이베셔 난 아드리 ‘a son born from the mouth of the Buddha’ (1463 *Pōphwa kyōng ōnhae* 1:164b).

However, *-(o/u)n* was in essence time-neutral. It combined with tense and aspect morphemes to form the modifiers *-non*, *-ten*, *-ken*, and *-lin*, which added considerably to the complexity of modification. Examples: *no.m_on culkinon na.l_ol* 녹논 즐기논 나를 ‘days others are enjoying’ (1447 *Yongbi ōch’ōn ka* stanza 92); *epten penkey lul* 었던 번게를 ‘lightning which had not been there’ (1447 *Yongbi ōch’ōn ka* stanza 30); *cwuktaka salGen [POYK-SYENG]* 죽다가 살연 百姓 ‘the people who died and then lived [i.e., were saved]’ (1447 *Yongbi ōch’ōn ka* stanza 25); *tinaken nyey nwuys SSI-CYELQ ey* 디나건 네 녓 時節에 ‘at a time in a long past ancient world’ (1447 *Sōkpo sangjōl* 6:8a); *mochomnay SSYENG-PPWULQ mwot holin cyencho_lwo niluti mwot holila* 무춤내 成佛 못 흐린 천초로 니르디 못 흐리라 ‘one cannot tell it for the reason that in the end one will not become a buddha’ (1464 *Kūmgang kyōng ōnhae* 43a).

In the fifteenth century *-(o/u)n* also served as a nominalizer. Although rare, textual examples can be found of deverbals with this ending functioning directly as nouns; e.g., [*QWUY-HWA*] [*CIN-LYE*] *hosi.n_olwo* [*YE-MANG*]_i *ta mwotcoWona* 威化振旅호시노로 輿望이 다 못즈털나 ‘with his victorious return from Wihwa all popular support came together [for him]’ (1447 *Yongbi ōch’ōn ka* stanza 11). The noun *elGwun* 열운 ‘adult,’ for example, was apparently formed this way. By the sixteenth century, however, this kind of nominalization had already ceased to be productive.

Prospective modifier *-(o/u)lq* Much like its modern counterpart, the ending *-(o/u)lq* was used for conjectures about the future. It could occur together with the prefinal ending *-li-* (which etymologically already contained an occurrence of *-(o/u)lq*) as *-lilq*; this doubling up is believed to have strengthened the force of the conjecture. Example: *THYEN-ZIN_i mwotolil_ssoy CYE-THYEN_i ta kissoWoni* 天人이 모드릴썩 諸天이 다 깃스털니 ‘all the heavens rejoiced because the angels will gather’ (1449 *Wōrin ch’ōn’gang chi kok* stanza 13).

Like *-(o/u)n*, *-(o/u)lq* was occasionally used as a nominalizer in the fifteenth century. But such nominalizations did not take particles, and, curiously enough, *-(o/u)lq* was then transcribed not with a final glottal stop but with an /s/ instead. Examples: *nwolGae_lol nnowoyya sulphuls epsi pulunoni* 놀애를 노외야 슬플업시 브르느니 ‘he sings a song again without sadness’ (1481 *Tusi ōnhae*

25:53a); *nephye twopsowo.m_i taols epse* 너피 돕스오미 다웁 업서 ‘his helping widely was without end’ (1463 *Pŏphwa kyŏng ōnhae* Introduction: 18a).

Nominalizers The usual nominalizer in Middle Korean was the substantive ending *-(o/u)m*. As mentioned above, *-(o/u)n* and *-(o/u)lq* also served as nominalizers in the fifteenth century, but both soon became exclusively used as modifier endings. The use of *-ki*, which is now the most productive nominalizer, was rare at that time. In addition, the negational ending *-ti* was used to nominalize complements of certain adjectives, such as *elyeW-* ‘be difficult.’

Nominalizer *-(o/u)m* When used to nominalize a predicate, *-(o/u)m* was always directly preceded by the volitive *-wo/wu-*; e.g., *mekwum* 머굼 ‘eating’ (*mek-* 먹- ‘eat’), *capwom* 자봄 ‘grasping’ (*cap-* 잡- ‘grasp’), *pswum* 뵙 ‘using’ (*psu-* 쓰- ‘use’), *phwom* 폼 ‘digging’ (*pho-* 팍- ‘dig’), etc. The result was that, in effect, the nominalizing suffix was *-wom/wum*. Examples: *ancwom ketnywo.m_ay ema-nim mwolosini* 안즙 견노매 어마님 모르시니 ‘mother was not aware of (his) sitting or walking’ (1459 *Wŏrin sŏkpo* 2:24b); *nal lwo pswu.m_ey PPYEN-QAN_khuy hokwocye hwolq stolo.m_inila* 날로 뿌매 便安키 흥고져 흥 쓰르미니라 ‘for no other reason than I want to make [them] convenient for daily use’ (144? *Hunmin chŏngŭm ōnhae* 3b). And because this nominalizing suffix incorporated the volitive, it gained an /l/ following the copula, and combined with honorific *-(o/u)si-* as *-syam*. Examples: *NUNG_hi SOYK ilwo.m_i kewulwu_uy polkwo.m kotholsila* 能히 색이로미 겨우루의 불곰 곧홀시라 ‘was like the brightness of a mirror’ (1465 *Wŏn’gak kyŏng ōnhae* 2:59b); *kasyam kyesya.m_ay wonol taloli.ngiska* 가삼 겨사매 오늘 다르리잇가 ‘by his going or staying, would it today be different?’ (1447 *Yongbi ōch’ŏn ka* 26).

Nominalizer *-ki* Though extremely rare, a few occurrences of *-ki* can be found in the Middle Korean corpus. Examples: *PWO-SI hoki lol culkye* 布施하기를 즐겨 ‘delights in giving alms’ (1447 *Sŏkpo sangjŏl* 13a); *kul suki wa kal psuki wa poyhwoni* 글 스기와 갈 쓰기와 비호니 ‘learn both the writing of letters and the use of the sword’ (1481 *Tusi ōnhae* 7:15a).

Conjunctive endings The endings used in Middle Korean to link predicates were diverse, and the subtleties of their meanings are often difficult for us in this latter age to unravel. The most important of these conjunctive endings are discussed below.

(1) Coordinate conjunction Three endings were the principal means used to link verb forms with an “and” meaning: *-kwo*, *-(o/u)mye*, and *-a/e*.

-kwo ‘and then’ The ending *-kwo* was used to link predicates in a coordinate relationship. Just like its modern equivalent, it meant something like ‘and

also' or 'and then,' and usage, too, was much the same as it is today. However, *-kwo* was also often followed by focus markers, either the particle (*o/lu*)*n*, the emphatic *-k*, or the intensifier *-m*, resulting in a compound ending, *-kwon* -곤, *-kwok* -곡, or *-kwom* -곰. Of these compounded forms, *-kwon* sometimes linked up with the future (conjunctural) marker *-li-*. Examples: *kwoc tywokhwo yelum hanoni* 꽃도코 여름 하느니 'its flowers are good, and the fruit is bountiful' (1447 *Yongbi ōch'ōn ka* stanza 2); *ilhwm two tutti mwot holiGwon homolmye pwo.m i.stonye* 일흠도 듣디 못하리온 *h* 될며 보미쓰녀 'one cannot even hear his name, how then can one see him?' (1485 *Yōnghōm yakch'o* stanza 5); *cwukkwok cwukumye nakwok na* 죽곡 주그며 나곡 나 'one dies, then one dies again; one is born, then one is born again' (1461 *Nūngōm kyōng ōnhae* 4:30a); *hon pwuchey lol tatoni hon pwuchey yelGikwom hol_ssoy* 혼 부체를 다드니 혼 부체 열이곰 흘씨 'when one closes one side of a [two-part] door, a side will open again' (1459 *Wōrin sōkpo* 7:9).

-(*o/lu*)mye 'and also' The ending *-(o/lu)mye* linked predicates together in a similar way, also with the general meaning of 'and also' or 'and then.' But it was in origin complex, consisting of the nominalizer *-(o/lu)m* plus the postposition *ye*, which was apparently a contraction of *ie*, the infinitive form of the copula. Examples: [*TTOW-MANG*]_{ay} [*MYENG*]_{ul} *mitumye nwolGay_yey ilhwm mituni* 逃亡에 命을 미드며 놀에예 일흠 미드니 'he believed in fate for his escape, and he also believed in his name [as it was heard] in song' (1447 *Yongbi ōch'ōn ka* stanza 16); *emi two ato.l ol mwolomye atol_two emi lol mwololini* 어미도 아드를 모르며 아들도 어미를 모르리니 'mother will not know son, and son will not know mother, either' (1447 *Sōkpo sangjōl* 6:3b).

The ending *-(o/lu)mye* could follow conjunctural *-li-*. It itself was sometimes followed by the postposition *syē* (apparently the infinitive form of the existential verb (*i*)*si-* 'be, exist'); the combination, *-(o/lu)myesyē*, emphasized the simultaneity of the predicates it linked. It also combined with the postposition *-ng*, and the result, *-(o/lu)myeng*, had a usage and meaning similar to that of *-(o/lu)myesyē*. Examples: *somocha_za holimye* 스므차샤 하리며 'he will have to break through, and ...' (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 10b); *swume salmyesyē epezi lol hywoyang_hoteni* 수머 살며셔 어버시를 효양하더니 'while he was in hiding he cared for his parents' (1518 *Pōnyōk sohak* 8:2); *teumyeng tele* 더으명 더러 'add to and at the same time take away' (1466 *Kugūppang ōnhae* 1:70).

Infinitive *-a/e* 'and so, -ing' This all-purpose ending (whose shape normally depended upon vowel harmony relationships) is by convention called the "infinitive" in English, even though its meaning and usage often do not correspond very well to those of infinitives found in Western languages. The common thread is that an infinitive is associated with auxiliary verbs, and in the Korean case, *-a/e* marked a verb functioning in a dependent

relationship with a following verb or predicate. For example, the infinitive form of *tul-* ‘enter’ was *tule*, which was used as an auxiliary with a motion verb in the meaning of ‘entering’ or ‘into’; e.g., *tule ka-* 드러가- ‘go into.’ The following passage has two occurrences of the infinitive, both of which mark longer predicates: [QILQ-KAN] [MWOW-QWOK] *two epsa, wum mwute salosini.ngita* 一間茅屋도 업사 움 무더 사르시니이다 ‘there was not even a one-room straw hut, and so, digging mud holes in the ground, they lived [in them]’ (1447 *Yongbi öch’ön ka* stanza 111).

The Middle Korean infinitive often occurred with the emphatic *-k*, and the intensifier *-m*. Examples: *swu.l ul masyek tyangsyang kocyang CYWUY_khey homyen* 수를 마석 당상 마장 醉케 흥면 ‘if, having drunk wine, it always causes one to be drunk, ...’ (1466 *Kugüppang önhæ* 1:64); *skwoli capam selu nizuni* 꼬리 자밤 서르 니스니 ‘grabbing tails, they bound each other together’ (1482 *Nammyöng-chip önhæ* 1:27b); *twuze salom_i selu kolam pwule* 두서 사르미 서르 마람 부러 ‘several men take turns blowing’ (1466 *Kugüppang önhæ* 1:46).

(2) **Causation endings** Endings used to show the origin of, or reason for, an act or state included *-(o/u)ni*, *-(o/u)may*, *-noll/nul*, *-(o/u)l_ssoy*, and *-kwantoy*. Although the morphemic structure of each of these endings was different, their meanings and usages were so similar, the differences have still not been completely determined.

-(o/u)ni ‘since’ This ending, which is still found in Korean today, was the most common form used to show causation. Examples: *ney ato.l_i HYWOW-TTWOW_hokwo hemul epsuni, etuli naythilywo* 네 아드리 孝道호고 허물 업스니 어드리 내티료 ‘since [my] four sons are filial and have no faults, how can I abandon them?’ (1459 *Wörin sökpo* 2:6a); *SYWU-TTALQ_i ... SYEY-CWON_ol NYEM hozowoni, nwu.n_i twolwo polkkenal* 須達이 ... 世尊을 순호즈벌니 누니 도로 붉거늘 ‘Sudatta called Sakyamuni’s name, and as a result his eyes regained their sight’ (1447 *Sökpo sangjöl* 6:20a).

However, *-(o/u)ni* also had a range of meanings and usages besides causation. It could be translated in a variety of ways, including ‘and,’ ‘and so,’ ‘and then,’ ‘when,’ ‘if,’ ‘but then,’ etc.; the choice of interpretation was usually only derivable from context. Sometimes it simply provided a loose link to what followed. Examples: *pulkun say ku.l ul mule, [CHIM-SILQ] i.ph ey anconi [SYENG-CO]_ey [TYEY-HHWO]_lol pwoyzoWoni* 붉근 새 그를 드러 寢室이페 안즈니 聖子革命에 帝祐를 뵈스벌니 ‘a red bird, holding a letter in its beak, sat on the door of the bedroom, and showed a heavenly omen that the august son would revolt’ (1447 *Yongbi öch’ön ka* stanza 7); *PPI hon ato.l_ol nahoni, saol mwot chasye mal homye*婢 혼 아드를 나흐니 사을 못 차셔 말하며 ‘a maidservant gave birth to a son, and then, before three days had passed, he spoke’ (1459 *Wörin sökpo* 21:55).

-(o/u)may ‘because’ This ending combined the nominalizer *-(o/u)m* with the locative particle *ay*; the literal meaning was therefore something like ‘in doing/being ...’. Example: [HWAN-NAN]_hamay [PHYEN-AN]_hi sati mwot *hoswola* 患難하매 便安히 사디 못 흥소라 ‘because his distress was great, he was not able to live comfortably’ (1481 *Tusi ōnhae* 8:43a).

-nol/nul ‘as, since, when’ The ending *-nol/nul* was also morphemically complex, combining the modifier ending *-(o/u)n* with the accusative particle *-ol/ul*. Since *-nol/nul* virtually always appeared combined together with the perfective morpheme *-ke-*, the functioning ending was, for all practical purposes, *-kenol/kenul*. Example: *kolo.m_ay poy epkenul, elGwusikwo stwo nwokisini* 丸르매 빅 업거늘 얼우시고 쫓 노기시니 ‘as there was no boat on the river, it was made to freeze [so he could cross] and then caused to melt’ (1447 *Yongbi ōch’ ōn ka* 20).

-(o/u)l_ssoy, ‘as, because’ This complex form combined the prospective modifier *-(o/u)lq* with the postmodifier noun *so* ‘the fact that ...’ and the locative particle *oy* (here realized as *-y*). (On the orthography, see section 5.2.6, above.) The ending *-(o/u)l_ssoy* was used only in declarative sentences, while *-kwantoy* (discussed below) was used in interrogative sentences. Example: *polo.m_ay ani mwuyl_ssoy, koc tywokhwo yelum hanoni* 丸르매 아니 필씨 곳도코 여름 하느니 ‘because it does not move in the wind, its flowers are good and its fruit was plentiful’ (1447 *Yongbi ōch’ ōn ka* stanza 2).

-kwantoy ‘as, because’ The companion form to *-(o/u)l_ssoy*, *-kwantoy*, was also complex, incorporating the postmodifier noun *to* ‘the fact that ...’ and the locative particle *oy*. As mentioned above, *-kwantoy* was only used with questions. Example: *esten HHOYNG-NGWEN_ul cizusikwantoy, i SYANG_ol TUK_hosini.ngiskwo* 엇던 行願을 지스시관타 이 相을 得히시니잇고 ‘by performing what acts of compassion has he acquired this appearance?’ (1459 *Wōrin sōkpo* 21:18).

(3) Conditional endings The endings used to express meanings in the semantic range of ‘when’ or ‘if’ included *-(o/u)myen* and *-ton/tun*, as well as relatively rare forms such as *-(o/u)ntay* and *-(o/u)lantoy*.

-(o/u)myen ‘when, if’ The most common conditional ending was *-(o/u)myen*. Its usage was little different from that of its reflex in today’s language. Examples: *woyn nye.k_uy hon TYEM_ul teumyen, mos nwophum swoli_wo* 윈 녀기 흥 點덤을 더으면 뭇 노픈 소리오 ‘when one dot is added to the left [of a syllable], it is the highest sound’ (*Hunmin chōngūm ōnhae* 13b); *panol ani machisimyen, epi ato.l_i salosili.ngiska* 바늘 아니 마치시면 어비 아드리 사르시라잇가 ‘if he had not hit the needle, would father and son have survived?’ (1447 *Yongbi ōch’ ōn ka* stanza 52).

-ton/tun ‘when, if’ This conditional was used with the past (perfective) morphemes, *-ke-* and *-a/e-*; e.g., *hoketun* 헛거든, *hoyaton* 호야든. Examples: *poy kwolphoketun pap mekkwo ispuketun cowononila* 빅 골푼거든 밥 먹고 잇브거든 즈오느니라 ‘one eats food if he is hungry and sleeps if he is weary’ (1482 *Nammyōng-chip ōnhae* 1:10a); *azi [KWEN]_hoyaton [HYENG]_i kapha* 아시 勸호야든 ㅁ이 가과 ‘if the younger brother offers (liquor), the elder brother returns (the gesture)’ (1481 *Tusi ōnhae* 8:42b).

-(o/u)ntay ‘when, if’ This conditional ending also appeared with an affixed topic particle as *-ntayn* or *-nteyn*. These topicalized forms attached to perfective *-ke-* or retrospective *-te-*, creating the endings *-kentayn* and *-tenteyn*. Examples: *SYWU-ITALQ_i mwuluntay*, *TWOY-TAP_hwotoy*... 須達이 무른대 對答호되 ‘when Sudatta asked, [Sariputra] answered...’ (1447 *Sōkpo sangjōl* 6:35a); *THYEN-NYE_lul pwokentayn*, *nay kyeci.p_i_za nwun men MI-HHWUW kottwoswo.ngita* 天女를 보건덴 내 겨지비사 눈 먼 獼猴 곧도소이다 ‘when/if one sees an angel, my woman resembles a blind ape’ (1459 *Wōrin sōkpo* 7:12); *nazawotenteyn mwokswum kithuli.ngiska* 나사오던덴 목숨 기트리잇가 ‘if he had gone forth, would his life have been spared?’ (1447 *Yongbi ōch’ōn ka* stanza 51).

-(o/u)lantoy ‘when, if’ This ending meant something on the order of ‘if it’s a matter of ..., then ...’ Example: *CYENG-SYA cizulantoy*, *ilhwi.m_ul* ... “*KWO-TTWOK-NGWEN*”_ila hola 精舍 지스란디 일후믈 ... 孤獨園이라 하라 ‘if you should build a monastery, call it “The Garden of Loneliness”’ (1447 *Sōkpo sangjōl* 6:40a).

(4) Concessive endings The usual Middle Korean endings used to express concession were *-(o/u)na* and *-toy*. Less common were *-(o/u)ntol*, *-keniwa*, *-kenmalon*, *-(o/u)l spwuntyeng*, and *-(o/u)l syentyeng*.

-(o/u)na ‘but, although, or’ The ending *-(o/u)na* had essentially the same meaning and usage as its modern reflex. Example: *TEK simkwo.m_ol hona*, *natpi nekisya* 德 심고믈 하나 날비 녀기샤 ‘he instilled virtue, but deemed it insufficient’ (1459 *Wōrin sōkpo* 10:4a)

-toy ‘although’ The ending *-toy* always appeared together with the volitive *-wo/wu-*. In addition to marking a dependent clause with a concessive meaning (‘although ...’), *-(wo/wu)toy* was also used idiomatically with verbs of speaking (‘say,’ ‘ask,’ etc.) to introduce a quote (e.g., ‘saying as follows: ...’) Examples: *azoWwotoy nazawoni* 아스 보되 나사오니 ‘although he knew this, he advanced’ (1447 *Yongbi ōch’ōn ka* 51); *HHWA-SSYANG skuy mwutcowotoy*: 和尚의 問즈오되 ‘he asked the priests (as follows):’ (1467 *Moguja susimgyōl ōnhae* 7).

-(o/u)ntol ‘though, in spite of’ This ending was made up of the modifier *-(o/u)n* plus the postmodifier noun *to* ‘the fact that ...’ and the accusative

particle. Example: *wola hontol, wosili.ngiska* 오라 혼들 오시리잇가 ‘though told to come, [why] would he come?’ (1447 *Yongbi öch’ön ka* 69).

-keniwa ‘but, although’ This ending contained the perfective *-ke-*, the modifier *-(o/u)n*, the noun *i* ‘one,’ and the comitative particle *wa*. Example: *nyenu ilon sihwok swuypkeniwa kyecipi mos elyewuni* 너느 이른 시혹 쉽거니와 겨지비 못 어려우니 ‘other works are sometimes easy, but (the works of) women are the most difficult’ (1475 *Naehun* 1.2:16)

-kenmalon ‘but, although’ This ending also was built on the perfective *-ke-* and the modifier *-(o/u)n*; the identity of the postmodifier noun *mal* (plus topic particle), however, is uncertain. Example: *twu [HYWUYENG-TTYEY] skwoy hakenmalon, [YAK] i hanol kyeyGwuni* 두兄弟 죄 하건마론 藥이 하늘 계우니 ‘the two brothers’ plots were many, but poison could not overcome heaven’ (1447 *Yongbi öch’ön ka* stanza 90).

-(o/u)l spwuntyeng ‘but, although’ This ending consisted of the prospective modifier *-(o/u)lq* plus a postmodifier noun, *spwuntyeng* [*spwun* + ?]. Example: *CYE-TYEN ul ani ta nilulspwuntyeng, SSILQ_eyn ta way.stenila* 諸정天甸을 아니 다 니를썩던 實썩엔 다 왜져니라 ‘although they did not reach all the heavens, in reality they all came’ (1447 *Sökpo sangjöl* 13:7a).

-(o/u)l syentyeng ‘but, although’ This ending also consisted of the prospective modifier *-(o/u)lq* plus a postmodifier noun, *syentyeng*. Example: *wocik [CI-LAN] ulwo hoywo tywokhey holsyentyeng, estey kwuthuyye ci.p ul iGwus hoyya salla holiGwo* 오직 芝蘭으로 히여 도케 흘선던 엇데 구퉁여 지블이 웃흐야 살라 흐리오 ‘the iris and the orchid get along well together, but how can one force people to live together as neighbors?’ (1481 *Tusi önhæ* 20:29a).

(5) Purposive ending -(o/u)la The ending *-(o/u)la* ‘for the purpose of’ indicated the goal of an action. It was etymologically derived from the prospective modifier *-(o/u)lq* plus an otherwise obsolete locative particle **a* (which was attested in Old Korean). Example: *pilmekula wosini* 빌머그라 오시니 ‘he came in order to beg’ (1459 *Wörin sökpo* 1:5b).

(6) Intentive ending -lye The intentive, *-lye* ‘with the intention of,’ was used much as its reflex is today. In Middle Korean, it always occurred with the volitive *-wo/wu-*. Example: *MYWOW-PEP ul nilGwo lye hosinonka SSY-WUW-KUY lol hwolye hosinonka* 妙法을 닐오려 흐시논가 授記를 호려 흐시논가 ‘does he intend to explain Buddhist law, or does he intend to make prophecies?’ (1447 *Sökpo sangjöl* 13:25-26).

(7) Desiderative endings Several endings expressed desire or aspiration. These included *-kwocye*, *-acye*, *-kwatye*, *-kwatoyye*, and *-kuyskwo*.

-kwocye ‘want to, intend to’ This ending was the most commonly used desiderative in Middle Korean. It expressed the speaker’s desire for his own action; it contrasted with *-kwatye*, which the speaker used when he wanted a third party to act. Example: *spolli kakwocye NGWEN honwola* 썰리 가고저 願 ㅎ노라 ‘he wants to go quickly’ (1459 *Wörin sökpo* Introduction: 26b).

-acye ‘would like to, want to’ Though less used than *-kwocye*, *-acye* also expressed a speaker’s own desire to do something: *nay pwoacye honota* 내 보아져 ㅎ는다 ‘I would like to see him’ (1447 *Sökpo sangjöl* 6:14b).

-kwatye ‘want (others) to’ As mentioned above, *-kwatye* expressed a wish to have others act. Example: *QILQ-CHYEY CYWUNG-SOYNG i ta KAY-THWALQ ol TUK kwatye NGWEN honwo.ngita* 一切 衆生이 다 解脫을 得과더 願 ㅎ노이다 ‘we want all living things to receive salvation’ (1459 *Wörin sökpo* 21:8).

-kwatoyye ‘want (others) to’ Though less common, *-kwatoyye* had very much the same meaning and usage as *-kwatye*. Both expressed a desire for the action of others. Example: *QILQ-CHYEY CYWUNG-SOYNG i ta pesenakwatoyye NGWEN honwo.ngita* 一切 衆生이 다 버서나과디여 願 ㅎ노이다 ‘we want all living things to escape [from earthly travail]’ (1447 *Sökpo sangjöl* 11:3).

-kuyskwo, -keyskwo ‘wants to’ This ending marked the intended result of the action of the main verb, much as *-keykkum* does in Contemporary Korean. *salom mata swuWi ala, SAM-PWOW ay nazaka putkuyskwo polanwola* 사름마다 수비 아라 三寶에 나사가 븐긔고 브라노라 ‘(I) hope that every person understands it easily and puts his reliance in the Three Treasures’ (1447 *Sökpo sangjöl* Introduction: 6). After a verb-stem final *-l*, the ending *-keyskwo* appeared as *-Geyskwo* (-엿고). Example: *[MYEY-HHWOYK] hon kwotay nazaka alGeyskwo hosinila* 迷惑 ㅎ 고대 나사가 알엿고 ㅎ시니라 ‘he wanted (everybody) to proceed to the place of illusion and get enlightened’ (1461 *Nüngöm kyöng önhæ* 1:113a).

(8) Projective ending -tolwok The ending *-tolwok* ‘to the point where, until’ projected the limit of an action or state. In the fifteenth century it had already begun to appear as *-twolwok* as well, and in the sixteenth century that latter form displaced *-tolwok*. Example: *iGwus cis pu.l un pa.m i kiptolwok polk-aystwota* 이웃 짓 브른 바미 겁드록 볼갯도다 ‘the fire of the neighboring house was bright until deep into the night’ (1481 *Tusi önhæ* 7:6b).

(9) Increasing degree The Middle Korean form ancestral to Contemporary Korean *-(u)lq swulwok* ‘the more ... the more ...’ was *-(o/u)l[q] solwok*, but it is seldom found in the textual record. The ending more commonly used at that time to show increasing degree was *-tiGwos*.

-tiGwos ‘increasing with, the more ... the more ...’ Example: *TTWOW i khun palo.l i kothoya: tewuk tutiGwos tewuk kiphulila* 道 | 큰 바리리 곧 하야 더욱 드디웃 더욱 기프리라 ‘the Way is like a great sea: the farther one goes in, the deeper it is’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 49a).

-(o/u)l[q]_solwok ‘increasing with, the more ... the more ...’ Though rare, this ending did occur in the fifteenth century. Example: *sakwoynon ptu.t un nulkul_solwok stwo [CHIN]_hotwota* 사피는 뜨든 늘글수록 쏘 親호도다 ‘the meaning of associating [with people] becomes all the more intimate the older one gets’ (1481 *Tusi önhæ* 21:15).

(10) Sequence and alternation Two endings were used to indicate the rapid succession of two different actions: *-(o/u)la* and *-(o/u)nta mata*.

-(o/u)la ‘and then, whereupon’ Example: *pol kwuphila phyel ssozi_yey* 불 구피라 펼 쏘시에 ‘in the interval between bending and then straightening out one’s arm’ (1459 *Wörin sökpo* 21:4a). The ending also appeared with a suffixed emphatic *-k* as *-(o/u)lak*, and this emphatic form could be used twice to show alternating actions or conditions. Examples: *wolak kalak hokwo* 오락 가락 호고 ‘coming and going’ (1517 *Pönyök Pak T’ongsa* 1:39); *wololak nolilak hoyä* 오락락 누리락 하야 ‘rising and falling, fluctuating’ (1447 *Sökpo sangjöl* 11:13).

-(o/u)nta mata ‘as soon as, whereupon’ Example: *chetin mu.l un chetinta_mata ele* 처딘 뜨른 처딘다마다 어러 ‘the dripping water froze as soon as it dropped’ (1482 *Kümgang kyöng samga hae* 4:42). The meaning of this ending corresponds to Contemporary Korean *-ca_maca* ‘as soon as,’ and the forms, too, have similar origins, since both *mata* and *maca* were derived from the negative imperative verb *mal-*.

(11) Adverbative endings There were three adverbative endings in Middle Korean: *-i*, *-wo/wu*, and *-key/(koy/kuy)*. These forms were treated above, in the discussion of suffixes.

(12) Negational endings A number of endings were used together with a following negative expression or predicate. These included *-ti*, *-tol*, *-(o/u)ntwong*, *-tulan*, and *-tiWi*. All of these endings appear to have contained (at least etymologically) the postmodifier noun *to* ‘the fact that ...,’ with the noun attached directly to the stem (except for *-(o/u)ntwong*, which incorporated the modifier ending *-(o/un)*).

-ti Examples: *ati mwot_homye* 아디 못 하며 ‘cannot know’ (1447 *Sökpo sangjöl* 11:13), *ati elyeWun PEP* 아디 어려븐 法 ‘a law difficult to understand’ (1447 *Sökpo sangjöl* 13:40b).

-tol Examples: *PEP tuttol ani holila* 法 들들 아니 흐리라 ‘one will not obey the law’ (1459 *Wörin sökpo* 2:36b); *YAK_ul cwuenul, mektol sulhi nekini* 藥을 주어늘 먹들 슬히 너기니 ‘when we gave them medicine, they thought it unpleasant to take’ (1459 *Wörin sökpo* 17:20).

-(o/u)ntwong Example: *amwo tolasye wontwong mwolotesini* 아모드라셔 온동 모르더시니 ‘he did not know where they came from’ (1459 *Wörin sökpo* 2:25b).

-tulan Example: *ettulan mwotkwo* 언드란 묻고 ‘could not hold [the child]’ (1459 *Wörin sökpo* 10:24).

-tiWi ‘but, yet, even though, even if’ This ending was surely related to *-ti*, but the etymological source of the second syllable, *Wi*, is not clear. As has already been discussed, the ending had the form *-tiWi* (-디뵤) in the mid-fifteenth century, but shortly thereafter it came to be written variously as *-tiwuy* (-디위), *-tiwoy* (-디외), and *-tiwey* (-디웨); all were surely attempts to transcribe [tiwi]. Semantically, the ending had the effect of affirming more emphatically the stated fact occurring before the negative. Example: *ingey tun salo.m_on cwuktiWi nati mwot_hononila* 이에 든 사르믄 죽디뵤 나디 못흐느니라 ‘even when the person who is in this place dies, he will not be able to get out’ (1447 *Sökpo sangjöl* 24:14b).

Finite verb endings The verb endings that ended a sentence indicated whether it was declarative, imperative, propositive, promissory, interrogative, or exclamatory.

Declarative The declarative ending was *-ta*. But after various prefinal endings, including *-wo/wu-*, *-kwa-*, *-te-*, *-li-*, and *-ni-*, as well as the copula *i-*, *-ta* was replaced by *-la*. (As has already been noted, *-li-* and *-ni-* were composed of the modifier endings *-(o/u)lq* and *-(o/u)n* plus the copula, which explains the similar behavior.) Examples: *SYA-LI-PWULQ_ul SYWU-TTALQ_i cwochakala hosita* 舍利佛을 須達이 조차가라 흐시다 ‘he said for Sudatta to follow after Saraputra’ (1447 *Sökpo sangjöl* 6:22b); *nay poyhwanti panhoy namcuk hota* 내 비환디 반히 남즉흐다 ‘I studied for a little over half a year’ (1517 *Pönyök Nogölte* 1:11); *howoza nay CWON_hwola* 흐오사 내 尊호라 ‘alone I am holy’ (1459 *Wörin sökpo* 2:34b); *LWUW_nun tala.k_ila* 樓는 다라기라 ‘“LWUW” is a two-storied house’ (1447 *Sökpo sangjöl* 6:2b).

Imperative There were three imperative endings, *-(o/u)sywoy*, *-assy*, and *-(o/u)la*, and they were distinguished from each other by the level of deference. (The imperative endings are generally used in Korea as the names of the politeness levels in the honorific system: *hosywoy-chey* (흐쇼셔체)

‘the “*hosywo sye*” style,’ *hoyassye-chey* (호야씨체) ‘the “*hoyassye*” style,’ and *hola-chey* (호라체) ‘the “*hola*” style.’)

-(o/u)sywo sye Of the three imperative endings, *-(o/u)sywo sye* showed the greatest deference toward the listener. It was used in requests by a subordinate to a superior. Example: *nimkum ha alosywo sye* 님금하 아로쇼셔 ‘O King, please know this’ (1447 *Yongbi ŏch’ ŏn ka* 125).

-assye The ending *-assye*, also showed a degree of deference toward the listener, but the style was more relaxed than that of *-(o/u)sywo sye*. Example: *estyey pwutyeyla hononiska, ku ptu.t ul nilGessye* 엇테 부테라 호느닛가, 그 프들 닐어씨 ‘Why does one say “Buddha”? Tell the meaning of it!’ (1447 *Sŏkpo sangjŏl* 6:16–17).

-(o/u)la The form *-la* was the basic imperative ending – as is still the case today. In the modern standard language, it usually co-occurs with the infinitive *-ale*, and that was occasionally true in Middle Korean as well. Examples: *nyeys ptu.t ul kwothila* 넷 프들 고티라 ‘restore the old way of thinking!’ (1449 *Wŏrin ch’ ŏn’ gang chi kok* stanza 29); *il cyemuli hoya hemu.l i epsula hokwo* 일 저므리 호야 허므리 업스라 호고 ‘let there be no blunders from early morning till night, it says, and ...’ (1475 *Naehun* 1:84a); *SYA-LI-PWULQ a alala* 舍利佛아 아라라 ‘Saraputra, know this!’ (1447 *Sŏkpo sangjŏl* 13:60b).

In addition to the above direct imperatives, Middle Korean also had imperative constructions that took the form of requests. These request forms were also differentiated by level in the honorific system. They included *-kwola*, *-kwolye*, and *-kwo.ngita*; and *-cila* and *-ci.ngita*.

-kwola, -kwolye These three endings were used by the speaker to ask the listener to perform some action. The ending *-kwola* was used as a direct-style request; *-kwolye* was a more indirect request that showed a measure of deference toward the listener; and *-kwo.ngita* was a request on the highest level of deference – it belonged to the “*hosywo sye*” style. Examples: *PWU-CYWOK_on malsom puthye amolyey hokwola CHYENG_hol_ssi_’la* 付囑은 말쭙브터 아므레 호고라 請홀씨라 “‘*PWU-CYWOK*” means to put words [to someone] and request to do [something] some way’ (1447 *Sŏkpo sangjŏl* 6:46a); *nayza cwuketwo mutenkeniwa i atol_ol salokwola* 내사 주거도 브던커니와 이 아드를 사르고라 ‘it does not matter if I die, (but) please save my son’s life’ (1481 *Samgang haengsil to, Hyoja-to* 20); *nay aki wuy_hoya ete pwokwolye* 내 아기 위호야 어더 보고려 ‘please try to find (a daughter-in-law) for my son’ (1447 *Sŏkpo sangjŏl* 6:13b).

-cila and -ci.ngita These two endings were used when requesting facilitation of the speaker’s actions, needs, or desires, *-cila* directly and *-ci.ngita* with

deference. Both endings were always used together with one of the perfective morphemes, either *-ke-* or *-a/e-*. Examples: *SOYNG-SOYNG SYEY-SYEY ay kutis kasi towoyacila* 生生世世에 그덧 가지 드외야지라 ‘I want to become your wife’ (1459 *Wörin sökpo* 1:11b); *nay nikeci.ngita kasya* 내 니거지이다 가사 ‘I would like to go’ (1447 *Yongbi öch’ön ka* stanza 58).

Propositive Propositive sentences were invitations or suggestions to do something together with the speaker; i.e., ‘let’s ...’

-cye and -sa.ngita There were two propositive endings, plain *-cye* and deferential *-sa.ngita*. Examples: “*hontoy ka tutcye*” *hoyaton* 흥덕 가 듣저 햏야든 ‘and so he said, “Let us go together and listen”’ (1447 *Sökpo sangjöl* 19:6b); *CCYENG-THWO_ey hontoy ka nasa.ngita* 淨土에 흥덕 가 나사이다 ‘let us go together into the Pure Land and be born [there]’ (1459 *Wörin sökpo* 8:100).

Plain *-cye* was also sometimes used together with the imperative ending *-la*. Example: *wuli miche ka pwozoWa mozo.m_ol hwen_hi nekisikey hocyela* 우리 미쳐 가 보스바 막스물 훗히 너기시게 햏져라 ‘let us go there, see [him], and rejoice [at his holiness]’ (1459 *Wörin sökpo* 10:6a).

In the sixteenth century, *-cye* also began to appear as *-cya* (which later developed into the Contemporary Korean propositive, *-ca*). Examples: *pitan sa kacikwo kacya* 비단 사 가지고 가자 ‘let’s buy (some) silk and go’ (1517 *Pönyök No költae* 2:23); *ani culkiketun macya* 아니 즐기거든 마자 ‘if you don’t enjoy it, let’s not do it’ (1517 *Pönyök Pak T’ongsa* 1:74a).

Promissory Promissory sentences ended in *-ma*, an ending that always appeared together with the volitive *-wo/wu-*. Examples: *swon_ol maca mol pwonay machywoma* 소닐 마자 물 보내야 마쇼마 ‘welcoming the guest, (I) will send my horse to meet (him)’ (1481 *Tusi önhæ* 21:22); *nay ne_tolye nilGwoma* 내 너드려 닐오마 ‘I will tell you’ (1517 *Pönyök Pak T’ongsa* 1:32b).

Interrogative In Middle Korean, there were two types of questions: (1) yes-or-no questions asking for a choice, and (2) questions with a question word asking for an explanation. Yes-or-no questions took the ending *-ka*, while question-word questions took the ending *-kwo*.

-ka and -kwo When used as direct-style (“*hola*”-style) endings, both *-ka* and *-kwo* worked in two different ways. If the predicate was a nominal, they functioned as postpositions, attaching directly to the noun. If the predicate was a verb or adjective, they attached either to *-ni-* or to *-li-*. With *-ni-*, the combined shapes were *-nye* and *-nywo*; with *-li-*, the shapes were *-lye* and *-lywo*. Nominal examples: *i non SYANG_ka PPELQ_Ga* 이는 賞가 罰아 ‘is this reward or punishment?’ (1472 *Mongsan Hwasang pöbö yangnok önhæ* 53b); *i esten KWANG-MYENG_kwo* 이 엇던 光明고 ‘what kind of brightness

is this?’ (1459 *Wörin sökpo* 10:7). Verb and adjective examples: *hanye mwot hanye* 하녀 못 하녀 ‘is it great or not great?’ (1459 *Wörin sökpo* 17:48b); *etuy za silum epsun toy isnonywo* 어디사 시름 업슨 디 잇노뇨 ‘where is there a place without sorrow?’ (1459 *Wörin sökpo* 10:25); *isilye epsulye* 이시려 업스려 ‘does it exist or does it not exist?’ (1463 *Pöphwa kyöng önhae* 5:159a); *etuli kalywo* 어드리 가료 ‘where shall [I] go?’ (1447 *Sökpo sangjöl* 6:22a).

Polite questions The endings *-ka* and *-kwo* each had a polite equivalent (incorporating the polite marker *-ngi-*), *-ngiska* and *-ngiskwo*. Examples: *kasyam kyesia.m_ay wonol taloli.ngiska* 가삼 겨사매 오늘 다르리잇가 ‘by [the king] going or coming would it be different today?’ (1447 *Yongbi öch’ön ka* 26); [LYANG-HAN] [KWO-SSO] *_ay este honi.ngiskwo* 兩漢故事에 엇더 하니잇고 ‘how were they as far as the ancient matters of the Two Han are concerned?’ (1447 *Yongbi öch’ön ka* stanza 28).

However, the intermediate discourse style was different. In the so-called “*hoyassyë*” style (see the discussion of imperatives, above), both types of questions used the same ending, *-ska*. This convergence suggests that the distinction between the two types of questions was already beginning to break down in Late Middle Korean. In addition, though rare, examples of *-ka* used in (polite) question-word questions can be found in fifteenth-century texts. Example: *yesus hanol_i enuyza mos tywohoni.ngiska* 여섯 하늘리 어니사 못 도흐니잇가 ‘of the six heavens, which is the most fine?’ (1447 *Sökpo sangjöl* 6:35).

Other question forms Besides *-ka* and *-kwo*, there was yet another, rather peculiar interrogative ending in Middle Korean used only in case the subject of the question was the second-person pronoun *ne* ‘you.’ For this interrogative, a modifier ending, either *-(o/u)n* or *-(o/u)lq*, was attached directly to *-ta*, and this complex form was used for both yes-or-no questions and question-word questions. Examples: *ney kyecip kulye katenta* 네 겨집 그려 가던다 ‘did you go because you missed your wife?’ (1459 *Wörin sökpo* 7:10); *ney estyey anta* 네 엇데 안다 ‘how do you know?’ (1459 *Wörin sökpo* 23:74); *ney icey two nowoyya nom muyWun ptu.t_ul twullta* 네 이제도 노외야 님 피본 프들 돌따 ‘do you now also again have the intention to hate others?’ (1459 *Wörin sökpo* 2:64a); *ney culkye nay emi_lul hywoyang_holta* 네 즐겨 내 어미를 효양홀다 ‘will you gladly care for my mother?’ (1587 *Sohak önhae* 6:50).

Finally, a kind of rhetorical question was formed using *-i.ston*, *-i.stonye*, or *-i.stoni.ngiska*. Examples: *ati mwot_homyen SIK_i aniGeni.ston* 아디 못흐면 識이 아니어니쑤 ‘when one doesn’t understand it, can it be knowledge?!’ (1461 *Nüngöm kyöng önhae* 3:47b); *mwo.m_ays kwoki_latwo pinon salo.m_ol cwuliGeni homolmye nyenamom chyenlya.ngi.stonye* 모맷 고기라도 비는 사르물 주리어니 흐믈며 녀나믄 천라이쑤녀 ‘because I would even

give the begging man flesh of my body, how much more other goods?!' (1447 *Sōkpo sangjōl* 9:13a), *homolmye QA-LA-HAN KWA lol TUK_kuy hwom̄i.stoni.ngiska* ᄒ물며 阿羅漢果를 得기 호미썸니잇가 'how much more [will one do] to attain the level of the Arahan?!' (1447 *Sōkpo sangjōl* 19:4b).

Exclamatory In the fifteenth century the most common exclamatory ending was *-twota*. In the sixteenth century, that ending was replaced by *-kwona*, a form ancestral to Contemporary Korean *-kwuna*. Other endings used in exclamations included *-(o/u)ntyē* and *-(o/u)lssyē*.

-twota The ending *-twota* was made up of the emotive *-two-* plus the declarative ending *-ta*. Examples: *i kaksi_za nay etninwon mozo.m_ay mastwota* 이 각시사 내 얻니논 믋스매 맛도다 'precisely this bride is the one I wish to have!' (1447 *Sōkpo sangjōl* 6:14ab); *stwo molkon kolo.m_i nakunay silu.m_ul solwo.m_i istwota* 쏘 물곤 마르미 나그내 시르물 즈로미 잇도다 'And again, the clear river melts away the sorrows of the wanderer!' (1481 *Tusi ōnhae* 7:2a).

-kwona The earliest attestation of *-kwona* comes from Ch'oe Sejin's *Pōnyōk Pak T'ongsa*, which was written around 1517: *tywohon ke.s_ul mwolonontos hokwona* 도ᄒ 거술 모르논ᄒ ᄒ고나 '[the innkeeper] seems not to know a thing of quality!' (1:73a). Occurrences of the ending can also be found in Ch'oe's other language textbook, *Pōnyōk Nogōltae*.

-(o/u)ntyē and -(o/u)lssyē These endings can be etymologically analyzed as the modifier endings *-(o/u)n* and *-(o/u)lq* plus a postmodifier noun *to* or *so* and the copula. Examples: *sulphuta nyey-salo.m_oy ma.l_ol ati mwot_honwontyē* 슬프다 냇사르미 마를 아디 못ᄒ논ᄒ 'it is sad; one cannot understand the words of people of ancient times!' (1482 *Nammyōng-chip ōnhae* 2:30b); *nay atol_i etilssyē hosini* 내 아드리 어딜썸 ᄒ시니 '[the king] said, how wise is my son' (1459 *Wōrin sōkpo* 2:7a).

Beginning with the *Wōn'gak kyōng ōnhae* of 1465, the ending *-(o/u)lssyē* was consistently written as *-(o/u)lssyē*, without transcribing the reinforcement of *s*. This practice corresponds with the virtual disappearance of initial geminates from the textual record. (See section 5.2.1.3, above.) Example: *khulsyē MEN-PEP_i puthe piluswumiye* 클셔 萬法이 브터 비르수미여 'how great! all laws begin with this' (1465 *Wōn'gak kyōng ōnhae* Introduction: 31a).

5.5 Syntax

The syntactic structure of Middle Korean was much the same as that of the language today. Then, as now, the typical sentence ended in a verb, and that verb could be preceded by an unspecified number of nominal or adverbial

phrases. Oftentimes such phrases stood unmarked, in absolute position, their meanings and functions dependent upon context; other phrases were marked by postposed case particles or various “special particles.” Modifiers preceded modified. Ellipsis of elements understood from context, a process as common then as it is today, was generally preferred to pronominalization. Such typological features have characterized Korean at all its historically attested stages.

Nevertheless, though Korean syntax has been remarkably stable over time, people in the fifteenth century did not put their sentences together in exactly the same way that their descendants do today. Changes can be found in a number of specific structural details.

5.5.1 *Dependent clauses*

One of the most important syntactic differences between Middle Korean and later stages of the language can be found in the formation of dependent clauses. In Korean today, the subject of a dependent clause is normally marked with a nominal particle – just as it would be if it were an independent sentence. For example, the subject has the same form in both *Swutal_i sassta* ‘Sudatta bought [it]’ and *Swutal_i san kes ita* ‘it’s something Sudatta bought.’ In Middle Korean, however, the subject of a modifying clause was transformed into a genitive. Take the following passage, for example: *i TWONG-SAN_on SYWU-TTALQ_oy san ke.s iGwo* 이 東山은 須達의 산 거시오 ‘this garden hill is the one Sudatta bought, and ...’ (1447 *Sōkpo sangjōl* 6:39-40). Here, the genitive particle *oy* marked the subject of the dependent clause, so that the literal meaning of the passage was something like ‘this garden hill is Sudatta’s bought thing, and ...’ Here are additional examples: *nay_oy emi NGWUY_hoya PALQ_hwon KWANG-TTAY SSYEY-NGWEN_ol tulusywo sye* 내의 어미 爲하야 發혼 廣大誓願을 드르쇼셔 ‘hear the great vow that I have made for the sake of the mother’ (1459 *Wōrin sōkpo* 21:57); *HHWO-W_uy hoywon i.l_ila hoye nilotengita* 浩의 혼은 이리라 하여 니르더이다 ‘he said it was an act that *Hao* had done’ (1518 *Pōnyōk sohak* 9:46).

Subjects in nominalizations were also marked as genitives. Examples: *NGUY-KON_oy CHYENG-CCYENG_hwo.m_i ile_holssoy* 意根의 淸淨호미 이러홀썩 ‘because the purity of the spirit is thus’ (1447 *Sōkpo sangjōl* 19:25a); *nay_uy SSWUW-MYENG_TTYANG-NGWEN_nilGwo.m_ol tutkwo* 내의 壽命 長遠 닐오물 듣고 ‘listening to my preaching on the long life’ (1463 *Pōphwa kyōng ōnhae* 5:197a).

A secondary feature of these structures is that personal pronouns were doubly marked as genitives. For example, *nay* ‘my’ and *ney* ‘your’ appear as *nay_oy* and *ney_uy* in the above citations.

There was yet another, more curious treatment of subjects in dependent clauses. In the following examples, the subjects appear to be marked with the

accusative particle (*o/u*), as direct objects: *salo.m_oy i.l_ol tapwos wolmtos_hwo.m_ol sulnwoni* 사르미 이를 다붓 읍뎡호뎡 슬노니 ‘he is grieved that the affairs of men are like the [tangled] movement of mugwort, and so ...’ (1481 *Tusi ōnhae* 7:16a); *wocik stwong_ul tolmye pswu.m_ul maspwol ke.s_ila* 오직 쑥을 들며 뿌믈 맛볼 거시라 ‘(you) do taste only whether the dung is sweet or bitter’ (1518 *Pönyök sohak* 9:31).

5.5.2 Zero case marking

While unmarked subjects and objects are common enough in colloquial Korean today, the omission of nominative and accusative particles appears to have been even more frequent in the fifteenth century. In Middle Korean texts, unmarked subjects are particularly common before adjectives or intransitive verbs. Here are a few examples: *kwoc tywokhwo yelum hanoni* 꽃 도쿄 여름 하느니 ‘its flowers are good and the fruit is bountiful’ (1447 *Yongbi ōch’ōn ka* stanza 2); *pwuthye wosikenul pwozopkwo kwa_hozoWa* 부터 오시거늘 보습고 과호스바 ‘since the Buddha had come, he saw Him and praised Him’ (1447 *Sōkpo sangjöl* 24:7b); *kotok_homye pwuyywwum isnon kes_i* 마득하며 뷘음 잇는 것이 ‘the existence of waxing and waning’ (1482 *Kūmgang kyōng samga hae* 2:6b); [PPANG-SYWU] *honon toys pwu.ph_ey salom tonnili kuchuni* 防戍호는 뒷 부페 사름 든니리 그즈니 ‘at [the sound of] the drum of the border guard’s place, people stop moving around, and so ...’ (1481 *Tusi ōnhae* 8:36b). Unmarked accusatives were, if anything, still more common. Here are some examples: *QA-SYWU-LA_non al pska nanonila* 阿脩羅는 알 빠 나느니라 ‘breaking the egg, Asura was born’ (1447 *Sōkpo sangjöl* 13:10a); *say cwohon wos nipkwo [HYANG] pwuywukwo* 새 조흔 옷 닙고 좃 휘우고 ‘(you) put on new, clean clothes and burn incense and ...’ (1461 *Nūngōm kyōng ōnhae* 7:6a); *ku kyeci.p_i pap kacyetaka mekikwo* 그 겨지비 밥 가져다가 머기고 ‘the woman, taking the rice and then feeding it, ...’ (1459 *Wōrin sōkpo* 1:44a).

5.5.3 Comitative particles

In the Korean language today, the first of two nouns linked together in coordination is regularly followed by the comitative particle *wa/kwa*; e.g., *pap_kwa kimchi_lul mekessta* ‘I ate rice and kimchi.’ Occasionally both nouns are followed by the particle; e.g., *pap_kwa namul_kwa sekkese mekessta* ‘I ate rice mixed together with greens.’ In the fifteenth century, this kind of multiple use of the comitative particle was the norm, and the case marking that applied to the nouns was usually added after the last occurrence. For example, in the following passage the coordinated nouns function as the sentence subject, and so the second noun is followed by *wa* plus the nominative particle *i* (*way* 왜): *CHI-TTWUW_wa CYENG-CHI_way kolhoyyo.m_i*

isnoni 齒頭와 正齒왜 글히요미 잇느니 ‘[in the sounds of Chinese] dental spirants and “upright” dentals are distinguished’ (*Hunmin chŏngŭm ōnhae* 14b). Here is a much more complex example of multiple particle use: *pis_kwa swoli_wa HYANG_kwa mas_kwa mwo.m_ay pemkunun kes_kwa PEP_kwa_oy tywohomye kwucwu.m_ul alwo.m_i LYWUK-SIK_ini* 빛과 소리와 좃과 맛과 모매 범그는 것과 法과이 도하며 구주물 아로미 六識이니 ‘the perception of good and bad of light, sound, smell, taste, things that concern the body, and the law – these are the six senses’ (1447 *Sŏkpo sangjŏl* 13:38-39). And two more examples: *LYWUK-TTIN_kwa LYWUK-KON_kwa LYWUK-SIK_kwa lol mwotwoa* 六塵과 六根과 六識과를 모도아 ‘the six sensory worlds, the six sense organs and the six senses together’ (1447 *Sŏkpo sangjŏl* 13:39a); *pwuthye_wa cywung_kwas_kungey* 부터와 좃과그에 ‘to the Buddha and also to the monks’ (1447 *Sŏkpo sangjŏl* 13:22b).

In the fifteenth century, the last occurrence of the particle was occasionally omitted; e.g., *polom_kwa kwulwu.m_un* 바람과 구름 ‘wind and clouds’ (1481 *Tusi ōnhae* 20:53). But in writings from the early part of the sixteenth century many examples of the older, multiple-particle use could still be found. In the *Pŏnyŏk sohak* text of 1518 they are numerous; e.g., *CHYWUN_kwa CIN_kway* 椿과 津과 ‘[the brothers] Ch’un and Chin’ (9:74); *swul_wa cye_wa lol* 술와 저와를 ‘spoon and chopsticks’ (9:76); *KWO-SOM_kwa HHWANG-LYEN_kwa HHWUNG-TAM_kwa lol* 苦蔘과 黃蓮과 熊膽과를 ‘bitterroot, yellow lotus, and bear’s gall’ (9:106). However, it was precisely these examples that were all corrected in the *Sohak ōnhae* text of 1588: *CHYWUN_kwa CIN_i* 椿과 津이 (6:69); *swul_wa cye lol* 술와 저를 (6:76); *KWO-SOM_kwa HHWANG-LYEN_kwa HHWUNG-TAM_ol* 苦蔘과 黃蓮과 熊膽을 (6:99). Since the *Sohak ōnhae* is one of the earliest texts to show these historical facts clearly, we can surmise that the syntactic change took place toward the end of the Middle Korean period.

5.5.4 Other changes in particle use

In Middle Korean, the adjectives *kot_ho-* 같히- ‘be alike’ and *sso-* 쓰- ‘be worth (something)’ took complements with the nominative particle *i*. Examples: *pwuthyey POYK QUK SYEY-KAY_yey HWA-SIN_hoya KYWOW-HWA_hosya.m_i toli cumun kolo.m_ay pichwuywo.m_i kot_honila* 부테 百億 世界에 化身하야 教化하샤미 드리 즈른 마르매 비취요미 같히나라 ‘the Buddha taking on human form in a hundred thousand million worlds and edifying [the people] is like the shining of the moon on a thousand rivers’ (1459 *Wŏrin sŏkpo* 1:1a); *mal nanywo.m_i CYWUY_hon salo.m_i kot_homye hoceculwo.m_i SSWOK-CO_i kot_hoya* 말 내요미 醉흔 사르미 같히며 흐저즈로미 俗子 | 같히야 ‘speaking words is like a drunken man, and doing wrongful deeds is like a common man’ (1472 *Mongsan Hwasang pŏbŏ yangnok ōnhae* 47b); *ilhwum_nan tywohon wo.s_i piti CHYEN MEN_i ssomye* 일흔난

도흔 오시 비디 千萬이 쓰며 ‘well-known, good clothes are worth a thousand times ten thousand’ (1447 *Sökpo sangjöl* 13:22b).

Already in the fifteenth century, *kot_ho-* 겠ㅎ- ‘be alike’ was also occasionally used with the comitative particle *walkwa*. Examples: *SYEY-KAY_wa kot_hoya* 세계와 겠ㅎ야 ‘like the world’ (1447 *Sökpo sangjöl* 9:11b); *hanol_khwa kothwotoy* 하늘과 맛토티 ‘though it is like the heaven’ (1459 *Wörin sökpo* 1:14b). That pattern soon became dominant. For its part, *sso-* 쑈- ‘be worth (something)’ often took unmarked complements; e.g., *kap.s_i CHYEN MEN ssoniwa* 갑시 千萬 쑈니와 ‘the price is worth a thousand time ten thousand’ (1463 *Pöphwa kyöng önhæ* 1:82b).

The adjective *talo-* 다랏- ‘be different’ took complements with the locative particles *ay*, *aysye*, and *oykey*, as well as with the particle *twukwo* ‘than.’ Examples: *nalas mal.sso.m_i TYWUNG-KWUYK_ey talGa* 나라 말쑈미 中國에 달아 ‘[our] country’s language is different from [that of] China’ (*Hunmin chöngüm önhæ* 1a–b); *KANG-HHA_i homa swuykwu.ng_eysey talGwotoy* 江河 | 헝마 쉬구에서 달오디 ‘although a river is already different from a cesspool’ (1459 *Wörin sökpo* 18:46); *salo.m_oykey talGwon kwo.t_on* 사르미게 달온 고든 ‘the thing that is different from people’ (1467 *Moguja susimgyöl önhæ* 20); *pwontoys swoloy_twukwo talon ptut talon swoloy_lwo psumyen* 본딧 소리두고 다룬 뜯 다룬 소리로 쓰면 ‘if one uses a sound and meaning different than the original sound, ...’ (1527 *Hunmong chahoe* Introduction: 4b).

Later, in the Early Modern period, *talo-* 다랏- ‘be different’ was used with the comitative particle *walkwa*, but that usage could already be found in the 1447 *Yongbi öch’ön ka*: [*KWUN-YWONG*]_i nyey_wa talosya, ... [*CHI-CIN*]_i nom_kwa talosya 軍容이 네와 다랏샤, ... 置陣이 놉과 다랏샤 ‘the military formation was different from before, ... the battle array was different from others’ (stanza 51).

5.5.5 Nominalizer -ti

As was mentioned in the discussion of conjunctive endings, the ending *-ti* (ancestral to modern standard *-ci*) was used with a following predicate negated by *ani* ‘not’ or *mwot* ‘cannot.’ However, *-ti* was also used for nominalized complements governed by the adjective *elyeW-* ‘be difficult’ (which, of course, had negative semantic content). Example: *ati_elyeWun PEP* 아디 어려흔 法 ‘a law difficult to understand’ (1447 *Sökpo sangjöl* 13:40b). In addition, it was occasionally used with *sul_ho-* ‘hate to do’ and *pwuskuli-* ‘be ashamed to do.’ Example: *na-kati sul_ho.ya* 나가디 슬ㅎ야 ‘hate to go out’ (1481 *Samgang haengsil to Yöllö-to*:16a). There is also an occasional citation in the sixteenth-century literature in which *-ti* is used with *tywoh-* ‘be good’: *kocang pwoti tywohoni* ㅁ장 보디 도흔니 ‘they are a great joy to see’ (c. 1517 *Pönyök Pak T’ongsa* 1:5b). In all these constructions *-ti*

was later replaced by the nominalizer *-ki*; the change with *elyeW-* is attested in texts dating from the early seventeenth century.

5.5.6 Postmodifiers

Certain nominal structures occurred exclusively after modifiers and served purely syntactic functions in the Middle Korean grammar. Among the postmodifiers peculiar to Middle Korean were *ssi*, *ssol*, and *ssoy*, which were also written *si*, *sol*, and *soy*. (See the discussion of reinforcement and the *ss* spelling, above.) These forms were used after the prospective modifier *-(o/u)lq*, and consisted of the postmodifier noun *so* (소) ‘the fact/one that ...’ plus a case particle.

ssi The form *ssi* was principally used in definitions. Examples: *elkwul kocol ssi THYEY_’Gwo* 얼굴 ㅁ즐 씨 體오 ‘having a form is THYEY [= body]’ (1447 *Sōkpo sangjōl* 13:41a); *CIN_on taol ssi_la, ... CAN_on kilil ssi_la* 盡은 다을 씨라, ... 讚은 기릴 씨라 ‘CIN means to exhaust, ... CAN means to praise’ (1447 *Sōkpo sangjōl* Introduction: 2).

ssol Among various other uses, the form *ssol* was sometimes used idiomatically with the verb *nilo-* ‘tell, inform, report, explain, teach.’ Example: *PEP_ul epsiGwumye no.m ol epsiGwul ssol nilGwotoy CUNG-SSYANG-MAN_ila* 法을 업시우며 ㅁ플 업시울 쫄 닐오디 增上慢이라 ‘to scorn the law and to scorn others, one calls that arrogance’ (1463 *Pōphwa kyōng ōnhae* 1:172b).

ssoy Combined with the prospective modifier *-(o/u)lq*, *ssoy* served to indicate causation. Example: *polo.m ay ani mwuyl ssoy* ㅁ르매 아니 ㅁ릴 씨 ‘because it does not move in the wind’ (1447 *Yongbi ōch’ ōn ka* stanza 2).

A similar group of postmodifiers were used after either *-(o/u)n* or *-(o/u)lq*. This group included *ti*, *tol*, *tolwo*, and *toy*. Like *ssi*, *ssol*, and *ssoy*, these forms were also morphemically composed of a postmodifier noun plus a case particle, but in this case the base noun was *to* (토) ‘the fact/one that ...’ Notice that the vowel of the noun, /o/, elided before the nominative particle *i*.

ti Cognate with conjunctive ending *-ti* (which attached directly to stems), postmodifier *ti* functioned syntactically as a noun. Note that conjunctive ending *-ti* paired with a negative auxiliary, *ani* or *mwot*, while postmodifier *ti* occurred with the negative copula. Examples: *hoyni sise towoyywon ti animye, kemuni multulye moyngkolwon ti anila* 희니 시서 ㅁ외운 디 아니며 거므니 ㅁ드려 ㅁ링 ㅁ론 디 아니라 ‘something white is not something that becomes [that way] by washing, and something black is not something made by dyeing’ (1461 *Nūngōm kyōng ōnhae* 10:9a); *alwolq ti animye* 아롱 디 아니며 ‘it is not something one knows’ (1464 *Amit’a kyōng ōnhae* 14b).

tol This construction was cognate with the concessive ending *-(o/u)ntol* ‘though, in spite of,’ but in this form it was overtly a noun in the accusative case. Example: *hyen na.l_isin tol alli* 현 나리신 들 알리 ‘can one know how many days it was’ (1447 *Yongbi ōch’ōn ka* stanza 112).

tolwo The case marker for the noun was the instrumental. Examples: *esten tolwo* 었던 드로 ‘for what reason’ (1464 *Sōnjong yōngga chip ōnhae* 1:111), *kulen tolwo* 그런 드로 ‘for that reason’ (1463 *Pōphwa kyōng ōnhae* 4:32a).

toy This postmodifier incorporated the locative. Example: *meli kaskun toy twu nas twon iGwo* 머리 갓근 덕 두낫 돈이오 ‘in getting your hair cut it’s two coins, and ...’ (c. 1517 *Pōnyōk Pak T’ongsa* 1:52a)

5.5.7 Nominalization

The overwhelming majority of nominalizations in the fifteenth century were made with the substantive ending *-(o/u)m*. The ending *-ki*, the most widely used nominalizer in the language today, was as yet rare in the Middle Korean period.

However, the Middle Korean corpus contains traces of other, perhaps older, patterns of nominalization. As has already been mentioned in the discussion of final endings, the modifier endings *-(o/u)n* and *-(o/u)lq* were occasionally used as nominalizers. The noun *elGwun* 얼운 ‘adult’ was a frozen form derived with *-(wo/wu)n* from a verb *elu-* meaning ‘to marry.’ In the 1447 *Yongbi ōch’ōn ka* (10:13a), a personal name written in Chinese characters as 金小斤 was glossed in Hangul as 저근 (*cyekun*). (In the Chinese transcription, 小 was a semantic gloss for the native verb *cyek-* ‘little,’ and 斤 was to be read for its sound value, *kun*.) Thus, the man’s name was *Kim Cyekun* ‘Kim Little One’; his given name was a noun, a deverbal, derived from *cyek-* ‘little’ plus the ending *-(o/u)n*.

Most nominalizations with *-(o/u)n* and *-(o/u)lq* were found in relatively well-defined morphological environments. For one thing, the prospective modifier *-(o/u)lq* was used before negatives, especially the verb *eps-* ‘not be, not have, not exist’ and the negative copula *ani-* ‘is not.’²⁸ Examples: *taols epsuni* 다웁 업스니 ‘because there is no end’ (1463 *Pōphwa kyōng ōnhae*, 2:75b); *sulphuls epsi* 슬픔 업시 ‘without sorrow’ (1481 *Tusi ōnhae* 25:53a); *anils animye* 아녓 아니며 ‘it is not that it wasn’t’ (1496 *Yukcho pōppodan kyōng ōnhae* 1:47); *twulwu ani_hols ani hosina* 두루 아니훗 아니헿시나 ‘[he] will not do it universally’ (1482 *Kūmgang kyōng samga hae* 5:10). Uses of *-(o/u)n* as nominalizer can be found with inflectional endings and before postpositions: Examples: [NGWU] [ZYWUYEY] [CILQ-SSYENG]_ho.n_olwo [PANG-KWUYK]_i hay mwotona, ... [QWUY-HWA]

²⁸ Note that in all such cases the final consonant of *-(o/u)lq* was transcribed as *s* (ㅅ) instead of *q* (ㅍ).

[CIN-LYE] *hosi.n_olwo* [YE-MANG] *i ta mwotcoWona* 虞芮質成^호는^로 方國이 해 모든나, ... 威化振旅^호시^로 興望이 다 못즈^벌나 ‘because of the pacification of Wu and Rui lands of all directions came together in great numbers, ... with his victorious return from Wihwa the hopes of the many all came together [for him]’ (1447 *Yongbi ōch’ōn ka* 11); *kutuys hwon cwochwō hoyā* 그^딛 혼 조^초호야 ‘it follows what you have done’ (1447 *Sōkpo sangjōl* 6:8b). In the first example, it can be seen that the nominalizations with *-(o)u)n* are followed by the particle *olwo*; in the second, the unmarked nominalization is simply the object of the following verb. In Old Korean such examples appear to have been relatively common, but by the fifteenth century they had become much less widespread.

5.5.8 Nominal predicates

A salient characteristic of Middle Korean was the frequent occurrence of nominal predicates without a copula. In such sentences, nouns and nominalized predicates were followed directly by morphemes that normally functioned as inflectional endings. One particularly striking example of this kind of construction can be found in the formation of questions. Examples: *i esten* [KWANG-MYENG] *kwo* 이 엇^던 光明고 ‘what kind of light is it?’ (1459 *Wōrin sōkpo* 10.7b); *i non SYANG ka PPELQ Ga* 이^는 賞가 罰아 ‘is this reward or punishment?’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 53b); *TTYWOW-CYWU_non i esten MYEN-MWOK_kwo* 趙州^는 이 엇^던 面目고 ‘what kind of appearance does Zhaozhou have?’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 55b). In questions such as these, the interrogative endings were attached directly as postpositions to the nouns. And, though not nearly so common, nominalized predicates occasionally attached directly to the declarative ending *-ta*. Examples: *ilitolwok wunon_ta*, ... *musum nwol-Gay pulunon_ta* 이^리 드^록 우^는 다, ... 므^슴 놀^에 브^르는^다 ‘does (this young man) weep so much, ... what song do (you) sing’ (1459 *Wōrin sōkpo* 8:101). In these two examples, the constructions *wunon* ‘weeping’ and *pulunon* ‘singing’ were nominalizations. Of course, by the Middle Korean period most occurrences of *-ta* were with verbals and adjectivals, but, as we have seen, the traces of earlier nominal constructions could also still be found.

5.5.9 Chinese influences

The Middle Korean textual record shows Classical Chinese influence on Korean grammar. For example, the words *tamos* ‘in addition,’ *pse* ‘using,’ *hoyye* (or *hoyyekwom*) ‘letting, making, forcing,’ and *mis* ‘reaching’ were used as loan translations of the Classical Chinese grammatical elements 與 ‘with,’ 以 ‘by, with,’ 使 ‘causing,’ and 及 ‘and, or.’ Syntactic constructions

built around these and other calques were common in the Middle Korean corpus. Examples: *ne_wa tamos twu nulku.n_i towoyyasimyen* 너와 다못 두 늘그니 드외야시면 ‘together with you, it becomes two old people’ (1481 *Tusi ōnhae* 9:16, as a translation of 與子成二老); *CYENG-NGUM_ulwo pse kwot NGIN_hoya te PHEN-YEK_hoya sakinwoni* 正音으로 써 곧 因하야 翻譯하야 사기노니 ‘using the Correct Sounds one then readily translates and glosses’ (1447 *Sōkpo sangjōl* Introduction: 6, as a translation of 以正音就加譯解); *salom mata hoyGye swuWi nikye* 사람마다 히여 수비 니겨 ‘letting all people learn it easily’ (*Hunmin chōngŭm ōnhae* 3b); *kulGwel_kwa mit KWONG-PWOK_kwa* 글월과 민 公服과 ‘writing and official dress’ (1588 *Sohak ōnhae* 6:88).

5.5.10 Stylistic linking

Perhaps the most striking characteristic of Middle Korean writings was the almost complete absence of simple sentences. The style seen in the texts of that period was marked by a convoluted syntactic linking of a level of complexity not seen anywhere in Korean writing today. The impression Middle Korean texts give the modern reader is that the events and thoughts contained in each paragraph were generally linked into a single, unbroken string.

5.6 Vocabulary

5.6.1 Replacement and innovation

By the fifteenth century the Korean lexicon already contained a rich stock of words derived from Chinese sources. Many of these words were of course terms for cultural objects and concepts that had been imported from China. But, from very early on, there had also been a tendency to substitute ordinary Chinese nouns and verbs for native vocabulary, and over time many of the original Korean words had fallen into disuse or been forgotten. In turn, the Sinitic origins of some of the imports were also forgotten, and in Middle Korean texts such words were written like native words, in Hangul, instead of with Chinese characters. Examples: *syangnyey* ‘usual practice’ (written 상녀 instead of 常例), *chapan* ‘food, side dishes’ (차반 for 茶飯), *wuytwu* ‘the head, boss’ (위두, 爲頭), *yang* ‘appearance’ (양, 樣), *hoyngtyek* ‘achievements’ (형덕, 行蹟), *kwuy(s.kes)* ‘ghost, spirit’ (긋것 鬼). Through constant usage over the years, some meanings had also drifted. The word *kannan* (艱難) ‘hardships,’ for example, changed in both sound and meaning to *kanan* ‘poverty.’ The word *pwunpyel* ‘division, distinction’ (分別), also written in Hangul (분별), came to mean ‘worry.’ There were often differences between

popular and literary forms. Sino-Korean *cywungsoyng* (衆生) retained the meaning of ‘all living beings’ in certain literary contexts, but its colloquial meaning was ‘animal, beast.’ Moreover, toward the end of the fifteenth century, the pronunciation of the word changed to *cumsoyng*. Examples: *mwotin cywungsoyng* 모딘 중칭 ‘the cruel beast’ (1447 *Yongbi ōch’ ōn ka* 30); *won cumsoyng* 온 즈칭 ‘a hundred beasts’ (1482 *Nammyōng-chip ōnhae* 1:47b).

It is also important to remember that the vocabulary of Korean during this period was deeply influenced by the religion and philosophy of the time. Beginning at least in the Three Kingdoms period and extending through the Koryŏ, Buddhism had exerted a powerful influence on the vocabulary of the Korean language, for the most part through Classical Chinese forms. The word *cywungsoyng* ‘all living beings’ cited above was just one example. In the late Koryŏ, however, neo-Confucianism replaced Buddhism and older forms of Confucianism as the spiritual doctrine favored by the literati, and in the Chosŏn period the new philosophy grew rapidly in importance. Finally, toward the end of the Middle Korean period, Buddhism faded in importance as neo-Confucianism became the dominant intellectual influence on the peninsula. This tendency became even more pronounced in the centuries that followed in the Early Modern period.

Glimpses of this process of lexical displacement can be seen in the Late Middle Korean textual record. The native word *sywulwup* (슈릅) ‘umbrella,’ for example, is found in only one Hangul text, the *Hunmin chŏngŭm haerye* of 1446. The same word had also been recorded in earlier Chinese texts, the twelfth-century *Jilín lèishì* (as 聚笠), and the early fifteenth-century *Cháo-xiān-guǎn yìyǔ* (as 速路). But the 1527 *Hunmong chahoe* gives the word for ‘umbrella’ as Sino-Korean *wusan* (우산 雨傘). The *Hunmong chahoe* itself recorded the words for ‘hundred’ and ‘thousand’ as native *won* 온 and *cumun* 즈문. But these words, too, had disappeared by the end of the sixteenth century, judging by the entries in the 1576 dictionary *Sinjŭng yuhap*: 千 일천천 (*ilchyen chyen*) ‘[the character] 千 [means] “one thousand” [and is read] *chyen*’; 百 일백백 (*ilpoyk poyk*) ‘[the character] 百 [means] “one hundred” [and is read] *poyk*.’

There are discernible lexical differences between fifteenth-century texts and sixteenth-century texts, as in the latter century, vocabulary began to take on a somewhat more modern look. The native function word *hotaka* (혹다가) ‘if, in case’ was the usual term for this meaning in the fifteenth century, but it disappeared almost completely in the sixteenth, replaced in general usage by the Sinitic expression *manil_ey* (萬一 plus the locative particle). Fifteenth-century *pantoki* (반드기) ‘necessarily’ became sixteenth-century *pantosi* ~ *pantusi*. (The new form *pantosi* (반드시) had already made its appearance in 1481 *Tusi ōnhae*.) The form of the common verb *moyngkol-* (땡글-) ‘make’ was replaced by *moyntol-* ~ *montol-* (땡돌-, 문돌-).

Numerous lexical changes also took place during the sixteenth century itself. Some replacements of this kind can be readily documented by comparing the 1518 translation of the “Lesser Learning,” the *Pönyök sohak*, with the reedited, 1588 translation of the same text, the *Sohak önhæ*. For example, the *Pönyök sohak* contains the words and expressions *homa* ㅎ마 ‘already,’ *wuthuy* 우퇴 ‘skirt,’ *patolap-* 바드랍- ‘be dangerous,’ *pizwum* 비숨 ‘make-up,’ and *kwakolon noskwos* 콰마론 ㄴ곳 ‘unexpected facial expression.’ But all of these lexical items were corrected in the *Sohak önhæ* to the forms *imuy* 이미, *chima* 치마, [WUY-SI] *ho-* 危始 ㅎ-, *tancang* 단장, and *kupke_hon nospis* 굽거흔 ㄴ빗. Another word used in the *Pönyök sohak*, and which is also found in fifteenth-century texts, was *nyle_wo-* 녀러오- ‘(go and) come back.’ However, this compound verb cannot be found anywhere in the *Sohak önhæ*. Examples: [HWON-IN] *mwo tkoci_yey nyle_wase* 婚姻 ㄴ지예 녀러와서 ‘**come back** from the wedding party’ (1518 *Pönyök sohak* 10:17); [HWON-IN] *mwo tkoci_lwo_puthe twola_wa* 婚姻 ㄴ지로브터 도라와 ‘**come back** from the wedding party’ (1588 *Sohak önhæ* 6:115).

The *Sohak önhæ* shows other signs of lexical innovation as well. It is the earliest text, for example, in which the following usages of the Sino-Korean element *theye* (體) ‘body, style, substance, appearance’ can be found: *icey hwongmun syeyki theye_yes il_ila* 이제 흥문 세기 테엿 일이라 ‘nowadays it is something **like** erecting a red gate’ (6:61); *kempak_hon theye hokenul* 검박흔 테 ㅎ거늘 ‘because one does **as if** one were thrifty and artless’ (6:128); *ancum_ul khi theye_lwo malmye* 안즘을 키테로 말며 ‘one should not sit in the **form** of a winnow’ (3:9). The form *theye_lwo* in the last example (combining *theye* with the instrumental particle) later underwent the change *theye_lwo* > *thye_lwo* > *chye_lwo* on its way to becoming Contemporary Korean *chelem* ‘like, as, as if.’

The Sinitic character of the age is shown by the many loanwords taken directly from Chinese. Many of these words were collected together in the sixteenth-century colloquial Chinese textbooks, *Pönyök Pak T’ongsa* and *Pönyök Nogöltæ*, as well as in the 1527 Sino-Korean glossary, *Hunmong chahoe*. Examples: *thwukwu* 투구 (頭盔) ‘helmet,’ *pikya-(wos)* 비가(웃) (比甲) ‘a type of riding apparel,’ *tingco* 덩즈 (頂子) ‘peak, button on top of a hat,’ *hwusi* 후시 (護膝) ‘knee-length outerwear trousers (*sulkap*),’ *toyimi* 디미 (玳瑁) ‘tortoise shell,’ *nwo* 노 (羅) ‘gauze,’ *yachyeng* 야청 (鴉靑) ‘dark blue,’ *yathwulwo* 야투로 (鴨頭羅) ‘a shade of green,’ *swaco* 쇠즈 (刷子) ‘brush,’ *phili* 피리 (簫) ‘flute,’ *sathang* 사탕 (砂糖) ‘sugar,’ *chyenlyang* 천량 (錢糧) ‘pin money,’ *cinti* 진디 (真的) ‘real, really,’ *poychoy* 빅치 (白菜) ‘Chinese cabbage.’ Such loans can also be found in fifteenth-century texts. Examples: *thwung* 퉁 (銅) ‘brass, copper, bronze’ (1447 *Sökpö sangjöl* 6:28a); *kyaso* 가스 (家事) ‘assorted household vessels’ (1459 *Wörin sökpö* 23:74); *hwe* 휘 (靴) ‘wooden overshoes’ (1461 *Nüngöm kyöng önhæ* 6:96b).

Such words as these were not like the traditional Sino-Korean readings of Chinese characters. Since the words were apparently borrowed directly from spoken Chinese, they must have reflected something of the pronunciations and usages then current in northern China.

5.6.2 *Phonetic symbolism*

Vowel oppositions were used to make subtle connotational differences in a word's meaning. These oppositions were largely ones associated with vowel harmony, with contrasts formed by the *yin-yang* 'female-male' pairs. For example, both *choykchoyk_ho-* 칙칙ㅎ- and *chuykchuyk_ho-* चुकचुकㅎ- meant 'packed, dense, tight and close,' but *choykchoyk_ho-* seems to have symbolized smaller, tighter configurations than *chuykchuyk_ho-*. The adjective *pholo-* 푸르- 'blue, green' referred to a brighter, lighter color than *phulu-* 푸르- 'blue, green.' Other examples: *pwotolaW-* 보드랍- 'small and delicately soft,' *pwutuleW-* 부드럽- 'deep cushiony soft'; *twolyet_ho-* 도련ㅎ- 'small and round,' *twulyet_ho-* 두련ㅎ- 'large, looping round'; *atok_ho-* 아득ㅎ- 'dark and dim,' *etuk_ho-* 어득ㅎ- 'dark and gloomy.' These examples of phonetic symbolism were of course much like those still found in Contemporary Korean today. But there were also contrasts that have since disappeared or changed significantly. Examples: *hyak-* 학- 'small, tiny,' *hyek-* 혁- 'small, few, sparse,' *hywok-* 혹- 'fine, tiny, minute'; *pes-* 벗- 'remove (clothing), avoid,' *pas-* 밷- 'remove (clothing)'; *twolohhye-* 도르히려- 'turn, turn around,' *twuluhhye-* 두르히려- 'turn, turn over'; *nam-* 남- 'exceed, remain,' *nem-* 넘- 'exceed, cross over.' The meanings of such contrasting forms often drifted apart, creating lexical items linked only by etymology. For example, among the above word pairs, both *nam-* and *nem-* carried the basic meaning of 'exceed,' but already in the fifteenth century *nam-* was sometimes used in the sense of 'remain,' and *nem-* in the sense of 'cross over.' The two forms had already begun to separate semantically. During the Middle Korean period, the word pair *sal* 살 and *sel* 설 were both used as classifiers for counting age, even though *sel* had the additional meaning of 'new year.' Later, during the Early Modern period, the two words separated, *sal* becoming the exclusive counter for age, and *sel* to mean only 'new year.' Many other word pairs were already distinct lexical items in the fifteenth century. Examples: *kach* 갖 'leather, hide, skin,' *kech* 겹 'surface, exterior'; *hal-* 핏- 'slander,' *hel-* 핏- 'tear down, destroy'; *pulk-* 붉- 'red,' *polk-* 밝- 'bright'; *nulk-* 늙- '(a person) grows old, is old,' *nolk-* 늙- '(an object, clothing) grows old, wears out.'

In a similar way, consonants were also used in phonetic symbolism. Where reinforcement is used as a semantic intensifier in Korean today, we find orthographic *s*-clusters in Middle Korean. For example, *stwutuli-* 쑤드리- 'beat, hit, thrash' represented more intense pounding than *twutuli-* 두드리-

‘id.’ Examples: *TWAN-LYEN_on swoy twutulye nikil_ssi_la* 煨煉은 쇠 두드려 니길씨라 ‘tempering is hammering and forging iron’ (1461 *Nŭngŏm kyŏng ŏnhae* 7:18a); *stwutulye pos.a* 쑤드려 낫아 ‘shatter by beating’ (1466 *Kugŭppang ŏnhae* 1:42). A more intensive form of *kuzu-* 그스- ‘pull, drag’ was *skuzu-* 쥌스-; e.g., *skuzul ssi la* 쥌을 씨라 ‘it is dragging’ (1463 *Pŏphwa kyŏng ŏnhae* 7:91). Later, the intensive form *skuzu-* completely displaced *kuzu-*, which then disappeared from use.

5.6.3 Special polite vocabulary

The honorific system of Middle Korean included important lexical distinctions. For example, the existential verb *isi-* was paired with the honorific existential *kyesi-* 겨시-, as was *mek-* ‘eat’ with honorific *cwasi-* 좌시- (which became *casi-* 자시- in the sixteenth century). These distinctions, albeit in slightly different forms, have been preserved down to the present day. But a few polite words in Middle Korean were different from those found in the language today. In modern standard Korean, the honorific equivalent of *ca-* ‘sleep’ is *cwumusi-*, but that word did not exist in the fifteenth century. Instead, the verb *ca-* itself was made polite by adding the honorific suffix *-si-*. Example: *com casilq_cey* 줌 자심제 ‘when you sleep’ (1449 *Wŏrin ch’ŏn’gang chi kok* stanza 118). The polite equivalent of *pap* ‘rice’ today is *cinci*, and there is also the obsolescent word *mey* ‘rice offered to the gods or departed spirits; rice [in court usage].’ Neither of these words was attested in the fifteenth century. The earliest citations for *cinci* date from the latter part of the sixteenth century; e.g., [*WANG-KYEY*] *cinci_lul twolwo hosin hwu_ey_za* 王季 진지를 도로 흐신 후에사 ‘after Wang Ji had eaten rice again’ (1588 *Sohak ŏnhae* 4:12). The Middle Korean reflex for *mey* was *mwoy* 뵈, which is only found in late sixteenth-century texts; e.g., [*MWUN-WANG*] *i twu_pen mwoy casimye* 文王이 두번 뵈 자시며 ‘Wen Wang partook of rice twice, and ...’ (1588 *Sohak ŏnhae* 4:12).

To indicate polite style, there were a number of special polite verbs. Alongside plain *nilu-* ‘tell, relate, report,’ there were the humble verbs *solW-* 송- ‘report (to an honored person)’ and *yetcoW-* 연졸- ‘tell (a superior).’ The polite equivalent of plain *pwo-* ‘see’ was the passive *pwoy-* 뵈- (humbly) see, or, alternatively, the passive combined with the deferential suffix (*-zoW-*) as *pwoyzoW-* 뵈술-. The humble verb used alongside plain *cwu-* ‘give’ was *tuli-* 드리- (as it still is today); the humble equivalent of *pat-* ‘receive’ was the plain verb combined with the deferential suffix as *patcoW-* 받졸-. There was also plain *mwoy-* ‘go with’ and humble *mwoyzoW-* 뵈술- ‘accompany.’

The noun *malssom* 말춤 ‘speech, language’ (which in the sixteenth century had the form *malswom* 말춤) does not appear to have functioned as the humble or polite form of *mal* ‘speech, language.’ That is a distinction that surfaced in later centuries. Examples: *nalas malssom_i* 나라트 말쑤미 ‘the

country's language' (*Hunmin chōngŭm ōnhae* 1a); *syangnyeys malswo.m_ay* 상녃 말소매 'in daily speech' (c. 1517 *Pōnyōk Pak T'ongsa* 1:14).

Pronoun usage in Middle Korean was different from that of today. For one thing, there was then no equivalent of the polite first-person pronoun *ce*. One referred to oneself in the presence of superiors with the plain pronoun *na* 나 'I, me.' There was, however, a polite third-person pronoun, which was *cokya* 즈가, a word probably derived from Chinese 自家 'oneself' (pronounced *zìjiā* in modern Mandarin), since it was principally used as a reflexive with that meaning.

6 Early Modern Korean

What is referred to here as “Early Modern Korean” extended from the beginning of the seventeenth century down to the end of the nineteenth century. It is the stage of the language represented in the texts written after the end of the Middle Korean period but before writing practices were updated and rationalized to reflect contemporary speech around the turn of the twentieth century. Early Modern Korean was, in that sense, a transition stage between Middle Korean and Contemporary Korean.

The Early Modern period began after the Japanese invasion of Korea in 1592. That invasion, followed by the seven, horrific years of the Imjin Wars, followed in turn by more years of widespread famine and disease, exacted a terrible price on Korean society. No books were published during that time, and when publication did resume around fifteen years later, Korean writing had changed. Gone were the diacritic dots used to mark tones; the triangle symbol used to write *z* had disappeared; consonant clusters and other kinds of spellings were confused and inconsistent; grammatical patterns and styles were noticeably altered. The differences in the textual records were so great, in fact, it was long believed that the wars with the Japanese had caused people to change the way they talked. Even today one sometimes hears it said that Hideyoshi’s invasions caused Koreans to forget how to pronounce *z*’s or to distinguish tones.

That popular mythology notwithstanding, the abruptness of the break with Middle Korean is an illusion. The changes that came to light after the Imjin Wars had been well under way before the end of the sixteenth century, but they had remained largely masked by the writing system. During the Middle Korean period, writers and printers had adhered so closely to accepted orthographic standards, the texts they produced contain little evidence of the changes that were taking place in people’s speech. But once that orthographic tradition had been interrupted, writing was bound to be guided more by pronunciation and guesswork than memorized spellings. Without question, the wars and the years of social chaos that followed must have had an effect on the language that people spoke; but it affected far more the way they wrote.

What people wrote about was also different. In the Middle Korean period, publishing had been largely controlled and supervised by a royal and aristocratic elite, principally for pedagogical purposes or Buddhist proselytization. Now, after the Japanese and Manchu invasions had run their course, Korean society and culture became infused with a new spirit. On the one hand, what was written about was affected not only by the war experience, but also by new developments in commerce, handicrafts, and agriculture. The beginning of contact with Western civilization, at first principally through Ming China, bore heavily on these developments. It was a time of new technology and new literature. By the eighteenth century, the spirit of *Sirhak*, or “Practical Learning,” and popular interest in poetry and fiction gave rise to new literary forms and an outpouring of vernacular writing in Hangul. In general, the literary works of this period were perhaps still a little too dependent upon Sinitic vocabulary, but they also represented bold attempts to bring into Korean writing the ordinary words of everyday life.

Around the end of the sixteenth century, Korea had begun to be affected ever so slightly by Western culture. At first, this influence had made itself felt through religion, when Catholicism became known on the Korean peninsula, bringing with it a smattering of new knowledge about astronomy, geography, and other natural sciences. Then, in the Early Modern period, Koreans residing in China, some of whom converted to Catholicism, brought treatises on a variety of subjects with them back home, and it was generally in this indirect way that Koreans had contact with the West until the latter part of the nineteenth century. This circuitous route was not a very efficient method for importing new ideas and technology, and it led to a lot of guesswork and experimentation on Korean soil. Still, attenuated though it was, contact with the West began to influence Koreans’ awareness of the world around them and their language. It was a prelude to the frenetic Westernization of the present day.

6.1 Sources

The best source materials for Early Modern Korean are first editions of works written during that period. Reissues of earlier, Middle Korean texts are less useful, because they provide reliable information about Early Modern Korean only in the places where changes were made in the original text. But those works, too, have their value. For example, linguistically useful emendations can be found in the various Early Modern editions of the *Yongbi ŏch’ ŏn ka*. Originally published during the Middle Korean period in 1447, the *Yongbi* text was reissued in new editions in 1612, 1659, and 1765. In the 1612 edition, the original, Middle Korean forms *iptesini* 입더시니 ‘was confused, and

so ...' (stanza 19), *nyethwosikwo* 녀토시고 'was made shallow, and ...' (stanza 20), *cywungsoyng* 증칭 'beast' (stanza 30), *nwun_kot_tiningita* 눈곧더니이다 'it fell like snow' (stanza 50), and *hyekun* 혀근 'small' (stanza 82) were preserved intact, but in the 1659 edition, all of these forms were corrected to *eptesini* 엽더시니 'was not there, and so ...,' *yethwosikwo* 여토시고, *cumsoyng* 줌칭, *nwun_kotteningita* 눈 곧더니이다 ('it was like snow'), and *cyekun* 처근. Then, in the 1765 edition, *tetisina* 더디시나 'he threw it away, but...' (stanza 27) was altered to *titisina* 디디시나 ('he stepped on, but...'). Emendations like these reflect changes that had taken place in the language; they were evidently made either because the editors did not understand the original forms, or because they thought they were mistakes. The 1613 redaction of the 1527 *Hunmong chahoe* has an especially large number of such changes.

6.1.1 Seventeenth century

6.1.1.1 Sŏnjo (r. 1567–1608)

The reign of Sŏnjo, the fourteenth king of the Chosŏn dynasty, spanned the final years of the Middle Korean period, the wars with the Japanese, and the beginning of the Early Modern period. In the last year of his reign, 1608, the very first two Early Modern Korean works were published. These were both medical treatises compiled by Hŏ Chun at royal behest, the *Ōnhae tuch'ang chibyo* 諺解痘瘡集要, which was a Korean translation and redaction of Chinese prescriptions for smallpox, and the *Ōnhae t'aesan chibyo* 諺解胎產集要, a similar work on nursing infants and childbirth. Copies of both are preserved in the Kyujanggak Library of Seoul National University.

6.1.1.2 Kwanghaegun (r. 1608–23)

Hŏ Chun was also commissioned by Sŏnjo to produce an encyclopedia of Chinese herbal medicines, the *Tongŭi pogam* ('A Handbook of Eastern Medicine' 東醫寶鑑), but that work was not completed until 1610, two years after Sŏnjo's death. One of the finest medical compilations ever produced in Korea, the *Tongŭi pogam* was written in Classical Chinese, but the names of the plants and herbs were transcribed in Hangeul. A copy of the text is preserved in the Kyujanggak Library at Seoul National University.

Kwanghaegun, the monarch who succeeded Sŏnjo, made the reprinting of classical texts that had become hard to obtain after the Imjin Wars one of his principal domestic projects. Among the works he had reissued was the *Akhak kwebŏm* 樂學軌範 (1610), a compendium of classical musicology that had been originally published in 1493, but which was based on studies made during Sejong's reign; other reissued texts included the *Yongbi ōch'ŏn ka*



Figure 10. The *Tongguk sinsok samgang haengsil* to
 This early seventeenth-century didactic work contains illustrated stories
 of martyrs who had behaved virtuously during the wars with the Japanese,
 as well as other stories of great virtue from Korean history.

(1612) and the *Hunmong chahoe* (1613). Original works published during his reign include the *Yönbyōng chinam* ('A Guide to the Training of Troops' 練兵指南) (one volume, 1612) and the *Tongguk sinsok samgang haengsil* to 東國新續三綱行實圖 (eighteen volumes, 1617), a compilation commissioned by Kwanghaegun to document the virtuous deeds of Korean martyrs during the wars with the Japanese, as well as virtuous behavior by Korean historical figures. (The first of these two publications can be found in the Korean National Library; the second in the Kyujanggak Library.) Along with the medical treatises mentioned above, these works are the most important linguistic materials preserved from the early seventeenth century.

6.1.1.3 Injo (r. 1623–49)

Works completed during the reign of Injo include the *Karye ōnhae* 家禮諺解 (1632), a Korean explication of the Chinese neo-Confucian text, *Zhuzi jiali* 朱子家禮, as well as the *Hwap' o-sik ōnhae* ('A Vernacular Interpretation of Cannonry Methods' 火砲式諺解) (1635). First editions of these works are no longer extant, and the surviving copies (found in the Karam Library) are later reprints. A second edition of the *Tusi ōnhae* (the *Chunggan Tusi ōnhae*) was

also published during Injo's reign, in 1632. This edition is of particular interest because, according to the preface written by Chang Yu, it was put together in the southeast, in what is now Kyöngsang, and was therefore influenced by the dialect spoken there. Many copies of this text survive today. The *Kwönnnyöm yorok* 勸念要錄, published in 1637, was a collection of Buddhist fables, including "The Story of the Return of Master Wang's Soul." According to an inscription in this text, it was "printed in the Hwaöm Temple in the Kurye region," and thus also contains elements of Kyöngsang dialect. (A copy is preserved in the Ilsa Library.)

6.1.1.4 *Hyojong* (r. 1649–59)

Works published during the reign of Hyojong include the medical treatise *Pyögon sinbang* 辟瘟新方 (1653) and a neo-Confucian book of manners, the *Kyöngmin p'yön önhæ* 警民編諺解 (1656). There also appeared the first in a series of books with the title *Örok hæ* 語錄解. This series, the compilation of which is believed to have been begun by disciples of T'oegey Yi Hwang (1501–70), consisted of collections and exegeses of Chinese colloquialisms and slang expressions. One volume can be dated by a 1657 postface written by Chöng Yang; another, the redaction of which was supervised by Nam Isöng, was published with a postface by Song Chungil in 1669, during the reign of Hyojong's successor, Hyönjong (r. 1659–74).

6.1.1.5 *Sukchong* (r. 1674–1720)

A variety of translation guides were published during the reign of Sukchong, many of which are still extant. The *Nogöltæ önhæ* 老乞大諺解 (two volumes, 1670), *Pak T'ongsa önhæ* 朴通事諺解 (three volumes, 1677), and *Ch'öphae sinö* 捷解新語 (ten volumes, 1676) were popular language textbooks used in the Office of Interpreters. Note, in particular, that the *Nogöltæ önhæ* and the *Pak T'ongsa önhæ* were new works. Although influenced by Ch'oe Sejin's *Pönyök Nogöltæ* and *Pönyök Pak T'ongsa* (for example, they contain occurrences here and there of the obsolete letter for /z/, △), they were not later editions of those earlier, sixteenth-century works. The *Ch'öphae sinö* was a textbook of colloquial Japanese. The author, Kang Usöng, had been taken prisoner by the Japanese during the Imjin Wars and had subsequently spent ten years in Japan. After returning to Korea, Kang drafted the manuscript for this textbook around 1618, but over half a century passed before it was finally published. In any event, the *Ch'öphae sinö* is a source of unique information about spoken Japanese as well as about Korean. The *Yögö yuhæ* 譯語類解 (1690), a collection of Chinese words with Korean glosses, contains information about the makeup of the Korean lexicon in the

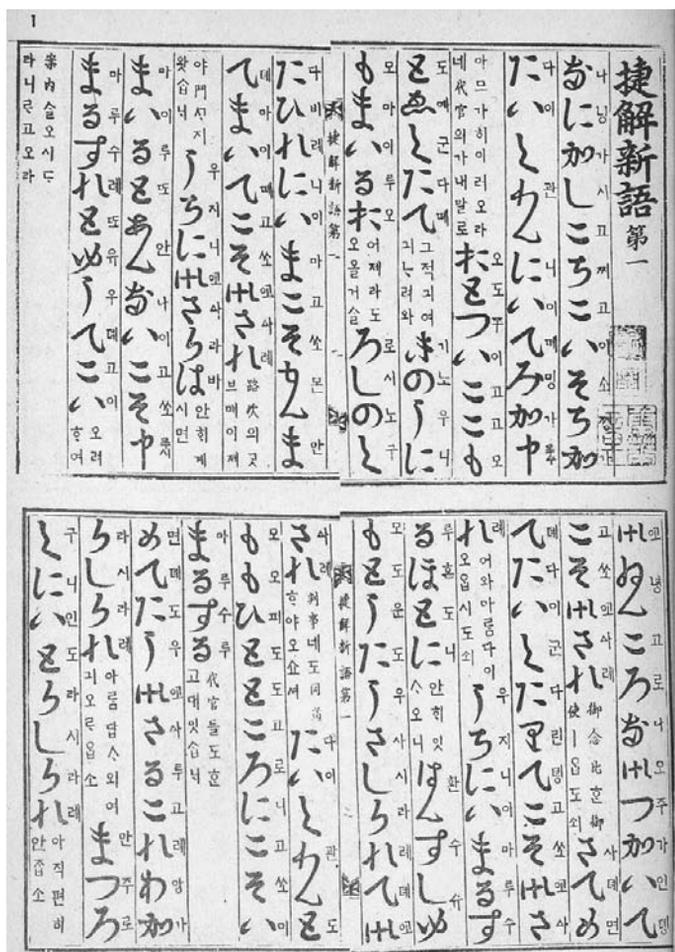


Figure 11. The Japanese-language textbook, *Ch'ōphae sinō*

This seventeenth-century publication is a highly idiosyncratic textbook of colloquial Japanese. As might be imagined, the text has been extensively studied by Japanese even more than by Koreans.

late seventeenth century. (A copy is preserved in the Kyujanggak Library.) The *Sinjōn chach'obang ōnhae* 新傳煮硝方諺解, which is a Korean exegesis of a Chinese manual for making gunpowder, was published in 1698. A copy of the first edition of this text is apparently not extant, but a reprint from the late eighteenth century is preserved in the Kyujanggak Library. There is no way to determine how or how much the later edition differs from the original,

however. The *Waeõ yuhae* 倭語類解 was another Japanese textbook. This text contains no clear indication of its publication date or authorship, but it is believed to have been written by a scholar named Hong Sunmyõng. Since it appears to have been compiled somewhat later than the *Yõgõ yuhae*, it can be placed in time around the beginning of the eighteenth century.

6.1.2 Eighteenth century

Most of the linguistic materials published during the reigns of Yõngjo (r. 1724–76) and Chõngjo (r. 1776–1800) can be divided into two genres, Korean exegeses of Chinese writings (*õnhæ*) and language textbooks. In addition to these two types of publications, however, important linguistic information can also be found in the texts of royal edicts.

6.1.2.1 *Õnhæ*

Many of the vernacular versions of Chinese texts were reissues or revised editions of earlier works. These included the *Samgang haengsil to* (1729), the *Iryun haengsil to* (1729), the *Kyõngmin p'yõn õnhæ* (1728), the *Õje naehun* (御製內訓, i.e., Queen Mother Insu Taebi's *Naehun*) (1736), and the *Oryun haengsil to* 五倫行實圖 (1797), a combined edition of the *Iryun haengsil to* and the *Samgang haengsil to*. However, the *õnhæ* of this period also consisted of original writings, including the *Õje sanghun õnhæ* 御製常訓諺解 (one volume, 1745), the *Ch'õnui sogam õnhæ* 闡義昭鑑諺解 (five volumes, 1755), the *Sipku saryak õnhæ* 十九史略諺解 (two volumes, 1772), the *Yõmbul pogwõn mun* 念佛普勸文 (one volume, 1776), the *Myõngürok õnhæ* 明義錄諺解 (three volumes, 1777), the *Sok Myõngürok õnhæ* 續明義錄諺解 (two volumes, 1778), the *Chahyul chõnch'ik* 字恤典則 (one volume, 1783), the *Muyedo pot'ongji õnhæ* 武藝圖譜通志諺解 (one volume, 1790), and the *Chõngsu muwõnnok õnhæ* 增修無冤錄諺解 (three volumes, 1792). All of these works can be found today in the Kyujanggak Library. Among them, the *Yõmbul pokwõn mun* is especially noteworthy because it was printed in the Haeinsa Temple in Kyõngsang Province and thus reflects elements of the dialect spoken there. The *Myõngürok õnhæ* is of special interest as well, because it bears features of the language spoken in the royal palace.

6.1.2.2 Language textbooks

For the study of Chinese, the Interpreters' School compiled the *Yõgõ yuhae po* 譯語類解補 (1775) as a supplement to the 1690 *Yõgõ yuhae*. For Japanese, there was the *Kaesu Ch'õphae sinõ* 改修捷解新語 (1781), a reworking of Kang Usõng's 1748 textbook.

In the eighteenth century, the School devoted special attention to the training of interpreters in Manchu and Mongolian, and it published a large number of works for these languages that were both extensive and of a consistently high quality. Some of these textbooks were revised versions of earlier works, some were new compilations; a great deal of energy was devoted to both. The Manchu texts *P'alsea* 八歲兒 (one volume), *Soaron* 小兒論 (one volume), *Samyök ch'onghae* 三譯總解 (ten volumes), and *Ch'öngö Nogöltae* 清語老乞大 (eight volumes) were all first published in 1704. Then, the revised edition of the last of these, *Ch'öngö Nogöltae sinsök* 清語老乞大新釋, was printed in 1765; the *Chunggan Samyök ch'onghae* 重刊三譯總解 appeared in 1774; and later that same year, 1774, the texts *Soaron* and *P'alsea* were also reissued. The only surviving copies of any of these Manchu texts are the second editions. (All are found in the British Museum; the *Ch'öngö Nogöltae* is missing in the Kyujanggak collection.) The *Tongmun yuhae* 同文類解, a Manchu glossary, was published in 1748. Then, around the last years of Yöngjo or the early years of Chöngjo, the last and greatest of the scholarly works on Manchu, the *Hanch'öng mun'gam* 漢清文鑑 (fifteen volumes), appeared. (Copies can be found today in the École des langues orientales in Paris and in the collection of Tokyo University.) This great dictionary of Chinese, Manchu, and Korean was based upon the Qing dynasty Chinese work, the *Zengding Qingwen jian* 增訂清文鑑.

Mongolian textbooks went through many revisions and printings. The *Mongö Nogöltae* 蒙語老乞大 (eight volumes), first published in 1741, was revised and expanded in new editions in 1766 and 1790. The *Ch'öphae Mongö* 捷解蒙語 (four volumes) was published in 1737 and republished in 1790. The *Mongö yuhae* 蒙語類解 (two volumes) appeared in two editions, in 1768 and 1790, and the *Mongö yuhae pop'yön* 蒙語類解補編 was appended to the second edition as an attachment. For all of these works, the only editions still extant are the last ones from 1790. (Copies are preserved in the Kyujanggak Library and elsewhere.)

In addition to these textbooks, several manuscript glossaries have survived. The *Pangön chipsök* 方言集釋, which was compiled by Hong Myöngbok and others in 1778, is a dictionary of five languages: Korean, Chinese, Manchu, Mongolian, and Japanese. (It is preserved in the Seoul National University collection.) The *Samhak yögö* 三學譯語, which is contained in the *Kogüm söngnim* 古今釋林 compiled by Yi Üibong in 1789, is a glossary of Japanese, Manchu, Mongolian, and Korean. It also is preserved in handwritten form (and is found in the Seoul National University collection). And as for Japanese, various versions of the work *Inö taebang* 隣語大方 are found in the Kyujanggak Library, Japan, and Russia. These Japanese materials appear to date from the late eighteenth (or the early nineteenth) century.

6.1.2.3 Royal edicts

Royal edicts, called *yunŭm* 綸音 ('silken sounds'), were written in Hangul to represent the words of the king to the people. More than twenty of these documents have been preserved from the reign of Chǒngjo.

6.1.3 Nineteenth century

Works of note from the nineteenth century include an expanded exegesis of a Ming Chinese military manual, the *Singan chŭngbo Samnyak chikhae* 新刊增補三略直解 (three volumes, 1805); an illustrated exegesis of a Southern Song Taoist writing, the *Taesang kamŭng p'yŏn tosŏl ōnhae* 太上感應篇圖說諺解 (1852); and a volume memorializing Ming soldiers who had died defending Korea during the wars with Japan, the *Kwansŏng chegun myŏngsŏng kyŏng ōnhae* 關聖帝君明聖經諺解 (1855). The *Mulmyŏng ko* 物名攷, which was compiled by Yu Hŭi during the reign of Sunjo (r. 1801–34), is preserved as a handwritten document. Its value for historical linguistics is the large number of terms for animals, plants, and minerals that it contains.

Sources from the latter half of the nineteenth century include the household guide *Kyuhap ch'ongsŏ* 閨閣叢書 (1869); an exegesis of a Chinese book of manners, the *Kyŏngsinnok ōnhae* 敬信錄諺解 (1880); a translation of a Chinese religious text, the *Kwahwa chonsin* 過化存神 (1880); the *Chogun-nyŏng chŏkchi* 竈君靈蹟誌 (1881); a royal edict denouncing Catholicism, the *Ch'ŏksa yunŭm* 斥邪綸音 (1881); and the undated Chinese lexicon, *Hwaŏ yuch'o* 華語類抄.

6.1.4 Literary works

As was mentioned at the beginning of this chapter, vernacular literature flourished during the Early Modern period, and a great number of literary works from that time have been preserved, including lyric poetry in both the *sijo* and *kasa* forms, novels, diaries, travel journals, and personal correspondence. Many of these writings are invaluable sources of linguistic information, particularly in the areas of syntax and discourse. However, this undeniable potential can often be frustratingly difficult to exploit. In an era before copyright protection, popular works were copied and recopied, altered freely and usually without precise dating. Much remains to be done in sorting out these philologically complex issues.

6.1.4.1 *Sijo*

One of the most important of these literary genres was that of *sijo* poetry, especially the long-form narrative *sijo* (辭說時調), which became a vehicle for realistic portrayals of love, life, and suffering. The two major collections

of *sijo* were the *Ch'ŏnggu yŏngŏn* 靑丘永言 ('Enduring Words from the Green Hills') compiled by Kim Ch'ŏnt'aek in 1728, and the *Haedong kayo* 海東歌謠 ('Songs from East of the Sea') compiled by Kim Sujang in 1763. Most of the poems in these two great anthologies originated in the Early Modern period, but many older compositions, by both known and unknown authors, were included as well.

6.1.4.2 Novels

The type of popular literature most representative of the time was the vernacular novel. Some of the writings in this genre, like *Kuun mong* ('A Nine Cloud Dream' 九雲夢, first composed around 1689), had aristocratic styles and themes. But most were stories written by people from lower social classes for a broader popular audience, with themes ranging from social criticism to morality tales and melodramatic love stories. Hŏ Kyun's *Hong Kiltong chŏn* ('The Tale of Hong Kiltong' 洪吉童傳), a story of a heroic fighter for social justice dating from around the second decade of the seventeenth century, is believed to have been the first of these vernacular novels. That popular work was soon followed by a variety of other novels, including *The Tale of Hŭngbu*, *The Tale of Sim Ch'ŏng*, *Imjin nok* ('The War with Japan' 壬辰錄), *Ongnu mong* ('Dream of the Jade Chamber' 玉樓夢), *The Tale of Sukhyang*, and the most famous and popular story of them all, *The Tale of Ch'unhyang*, a story of love transcending social class. A great number of these vernacular novels are preserved in handwritten copies, and, despite the sometimes greater age of the original compositions, most of the texts can be considered nineteenth-century materials. Some of the oldest date from the eighteenth century. Novels published in Seoul and Chŏnju date from the latter half of the nineteenth century; those from Chŏnju are of particular interest because they reflect elements of the local North Chŏlla dialect. *P'ansori*, a style of long narrative sung to an outdoor audience by a single professional performer, flourished in the Chŏlla region, and the narratives made popular there in the nineteenth century by master *p'ansori* artists such as Sin Chaehyo retained intact much of the phraseology and flavor of the Chŏnju novels.

6.1.4.3 Diaries

The literary genre referred to as "diaries" (일기) was not restricted to daily records of events. During the years 1829 to 1832, an official named Yi Hŭich'an was posted to the Hamhŭng region, and his wife wrote a series of Hangul essays about her experiences. These precisely dated essays, collected into what is known as the *Ŭiyu-dang ilgi* ('The Diary of Ŭiyu Hall' 意幽堂日記), contain clear accounts of travel, biographical sketches, and translations. (The diary is in the possession of the Karam Library.) The *Kyech'uk ilgi* ('A Diary of 1613' 癸丑日記) is a retrospective essay written by an anonymous court

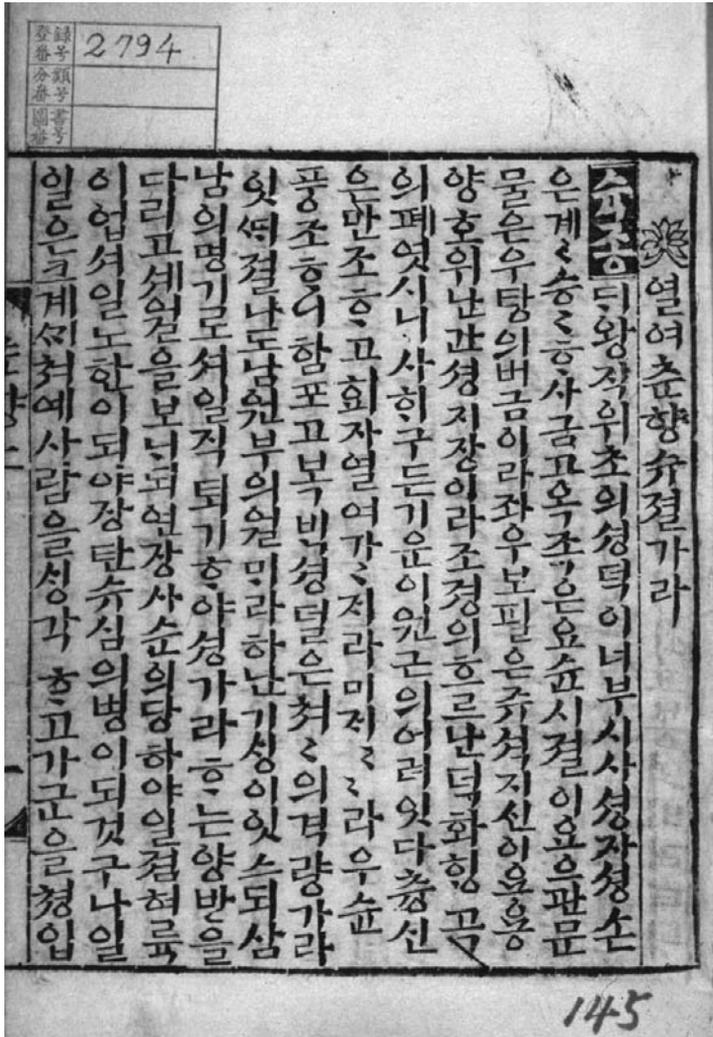


Figure 12. The “Tale of Ch’unhyang,” a story of love transcending social class. The vernacular novel *Ch’unhyang chŏn* is the most famous and popular story of the Early Modern period.

lady about the dramatic events surrounding Kwanghaegun’s murder of his young half-brother in 1613; and the *Sansŏng ilgi* (‘A Sansŏng Diary’ 山城日記) is an essay of similar origin about the flight of the royal court to the Sansŏng fortress during the Manchu invasion of 1636. Finally, there are the classic

memoirs together known as *Hanjungnok* ('Records Written in Idleness' 閑中錄). Written by the princess known only as Lady Hong of Hyegyŏng Palace, the memoirs describe the princess's life and family and, finally, the madness of her husband, Prince Sado, followed by his gruesome and tragic death in 1762 at the hands of his father, King Yŏngjo, who ordered his son into a rice chest, which was then sealed. Though the dating of these three works is somewhat uncertain, they all describe life in the royal palace and are sources of information about the specialized idiom used there.

6.1.4.4 Letters

The *Sinhan ch'ŏp* ('A Collection of Royal Letters' 宸翰帖) is a collection of personal correspondence written in Hangul to Princess Sukhwi by a succession of monarchs and their queens, from Hyojong to Sukjong. (The collection is in the possession of Kim Ilgŭn.)

6.1.5 Other sources

A number of Chinese-style riming dictionaries were produced during the Early Modern period, including Pak Sŏngwŏn's *Hwadong chŏngŭm t'ongsŏk un'go* 華東正音通釋韻考 (1747), Hong Kyehŭi's *Samun sŏnghwi* 三韻聲彙 (1751), and the *Kyujang chŏnun* 奎章全韻 (1796), a work compiled by royal command during Chŏngjo's reign. There were also numerous writings on the Chinese character system and the readings of characters that contain valuable information on Korean phonology and vocabulary; such works include Ch'oe Sŏkchŏng's *Kyŏngse chŏngun* 經世正韻 (1678), Sin Kyŏngjun's *Hunmin chŏngŭm unhae* 訓民正音韻解 (1750), Hwang Yunsŏk's *Ijae yugo* 頤齋遺藁 and *Iſu sinp'yŏn* 理藪新編 (both compiled during Yŏngjo's reign), Yu Hŭi's *Ŏnmunji* 諺文志 (1824), and Chŏng Yagyong's *Aŏn kakpi* 雅言覺非 (1819). (The *Kyŏngse chŏngun* is found in the Kawai Library of Kyoto University, and the *Hunmin chŏngŭm unhae* 訓民正音韻解 is kept in the Sungsil University library in Seoul.)

The collected writings of Yi Tŏngmu, known as the *Ch'ŏngjang-gwan chŏnsŏ* 靑莊館全書 (1795), and the *Oju yŏnmun changjŏn san'go* 五洲衍文長箋散稿, compiled by Yi Kyuyŏng during the reign of Hŏnjong (1827–49), are both encyclopedic works containing interesting observations about the Korean language and writing system.

The Early Modern period also saw the compilation of several reference works on *idu* writing. These include the *Naryŏ idu* 羅麗吏讀 contained in the aforementioned *Kogŭm sŏngnim* (1789), the *Chŏnnyul t'ongbo* 典律通補 compiled by Ku Hyŏnmyŏng during the latter part of the eighteenth century, and the *Yusŏ p'ilchi* 儒胥必知 of unknown authorship from around the same time.

6.2 Writing and orthography

The symbols and orthography found in texts published after the Imjin Wars were noticeably different from those seen in prewar texts. Korean orthography had been consistent and regular in the fifteenth century, and in the sixteenth century this consistency had broken down, but only gradually. After the Imjin Wars, however, the orthographic tradition was thrown into disarray. By this time, the language had changed so much it was difficult to follow the old orthographic rules, and the chaos of war precipitated a complete breakdown. Moreover, a regularized and unified new orthography was not created to replace the old system, and the chaotic situation continued throughout the seventeenth century. It became even worse in the eighteenth and nineteenth centuries, when the spread of writing through the emergence of popular literature added to the orthographic inconsistency.

After the Imjin Wars ended, three principal differences emerged in the orthography and set of symbols used to write Korean. The first was that tone marks completely disappeared. In the latter half of the sixteenth century, these diacritics had already begun to be neglected in some texts, but by the beginning of the seventeenth century, they ceased to be part of the orthography at all. The second change was that the letter “◊” (used to write /ng/) fell into disuse. In the sixteenth century, the letter had already been used only in syllable-final position, where even there it was sometimes replaced by the zero symbol, ○, without the large tick on top. After the Imjin Wars, in the seventeenth century, the letter ○ occasionally appeared in some writings, but not in contexts different from that of the zero symbol. The two letters were no longer distinguished. Just as is true in Contemporary Korean today, the phonological value assigned to the letter ◊ depended upon where it was written: in syllable-initial position, it was the zero symbol, and in syllable-final position, it represented /ng/. The third change was the disappearance of the letter △. This letter, which had been used to write /z/, had been preserved at least orthographically in spellings up through the end of the sixteenth century. But it fell into disuse in the seventeenth century. And though it is true that the symbol occasionally cropped up in some texts, such occurrences were usually confined to reprints or new editions patterned on Middle Korean texts, such as the *Tongguk sinsok samgang haengsil to* (1517), the *Chunggan Tusi ōnhae* (1632), or the *Nogŏltae ōnhae* (1670). Since the symbol for the glottal stop (◌◌) (as well as the bilabial fricative, ㅃ) had already fallen into disuse, these orthographic changes left a system in which twenty-five basic letters were used to write Korean.

The biggest changes in Korean orthography, however, were caused by the breakdown in standardization. Compared to what had preceded it, writing was highly irregular. In the Early Modern Korean period, writers were not constrained very much by spelling rules.

6.2.1 Initial clusters

Some of the worst confusion came in the spelling of initial clusters. In Middle Korean there had been three series of such clusters: (1) *sk-*, *st-*, *ss-*, *sp-*; (2) *pt-*, *ps-*, *pth-*; and (3) *psk-*, *pst-*. But in the seventeenth century, the orthographic distinctions between these clusters broke down. The spelling of words with an initial *psk-* or *pst-* became inconsistent. For one thing, a new orthographic cluster, *pk-*, emerged as an alternative way of writing *psk-*. As noted earlier, in Chapter 5, even in the earliest Hangul texts *sk-* had sometimes been substituted for *psk-*. Now, as a result of this new development, *psk-* clusters could be written either as *sk-* or *pk-*. Examples: *psketye* 꺾더 ‘collapsing’ (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 3:43), *sketinila* 쓰디나라 ‘collapsed’ (ibid. 4:29), *pketinila* 꺾디나라 ‘collapsed’ (ibid. 2:84); *pskulye* 꺾러 ‘wrapping’ (ibid., *Ch’ungsono* 1:46), *skuliGwokwo* 쓰리오고 ‘wrapped, and ...’ (ibid., *Hyojado* 8:8), *pkulye* 꺾러 ‘wrapping’ (ibid. 6:44). In a similar way, *pt-* was often written as a substitute for *pst-*. Examples: *pstay* 꺾 ‘occasion’ (1617 *Tongguk sinsok samgang haengsil to*, *Ch’ungsono* 1:78), *ptay* 꺾 ‘id.’ (ibid. *Hyojado* 1:33).

The distinction between *p*-clusters and *s*-clusters broke down, as *pt-* was confused with *st-*, and *ps-* was confused with *ss-*. Early examples of such spelling mistakes are found in the 1632 *Chunggan Tusi ōnhae*, where *ptut* 뜻 ‘meaning’ was recorded several times as *stut* 뜻 (3:49, 7:11, 7:24), but the confusion became more widespread in the latter half of the seventeenth century. Examples: *ptenasye* 떠나셔 ‘departing’ (1676 *Ch’ōphae sinŏ* 5:3), *stenasye* 써나셔 ‘id.’ (ibid. 5:11); *pswuk* 뺨, *sswuk* 쪽 ‘artemisia’ (1677 *Pak T’ongsa ōnhae* 1:35); *psukwo* 쓰고 ‘uses, and ...’ (ibid. 3:28), *ssum* 이 씌이 ‘using’ (ibid. 2:2). In the eighteenth century the confusion became still worse; by that time, the choice of which kind of cluster was used in spelling a word was essentially random.

Another Early Modern development was the reemergence of the geminate spellings *pp-*, *tt-*, *kk-*, *cc-*, and these were used as yet another alternative for transcribing consonant clusters. Examples: *spayye* 췌여 ‘withdrawing’ (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 3:9), *ppayye* 꺾여 ‘id.’ (ibid., *Yŏllyŏdo* 4:23); *spolli* 췌리 ‘quickly’ (1637 *Kwŏnnyŏm yorok* 6), *ppolli* 꺾리 ‘id.’ (1632 *Chunggan Tusi ōnhae* 4:15).

In the nineteenth century, the tendency toward randomness settled a bit, and these complex initial consonants began to be usually written as *s*-clusters: *sk-*, *st-*, *sp-*, and *sc-*. The lone exception was that /ss/ was also sometimes written as *ps-*.

Though rare, the seventeenth-century transcription *sh-* (ㅅㅎ-) deserves special mention. The earlier verb form *hhye-* ㅎ히- ‘pull,’ with a reinforced consonant, had been replaced by the form *hye-* ㅎ- in the 1465 *Wŏn’gak*

kyŏng ōnhae and written that way, with a plain consonant, until the end of the sixteenth century. But in the seventeenth century, ‘pull’ was written *shye-* 𪎗-, showing that the verb was in fact still pronounced with initial reinforcement. Examples: *hwa.l ol shye* 화를 𪎗 ‘drawing the bow’ (1617 *Tongguk sinsok samgang haengsil to*, *Yŏllyŏdo* 4:70), *PEP ol shye* 法을 𪎗 ‘citing the law’ (1656 *Kyŏngmin p’yŏn ōnhae*, Introduction 3), *na lol shye* 나를 𪎗 ‘pulling me’ (1612 *Yŏnbyŏng chinam* 9).

6.2.2 Terminal consonants

Transcription of the terminal consonants *-s* and *-t* became confused. In the fifteenth century, these two consonants had been consistently distinguished at the end of a syllable, but in the sixteenth century, particularly in its latter half, the distinction broke down. By the seventeenth century, the choice between the two spellings became essentially a random decision. Examples: *kwutkwo* 굳고 ‘harden, and ...’ (1608 *Ōnhae tuch’ang chibyo* 1:34), *kwusketun* 굳거둔 ‘when it’s hardened’ (ibid. 2:217); *mwutkwo* 묻고 ‘ask, and ...’ (1637 *Kwŏnnyŏm yorok* 3), *mwusti* 못디 ‘(not) ask’ (1676 *Ch’ŏphae sinŏ* 1:9); *mas* 맛 ‘taste’ (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 4:30), *mat* 만 ‘id.’ (ibid. 1:36); *mwos* 못 ‘pond’ (1637 *Kwŏnnyŏm yorok* 3), *mwot* 못 ‘id.’ (ibid. 30). In the eighteenth century, *-t* gradually ceased to be used as a terminal consonant as it was replaced in all cases by *-s*. There is even an example where *mite* ‘believing’ was written *mise* 밋어 (1777 *Myŏngŭirok ōnhae*). This spelling was an extreme case of overcorrection, because here, *t* occurred before a vowel and was surely realized as [d].

6.2.3 Medial spellings

The spellings *-ll-* and *-ln-* were interchangeable, so that *cinsil_lo* ‘truly’ was often written as *cinsil_no* 진실노, *pulle* ‘calling’ as *pulne* 불너, *hulle* ‘flowing’ as *hulne* 흘너, etc. In Middle Korean, all occurrences of these forms had been written with a medial *-ll-* and never with an *-ln-*. Another Early Modern oddity was that the transcription of reinforced and aspirated consonants in medial position often included an extra, redundant consonant. Here are a few examples: *kis.ske* 기써 ‘being made happy’ (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 6:27), *mwulup.ph_i* 무릅피 ‘knee [+ nominative particle *i*,]’ (1608 *Ōnhae tuch’ang chibyo* 1:35), *kwot.ch_ol* 곧출 ‘flower [+ accusative particle *ol*]’ (ibid. 2:49), *kwos.ch_ul* 곱출 ‘id.’ (1677 *Pak T’ongsa ōnhae* 2:43), *puk nyek.kh_uy* 북녁키 ‘the north side’ (1670 *Nogŏltae ōnhae* 1:15).

From spelling errors of this kind, we see that the orthographic standards of the Middle Korean period had not completely disappeared. They remained, rather, as a kind of ideal of which Early Modern scribes were aware but did

not control. Efforts by scribes to preserve, on the one hand, the traditional spellings and, on the other, to record how the words were actually pronounced resulted in the highly unsystematic orthography that characterized the Early Modern period. But what is also revealed in these Early Modern spellings is the kind of awareness writers had of their language's morphology. One thing that was especially clear was that a noun and a following particle were consistently regarded as forming an indivisible unit. Such constructions were thought of as single words, as even a superficial examination of the spellings in such works as *Pak T'ongsa ōnhae* or *Myōngŭirok ōnhae* will show. The spelling of noun phrases was one of the more revealing aspects of Early Modern orthography.

6.3 Phonology

Despite the sudden changes in Korean writing, the linguistic transition into the Early Modern period was not an especially abrupt one. The capital remained in Seoul, and since the de facto standard was still the speech of the aristocratic classes who lived there, the changes were, for the most part, ones already under way in the Middle Korean period.

On occasion, seventeenth-century spellings revealed aspects of the phonology that had been masked by the traditional orthography. One such spelling was *sh-* ㅅ-. In the earliest Hangeul texts, the verb stem *hhye-* ㅎㅛ- 'pull' had an initial transcribed with the geminate spelling *hh-* ㅎㅎ-, but beginning with the 1465 *Wōn'gak kyōng ōnhae*, that spelling had been replaced by a simple *h-* ㅎ-, making it appear as if the reinforcement had been lost. However, in seventeenth-century texts, the verb stem appeared in texts as *shye-* ㅅㅛ-, showing that the earlier, reinforced pronunciation had not disappeared but had, rather, been merely hidden by spelling convention. Then, beginning with the 1670 *Nogōltae ōnhae*, the stem came to be transcribed as *khye-* ㅋㅛ-: *yele mwosip_uy sal nakuney khyewola* 여러 모시브 살 나그네 꺾오라 'Draw travelers to buy some ramie cloth!' (2:53).

6.3.1 Consonants

The inventory of consonants in the seventeenth century differed from that of the fifteenth century in two ways. (1) First, it did not have a series of voiced fricatives, /W, z, G/, since *W* and *z* had disappeared during the Middle Korean period, and *G* soon thereafter. (2) Second, the series of reinforced consonants was now fully developed and included the affricate /cc/: /pp, tt, kk, cc, ss, hh/.

6.3.1.1 G (O)

The transcription of the voiced velar fricative *G* following the liquid /l/ was maintained into the sixteenth century, but in the latter half of the century

-lG- was replaced by *-ll-* in the spelling of verb inflections. In the seventeenth century, *-lG-* was often replaced by *-ll-* (or *-ln-*) in the transcription of nouns as well. For example, Middle Korean *nwolGay* 놀애 ‘song’ appeared as *nwolnay* 놀내 (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 6:27) and *nwollay* 놀래 (1676 *Ch’ŏphae sinŏ* 6:8, 9:6); *nwolGay* 몰애 ‘sand’ as *nwollay* 몰래 (1632 *Karye ŏnhae* 7:23; 1632 *Chunggan Tusi ŏnhae* 3:54, 6:25). The Middle Korean genitive form of the noun *nwolo* 노록 ‘deer’ was *nwol.G_oy*; in seventeenth-century texts, we see *nwol.l_uy kwoki* 놀릭 고기 ‘deer meat’ (1617 *Tongguk sinsok samgang haengsil to*, *Hyojado* 7:4), *nwol.l_oy kwoki* 놀릭 고기 ‘id.’ (1690 *Yŏgŏ yuhae* 1:50), and *nwol.l_oy saski* 놀릭 샷기 ‘deer offspring’ (ibid. 2:39).

However, in the seventeenth century there was also another development. In these same nouns, the *G* sometimes simply dropped, leaving the single liquid *l/* (which was presumably pronounced [r]). Examples: *nwolay* 노래 ‘song’ (1677 *Pak T’ongsa ŏnhae* 1:26), *nwolay* 모래 ‘sand’ (1632 *Karye ŏnhae* 7:24). For a while, both spellings, *-ll-* and *-l-*, coexisted, but by the eighteenth century the nouns were always written with a simple medial *-l-*. In other words, what had originally been *-lG-* clusters developed in two different directions. In verb forms, they consistently became *-ll-* (e.g., *wolGa* 올라 ‘goes up,’ > *wolla* 올라), and that is what they still are today. But in nouns the outcome was different. At first, *-ll-* and *-l-* coexisted, then, somewhat later, *-l-* became the dominant form (e.g., *nwolGay* 놀애 ‘song’ > *nwollay* 놀래 ~ *nwolay* 노래 > *nwolay* 노래).

6.3.1.2 Clusters and reinforcement

The development of initial clusters into reinforced consonants began in the Middle Korean period and is thought to have reached completion sometime in the middle of the seventeenth century. Textual evidence can be found in the fact that early seventeenth-century scribes confused the spellings of *psk-*, *sk-*, and *pk-*. In the 1632 *Chunggan Tusi ŏnhae*, *ptut* 뜻 ‘meaning, intent’ is often written as *stut* 쯤, and the clusters *pt-* and *ps-* are regularly confused with *st-* and *ss-* in texts from the latter half of the seventeenth century. Particularly revealing was the emergence of a new spelling, *sc-* ㅅㄷ-, which, if taken at face value, would have represented a cluster that had not existed in Middle Korean. This spelling is found regularly in the early eighteenth-century text *Waeŏ yuhae*; e.g., *scol* 쯤 ‘salty’ (1:48), *scak* 짝 ‘one of a pair’ (2:33). (In Middle Korean, these words had begun with *pc-*.) However, even earlier evidence for the change *pc-* > *cc-* comes from the 1676 *Ch’ŏphae sinŏ*, where the spelling *cc-* ㅅㅅ- itself can be found: *ku ccom_ol* 그 쯤을 ‘this interval’ (7:19). By around the middle of the seventeenth century, all such spellings represented reinforced consonants.

6.3.1.3 The spread of reinforcement and aspiration

In texts from the fifteenth and sixteenth centuries, there were already numerous examples of the sporadic reinforcement or aspiration of plain obstruents. But during the Early Modern period the phenomenon became far more common. The following examples of reinforcement are taken from the early part of the period: *ssut-* 쓸- ‘wipe away’ (< *sus-*) (1617 *Tongguk sinsok samgang haengsil to, Sinsok yöllyö to* 5:13), *stwu-* 쑤- ‘bore’ (< *tulp-*) (1677 *Pak T'ongsa önhæ* 1:14), *skwoc-* 쑤- ‘stick in’ (< *kwoc-*) (1690 *Yögö yuhae* 1:43). Such cases of reinforcement were not phonologically conditioned; they represented instead the use of reinforcement for its impressionistic value, as a kind of sound symbolism that made the word more emphatic. Other occurrences of reinforcement resulted from regressive assimilation. This process can be seen in the words *kwoskwoli* 꽃고리 ‘Korean nightingale,’ *koskos_ho-* ㄹ ㄹ ㅎ- ‘is clean,’ *tet.tet_ho-* ㄷ ㄷ ㅎ- ‘is fair,’ and *tostos_ho-* ㅌ ㅌ ㅎ- ‘is warm,’ which changed into their modern forms *kkwoykkwoli*, *kkaykkus_ha-*, *ttesttes_ha-*, and *tattus_ha-* around the beginning of the eighteenth century. Example: *stos.stos_hota* 쑤쑤하다 ‘is warm’ (1748 *Tongmun yuhae* 1:61).

The reinforcement of two Sino-Korean morphemes is particularly conspicuous and noteworthy. The Middle Korean readings of 雙 ‘double’ and 喫 ‘eat’ had been attested in the 1527 *Hunmong chahoe* as *swang* 쌍 and *kik* 喫. But by Early Modern times the two came to have reinforced initials. In the 1824 *Önmunji* we read: “In recent days in colloquial Korean, with the exception of the two characters 雙 *ssang* 쌍 and 喫 *kkik* 喫, no [characters] have ‘wholly muddy’ (全濁) pronunciations.” The early eighteenth-century textbook *Waeö yuhae* gives the character explication [SSANG] *ssang ssang* ‘double *ssang*’ 雙 쌍쌍 (2.33). Those two character readings were not the only ones that changed, however; the character 氏 also came to have a reinforced pronunciation. The 1637 *Kwönnyöm yorok* contains the entries [SWONG SSI] *swong ssi* 宋氏송씨 ‘the wife of Song’ (1) and [KWU SSI] *kwu ssi* 具氏구씨 ‘the wife of Ku’ (20), and the form *ssi* 씨 is also found in royal edicts from 1781 and 1783. And yet the pronunciation was apparently not always reinforced. And judging from the *Önmunji* passage about Sino-Korean, the character was apparently also still read *si* as late as the early nineteenth century.

Sporadic aspiration was somewhat less common, but still significant. Examples: *thas* 탓 ‘cause’ (< *tas*) (1676 *Ch'öphae sinö* 6:9, 9:7), *phwulmwu* 풀무 ‘bellows’ (< *pwulmwu*) (1677 *Pak T'ongsa önhæ* 3:29), *khwokhili* 코끼리 ‘elephant’ (< *kwokhili*) (1690 *Yögö yuhae* 2:33).

6.3.1.4 Palatalization

The most significant phonological change during the Early Modern period was palatalization. This process caused the dental consonants /t, th, tt/ to

change into the spirants /c, ch, cc/ when followed by *i* or *y*, and in some parts of Korea, the velar consonants /k, kh, kk/ underwent the change as well. These changes began quite early in the southern dialects and are believed to have spread north from there. In Seoul, only /t, th, tt/ palatalized, and then only very late. In the P'yŏngan dialects in the northwestern part of the peninsula, the consonants have still, to this day, remained unaffected by the process.

In his 1824 work *Ŏnmunji*, Yu Hŭi offered some interesting observations that shed light on the timing and progress of these changes:

In colloquial Korean, *tya* 다 and *tye* 더 are pronounced like *cya* 자 and *cye* 저, and *thya* 타 and *thye* 터 are pronounced like *chya* 차 and *chye* 처. This is nothing more than the relative difficulty or ease of pressing down the chin. These days only the people in the northwest do not pronounce the character *THYEN* (天) like *CHYEN* (千), or the character *TI* (地) like *CI* (至).

This passage clearly indicates that, by the early part of the nineteenth century, all of the country's dialects except those in the northwest had undergone palatalization. Yu Hŭi then goes on to say this:

Furthermore, I heard Master Chŏng say that his great-great grandfather had two brothers, one was named [in the earlier pronunciation] *TIHWA* (知和) and the other *CIHWA* (至和), and at that time he never had doubts about [the names]; it can be seen that the confusion of *ti* 디 and *ci* 지 was then still not old.

The elderly Mr. Chŏng that is mentioned in this passage was Chŏng Tongyu (1744–1808), a Hangul scholar and advocate and Yu Hŭi's teacher. And, if this interesting anecdote can be taken at face value, palatalization had still not taken place during the lifetime of Chŏng Tongyu's great-great grandfather (probably around the middle of the seventeenth century). Of course, the passage does not give a precise dating of the change; it only allows one to surmise that palatalization must have occurred during the latter half of the seventeenth, or in the eighteenth century. A precise dating of the change can only be established through the examination of textual materials.

The earliest extant attestations of palatalization appear to be those found in the early eighteenth-century Japanese textbook *Waeŏ yuhae*. Examples: *THA chi.l tha* 打 칠타 'the [Chinese character] *tha* [that means] "hit"' (1:30), *WA cisay* 瓦 지새 'tile *WA*' (1:32), *CO cilu.l co* 刺 지를즈 'pierce *co*' (1:54), *CHYWUL naychi.l chywul* 黜 내칠 출 'degrade *chywul*' (1:54), *YWONG ccihu.l ywong* 舂 찌흘 용 'mill *ywong*' (2:3), *CHYWOK ccilu.l chywok* 觸 찌를 촉 'stick *chywok*' (2:24), *LAK ci.l lak* 落 질락 'fall *lak*' (2:30). (The Middle Korean forms of these words had been *thi-* 'hit,' *tisay* 'tile,' *ti-* 'pierce,' *naythi-* 'degrade,' *tih-* > *stih-* 'mill,' *pstilu-* 'stick.')

Moreover, the 1748 Manchu glossary *Tongmun yuhae* confirms that the process of

palatalization was already complete by that time. Examples: *scis.tha* 찻타 ‘pound, crush’ (< *stih-* < *tih-*) (2:2), *scita* 찌다 ‘steam’ (< *pti-*) (1:59), *cik.hita* 직히다 ‘protect’ (< *tik.huyta*) (1:45), *kwocisik* 고지식 ‘simple and honest’ (< *kwotisik*) (1:21), *cwomchyelwo* 줌쳐로 ‘trifling’ (< *-thyelwo*) (2:57). From these attestations it can be seen that palatalization must have taken place some time around the turn of the eighteenth century.

As a result of palatalization, the consonant–vowel combinations /ti, tya, tye, tywo, tywu/ and /thi, thya, thye, thywo, thywu/ disappeared from the Korean phonological inventory. However, at the beginning of the nineteenth century /tuy, thuy, ttuy/ changed to /ti, thi, tti/, giving rise to those consonant–vowel sequences anew. Examples: *kyentuy-* > *kyenti-* ‘endure,’ *mwutuy-* > *mwuti-* ‘dull,’ *ttuy* (written *stuy* 썩) > *tti* (*sti* 띠) ‘belt.’

Palatalization must be understood as a broader phonological process than just these phonemic changes, however. First of all, a necessary precondition for them was a palatal pronunciation of the affricates /c, ch/, and in Middle Korean those consonants had been pronounced as dental affricates ([tʃ], [dʒ], etc.). The dental affricates must first have changed in pronunciation to palatals ([tʃ̟], [dʒ̟], etc.) before /i, y/ in order for the palatalization of /t, th, tt/ to have taken place. Moreover, at some point in the early Early Modern period the dental affricates became palatalized in all environments, resulting in the neutralization of the Middle Korean distinctions between /ca, ce, cwo, cwu/ (차, 저, 조, 주) and /cya, cye, cywo, cywu/ (차, 저, 죠, 쥬). The 1670 *Nogŏltae ōnhae* and the 1690 *Yŏgŏ yuhae* contain a large number of spellings showing that these distinctions had by that time become confused. Examples from the *Yŏgŏ yuhae*: *cyewul* 저울 ‘scales’ (< *cewul*) (2:16), *cecay* 저재 ‘market’ (< *cyecay*) (1:68), *cekun* 저근 ‘small’ (< *cyekun*) (1:35), *cywul* 줄 ‘string’ (< *cwul*) (2:17). Example from the *Nogŏltae ōnhae*: *chyang* 창 ‘boot soles’ (< *chang*) (2:48). Finally, palatalization is in fact a process that affected the pronunciation of a variety of consonants before /i, y/. For example, the consonants /s/ and /n/ have the palatal allophones [ʃ̟] and [ɲ̟] in that environment, and that was surely also the case in the Early Modern period.

6.3.1.5 Dropping of initial *n-*

Closely related to palatalization is the dropping of the consonant *n-* in word-initial position before /i, y/. The loss of this consonant apparently took place in the latter half of the eighteenth century, because it is in texts from that time that word-initial *ni-* 니 began to be written as *i-* 이. In the 1772 text *Sipku saryak ōnhae*, the word for ‘king’ is written *imkum* 임금 (< *nimkum*), and the spellings *il.um* 일음 ‘speaking’ (< *nilum*) and *iluhi* 이르히 ‘until arriving’ (< *niluhi*) can be found in royal edicts (*yunŏm*) of 1782 and 1783. In the nineteenth century, examples like these became the rule.

6.3.1.6 Other consonant changes

There are a few examples of the dropping of /l/ before the labial /ph/. The change is seen in Middle Korean forms such as *alph* 앞 ‘front,’ *alphi-* 알피- ‘hurt, ail,’ and *kwolpho-* 골프- ‘be hungry,’ which changed to *aph*, *aphu-*, and *kwophu-*. Examples: *a.ph_oy* 아피 ‘in front’ (1617 *Tongguk sinsok samgang haengsil to*, *Sinsok yöllyö to* 6:18), *ap.h_uy* 압희 ‘in front’ (1676 *Ch’öphae sinö* 5:23), *aphukey hota* 아프게 하다 ‘cause to hurt’ (1748 *Tongmun yuhae* 2:30), *poy kwopphuta* 피 곱프다 ‘be hungry’ (1748 *Tongmun yuhae* 2:28).

In a small number of Korean words, a nasal has unexpectedly developed before an affricate in intervocalic position. This nasal epenthesis is attested as early as the Middle Korean period; the fifteenth-century verb *kochwo-* ‘hide,’ for example, was written *komchwo-* in the sixteenth century. Example: *komchwota* 콤초다 (1569 *Ch’iltae manpö* 7; 1577 *Yaun chagyöng* 67). But other cases are found in Early Modern Korean and later. The verb *teti-* ‘throw,’ for example, became *teci-* in Early Modern Korean through palatalization; examples: *tecini* 더지니 (1704 *Samyök ch’onghae* 1:21), *tecye* 더쳐 (1778 *Sok Myöngüirok önhae* 1). Later, in Contemporary Korean (and today’s modern Seoul), the word became *tenci-*, with a nasal /n/ developing before the affricate. In the 1617 text, *Tongguk sinsok samgang haengsil to*, the verb *kuch-* ‘break off’ appears in its infinitive form as *kunche* 근쳐 (*Yöllyödo* 3.27), another clear case where a nasal has been inserted.

There were a number of idiosyncratic changes, one of which is seen in the word *tisay* ‘tile.’ In Korea, the traditional material out of which roofs are made is straw thatch, and in the fifteenth century, the word for such ‘grass’ or ‘straw’ was *say*. When tiles were first imported into Korea from China, *til* ‘earthenware’ was added in front of the word for ‘thatch’ as the name for this new roofing material. The /l/ in **tilsay* then elided, making *tisay* the word for ‘tile.’ This form endured well into Early Modern times, as is seen, for example, in the 1690 text *Yöggö yuhae*. In the eighteenth century, however, the word changed, appearing variously as *cisay*, *ciwa*, and *kiwa*. Examples: *cisay* 지새 (1748 *Tongmun yuhae* 1:36; 1776 *Hanch’öng mun’gam* 12:10); *ciwa* 지와 (1776 *Hanch’öng mun’gam* 13:16); *kiwa* 기와 (1778 *Sok Myöngüirok önhae* 1). The form *cisay* resulted of course from palatalization; in *ciwa* (and *kiwa*), the Sino-Korean morpheme *wa* (瓦) ‘tile’ has replaced the native morpheme *say*.

But the initial /k/ in *kiwa* requires a more circuitous explanation, since the change $t > c > k$ was not a regular one. Note, however, that the change of Middle Korean *cilsam* 짚삼 ‘weaving’ into *kilssam* 길쌈 was a parallel development, as was the change of Middle Korean *cich* 깃 ‘feathers’ into *kis* 깃. Middle Korean *cil_tul-* 짚들- ‘domesticate’ became *kil_tul-* 길들-. Moreover, Middle Korean *masti-* 맡디- ‘entrust’ did not change directly into Contemporary Korean *maski-* (phonemically /makki/ and spelled

morphophonemically as *mathki-* 말기-); rather, it passed through *masci-* 맞지- as an intermediate form. Example: *mascyē* 맞져 ‘entrusting’ (1777 *Myōngūirok ōnhae* 1:3). The Middle Korean word *timchoy* 덩치 ‘kimchi’ (a Sino-Korean form 沈菜 that replaced native *tihī*) was written *cimchoy* 짐척 or *cimchuy* 짐척 in some Early Modern texts, and *cimchi* is still the word for ‘kimchi’ in many southern dialects.

These word forms are believed to have been caused by hypercorrection, or overcompensation. In dialects spoken in Kyōngsang and Chōlla, palatalization and affrication affected not only dental stops as they did in the capital area; in those southern dialects, the process spread and also caused /ki/ to change to /ci/ (e.g., /kil/ ‘road’ > /cil/). But since such regional speech was lower in prestige relative to Seoul, there were widespread attempts to restore the “correct,” more prestigious velar stop pronunciation in such words, and a lot of mistakes were made. As a result, even standard Korean is left today with the hypercorrected forms *kiwa* ‘tile’ (for earlier *ciwa* 지와) and *kimchi* (for earlier *cimchuy* 짐척 < *timchoy* 덩척).

6.3.2 Vowels

6.3.2.1 The loss of /o/ (ㆍ)

In the Early Modern period, the greatest change in the vowel system occurred in the latter half of the eighteenth century, when the Middle Korean vowel /o/ was lost. The first stage in this loss had taken place in the sixteenth century, when the vowel merged with other vowels, usually /u/, in non-initial syllables. Its loss in initial syllables in the late eighteenth century completed the process.

The first documented example of the loss of /o/ in an initial syllable is found in one of the last texts published during the Middle Korean period, the 1588 *Sohak ōnhae*, where the word *holk* ‘earth’ appears as *hulk* 훌 (6:122). This same form *hulk* appears in a number of places in the early seventeenth-century text, the 1617 *Tongguk sinsok samgang haengsil to*, which also contains examples of the word *somay* ‘sleeve’ written as *swomay* 소매 (*Yōllyōdo* 4:14). However, the changes seen in both of these words are different from the regular change *o* > *a* that took place later, in the latter half of the eighteenth century. Rather, they belonged to the first stage of the vowel loss, in which /o/ merged with /u/ or /wo/ in non-initial syllables; perhaps these particular words appeared often enough in compounds or otherwise in structurally non-initial position to precipitate the changes. In the latter half of the seventeenth century, the forms *haya_poli-* 하야브리- and *hayya_poli-* 헤야브리 ‘tear down’ (< *hoya_poli-*) appeared in the 1677 *Pak T’ongsa ōnhae*, and *kaoy* 가악 ‘scissors’ (< *kozGay* 쫄애) appeared in the 1690 *Yōgō yuhae*. This small number of examples, however, is not sufficient

to substantiate that /o/ had been lost. In texts from the middle of the eighteenth century – in the *Tongmun yuhae* from 1748, for example – *kannahoy* ‘woman, girl’ was written *konnahoy* 근나희, but that word is the only addition to the list of forms in which the vowel had been lost by that time.

The *Hanch’ōng mun’gam* of 1776 is the oldest extant text preserving enough examples to establish definitively the loss of /o/ in initial syllables. In that text, spellings involving the vowel are thoroughly confused. The Sino-Korean word for ‘tomorrow’ (來年) is spelled both *laynyen* 래년 and *loynyen* 름년; ‘play (an instrument)’ is *thata* 타다 as well as *thota* 트다; ‘pull’ is *toloyta* 트릭다, *taluyta* 다릭다, and *taloyta* 다릭다. Moreover, there are numerous examples of words written with the vowel /a/ instead of /o/. Examples: *kalay* 가래 ‘wild walnut’ (< *kolay*), *talphayngi* 달팽이 ‘snail’ (< *tolphayngi*), *taloy* 다릭 ‘*Actinidia arguta*’ (< *tolay*). Somewhat later, in a royal edict (*yunūm*) of 1797, the spellings *kaca* 가자 ‘furnished, available’ (< *koca* [koc- + -a]) and *katatumnon* 가다듬논 ‘straightening up’ (< *kotatumnon*) also reveal the loss of the distinction. Examples such as these show clearly that the vowel /o/ ceased to be phonemically distinct around the middle of the eighteenth century. This second and last stage in the loss of the vowel can, for the most part, be formulated as the change /o/ > /a/.

These conclusions are substantiated by statements made by scholars who lived during that time. Sin Kyōngjun, who lived from the 1710s to the 1770s, wrote about the letter ㅛ in his 1750 work *Hunmin chōngūm unhae*. In a passage in which he also touched on the curious double letter ㅛㅛ (a symbol which he himself had created to represent *yo*), Sin wrote: “In our eastern region [i.e., Korea], ㅛ very often serves as a medial sound, while ㅛㅛ never does. However, in dialects, ‘eight’ is called *yotolp* ㅛㅛ, and there it is a syllable.” From this statement it is clear that Sin Kyōngjun was aware of the pronunciation associated with the letter ㅛ. Later in the period, Yu Hūi, who lived from the 1770s to the 1830s, wrote in his 1824 *Ōnmunji*: “The unrefined in Korea are not clear about ㅛ, often confusing it with ㅓ; for example, characters that have ㅛ like 兒 [*O*] and 事 [*SO*] are now in unrefined speech falsely pronounced like 阿 [*A*] and 些 [*SA*]. Or they confuse it with 一, as in *holk* ㅛ土 ‘earth,’ which is now read *hulk* ㅛ土.” These statements attest to and help date the loss of /o/. Nevertheless, even though the phoneme /o/ had been lost before the end of the eighteenth century in Korean speech, the letter ㅛ continued to be used until the rules of modern orthography were established in 1933.

6.3.2.2 Monophthongization

Through the loss of /o/, the first-syllable diphthong *oy* changed to *ay*. Some time after that, the diphthongs *ay* and *ey*, which had been pronounced [ay] and [əy], monophthongized to [ɛ] and [e]. Since *oy* behaved like *ay* and changed

to [ɛ] as well, the two must have merged before this monophthongization occurred. Monophthongization is thus thought to have taken place after the loss of /o/.

Philological evidence for monophthongization comes from cases of umlaut found in the 1855 *Kwansŏng chegun myŏngsŏng kyŏng ōnhae*. Examples: *oyk.kinon* 익기논 ‘sparing of’ (26) (< *aski-*), *toylikwo* 떡리고 ‘boils down’ (27) (< *toli-*), *meykin* 메긴 ‘feeding’ (28) (< *meki-*), *kitoylye* 기다려 ‘wait’ (30) (< *kitoli-*), *ciphoyngi* 지팡이 ‘cane’ (33) (< *ciphangi*), *soyk.ki* 쇠끼 ‘the young (of an animal)’ (33) (< *saski*). As can be seen in these examples, a second-syllable *i* caused the fronting of a first-syllable [a] to [ɛ] and a first-syllable [ə] to [e], changes believed to have taken place around the turn of the nineteenth century. This kind of umlaut could only have happened after the monophthongization of diphthongs. Therefore, the monophthongization of *ay* and *ey* must have occurred at the end of the eighteenth century.

The diphthongs *woy* and *wuy*, however, do not yet appear to have taken on their present-day values at that time. (In the modern standard, /woy/ is [wɛ] or [ö], and /wuy/ is [wi] or [ü].) In nineteenth-century texts, very few examples of those particular diphthongs were produced by umlaut.

6.3.2.3 The vowel system

These two important changes, the loss of /o/ and the monophthongization of /ay/ and /ey/, fundamentally altered the Korean vowel system. After they had taken place – that is, around the beginning of the nineteenth century – the Early Modern vowel system had eight monophthongs. The system was as follows:

ㅣ	i [i]	—	u [i]	⊥	wu [u]
ㄷ	ey [e]	ㄷ	e [ə]	⊥	wo [o]
ㅅ	ay [ɛ]	ㅅ	a [a]		

6.3.2.4 The erosion of vowel harmony

Before the advent of the Early Modern period, in the sixteenth century, the vowel *o* merged with *u* in non-initial syllables. This change had a great effect on the Middle Korean vowel harmony system, for even though *o* still contrasted with *u* in initial syllables, the contrast was neutralized in non-initial syllables. Thus, the vowel *u* became, at least in part, a neutral vowel in the system. The breakdown of Middle Korean vowel harmony resulted from the neutralization of its vowel harmony oppositions, and the neutralization of *u* in non-initial position was a decisive step in this process.

In the eighteenth century, the vowel /o/ merged with /a/ in initial syllables (the second, and final, stage in the loss of /o/). This change did not neutralize a vowel harmony opposition, since both /o/ and /a/ were *yang* vowels. However, it did change the system, because through the merger, /a/ incorporated

the oppositions previously associated with /o/. Thus, /a/ was not only paired with /e/ as before, it was now paired with /u/ as well.

Early Modern texts showed the change /wo/ > /wu/ in non-initial syllables with increasing frequency during the period. This development represented a serious erosion of vowel harmony between stems and endings.

6.3.2.5 Minor changes

In the Early Modern period there were a number of vowel changes that had little effect on the overall structure of the system. Here are three:

Reduction of other diphthongs In Middle Korean texts, there had been some occurrences of the word *pwulhwuy* ‘root’ in which the diphthong *wuy* was realized as *uy* (for example, the 1588 *Sohak ōnhae* contains the phrase *nomol spwulhuy* *늑물 쑤희* ‘herbal roots’). But the tendency to replace *wuy* with *uy* spread in the seventeenth century. Examples: *pwulhuy* *불희* ‘root’ (1690 *Yōgō yuhae* 1:33), *puy-* *띄* ‘empty’ (1677 *Pak T’ongsa ōnhae* 1:55) (< *pwuy-*), *puy-* *띄* ‘cut’ (1677 *Pak T’ongsa ōnhae* 1:48) (< *pwuy-*).

Somewhat later, *uy* was reduced to *i*. Examples: *muyp-* ‘is hateful’ > *mip-*, *pwulhuy* ‘root’ > *ppwuli*. (The change *tuy* > *ti* mentioned above was of course part of the process.) Just when this monophthongization occurred has not yet been established.

Labialization In Early Modern Korean, the vowel *u* labialized after a labial consonant (*m*, *p*, *ph*, or *pp*), and the distinction between /u/ and /wu/ was lost in that environment. In Middle Korean, *mul* *물* ‘water,’ for example, had stood in contrast with *mwul* *물* ‘group,’ but now that was no longer true. This change can be seen in the 1690 text *Yōgō yuhae*: *pwul* *불* ‘fire’ (2:18) (< *pul*), *mwu-comi_hota* *무즈미하다* ‘dive’ (2:22) (< *mu-comi_hota*), *pwusta* *붓다* ‘strain (wine)’ (1:59) (< *pusta* ‘pour’), *pwuthita* *부티다* ‘stick on’ (1:10), *mwutentha* *무던타* ‘is quite satisfactory’ (2:46) (< *muten_hota*). Such examples become the rule in eighteenth-century texts. An extremely large number of them are seen in the 1748 *Tongmun yuhae*; for example, *pwul* *불* ‘fire’ (1:63), *spwul* *쑤* ‘horn’ (2:38), *phwul* *풀* ‘grass’ (2:45), *nomwul* *늑물* ‘herbs’ (1:59) (< *nomul* < *nomol*), *pwulakta* *붉다* ‘is red’ (2:25). From these textual attestations it can be seen that labialization took place around the end of the seventeenth century.

Vowel fronting Nineteenth-century texts contain many words showing the change *u* > *i* following one of the spirants *s*, *c*, *ch*. Here are some examples from the 1855 *Kwansōng chegun myōngsōng kyōng ōnhae*: *tasilinon* *다시리*는 ‘governing’ (9), *cilkewun* *즐거운* ‘enjoyable’ (11), *chocini* *츠치니* ‘seeks and so...’ (18), *ancitwoy* *안지되* ‘even though (he) sits...’ (31),

icilecikwo 이지리지고 ‘wane, and ...’ (22). Notice that the standard Seoul forms of the words today (*tasulinun*, *culkewun*, *chacuni*, *ancutwoy*, *icilecikwo~iculecikwo*) do not generally reflect the change. Here is an exception, however: in the sixteenth century, the Middle Korean word *achom* 아침 ‘morning’ changed to *achum* 아츰. In the nineteenth century, the vowel was fronted in the presence of the spirant, and the word became *achim* 아침, which is the form of the word today.

6.3.3 *Suprasegmentals*

As has already been stated in [Chapter 5](#), Middle Korean tones were lost in the sixteenth century. Thus, Early Modern Korean was not a tone (or a pitch accent) language.

But syllables that had been marked as rising tones consisted of two moras, and the length of the syllable naturally persisted even after the loss of its distinctive pitch. Once the pitch distinction had been lost, the vowel length became distinctive. This vowel length was not transcribed in Middle Korean texts, but a transcriptional trace of it can be found in the case of the vowel *e*. The phonetic realization of the vowel was different depending on whether it was long or short, and this difference is reflected in some of the textual records from the nineteenth century. That is to say, a long /*ẽ*/ had a phonetic value close to that of /u/, a fact that is evident in the following transcriptions, for example: *skulici* 쓰리지 (< *skēli-*: 쓰리-) ‘avoid’ (1880 *Kwahwa chonsin* 8), *utulini* 으드리니 (< *ǔt-*: 연-) ‘acquire’ (1881 *Chogunnyōng chōkchi* 6).

6.4 Grammar

A cursory look at Early Modern texts of the seventeenth century reveals a language structure unlike that seen in Middle Korean texts of the fifteenth century. For the most part, the differences between the two are the result of changes that had taken place in the sixteenth century but which had been hidden from view by literary convention. Middle Korean scribes had adhered to stylistic standards, and when those standards were lost, changes suddenly emerged in the written record. And since no new standards were devised to replace the old ones, the differences in the written language became ever more severe in the eighteenth century, finally reflecting, by the nineteenth century, a language much the same as the contemporary standard language of today. These latter changes were ones that for the most part took place in the Early Modern period.

When the grammatical system of Early Modern Korean is compared to that of Middle Korean, the most striking characteristic is the tendency toward structural “simplification” – that is, a more streamlined system. As will be

discussed later, this tendency toward simplification is seen in almost every aspect of Early Modern grammar. This tendency actually began in the sixteenth century, but up until the beginning of the seventeenth century it could not escape the shadow cast by the old system. The written language kept it hidden. For this reason, it is undeniably difficult – though not completely impossible – to ascertain through the textual record which grammatical changes took place in the Early Modern period and not before.

6.4.1 Morphology

Verb stems could appear in isolation in Middle Korean, but that was no longer true in Early Modern Korean. As a result, such things as the use of verb stems as adverbs and the combining of verb stems directly into compounds were no longer productive processes in Early Modern Korean. Examples of such constructions are occasionally seen in Early Modern texts, but in every case those are fossilized Middle Korean structures. One interesting illustration of the change can be seen in the use of the form *kot* 근 ‘like, as.’ The earlier use of *kot* is seen, for instance, in the 1447 *Yongbi ōch’ōn ka* passage *hanols pye.l i nwun kot tini.gnita* 하늘벼리눈근디 니이다 ‘the stars in heaven fall like snow’ (50). But by the seventeenth century that usage had become incomprehensible, so in the 1657 reprint of the text the passage was corrected to read *nwun kotteni.ngita* 눈근더니이다 ‘[the stars in heaven] were like snow.’ In other words, what had been a separate verb (*tini.ngita* ‘fall’) in Middle Korean was changed into a verb ending for the verb stem *kot-*.

Except for a few minor differences, numerals remained relatively unchanged in Early Modern Korean. The cardinal numerals, as given in the eighteenth-century Manchu glossaries *Tongmun yuhae* (2.20–21) and *Hanch’ōng mun’gam* (4.25–27), were as follows: *honna* 혼나 ‘1,’ *twul* 둘 ‘2,’ *seys* 셋 ‘3,’ *neys* 넷 ‘4,’ *tasos* 다섯 ‘5,’ *yesos* 여섯 ‘6,’ *nilkwop* 널곱 ‘7,’ *yetolp* 여덟 ‘8,’ *ahwop* 아홉 ‘9,’ *yel* 열 ‘10,’ *sumul* 스물 ‘20,’ *syelhun* 열흔 ‘30,’ *mahun* 마흔 ‘40,’ *swuyn* 쉰 ‘50,’ *yesywun* 여순 ‘60,’ *nilhun* 널흔 ‘70,’ *yetun* 여든 ‘80,’ *ahun* 아흔 ‘90,’ *poyk* 백 ‘100,’ *chyen* 천 ‘1,000,’ *man* 만 ‘10,000.’ Of these numerals, *honna* 혼나 ‘1,’ *twul* 둘 ‘2,’ and *yel* 열 ‘10’ still had, in the seventeenth and eighteenth centuries, a morphophonemic final *-h* like that of the Middle Korean forms. There was one noteworthy change in Early Modern Korean: the Middle Korean higher numerals *won* 온 ‘100’ and *cumun* 즈믄 ‘1,000’ had by this time completely disappeared and had been replaced by Sino-Korean *poyk* 백 and *chyen* 천. In addition, among the ordinals, a new form *ches-cay* 첫재 ‘first’ made its appearance. (In the 1748 *Tongmun yuhae* the form was *ches-kes* 첫것.) This suffix *-cay* came to be uniformly used for ordinals; e.g., *twul-cay* 둘째 ‘second,’ *seys-cay* 셋째 ‘third.’

6.4.1.1 *Nominal suffixes*

The most common suffix used to derive nominals from verb stems was still *-(o/u)m*. However, its usage had changed. In Middle Korean, a distinction had been maintained between its use in deriving nouns and its use in nominalizing sentences. That is, in deriving nouns, *-(o/u)m* had been suffixed directly to the verb stem, while sentential nominalizations had incorporated the volitive *-wo/wu-* between the stem and the suffix. This distinction had been lost by Early Modern times. As a result, forms used in sentential nominalizations, such as *wulwum* ‘... crying’ and *wuzwum* ‘... laughing,’ no longer incorporated the volitive and became indistinguishable from derived nouns such as *wulum* ‘crying’ and *wuum* ‘laughing.’ The original, 1527 edition of the *Hunmong chahoe* contains the entry [MYENG] *wulwum myeng* 鳴 우름명 ‘[the character] 鳴 [that means] “cry” [and is read] *myeng*’ (3.8), but in the 1613 reprint the word was corrected to *wulum* 우름. The 1676 *Ch’ŏphae sinŏ*, for example, used *wuum* 우음 ‘... laughing’ (9.1.9.11) as the form of the verb when it served as the predicate in a nominalized sentence. However, the nominal *chwum* ‘dancing’ constituted an exception to this rule. In this case, it was not the nominalization that changed, but rather the stem of the verb. In Middle Korean the stem had been *chu-* ‘dance,’ but by Early Modern times it had become *chwu-*. Here are two example occurrences: *chwum chwuta* 춤추다 ‘dance a dance’ (1690 *Yŏgŏ yuhae* 1.60, ?1720 *Waeŏ yuhae* 1.42).

The nominalizing suffix *-i* became completely unproductive. The only occurrences in Early Modern Korean were fossilized Middle Korean forms; e.g., *mascwoi* 맞조이 ‘welcoming’ (1676 *Ch’ŏphae sinŏ* 5.18 < MK *ma.ccoWi* 마쯔비), *nwoli* 놀이 ‘playing’ (1670 *Nogŏltae ŏnhae* 2.48).

The related nominalizing suffix *-(o/u)y* had attached to adjectives, and nominals such as *khuy* 크 ‘size’ (< *khu-* ‘big’), *nwophoy* 노피 ‘height’ (*nwoph-* ‘high’), and *kiluy* 기리 ‘length’ (*kil-* 길- ‘long’) remained in use in the seventeenth and eighteenth centuries. Examples: *khuy* 크 (1748 *Tongmun yuhae* 1.18), *kiluy* 기리 (1690 *Yŏgŏ yuhae* 2.45). However, the reduction of the diphthong /uy/ to /i/ (as discussed above) caused these forms to change to *khi* 키, *nwophi* 노피, and *kili* 기리, and the result was that phonological contrasts were lost. Now the nominals were homophonous with the adverbs *khi* 키 ‘in a big way,’ *nwophi* 노피 ‘highly,’ *kili* 기리 ‘long, for a long time.’

There were two plural suffixes, *-tulh* -들 and *-ney* -네. These had developed from Middle Korean *-tolh* -들 ‘and others’ and *-nay* -내 ‘and other esteemed persons’ with much the same meaning and usage. However, Early Modern Korean *-ney* was no longer used as a marker of respect. Examples: [TOY-KWAN] *ney.skuy* 代官네씨 ‘to the substitute officials’ (1676 *Ch’ŏphae sinŏ* 1.9), [CHYEM-KWAN] *ney.skuy* 僉官들씨 ‘to the assembled officials’ (1676 *Ch’ŏphae sinŏ* 2.17).

6.4.1.2 Verbal suffixes

By Early Modern times, a few differences had emerged in the stems of causatives and passives. In Early Modern Korean, the suffixes *-hi-* -히- and *-wu-* -우- (which in Middle Korean had been *-Wo-* -웠-) were used to derive causative stems. The rare causative suffix *-o-*, which had already become unproductive in Middle Korean, had nevertheless been used at that time with the *l*-stem verbs *sal-* 살- ‘live’ and *il-* 일- ‘happen, rise’ to derive *salo-* 사르- ‘to save someone’s life, let live’ and *ilo-* 이르- ‘to erect a building or tower.’ But in Early Modern Korean, *ilo-* 이르- completely disappeared, and *salo-* 사르- was used only in the fossilized forms *salocap-* 사르잡- ‘take prisoner’ and *salocaphi-* 사르자피- ‘be taken prisoner.’ In the fifteenth century, the causative form of the verb *ho-* ‘do’ had been *hoy-* 히-. In the sixteenth century, we begin to see examples of this causative written as *hoi-* 호이-, and this latter form is the one that was passed down into the seventeenth century. Examples: *pyesol hoita* 벼슬 호이다 ‘place in a government post’ (1690 *Yōgō yuhae* 1.12, 1776 *Hanch’ōng mun’gam* 2.47), [*CWOY*] *lol ta myen hoikwo* 罪를 다 면호이고 ‘have all crimes absolved’ (1704 *P’alsea* 11). This second passive form, *hoi-*, was itself replaced by *siki-* 시기- in the latter part of the Early Modern period. Examples: *il sik.ita* 일식이다 ‘give (someone) work (to do)’ (1776 *Hanch’ōng mun’gam* 2.61), [*POY-PAN*] *sikita* 排班시기다 ‘had put in order’ (1776 *Hanch’ōng mun’gam* 3.15).

The suffix *-i-* in some Middle Korean passive stems was replaced in Early Modern Korean by *-hi-*. For example, the Middle Korean passive of *polW-* 밟- ‘tread’ was *pol.i-* 불이- (< *polWi-* 불비-), but in Early Modern Korean this passive became *polphi-* 불피-. Examples: *polp.phye* 밟피 ‘stepped on’ (1677 *Pak T’ongsa ōnhae* 3.2), *polp.phita* 밟피다 (1748 *Tongmun yuhae* 1.26).

6.4.1.3 Adjectival suffixes

The Middle Korean suffixes *-loW/loWoy-* -를/르웁- and *-toW/toWoy-* -뵘/드뵘- had been used to derive adjectives from nouns. These continued into the Early Modern period, but the forms had changed to *-lwoW-* and *-twoy-*. Examples: *phyeylwopti* 꽤롭디 ‘bothersome’ (< SK *phyey* 弊 ‘trouble, inconvenience’) (1676 *Ch’ōphae sinō* 5.22); *haylwopti* 해롭디 ‘harmful’ (< SK *hay* 害 ‘harm, damage’) (1677 *Pak T’ongsa ōnhae* 1.13); *hywotwolwowum* 효도로움 ‘filiality’ (< SK 孝道 ‘filial piety’ + *-lwoW-* + *-um* NOM) (1617 *Tongguk sinsok samgang haengsil to, Hyojado* 3:39); *cyensyengtoykwō* 정성되교 ‘sincere’ (< SK 精誠 ‘sincerity’) (1617 *Tongguk sinsok samgang haengsil to, Hyojado* 3:39); *kulustoy* 그릇된 ‘mistaken’ (< *kulus* ‘mistake’) (1776 *Hanch’ōng mun’gam* 8.49). In the eighteenth century the suffix *-sulew-* ‘-like’ made its appearance. Examples: *wensyusuleun nwom* 원슈스러운 놈 ‘a fellow like an enemy’ (1775 *Yōgō yuhae po* 21); *elwunsulewon chyey* 어룬스러운 체 ‘on the pretext of being like an adult’ (1775 *Yōgō yuhae*

po 56); *chwonsulewon* 이 혼스려운 이 ‘someone like a hick’ (1776 *Hanch’ōng mun’gam* 8.50).

The Middle Korean suffix *-Wo/Wu-* -*뉘/뉘-* converted verb stems into adjective stems, but by the Early Modern period it was no longer productive. In its stead, a process that came to be used in the early years of the Early Modern period combined the adverbial forms of stems such as *kisk-* ‘rejoice,’ *twuli-* ‘fear,’ *ceh-* ‘be afraid of,’ and *muy-* ‘hate’ with *ho-* ‘do.’ Then, in the latter part of the period, the adverbial forms of the fossilized stems *muyw-* ‘hateful’ (< *muyW-* 뉘-) and *cephu-* ‘scary’ were also combined with *ho-* ‘do,’ creating doublets. Examples: *kiske_hota* 기거하다 ‘is happy’ (1776 *Hanch’ōng mun’gam* 6.56); *muyye_hota* 미여하다 ‘is hateful’ (1776 *Hanch’ōng mun’gam* 7.49); *twulye_hoye* 두려히여 ‘is frightening’ (1797 *Oryun haengsil* to 3.21); *muywe_hal_soy* 미워홀식 ‘is hateful’ (1797 *Oryun haengsil* to 2.6); *cephu_hota* 저퍼하다 ‘is hateful’ (1776 *Hanch’ōng mun’gam* 7.7). In the language today, this Early Modern compounding process has become the most common way of making adjectivals out of verbs.

6.4.1.4 Adverbs

The fifteenth-century adverbs *mwomzwo* 몸소 ‘personally, by oneself’ and *swonzwo* 손소 ‘personally, with one’s own hands’ (which had been derived from the nouns *mwom* ‘body’ and *swon* ‘hand’) appear variously in Early Modern texts as *swoncwo*, *swonswo*, *mwomcwo*, and *mwomswwo*. All of these variants can be seen in the 1617 text, *Tongguk sinsok samgang haengsil* to. Examples: *swoncwo* 손조 (*Hyojado* 2.38), *swonswo* 손소 (*Hyojado* 2.43), *mwomcwo* 몸조 (*Ch’ungsindo* 1.36), *mwomswwo* 몸소 (*Yōllyōdo* 1.42; *Hyojado* 1.90). These adverbial doublets continued in existence at least until the eighteenth century.

6.4.2 Nouns and noun phrases

The final *h*’s of Middle Korean nouns were preserved into the early part of the Early Modern period, but were lost by the latter part of the period. A special case was the Middle Korean noun *stah* 땅 ‘earth,’ which was replaced by *stang* 땅 (1617 *Tongguk sinsok samgang haengsil* to, *Hyojado* 1.1, *Yōllyōdo* 5.27). Another, parallel case was the noun *cip.wuh* 집웅 ‘roof [lit., house-top]’ (1481 *Hyojado* 2.38), which became *cipwung* 지붕.

The shape alternations of nouns such as *namwo* 나무 ‘wood, tree’ were regularized. The tendency toward the leveling of these alternations had begun in the fifteenth century. In the 1481 *Tusi ōnhae* (8.44), for example, we find the phrase *namo_non* 나무논 instead of the earlier *nam.k_on* 남근 (1447 *Yongbi ōch’ōn ka* 2), and in the same text we find *pwulmwu_lul* 불무를

‘bellows’ (6.24), instead of *pwulm.k_ul* 불굴. However, remnants of the old alternations remained, for up until the latter part of the Early Modern period, the words for ‘wood’ and ‘hole’ occasionally appeared in phrases as the forms *nang.k_i* 낭기 and *nang.k_ul* 낭글, and *kwung.k_ul* 궁글 and *kwung.k_uy* 궁귀. (These forms are still found today in certain regional dialects.) But by the end of the period, ‘wood’ was consistently being written as *namwo* 나무, and ‘hole’ as *kwumeng* 구멍. Similar things can be said about nouns such as *nwolo* 노룩 ‘deer’ and *azo* 아스 ‘younger brother.’ Middle-Korean type alternations for these words, too, could be seen as late as the eighteenth century. Examples: *nwol.l_oy kwoki* 놀릭 고기 ‘deer meat’ (1690 *Yōgō yuhae* 1.50), *nwol.l_uy saski* 놀릭 삿기 ‘deer offspring’ (1748 *Tongmun yuhae* 2.39).

6.4.2.1 Particles

A noteworthy change in the particle system was the form of the subject marker. In the fifteenth century, the only form marking subjects had been *i*, and the familiar suppletive alternant *ka* remained completely unattested until the sixteenth century, when it made its first, fleeting appearance. But in texts of the seventeenth century the existence of *ka* is beyond doubt. It is seen, for example, in the 1676 textbook *Ch’ōphae sinō*; e.g., *poy_ka wol ke.s_ini* 빅가 올 거시니 ‘since the ship is coming ...’ (1.8), [*TWONG-LOY*]*_ka ywosoi phyen.thi ani hositeni* 東萊가 요스이 편티 아니 호시더니 ‘since Tongnae has been in an unfavorable situation these days ...’ (1.36). And it is also found in the 1698 manual for making gunpowder, *Sinjōn chach’obang ōnhae*: *telawon coy_ka ta chetikwo* 더라운 직가 다 처디고 ‘dirty sediment all sinks under’ (9), *moynngnyel_khi lol hay_honun thuy_ka ta swosa wolla* 밍닐키를 해흔는 틱가 다 소사 올라 ‘particles that harm the intensity all float to the top’ (12). What is noteworthy in every one of these examples, however, is that the nouns to which *ka* attaches (*poy* ‘ship,’ *TWONG-LOY* ‘Tongnae,’ *coy* ‘sediment,’ and *thuy* ‘particles’) all end in *-y*. The fact that *ka* only appeared in this very limited phonological environment shows that the seventeenth century marked the beginning of the particle’s development. After that, the use of *ka* gradually spread to positions following nouns ending in vowels, where it is found in the language today. But this development is not well documented in the textual record. Even though *ka* was probably idiomatic and common in the spoken language in the eighteenth and nineteenth centuries, it was still not used in the written language. The Contemporary Korean usage of the particle was first reported by foreign missionaries at the end of the nineteenth century.

An honorific subject marker was formed by combining the particle *sye* ‘from, at’ with the dative *skey* (mentioned below). Examples: [*CUNG-CWO*]*_skeysye nasimyen* 曾祖께서 나시면 ‘if the great-grandparents go

out...’ (1632 *Karye ōnhae* 2.2); [SO-SIN]_skuysye_two chwoychwok_hosye 使臣의셔도 최촉의셔 ‘since the envoy also pressed’ (1676 *Ch’ōphae sinŏ* 5.16). The honorific subject marker in standard Korean today is believed to be a reflex of this form. On the other hand, in the 1676 *Ch’ōphae sinŏ* the honorific subject marker also appears as *kyesye* and *kyeysye*; moreover, in personal letters and in the nineteenth-century memoir *Hanjungnok* (‘Records Written in Idleness’) the marker is recorded as *kyewosye* and *kyeywosye*. Examples: *acoma-nim kyewosye yele tol chywoycyen_hoopsiten kusthoy* 아즈마님겨오셔 여러 들 초견하옵시던 ‘after the lady had toiled for several months...’ (*Sinhan ch’ōp* ‘A Collection of Royal Letters’); *syen.in_kyewosye kyengkyey_howositoy, syen.in_kyeywosye skwum_ey pwowa kyeysiwoteni* 선인겨오셔 경계하오시디, 선인겨오셔 꿈에 보와 계시오더니 ‘the immortal [deceased father] has warned, the immortal [father] has appeared in a dream’ (*Hanjungnok*). In spite of their resemblance in both form and function to *skeysye*, these various latter forms appear to be derivations of the honorific verb of existence *kyeysi-~kyewosi-*.

By the Early Modern period, the only particle that functioned to mark genitives was *uy*. By then, the Middle Korean genitive particle *s* (the so-called “medial *s*” 사이시옷) had ceased to be syntactically productive as a genitive marker. It was now realized almost exclusively between the elements of compound nouns.

The system for marking datives was greatly simplified. The dative marker for plain animates (including people) was unified as *uykey*, and the honorific dative as *skey*. Examples: [CWO CWO]_uykey 曹操의게 ‘to [the Chinese general] Cao Cao’ (1704 *Samyōk ch’onghae* 6.19); [KA-LWO]_skey 家老께 ‘to the family elders’ (1632 *Karye ōnhae* 2.2); *eme-nim_skey* 어머님께 ‘to the mother.’ In Middle Korean, the monosyllable *key* – which was a contraction of *ku ngekuy* and thus meant ‘(in/at/to) that place’ – had attached directly to verbal nouns, but that usage was no longer seen in Early Modern Korean. There are examples, however, of the syllable attached directly to the noun *mol* ‘horse’: *mol_key nolini* 물게 느리니 ‘getting down from the horse, and...’ (1704 *Samyōk ch’onghae* 1.1); *hon [KWUN-SO]_lol sswowa mol_key steluchikwo* 軍士를 쏘와 물게 썰르치고 ‘shooting a soldier and knocking him from his horse...’ (1704 *Ch’ōngŏ Nogŏltae* 2.28).

The comitative particle (meaning ‘with, and, accompanying’) became phonologically fixed as *wa* 와 after a vowel, and *kwa* 과 after a consonant. In the sixteenth century, *kwa* had also appeared after a -y, and that continued to be the case in the seventeenth century. Examples: *maktay kwa* 막대와 ‘a stick and ...’ (1677 *Pak T’ongsa ōnhae* 2.28); *aloy_kwa* 아릿과 ‘underneath and ...’ (1670 *Nogŏltae ōnhae* 1.35). But the comitative particle soon came to be realized only as *wa* in that environment.

The vocative particle *ha* had been used as an honorific in Middle Korean, and people lower in rank had always used it when addressing a superior. But the particle ceased to be used at all in Early Modern Korean.

The postposition *twokwon* (from Middle Korean *twukwo~twukwon*) was used to express comparisons. Example: *amu il twokwon [TAY-KYENG]_ilwosongita* 아르 일도큰 大慶이로송이다 ‘compared to anything at all, it is very fortunate’ (1676 *Ch’ōphae sinō* 8.13). However, in the eighteenth century a new particle *pwotaka* appeared that gradually replaced *twokwon*, and by the nineteenth century it was the only particle used to express comparisons. Examples of this particle *pwotaka* can be seen in the royal edicts issued during the reign of Yōngjo (r. 1724–76), as well as in the 1783 text *Chahyul chōnch’ik*. Examples: *sywomin pwotaka pilwok kancyel_hwom_i isina* 쇼민보다가 비록 간절함이 이시나 ‘even if they have needs more pressing than the people’ (Royal Edict on Abstinence from Wine 御製戒酒論音); *ahuy-tul_kwa alin kes-tul_i hwok tonnimye pilkwō hwok nayye polinon ke.s_i pyeng_tun kes pwotaka tewuk kinkup_honi* 이 아희들과 어린 것들이 혹 튼니며 벌고 혹 내여 브리는 거시 병든 것보다가 더욱 더욱 긴 급흔니 ‘that these children and young people either go around begging or are cast out is more urgent than becoming sick’ (1783 *Chahyul chōnch’ik* 2). This postposition *pwotaka* was derived from a conjunctive form of the verb *pwo-* ‘see’ using the mood marker *-taka* (which is called the “transferentive” in Martin 1992); even today *pwotaka* is used in some dialects. The standard Seoul form is of course *pwota*.

The postpositions used as emphatic markers in Early Modern Korean were *ya* and *kwos*. The various other emphatic markers found in Middle Korean disappeared. The fifteenth-century particle *za* was replaced by *ya* around the end of the sixteenth century; the particle *kwos* came to be used mostly with negatives in the Early Modern period. Examples: *na kwos epsomyen* 나곳 업스면 ‘when I in particular am not there’ (the memoir *Hanjungnok*), *twu [PWUN]_kwos animyen* 두 분곳 아니면 ‘if it isn’t just those two (people)’ (1728 *Ch’ōnggu yōngōn*).

6.4.2.2 Pronouns

In Korean today, ‘I’ and ‘you’ followed by the subject marker are realized as *nay_ka* and *ney_ka*. These forms, which came into use in the Early Modern period, contain two occurrences of the subject marker. The *-y* in the Middle Korean nominative forms *nay* ‘I’ and *ney* ‘you’ was already a form of the subject particle *i*, but to that was added a second occurrence of the subject particle, the suppletive alternant *ka*. The form *nay_ka* 내가 was first recorded at the end of the eighteenth century, in the *Ringo taihō* (隣語大方), a Korean–Japanese textbook believed to have been compiled by interpreters on Tsushima Island.

The reflexive pronoun *cokya* *즈가* ‘himself, herself’ (equivalent to Contemporary Korean *caki*) had been used in Middle Korean as a third-person honorific. In Early Modern Korean, the pronoun with its honorific meaning intact is believed to have been preserved as *coka* in the speech of the palace. Thus, in the 1613 diary *Kyech’uk ilgi* written by an anonymous court lady, we find the sentence, *Kwongcywu coka non muso il’ kwo, kunyang kwongcywuy la hoyela* 공쥬 *즈가는* *므스 일고, 그냥 공쥬라* *햏여라* ‘The Princess Herself? What’s with that? Just call [me] Princess.’

In Middle Korean, the interrogative pronoun *nwu* ‘who’ combined directly with the inflectional interrogative ending *-kwo* to form *nwukwo* *누고* or *nwukwu* *누구*. In the Early Modern period, however, the forms fused together and became lexicalized. As a result, when Early Modern authors formed questions, they added another occurrence of the interrogative ending at the end of the sentence. Examples: *Nwukwu non em’ uy wolap’ uykey nan cosik imye nwukwu non ap’ uy nwu’ uykey nan cosik’ kwo?* 누구는 어찌 오라²의게 난 *즈식이며* 누구는 아²비 *누의*게 난 *즈식고* ‘Who is the child born to the mother’s older brother, and who is the child born to the father’s sister?’ (1670 *Nogŏltae ōnhae* 1.14); *I pes un nwukwo’ kwo?* 이 벗은 누구고 ‘Who is this friend?’ (1670 *Nogŏltae ōnhae* 2.5).

Two words meaning ‘what,’ *mues* and *muses*, coexisted in the seventeenth century. Examples: *muse.s ul* *므서슬*, *muse.s i* *므서시* (1677 *Pak T ongsa ōnhae* 1.56), *mue.s oy* *므어시* (1617 *Tongguk sinsok samgang haengsil to, Ch’ungindo* 1.75), *mues holiwo* *므엿* *햏리오* ‘do what?’ (1670 *Nogŏltae ōnhae* 1.24). But actually, both forms had already coexisted at the end of the sixteenth century, as could be seen in the *Sohak ōnhae*, which was published in 1588; for example, *muse.s ul* *므서슬* (6.123), *mue.s ul* *므어슬* (5.99). In the eighteenth century the form of the interrogative pronoun was unified as *mwues* *무엇*, a word attested, for example, in the Manchu glossaries *Tongmun yuhae* (2.47) and *Hanch’ŏng mun’ gam* (6.36).

The interrogative *enu* ‘which’ functioned as a pronoun in Middle Korean, which meant that, like other substantives, it could be followed by case particles. In Early Modern Korean, however, it lost this function and came to be used only as a modifying prenoun, just as it is in Contemporary Korean today.

6.4.3 Conjugations

The loss of the voiced spirants *W* and *z* altered the Middle Korean inflecting stems ending in those consonants. The change was not great in the case of stems ending in *-W-*, since that consonant simply weakened into the semi-vowel *-w-*. However, the change was greater in the case of *-z-*, because that consonant disappeared completely. For example, in Middle Korean the stem

ciz- ‘make’ had the morphophonemic alternation *ciz-~cis-* (with *ciz-* ㅈ- appearing before vowels and voiced spirants, and *cis* ㅈ- before obstruents). After the change, the alternation became *ci-~cis-*. Moreover, the new alternant *ci-* behaved differently from vowel-stem forms. Whereas endings such as *-ni* and *-mye* attached directly to vowel stems, the epenthetic vowel /u/ appeared when they occurred after *ci-* ‘make’ (*ciuni* < MK *cizuni* 지스니).

The stem-final cluster *-sk-* was reduced to *-kk-*. In Middle Korean, the only stem ending in the cluster *-st-* had been *mast-* 맞- ‘entrust,’ and in Early Modern Korean, the stem underwent an irregular change to *math-* 맡-, as seen in this example: *mas.thon sta.h_oy* 맞튼 사히 ‘the entrusted land’ (1617 *Tongguk sinsok samgang haengsil to*, *Ch’ungshindo* 1.48). However, the causative stem derived from that form, *masti-* 맞디-, did not change with it, and instead, through palatalization, became *masci-* 맞지-. Examples: [WUY-IM] *mascita* 委任 맞지다 ‘give [someone] responsibility’ (1748 *Tongmun yuhae* 2.55); [KYWO-PWU THWONG-CHING] *mascita* 交付 通稱 맞지다 ‘giving responsibility is usually called *mascita*’ (1776 *Hanch’ong mun’gam* 2.61). Then, in later years, this form *masci-* changed to *maski-* 맞기-, apparently by analogy with other causative forms.

Some irregular conjugations fell together. When the spirant *G* was lost, stems such as *talo-* 다랴- ‘is different’ fell together with “*l*-doubling” stems such as *hulu-* 흐르- ‘flow.’ This stem had had the alternation *talo-* ~ *talG-*, and /G/ was replaced in this alternation by /l/, perhaps by analogy with the “*l*-doubling” stems. Even more significant were the changes that took place in stems such as *pozo-* 뵈스- ‘break,’ *kuzu-* 그스- ‘drag,’ *pizu-* 비스- ‘decorate,’ and *swuzu-* 수스- ‘is boisterous.’ These particular stems had contained both *z* and *G* in Middle Korean, and after the spirants disappeared, the stems underwent a variety of changes. The stem *pozo-* 뵈스- ‘break’ became *pasu-* 파스-; and *kuzu-~skuzu-* 그스-~스스- ‘drag’ became *kuu-~skuu-* 그으~스으-. Examples: *kuukwo* 그으고 (1617 *Tongguk sinsok samgang haengsil to*, *Yöllyödo* 8.57); *skue kacye kani* 쓰어 가져 가니 ‘since [he] drags [it] and takes it [with him]’ (1677 *Pak T’ongsa önhae* 3.24); *skue naythita* 쓰어 내티다 ‘pull and take away’ (1690 *Yöggö yuhae* 1.67); *skue nayyetaka* 쓰어 내여다가 ‘has dragged out and ...’ (1704 *Samyök ch’ongghae* 5.15). The form *skue* that appeared in these constructions soon contracted to *ske* 썌 and was then used like a prefix. A trace of the verb *pizu-* ‘decorate’ survives today in the word *selpim* 설빔 ‘New Year’s garb’ (literally, ‘New Year’s embellishment’), but otherwise the Middle Korean verb has died out completely.

In Middle Korean, the stem *nye-* 녀- ‘travel about’ appeared occasionally as *ney-* 네-, but by Early Modern times the stem appeared only in the latter form. The honorific existential *kyesi-* 겨시- ‘is’ became *kyeysi-* 계시- in the same time frame. In Middle Korean, the (non-honorific) existential verb

alternated in form between *isi-*, *is-*, and *si-*, but by the Early Modern period this variation had disappeared. By that time, the verb was realized only as *is-* 잇-.

Some inflectional forms were affected by changes in the language's morphophonemic alternations, two of which deserve special mention. First, the alternation of *k* with *G* disappeared. As we have pointed out, the Middle Korean voiced velar fricative /G/ replaced /k/ in certain environments; for example, *mul* 'water' plus the comitative particle *kwa* was transcribed as *mul_Gwa* 물와, and the verb stem *al-* 'know' plus the gerund *-kwo* became *alGwo* 알오. But by Early Modern times /G/ had been lost, and almost everywhere the stop *k* was restored. Now the only trace left of the alternation was after the copula. In Middle Korean the gerund form of the copula had been *iGwo* 이오, but in Early Modern Korean it became *iywo* 이요. Example: *ku cwoy twul.h iywo* 그 죄 둘히요 'the transgressions are two, and ...' (1704 *Samyŏk ch'onghae* 2.4). The second morphophonemic change affecting inflection was the weakening of the rules of vowel harmony. As a result of this change, the concord of suffixes with stems became in essence no different from that of today's standard language. Almost the only vowel harmony to be found in suffixes – then or now – is the alternation seen in the infinitive form *-ale*. The third change was in the Middle Korean rule governing the alternation, under certain conditions, of /t/ with /l/. A typical example was in the inflection of the copula.

6.4.3.1 Prefinal endings

A number of salient changes took place in the prefinal endings. For one thing, the volitive *-wo/wu-*, a puzzling morpheme known only from the Middle Korean corpus, was no longer productive in Early Modern Korean. For another, the Middle Korean honorific system, which had made use of three separate prefinal endings (the honorific *-(o/u)si-*, the deferential *-zoW-*, and the politeness marker *-ngi-*) was reduced in Early Modern Korean to a simpler system indicating only honorific status and politeness. This simplification took place when the deferential marker ceased to be used independently and became part of the marking of general politeness. Now, a polite discourse style was indicated not simply by the single prefinal ending *-ngi-*, but rather by a more complex ending combining the Middle Korean deferential with the politeness marker. Thus, the Early Modern polite endings *-opnoyng.ita* -옵녕이다, *-opnoyita* -옵네이다, *-opnoita* -옵네이다 all go back to the Middle Korean form *-zopno.ngita* -줍녕이다. Many examples of these endings can be found in the 1676 Japanese textbook *Ch'ŏphae sinŏ*. This combination of the erstwhile deferential with the politeness marker is the etymological source of *-(u)pnita* in today's Seoul standard.

Tense and aspect During the Early Modern period, the Middle Korean tense and aspect system gradually developed into the system found in the language today. The first of the changes was the development of a new past marker, *-as/es-*. In the 1704 Manchu textbook *Samyök ch'onghae*, this marker was used for translating the Manchu past tense; e.g., *mullichyesta* 물리쳤다 'defeated' (2.5), *pwonayyesta* 보내엿다 'sent' (2.9). The new form was created by combining the infinitive *-a/e* with the stem of the verb of existence *is-*. The suffix *-keyss-*, which marks future tense in Contemporary Korean, must undoubtedly have also developed in the Early Modern period, but there are no clear records of it. Like the subject marker *ka*, *-keyss-* rarely appeared in written records until missionaries noticed it in the late nineteenth century. The marker is thought to have been formed by combining the adverbative suffix *-key* with the verb of existence *-is*, but documentary evidence supporting this etymology is lacking. In Middle Korean, the processive marker *-no-* combined with the declarative ending *-ta* in a straightforward way to form the ending *-nota*. But by the Early Modern period, this ending had changed into *-nta* after a stem ending in a vowel, and into *-nunta* after a stem ending in a consonant. Examples: *kanta hoya* 간다 흥여 'saying [he] is going' (1704 *Samyök ch'onghae* 2.9); *toli lol nwsnonta hononila* 득리를 놋는다 흥느니라 'he says that [they] are building a bridge' (1677 *Pak T'ongsa önhae* 2.33). Of these two variants, *-nta* also appeared in some sixteenth-century texts, but *-nunta* first made its appearance in the seventeenth century.

Emotives Of the various emotives used in Middle Korean, only *-two* continued to be used in Early Modern Korean. The prefinal endings *-twos-*, *-s-*, *-kwa-*, and *-kwas-* were no longer productive.

6.4.3.2 Final endings

Modifiers and nominalizers The Middle Korean endings used to transform predicates into noun modifiers and nominals remained essentially unchanged, at least in function. However, changes did take place in their forms and distributions. There were four such endings: (1) *-(o/u)n*, (2) *-(o/u)lq*, (3) *-(o/u)m*, and (4) *-ki*. (1) In Middle Korean, the modifier ending *-(o/u)n*, combined with (among other prefinal endings) *-no-*, *-te-*, *-ke-*, and *-li-* to form the compound endings *-non*, *-ten*, *-ken*, and *-lin*. Of these four endings, only the first two survived into Early Modern Korean, as *-nun* and *-ten*. The other two endings disappeared from the textual record. (2) The Middle Korean ending *-(o/u)lq*, which combined the future marker *-li-* with *-(o/u)lq*, also disappeared from the record. (3) In Middle Korean, *-(o/u)m* was preceded by the volitive *-wo/wu-*, but in the Early Modern period, when the volitive fell into disuse, *-(o/u)m* came to

be used by itself to nominalize predicates. As a result, the distinction between nominalized predicates and derived nominals was lost. (See section 6.4.1.1 “Nominal suffixes,” above.) Another noteworthy change in the Early Modern period was that in nominalizations of stems ending in /l/, the linking, epenthetic vowel no longer appeared. Examples: *kolm* 𑖇𑖇 ‘replacement,’ *tulm* 𑖇𑖇 ‘entrance.’ Contemporary Korean forms such as *alm* ‘knowledge’ and *salm* ‘life’ represent traces of this Early Modern structure. (4) Also, in the Early Modern period the use of *-ki* as a nominalizing suffix became extremely common.

Conjunctive endings Conjunctive endings became simplified in the Early Modern period. There was, first of all, a simplification of the rules with which they combined with prefinal endings, postpositions, focus markers, and the like; and, in addition, more than a few Middle Korean endings were lost. For example, in Middle Korean the endings of coordinate conjunction *-kwo*, *-(o)lmye*, and *-ale* combined with postpositions and focus markers to form a variety of endings such as *-kwon*, *-kwok*, *-kwom*, *-(o)lmyesye*, *-(o)lmyeng*, *-ak*, and *-am*, but by Early Modern times all of these endings had disappeared from use except *-(o)lmyesye*. Then, in the latter part of the Early Modern era, this form *-(o)lmyesye* developed into *-(u)myense* ‘while [do]ing...’ In much the same meaning and usage, *(o)lmye* had, in Middle Korean, combined with the postposition *-ng*. The only occurrence of this postposition then was in the ending *-(o)lmyeng*, and in Early Modern Korean it was found only in the idiomatic expression *womyeng kamyeng* ‘coming and going.’ Among the endings that were completely lost were *-tiwos* and *-tiWi* > *-tiwuy*.

Other significant changes in the conjunctive endings were as follows: first, the Middle Korean ending *-wo/wutoy*, which was composed of the volitive *-wo/wu-* plus the concessive *-toy*, became *-tway* in Early Modern Korean. This change was already under way during the latter part of the Middle Korean period. Examples: *hon pwus_sik stutwoy* 혼붓식 쓰되 ‘even though one moxa stick each is used...’ (1542 *Punmun onyök ihae pang* 19); *ahoy_lol kol.ochitwoy* 아히를 끌으치되 ‘even though one teaches the children...’ (1588 *Sohak ōnhae* 5.2); [*MWUN*] *phwo_lol moytwoy* 紋표를 띠되 ‘even though [he] tied on heraldic marking...’ (1632 *Karye ōnhae* 8). Then too, the less common concessive ending *-kenmalon* became *-kenmanon*. This change was also seen in the latter part of the Middle Korean period; e.g., *hakenmanon* 하건마는 ‘even though it is a lot...’ (1588 *Sohak ōnhae* Introduction: 2). In the Early Modern period, examples of the following form also appeared: *mal_two hotenimanon* 말도 헛더니마는 ‘though he had also spoken...’ (1676 *Ch’ōphae sinō* 9.12). The rare desiderative *-kwatye* became *-kwatya* in the sixteenth century (e.g., *alkwatya hoya* 알과다하야 ‘wanting to

know’ (1588 *Sohak ōnhae* Explanatory Notes); that form was also used in Early Modern Korean, but through the process of palatalization, it soon became *-kwacya*. Examples: [*MI-HWOK*]_{ul} *phulusikwatya* 迷惑을 프르시과다 ‘wanting to resolve the confusion...’ (1676 *Ch’ōphae sinŏ* 1.30); *moom*_{ul} *cwotkwatya* 마음을 좇과다 ‘wanting to follow the heart...’ (1704 *Samyōk ch’onghae* 10.3); *wuskwacya hoki*_{lul} *wonkaci*_{lwo} *hwotoy* 옷과자 흥기를 온가지로 호되 ‘though wanting in all ways to laugh...’ (1772 *Sipku saryak ōnhae* 1.23). The ending *-(o/u)l[q]* *solwok* (which was ancestral to *-(u)lq swulwok* ‘the more ... the more ...’), was rarely used in Middle Korean, but coming into the Early Modern period its usage eclipsed that of the once more common *-tiGwos*. Its form then changed to *-(u)lq swolok*. Examples can be found in Kim Sujang’s 1763 collection of *sijo*, *Haedong kayo* (‘Songs from East of the Sea’). On the other hand, the Middle Korean ending *-tolwok* ‘to the point where, until’ continued in use in Early Modern Korean in the slightly changed form *-twolwok*.

The postmodifier *cay* (< Middle Korean *cahi*) attached to the modifier form of a verb or adjective to show continuity of the action or state. Example: *hwantwo chon cay woloni* 환도 춘 재 오르니 ‘having strapped on his sword, he went up [to the emperor]’ (1704 *Samyōk ch’onghae* 1.13). This morpheme was apparently to be identified with the suffix *-cahi/chahi* used to form ordinals from cardinal numerals.

Finite verb endings

Declaratives The rare form *-lwa* made its appearance as a declarative ending in the Early Modern period. Examples: [*KWO-LYE WANG-KYENG*]_{ul} *wlosye wo.lwa* 高麗王京으로셔 오와 ‘[he] came from the Koryŏ royal capital’ (1670 *Nogŏltae ōnhae* 1.1); *pwule kwen_hola wo.lwa* 부러 권하라 오와 ‘[he] came specifically to admonish’ (1704 *Samyōk ch’onghae* 1.3). Meanwhile, the usual declarative ending *-ta* underwent changes; Middle Korean forms such as *-te.ngita*, *-no.ngita*, *-nwo.ngita*, *-nwo.swo.ngita*, and *-twoswo.ngita*, were generally replaced by shorter forms such as *-tey*, *-noy*, *-nwoy*, *-nwo.swoy*, and *-twoswoy* (which, following the copula, was realized as *-lwo.swoy*), the ending *-ta* having been completely elided. Examples: [*MWUN-AN*]_{ul} *hoopsitey* 問安하옵시데 ‘[he] asked about [his] well-being’ (1676 *Ch’ōphae sinŏ* 1.22); [*MWUN*]_s *koci wassopnoy* 門스까지 왔습네 ‘I came as far as the door’ (ibid. 1.11); *isil-tos_hona niluopnwo.swoy* 이실듯하다 니르옵노쇠 ‘[he] said [he] seemed to be there’ (ibid. 5.14); *ewa alomtai woopsitwo.swoy* 어와 아롭다이 오옵시도쇠 ‘Ah! It’s wonderful that you’ve come’ (ibid. 1.2); *ewa caney_non wuun salom_ilwo.swoy* 어와 자네는 우은 사름이로쇠 ‘Ah! You are an amusing person’ (ibid. 9.19).

Imperatives and propositives The Middle Korean deferential imperative ending *-(o/u)sywo.sye* disappeared and was replaced by *-swo*. Examples: *yekuy*

woloopswo 여긔 오르 읍소 ‘please come here!’ (1676 *Ch’ōphae sinǒ* 1.2); *honor_taylwo hoswo* 나 흐는대로 흐소 ‘please do as I say!’ (ibid. 7.7); *kwoti tustin maopswo* 고디 듯딘 마옵소 ‘please do not take it at face value’ (ibid. 9.12). A first-person plural propositive *-opsay* (‘let’s...’) also made its appearance around this time. (This form is still the polite propositive used in some dialects today.) The element *-op-* was a reflex of the deferential *-zoW-*, and *-say* was from the Middle Korean deferential propositive *sa.ngita* with the declarative ending *-ta* elided. Example: [*SYE-KYEY*] *lol naysyenon pwoopsay* 書契를 내셔는 보옵새 ‘let us see if [he] has produced a written agreement’ (1676 *Ch’ōphae sinǒ* 1.16). The Middle Korean plain propositive *-cye* became *-cya*. Example: *kam hi phi_hocya nilonon i lol pehywolila* 감히 피흐자 니르는 이를 버흐리라 ‘those who dare to say “let’s flee” will be beheaded’ (1617 *Tongguk sinsok samgang haengsil to, Ch’ungsin-to* 1.39).

Interrogatives Most of the interrogative endings used in Middle Korean continued to be used in Early Modern Korean. However, the distinction between yes-or-no questions and question-word questions gradually disappeared. In addition, the endings *-nye* and *-lye*, which were composed of the modifier endings *-(o/u)n* and *-(o/u)lq* plus the postmodifier interrogative *-ye*, changed in form to *-nya* and *-lya*. This change began in the late Middle Korean period, in the sixteenth century, and became firmly established in the seventeenth. Examples: *ani_hwo.m_i ka_honya* 아니호미 가흐냐 ‘is it better not to do it?’ (1577 *Yaun chagyōng* 83); *pilwok mool.h_i ta tonnylya* 비록 모을히 다 든니라 ‘if a village, should I necessarily go to them all?’ (1588 *Sohak ōnhae* 3.5); [*POYK-HWO*] *i ta etoy cwuk.e kanya* 百戶 | 다 어딴 죽어 가냐 ‘where will all the *paekho* [military officers] die?’ (1677 *Pak T’ongsa ōnhae* 2.5); *polam masilya* 바람 마시라 ‘does one drink the wind?’ (1670 *Nogŏltae ōnhae* 1.18). The endings *-i.ston* and *-i.stonye*, which were used in Middle Korean for rhetorical questions, could no longer be found by the Early Modern period.

Exclamations The sixteenth-century ending *-kwona* became widespread in Early Modern Korean, and the new endings *-kwoya* and *-kwoyya* also came into use. Examples: *twokpyel_i mwolononkwona* 독별이 모르논고나 ‘so [you] don’t particularly know it!’ (1670 *Nogŏltae ōnhae* 1.24); *khwo naynon mol_ilwokwona* 코내는 물이로고나 ‘so it’s a horse that’s blowing its nose!’ (ibid. 1.17); *nikun_tos hokwoyya* 니그듯 흐피야 ‘[he] seems to have become accustomed to it!’ (ibid. 1.31); *i hwal_ul ney stwo kantaylwo hun-namula-nonkwoyya* 이 활을 네 쏘 간대로 혼나므라는피야 ‘how stupidly you again find fault with this bow!’ (ibid. 2.28). The ending *-twota* continued in use, though it was no longer the most common exclamatory marker; in an unexplained phonological development, the ending was written *-stwota* (indicating reinforcement of the initial consonant) following the modifier ending *-nun*.

The ending *-(o/u)lssye* became *-(o/u)lssya*. Examples: [*SO-SI*]*_lol cwocha nwononstwota* 四時를 조차 노논쪄다 ‘they are enjoying themselves according to the four seasons!’ (1677 *Pak T’ongsa ōnhae* 1.18); *elin ahoy eyyespulsya* 어린 아히 에엿블샤 ‘how pitiful are the young children!’ (ibid. 3.43).

6.4.4 Syntax

By the Early Modern period, the syntax of the language had become virtually identical to that of Contemporary Korean. How the language had changed during the Middle Korean stage is not always easy to document, however. As has already been noted, the compositional style of most Middle Korean texts was that of translation; then, too, the de facto written standard of the period served to mask the process of change. In this section we will simply note a few of the more salient syntactic differences between Middle Korean and Early Modern Korean.

In Early Modern Korean, the postmodifier nouns *to* and *so* were no longer used productively. Traces of these structural elements, which corresponded in meaning and usage roughly to that of Contemporary Korean *kes* ‘the fact/one that ...,’ still remained in various constructions, but these had become lexically frozen forms.

Nominalizations formed with the nominalizer *-ki* became much more common. As a result, the use of the nominalizer *-(o/u)m* became that much less productive. A few occurrences of *-ki* are found in Middle Korean texts, but they are rare; *-ki* nominalizations, in fact, can be considered one of the characterizing features of Early Modern syntax. Also, while in Middle Korean the endings *-(o/u)n* and *-(o/u)lq* occasionally functioned as nominalizers, their Early Modern reflexes were used without exception as modifier endings, just as they are today.

A careful examination of Middle Korean sentences reveals that most were nominal sentences, at least etymologically. That is especially true of interrogatives, which in Middle Korean clearly had the structure of nominal-head sentences. However, Early Modern Korean showed a greater tendency toward sentences with verbal, adjective, or copular heads. In Middle Korean, when the predicate of a question was a noun, an interrogative ending *-ka* or *-kwo* was directly affixed to that noun. But in Early Modern Korean, that was not nearly so often the case. For example, a typical Middle Korean sentence is the question *no.m_on nwukwu* 누가 누구 ‘Who [is] that person?’ (1472 *Mongsan Hwasang pōbō yangnok ōnhae* 20). Here, in the form *nwukwu*, the interrogative ending *-kwo* was directly attached and fused to the noun *nwu* ‘who.’ This kind of structure was also possible in Early Modern Korean, as is shown in the sentence *i pes_un nwukwo_kwo* 이 벗은 누구고 ‘Who [is] this friend?’ (1670 *Nogōltae ōnhae* 2.5). But such questions more typically took a form like that

of the sentence *ney nwu.yn_ta* 네 ㄴ니다 ‘Who are you?’ (1704 *Samyök ch’onghae* 8.1), where the noun *nwu* ‘who’ is followed by the copular construction *inta*.

A feature Early Modern Korean shared with Middle Korean is the complexity of the sentences recorded in the textual corpus. If we set aside vernacular versions of Chinese texts because of questions about syntactic naturalness, we see that native genres, especially the vernacular novel, showed a tendency toward extremely complex sentences consisting of long concatenations of linked clauses. This convoluted style continued to be used throughout the period, and a significant simplification of the written sentence first came about only in the Contemporary Korean era.

6.5 Vocabulary

A salient change in the Korean language between the Middle and Early Modern periods, as well as during the Early Modern period itself, was the loss of native vocabulary. Much of this change resulted from the continuing replacement of native words with Sino-Korean equivalents. For example, instead of *mwoy* ‘mountain,’ *kolom* ‘river, lake,’ *azom* ‘relatives,’ and *wolay* ‘gate,’ Koreans now used the words *san* (山), *kang* (江), *hwosywu* (湖水), *chinchyeok* (親戚), and *mwun* (門) instead. The use of Sino-Korean for such basic terms showed the extent to which Chinese vocabulary had been penetrating the Korean language from ancient times on. However, many other words were not crowded out by the cachet of Chinese vocabulary, but simply fell into disuse for reasons that are as yet unclear. Such lost vocabulary included inflecting forms like *iW-* ‘is bewildered,’ *woy-* ‘bore,’ *woypho-* ‘carve’ (a compound of *woy-* ‘bore’ plus *pho-* ‘dig’), and *hyek-* ‘is small.’ Such words are of course exotic to Koreans today, but Koreans in the seventeenth and eighteenth centuries also found them unfamiliar and confusing. We know that to be true because, for example, the word *iptesini* 입더시니 ‘was bewildered,’ as recorded in the first, 1447 edition of the *Yongbi öch’ön ka* (stanza 19), was corrected in the 1659 reprint to read *eptesini* 엇더시니 ‘was not there.’ Similarly, the word *hyekun* 혀근 ‘small’ in stanza 82 of the first edition was emended to read *cyekun* 저근 ‘id.’ in the later edition. Such “corrections” are clear indications that the words were by then obsolete. Similarly, the edition of the Sino-Korean glossary *Hunmong chahoe* published before the Imjin Wars contains the character gloss [*KHUK*] *woyphol kak* 刻 의폴 각 [‘the character pronounced] *kak* [that means] “carve”] (1.1). But in the edition published a few short years later, in 1613, the entry was changed to read [*KAK*] *sakil kok* 刻 사길 국. Clearly, the seventeenth-century editors no longer understood the verb *woypho-* and felt the need to change the entry to make it comprehensible.

Other words changed in meaning. For example, the adjective *eyespu*- meant ‘pitiable’ in Middle Korean, but in Early Modern Korean, ‘pretty.’ Semantic drift can also be seen in the words *eli*-, which in Middle Korean meant ‘foolish,’ and *cyem*-, which meant ‘is young’ when referring to an infant or small child. But by Early Modern times, *eli*- had taken over the meaning of ‘is small, young,’ while *cyem*- had come to refer only to someone a bit older who was ‘youthful’ (in one’s teens or twenties). This meaning change of *eli*- can be verified from the end of the sixteenth century, as, for example, in this passage taken from the 1588 *Sohak ōnhae: elin ahuy* 어린 아희 ‘infant child’ (4.16). Another case of drift is that of the verb *solang_ho*-, which in Middle Korean meant both ‘think of’ and ‘love,’ but after that period was exclusively used to mean ‘love.’ It appears that ‘think of’ was the original meaning, and in the fifteenth century the semantic range of the word was extended to include ‘love.’ It was also in the fifteenth century that the synonym *toz*- ‘love’ and near-synonym *kwoy*- ‘esteem, favor’ in turn became obsolete. The Middle Korean noun *cus* meant ‘appearance’ or ‘form,’ but its meaning later became vulgarized, so that the word’s present-day reflex *cis* ‘act’ or ‘gesture’ refers mainly to an act that is vulgar, laughable, or impolite. The Explanations and Examples section of the 1446 *Hunmin chōngŭm haerye* contains the definition *him* [WUY KUN] 힘爲筋 ‘[the word] *him* is “sinew, muscle.”’ In later ages, however, the word *him* came to refer only to the abstract concept of ‘strength,’ preserving but a part of the original meaning. Middle Korean *pit* combined the meanings ‘price, value’ and ‘debt,’ but the former meaning was lost in the Early Modern period. The words *ssota* and *pit-ssota* were both originally used to express the meaning ‘to have [so much] value.’ But Contemporary Korean shows that a semantic opposition later developed between the two. Now, *pissata* (< *pit-ssota*) has come to mean ‘to be expensive,’ i.e., something has a high value, while *ssata* (< *ssota*) means only ‘cheap,’ i.e., that something has a low value. (Note that the present-day idiom *ku salam_un may mac.a ssata* ‘that person **deserves** to be whipped’ preserves the earlier meaning of *ssata*.) In the seventeenth and eighteenth centuries, the expression *kap-ssota* meant that the price (*kaps*) of something was appropriate; that meaning is attested, e.g., in the 1748 Manchu glossary *Tongmun yuhae* (2.26). Thus, the word *ssata* appears to have developed the meaning ‘cheap’ sometime after that, probably in the nineteenth century. (In Middle Korean, by the way, ‘cheap’ was expressed as *pit-tita*, literally, ‘value falls.’)

Sino-Korean changed, too. In Early Modern Korean, many words of Sino-Korean origin had meanings and usages unique to or characteristic of the period, and since that time the words have changed or disappeared entirely from the Korean vocabulary. Vernacular novels in particular contained many such idiosyncratic, made-in-Korea sinicisms. These included, for example,

wencyeng 原情 in the meaning of ‘petition, appeal’ (in Classical Chinese texts, this rare compound meant ‘to ask about the state of affairs’), *incyeng* 人情 in the meaning of ‘bribe’ instead of ‘human feelings,’ *pangswong* 放送 in the meaning of ‘set free’ (such a word is not attested at all in Classical Chinese), *hawok* 下獄 ‘imprison’ (also not Chinese), *tungtoy* 等待 ‘prepare in advance and wait,’ *palmyeng* 發明 ‘pretext’ (‘invent’ is a Meiji-period Japanese innovation), and *cyengchyey* 政體 ‘governing conditions’ (rather than ‘system of government’).

At the same time, a variety of new words were added to the Korean lexicon. Some of these came from Classical Chinese, which continued to make itself felt in Korean society, even in sometimes subtle ways. For example, the word *nywu* ‘kind, category, comrade’ began to appear in Korean texts, e.g., in the 1748 Manchu glossary *Tongmun yuhae* (2.51). The word appears to have been a trendy loan taken from a reading of the Chinese character 類. Example: *chwawu-phyen nywu-tul_un* 좌우편 누들은 ‘the guys on the left and right sides’ (1704 *Samyök ch’onghae* 1.10). Another word that was used a lot in Early Modern Korean was *soyngsim_ina* ‘bravely.’ Examples: *soyngsim_ina* 칭심이나 (1690 *Yögö yuhae* 1.31), *soyngsim_ina kule holiiska* 칭심이나 그러 흐리잇가 ‘should (we) unhesitatingly so do?’ (1677 *Pak T’ongsa önhae* 1.58). This word *soyngsim(_ina)* ‘bravely’ was most likely a colloquialism that developed from the Sino-Korean reading (*en kam soyng sim*) of the Sinitic expression 焉敢生心 ‘how could one dare.’

But many neologisms were, at least in origin, Western-inspired terms brought into Korea through China. In the seventeenth century, Korea was an extremely isolated and remote place, and although Koreans had heard of the West through Chinese sources well before that, what they knew of the world beyond the borders of Sinitic civilization was limited and vague. Maps of Europe had first reached Korea around the turn of the seventeenth century, and the gradual introduction of Western cultural objects, as well as direct contact with Westerners, began only during the mid-seventeenth century. Most of these Western cultural objects flowed into Korea through Peking, and devices such as alarm clocks (*comyengcywong* 自鳴鐘) and telescopes (*chyenlikyeng* 千里鏡) naturally came to be known by Sino-Korean names. However, of far greater importance were the maps and books imported from China on astronomy, geography, and all manner of natural sciences as well as religion, and through these writings Koreans gained new-found knowledge about the world beyond their borders. It was also during this period that, completely by accident, the first Westerners reached Korea. In 1628 a tall blond Dutchman named Jan Janse Weltevree (Korean name Pak Yön) and two shipmates were marooned in Korea, coming ashore on the eastern coast of Kyöngsang Province. Then, in 1653 another Dutchman, Hendrik Hamel, along with a number of his shipmates, was shipwrecked on Cheju Island.

All of these Dutchmen worked in firearms production and other forms of military service for the Korean government, Weltevree for the rest of his life and Hamel and his shipmates for about fourteen years until they were repatriated through Japan to Holland.

The growing number of contacts brought a flow of new objects and knowledge into Korea, and with such things came new words. It was around this time, for example, that tobacco came to Korea. Both object and word are thought to have reached Korea from the West through Kyushu, where, in the local dialect, ‘tobacco’ was pronounced *tābako* (since intervocalic voiced stops were prenasalized); then, in Korea, the word was naturalized by dropping the last syllable and adding the nominal suffix *-i*, and the result was *tampay* ‘cigarettes.’

Nevertheless, the greatest source of loanwords during the Early Modern period was not Western terminology filtered through Chinese (or Japanese), but rather the Chinese language itself. As it happens, many such borrowings are listed and discussed directly in the *Isu sinp’yŏn* 理數新編 by Hwang Yunsŏk (1729–91) and in the *Aŏn kakpi* 雅言覺非 by Chŏng Yagyong (1762–1836). As a result, these two works provide us with a vivid picture of Mandarin loanwords used in Korea in the eighteenth and nineteenth centuries. Among the borrowings cited there are: *tangci* 當直 ‘in service,’ *tehywung* 大紅 ‘deep red, crimson,’ *cati* 紫的 ‘purple,’ *mangkin* 網巾 ‘horsehair band,’ *tenling* 團領 ‘official garment with a round collar,’ *kankyey* 甘結 ‘official document,’ *sywuphan* 水飯 ‘watered-down rice,’ *pitan* 匹段 ‘silk,’ *thywo-sywu* 套袖 ‘sleevelet,’ *thangken* 唐巾 ‘(Chinese) cap,’ *mwumyeng* 木綿 ‘cotton,’ *pwoli* 玻璃 ‘glass.’ Of course, not all these words were borrowed at the same time. And some of them may have been borrowed earlier, during the Middle Korean period. In any event, in his early nineteenth-century work, Chŏng Yagyong pointed out an interesting aspect of how such Chinese loans were handled in his day. Taking *pwoli* ‘glass’ as an example, he noted that although the word from which it had been borrowed, *bōlǐ*, was written in Chinese with the characters 玻璃, Koreans looked for characters with Korean pronunciations that better fit the loanword and came up with 菩里, and that is how they began transcribing it. This purely phonetic use of characters apparently enjoyed a considerable degree of popularity during the Early Modern period, and more than a few traces of it can still be found today. But then Chŏng also went a step further in his discussion by describing a pun on this word. Since, like ‘glass,’ ‘barley’ was also pronounced *pwoli* in Korean, and since the character used to write ‘barley’ was 麥, *pwoli-ankyeng* 玻璃眼鏡 ‘glass spectacles’ came to be called *moykkyeng* 麥鏡 ‘barley glasses.’ Besides this playful use of transcriptional characters, there was yet another interesting aspect to the pronunciation of Chinese loanwords. The word for ‘glass’ mentioned above was a primary example. In the 1748 Manchu glossary

Tongmun yuhae (2.23), the word was written *pe- 리*, and in the nineteenth-century Chinese lexicon *Hwaǒ yuch'o* (20), it was written *pholi* *프리*. These transcriptions show there was a general tendency away from the original characters towards Koreanizing the pronunciations of the loanwords.

Another source of loanwords was Manchu. However, most of the words that in the past were said to be from Manchu were actually words that Manchu and Korean had both borrowed from Mongolian. If those words are removed from the mix, the number of loanwords from Manchu becomes much smaller. Here are some of those loanwords that were almost certainly from Manchu: *nelkhwu* *넬쿠* 'rain cape' (1748 *Tongmun yuhae* 1.55; 1776 *Hanch'ōng mun'gam* 11.6) from Manchu *nereku* 'id.'; *swopwuli* *소부리* 'saddle cloth' (1775 *Yōgō yuhae po* 46; 1748 *Tongmun yuhae* 2.19) from Manchu *soforo* 'id.'; *khulimay* *쿠리매* 'outer garment' (1748 *Tongmun yuhae* 1.55; 1776 *Hanch'ōng mun'gam* 11.4) from Manchu *kurume* 'id.'; *mahulay* *마흐래* 'official's cap' (1748 *Tongmun yuhae* 1.55) from Manchu *mahala* 'id.' This last example, however, was possibly a word that both Manchu and Korean borrowed from Middle Mongolian *mayalai* 'hat.'

7 Contemporary Korean

The story of Contemporary Korean begins with Korea's fitful emergence on the world stage in the late nineteenth century. The opening of Korean ports to outside powers brought sweeping political and social change to the country, and the pace and pressure only intensified over the next half-century. For the most part, the change was traumatic. The history of the Japanese colonial period, the partition of the country into north and south, and the culminating, internecine Korean War, was grim.

But the history of the language that played out against this backdrop was not altogether a story of misfortune. The reform of the language, particularly in how it was written, was very much at the center of what in Korea is called the "enlightenment period." The stage for that movement was set in the early nineteenth century, when there developed out of the *Sirhak* (Practical Learning) tradition a body of scholarship, known as "enlightenment thought," that argued for the opening of Korea to Western culture and technology. Then, when Korean ports were forcibly opened to foreign commerce with the Kanhwa Treaty of 1875, many of those Korean intellectuals looked toward constructing policies of reform and modernization. Thus began the "enlightenment period."

At the top of the reformers' agenda was language. The creation of a modern state required a modern standard language for the proper functioning of society and government. And because that task was at first seen principally in terms of writing reform, that is where we see the efforts of language reformers during the enlightenment period. The order of business was the "unification of the written and spoken language," or *Ŏnmun ilch'i*, a movement that took its name from a similar initiative in Japan, where many of the same problems confronted reformers.

7.1 Script reform

In the middle of the nineteenth century, four different kinds of writing were used in Korea. Of the four, *Hanmun*, Classical Chinese, remained the most prestigious. It was the medium of choice for formal writing, at least among

members of the elite. *Ŏnmun* (as Hangul was then known) was the least prestigious. It was also the least standardized and least consistent. “Middlemen,” such as government workers and clerks, wrote in two different ways, either in *idu* or in *ŏnhanmun*, a mixed script consisting of Chinese phrases syntactically connected by particles and inflectional endings written in *ŏnmun*.

Within the movement for the “unification of the written and spoken language,” there was general agreement that Classical Chinese and *idu* were no longer necessary in the modern, West-oriented world. On the other hand, both *ŏnmun* and *ŏnhanmun* had their ardent advocates.¹ In this situation, it was natural that disagreements would arise within the movement, and from the beginning there were heated debates. For decades (and even today to a certain extent), the two groups of advocates remained at odds over whether Korean should be written completely in Hangul, or in a script mixing Hangul with Chinese characters.

Early in the twentieth century, the mixed script replaced Classical Chinese as the medium for formal writing. One of the most important works in bringing about this reform was Yu Kilchun’s travel diary, *Söyu kyŏnmun* 西遊見聞 (‘Observations on a Journey to the West’), a work he published in 1895. Reporting on the marvels he had seen in Europe and America, Yu presented his narrative not in Classical Chinese (as had often been the custom in some earlier travel diaries) but in a mixed script consisting of Chinese characters transcribing Sino-Korean words and linked by Hangul particles. The same mixed kind of writing was subsequently adopted in most Korean newspapers, and gradually, Classical Chinese stopped being used as a written medium in Korea. After the March 1st Movement in 1919, Chinese characters came as a matter of course to be used only in mixed-script, Korean-language texts.

Hangul-only writing was also moving ahead. Moreover, in at least one kind of publishing there was little that its advocates found necessary to change. The classic novels of the Early Modern period had all been written completely in Hangul, and that tradition continued into the new age, titles being printed in Chinese characters, with the text inside the books appearing in all-Hangul, vertical lines. But all-Hangul writing had popular appeal beyond fiction as well. In 1896 Sö Chaep’il founded *Tongnip sinmun* 독립신문 (‘The Independent’), Korea’s first truly modern newspaper, and in order to attract a broader readership among the people he had it printed all in Hangul, completely without Chinese characters. It became an extremely popular

¹ Accordingly, both script names were updated along nationalistic lines, *ŏnmun* becoming “national writing” (*kungmun* 國文), and *ŏnhanmun* becoming “national Hanmun” (*kukhanmun* 國漢文).

vehicle for advancing the liberal, Western ideas of the Independence Club, including that of script reform.

Nevertheless, most newspapers of the time were printed in some version of the mixed script, and that practice continued during the colonial period and beyond. After 1945, however, writing and printing in Hangul quickly gained ground. In 1949, Kim Il Sung brought about a complete end to the use of Chinese characters in North Korea, because he associated mixed writing with Japanese practice. In South Korea, too, even though mixed writing continued to be the rule in newspapers and professional books (though never in fiction), the frequency with which Chinese characters appeared in publications steadily declined. Finally, by the 1990s, most major South Korean dailies had phased out the use of Chinese characters, and today, virtually all South Korean publications are printed in Hangul only. The occasional character is still seen in newspaper headlines, usually as abbreviations (for example, 美 stands for ‘America,’ 日 for ‘Japan’). But otherwise Chinese characters appear almost exclusively in parentheses as a clarification for a preceding Sino-Korean word or a name. More recently, beginning in the first decade of the twenty-first century, Chinese characters have undergone a mild resurgence in popularity, with mixed script proponents continuing to advocate the importance of Chinese-character education. But the possibility that Korea will ever see a return to mixed-script publishing seems remote.

7.1.1 *Orthographic standards*

The reformers’ next order of business was to establish a consistent orthography. During the late Chosŏn period, the lack of standards for Hangul writing had resulted in wildly varying spellings and usages, where even the variety of language or dialect represented depended almost entirely upon the individual writer. Now, as specialists struggled to modernize written Korean, spelling and usage standards became an urgent matter. Regardless whether one advocated writing all in Hangul or, alternatively, in a mixed script, the same problems of Hangul standardization confronted language planners. Thus, in order to address these problems, serious study of Contemporary Korean phonology and grammar began.

In 1905, the activist Chi Sŏgyŏng put forward a public appeal for the development of “new standards” of spelling and usage (新訂國文). This document quickly attracted enough public attention to affect government policy, the first to do so, and in 1907 the newly established Institute for the Study of Korean Writing (Kungmun Yŏn’guso) took up Chi’s proposal and began serious work on the project. In this first effort at standardization, the most important contributor by far was the scholar Chu Sigyŏng, the founder of the Society for the Standardization of Korean Writing (Kungmun

Tongsikhoe). Chu was a passionate patriot and advocate of language reform, and it was his suggestions and principles that were reflected most in the document the Institute developed. Chu was also a brilliant and intuitive student of language science. Already by the end of the nineteenth century, Chu had put forward principles for a new orthography, and the theoretical and descriptive works he published in the early decades of the twentieth century on Korean grammar, phonology, and script were to have long-lasting effects not only on the development of language policy, but on Korean linguistics as well. Most notable was his *Kugŏ munpŏp* 國語文法 ('Korean Grammar' 1910), and his *Mal ūi sori* 말의 소리 ('A Phonology of Korean' 1914). Chu Sigyŏng is also usually given credit for coining the word "Hangul" itself around 1912.

Language scholars worked for two more decades. Finally, in 1933, the Korean Language Society (Chosŏnŏ hakhoe 조선어 학회)² issued its landmark document, "A Proposition for the Unification of Hangul Orthography" (*Han'gŭl matchumpŏp r'ongiran* 한글 맞춤법 통일안). Based largely upon Chu Sigyŏng's ideas and principles, the "Proposition for the Unification of Hangul Orthography" remained the orthographic standard for the next half century.

In 1988 the South Korean Ministry of Education promulgated a new, official document, "Hangul Orthography" (한글 맞춤법). From time to time minor spelling rules found in its guidelines continue to be tweaked by officials in the Ministry of Education, but in general this 1988 document remains the rule book governing how Hangul is written.

7.1.2 *The principles of contemporary Korean orthography*

Both the "Proposition for the Unification of Hangul Orthography" of 1933 and the "Hangul Orthography" of 1988 were crafted in ways that preserved the existing alphabetic system with minimal change. Of the letters themselves, the reformers eliminated the vowel symbol ㆍ, because the sound it stood for, [ʌ], no longer existed in Seoul speech. They also changed the convention for representing the reinforced consonants /kk, tt, pp, ss, cc/. Instead of writing those phonemes as consonant clusters, ㄱㄱ, ㄷㄷ, ㅍㅍ, ㅅㅅ, ㅊㅊ (*sk, st, sp, ps, sc*), they decided to transcribe them with double letters: ㄲ, ㄸ, ㅍㅍ, ㅅㅅ, ㅊㅊ. But those were the only symbol changes they made.

The convention of using the consonant symbol ㅇ to represent a "zero initial" as well as a syllable-final /ng/ was kept intact. The standard Seoul vowel sounds [ɛ], [e], and [ø] continued to be written, as before, by combining two vowel symbols, ㅑ, ㅓ, and ㅜ, as if these vocalic elements were still the

² Renamed the "Han'gŭl hakhoe 한글학회" after the colonial period.

diphthongs [ay], [ey], and [oy]. Monophthongization had taken place centuries earlier, but the orthographic convention for transcribing the restructured vocalic elements did not reflect that change. The symbol ㅏ continued to be used to transcribe both [s] and [t] at the end of a syllable.

The basic principle of this orthography was summarized in Article 1 of the 1933 document as follows: “Write the standard language according to its sounds, but make it fit the language rules.” What this statement meant in practice was that the new orthography was to be a morphophonemic one. That is, although Korean letters were to be written “all according to their sound values” (Article 5) if possible, the morphophonemic shape of the word took precedence. And so, for example, ‘value, price’ was always to be written 값 (kaps), even though the final ㅏ (-s) would not be pronounced when followed by a consonant (e.g., 값과 [kapk’wa], 값도 [kapt’o]). The decision was to keep the “basic” shape of the word constant. The only exceptions to the rule were irregular verb and adjective inflections. For example, 곱다, 고와 [kwop (-ta), kwo.w(-a)] ‘pretty’; 짓다, 지어 [cis(-ta), ci(-e)] ‘make.’

In other words, even though many of the participants in the “Unification” project had not fully understood the morphophonemic principle, it was what consistently guided the construction of the orthography. It was the kind of writing that Chu Sigyŏng had long argued for. But it was also exactly the opposite of fifteenth-century orthography. In the fifteenth century, Hangeul writing had very much been a phonemic one instead (see the discussion in Chapter 5, above).

7.2 Language standardization

During the years the Korean Language Society worked on establishing an orthography, it was less actively concerned with defining a standard for the spoken language. Nevertheless, when the “Proposition for the Unification of Hangeul Orthography” was promulgated in 1933, the first rule laid out in the document’s introduction was that, “The Standard Language is to be Seoul speech now generally used in middle-class society.” That simple preamble to the rules of orthography was the first explicit statement of its kind about standard Korean. Two years later, in 1935, the Society established a committee to assess more specifically what was meant by the standard language, and in 1936 the committee produced a booklet entitled *Sajŏng-han Chosŏnŏ p’yojun mal moŭm* 査定한 朝鮮語 標準말 모음 (‘A Collection of Standard Language Vocabulary’). In that document the authors listed the standard forms for more than 6,000 words.

More recently, in 1988, the South Korean Ministry of Education published, along with its new rules for orthography, a separate guide entitled *P’yojunŏ kyujŏng haesŏl* 표준어 규정 (‘Standard Language Rules’). Among other

things, this booklet refined the definition of the standard language to read, “Contemporary Seoul speech generally used by educated people.”

Whatever the standard language was called, however, it was as a practical matter built upon the prose found in the “new novel” of the early twentieth century. That became the language taught in all schools after 1945. Ever since then, the public school classroom, along with migration (especially to Seoul, which is now home to a fourth of the South Korean population), public media, and military service, has served to bring the Seoul standard to all parts of the country.

The Seoul dialect is now recognized throughout South Korea as the prestige variety of the language. It is universally understood, the primary medium of communication everywhere; it is rapidly displacing all regional dialects and usages, especially among the young. In North Korea much the same is true. There the government claims that the standard (called “Cultured Language” *문화어*) is based upon speech in Pyongyang, but that statement is only partially true. Until 1945 Seoul speech was the standard there as well, and what is spoken today in the north has yet to diverge significantly, except in the official vocabulary used by the state. In any event, regional diversity is said to be disappearing even more rapidly there, in North Korea, than it is in the south.

7.3 Trends and changes

Language in Korea today has been researched intensively, and the literature on almost every aspect of its structure is voluminous. Contemporary Korean is a well-known, world language in the twenty-first century. At the beginning of the last century, however, what was spoken and written was notably different. The lexicon has undergone significant shifts, and the phonology and morphology have changed in some respects as well. What follows outlines some of those changes.

7.3.1 *Phonology*

The script unification of 1933 raised awareness among the Korean reading public that some sounds had changed, but the new standard spellings also masked other, ongoing changes.

7.3.1.1 *Consonants*

For the most part, the Korean consonant system has been relatively stable since the nineteenth century. The changes associated with palatalization represent the last major restructuring of the system, and those had run their course by that time. (See above, [Chapter 6](#).)

Stops and affricates are, as before, divided into three series: plain, aspirated, and reinforced.

Plain:	p	t	k	c
Aspirated:	ph	th	kh	ch
Reinforced:	pp	tt	kk	cc

The “plain” consonants are marked by lax articulation. In initial position they are voiceless and slightly aspirated; between vowels they are voiced. Aspirated consonants are voiceless and characterized by a strong puff of air, particularly so in initial position, less so in medial position. “Reinforced” consonants are articulated with considerable muscular tension throughout the vocal tract, especially in the glottis, and so they are said to be glottalized. They are voiceless. In medial position the closure time of reinforced stops is much longer than that of plain consonants.

This three-way contrast does not apply to fricatives, however. There are only two dental fricatives, *s* and *ss*. The plain consonant *s* has a lax articulation, but in initial position it has considerably more aspiration than the other plain consonants. Also, unlike other plain consonants, it does not voice between vowels, giving rise to the belief among many phonologists that *s* should be classified with the aspirated series of consonants.

Contemporary Korean has only one glottal fricative, *h*. In Middle Korean, there had also been a reinforced glottal fricative *hh* ᄒᄒ, a phoneme that continued to exist into Early Modern Korean times, at least as late as the seventeenth century. (In that later age *hh* was occasionally transcribed as the cluster *sh* ᄒᄒ; see the discussion in [Chapter 6](#), above.) The loss of the reinforced glottal fricative *hh* (which usually became an aspirated velar stop, *kh*) therefore represents a change in the phonological structure of Korean.

In addition to those stops, affricates, and fricatives, Contemporary Korean also has three nasals, *m*, *n*, *ng*, and one liquid, *l*. As is well known, the phoneme /l/ has two main allophones, a tap [ɾ] and a lateral [l]. The velar nasal *ng* does not occur in initial position. In native and Sino-Korean words the liquid /l/ also does not occur in initial position, but it frequently does in Western loanwords, where it usually has the articulation [ɾ]. And with the explosion of vocabulary borrowed from English in recent decades, that initial liquid is rapidly becoming a statistically common segment in the Korean sound system.

Throughout the history of the Korean language, there has been a tendency toward increasing implosiveness. In this process, consonant contrasts at the end of a syllable have slowly been lost, and today, a syllable followed by a juncture can only end in a vowel or one of seven consonants, *p*, *t*, *k*, *m*, *n*, *ng*, or *l*. None of these syllable-final consonants is ever released. Other consonants that occur morphophonemically at the end of a word (and thus are transcribed

in today's morphophonemic orthography) are realized phonemically only when they are followed by a particle or an inflectional ending. Aspiration and reinforcement at the end of a word are otherwise neutralized; thus, *p* and *ph*, for example, are both realized there as the unreleased stop [p]. Fricatives and affricates as well as stops are not distinguished in terminal position. There, the stops *t* and *th*, the affricates *c* and *ch*, and the fricatives *s* and *ss* are all uniformly realized as [t]. Notice that *s* had been distinguished from *t* in final position in the fifteenth century, but this distinction was lost around the turn of the sixteenth century. The realization of the phoneme /l/ as [l] in terminal position is in keeping with this tendency toward increased implosiveness.

There are no initial clusters in Contemporary Korean. Nor do clusters normally occur at the end of a word. On occasion, clusters such as [lm] can be heard in words such as *salm* 'life,' but such careful articulation is often a spelling pronunciation. Such clusters before a juncture are reduced by phonological rules; in this case, the /l/ is elided. Between vowels, a maximum of two consonants occur in clusters, and morphophonemic rules dictate which ones those are and how they are realized. The rules are often complex. For example, the cluster in the Sino-Korean compound *twoklip* 'independence' is replaced by *-ngn-*; thus, the word is pronounced [toŋnip]. The extent to which the range of morphophonemic rules found in Korean today applied in earlier periods is not altogether clear, especially in Sino-Korean compounds.

7.3.1.2 Vowels

Korean vowels have changed in a number of ways since the nineteenth century. The present-day Seoul standard is said to have two rounded front vowels, but that was apparently not the case in the nineteenth century. At that time, what was written as the diphthongs *woy* ㅜㅝ and *wuy* ㅜㅟ appear to have still had *-y* offglides, at least judging by the philological evidence (see the discussion in Chapter 6, above). But in today's Seoul standard, /woy/ is pronounced [ö] or [we], and /wuy/ is [ü] or [wi]. In general, when those vocalic elements appear at the beginning of a word, and without an initial consonant, they are always pronounced [we] and [wi]. For example, 'cucumber' (외) is [we], and 'upper part, above' (위) is [wi]. But when they are preceded by an initial consonant, especially one pronounced with a palatal articulation, they become the front rounded vowels [ö] and [ü]. For example, *swoy* 쇠 'metal, iron' is usually pronounced [sö]; *cwoy* 죄 'sin, transgression' is [tjö]; *swuy* 추 'flyblow' is [tjü]; and *cwuy* 쥐 'mouse, rat' is [tjü]. Many young Seoul speakers do not have these front rounded vowels, pronouncing them [we] and [wi] in all phonological environments; still, the vowels are recognized as part of the ideal system considered to be the standard. Here are the vowels of that system:

Standard Korean vowels

ㅣ	i	[i]	ㅜ	wuy	[ü]	ㅡ	u	[i]	ㅜ	wu	[u]
ㅝ	ey	[e]	ㅝ	woy	[ö]	ㅝ	e	[ə]	ㅝ	wo	[o]
ㅝ	ay	[ɛ]							ㅝ	a	[a]

Note, here, that the phonetic value of the vowel /e/ is not always [ə]. Rather, the pronunciation of that vowel depends upon its length, and such an allophonic difference was already there in the nineteenth century, as is apparent from some of the transcriptional confusion of the day. When the vowel in today's standard is short, it has a pronunciation much like [ʌ]; when long, it is [ə:]. That difference can be heard in many Sino-Korean readings. For example, 榮 'glory' is read [yʌŋ]; 永 'eternal' is [yə:ŋ].

The standard vowel system is in the process of change, however. It is already somewhat old-fashioned and noticeably different from what is heard today in the speech of younger-generation Seoul natives. For one thing, as we have mentioned, the two front rounded vowels are being lost. A still better-known change is the ongoing merger of the two vowels *ay* [ɛ] and *ey* [e], so that today, almost no one in Seoul under the age of about fifty can tell the two sounds apart, even in first-syllable position. For most Seoulites, then, *kay* 개 'dog' and *key* 게 'crab' can only be distinguished by context. The loss of this distinction is usually attributed to the large-scale migrations into Seoul from the southeast, especially from Kyöngsang, because the two vowels have long since merged in the dialects spoken there.

Another ongoing vocalic change in Seoul can be heard in the sequence *uy* ㅝ, which is often pronounced as a diphthong, [iy]. This vocalism stands out as a structural exception, primarily because -y offglides were uniformly lost following the monophthongization of diphthongs that took place in the nineteenth century. But older natives of Seoul, at least, do not pronounce *uy* ㅝ as a diphthong at all. Instead, the sequence is morphophonemic only. In their speech it is realized as [i] in word-initial position and as [i] later in the word.³ The diphthong [iy] heard in the speech of the young is thought to be, in origin, a spelling pronunciation of the morphophonemic transcription. In addition, the genitive particle, which in earlier periods was /uy/ 의 and is still written that way, is always pronounced [e] by young and old alike.

There are also a number of purely historical spellings, particularly of Sino-Korean morphemes. For example, *huy* 희 希 'hope for' is always and only

³ An interesting phonological trace of the earlier, diphthong pronunciation, however, can be found in such words as *pwonuy* 보늬 'inside skin (of a chestnut)' and *mwunuy* 무늬 'pattern.' For there, in those words, the phoneme /n/ does not palatalize to [ɲ] as it usually does in front of the vowel /i/, and instead it is pronounced [n], showing that at some structural level the vowel /u/ is still there.

pronounced *히* [hi]; *kyey* 계 階 ‘rank, grade’ is 계 [ke]; (*sil*)*lyey* (실)례 (失)禮 ‘(lapse in) etiquette’ is (실)례 [(il)le]; etc. The glides represented in the spellings of these latter two morphemes (and many other such morphemes) no longer exist.

Vowel harmony Much of the Middle Korean vowel harmony system has broken down, but some of the oppositions are still remarkably productive. In particular, the *yang*, or ‘bright,’ vowels /a/ (ㅏ) and /wo/ (ㅜ) are paired against the *yin* or ‘dark’ vowels /e/ (ㅓ) and /wu/ (ㅜ), and these oppositions are robust in onomatopoeia and mimetics. For example, the adverb *allak-tallak*, with ‘bright’ vowels, is descriptive of dappling in small dots or flecks, while the opposing ‘dark’ vocalism in *ellek-tellek* describes variegation in large patches. The adverb *cwol-cwol* means ‘trickling, murmuring,’ while its dark counterpart *cwul-cwul* implies ‘flowing, streaming.’ Such vowel harmony relationships give Korean a distinctive and lively range of expression.⁴

In addition, traces of the earlier vowel harmony system can still be found in verbal inflection, most notably in what is known as the infinitive ending *-a/e* ‘does and then. . .’ To a certain extent, the behavior of this morpheme remains that of the Early Modern period. However, in many cases occurrences of the *-a* allomorph now alternate with, or are being replaced by, *-e*. In what is deemed the standard language, *-a* is said to occur after inflecting stems with an /a/ or /wo/ vocalism (that is, with a ‘bright’ vocalism). But increasingly in Seoul today, one hears *pat.e* ‘receive and. . .’ and *cap.e* ‘grasp and. . .’ in place of ‘standard’ *pat.a* and *cap.a*.

7.3.1.3 Suprasegmentals

The Seoul dialect has distinctive vowel length. As we have already mentioned, tones were lost in the central dialect in the sixteenth century, but a trace of the so-called rising tone was left in the form of a long vowel. That development resulted in contrasts such as the following:

<i>Long vowel</i>	<i>Short vowel</i>
<i>ma:l</i> ‘speech’	<i>mal</i> ‘horse’
<i>nwu:n</i> ‘snow’	<i>nwun</i> ‘eye’
<i>pa:m</i> ‘chestnut’	<i>pam</i> ‘night’
<i>pa:l</i> ‘blinds’	<i>pal</i> ‘foot’

However, as was generally true in the Early Modern period, vowel length is not preserved in non-initial position. For example, the vowel is long in the

⁴ Cf. the discussion of Japanese verbs and mimetics in Shibatani (1990, pp. 153ff). Shibatani’s observations about the semantic roles and interactions of these words in Japanese could be applied to Korean as well.

verb stem *e:ps-* ‘does not exist.’ But when that stem occurs non-initially, such as in *kkuth-epsi* ‘endlessly, without end,’ its vowel is short. In casual speech, the contrast between *ches-nwu:n* ‘first snow’ and *ches-nwun* ‘first look (literally, first eye)’ is lost. This loss of vowel length in non-initial position is especially apparent in Sino-Korean compounds. For example, the long vowel of *tay:* (大) ‘big, great’ is kept long in *tay:hak* (大學) ‘college,’ but becomes short in *hwaktay* (擴大) ‘magnification.’

7.4 Morphology

We have described the grammatical changes that began to take place in the sixteenth century as structural simplification. This tendency toward the leveling of morphological complexity continued into the Contemporary period.

7.4.1 Nouns and noun phrases

In Middle Korean, certain classes of nouns had non-automatic, allomorphic variations. But today, in the Seoul dialect at least, these variations have been lost and the nouns have unitary shapes. The Middle Korean alternation *namwo* ~ *namk-* ‘wood, tree’ has become uniformly *namwu* (except in one or two archaic idioms); *kwumwu* ~ *kwumk-* ‘hole’ is now *kwumeng* (again, except in archaic idioms). The noun *nwolo* ~ *nwolG-* ‘roe deer’ is *nwolwu*; and *azo* ~ *azG-* ‘younger brother’ is always *awu*.

Morphophonemic variety at the end of nouns is being leveled. For example, in standard Korean the noun *kkwoch* ‘flower’ is pronounced [kʷot] in isolation, but [kʷoc^h] when followed by a particle beginning with a vowel; e.g., *kkwoch i*, *kkwoch ul*. But now, in the speech of many Seoulites, the ending consonant *ch* is optionally replaced by *s*; thus, one hears *kkwos i*, *kkwos ul*. The same is true of the consonants at the end of *cec* ‘breasts, milk’ and *path* ‘field,’ where *ces* and *pas* have become optionally occurring forms. These examples are representative of changes taking place in dental obstruents at the end of words.

In Middle Korean, a morphophonemic *h* at the end of nouns was realized before particles beginning with a vowel. The consonant has since been lost in that environment. However, a trace of it can still be found in Seoul speech at the end of the word *hana* ‘one.’ In standard Korean, the addition of a particle to this noun produces regular forms such as *hana_two* ‘[not] even one.’ But in Seoul speech the irregular form *hana_thwo* can still be heard, and there the aspiration serves as evidence of a noun-final *h*. Similarly, the form of the subject particle *i/ka* that ordinarily appears after a vowel is *ka*, and that is the form we usually see after *hana*; thus, *hana_ka*. However, *hana_i* can also sometimes be heard, and the use of *i* here is evidence that, in some

people's speech at least, the noun can still be treated as if it ends in a consonant. Besides this exception, evidence of an *h* at the end of nouns can today be found only in frozen compounds such as *am-thalk* 'hen' (< *amh* 'female' + *talk* 'chicken') and *swu-thalk* 'rooster' (< *swuh* 'male' + *talk* 'chicken').

7.4.1.1 Particles

ka The subject particle *ka* first appeared in texts written toward the end of the Middle Korean period. But it was then rare and remained so throughout the Early Modern period, at least in the textual record. The subject particle used in those records was always *i*, in all phonological environments. Later, attestations by foreign missionaries in the late nineteenth century made it clear that, although *ka* was not being written down, the particle had already become common in speech, alternating with *i* in the suppletive relationship familiar to us today. It was only in the Contemporary Korean period that *ka* came to be used regularly in writing.

s In the Early Modern period, the Middle Korean genitive particle *s* ㅅ became unproductive as a genitive marker. From then on, it has appeared only in noun compounds. Yet, how it functions in forming those compounds has still not been completely elucidated, even today. For example, *namwu-s-cip* 'lumber yard' (< *namwu* 'wood' + *s* + *cip* 'house') has a different meaning from *namwu-cip* 'wooden house,' without the "medial *s*" (ㅅㅏㅅ). What the contribution of *s* is to the difference in meaning is not always clear.

uy Like usages of the dative marker *eykey*, occurrences of the genitive particle *uy* were in earlier periods confined to uses after an animate noun. However, relatively recently the use of *uy* has broadened to include uses after inanimates. Moreover, this genitive particle is now also combined with the locative particles *ey* 'to, toward,' in constructions such as *sengkwong ey uy kil* 'the road to success,' and *eyse* 'from,' as in *Hankwuk eyse uy swosik* 'news from Korea.' These constructions probably arose originally as translations of English or Japanese.

7.4.1.2 Pronouns

Several changes took place in Korean pronouns after the Early Modern period. One is that the subject forms of *na* 'I' and *ne* 'you' became *nay_ka* and *ney_ka* – or at least those forms became commonplace. In both instances, the particle *ka* was simply added to the old nominative forms *nay* and *ney*, which already combined the pronouns *na* and *ne* with the older subject particle *i*. Still more recently, the loss of the phonological distinction /ay/ : /ey/ among younger-generation speakers has resulted in the creation of the

new form *ni_ka* ‘you (as subject).’ New genitive forms of those two pronouns also emerged: *nay* ‘my’ and *ney* ‘your.’ And once again, the loss of the vocalic distinction has precipitated the change of *ney* ‘your’ to a new possessive form, *ni*.

The beginning of the Contemporary period also marked the first regular uses of the honorific first-person pronoun *ce*. Used as subject, its form is *cey_ka*, and its genitive form is *cey*.

The interrogative pronoun *nwu* ‘who’ came to have an additional, second form, *nwukwu*. Used as subject, ‘who’ is now *nwu_ka* instead of earlier *nwuy*. As genitive, alongside the somewhat literary *nwuy*, *nwukwu_uy* is now more common in spoken Korean. The form of the interrogative used as object is *nwukwu_lul*.

7.4.2 Verbs and adjectives

The inflection of verbs and adjectives has remained essentially the same as it was in the Early Modern period. However, the inflection of the copula has been altered through analogy with verbs. The most noticeable changes are that, first, the direct-style indicative assertive *ita* ‘(it) is’ has now replaced Middle Korean *ila*, and, second, *ikwo* ‘is and . . .,’ is almost exclusively used as the “gerund” in ordinary speech. Of course, a trace of *ila* is still found in the quotative, *ila(kwo)*; and the older, Middle Korean gerund *iywo* 이요 is still used in writing and in very formal speaking styles.

Another change can be found in how negatives are formed. What is often considered the negative copula *anita* is the negative *ani* functioning as a precopular noun, as in Middle Korean *ma.l_i ani 'la* 마리아니라 ‘not (that) language’ (*Sŏkpo sangjŏl* 6.36a). But *ani* also functioned as an adverb used to negate inflecting forms: *ani wolila* 아니 오리라 ‘not come’ (*Wŏrin ch'ŏn'gang chi kok* 53). In the Early Modern period, *ani* also came to be used with verbal inflection as an alternative pattern for negating verbs. And so, in texts from the seventeenth and eighteenth centuries, we see such inflected forms as (*hoti*) *ani.l*, *anye*, *animye* (흥디) 아닐, 아녀, 아니며 ‘not (do).’ But coming into the Contemporary period, this inflecting pattern was lost. Now in its place we find two alternatives, (*haci*) *ani hata* ‘not do,’ a somewhat old-fashioned pattern with verbal inflection, or its contraction, (*haci*) *anhata* ‘not do.’

7.4.2.1 The honorific system

Korean’s famously complex honorific system depends heavily upon inflectional categories. There were three such categories in earlier Korean: (1) subject honorification, (2) object exaltation, and (3) speech style. “Object

exaltation,” which is how a speaker shows deference toward the person affected by the action of the verb, is no longer a productive part of the inflectional system, however. In Middle Korean, the verbal suffix *-sop-* -습- served that function. But today a person in an object position is shown respect in other ways, most notably by the particle *kkey* (for a person in the indirect object position – e.g., *halme-nim_kkey* ‘to grandmother’) and by special polite words such as *mwo-sita* ‘escort.’

Thus, in the inflectional system, Contemporary Korean only makes use of subject honorification and speech style. Subject honorification is expressed by incorporating the prefinal ending *-(u)si-* into the predicate. This morpheme is at least as productive today as it was in Middle Korean.

The “style” of a sentence reflects the social relationship of the speaker to the person to whom he or she is speaking. The spoken, standard language now has a number of such levels; some scholars argue for six, some for only three, four, or five actively used levels. Assuming first the larger number, the levels are, in increasing levels of formality: (1) plain style (*hayla-chey* 해라체), (2) *panmal* style (*panmal-chey* 반말체), (3) familiar style (*hakey-chey* 하계체), (4) semiformal style (*hawo-chey* 하오체), (5) polite style (*hayywo-chey* 해요체), (6) formal style (*hapsywo-chey* 합쇼체). Here are examples:

- (1) Plain: *Kwohyang_i eti 'ni?* 고향이 어디니? ‘Where are you from?’
- (2) *Panmal*: *Kwohyang_i eti ya?* 고향이 어디야? ‘Where are you from?’
- (3) Familiar: *Caney_ka kakey.* 자네가 가게. ‘You go.’
- (4) Semiformal: *Tangsin_un kakeyss.swo?* 당신은 가겠소? ‘Are you going?’
- (5) Polite: *Kakeyss.e ywo?* 가겠어요? ‘Are you going?’
- (6) Formal: *Kakeyss.supsita.* 가겠습니다. ‘(I’ll go.)’

(In addition, in certain kinds of formal writing, yet another style called *haswose-chey* 하소서체 can sometimes be seen.)

However, of these six levels, two are rapidly becoming obsolete. The reason is that younger Seoulites no longer use the “familiar style” (*hakey-chey*) or the “semiformal style” (*hawo-chey*) at all. And since what is called here the “polite style” involves only the addition of the sentence particle *ywo* 요 to the *panmal* style, the honorific inflectional system is rapidly being reduced to only three different sets of endings: plain, *panmal*, and formal.

7.5 Syntax

As has been mentioned before, Korean syntax has remained relatively unchanged since the earliest records. However, its structure is not completely unaffected by other languages. In particular, some usages have been imported from Japanese. One example is the syntactic distribution of *pwota*, a morpheme of comparison originally and primarily used as a nominal particle. In that

particle usage, *pwota* first arose as the Contemporary Korean shortening of the Early Modern postposition *pwotaka*. But during the period of Japanese occupation, the morpheme came to be used as an adverb, too; for example, in *pwota wuytae-hata* ‘is greater,’ *pwota* modifies the predicate. This adverbial usage is modeled on Japanese *yori*, a morpheme of comparison also used as both adverb and particle.

Another example of Japanese influence is the use of the auxiliary particle *ppwun* ‘only X’ in the free-standing construction *ppwun_man anila* ‘not only (that), in addition.’ This construction is modeled on the rather literary Japanese written form *nomi-narazu* ‘not only. . .’

7.6 Vocabulary

In the Contemporary period, the most significant changes in the Korean language by far have been in its vocabulary. Thousands of new words have been imported into Korean and have fundamentally altered its lexicon. However, although these words are terms of Western origin, they were not borrowed directly from English or from any other Western language, at least not in the nineteenth and early twentieth centuries. Instead, in an era when few had ever heard a word of English spoken, Koreans took in each new term through a translation of the word’s roots into Classical Chinese. While their knowledge of English was almost non-existent at the time, Koreans knew that literary language intimately and well, and as a result, Classical Chinese served effectively as the vehicle for bringing in new ideas and concepts.

For the most part, these translations of Western words originated in Japan. Japan had adopted Western ideas and technologies earlier and more aggressively than either Korea or China, and in doing so, had developed strategies for dealing with vocabulary earlier as well. The words they came up with were not marked as Japanese; instead, they were coinages that made use of the elite culture common to all of East Asia. Thus, no matter where the vocabulary came from, it was readily adopted by Chinese, Japanese, and Koreans because it fit naturally with the Sinitic lexica that already existed there (just as do new Latinate coinages in the vocabularies of European countries).

Such neo-Sinitic words usually consist of two Chinese characters, or, occasionally, three. Moreover, they often involve a literary allusion from the Chinese classics. For example, in an 1867 essay, the Meiji intellectual Fukuzawa Yukichi introduced the term 文明(開化) *bunmei(-kaika)* to his readership as a translation of English ‘civilization.’ Although *bunmei* ‘civilization’ is an ordinary Japanese word now – just as its equivalent, *mwunmyeng*, is in Korean – at the time Fukuzawa first used the word, it was instantly recognizable to any educated East Asian gentleman as a graceful phrase from the *Book of Changes* meaning ‘literary embellishments are

resplendent.’ In perhaps a similar way, *kwahak* 科學 (in Korean pronunciation) was created to render English ‘science’; *miswul* 美術 was patterned on English ‘(fine) arts’; *ciyang* 止揚 was from German *Aufhebung*. A few words were coined in modern China; e.g., *kiha* 幾何 ‘geometry’ (from *jihé*, imitating the sounds of English ‘geo(metry)’). And no matter whether the original model was English or French, *kwuk.e* 國語 was used to designate the new ‘national language.’ Here are a few more examples: *sahwoy* 社會 ‘society,’ *cengchi* 政治 ‘politics,’ *kyengcey* 經濟 ‘economics,’ *chelhak* 哲學 ‘philosophy,’ *kaynyem* 概念 ‘concept.’ Such vocabulary now fills the modern Korean lexicon.

Some borrowings are productive morphemes. For example, the suffix *-cek* 的 changes a noun into an adjectival usage; e.g., *aykwuk* 愛國 ‘patriotism’ → *aykwuk-cek* 愛國的 ‘patriotic,’ *isang* 理想 ‘ideal’ → *isang-cek* 理想的 ‘idealistic.’ The suffix *-cwuuy* 主義 adds the meaning of ‘-ism’: *isang-cwuuy* 理想主義 ‘idealism,’ *sahwoy-cwuuy* 社會主義 ‘socialism,’ *capwon-cwuuy* 資本主義 ‘capitalism.’ A few popular neologisms were closely associated with a particular time period, and did not last long. One of these is the word *kayhwa* 開化 itself used as a prefix; for example, *kayhwa-cang* 開化杖 ‘(enlightenment) walking stick,’ *kayhwa-cwumeni* ‘purse (= enlightenment-pocket).’ The prefix *yang-* 洋 ‘Western,’ whose use goes back to the nineteenth century, has endured much longer; e.g., *yang-pha* ‘bulb onions.’ But many such words have fallen into disuse; *yang-tampay* ‘Western cigarettes’ *yangpwok* ‘[Western] suit,’ and *yangcwu* ‘[Western] liquors’ are old-fashioned and now seem quaint.

Throughout the known history of Korean, Sinitic vocabulary has tended to displace native words. The more recent “neo-Sinitic” vocabulary has continued and added to that tendency. Moreover, whenever Sino-Korean synonyms exist alongside native words, the Sino-Korean words are generally considered more elegant, and therefore sometimes serve as respectful, even honorific terms. That is particularly true of professional usages such as medical vocabulary. Sino-Korean *chia* 齒牙 ‘tooth’ is more elevated than native *i* – or the socially even lower *ispal*, as is *chithwong* 齒痛 ‘toothache’ alongside *i alh.i*. And *swucwok* 手足 ‘hands and feet, limbs’ is considerably more distancing and professional than its synonym *swon-pal*.

7.6.1 Native neologisms

This neo-Sinitic vocabulary grew rapidly during the enlightenment period, but soon thereafter a parallel, nativist movement also emerged. The awakening of nationalist sentiments and a newly discovered pride in all things Korean, and especially in Hangul, resulted in efforts to displace these new words with pure Korean. Instead of the Sino-Korean word *mwunpep* 文法

‘grammar,’ nativist language scholars substituted the neologism *malpwon*, literally, ‘language model.’ To replace *myengsa* 名詞 ‘noun,’ they made up the new word *ilum-ssi* ‘name seed.’ In physics, *cawoysen* 紫外線 ‘ultraviolet rays’ became *nem-pwola-sal* ‘cross-purple-(sun)beam.’

This movement toward language purism gained strength after liberation from Japan. In South Korea, the movement found a base of political power in the Ministry of Education, which forcefully promoted the use of such native neologisms. Though most of these coinages willy-nilly ignored the nuances of language use in South Korea, a few of them can still be seen in writings today – for example, in math textbooks *seym-pwon* ‘calculation-model’ is used as a synonym for *sanswu* 算數 ‘arithmetic’; *sey-mwo-kkwol* ‘three-corner-shape’ is substituted for *samkak-hyeng* 三角形 ‘triangle.’ Such prescriptivist usages are often not well thought out. For example, *kkwol* ‘shape’ is used in many compounds (as in *sey-mwo-kkwol* ‘three-corner-shape’ = ‘triangle’; *maykim-kkwol* ‘classifying-shape’ = ‘modifying form’). This usage is an example of the reformists’ zeal for “getting back to our roots,” because it was a normal and respectable word in Middle Korean. But in the language spoken today, *kkwol* is derogatory, vulgar, and laughable; for example, *kkwol-pwulkyen* ‘shabby, indecent, obscene,’ *kkwol-sanapta* ‘ugly, disgusting,’ *Ce kkwol cwom pwala!* ‘Look at that silly idiot!’ The result is that neologisms such as *sey-mwo-kkwol* are met with snickers. They are usually too clumsy to be taken seriously. Another part of the problem is that many of the neologisms are constructed so as to imitate the conciseness of Sino-Korean expressions. But that is something difficult to do without violating the natural structure of Korean. The coinage for ‘ultraviolet rays,’ *nem-pwola-sal* ‘cross-purple-(sun)beam,’ is as clumsy as the English translation suggests.

However, whereas such efforts by specialists have enjoyed little success, genuinely native words arose more naturally in Korean society. For example, the word *woppa* ‘(a girl’s) older brother’ is now an integral part of standard Korean, even though it was only used within the city walls of Seoul around the beginning of the twentieth century. After liberation from Japan, some Japanese words were replaced by native coinages. Thus, *ywokkwotwoli* ‘cutting in (line)’ (from *J. yokodori* ‘seizure, taking away’) became *say-chiki* (from ‘interval’ + ‘striking’); *suli* ‘pickpocket’ became *swomay-chiki* (from ‘sleeve’ + ‘striking’). The new Korean literature gave poetic uses to the language. The noun *kwo.ywo* ‘stillness, quiet’ arose as an elliptical, literary usage from the adjective *kwo.ywo-hata* ‘is still, quiet’; *wokwo-kata* ‘comes and goes’ was abbreviated to *wokata*. Some archaic, literary words such as *kalam* ‘river’ have been resurrected.

The new literature also introduced usages patterned on translations of Western languages. One particularly glaring example is the use of third-person

pronouns otherwise alien to Korean. (The same kinds of things were found in the new literature of Japan as well.) The early twentieth-century writer Kim Tongin famously experimented with using the pronoun *ku* ‘that’ as a third-person pronoun; others tried Sino-Korean *kwelnye* (厥女) for ‘she,’ still others *kunye* (‘that’ + ‘female (女)’) or *kuney*, in that meaning. For the most part, these pronouns have not been adopted into speech, however.

Toward the end of the twentieth century the nativist movement took yet another turn. Around the time that South Korea began to see a renaissance of interest in traditional performing and visual arts, it became fashionable to create personal names out of native words. All at once, instead of traditional Sino-Korean names, many children began to be called Kalam 가람 ‘river,’ Pichna 빛나 ‘shine,’ Sinay 시내 ‘stream,’ Hanul 하늘 ‘sky,’ Kkochnim 꽃님 ‘flower,’ Sulki 슬기 ‘wisdom,’ Pyel 별 ‘star’ – or, most famously, Pi 비 ‘rain’ (as in the name of the Korean pop star). And today, at the beginning of the second decade of the twenty-first century, this nativist naming practice shows no sign of waning. Moreover, the nostalgia for a Korean past (whether real or imagined) does not end with personal names. Romantic, native names have also become popular for such things as coffee shops, restaurants, night clubs, and even residences; e.g., Namwu sai_lwo 나무 사이로 ‘In the midst of the trees,’ Pwom nal_ey pwoli-pap 봄날에 보리밥 ‘Barley rice on a spring day.’ On the other hand, Sino-Korean names are usually the rule for more staid or formal business establishments.

7.6.2 Loans

During the period of Japanese occupation, Koreans absorbed countless linguistic elements from Japan. After liberation, Japanisms were largely eliminated in North Korea; and in South Korea, too, most Japanese loanwords quickly fell into disuse, with moves to purge further linguistic reminders of that period continuing to this day. Most of the replacement vocabulary has involved adopting the Sino-Korean readings of the characters with which a particular word was written, but sometimes a native word, occasionally a new coinage, was chosen. The distinctive Japanese-style boxed lunch, for example, which was called by its Japanese name, *obentō*, at the end of World War II, briefly metamorphosed into *pyenttwo*, but by the 1980s it had become a *twosilak*, with a native name. Even Western words that had passed through Japan were changed; for example, the pronunciation *seyntha* ‘center’ was altered slightly to *seynthe* to conform better with the English sounds. Nevertheless, remnants of older Japanese vocabulary still remain, often in inconspicuous places. The word for the distinctive wheat noodles known as *udon* is *wutwong*; *sinpwun* ‘social standing’ comes from Japanese *mibun*.

Today, the proximity of Japan and the freedom of cultural exchange and travel between the two countries has given rise to new kinds of loans. The word *thayllenthu* ‘television personality’ is from English ‘talent,’ but the usage comes out of the Japanese entertainment world; *aynimey* ‘anime’ is part of Korean youth culture. But loans also go both ways now. What was once called *chōsen-zuke* ‘Korean pickles’ has become *kimuchi* in Japanese supermarkets and restaurants.

Korean is replete with Western loanwords, and such borrowings are increasing in number every day. There are of course the usual international terms associated with a particular professional or cultural field; French words are found in the art world; Italian in music. But it is English that is transforming the face of the language. In today’s South Korea the attitude toward English vocabulary is “total availability,” as someone once described a similar situation in postwar Japan. Virtually any English word is fair game, in conversations or essays, in South Korean culture. Moreover, Koreanized English elements sometimes called “Konglish” are creatively used to make up new words. A mobile phone is a “hand phone”; an *ophisuthel* (‘office-hotel’) is a Korean kind of pied-à-terre. The majority of such English and Englished usages are undoubtedly nonce words, and most will have a short half-life. But many will also be integrated into the language as Korea’s emerging world culture develops.

7.6.3 Other vocabulary trends

Abbreviations make use of an East-Asian type of acronym that combines the first syllables of the name or term’s constituent elements. *Kwongtwong wiwenhoy* ‘joint commission’ is shortened to *kwong-wi*; *nwotwong cwohap* ‘labor union’ becomes *nwo-cwo*; *pwulkwoki paykpan* ‘pulgogi and rice’ is *pwul-payk*. Such uses of language now characterize the lexicon.

As has already been mentioned, one of the most distinctive characteristics of Korean is its mimetic and onomatopoeic vocabulary. The complex expressiveness with which such words are used – and Contemporary Korean is particularly rich in this vocabulary – is rivaled by that of few other languages. Moreover, mimetic words such as *ttallang-ttallang* ‘jingle-jingle’ and *acang-acang* ‘totteringly,’ which typically appear as reduplicated adverbials, can also take the suffixes *-kelita* or *-tayta* and be used as predicates: *ttalang-kelita* ‘[the bell] jingles,’ *acang-kelita* ‘[the baby] toddles.’ These particular adjectival suffixes first made their appearances with mimetics and onomatopoeia in the textual record around the early nineteenth century.

Additional readings on selected topics

OVERVIEWS

Numerous histories of the language have been written in Korean, including the one on which the structure of the present work is patterned, Lee Ki-Moon's *Kugŏ-sa kaesŏl* (seventeenth, revised, and updated edition, Seoul: T'aehaksa, 2007; first published in 1961). In addition, the 1972 edition of this work has been translated into Japanese by Fujimoto Yukio (*Kankokugo no rekishi*, Tokyo: Taishūkan, 1975), and into German by Bruno Lewin *et al.* (*Geschichte der koreanischen Sprache*, Wiesbaden: Reichert, 1977).

The only other in-depth treatment in a Western language is Samuel E. Martin's *A reference grammar of Korean* (Rutland, Vermont and Tokyo: Tuttle, 1992). Martin's work combines a structural description of the present-day language, Contemporary Korean, together with historical analyses, treating topics and themes as they have developed over time rather than dividing narrative into historical periods. The romanization and grammatical terminology of Martin's grammar have become standard in linguistic writing, and we have adopted both in this work as well. Particularly useful is Part 2, the "Grammatical Lexicon," a 540-page, alphabetized listing of grammatical elements found in Contemporary Korean and historical texts, all illustrated with extensive, translated examples.

Useful chapter treatments of the history of Korean can be found in two general books on Korean, Sohn Ho-Min (Son Homin), *The Korean language* (Cambridge University Press, 1999) and Lee Iksop and S. Robert Ramsey, *The Korean language* (Albany: SUNY Press, 2000). Sohn provides a good overview of the linguistic literature, particularly that dealing with genealogical issues, and his bibliography is excellent. Lee and Ramsey (2000) contains an extensive discussion of the historical periods. Both books include separate chapters on how the various historical writing systems worked.

Finally, special mention must be made of Gari K. Ledyard, *The Korean language reform of 1446* (Seoul: Singu munhwasa, 1998), a book describing the history and background surrounding the invention of Hangul, the Korean

alphabet, in the fifteenth century. Nothing else in English presents so clearly, and in such detail, the philology of that critical period.

COMPARATIVE STUDIES

Korean has most frequently been compared to (1) Japanese and to (2) Altaic. But there have occasionally been comparisons to other languages as well, most notably Dravidian; see H. B. Hulbert, *A comparative grammar of the Korean language and the Dravidian languages of India* (Seoul: Methodist Publishing House, 1905); Ōno Susumu, *Sound correspondences between Tamil and Japanese* (Tokyo: Gakushūin University Press, 1980); Morgan E. Clippinger, "Korean and Dravidian: lexical evidence for an old theory," *Korean Studies* (1984), 8: 1–57.

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WRITING SYSTEMS

The Korean alphabet is by now so widely known it is given a separate entry in most general treatises on writing. See, for example, Geoffrey Sampson, *Writing*

systems: a linguistic introduction (London: Hutchinson, 1985); Florian Coulmas, *Writing systems of the world* (Oxford: Blackwell, 1989) and *The Blackwell encyclopedia of writing systems* (Oxford: Blackwell, 1996); John DeFrancis, *Visible speech: the diverse oneness of writing systems* (Honolulu: University of Hawaii Press, 1989); Henry Rogers, *Writing systems: a linguistic approach* (Oxford: Blackwell, 2005). Some of these works also discuss the alphabet's history, but not in great depth. On the other hand, the pre-alphabetic systems are a different matter entirely, and rarely are *idu*, *hyangch'al*, *kugyŏl*, or *kakp'il* treated at all in Western-language literature. (See, however, Vos 1964, below, and the chapters on writing in Sohn 1999 and Lee and Ramsey 2000.)

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EARLY MIDDLE KOREAN

Phonological research on this pre-alphabetic stage of the language can be divided into two different approaches: (1) an examination of the information contained in the twelfth-century Chinese booklet, *Jīlín lèishì*, and (2) a study of early loanwords into Korean from Mongolian. (For grammatical and syntactic research, see the references listed under “*Kugyŏl* and *kakp'il*”, above.)

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